Information Management & Technology

Overview

North Bristol views the development and implementation of information management and technology (IM&T) as key to the successful delivery of new models of patient care, improved ways of working, aiding the delivery of a better patient experience, and ensuring the Trust has the robust, information centred systems it needs to deliver patient services and run its business.

IM&T directly supports the delivery of the Trusts mission to provide the best care for patients, by being the specialist service of first choice to patients, and providing the best possible patient journey within the resources available.

Background

IM&T at North Bristol has made a long journey since the first IM&T Strategy was put in place in 2002. This initial strategy is set out in **Appendix 1.**

In summary it involved the:

- Resolution of a number of underlying soft and hard infrastructure problems (e.g.: no trust wide network in 2002, few, aged PCs, old core business applications).
- The delivery of systems and developments to lay solid foundations for more clinical and business focused applications, to more directly support the delivery of patient care (e.g.: PACS, Pathology, Radiology, Cancer).
- Changing how IM&T was viewed by the organisation, a need to make it central to all aspects of the organisation – clinical, operational and financial.

In 2002 IM&T had a poor reputation, infrastructure was outdated and need of significant investment, information delivery was poor, commercial deals in place prevented the best team working arrangements being put into place, and the key systems supporting the business were aged, and did not deliver value to the business or to the delivery of patient care. There was also no co-ordination or partnership working across the community.

Success 2002-2006

Over the past 4 years some of the key successes in the delivery of IM&T to support the Trust's delivery of clinical services and effective running of the organisation include:

- **Implemented new PACS digital imaging** successfully, replacing all plain film.
- **Implemented new Radiology Information System** to support the delivery of diagnostic activity.
- **Implemented a new Pathology system**, and Trust wide results viewing, to support the delivery of testing and resulting across the organisation.
- **Delivered a new Trust wide network across all sites**, enabling access to key information systems for all staff, from any location.
- **Delivered increased PC/workstation access** from 1 device per 8 staff, to around 1 device to 2 staff, modernising the equipment in the work place.
- **Delivered new human resources and payroll systems** to enable to modernisation of these business services.
- **Deployed new library and knowledge management systems** to better manage access to a world of information.
- **Deployed clinical/educational support tools**, such as the Map of Medicine and Managed Learning Environment, to deliver clinical guidance and practical learning, online, to work alongside operational systems.
- **Deployed new cancer system to support the delivery of national quality standards** and work alongside other clinical systems (e.g.: PACS) to support patient care, and remove/reduce the need for physical notes.
- **Developed cross community, partnership working**, so that all organisations understand that together we achieve more.
- **Developed affordable, sustainable and benefits related IM&T investment**, ensuring that investment, breeds delivery, which breeds credibility, and so on.
- **Moved IM&T from being at the periphery of the organisation, to making IM&T something much closer to the heart of the organisation** – *with significant room to evolve still further.*

Success 2007-2015

The new models of care in the new Southmead Hospital, and associated Frenchay and Cossham hospitals, and community facilities, will be supported and enabled by a modern IM&T infrastructure, up to date applications systems and robust information management.

There must also be a clear focus on the external customer – the patient, and the internal customer – clinician, manager, and staff – as the prime deliverer of our core business – helping people stay well, and get better.

The principles underpinning the strategic support and operational enabling that IM&T provides for and within the new hospital and related facilities, to deliver the new models of care are:

1. **Patients** – in all we do, we should ask, *"is this what the patient deserves and needs"?*
2. **Quality** – excellent service, robust, reliable systems, *safe and confidential*.
3. **Affordable** – delivers the reality within the affordability for the organisation.
4. **Paperless** – in reality this will be "paper lite" rather than "paper less", but this is the goal.
5. **Freedom** – wireless technology, freeing staff to deliver service when and as required.

Patients

We need to ensure that information and technology supports the patient experience along the whole journey. This will include online and telephone booking services to make an appointment after seeing a GP; to clear, appropriate communication via letter or email when being sent information or appointment details; to an integrated patient record, ensuring that all information is available to the healthcare professional delivering care, but protected from those who should not have access; to capturing information on a patients condition in one place; through to providing information on treatment from home, information on the Trust on the Internet, and even monitoring patients whilst at home or in the community, instead of bringing them into hospital.

We have to make information available, understandable and easy to use, in all aspects of a patients experience with North Bristol – including for a patients referrer (e.g.: GP), to ensure a smooth and timely patient journey.

We must ensure as IM&T investment and deployment is made, that the benefits of this change are understood, quantified and then delivered within the

organisation, to improve the clinical, operational and/or financial position to the benefit of the patient and the organisation.

Quality

Modern systems will enable clinicians to view all aspects of the patient record, from test results and nursing documentation, to vital signs monitoring, from a single location – and from any location where they have access. This is a powerful tool to aid clinical treatment, and improve the experience for the patient.

At the same time, with much information centred in one place, we must ensure that information is protected and secure, and only those who are supposed to have access do. Systems must be safe and robust – the medical record or images cannot stop being available during an appointment or an operation because of a computer problem.

In the Trusts move to a Foundation Trust, and in an increasingly competitive NHS market, there is a need to ensure financial and business systems are equally robust and sound, so that information is available, how its required, when its required and systems are fit for purpose.

Affordable

IM&T must continue to deliver within its means and to sensible investment plans that deliver real benefit and relate to real organisational problems that need solving. Technology must never be for technology's sake.

A sustainable capital plan has been developed, significantly linked to the implementation of the NHS Care Record (NCRS) through to the new hospital, and investment under the new hospital development is planned, and through the enabling works (e.g.: new Data Centre).

Investment must be optimised moving forward, for example, looking at ways to merge the usage of Facilities and IM&T infrastructure, so that there is not duplication (e.g.: one set of wires, common e-card systems, single help desk, etc).

We should also remember how technology can release money, and seek to drive out the benefits that new technologies may afford (e.g.: telecommunications and cheaper phone calls, enabling the redesign of patient admin processes).

Paperless

There is so much paper moving around North Bristol (and the wider NHS), that if this was to be reduced by a significant percentage, it would substantially improve the productivity of organisations, save money on the paper, transportation and storage and ensure information could be accessed far more readily.

It is a specific objective to virtually remove physical medical records during this time, but to go further and reduce as much paper as possible from around the organisation, which will lead to new ways of working, instant access to information, and an ability to respond faster to both patient demand, clinical need and business pressure.

Freedom

We are all used to wandering freely with our mobile phones, and yet are often restricted to our desks to make a call at work, or a specific "computer point" to look up information.

By removing the physical connections within the hospital boundaries, and beyond, we can seek to transform how many people work, how information is passed around (e.g.: on vulnerable children – enabling faster action to be taken), where people work from, supporting flexible working policies and contributing to the attraction of North Bristol as an employer – a modern, grown up place to work.

Objectives

North Bristol has the following objectives in 2008/2009:

1. Improve patient experience and safety to reduce mortality.
2. Progress significantly towards no wait/no delays.
3. Progress towards new hospital and service redesign.
4. Be a great place to work.
5. Build a strong and viable organisation.

Some of these objectives will undoubtedly remain over the coming 8 years.

Appendix 2 looks at the key areas of work to deliver the IM&T strategy, and support North Bristol, and the wider community, from 2007 to 2012 – ensuring a suitable "freeze" period prior to the move to the new Southmead Hospital, given the scale of this task.

Key Deliverables

Key deliverables of the IM&T strategy from 2007 to 2012 are:

- NHS Care Record (2008/2009):
  - New, single clinical system to support the delivery of patient care.
  - Direct patient benefits around electronic records, tracking of patients, monitoring and recording of clinical information.
  - "Location irrelevant" delivery of clinical information.
- Information Systems (2008/2009):
  - Single, central data warehouse supporting the business, clinical and operational performance and service line economics and patient costing.
  - "Near time" and "real time" information reporting capabilities, which can be flexibly analysed by managers, clinicians and staff alike.
- Medical Records (2008):
  - Centralised medical records service, with standard, efficient practices.
  - High quality, reliable delivery of patient records, to all locations, as and when required.
  - Reduction in the volume of paper transported around the orgainsation.
- Departmental Systems (2008-2010):
  - Merged, Windows based Pharmacy system, enabling smoother operational processes (2007).
  - New, strategic Pharmacy system, integrated into wider NHS Care Record (2009).

  - New, regional Child Health system, supporting child health services, and leading to the development of a wider Children's Services IT strategy, including CAMHS (2008).
  - Robust and sustainable Cancer system, delivering more effective clinical capability on top of existing operational capability (2009).
  - Replacement Maternity system, integration into the wider NHS Care Record (2008).
  - Full electronic ordering and results viewing, with paper based results and test at an absolute minimum (2009).
- Community (2008-2011):
  - Clear strategic direction to implement community wide systems for all services wherever possible.
  - Replacement of existing community based systems, integrating them into GP systems, Acute systems or new community systems as appropriate.
  - Reduction in the barriers between community/primary care and social services, especially around areas such as the single assessment process and child health, and the introduction of appropriate systems to support these new ways of working, to improve the patient experience.
  - Ensure a robust and efficient Acute/GP-Primary interface, around areas such as correspondence, results reporting and access (2008-2009).
- Infrastructure (2007-2012):
  - Clear, continued investment strategy to ensure sustainable delivery of IM&T enabled business and clinical improvements.
  - New, purpose built data centre to deliver Trust, community and some national applications (2009).
  - Utilisation of technology to deliver real benefit at the point of use (e.g.: ward, theatre, home office, mobile working), and provide options for the flexibility of working practices and care delivery.
- NHS Care Record – Phase II (2010-2012):
  - Deliver electronic prescribing across the Trust.
  - Deliver fully electronic patient records, including all notation, clinical recording, letters, etc.
- Electronic Document Management (2009-2012):
  - Radical transformation of all "paper" materials used across the Trust, moving as much as practical into a robust Trust wide, document management system.
- Patient Information (2007-2012):
  - Continued development of an up to date and effective Internet, with access for patients to key information.
  - Roll out of pathway tools and patient information literature, accessible when required.

  - Increased electronic communications with patients, as culture and access permit, whilst ensuring those without such access are equally served.
  - Robust information governance arrangements in place, to ensure security and accuracy of any information held.
- New Models of Care / New Hospital (2007-2015):
  - Ensuring the design of the new hospital/facilities is technologically enabled.
  - Ensuring that design now, does not build in redundancy later – maintaining innovation.
  - Ensuring that new models of care and improved patient experiences are deliverable in all care settings.
  - Investment is sustainable and deliverable, and yields real benefit.

Risks and Issues

Key risks and issues in the delivery of the IM&T strategy to 2012 are:

- **National Programme for IT**: The delivery of this nationally driven component of the North Bristol IM&T strategy remains a risk, given it's track record of poor delivery to date, and ongoing discussions around re-shaping existing contracts.
- **Community Working:** Although significant efforts have been made, and significant success obtained in partnership working across the community over the past 5 years, we need to ensure that especially Acute trust co-working remains strong, to deliver benefits to patients and clinicians, and to PCT commissioners, as we enter a more commercial period in the NHS evolution.
- **Sustainability:** As IM&T becomes ever more central to the needs of the organisation, resources will need to be sustained to keep pace with this, and ensure that services delivered are robust and strong.

Delivery

To ensure the delivery of the IM&T strategy, key areas of the IM&T service will underpin this. These areas are:

1. Service.
2. Information.
3. Medical Records.
4. Applications.
5. Infrastructure.

Excellent Service will focus on:

- **The needs of the patient first.**
- **How the needs of the patient can be supported**, in the round, by supporting GPs, Consultants, Nurses, and other healthcare professionals to deliver the best possible patient experience.
- Ensuring that **key services offer friendly informative accurate services**, for example for Switchboard or the Help Desk.

Robust Information systems will:

- Provide **accurate information across a range of systems**, to provide clinical, operational, managerial, financial and patient information.
- **Deliver the business intelligence North Bristol needs** to deliver modern healthcare services, be a Foundation Trust and develop in a more commercial health care market place.
- **Accurate and timely clinical coding**, coupled with modern financial systems will assist with providing financial information to help manage the operational services, within the financial envelope.
- Clinical Coding will take place as close to the patient experience and clinician intervention as is possible.
- Knowledge management services will be available from Education facilities, libraries, information points, and indeed, across the Trust, enabling clinical and non-clinical educational information to be available to all staff.

Medical Records will:

- **Migrate to an electronic patient record**, encompassing all possible information.
- **Move historical patient records online**, so they are safe and accessible.
- Deliver records – electronic or physical – when and where required, without delay, safely, and in support of the patients and clinicians needs.
- **At all times, be confidential**, and recognise the special nature of the documentation (physical or electronic) that is being handled or processed.

Applications Systems will provide:

- **A single, modern IT system supporting both administration and clinical requirements,** including prescribing, decision support and clinical documentation. These will integrate with partner organisations systems across the Health economy to assist with care across the patient pathway.
- **This single system will be fully integrated with those of other NHS organisations in the area** (and in some cases, non-NHS organisations),

including PCT's allowing easy sharing of information and moving of patient record information.

- **Fully integrated systems within the Trust** ensuring consistency of information provision, and ease of movement of key patient and other information between different systems.
- **No more than 50,000 paper records stored on the Southmead site**, with a 90% computerised/electronic patient record, with full flexibility to move beyond the "hospital boundary", utilising the same record in Community and primary care settings. This is vital to deliver many of the new models of care.
- **Electronically delivered X-rays and other images**, direct to PC/workstation screens. Actual "film" movement will be minimal and historical.

Infrastructure will be underpinned by:

- **A full wireless Trust and community network**, in clinical and non-clinical areas, allowing access from any location to IT systems and information, and for all staff.
- **High levels of PC penetration**, allowing access to information and systems, and supporting the organisation directly. People to PC ratios, generally, will be in the region of 2:1 in clinical areas, and 1:1 in non-clinical areas.
- **Modern, personalised, mostly wireless telecommunications systems**, supporting patient access to information and aiding communication within the organisation, will be available.
- **Standardised, streamlined processes** (from PC requesting to systems access, from extension changing to video conferencing set up).
- **Infrastructure to carry a range of digital services**, covering security, pass card information and images and alarms.
- The Trust's infrastructure **will be supported by first class customer service**, from a central Help Desk facility, working alongside Facilities, to provide a combined support organisation.

All of these segments of the strategy need to be underpinned by first class education and training, appropriate capacity and capability to deliver and sustainable investment.

Summary

IM&T has made significant progress from 2002 to 2006 in delivering changes in a number of key areas:

- Clinical Systems – PACS, Pathology, Cancer, Radiology.
- Financial – Shared Services turnaround, ESR/Payroll.
- Operational – Improved reporting, process improvement.

IM&T has delivered this progress through:

- Affordable investment, backed by credible delivery.
- Making the linkages to key parts of the Trust, as to how IM&T can support them.
- Building partnership, inside our outside the organisation.
- Not approaching "IM&T" projects as "IM&T projects" – but as clinical, operational or change projects supporting and enabling the needs of North Bristol.

Now North Bristol is ready to move into a new phase of IM&T supporting and enabling change, leading up to the opening of, and the initial running of, the new hospital at Southmead.

The next few years, to 2012, IM&T will deliver key benefits around:

- Having built many of the foundations, an ability **to deliver more, directly that supports patient care** and clinicians delivering patient care.
- Modernising technology in use, and introducing new technology **to free staff to work where they need to,** and have access to the information they required.
- Robust, **real time information to enable operational and financial decisions to be made when required,** with access to all the right information.
- **Key "Big Projects" coming to fruition** – such as the NHS Care Record, modernisation and centralisation of Medical Records and the delivery of a new Data Centre for North Bristol.
- **Drive greater benefits through technology enabled change**, aiding workforce re-design, process re-design, and ensuring that operational and financial benefits are driven out wherever possible.

In the build up to 2015:

- **Patients** must have access to clear information about their services, whenever they need it; in the form they want it.

- **Clinicians** must have the clinical and information systems they require to deliver the services they need, in any care setting.
- **Managers and staff** must have intelligent systems, informing and supporting their operational and business decisions.
- IM&T investment will have realised, and continue to realise clear financial, as well as clinical and operational benefits.

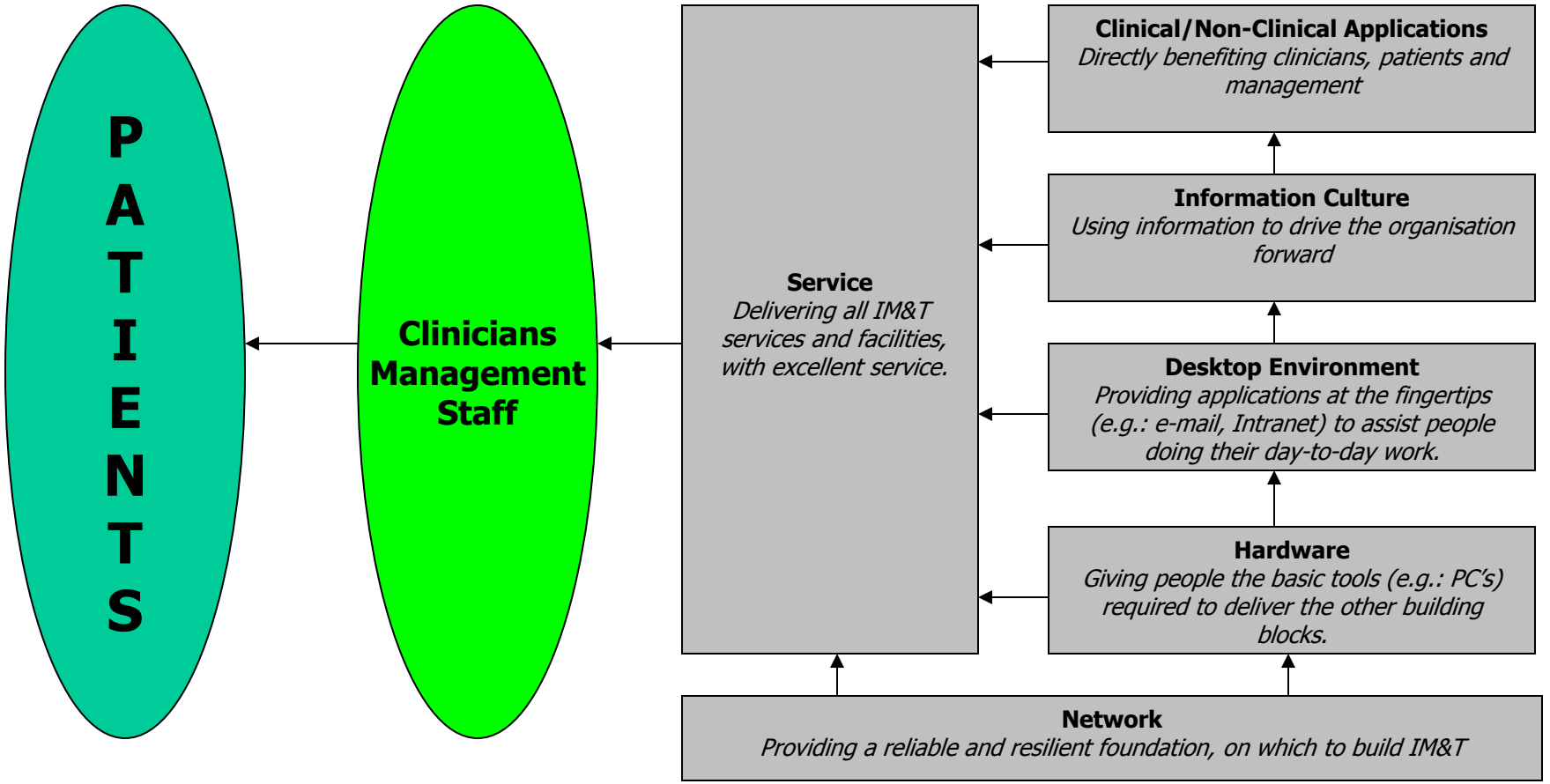
IM&T must continue its journey to support organisational change and deliver direct clinical, operational and financial value – not just the delivery of "IM&T", but supporting and enabling patient care, operational performance and financial sustainability.

[REDACT NAME]

Director, Information Management and Technology
North Bristol NHS Trust

September 2007
Version 2.2

IM&T Strategy 2002-2006



North Bristol NHS Trust

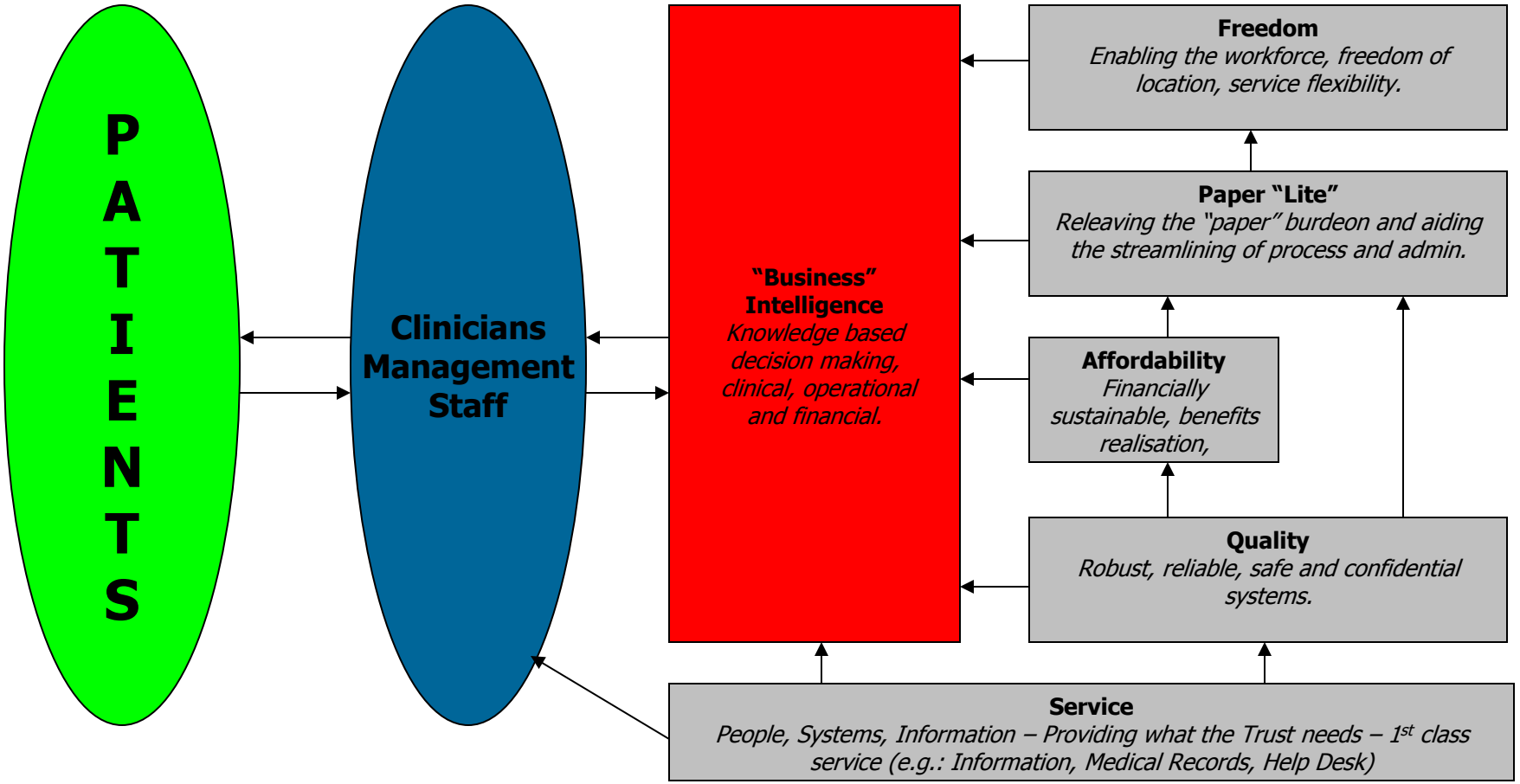
IM and T Work Plan
2007-2015

Appendix 2.i (b)

Key Deliverable	Core Component	2007	2008	2009	2010	2011	2012	2013	2014	2015
NCRS										
	Phase I									
	Phase II									
Information Systems										
	Warehouse									
	Patient Level Costing - I									
	Patient Level Costing - II									
Medical Records										
	Centralisation / Standardisation									
	High Quality, sustainable service									
Departmental Systems										
	Pharmacy - I									
	Pharmacy - II									
	Child Health									
	Cancer - III									
	Maternity									
	Order Communications - II									
Community										
	Infrastructure									
	Single Assessment Process									
	GP/Acute Interfaces									
Document Management										
	Papelite implementation									
Patient Information										
	Internet based information									
	Pathway tools									
	Information goverance									
New Models of Care										
	PFI Design									
	Innovation									
	Full technology integration									
	Sustainable investment									
	Deployed / "Go Live"									
	Implementation									

Plan - Sept 2007

IM&T Strategy 2007-2015



North Bristol NHS Trust

APPENDIX 3

NORTH BRISTOL NHS TRUST
TRAVEL TO WORK STRATEGY
SUMMARY
FEBURARY 2004

Contents

Tables

Figures

1. Introduction

1.1. Scope of report

1.1.1. North Bristol NHS Trust is the largest provider of healthcare services in the South West, managing in the region of 1600 beds across seven hospitals, providing healthcare services to a local population in excess of 500,000 and treating over 400,000 outpatient and 100,000 emergency cases a year.

1.1.2. With 4,300 full time and 7,200 part time staff the Trust is also one of the largest employers in the region. The Trust is accredited by the University of the West of England and the University of Bristol as a teaching trust and it's two acute hospitals take on several hundred trainee medical staff annually.

1.1.3. The movement of staff, students, patients and visitors on this scale makes the Trust a major trip generator. An estimated 5,000 journeys are made by car each day to Southmead and Frenchay Hospitals. Demand for parking at both hospitals has long exceeded available capacity and lack of parking space is the cause of considerable frustration amongst staff and visitors, with illegal parking resulting in safety and operational risks.

1.1.4. In order to minimise these risks, make best use of limited resources, comply with the requirements of local and national legislation and demonstrate good practice in an increasingly important area, a fundamental review of staff travel to work arrangements has been undertaken. This document, the result of that review, outlines the series of measures that the Trust intends to implement over the next five years to bring about a significant and sustained reduction in single occupancy vehicle use amongst its staff.

1.2. Format of report

1.2.1. This report is broken into sections that explain why and how the Travel Plan was developed, what measures are included and how success will be measured and communicated to staff.

1.2.2. Section 2 explains why the Trust has developed a plan and provides an overview of the development process. Section 3 reviews healthcare and transport legislation to establish the context for the plan and identifies some of the legislative requirements acting on the Trust.

1.2.3. Section 4 of the report reviews existing transport infrastructure and service provision in and around Trust sites and briefly discusses how Trust policies affect staff travel to work behaviour. Building on the latter, section 5 provides an overview of current staff travel to work patterns and highlights some possible travel plan measures.

1.2.4. Based on the result of these surveys, section 6 sets out the objectives and modal change targets the Trust has set for the plan and explains how these targets relate to those of Local and National Government.

1.2.5. Section 7 outlines the package of measures the Trust has developed to achieve these targets and includes the Action Plan that will be used to guide investment in travel to work measures. Some specific projects are discussed.

1.2.6. Section 8 explains how the impact of the plan will be monitored and what mechanisms have been included to facilitate update and review.

1.2.7. Finally, section 9 examines how the plan will be marketed and how progress will be communicated to staff.

1.3. Who should read this document?

1.3.1. This document is primarily intended as a reference for use by facilities managers. A summary of the document will be distributed to all wards and departments within the Trust. The document will also be relevant to other NHS organisations and third parties that make use of the Trust's sites.

2. Background

2.1. Introduction

2.1.1. North Bristol NHS Trust was formed in 1999 through the merger of Southmead Health Services and Frenchay Healthcare NHS trusts. The merger led to improvements in the quality of healthcare provision in North Bristol, allowing for the creation of specialist facilities and the removal of unnecessary duplicate services.

2.1.2. From a transport perspective however, the process was not without problems. Whilst allowing for greater efficiency in those transport services provided by the Trust, the consolidation of services and departments caused shifts in staff travel to work patterns and increased levels of work related travel between sites, exacerbating the already serious parking and access problems that existed at the former trusts.

2.1.3. Managed car parking was introduced at the two trusts shortly before the merger. Different approaches were taken, with policy at Southmead Hospital requiring staff to purchase an annual parking permit, the cost of which was linked to salary, and staff at Frenchay and Blackberry Hill Hospitals required to pay an annual administration charge. No serious attempts were made to control demand through restraint measures, or to invest in or encourage the use of alternative modes of transport.

2.1.4. Although the introduction of managed car parking brought several benefits, the overall effect was for these benefits to be more than offset by the 2% annual increase in traffic levels recorded over the period, a trend compounded by the lack of facilities and support systems for cyclists, pedestrians and users of public transport.

2.1.5. In an attempt to address the problem the Trust has developed 'A Better Way to Work' – a travel plan that has the aim of safely and effectively managing parking capacity by shifting journeys onto alternative modes.

2.2. The development process

2.2.1. A Transport Working Group was established in 2001 with the purpose of investigating, planning and implementing improvements to transport and travel to work arrangements across the Trust. The Trust's former chairman chaired the group, with membership drawn from the Board and Management Teams, staffside, stakeholder and user groups. A full membership list is provided in appendix 1. Car parking and 'alternative travel to work' sub groups were subsequently established. At about the same time the Trust received eight days of travel plan advice from consultants Colin Buchanan & Partners under the DfT 'TransportEnergy' best practice programme to help in the development and implementation of the Travel Plan. This established a framework for subsequent work and had a number of outcomes including traffic monitoring and survey design.

2.2.2. The Working Group and sub groups were asked to:

- Detail the financial implications of proposed changes.
- Evaluate car parking at Frenchay, Southmead and Blackberry Hill and make recommendations to standardise its management.
- Examine ways to ensure common and equal fees for car parking at Frenchay, Southmead and Blackberry Hill.
- Reduce car dependency and promote alternative methods of travel to work by allocating resources to existing facilities.
- Present to the Trust Board a Transport Policy.
- Develop links with Bristol City and South Gloucestershire Councils and contribute to their travel to work strategies.
- Develop links with national and local transport organisations.

2.2.3. In late 2001 the car park sub group made a series of recommendations for the harmonisation of permit fees between the sites. It was agreed that permit fees would not be collected from May 2002 onwards whilst work by the alternative travel to work group was in progress, and that staff would make the final choice on permit fee structure through the mechanism of a vote during consultation on the Travel Plan.

2.2.4. The development of alternative travel options has been led by the travel to work sub group with input from key stakeholders including local authorities and transport

providers. The group has met on a regular basis to discuss the Travel Plan's development and implementation.

2.3. Consultation

2.3.1. Throughout the development process the Trust has sought to engage with and seek the views of staff members. The initial travel survey was used as the starting point for focus group explorations of specific issues, and to stimulate the discussion in user groups that directly informed the development of the Action Plan.

2.3.2. In June 2003, following approval of the draft plan by the Trust board, a formal consultation exercise was undertaken. Consultation on the draft plan took the form of a road show featuring displays, presentations and Q&A sessions. Voting slips were distributed with payslips.

2.3.3. In total nine meetings were held at Southmead, Frenchay and Blackberry Hill Hospitals. Approximately two hundred staff attended the meetings with similar numbers sending comments to the consultation email address.

2.3.4. Approximately a quarter of the 10,000 staff employed at the Trust took part in the voting exercise to select a new permit fee structure. Staff were invited to vote for which of two options – a flat fee or a salary linked system – they would prefer to have the Trust adopt. Two thirds of those voting opted for the latter, the implementation of which is discussed in section 7.8

2.4. Partnership working

2.4.1. Partnerships have been developed with a range of stakeholder groups and organisations to support the development of the plan and to share best practice.

2.4.2. Local Authority involvement has been a key part of this process and both Bristol and South Gloucestershire Councils have provided policy advice, technical assistance and resources as well as support at both officer and member level. The travel plan co-ordinators employed by the authorities have proved particularly valuable in this respect by acting as a single point of information and expertise.

2.4.3. The Trust attends the Green Commuter Clubs run by the authorities to share best practice and foster joint working between public and private sector organisations. Examples of the latter include the successful 2carshare and CarshareBristol projects and numerous initiatives between the Trust and organisations such as LifeCycle UK. The Trust also works with individual authorities on specific projects such as the VIVALDI funded Southmead Interchange initiative. In 2002 the Trust received an award in the progress category of the Avon Area Travel Plan award scheme and it is expected that further recognition will be sought in 2004.

2.4.4. The Trust has a partnership agreement with Bristol City Council and bus operator First Bristol Buses Ltd (see appendix 2) and the organisations have committed to improving services and exploring options for new services and ticketing initiatives.

2.4.5. As the profile of travel planning has risen within the NHS, so the Trust has become increasingly involved in sharing best practice with other acute hospital trusts and Primary Care Trusts. The Trust has also become involved in benchmarking and sits on the NPAG Transport and the Environment Best Value Group.

3. Context

3.1. Introduction

3.1.1. Whilst the main driver for the development of 'A Better Way to Work' has been the need to address the specific problems of poor access and parking at Trust sites, the Trust is also responding to the obligations of transport and healthcare policy and by the need to consider the transport impact of future healthcare infrastructure development. This section briefly examines the relevant issues.

3.2. Transport Trends

3.2.1. The increasing level of demand for parking at the Trust is largely attributable to increasing levels of vehicle ownership and use amongst staff. This in turn is a reflection of a wider trend that nationwide has resulted in a 79% increase in car based road traffic during the period 1980 – 2000.

3.2.2. Car use has increased as disposable income has risen and the overall cost of motoring has fallen. The cost of vehicle use is a function of purchase cost, maintenance, fuel, oil, tax and insurance and is lower in real terms now than in 1980 whilst bus fares have risen by 31% over the same period.

3.2.3. However, these costs are artificially low. They do not take account of 'non market' costs such as air and noise pollution, habitat destruction and loss of amenity and the health impacts associated with high levels of car use. These externalities are estimated to cost society the equivalent of 10% of GDP per annum.

3.2.4. Wider social changes have had a profound effect on levels of car ownership and use. For example, the increasing number of women drivers, a reflection of the changing role of women in the workplace, means that over 70% of UK adults now hold a full driving licence, compared to 57% in 85/86. Likewise, whilst the average number of trips made per person per year has remained relatively constant over the period, trip substitution has occurred, with more journeys now made by car (up 24%), and less by bicycle (down 44%) and bus (down 31%).

3.2.5. Land use planning policy in the late 1980's and early 1990's favoured low density urban fringe development. The period 1985 – 1997 saw a four fold increase in the number of out of town shopping centres granted planning permission, driving an increase in car use through inadequate provision for access by non car modes.

3.2.6. There were over 25 million licensed cars in the UK in 2000, 63% more than 1982. The projected size of the private car fleet in 2025 is some 41 million.

3.3. Transport impacts

3.3.1. The impacts of road vehicle use may be described as falling into three categories:

- Environmental, relating to the release of pollutants from fuel combustion, the use of non-renewable resources in manufacturing processes and the loss of land to transport infrastructure.
- Economic, relating to congestion costs and the costs to the NHS and wider economy of road traffic accidents and the longer term impacts of sedentary lifestyles and pollution.
- Social, relating to the impacts of noise pollution and social exclusion.

3.3.2. Greenhouse gas emissions from the transport sector rose by 39% between 1980 and 2000 and now account for 26% of UK emissions of climate forcing pollutants, up from 20% in the late 1990's. Transport is the only sector of the UK economy in which Carbon Dioxide emissions are still rising. The transport sector is also the main UK source of Carbon Monoxide (70% of total 'man-made' emissions) and Nitrous Oxides (50%) and is the source of 20% of the particulate matter produced in the UK. Average fuel consumption in the UK private vehicle fleet has not improved since 1987 and the transport sector consumes 34% of total UK energy production, up from 25% in 1980.

3.3.3. 500,000 car trips are made each day into and out of Bristol City Centre. Congestion - additional time spent travelling compared with free flowing traffic – is a particular problem in Bristol because the road network does not have the capacity to efficiently handle existing traffic levels. The projected increases in levels of car ownership and use would have a significant impact on the economic vitality of the city and the quality of life

of its residents. Traffic speeds in the central area are now 11 mph, down from 16 mph in 1990 and the cost of congestion to business in the area is estimated at £50 million per annum. Traffic levels in the North Fringe area have grown by 32% between 1991 and 1996.

3.3.4. Although levels of car ownership are high in both Bristol and South Gloucestershire, this masks significant variations between wards. For example, whilst over 80% of households have access to a car in the most affluent wards of the city, this falls to 35% in inner city wards. Out of town shopping and leisure centres are inaccessible to pedestrians and others without access to a car, with the result that the elderly, disabled and those on low incomes are excluded from these services.

3.3.5. NHS modernisation, which has been driven by the closure of cottage style and city centre hospitals in favour of large, single site facilities on green belt land, has contributed to the problems of social exclusion. Distances travelled to access such sites are greater than for the facilities they have replaced, and they are poorly planned for accessibility by non car modes. Poor access results in missed and delayed appointments and 31% of those without access to a car experience problems travelling to hospital.

3.4. Healthcare policy

3.4.1. In 1997 3,599 people were killed and 327,544 were injured (42,937 seriously) in road traffic accidents in the UK. This equates to roughly 10 deaths and 1000 serious accidents a day. It is estimated that the annual cost to society of road traffic accident fatalities amounts to some 2.5% of GDP.

3.4.2. Vehicle exhaust emissions damage health. Carbon monoxide interferes with respiratory biochemistry and can affect the central nervous and cardiovascular systems, reducing the capacity of blood to carry oxygen to tissues. Nitrogen oxides are thought to have both acute and chronic effects on respiration and lung function, particularly in people with asthma. They also contribute to the formation of ozone, a harmful secondary pollutant and climate forcer. Particulate air pollution episodes are responsible for causing premature deaths among those with pre-existing lung and heart disease. A quarter of Bristol's population live in areas where NO_x, PM_{10} and ozone levels exceed threshold values. An estimated 10,000 premature deaths are attributable to respiratory disease

caused by air pollution from road traffic, estimated to cost £11 billion per annum annually.

3.4.3. Increasing levels of car use and declining levels of walking and cycling as modes of transport have contributed to the rise in the incidence of overweight, obesity and their associated health impacts. It is estimated that 63% of men and 49% of women are overweight. In 1998 the direct cost to the NHS of treating the effects of obesity was put at £500 million per annum, with additional indirect costs of £2.6 billion per annum.

3.4.4. The NHS has a duty to improve the health of the population as a whole whilst narrowing health inequalities. Transport is an important determinant of public health and the integration of healthcare with transport and land use planning is a key means of encouraging healthy transport and ensuring health services are accessible to all.

3.4.5. The Health Act and 'Our Healthier Nation' the white paper on public health, provide the statutory basis for this duty through the National Service Framework on Coronary Heart Disease and the production of Health Improvement Programmes by strategic health authorities.

3.4.6. The Avon, Gloucestershire and Wiltshire Health improvement programme recognises that the provision of accessible transport is a key part of the delivery of progress in the four priority areas of Coronary Heart Disease and stroke, cancer, accidents and mental health.

3.4.7. The National Service Framework on CHD aims to reduce heart disease in part by increasing levels of physical activity and encouraging the development of Travel Plans and healthy transport options amongst employers. The NHS not only has a duty to lead by example in this respect, but as the largest employer in the UK, to take action to address the unparalleled impact its operation has on health and the environment.

3.4.8. Guidance in this respect is provided through Controls Assurance, a mechanism that seeks to ensure that Trusts identify and deal with risks across all areas of their activity. The Fleet and Transport Management standard requires Trusts to take steps to 'improve fleet and transport management and reduce environmental and other risks associated with transport' (NHS Executive, 2000), and in particular, to:

- Give preference in procurement to vehicles with reduced emissions and increased fuel economy
- Consider mileage allowance rates that encourage smaller engined vehicles / cycling rates etc.
- Produce Transport Plans and encourage staff to adopt healthy transport choices such as walking and cycling
- Rationalise car parking needs in discussion with Local Authority officers
- Recognise the importance of good access, on-site traffic management systems, provision of signs and egress to the healthcare site
- Liase with public transport coordinators, both bus and rail, to provide a viable service to the site
- Negotiate with suppliers for deliveries to be made outside times of peak congestion
- Pursue opportunities for sharing vehicles or transport
- Consider journey management and distances covered

3.5. Transport Policy

3.5.1. It is now generally accepted that the trends in road traffic described above are socially, environmentally and economically unsustainable. Policy has moved on from 'predict and provide' to the use of a framework where transport planning is integrated with land use and healthcare planning and sustainable development. The general aim is to reduce congestion and pollution and provide a wider choice of quicker, safer and more reliable travel options.

3.5.2. The Environment Act (1995) and Road Traffic Reduction Act (1997) impose statutory duties on local authorities to reduce traffic levels, promote the use of sustainable modes of transport and take measures to reduce the pollution associated with road traffic.

3.5.3. The Integrated Transport White Paper and the Transport Act set out a series of strategies and structures to deliver modernised transport infrastructure. Between them, these documents provide the statutory basis for the introduction of Local Transport Plans, Regional Transport Strategies and Multi-Modal Studies.

3.5.4. The Ten Year Plan for Transport, budgets for expenditure of £180 billion over the plan period with significant allocations for integrated transport measures including behavioural change initiatives, demand management and travel planning. A three year funding package was made available to local authorities to support Workplace Travel Plan Co-ordinators and the development of travel for work strategies.

3.5.5. The framework for the delivery of the ten-year plan is set out in the Transport Act (2000). The Act places a statutory duty on local authorities to prepare five year Local Transport Plans that set out the policy and financial frameworks of future transport provision in their areas.

3.5.6. Both Bristol and South Gloucestershire Councils see Travel Plans as a key tool in meeting their Local Transport Plan objectives and emphasise the benefits of working in partnership with organisations that are developing plans on a voluntary basis. However, local authorities also have powers to require travel plan development as a condition of planning consent.

3.5.7. The principal tools in this respect are provided through Planning Policy Guidance note 13 (transport) and section 106 of the Town and Country Planning Act (1990). PPG13 allows for the application of conditions to planning consents, such as those relating to the provision of cycle facilities and facilities for public transport. PPG13 also makes provision for planning obligations and the use of commuted payments to support improvements to public transport, cycling and walking measures likely to influence travel patterns to the site involved.

3.5.8. Likewise, section 106 of the TCPA empowers local authorities to attach 'agreements regulating development or use of land' in such as way as to mitigate the impacts of developments that result in traffic generation or increased congestion.

3.5.9. The Trusts travel plan has been developed voluntarily and the Trust has thus not been subject to any of the planning conditions outlined above. However, in October 2003 South Gloucestershire Council imposed a condition on planning consent to redevelop the Post Graduate Centre at Frenchay Hospital that required the Trust to have implemented the travel plan by the time the development was occupied.

4. Existing facilities & services

4.1. Introduction

4.1.1. The Trust manages a large and varied estate, ranging from cottage hospitals and health centres to acute general hospitals. Its three main hospitals exhibit marked differences in context, built environment and in the nature of existing transport links. As all these factors influence travel behaviour a detailed understanding of the state of existing provision, both on and off site, is required if an effective policy response is to be developed.

4.2. General

4.2.1. **Southmead Hospital** is an acute general hospital covering an area of 24 hectares about 5km North of the city centre. The site has older buildings in the centre and more recent development at the periphery. Car parking is generally provided on the edge of the site.

4.2.2. The surrounding area is suburban, with the residential areas of Horfield to the South and West, Filton to the North and Southmead to the West. Consequently, the site is reasonably well served with regard to local facilities – shopping located on Southmead Road and Filton Road includes a post office, newsagents, grocery stores and a chemist.

4.2.3. The A38 runs within a few hundred metres of the sites Eastern boundary, a radial route carrying significant volumes of commuter traffic between the city centre and the North Fringe. The road is a principal public transport corridor. Both the A38 and the B4056 (Southmead Road) exhibit peak time congestion.

4.2.4. The sites main entrance opens onto Monks Park Avenue providing 24 hr vehicle access and serving as the principle A&E access point. The entrance also allows 24 hr pedestrian and cycle access. A second entrance opens onto Southmead Road and provides daytime vehicle access and 24 hour pedestrian and cycle access. Both entrance are barrier controlled. Minor entrances onto Dorian Road and Kendon Drive allow peak time vehicle and pedestrian and cycle access respectively.

4.2.5. **Frenchay Hospital** is an acute general hospital of some 28 hectares about 6km NE of the city centre. The site includes a number of listed buildings along with more modern development. Part of the site falls within the Frenchay conservation area. There are very few facilities in the local area.

4.2.6. The site is bounded to the North and East by the residential areas of Frenchay and Downend, to the south by Frenchay Common and to the West by the B4058 / Frenchay Park Road. The M32 runs about 500 metres West of the site, with the Avon ring road to the North.

4.2.7. The main entrance (A) opens onto Bristol Road, providing 24 hour access to A&E. Entrance B provides access to the site from the mini roundabout at the junction of Bristol Road, Frenchay Park Road and Beckspool Road. A third entrance (C) opens onto Frenchay Common. A gated footpath runs between Trust Headquarters and Frenchay Common.

4.2.8. The Trust owns and occupies most of the Frenchay and Southmead sites. A number of other organisations are based at the sites.

4.3. Pedestrian provision

4.3.1. It is possible to access **Southmead Hospital** on foot from all four entrances. Access is facilitated from Southmead Road by a pedestrian crossing adjacent to the site entrance. The pedestrian environment around the site is reasonable, with generally well maintained and lit footpaths.

4.3.2. On site facilities are reasonable. Some pavements are too narrow for wheelchair use. Pedestrian crossings are provided at six points across the site but are unlit. There are a number of points of conflict between pedestrians and other road users, such as at the Monks Park and Southmead Road entrances where cyclists are directed on to the pavement to avoid site barriers. A speed limit of 15mph operates across the site, but is not enforced and is regularly exceeded by both staff and visitors to the site.

4.3.3. Services provided on site include a restaurant, shops and cafes, photo processing, nurseries, market stalls, a social club and tennis courts. An independently operated open-air market is held in the main staff car park on Saturdays.

4.3.4. The pedestrian environment around **Frenchay Hospital** is reasonable at best, the area around the common in particular being poorly lit. The high level of staff parking on Beckspool Road along the common reduces the pavement width significantly. No crossing facilities are provided in the vicinity of any of the entrances.

4.3.5. On site facilities are much the same. A lighting survey conducted in 2002 demonstrated that lighting across the site is adequate. The narrow roads on the site mean that speed limits are generally low. In some areas – such as around A&E, pavements are not provided and provision for pedestrian is at the same grade as other road users.

4.3.6. Services provided at Frenchay include a restaurant and coffee shops, a social club, meeting hall, open air swimming pool, tennis courts, cricket pitch and nature trail.

4.4. Cycling

4.4.1. As part of the Showcase Bus Corridor package of works, a number of improvements have recently been made to cycle infrastructure around **Southmead Hospital**. These include Advanced Stop Lanes, cycle lanes and junction improvements on the A38. Additionally, specific cycle access is provided onto the site from Kendon Drive. There are no cycle facilities on Southmead Road or Monks Park Avenue.

4.4.2. The high level of on street parking on Monks Park Avenue and Southmead Road forces cyclists into the centre of the road, potentially causing conflict for road space with other users. Cyclists turning right onto the site from these roads are able to use the ghost islands by the site entrances.

4.4.3. Cyclists entering the site from Southmead Road or Monks Park Road are directed onto the footpath to avoid the entrance barriers, which being controlled by inductive loops will not be triggered by cyclists. Signage instructs cyclists to dismount. This is a point of conflict between cyclists and pedestrians. Cyclists entering the site from Dorian Road at times when the gate is down are also directed onto the footpath.

4.4.4. Cycle parking is provided at numerous locations across the site. Long stay parking is generally provided in the centre of the site, with short stay parking provided throughout. Facilities are generally Sheffield Stands or similar with a small number of older, wall mounted Butterfly stands. Many staff park their bikes informally close to their place of work. Covered parking is currently provided in a secure compound by the Post Room, the Post Graduate Centre and in the Cycle Centre. Table 4-2 summaries the number, location and type of existing cycle parking facilities at the three sites, although it should be noted that this is not necessarily accurate as new facilities are added on an ongoing basis.

4.4.5. Due to the nature of the site, there are a large number of showering and changing facilities on wards and accommodation blocks. Not all of these are available for use by cyclists, however, the travel to work office maintains a spreadsheet of those that are.

4.4.6. A dedicated cycle centre is located toward the centre of the site. The centre has secure access control and includes parking for 60 bicycles, a changing area with X lockers, ironing board, iron and hair dryer, toolkit, a drying room, showers and WCs and an information point. The centre is at capacity year round.

4.4.7. Cycle access to **Frenchay Hospital** is not to the same standard as that to Southmead Hospital. There are no cycle on Frenchay Park Road of Beckspool Road, however a share use facility is provided on Stoke Lane / Coldharbour Road and off road routes have been developed between UWE and the MoD at Filton Abbey Wood, allowing for reasonable cycle access from Abbey Wood station.

Table 4-1 Cycle Parking

Southmead Hospital	**No of stands**	**Long Stay**	**Short Stay**
Somerset House	3		√
Cycle Centre	30	√	
Medical Electronics	1		√
Avon Way	10		√
Restaurant	3		√
Midwifery	4		√
Personnel	2		√
Main admissions	6		√
Oral Surgery	2		√
Post Grad Compound	5	√	
Post room compound	12	√	
Monks Park House	2		
Total	**80**	**47**	**33**
Frenchay Hospital			
CSSD	5	√	
THQ (front)	2		√
THQ (side)	2		√
Gardens Dept yard	2	√	
Phase 1	5		√
Pain clinic	3		√
Swimming pool	2		√
Cycle compound	15	√	
Medical illustration	2		√
Medical engineering	2		√
Finance	2		√
A Block	2		√
Pathology	3		√
Porters lodge	2		√
Old pain clinic	2		√
Staff restaurant	2		√
Resident block	2		√
Neuro pathology	2	√	
Postgrad centre	3		√
Pathology	3		√
Payroll	3		√
Neurosciences	2		√
Total	**68**	**22**	**46**
Blackberry Hill			
Main entrance	2		√
Porters lodge	2		√
Training	4		√
Compound	4	√	
Side entrance	3		√
Restaurant	3		√
Total	**18**	**4**	**14**

4.4.8. The first health service Bicycle Users Group was set up at Frenchay Hospital in 1993. BUGs are now active at both acute hospitals.

4.4.9. The Trust currently pays a mileage allowance to staff who use their bicycles on Trust business. The allowance has not increased since its introduction in 1998 and stands at 40 p/mile for the first two miles, with 14 p/mile thereafter, up to a maximum of 10 miles. The number of staff claiming this allowance is very low. The total amount paid out for cycle mileage in 2001/02 – 2002/03 was only £100.

4.4.10. Discounts on bicycles, equipment and accessories have been agreed with a number of cycle shops in the North Bristol area. These are listed in table 4-3. A number of these stores have pick up / drop off arrangements whereby they will collect a bicycle for servicing from Southmead, Frenchay or Blackberry Hill and return it on the same day.

Table 4-2: Discounts at cycle shops

	Bikes	Accessories	Parts	Servicing
Bike UK	15	-	-	-
Pemburys	12.5	12.5	15	20
Bike City	10	-	-	-
Blackboy Hill Cycles	10	-	-	-
Harveys Cycle Exchange	-	-	10	-
Woods Cycles	5	-	10	-

4.5. Bus services

4.5.1. First operates the majority of commercial bus services in the Bristol area. These generally run on a radial basis through the city centre. Other operators include South Gloucestershire Bus and Coach and First Badgerline who provide services in South Gloucestershire and North Somerset respectively. A small number of services operate on an orbital basis and these tend to be financially supported by Bristol City or South Gloucestershire Councils.

4.5.2. Its residential setting and proximity to one of the principal bus corridors into the city ensure **Southmead Hospital** is well served by public transport. The existing service frequency and network coverage suggest that bus services to the site have the capacity to support significantly more than the 4% of staff who currently travel by this mode.

4.5.3. There are five bus routes that directly serve the site. Three stop immediately outside the Monks Park Avenue or Southmead Road entrances, with the remaining two running through the hospital grounds on a hail and ride basis. Shelters are provided immediately outside the site in each direction of travel. The shelters outside the main entrance have been upgraded as part of the Showcase Bus Corridor package of works and now feature raised bus borders and real time information displays.

4.5.4. Services 76/77 (Hartcliffe – Henbury) and 54/54b (Cribbs Causeway – Stockwood) offer the highest service frequencies – up to six services per hour on the 76/77 and four services an hour on the 54/54B – and the longest hours of operation. Service 76/77 forms the cities first Showcase Bus Corridor. In addition to improved bus shelters, the corridor features new bus priority measures including road space reallocation and transponder controlled traffic signals and a fleet of new, low emission, DDA compliant buses.

4.5.5. The supported services have the benefit of running through the Hospital grounds but are less frequent and have less capacity. They offer useful cross-city services linking the hospital to Filton Abbeywood and Parkway stations as well as Frenchay Hospital (see below). A further twelve services stop at the junction of Monks Park Avenue and the A38, about 400m of the main entrance.

4.5.6. **Frenchay Hospital** has a semi rural setting and as such bus services to the site are more limited. Existing services have spare capacity but new routes and / or increased frequencies would be required to accommodate significantly increased demand for public transport.

4.5.7. There are eight bus routes that directly serve the site, with stops located adjacent to entrances A and B. The shelters by the main are recessed, with no lighting and poor visibility and require replacement with a DDA compliant type.

4.5.8. The majority of services operate on radial routes into the city centre and Northwards to The Mall and Yate, with a small number of circular routes providing links to Longwell Green and Hanham. Service 4 (Hanham – City Centre) is the only commercially operated service to the site and has a frequency of 4 services per hour. The remaining

services are council supported and operate at lower frequencies and capacities. The 518 operated by South Gloucestershire Bus and Coach is the only bus service to link Southmead and Frenchay Hospitals.

4.5.9. Two bus routes directly serve **Blackberry Hill Hospital**. Stops are located immediately outside the main entrance in each direction of travel.

4.5.10. Service 5 (Downend – Centre) is the only commercially operated and runs every fifteen minutes. There are no bus services between Blackberry Hill and Frenchay hospitals.

4.5.11. The Trust is a member of Firsts 'Commuter card' scheme. Staff who purchase a First 6Month or First Year pass through the Trust receive a 10% discount on the ticket price. The Trust purchases the ticket from First and recovers the cost through monthly or weekly salary deduction over the duration of the ticket.

4.5.12. Staff who use public transport for business trips are entitled to claim an allowance of 23p / mile as specified by the Whitley Council.

Table 4-3 Bus services to Southmead Hospital

					Services / Hour						
					Monday – Friday					Sat	Sun
Service	Operator	Type	From	To	First	Last	AM	PM	Daily		
Through hospital grounds											
517	SGB&C	S	Abbey Wood	Avonmouth	0630	1735	1	1	1	-	-
			Avonmouth	Abbey Wood	0650	1735					
585	First	S	Sea Mills	Broadmead	0717	1834	1	1	1	1	-
			Broadmead	Sea Mills	0726	1831					
Stops immediately outside hospital											
76/77	First	C	Hartcliffe	Henbury/ Southmead	0442	2245	6	6	6	6	2
			Henbury/ Southmead	Hartcliffe	0516	2242					
518	SGB&C	S	Longwell Green	Avonmouth	0601	2241	2	2	2	2	1
			Avonmouth	Longwell Green	0613	2203					
Stops within 400m of site entrance											
54/54B	First	C	Stockwood	Cribbs	0525	2247	4	4	3	4	2
			Cribbs	Stockwood	0635	2247					
574	SGB&C	S	Bradley Stoke	City Centre	0749	1853	1	1	1	1	-
			City Centre	Bradley Stoke	0844	1756					
Services along Gloucester Road											
X10 X11 X14	First	C	Bristol	Chepstow	0820	1845	1	1	1	1	-
			Chepstow	Bristol	0711	1645					
75/75A	First	C	Hartcliffe	Cribbs	0520	2284	5	5	5	4	2
			Cribbs	Hartcliffe	0642	2232					
99	First	C	UWE	City Centre	0719	2055	3	3	3	-	-
			City Centre	UWE	0706	1900					
309 310	First	C	Bristol	Wotton under Edge	0555	1750	3	3	3	2	1
			Wotton under Edge	Bristol	0627	2147					
586	First	S	Zetland Road	Broadmead	0702	1908	1	1	1	1	-
			Broadmead	Zetland Road	0648	1901					
609 610	First	C	Bristol	Thornbury	1850	2250	1	1	1	1	-
			Thornbury	Bristol	1947	2147					

Table 4-4 Bus services to Frenchay Hospital

					Monday – Friday					Sat	Sun
Service	Operator	Type	From	To	First	Last	AM	PM	Daily		
Stop immediately outside hospital											
4	First	C	Hanham	City Centre	0620	2308	4	4	4	4	2
			City Centre	Hanham	0638	2215					
518	SGB&C	S	Longwell Green	Avonmouth	0601	2241	2	2			
			Longwell Green	Avonmouth	0613	2203	2	2			
318 / 319	First	C	Keynsham	Cribbs	0628	1817	1	1	1	1	-
			Cribbs	Keynsham	0633	1849					
626											
629											
680 / 681	SGB&C	S	Brimsham Park / Tormarton	Filton	0714	1757	1	1	1	-	-
			Filton	Brimsham Park / Tormarton	0901	1857					

Table 4-5 Bus services to Blackberry Hill

					Monday – Friday					Sat	Sun
Service	Operator	Type	From	To	First	Last	AM	PM	Daily		
Stop immediately outside hospital											
5	First	C	Downend	City Centre	0632	2230	4	4	3	3	2
			City Centre	Downend	0630	2316	4	4	3	3	2
581	First	S	Longwell Green	Cribbs	0739	1741	1	1	1	1	-
			Cribbs	Longwell Green	0742	1903	1	1	1	1	-

Notes:

Operators: First = First Bristol. SGB&C = South Gloucestershire Bus & Coach Co.

Type: C = Commercial. S = Subsidised. 99 = term time only

4.6. Intersite Bus

4.6.1. The Trust operates a shuttle bus service that runs between Southmead, Frenchay and Blackberry Hill Hospitals. The service was extended in May 2003 and now runs later in the evening as well as at the weekend. The bus now runs between 06.55 and 20.55

Monday to Friday, and between 09.55 and 13.55 on Saturday and Sunday. One 15 seat vehicle operates on the service, which has a frequency of 1 / hr.

4.6.2. Stops, currently of the 'pole and flag' type, are located by the Southmead Road entrance, outside the AOC, opposite the car park office and next to the Monks Park entrance at Southmead, next to the Redwood Restaurant at Frenchay and by the main entrance at Blackberry Hill Hospital.

Table 4-6 Intersite Bus Timetable

Monday – Friday		
	First	Last
Blackberry Hill	06.55	19.55
Frenchay	07.05	20.05
Southmead	07.25	20.25
Frenchay	07.45	20.45
Blackberry Hill	07.55	20.55
Saturday – Sunday		
Blackberry Hill	09.55	12.55
Frenchay	10.05	13.05
Southmead	10.25	13.25
Frenchay	10.45	13.45
Blackberry Hill	10.55	13.55

4.7. Travel Information

4.7.1. Travel Plan information boards are provided at eighteen locations across the Trust. They provide space for leaflets, cards, posters and booklets. Comment boxes are provided on each. Each site has a BUG noticeboard to display maps, leaflets and other cycling information.

4.7.2. The security and car parking offices at Southmead and Frenchay are supplied with copies of site maps, bus timetables and other travel information. Similar information is available from wards, departments and reception areas.

4.7.3. A Travel Plan intranet site has been developed and currently provides basic information on car parking and the intersite bus.

4.7.4. All new Doctors and nurses receive an induction pack with details of travel to work arrangements and initiatives, and all new staff receive a benefits sheet in their pack providing an overview of the travel plan with information on where to get further details.

4.7.5. All new staff with the exception of Doctors receive a travel to work presentation as part of their induction programme. This provides staff with information on existing car parking arrangements as well as the new arrangements planned as part of the Travel Plan. A wide range of public transport, cycling, car and ride sharing and associated information is made available to staff during their induction.

4.8. Parking

4.8.1. Policies have been developed to regulate parking at Southmead, Frenchay and Blackberry Hill Hospitals. At the Trust's other hospital sites car parking is provided on an unregulated basis. The policies cover apportionment and use of parking capacity; procedures for permit allocation and control of dangerous and 'illegal' parking.

4.8.2. Parking management is contracted out to professional car park operators. Q-Park (formerly Universal Parking Management) provides management services at Southmead Hospital, whilst KML fulfil this function at Frenchay and Blackberry Hill. These arrangements date from the former Southmead and Frenchay Hospital Trusts and were inherited by North Bristol Trust when it was created in 1999. The contracts have been extended on a short-term basis such that both will be due for renewal in 2007, at which point a Trust wide contract will be sought.

4.8.3. Q-Park and KML are responsible for all aspects of operational management. Their responsibilities include the provision of parking attendants, administration of the permit application and renewal process, enforcement of the Trust's parking policy (including the collection of fines and clamping), maintenance of car park barriers and signage and the provision of a courtesy bus service (Southmead only). The two companies provide professional expertise to facilitate ongoing improvements to the quality of the Trusts car parks.

4.8.4. There are currently 1327 spaces at **Southmead Hospital** provided for staff use, 81% of total parking capacity at the site, with the remaining 19% allocated for use by patients

and visitors. The staff car parks operate near or at capacity much of the time. Capacity is below that allowed for by local authority guidance and is subject to additional pressure as development activity reallocates parking capacity for other uses[1].

4.8.5. The site has a permit / space ratio of 2.98, significantly higher than the 1.66 recommended for new hospital development. There are therefore substantially more permits per space than can be efficiently managed. This imbalance between demand and supply, caused by the lack of any demand restrain measures, is the cause of most of the parking issues that affect the site. Additionally, there are serious and ongoing issues relating to illegal and dangerous parking on site and staff parking on residential roads in the surrounding area.

4.8.6. Notwithstanding the above, the apportionment and management of existing capacity is generally good. Table 4-4 lists current parking capacity and apportionment. All the main staff car parks are barrier controlled and well lit. A number of car parks have been awarded 'Secure car park' status by the Association of Chief Police Officers for several years in succession. Separate car parks are provided for late shift staff on call and peripatetic staff, consultants and for loading and short stay purposes.

4.8.7. The main vehicle access points are the Monks Park Avenue and Southmead Road entrances. Of the two, the Monks Park / A&E entrance provides 24 hour access to the site, with the Southmead Road entrance open between 8am and 6pm. Access is possible from the Dorian Road entrance during the morning and evening peaks only.

4.8.8. At **Frenchay Hospital**, 1159 spaces are provided for staff, 74% of total capacity. Recent revisions to South Gloucestershire Council's local plan (currently at the draft deposit stage) have replaced maximum parking standards for hospital developments with a per site assessment, determined on merit. making an assessment of the optimum level of staff parking problematic. Notwithstanding this, the 4110 live permits at Frenchay have resulted in a permit / space ratio of 2.64, suggesting that the number of

[1] Although the use of parking standards to determine the optimum number of spaces for the number of staff employed on the site is complicated by the fact that the site is classed as mixed use, working on the basis of 1 space per 3 beds plus 1 space per 3 w.t.e equivalent staff, suggests that appropriate capacity stands at 1470 spaces. However, revisions to the First Deposit of the Bristol Local Plan suggest this standard might be tightened for sites such as Southmead that are well served by public transport.

spaces necessary for efficient management of existing demand is in the region of 1950 spaces. Table 4-5 lists current parking capacity and apportionment

4.8.9. Only the main staff car park is barrier controlled, access to which is via the main visitor car park, making entering and leaving at peak times problematic. Several car parks have temporary surfaces and others are in a poor state of repair. Lighting is adequate throughout. Spaces are provided for a range of users including late shift staff. Provision is also made for 'Priority' users – members of staff who leave the site on Trust business on a regular basis.

4.8.10. Staff parking on Beckspool Road, Frenchay Park Road and the residential roads around Froomshaw Road is commonplace and of serious concern to local residents.

Table 4-7 Southmead Hospital Car Parks

LOCATION	TOTAL SPACES	STAFF	CAR SHARE	ON CALL	COMM	PAY & DISPLAY	DIS	VSTR	DROP OFF	PICK UP	AMB BAY	LOAD BAY	BARRIER
A&E	39			2		30	7						
AOC (Front)	8								8 (10 mins)				
AOC (Rear)	90					90							
AOC (Rear/Staff)	28	23		5									Yes
AVON WAY (Public)	130					130							
AVON WAY (Staff)	318	318											Yes
AVONMEAD	7				7								
BOILER HOUSE	12	12											
BRECON UNIT	34	30		4									Yes
CDS/DONAL EARLY	65			5		49	8			3			
CHAPEL WAY	19			7			10		2				
CHRISTOPHER HANCOCK	188	181			2		3	2					Yes
CONSULTANT	22	22											Yes
COTSWOLD CENTRE	11	11											
DSC	6						6						
ELGAR HOUSE	7					5	2						
ELGAR HOUSE (Staff)	15	15											
GLOUCESTER HOUSE	69	57		1			2				9		
LATE SHIFT	79	79											Yes
LEWIS LABS	6	5						1					
MAIN ADMISSIONS	0												Yes
MATERNITY	5			5									
MONKS PARK HOUSE	43	33			8			2					
MORGUE (DMA)	2						2						Yes
NICU	21	21											Yes

OCC HEALTH	6				4			2					
OT TECHS BAY	2	2											
RICHARD BRIGHT	7						6		1				
RICHARD BRIGHT ON CALL		?											
SILVER BUILDING/POST GRAD	26					18	4	3				1	
SOMERSET HOUSE	6							6					
TRAINING	6	6											
TUKE	69	69											Yes
TYNDALL HOUSE	30	30											
TYNDALL WAY	252	247						5					Yes
UPM SPACES	9	9											
WESTGATE HOUSE	9	9											
TOTALS	**1646**	1179	0	29	21	324	50	21	11	3	9	1	

Table 4-8 Frenchay Hospital Car Parks

LOCATION	TOTAL SPACES	STAFF	CAR SHARE	ON CALL	COMM	PAY & DISPLAY	DIS	VSTR	DROP OFF	PICK UP	AMB BAY	LOAD BAY	BARRIER
A&E	28	27					1		4				
ANAESTHETICS	10	10											
BARRIER CAR PARK	155	155											Yes
BURDEN CENTRE	32	32							4				
CAR PARK A	64					64							
CAR PARK B	61					61							
DRESSING CLINIC (Old MRI)	14	14											
ENTRANCE C	14	14											
ESTATES	52	52											
LASER UNIT (Rear)	10	10											
LIMETREE DRIVE (Mixed)	127	61				46	20		7		1		
LIMETREE DRIVE	121	120					1						
MacMILLAN/PLASTICS	61	61					2		2				
MAIN CAR PARK	198					188	10						
MAIN CAR PARK (Priority)	22	22											
MEDICAL RECORDS	8	8											
NHS SUPPLIES	13	13											
O/SIDE DAY HOSPITAL	18	17					1						
OCCUPATIONAL HEALTH	37	35					2		5		1		
OLD STABLES (Overflow)	23	23											
OUTPATIENTS	31	28					3						
PATHOLOGY LAB	6	6					4						
PHYSIOTHERAPY	12	10					2		2				
RESIDENCES A	100	100											
RESIDENCES B (& Overflow)	90	90											

RESIDENCES C (& Overflow)	145	145											
SEWING ROOM/LINEN EXCHANGE	8	8											
SOCIAL CLUB (Opposite)	30	30											
THQ	68	68					1						
TOTALS	**1558**	**1159**				**359**	**47**		**24**		**2**		

Table 4-9 Blackberry Hill Hospital Car Parks

LOCATION	TOTAL SPACES	STAFF	CAR SHARE	ON CALL	COMM	PAY & DISPLAY	DIS	VSTR	DROP OFF	PICK UP	AMB BAY	LOAD BAY	BARRIER
OAKWOOD HOUSE	5	2							3				
RIVERSIDE	26	24					2						
TRANSPORT DEPT	9	9											
ESTATES													
FROMESIDE HOUSE	28	28											
WICKHAM HOUSE	50	50											
ORCHARD DAY HOSPITAL	30	30											
ORCHARD HOSPITAL OVERFLOW	30	30											
MAPLES	12	12											
BRACE CENTRE	30	30											
LAUNDRY	3								3				
WRVS	4	4											
MANOR PARK PHARM	10	10											
CEDAR HOUSE	36	36											
MAIN STAFF	51	50							1				
WHITE GATE	19	19											
RESTAURANT	20	20											
MAIN PUBLIC	60			4		52	3		1				
WESTLEIGH HOUSE	10	10											
TRAINING DEPT	21	20					1						
BADMINTON	25	25											
TOTALS	**479**	**409**		**4**		**52**	**6**		**8**				

4.9. Other Policy Issues

4.9.1. All staff have the opportunity to apply for flexible working. Flexible working can take a number of forms, many of which have positive impacts on demand for parking. Flexitime, shift working and compressed hours can spread solo car journeys across the working day, reducing the congestion problems associated with 9 – 5 working. Moreover, home working removes the need to make the journey to work entirely and the Trusts guidance on home working acknowledges its beneficial effects on parking and travel to work difficulties.

4.9.2. Job vacancies are advertised in a wide range of local and national media. The Trust does not have a recruitment policy of targeting specific geographical areas to fill specific grades, but makes extensive use of local print media to recruit non specialist roles.

4.9.3. The Trust is required to recruit nationwide in order to fill senior and specialise posts and grades and offers a relocation package to qualifying staff. The package provides for the reimbursement of fees, duty and other costs associated with relocation but is contingent on the member of staff concerned moving to a location no more than 25 miles distant of their place of work.

4.9.4. An increasing number of staff have been recruited overseas. 'Overseas staff' are usually based in Trust accommodation at Blackberry Hill and are reliant on the intersite bus for transport to and from work. This has resulted in a sharp increase in patronage on the bus, demand for which often exceeds capacity during the morning and evening peaks. This is a serious reliability issue, as the transport department do not have the spare capacity to send out sweeper vehicles.

4.9.5. Staff who use their vehicles on business use are paid a mileage allowance at rates specified by the Whitley Council. Current rates are illustrated below:

Table 4-10 Whitley Council rates

	501 – 1000 cc	1001 – 1500 cc	Over 1500 cc
Regular user			
Lump Sum	£508	£626	£760
Up to 9,000 miles	27p	33.5p	40p
Thereafter	16.2p	18.3p	20.5p
Standard			
Up to 3,500 miles	34p	43p	53p
Thereafter	16.2p	18.3p	20.5p

5. Staff travel patterns

5.1.1. The Trust employs staff in a wide range of clinical and non-clinical positions. A high proportion of staff are female and many work shifts, so that staff have a wide range of transport needs, many of which may be unique to the healthcare sector.

5.1.2. In order to gain an understanding of how these staff travel to work and their reasons for doing so, and to assess options for encouraging a switch away from the private car, a staff travel survey was undertaken. The survey took the form of a self-completion questionnaire, distributed to all members of staff in October 2001, yielding a response rate of 25%

5.1.3. The survey was designed to collect data in the following key areas:

- The journey to work
- Awareness of existing facilities
- Attitudes to possible travel plan measures

5.1.4. A full analysis of the results is available in a separate report. The key findings are explained below.

5.2. The journey to work

5.2.1. Most journeys were short. Almost a third of staff made the journey to work in less than 15 minutes. Only a quarter took more than half an hour. However, only a third of bus users got to work in less than half an hour, suggesting that congestion is a serious cause of delays.

5.2.2. The majority of staff lived less than 3 miles from their place of work. In fact, 15% of solo drivers travelled less than a mile to get to work, with only 10% living more than 10 miles from work.

5.2.3. 75% of staff drove to work alone, 8% car shared, 7% walked, 4% cycled and 4% took the bus. As illustrated in table 5-1, levels of car use were well above the national average whilst levels of walking and bus use were well below, in the case of the latter significantly so.

5.2.4. There was a significant difference in modal split between sites. More women drove to work alone than men. Solo car use was highest in the 35 – 44 age bracket. Younger and older staff were less likely to drive to work alone.

5.2.5. There were significant differences in mode between staff groups. Just over half of ancillary staff drove to work alone compared to over 80% of management grades and nursing staff.

5.2.6. Although levels of solo car use were high amongst on call and 'out of hours' staff, they were actually higher amongst staff who work normal office hours.

5.2.7. 30% of staff drove to work because it was seen as being the quickest mode. A quarter drove because they needed access to a car during the day. A fifth of staff said they drove to work because there were no alternative options. Only 10 in 10 drove to work because they had to take children to school or childcare.

5.2.8. A large number of staff admitted parking on residential roads surrounding the Trusts sites. This was as high as 7% at Blackberry Hill.

5.2.9. 50% of solo drivers would be prepared to car share. Some 60% thought that help with finding a car share partner would be most effective at encouraging use, A fifth favoured reducing parking charges for car sharers and 20% a free emergency ride home.

5.3. Alternatives to the car

5.3.1. The majority of solo drivers would consider using alternatives to the car if improvements to existing services and facilities were made.

5.3.2. The level of awareness of existing travel initiatives was variable. Few staff knew that the Trust offers interest free loans for season ticket purchases, or paid a cycle mileage

allowance. However, the majority of staff at Southmead and Frenchay were aware of the intersite bus. Less than half Blackberry hill staff were aware of this facility.

5.3.3. Poor street lighting was seen as the main barrier preventing increased levels of walking, although those who did walk saw this as less of an issue than those who drove. More visible security and better lighting were also seen as important.

5.3.4. Most staff saw more comprehensive off road cycle paths as a way of encouraging staff to cycle to work. This was considered far more important than the provision of cycle parking and showering and changing facilities.

5.3.5. Staff who travel to work by bus considered more direct bus routes to be the best way of driving patronage amongst staff. Non users considered service frequency more important. 75% of staff who use the bus experience problems on a regular basis, falling to 33% amongst motorists and only 16% of cyclists.

Table 5-1 Comparison of main mode

Main mode to work	NBT Sept 2001	National	NBT March 2003
Car	75	70	69
Car share	8		17
Bus	4	8	5
Rail	0	6	0
Walk	7	11	2
Cycle	4	5	5
Motorbike / PTW	1		2

6. Objectives and targets

6.1.1. As the plan develops, progress will be assessed against a broad objective and a series of targets. The objective sets out the overall aim for the plan; with the targets setting the goals that will help the Trust measure progress.

6.1.2. The Trust recognises that the Travel Plan process is dynamic, characterised by a continuous cycle of action, monitoring and review. The setting of targets is key to this process as they provide the basis from which changes in travel behaviour can be monitored, providing a means for the plan to be revised as necessary.

6.1.3. The Travel Plans targets are designed to be SMART – Specific, Measurable, Achievable, Realistic and Time constrained. In setting these targets the Trust has considered the level of modal change necessary to realise real improvements on the ground whilst being consistent with modal change targets set by local and national Government.

6.1.4. The main focus of the plan is on the parking and access issues and consequently the targets focus on reducing the number of staff who drive to work alone. However, the Trust expects that the plan will bring the following additional benefits:

- Improved access for all staff (with associated employment benefits)
- Improved access for patients and visitors
- Health benefits to staff
- Environmental improvements relating to air quality and noise pollution
- Wider community benefits relating to social exclusion, congestion and road safety

6.1.5. Thus the overall **objective** of the plan is to reduce the need for staff to use the private car when travelling to and between Trust sites.

6.1.6. A **headline target** has been set to reduce SOV levels from 75% in 2001 to 68% by 2007, representing a 10% reduction in real terms.

6.1.7. This headline target breaks down into **secondary targets** that apply to the Trust as a whole. Table 6-1 sets out these targets. Baseline data for the targets are derived from the most recent staff travel survey. Interim targets have been set for 2004. New targets and objectives will be set at the end of the first plan period in 2007.

Table 6-1 Travel Plan targets

Mode	Baseline	Interim	Target	Change
SOV	**75**		**68**	**(10)**
Car Sharing	8		9	13
Walk	7		8	14
Cycle	4		6	38
PTW	1		1	0
Bus	4		8	100
Train	0		0	0

6.1.8. The targets the Trust has adopted are designed to complement those set out by Bristol City and South Gloucestershire Councils in their Local Transport Plans. The links between the various targets are illustrated in table 6-2 below.

Table 6-2 Links to LA LTP targets

Mode	NBT	BCC	SGC
SOV	Reduce by 10% in real terms by 2005	Reduce growth in car traffic by 20% by 2005 and thereafter reduce by 20% by 2015. Reduce growth in outer area by 15%	Limit growth to 7% between 2001 – 2006 Reduce mode share by 5-27% depending on corridor
Car Share	Increase mode share by 13% by 2005		Increase mode share by 10% by 2005
Bus	Double mode share by 2005	Increase bus trips to central area by 10% by '05 and by 30% by '15	Increase frequency of use
Train	Remain stable	Increase number of trips on local services by 5% by 2006 Increase mode share to at least 1.5% by 2006	Increase rail use for commuting by 30% by 2005
Cycle	Increase by 38% by 2005	Double by 2002 and double again by 2012 Achieve a 10% mode share by 2012	Double mode share by 2005 Increase to at least 10% amongst large employers

Walk	Increase by 14% by 2005	Increase number of walk trips to central area by 10%	Increase journeys to work on foot

7. Delivering the Travel Plan

7.1. Introduction

7.1.1. The parking policies the Trust has inherited have proven to be inconsistent, inequitable and ineffective at addressing the current problem of high (and increasing) demand for parking and limited capacity on constrained sites to supply it. The lack of demand management has created an expectation that all staff are entitled to drive to work with the consequence that dangerous parking and competition for spaces are commonplace.

7.1.2. Given the constrained nature of the Trust's sites, increasing the number of parking spaces to meet forecast demand is not possible. Indeed it is likely that capacity will decrease in future due to developmental pressures. Thus, measures to control demand for parking are essential if best use is to be made of the limited and potentially diminishing parking resource.

7.1.3. The plan uses a 'carrot and stick' approach to changing travel behaviour. The introduction of demand management measures to ration the availability of permits is a basic element. However, as the use of charges alone has not proven effective in the past at managing demand the Trust has developed a twin track approach based around charging to generate funding allied to the use of allocation criteria to ration permits.

7.1.4. The other key element of the plan is the development of alternative travel to work measures. As discussed in section 4.10, existing facilities are strong in some areas and weak in others. The aim of the plan is to build on and improve these facilities. In this respect, the Travel Plan utilises a *behavioural change* approach to changing travel patterns, as illustrated in figure 7-1. Over eighty different measures have been identified. The schemes are designed to facilitate the move from one stage of behavioural change to another and to increase the sustainability of Trust transport. The schemes are listed in the Action Plan in section 7.14, along with their costs, progress, scheduling and other implementation details.

7.1.5. The plan is not prescriptive. Rather, staff are encouraged to make use of the facilities and incentives offered by the Trust and its partners to make appropriate travel choices based on their personal circumstances.

7.1.6. The measures are agreed outcomes following consultation with staff, unions and stakeholder groups and have been developed in partnership with local authorities, transport operators and other organisations. The plan is revenue neutral, with all project costs being met through permit fee revenue. The car park companies will fund capital costs associated with car park measures, amortizing charges over the duration of their contracts.

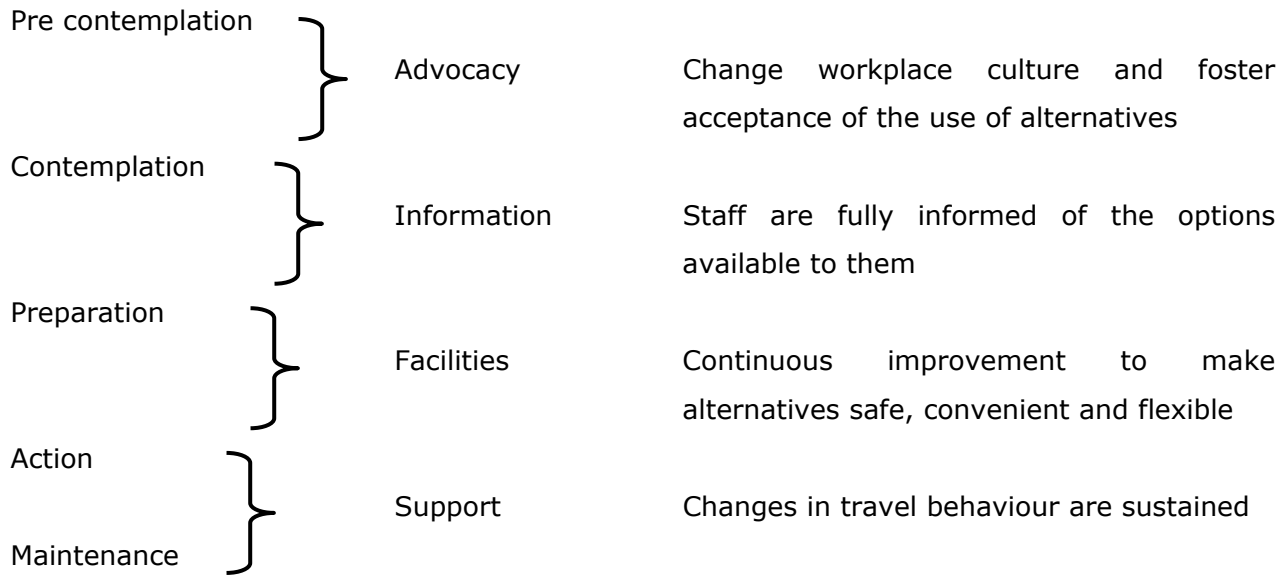
7.1.7. The results of the last staff travel survey, backed up by recent DfT research, suggests that whilst only in the region of 10% of solo car drivers would consider cycling or using public transport, some 50% would consider car sharing – and furthermore, that people who car share are some five times more likely to use alternatives than solo car drivers. Accordingly, the focus of the first phase of the plan is on encouraging staff to change the way they use their cars rather than seeking to bring about radical changes in travel behaviour.

7.1.8. This initial phase also includes improvements to public transport and cycling infrastructure, mainly to benefit existing users of those modes, but also to support staff who are preparing to make the move to more sustainable modes of transport.

7.1.9. The early introduction of these measures allows time for them to 'bed in' in advance of the introduction of parking restraint measures. This approach also has the benefit of establishing a Travel Plan culture within the Trust in which staff who would not normally consider leaving their cars at home feel comfortable in exploring other travel to work options.

7.1.10. The initial phase will be followed, during the summer of 2004 by the introduction of demand management measures. The remainder of this section outlines the measures that will be in place by summer 2004 to encourage the use of alternatives, the measures that will be used to manage parking and the mechanisms for their administration, and the longer term actions that are scheduled for the period following summer 2004.

Figure 7-1 Stages of behavioural change



7.2. Car Sharing

7.2.1. The Trust has licensed a car share package called 'CarshareBristol' from the University of Bristol. The system is Internet based and registered users are able to search for car share partners whose location and working patterns match their own.

7.2.2. The Trust offers access to the system free of charge. The system can be used at home or work, however, staff who do not have internet access will be able to use the included call centre. A private group has been created for NBT staff, and once registered staff have the option of restricting their search to fellow employees, or widening it to search for matches amongst any of the 22 other organisations in the scheme.

7.2.3. The system brokers the match through anonymous email exchange. Guidance is provided on safety aspects and on splitting the costs of petrol etc.

7.2.4. In the region of 200 staff car parking spaces at Southmead and Frenchay Hospitals will be reallocated for use by car sharers. Access to these spaces will be restricted to staff who have registered with CarshareBristol and who share their journey to work with at least one other member of staff. These will operate on an informal basis initially, but any future Trust wide car park contract will make provision for the introduction of separate barrier controlled car share car parks.

7.2.5. An 'emergency ride home' guarantee will ensure that staff whose car share arrangements fail (such as in the case of sickness or accident) are able to recover the costs of the taxi home.

7.3. Bristol City Car Club

7.3.1. Car Clubs remove a barrier to reduced car dependency by providing vehicle access without the need to own a car. Membership of a car club gives access to a range of vehicle types, allowing the user to select the most appropriate vehicle for any given journey. The minimum booking period is generally one hour. For those who drive less than 10,000 miles per annum, vehicle access through a car club provides cost savings when compared to the cost of running a private car. Car club membership can remove the need to run a second family car entirely. Car Clubs also increase transport options for those who are not able to afford, or choose not to own, their own vehicles.

7.3.2. In partnership with club operator Smart Moves, the Trust will run a pilot City Car Club at Southmead and Frenchay Hospitals. Two Car Club cars will be based at each of the two sites and will be made available to staff for both work related and personal purposes.

7.3.3. The Trust will join the club as a 'corporate' member to provide vehicle access for staff who are considered non essential car users, but who make occasional journeys on Trust business. Staff who register as personal users will have access to the vehicles outwith core hours.

7.3.4. Individual members of the Club will be charged for their use of the vehicles at a rate of £2.10 per hour plus £0.15 per mile, with billing handled through operator Smart Moves. The cost of work related journeys will be billed direct to the Trust, avoiding the need for staff to claim travel expenses.

7.3.5. Initially, membership of the club will be restricted to staff who are not eligible or do not require a standard parking permit.

7.3.6. Staff who join the club will have access to other Bristol City Car Club cars. Conversely, members of the Bristol City Car Club will have access to the North Bristol Car Club cars.

7.4. Bus services

7.4.1. The Trust already operates a season ticket loan scheme. The scheme allows staff who regularly travel by bus to purchase a yearly or half yearly pass at a discounted rate. The Trust recovers the cost of the pass through a PAYE deduction from salary. The scheme will be heavily promoted to staff following Firsts relaunch in January 2004 and the scheme will be extended to include annual passes provided through South Gloucestershire Bus and Coach Company.

7.4.2. A 10% discount on all other advance tickets will be introduced. This will apply to tickets issued by First Bristol as well as to Ten-journey passes issued by South Gloucestershire Bus and Coach Company.

7.4.3. The information displays on bus shelters adjacent to Southmead, Frenchay and Blackberry Hill will be updated to carry site maps and information on key destinations on site. Likewise, information on bus services to these hospitals will be provided at Bristol Bus Station and Bristol Parkway Station.

7.4.4. DDA compliant bus shelters will be installed on site at Southmead Hospital for users of services 517 and 585. Theses services will be rerouted along Avon Way to allow the shelters to double as shelters for users of the intersite bus.

7.4.5. The Trust will collaborate with First and South Gloucestershire Bus & Coach on a guide for staff on bus services. The guide will include details of relevant routes to Southmead, Frenchay and Blackberry Hill, maps, ticketing incentives and links with other aspects of the travel plan such as the Car Club.

7.4.6. The Trust has agreed a partnership statement with First that commits both organisations to work to improve the quality of bus services to the Trusts sites. Issues relevant to Southmead are discussed in section 7.7 below. In addition, First has undertaken to review services 54 / 54b, 4 and 5 / 5a to assess the potential of amending these routes to provide a better service to Trust employees.

7.5. Intersite Bus

7.5.1. The existing 'pole and flag' type stops will be replaced by DDA compliant shelters, initially at four locations at Southmead Hospital (see section 7.7 below) before rolling out Trust wide. Timetable information and site maps will be provided at each.

7.6. Cycling

7.6.1. A cycle strategy has been developed (see appendix 3) that demonstrates how cycling will be integrated into the Trusts policy and planning processes, funded and monitored. Resources permitting, the following schemes will be implemented in the first phase of the Travel Plan:

7.6.2. The Southmead Cycle Centre will be partitioned to provide separate male and female changing areas. This will be a temporary arrangement to allow future works to provide segregated male and female changing / showering and WC facilities

7.6.3. A minimum of 30 additional Sheffield stands will be installed at Frenchay and Southmead, providing parking for up to 60 cycles.

7.6.4. The Trusts existing interest free loan scheme will be extended to include loans for the purchase of new bicycles and related equipment. A maximum of £500 will be loaned to staff and recovered in 12 monthly instalments.

7.6.5. Pool bicycles will be provided at all three sites, for on site travel and for short, work related trips off site. A pool bicycle policy will be developed outlining insurance and safety aspects. The bicycles will be supplied and maintained by a third party cycle store on behalf of the Trust.

7.6.6. The existing mileage rates will be raised to ensure parity across all modes of transport.

7.6.7. An emergency ride home scheme will be introduced, providing cover not only for cyclists but pedestrians, car sharers and bus users,

7.6.8. In partnership with LifeCycle UK, adult cycle training will be offered free of charge to staff. The Trust will pay for up to two sessions per person

7.6.9. Following changes announced in the 2003 budget, the Trust will hold bimonthly 'bikers breakfasts' for staff who cycle to work.

7.6.10. In partnership with Bristol and South Gloucestershire Councils, the Trust will produce cycle maps for each site. The maps will include identify the location of onsite facilities (Sheffield stands, cycle centres, showers etc) as well as local area access maps with cycle lanes, advisory routes and so on.

7.7. Interchange

7.7.1. The Southmead Interchange Project is a joint venture between the Trust, City Council and First Bristol Buses that aims to promote sustainable modes of travel to Southmead Hospital such as walking, cycling and public transport. The project combines several of the schemes outlined above with new engineering and infrastructure measures both on and off site, in such a way as to increase the accessibility of the site by non-car modes. The project is part funded by the European Union through it's VIVALDI initiative.

7.7.2. A partnership agreement that outlines the roles and contribution of the three organisations is included in appendix 2. A number of specific measures are included in the project, of which the following are expected to be complete by Summer 2004.

- Hospital information & maps provided at bus shelters on Monks Park Avenue and Southmead Road
- Bus shelters installed on site for use by through services and intersite bus
- Electronic information screens installed in A&E, AOC and the coffee shop to carry electronic timetable and other travel information
- Timetable and Travel information channel available through a dedicated Patientline channel
- Increased peak time intersite bus service frequency
- Branding of car park courtesy bus
- Minor cycle & pedestrian works
- Construction of a shared use facility across Horfield Common
- Signalisation of main Monks Park Way / Monks Park Avenue entrance

7.8. Parking Policy & Procedures

7.8.1. The Trust's parking policies have been updated and revised to ensure consistency with the overall aims and objectives of this travel plan.

7.9. Car park charges

7.9.1. The provision of staff parking represents a significant drain on Trust resources. It is estimated that the cost of providing staff parking, based on land rates, maintenance charges, car park contracts and opportunity costs is in the region of £3.2 million per annum.

7.9.2. The Trust's financial recovery plan and clinical commitments do not allow for continued selective staff subsidy on such a scale. The use of parking charges will allow the Trust to recover an element of the costs involved in providing parking and will generate the revenue that will fund the travel to work programme.

7.9.3. The fee structure selected by staff and agreed by the Trust board is based on a sliding scale, such that the cost of a permit represents 0.2% of salary. The salary bands are illustrated in table 7-1. Fees will be collected monthly by automated deduction from salary. Provision will be made for staff who wish to pay upfront by cheque. Staff of other organisations will be able to pay by standing order. Permits will be charged to bank staff on the basis of their pervious years income.

7.9.4. Costs are for an annual permit, i.e. one that entitles the holder to unlimited use of the Trusts parking facilities for 12 months from date of issue. An occasional use permit will be introduced for staff who do not require such access, allowing for a restricted use of parking facilities at greatly reduced cost.

Table 7-1 Parking permit fee salary bands

Salary band	Annual Fee / £
Up to £9,999	20
£10,000 - £19,999	45
£20,000 - £29,999	70
£30,000 - £39,000	95
Over £40,000	120

7.9.5. Revenue from car park charges is expected to be approximately £138,000 per annum. This revenue is ring fenced and will be used only to fund the initiatives in the action plan.

7.10. Permit allocation

7.10.1. The number of active permits in circulation at Southmead and Frenchay / Blackberry Hill Hospitals is far in excess of the level required for efficient car park operation, a direct consequence of the lack of measures to control demand. Car parking in new development is based around a planned ratio of 1.66 permit per space. In comparison, there are 2.98 permits per space at Southmead and 2.64 pps at Frenchay Hospitals.

7.10.2. The use of criteria to ration the availability of parking permits is an increasingly common feature of hospital travel plans and allows for a high level of sophistication in balancing operational need with efficient management of parking capacity.

7.10.3. The Trust has adopted a needs-based allocation system, based on successful models deployed by, amongst others Swindon and Marlborough and Oxford Radcliffe NHS Trusts and Orange. The basic principle of the system is that all staff who are considered by the Trust to need to drive to work are eligible for a permit. A series of criteria have been developed to assess this need, and staff who meet any one of these criteria are considered eligible for a permit.

7.10.4. The principle criteria are Travel to Work zones designated around the three main sites. The zones map areas of high public transport and pedestrian accessibility, based on the following key specifications:

- That the journey to work by bus or foot take no more than thirty minutes from any point within the zone
- That the thirty minute journey time be based on the complete door to door journey
- That DfT guidance be followed regarding walking distances to and from bus stops
- That only direct bus routes are included
- That service frequencies should be a minimum of 3 journeys / hour between 07:00 – 18:00 Monday – Friday
- That only well lit footways on the public highway are included. Footpaths, bridlepaths and other Rights of Way not on the public highway are excluded.

7.10.5. Members of staff who live outwith the zone of their base site fall outside this area of high accessibility and are therefore considered eligible for a parking permit. Staff who live within the travel to work zone of their base site are not automatically eligible for a

permit. In such cases a series of secondary criteria are used to determine eligibility. Staff are considered eligible for a permit if they meet any of the following criteria:

- They have a disability
- They have a work profile that means they considered essential car users OR that they leave their base site on Trust business on two or more occasions a week
- They have a working pattern that means that they start or finish work outside 07:00 – 18:00 Monday - Friday
- They have commitments of care to other family members
- They are registered car sharers

7.10.6. Staff who do not meet any of these criteria but who consider that they have a need to drive to work will be entitled to appeal against the decision. An appeals panel, chaired by a member of the Trust Board will consider such cases.

7.10.7. Table 7-2 illustrates the impact of the permit allocation criteria on the number of staff who are eligible for a permit. Due to the inherent difficulty in predicting the number of staff who meet the care commitments criterion, high and low cases have been taken. In the high case, 50% of staff who would otherwise not be eligible for a permit have care commitments. In the low case, 25% of these staff have care commitments.

Figure 7-2 Southmead Hospital Travel to Work Zone


Cribbs Causeway
Brentry
Filton
H
Southmead Hospital
M32
Horfield
Stoke Bishop
No. 76/77 bus route
Eastville
Redland
No. 55 bus route
St Pauls
Clifton
Barton Hill
City Centre

Figure 7-3 Frenchay Hospital Travel to Work Zone

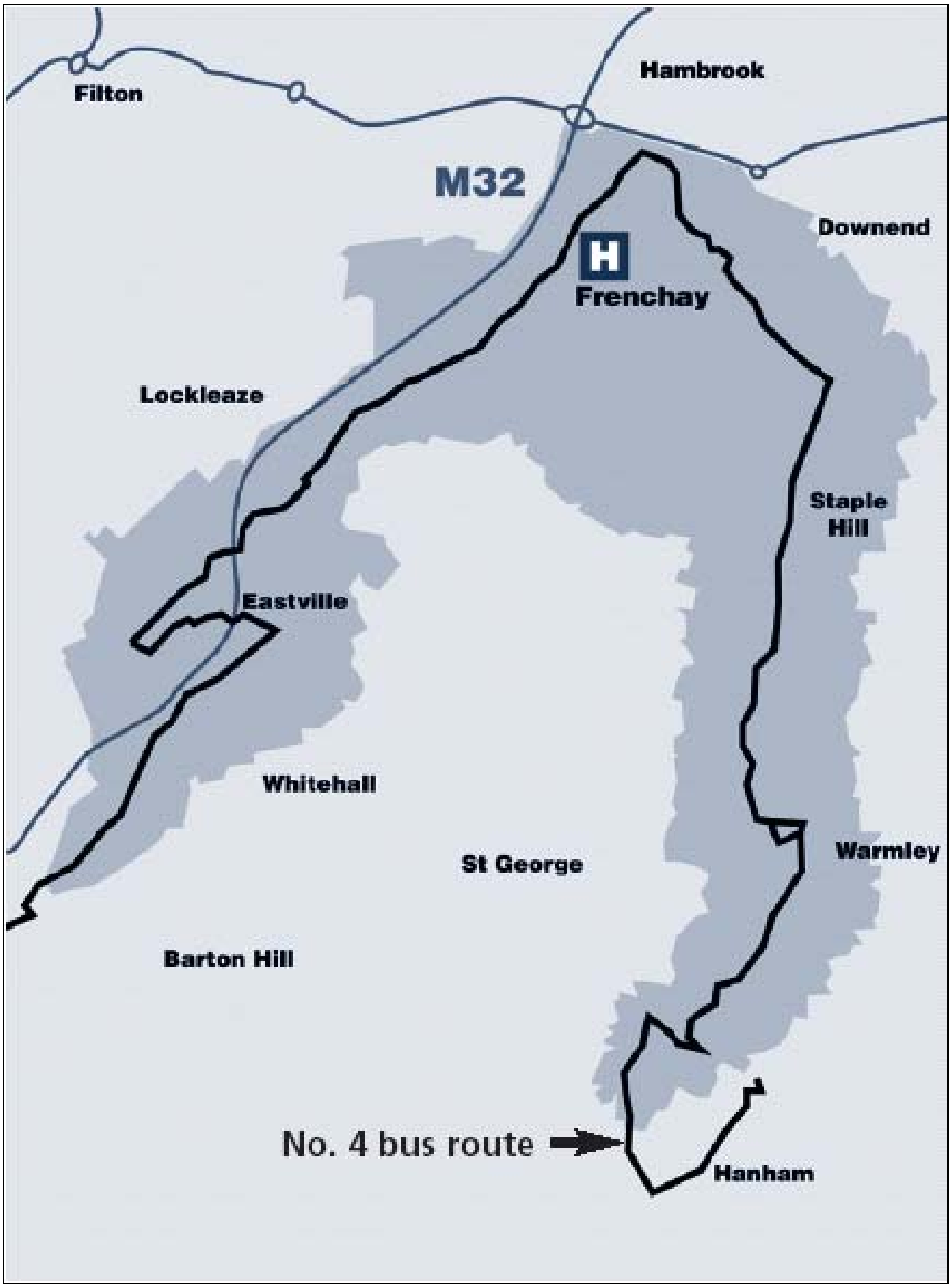

Filton
Hambrook
M32
Downend
H
Frenchay
Lockleaze
Staple Hill
Eastville
Whitehall
St George
Warmley
Barton Hill
No. 4 bus route
Hanham

Figure 7-4 Blackberry Hill Hospital Travel to Work Zone

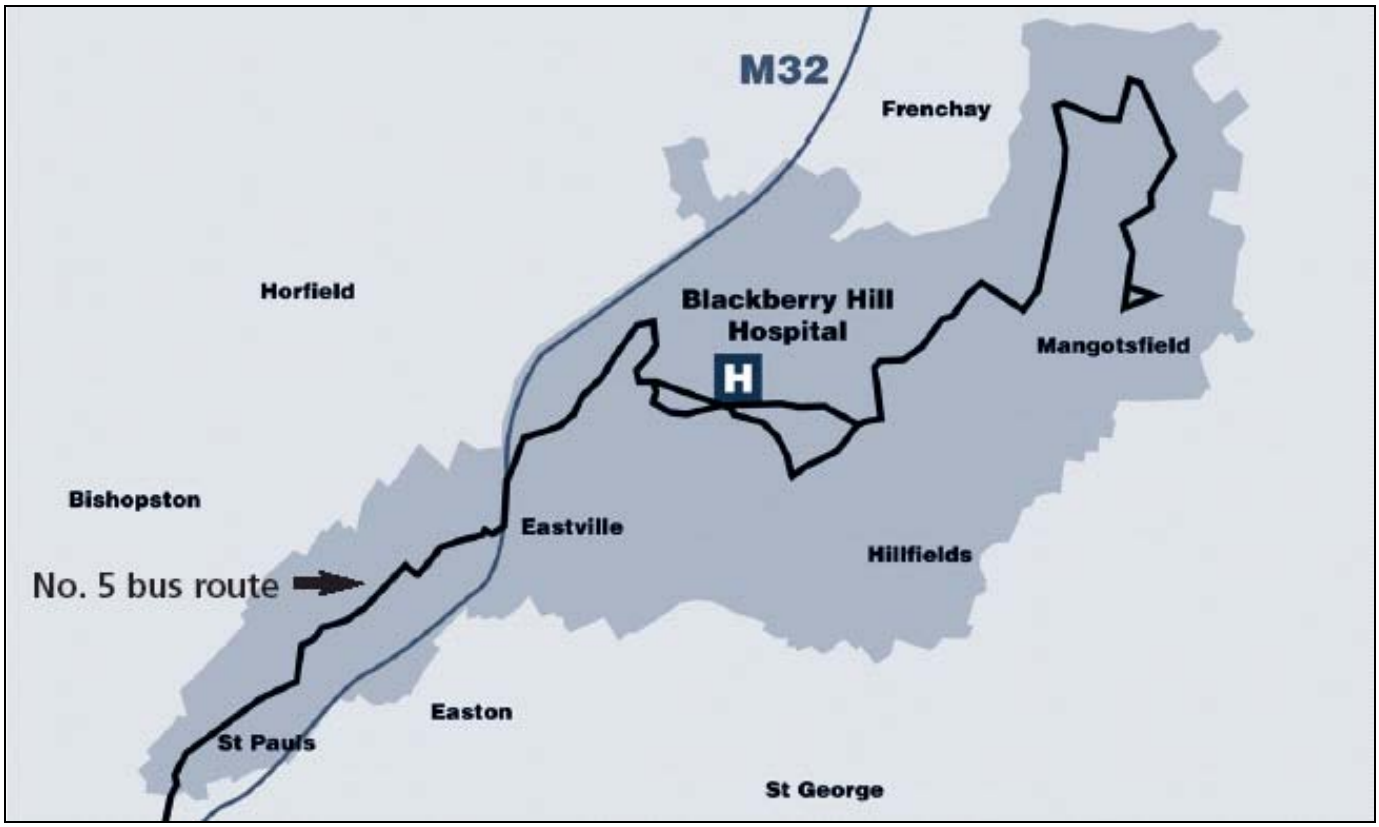


Table 7-2 Impact of allocation criteria

	SMH	FH	BBH	Trust
N° staff who currently drive to work	2467	2133	256	4856
N° staff within zone who currently drive to work	921	522	108	1551
N° staff that automatically qualify for permit	600	316	72	988
N° who qualify by having a care commitment	81 – 161	52 – 103	9 – 18	141 - 282
Reduction in N° of staff eligible for permit	160 –240	103 –154	18 – 27	282 - 423
% Reduction in N° staff eligible for permit	**6.5 – 9.7**	**4.8 – 7.2**	**7 – 10.5**	**5.8 – 8.7**

7.11. Parking on residential roads

7.11.1. The 2001 staff travel survey suggests that between 4 – 6% of staff do not park on site, but instead park on the residential roads surrounding the Trusts hospitals. There are a number of possible explanations for this, from avoiding permit fees (no longer relevant given the removal of charges in 2002) and the need to search for a parking spaces onsite, to just being closer to their place of work by parking off site then on parking on site but some distance away.

7.11.2. Given that the probable consequence of the reintroduction of permit fees and the introduction of constraints on permit availability will be an increased incidence of such off site parking, the Trust is concerned to minimise the impact of this on its neighbours. It is working with local councils and residents associations on options such as parking restrictions or residential parking schemes that would provide a means of preventing staff parking in residential areas.

7.11.3. A survey of staff parking on residential roads around Southmead Hospital will be undertaken in early 2004. This will be used to assess the need for such measures. Negotiations are underway with South Gloucestershire Council on joint funding of a similar study around Frenchay Hospital. If parking restrictions are considered necessary, scheme consultation and start-up costs may be imposed on the Trust as a condition of planning consent associated with ongoing development work at its sites.

7.12. Longer term actions

7.12.1. The actions discussed above will be introduced by summer 2004. The action plan contains a large number of additional projects and measures that will be introduced in the period following this and in future years. These are briefly outlined below.

7.12.2. Both car park contracts will be renegotiated during 2005. The Trust intends that a single contract arrangement will be developed to allow one contractor to operate car parking Trust wide. It is envisaged that the contract will make provision for dedicated barrier controlled car parks, capacity increases such as multi-decking of the Tyndalls Way car park at Southmead Hospital and possible the replacement of an annual permit fee with a per day charge to provide a direct, financial incentive to reduce solo car use.

7.12.3. The Trust will continue to assess options for safe pedestrian and cycle routes across the sites, building on work previously carried out by Ove Arup. This may include resiting and better lighting pedestrian crossing facilities, widening footpaths, removing shared use paths and so on.

7.13. Action Plan

Area	No	Action	Dir	Partners	Timing	Cost	Status	Comments
Table 7-3 General / awareness raising								
Parking policy	1	Common charging system	F / Fi	Q-Park, KML	1		IP	
	2	'Needs based' permit allocation system	F / Fi	Q-Park, KML	1		IP	
	3	Unify parking contracts	F / Fi	Q-Park, KML	4		NS	Expected 2007
	4	Replace annual fee with daily charge	F / Fi	Q-Park, KML	4		NS	As part of site wide contract
Relocation	5	Amend relocation package criteria	HR	-	3 / 4	Staff time	NS	Feasibility assessment scheduled March 2004. Currently 25 miles. Change to within travel to work zone?
Planning policy	6	Building standards amendments	F / P&P	Building contractors as required	4		NS	Include requirement in building standards that all new builds include showers etc
Flexible working	7	Review existing flexible working policy	HR	-			NS	Provision for staggered start terms where operationally feasible

On site facilities	8	Install cash machines at Southmead and Frenchay	F	As required			Stalled?	Expected Sept 2003 at FH.
	9	Promote use of on site and local facilities	F	As required		Staff time	Ongoing	
Awareness raising								
Staff induction	10	Provide travel information in induction manuals	HR	-	1	Staff time	Complete	
	11	Travel to work presentation	F	-	1	Staff time	Ongoing	15 minute travel plan overview
	12	Travel to work information stand	HR	Information sources	1	Staff time	Ongoing	Various leaflets available throughout session
Travel awareness	13	'Education' campaign	F	As appropriate	1		Ongoing	
Promotional events	14	Theme months	F	As appropriate	1		Ongoing	
Travel information	15	Create travel to work section on intranet and internet	IM&T	-	2	Staff time	NS	New web team appointed Jan 2004.
	16	Provide paper based transport information	F	Information sources	1	-	Ongoing	

Table 7-4 Cycling

Cycling								
Facilities	17	Partition Southmead cycle centre	F	-	2	£20,000	NS	
	18	Frenchay cycle centre	F	-	2	£165,000	NS	
	19	Sheffield stand programme	F	-	4	£50 / stand	Ongoing	350 stands Trust wide by 2007.
Signage	20	Safe routes	F	-	4?		Stalled	Safe routes programme on hold due to lack of resources
Support	21	Cycle training	F	Life Cycle UK	1	£20 / session	Ongoing	Limited to 2 sessions per person
	22	Cycle maintenance courses	F	Life Cycle UK	1	-	Ongoing	Offered through LifeCycle UK
	23	Discounts at cycle stores	F	Cycle stores	1	-	Complete	Discounts ranging from 5 – 15% are promoted to staff
	24	Bicycle clinics	F	Cycle stores	1	-	NS	
	25	Bikers breakfasts	F	-	1	£1000 / yr	NS	
	26	Loans for cycle purchase	HR	-	1	Staff time		Paper to TTWG March 2004
	27	Cycle security policy	F	-	1	Staff time	NS	

	28	Bicycle users groups	F	-	1	Staff time	Ongoing	
	29	Develop pool bike policy	HR	-	1	Staff time	NS	
	30	Purchase pool bikes	F	-	1	£1000	NS	
	31	CTC affiliation	F	CTC	1		NS	
	32	Review cycle mileage allowance	HR	-	1		NS	
	33	Review business use policy	HR	-	1		NS	
Information	34	Cycle parking maps	F	BCC	1		IP	Southmead maps should be complete by April 2004.
	35	General cycle information	F	-	1	Staff time	Ongoing	Travel to work office acts as information clearinghouse
	36	Develop BUG website	IM&T	-	1	Staff time	NS	See above
	37	Maintain BUG notice boards	F	-	1	Staff time	Ongoing	
	38	Purchase exhibition boards for static information displays	F	-	1			

Table 7-5 Trust Transport

Intersite bus	39	Install shelters	F	BCC	1	£20,000	NS	NBT contribution to Interchange project
	40	Increase service frequency	F	-	2			Issues re: working time directive
	41	Extend hours	F	-	1	£14,000	Complete	Further extensions linked to #41
	42	Integrate with HUBS bus	F	UBHT, Bristol University			NS	
	43	Monitor use	F	-	1	Staff time	Ongoing	Database developed March 04.
	44	Annual user survey	F	-	1	£20 / yr	Ongoing	
Home to work transport	45	Demand responsive transport feasibility study	F	Logical transport	3		NS	

Table 7-6 Public Transport / P&R

On site facilities	46	Shelters	F	-	1	-	NS	See #39 above
	47	Information screens	F	BCC, patient line	1	£25,000[2]	IP	3 information screens and links to patientline
Operational	48	Quality partnership	F	First, BCC	1	Staff time	IP	Draft agreement as part of SMH interchange project
	49	Route amendments	F	First	1	-	IP	4 and 54
	50	New service appraisal	F	First, SGB&C				Postcode data with SGB&C
	51	Improvement plan	F	First				Links with route managers
Ticketing	52	Agency sales	F	First	1	Staff time	IP	
	53	Incentives package	F / Fi	First, SGB&C				
	54	Season ticket loans	HR	-	1	Staff time	Ongoing	
Promotion & information	55	Provide NBT information at rail and bus stations	F	First,	1	-	NS	Information on relevant bus routes, sites maps etc
	56	Provide timetable	F	-	1	Staff time	Ongoing	Travel to work office acts as

[2] BCC element of Southmead Interchange programme

		information on wards						clearinghouse for third party travel information
	57	Electronic timetable information	F	BCC	1	See #47	IP	
	58	Link to ACIS information on intranet	IM&T	BCC	1	Staff time	NS	ACIS now operational
	59	Post Wessex train bulletin on intranet	F	Wessex Trains	1	Staff time	NS	See #15 above
	60	Joint First / NBT promotions	F	First	1		Ongoing	
	61	Timetable distribution	F	-	1	Staff time	Ongoing	
Park & Ride								
	62	Investigate possible P&R at Gypsy Patch Lane	F	SGB&C	1	£80,000 pa		
	63	Investigate P&R at BAWA	F	BAWA	1			

Table 7-7 Car Sharing / Ride Sharing

Car Sharing								
Systems	64	Join CarshareBristol	F	234car	1	£1,000	Complete	
Infrastructure	65 66	Signed car share spaces Dedicated car share car parks	F F	- -	2 2			
Incentives	67 68	Discounted car share permits Emergency ride home	F / HR F	- Taxi Co	1 1	Lost revenue	IP IP	£20 standard fee for car sharers Proposal to TTWG Jan 2004.
Promotion	69 70	CarshareBristol Aspects leisure park and share	F F	234car SGC	1		NS	
Ride Sharing								
	71	Bristol City Car Club	F	Smart Moves, BCC	1	£14,000	IP	Due for launch before end March 2004.
	72	Dedicated Car Club spaces	F	Smart Moves, BCC	1		NS	

Table 7-8 Car Parking

Facilities	73	Barrier controls	F	Q-Park, KML				
	74	Barrier cards	F	Q-Park, KML	1			
	75	White lining	F	-				
	76	Traffic flow	F	-				
	77	Capacity issues	F	BCC, SGC				
	78	Resurfacing	F	-				
	79	Late shift car parks	F	-				
Signage	80	Name boards	F	Q-Park, KML	1			
	81	Regulation and disclaimer signage	F	-	1			
	82	Security signage	F	-	1			

Dir Key: CS = Corporate Services,
F = Facilities,
Fi = Finance,
HR = Human Resources,
IM&T = Information Technology,
P&P = Policy and Planning,

Priority: 1 = By July 2004.
2 = August 2004 – March 2005.
3 = April 2005 – March 2006.
4 = April 2006 – March 2007

Status: Complete = Action completed,
IP = Work in progress,
NS = Not started,
D = Deferred

8. Communication strategy

8.1. Introduction

8.1.1. The purpose of marketing is to ensure that staff take ownership of the plan and see it as working for their benefit. To this end the strategy includes both general marketing, to raise awareness and educate staff on the need for change, as well as specific campaigns focused on individual modes and events

8.2. Launch event marketing

8.2.1. A key feature of the Travel Plan is the delivery to all members of staff of a travel plan resource pack containing information on and incentives to use alternatives to the single occupant car. The pack will form part of the parking permit application process and will include:

- The parking permit decision letter (with Permit where appropriate)
- A summary of car share matches appropriate to the individual's travel and working patterns, with details of how to join the scheme
- A personalised bus journey plan, along with a summary of the package of public transport ticketing incentives the Trust offers staff

8.3. General Marketing

8.3.1. The awareness raising process begins at the recruitment stage, with a travel plan summary included in the information for applicants sent out with application forms, and with information on accessing the hospital by public transport, foot and bike sent out with interview letters.

8.3.2. Subsequently, all new starters receive a presentation on the travel plan during their induction process. One-to-one travel advice is available during this time and a wide range of information leaflets are made available. The general staff benefits newsletter and Doctors and nurses manuals have been updated to include information on the travel plan and alternative travel choices. The 'getting here' section of the Trusts Internet site

has been also been updated to improve the quality of information provided on access by means other than the car.

9. Monitoring & Review

9.1. Monitoring framework

9.1.1. A monitoring strategy has been developed to measure the impact of the travel plan on modal share. The strategy has been designed to be flexible enough to accommodate changes as the Travel Plan evolves.

9.1.2. Snapshot surveys will be conducted ever year to monitor changes in travel patterns and staff attitudes against a baseline year of 2001. These will be Internet based, building on the pilot work discussed in section 5.4.

9.1.3. More comprehensive surveys will be conducted every other year. Surveys will use a stratified random sampling technique to ensure representative data is obtained whilst minimising survey fatigue.

9.1.4. Questionnaire design will be consistent with that used to collect the baseline data but will be amended to assess modal split figures in terms of staff/car ratios. The surveys will focus on travel mode and changes in travel behaviour and attitude. A sample is included in the appendices.

9.1.5. Survey data will be augmented by traffic counts, on street and cycle parking monitoring, intersite bus usage, public transport patronage and participation in car sharing and ride sharing schemes.

9.2. Review

9.2.1. In line with monitoring, the travel plan will be subject to an annual review process. This review will serve to assess the effectiveness and impact of travel plan measures and will be used to determine whether the plan is on track to meet its targets.

Appendices

Appendix 1: Working Group membership

Transport Working Group

Mary Adams	PALS manager
Cllr Peter Begley	Non Executive Director
Nick van der Bijl	Security manager
Rachel Bignal	Facilities directorate accountant
Russell Clease	AEEU union
John Fell	University of the West of England
Jonathon Green	Avon and Wiltshire Mental Health Partnership
Justin Guy	Press officer
Phil Hedges	MSF union
Nick Iles	Travel Plan Co-ordinator
Glynn Laverack	Head of Nursing, Critical Care
Paul Mason	AMICUS / AEEU union
Professor Phylidia Parsloe	Chair (left 2003, Chairmanship assumed by Simon Wood)
Dave Payne	Site Services Manager, BBH
Peter Revington	Clinical Audit
Caroline Slade	Assistant Director, Human Resources
Richard Tonkin	Avon and Wiltshire Mental Health Partnership
Nick van der Bijl	Security Manager
Pete Wheeler	Operations Director
Lucy Whiteford	CSP union
Simon Wood	Director of Facilities

Travel to Work Group

Nick Iles	As above
Nick van der Bijl	As above
Phil Hedges	As above
Glynn Laverack	As above
Peter Revington	As above
Caroline Slade	As aboove
Tim Hill	Bicycle users group
Lucy Whiteford	staff side representative

Appendix 2: Partnership Agreement for Southmead Interchange project

Partnership Agreement Between Bristol City Council, North Bristol NHS Trust and First.

Aim of the Partnership

To promote sustainable modes of travel to Southmead Hospital such as walking, cycling and public transport.

Purpose of the Partnership

All Parties:

1. Agree that there are good reasons for aiming to reduce the number of car trips made to Southmead Hospital. These include improving people's health, reducing congestion and making maximum use of a constrained site.

2. Over the next 12 months the parties will work together to make it easier for people to access Southmead Hospital by non-car modes, both through maximising the benefits of existing initiatives and developing new facilities as part of a Southmead Interchange Project. All aspects of the project will seek to be fully inclusive and accessible.

Objectives of the Partnership

Buses

Through the showcase bus route First and the City Council will provide a fast, reliable, accessible bus service from south and central Bristol to Southmead. All parties will work to ensure that the maximum benefits are gained from this by ensuring the service continues to be well publicised and well integrated into the existing site. This will be done through paper information, electronic information, signing and engineering works.

The Trust will aim to improve and promote the current NHS inter-site shuttle bus service and on-site courtesy bus. These improvements will include extended service, enhanced frequency, new on-site shelters and re-branding.

First will explore opportunities to improve bus links to the hospital.

Cycles

The Council will seek to improve cycle access to the hospital, including signage, engineering works and through improvements to nearby routes and links to the broader cycle network.

The Trust will seek to improve facilities for cyclists within the site, including routes and parking provision.

Pedestrians

The Council will seek to enhance walking routes to the hospital and improve pedestrian access at the main entrance, including safer crossing facilities.

The Trust will seek to improve facilities for pedestrians arriving at the site, including improved information and future on-site signage.

Car Clubs

The City Council and the Trust have developed a relationship with Bristol City Car Club and the Trust will facilitate the integration of car club services on the Southmead site and promote the benefits of the scheme to staff. The Trust will also promote the use of car sharing.

Information

The Council will develop electronic information provision incorporating Patientline bedside screens to inform patients and visitors of travel options at key locations in the site.

The Trust will facilitate the installation of these screens and all parties will produce improved information and promote sustainable travel to Southmead hospital.

First will market and promote travel to the hospital, including use of the information screens.

Review

The partnership will be subject to review and assessment including the contribution of the partnership to meeting the aims and objectives of the partners and the Trusts travel plan.

Partners

Bristol City Council

Councillor Helen Holland
Executive Member for
External Affairs and Partnerships

North Bristol NHS
NHS Trust

Chief Executive
North Bristol NHS Trust

First

Managing Director of First
Alex Perry

CiViTAS
Cleaner and better transport in cities

Appendix 3.i

Report on User Involvement in the Southmead Hospital Redevelopment Project

1. COMMUNICATIONS & PPI GROUP	
Number of PPI representatives	3
Dates of when the Group met	4
Key issues discussed	PPI Strategy and Implementation Plan, Community Presentation, evaluation process of all the SHRP Groups and review of the PPI Strategy and Implementation Plan
Evidence of PPI impacting on project development	Monitoring and evaluating the implementation of the PPI Strategy and Implementation Plan, designing the presentation to go out to communities from November 2008, through the evaluation process monitoring the effectiveness of PPI in the project
Evaluation process overview:	
Positives	Group meetings provide a positive and friendly environment for discussion. Views are listened to.
Negatives	A little too early in the process to assess whether the Group can make a difference. Interface with other Groups needed
Any resulting changes/issues to be noted	Set up the PPI Network Group Design an Issues Log
2 USER & ACCESS GROUP	
Number of PPI representatives	15
Dates of when the Group met	Meet on a monthly basis
Key issues discussed	Go through the changes in the plans, presentation from each bidder, any concerns that the group have and want to discuss
Evidence of PPI impacting on project development	Their views have been taken into consideration when designing the inpatient and outpatient areas
Evaluation process overview:	
Positives	Given opportunity to question. Views are listened to
Negatives	Not enough feedback from other groups.
Any resulting changes/issues to be noted	A log would be useful for each group

3 DESIGN GROUP	
Number of PPI representatives	1
Dates of when the Group met	PPI rep has attended each monthly meeting since July 2007
Key issues discussed	▪ Overall Southmead site and bidder master plans ▪ Building designs including internal and external finishes ▪ Landscape proposals ▪ Sustainability issues
Evidence of PPI impacting on project development	▪ Impact of hospital design on local area including visual impact, noise etc ▪ View of how the finishes of the building could impact on public perception of its cleanliness ▪ Sustainability issues – keeping them high on the agenda ▪ Advice on segregation of traffic for pedestrian safety etc ▪ How the local neighbourhood could get involved in the project and help with running the forthcoming engagement process ▪ Ensured the Design Group focused on the wider views of the public regarding the design of the building.
Evaluation process overview:	
Positives	▪ Useful public perspective brought to Design Group ▪ Early involvement of public rep useful ▪ Has encouraged Design group to consider the wider environmental issues associated with the hospital design
Negatives	▪ Insufficient time to cover issues sufficiently thoroughly ▪ Greater interface to be achieved with other groups ▪ Nature of competitive dialogue makes it problematic to discuss the confidential bidder proposals with the public so that broader public comments cannot be built into the bidder designs until the designs are almost complete
Any resulting changes/issues to be noted	▪ Establish the PPI network group to allow public reps to share experiences and issues. ▪ Consider other mechanisms for involving members of the public without breaching bidder confidentiality requirements.
4 FACILITIES MANAGEMENT GROUP	
Number of PPI representatives	Two (who in the main have attended every meeting)
Dates of when the Group met	Last Friday in every month (unless session cancelled due to 'no business to discuss')
Key issues discussed	Discussion has tended to concentrate on appraising the FMG members on bidder discussions and direction that is taking typically regarding how

	Facilities services will be delivered. Equally, the forum has involved seeking views/opinions form FMG (including PPI members) on how proposed changes to service would favour patients and how space for facilities services could positively impact on the patient experience.
Evidence of PPI impacting on project development	PPI members contributed significantly during the interim bidder evaluation stage, particularly regarding the design of soft Facilities space at ward level.
Evaluation process overview:	A number of suggestions made were fed back to both bidders as part of the interim bidder feedback sessions
Positives	PPI members have brought some real added value and insights/personal experience to the discussion in the FMG sessions
Negatives	None
Any resulting changes/issues to be noted	Helpful feedback has helped shape the soft FM hubs at ward level
OVERALL ACTIONS TO BE TAKEN	
▪ Set up the PPI Network Group ▪ Design an Issues Log for each Group ▪ Consider other mechanisms for involving members of the public without breaching bidder confidentiality requirements.	

Appendix 4.i

Model of Care
Detailed Patient Examples

3.4.2 Example 1: First time patient with single system condition

Traditional System	New Health System
A patient presents to a GP with a potential condition requiring some kind of specialist or additional diagnostic back-up to decision-making. The GP has little specialist back up directly to hand and therefore is likely to refer the patient to outpatients to see a specialist. The GP may have to choose between an emergency admission and a several-week wait for an outpatient appointment.	The GP will have access to immediate support from specialists in the **Specialist Teams** by e-mail or telephone together with access to rapid reporting diagnostics. The GP may therefore be able to diagnose the potential problem without a formal hand-over of care to the hospital.
The threshold for this referral will depend on the GP and their approach, knowledge and experience.	The GP as part of the **Enhanced Primary Care** system will have access to PCT guidelines on the approach to take together with advice and support from PwSI. This should produce a more equitable access to the service for the patient.
The patient may then be put on a queue of several weeks.	If a specialist opinion is required it will be accessed rapidly within the next 1-2weeks from the **Specialist Team** and the patient will potentially have a 1-stop assessment of their requirements with an immediate diagnosis.

3.4.3 Example 2: Single system condition becomes long term unstable

The patient in the above example may graduate to a long term patient and their care might change as follows:

Traditional System	New Health System
Where a problem occurred such as exacerbation of the condition the patient might see their GP.	The patient is likely to have a greater understanding of their problem and will be more assertive in contacting services. Better case management will provide continuing support and integrated care. This will be provided by the **Primary Care** Team, including pharmacy, social services, voluntary agencies and carers, district nursing and community matrons, and from the **Specialist Team** including PwSI and nurse practitioner.
The GP may refer to a specialist and the patient may be put on a waiting list. During this time the exacerbation might worsen and they may get admitted to hospital through A&E.	The specialist assessment and treatment will be accessed immediately from the **Specialist Team** either by the GP or the PwSI and this should minimise the need to turn up as a hospital emergency.
Whilst in hospital, access to previous care plans, patient history can be limited.	If the patient does have an acute attack, they could contact a nurse practitioner within the **Specialist Team** who may be able to provide medication adjustments/other interventions that prevent admission. If admission is still necessary, the case manager, who knows the patient, will be able to liaise with staff in the **Emergency and Acute assessment service** to case manage the treatment.
Although very sick, the patient may end up on a ward with less sick patients on the basis of age or specialty rather than any criteria of need.	Whilst they are very ill, the patient will be nursed by the **Critical Care Team** with staff whose main skill-set is the treatment of sick patients.
Planning the discharge for the patient can start quite late in the inpatient process leading to delays.	The process of recovery and return to home will be case managed for the patient as soon as the crisis arises by the practitioner in the **Specialist Team**.

Traditional System	New Health System
Once back at home, the patient does not have access to ongoing specialist support for their condition and they may have little information or knowledge of their problem. This could lead to a delay in returning to home where there is little support and also a repeat of the exacerbation and hospital admission.	The patient will receive support at home from the community arm of the **Specialist Team.**

3.4.4 Example 3: Complex multi-system unstable patient

Traditional System	New Health System
A person with complex long term problems and an equally frail carer has support from a variety of sources including social services, district nursing general practitioner, and occupational therapist. These interventions are not always co-ordinated.	The patient will have an identified case manager who will ensure that interventions are orchestrated and that the patient receives a continuous network of support. This case manager will be part of the re-ablement team.
Should the person have a problem due to a fall or exacerbation of an existing condition they may be admitted to hospital through A&E. They may then have their immediate problem fixed and be admitted to hospital but there may not be any reference to an existing care plan.	The case manager in the re-ablement team will organise a care plan as soon as the problem occurs. This plan will be co-ordinated with the various agencies involved in the patient's care.
The patient's stay in hospital may take several weeks and they may lose their independence altogether. There will be a risk of infection for the patient and there may be other problems in getting the carer confident about supporting the patient once they have returned home.	The episode will involve a brief stay in the acute hospital followed by rehabilitation in the community hospital run by the re-ablement team and then return to home. During the stay in hospital, the route home will be planned carefully and will take into account support required for the carer.
The process of care will be very stop start with no sense of an overall co-ordinated plan between social, primary and secondary care.	The whole episode will be characterised by an individually tailored care plan that runs through the whole process of care and that takes into account both health and social needs.

3.4.5 Example 4: Planned surgical patient

The example below refers to a patient with a relatively minor condition.

Traditional System	New Health System
A GP is presented with a patient where they are fairly clear as to the condition but it may take a few weeks to access the diagnostic test result required to confirm the opinion (or they may not be able to access the test directly).	The GP will be able to organise diagnostic tests and get an immediate diagnostic result to confirm their assessment. There will be clear protocolised guidance to allow consistent decision-making across the area
The GP may refer to an individual specialist and the patient put on a waiting list. The specialist may require the patient to undergo a diagnostic test after they have attended for a consultation and then return again for a further consultation.	The GP will be able to refer into a general pool for a particular condition and book the patient into a one-stop assessment and treatment clinic where the patient will be assessed, diagnosed and have a procedure where necessary in one visit. The pre-assessment processes will be conducted at home or by the **Primary Care** team.

Where the patient has a more serious condition the first part of the pathway will be the same but there will be additional steps as follows:

Traditional System	New Health System
Once the patient has been assessed for an operation they will be placed on a waiting list and will remain there largely unmanaged until the date of operation. Pre-assessment processes undertaken in this period tend to be one-off exercises and cancellations of the operation can occur due to inadequate planning	Under the new system the **Planned Surgical Service** will provide case management of the patient and the pre-assessment process will be more of an on-going process that will bring the patient to the point of operation in a planned and methodical way.
The operation may be cancelled due to organisational issues such as bed availability. This can lead to patients being admitted in advance of the operation in order to secure the bed.	The new **Planned Surgical** service will ensure that a bed and a theatre are booked for the operation and that there are no organisational cancellations. The patient will turn up on the day of operation where clinically appropriate and will arrive at a dedicated receiving area.

The patient may stay in hospital for 2-3weeks and there may be some issues in discharging the patient back home. The process of recovery and rehabilitation may not start immediately after the operation.	The patient will undergo a fast-track surgical process including optimised anaesthesia such as neural blockade and regionalised anaesthesia, minimally invasive surgery and intensive therapy and rehabilitation for the patient. This will lead to the patient having lengths of stay of a few days in hospital followed by support at home or in community hospital by the re-ablement team.

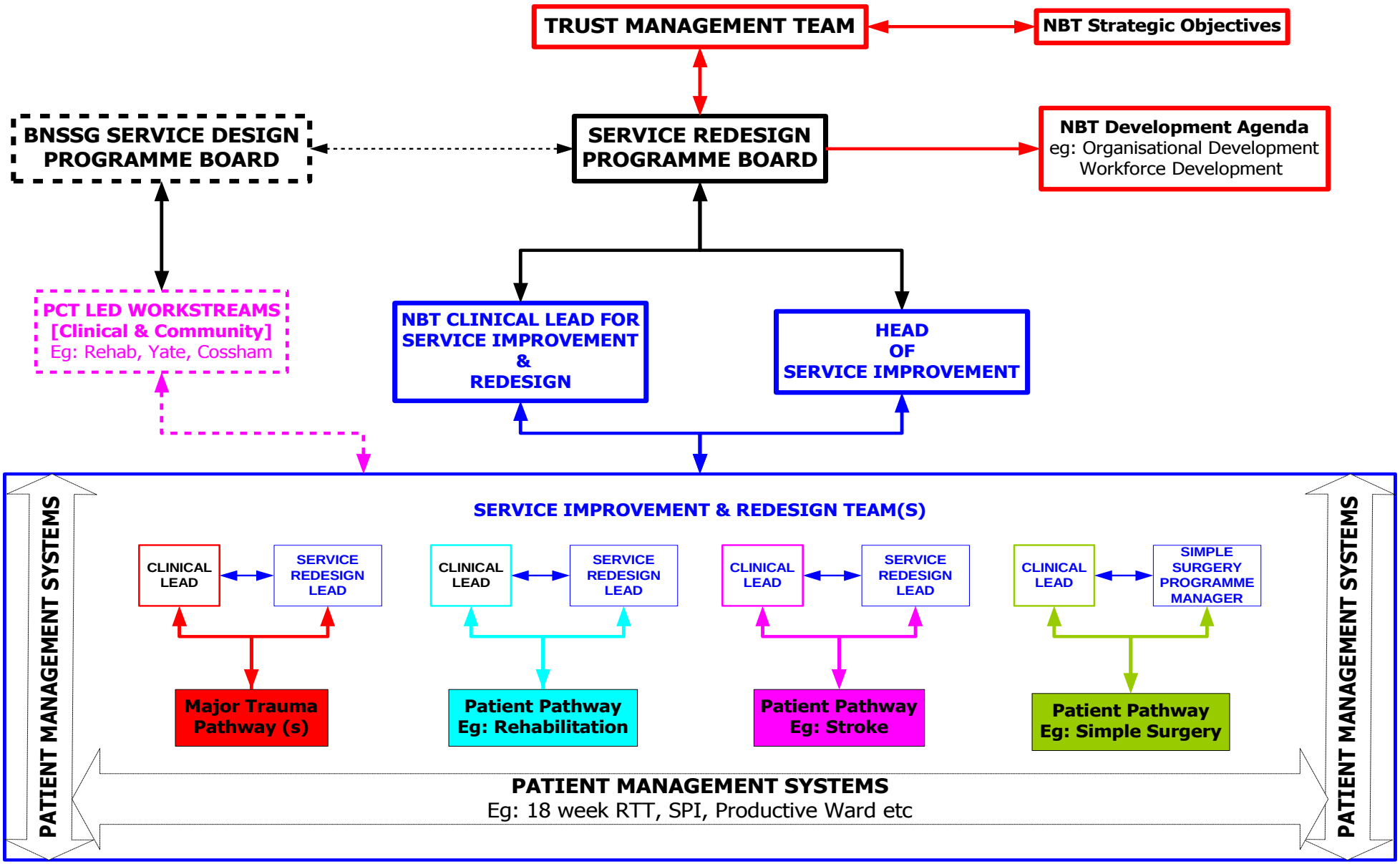
3.4.6 Example 5: Patient with Minor Injury/Illness

Traditional System	New Health System
A patient with a minor injury/illness may contact NHS Direct, GP OOH services or the A&E department and receive differing levels of treatment and approach.	The new system will provide a consistent level of service across the area for patients with a minor illness or injury. A higher proportion of their care can be managed in a community setting due to the development of extended roles and a network system.
A patient attending A&E with a minor problem will receive a treatment to solve the immediate problem but if they have more long-standing conditions, they may not get these resolved.	A patient attending the minor illness/injury service can have their short-term condition managed and appropriately linked with the **Primary Care** team to ensure that their long term condition is reviewed.

APPENDIX 4.ii

North Bristol NHS
NHS Trust

NBT Service Redesign Organisational Structure



NBT Service Redesign Process		
1. Getting Started Summary of proposal and case for change	▪ National imperatives ▪ Strategic objectives ▪ Organisational objectives ▪ Financial ▪ Accessible services ▪ Quality of care ▪ Clinical guidance ▪ Workforce development ▪ Patient experience ▪ Identify clinical champion(s)	**Summary of Proposal:** A précis of the proposal that should clearly state the long-term objectives and overall strategic gains. **Compliance with Strategic Concepts:** This should demonstrate how the proposed vision fits within the overall strategic concepts with specific illustrations of this compliance.
2. Background-Intelligence & Information Benchmark against current provision	▪ Benchmark against national/local standards ▪ Process map current service provision ▪ Patient experience/focus groups ▪ Demand and capacity analysis ▪ Workforce analysis ▪ Financial analysis	**Background-Intelligence and Information**: This should provide base line information and analysis, relevant to the overall conclusions reached in the proposal linking back to the targets and performance framework section. For example, an examination of stroke care will highlight overall length of stay, use of hospital resources in the acute management (eg: thrombolysis), reflection on morbidity/quality. All of the above should be benchmarked and include information on the patients' experience.

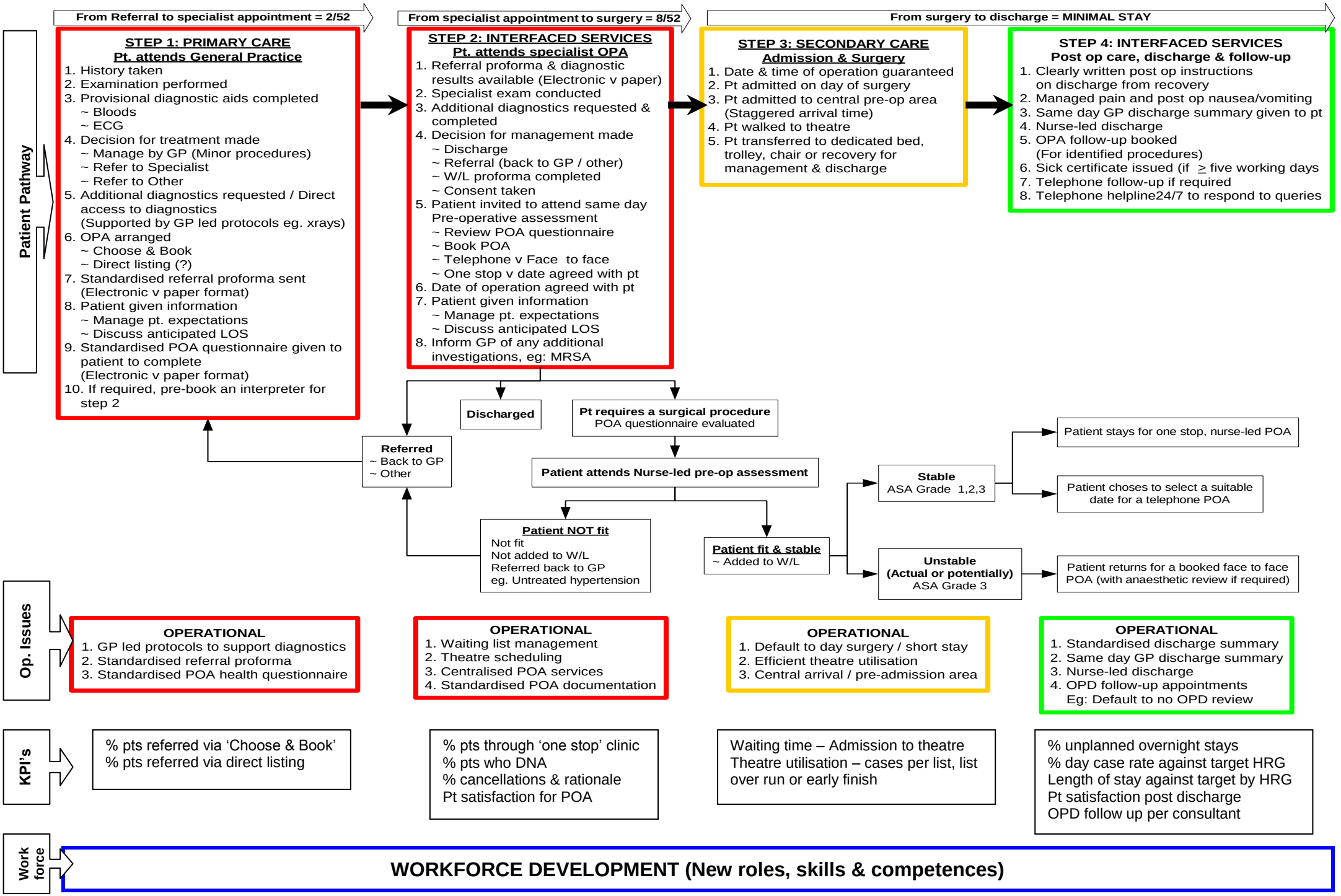
3. Visioning
Detailed proposal including main Pathway summary
	▪ Identify best practice
	  ○ Evidence base and best practice
	  ○ Clinical guidelines
	  ○ Department of Health guidance
	  ○ Network & visit other best practice Trusts
	▪ Communicate with specialists in their field
	▪ Define a vision for the pathway, identify what it should look like
	▪ Identify and agree the desired outcomes
	▪ Identify key performance indicators
	▪ Identify operational issues & changes required
		Detailed Proposal including main Pathway Summary:
		This should demonstrate a clear vision of how the new system would work highlighting the differences between current and proposed practices, including any interface between Primary Care/Secondary Care.
		Impact on Targets and Performance Framework:
		Demonstrate how proposed targets are in line with overall critical success factors e.g. reduction in morbidity, reduction in length of stay; accompanied by a proposed framework demonstrating how success will be measured.

	▪ Identify workforce changes & implications ▪ Identify benefits ▪ Identify the impact on other agencies and services	
4. Stakeholder involvement	▪ Identify stakeholders ▪ Engage with stakeholders ▪ Communication	**Communication Plan:** There needs to be a summary to identify a process for managing stakeholder involvement, explaining how stakeholders will be kept up to date with developments
5. Engagement & developing relationships	▪ Agree membership for a Steering Group ▪ Identify patient and carer representatives ▪ Engage and involve relevant managerial and clinical staff throughout the process ▪ Agree Steering Group Terms of Reference ▪ Develop a whole systems approach to co-ordinate the patient's process of care ▪ Establish links with key individuals to facilitate the design of patient care transition across organisational boundaries ▪ Agree pathway model of care	
6. Project management	▪ Develop an overall project plan with timescales and responsibilities ▪ Identify risks - Establish a risk register (flagged up on monthly Highlight reports) ▪ Clarify resolution mechanisms	**Delivery Arrangements and Programme:** The delivery plan needs to include a realistic timetable with named responsibility for actions. **Risks:** Development of a risk register needs to summarise the main risks involved and how they will be mitigated.
7. Review structure and build the case for change Proof of concept	▪ Pilot the pathway ▪ (PDSA) Plan, Do, Study, Act cycle ▪ Review the pilot and identify the changes required ▪ Define roles and competencies ▪ Identify education and training requirements ▪ Define administrative processes ▪ Define location and facilities ▪ Define support services	**Workforce:** There needs to be a summary of how teams/staff involved in the new pathway will work, demonstrating how staff will engage with the new processes. There also needs to be quantification of staff required, changes from existing establishments, and training and education implications with overall costing.

8. Develop service specification and write business case	▪ Specify the detail required to deliver the new service ▪ Identify actions required to implement the change ▪ Clarify the decisions which need to be made (and by whom) ▪ Assess cost and financial implications ▪ Identify benefits expected	**Financial Impact and Framework:** Demonstrate the impact upon capital and revenue costs highlighting how the pathway impacts on income positions such as payment by results. **HR Issues:** There needs to be a summary to explain how changes to staff structures and practices will be achieved.
9. Implementation Make change permanent	▪ Agree actions & responsibilities ▪ Continual review and feedback of process ▪ Adjust as required	
10. Evaluation & sustainability Monitor the change	▪ List key performance indicators and develop transparent monitoring to continually evaluate changes ▪ Adjust as required	

Simple Surgery Service Redesign Pathway (v12) - 060208

Appendix 4.iv



HERNIA (One stop) Patient Pathway (v3)

Current Patient's Pathway

STEP 1 - PRIMARY CARE
Pt. sees GP
(c/o abdo swelling)
GP exams pt.
GP refers pt. for:
Specialist r/v
+/- diagnsotics

STEP 2 - INTERFACED SERVICES
Pt attends OPD
Specialist exam
R/V diagnostics

Diagnostics NOT available

~ Diagnostics requested
~ Pt. returns to have tests completed

~Pt. discharged
or
~Referred back to GP

STEP 3 - INTERFACED SERVICES
Treatment & management agreed

~Pt added to W/L
(via secretary)

1st letter sent to pt.
~ To identify need for surgery
(req. pt. availability/short notice)
~ To add to waiting list (20/52 wait)

2nd letter sent to pt.
Asked to ring & agree:
~ TCI date (12/52)
~ POA date (within 3/12 of TCI date)
NB: Pooled hernia lists

STEP 4 - SECONDARY CARE
Pt. Attends for booked POA
(within 3/12 of TCI date)
Fit & well
(pt suitable for surgery)

Further investigations required

Pt. returns for review & management

STEP 5 - SECONDARY CARE
Arrive at hospital for surgery
Frenchay - Day case (LA)
Southmead - In-patient (GA)
All pts wheeled to theatre on trolley
Discharge by nurse - DC
Discharge by Dr - IP

STEP 6 - INTERFACED SERVICES
Discharge summaries:
~ Inpatient
Typed formal letter by sec (10 days +)
Hand written version given to pt.
TTA requested from pharmacy
~ Daycase
Typed by daycase goes with the pt.
Pre-packed TTA
OPD Follow up ratio - TBC

Revised Patient's Pathway

STEP 1 - PRIMARY CARE
~Pt sees GP
(c/o abdo swelling)
~Pt. referred to one stop clinic
(Via choose & book)

Referral criteria to include:
~Side & site of hernia
~U/S completed if bulge NOT present
~Can lie flat(Nil heart/respiratory failure
~Current medications
(Not on anticoagulents or Clopidogrel)
~Medical/surgical history & Allergies

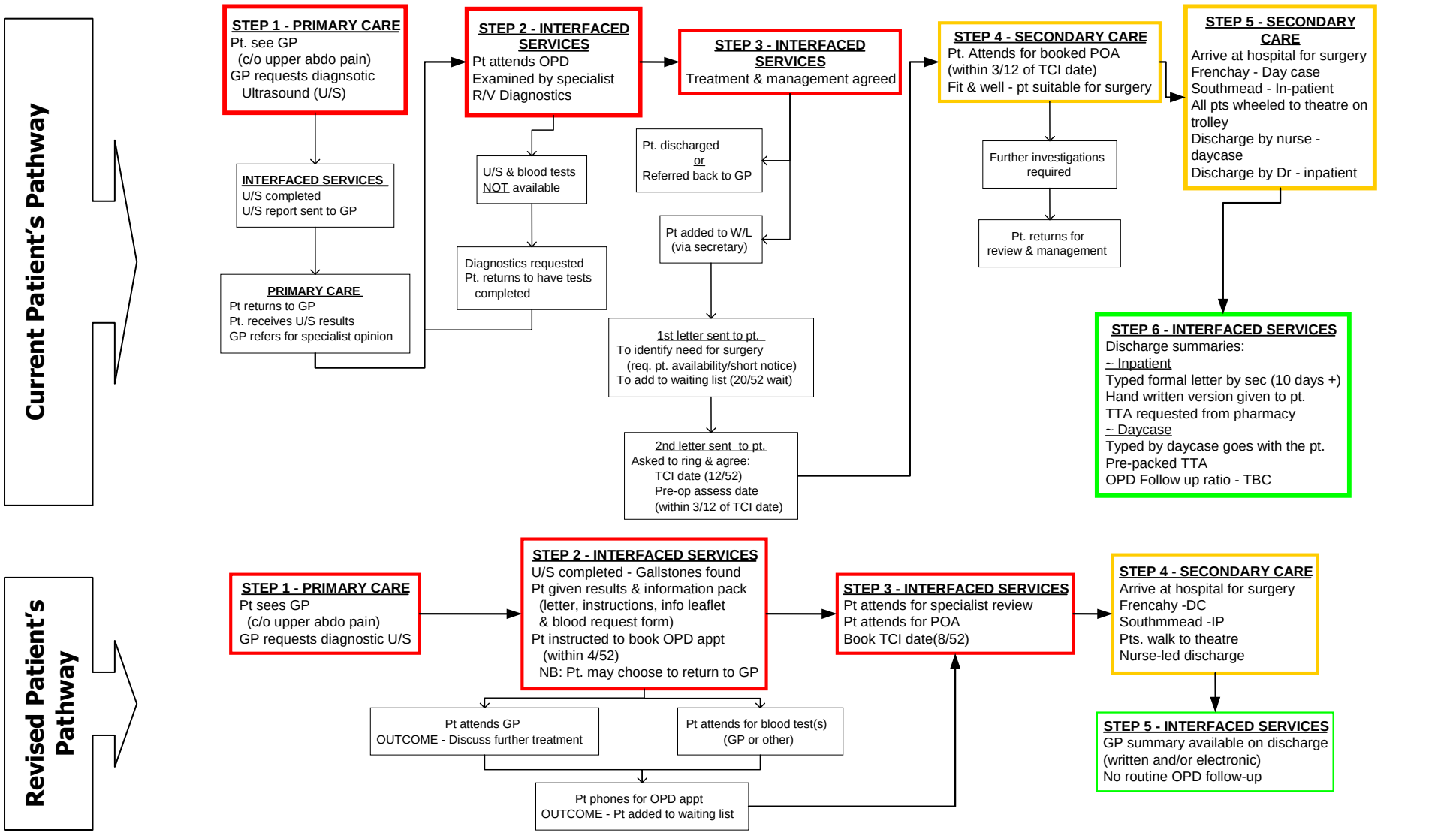
Pt directly added to waiting list
Inguinal hernia - LA (preferred option)
Umbilical hernia - GA
Epigastric hernia - GA
NB: LA - Pts/GP complete health questionnaire
GA - Pts. will required pre-op assess.

STEP 2 - SECONDARY CARE
Arrive at hospital for surgery
Frenchay -DC
Southmmead -IP/DC
Pts. walk to theatre
Nurse-led discharge

STEP 3 - INTERFACED SERVICES
GP summary available on discharge
(written and/or electronic)
No routine OPD follow-up

Workforce Development (New roles, skills & competence)

Gallstone Patient Pathway (v2)



Workforce Development (New roles, skills & competence)

TRANSIENT ISCHAEMIC ATTACK (TIA) v3 (71129)

Public awareness campaign, promote rapid assessment & appropriate access to hospital for management of symptoms

Rapid Triage, assessment and access to diagnostics

Decision to admit or manage as an OPD

Management & follow-up

PATIENT HAS A CEREBRAL EVENT

Onset of symptoms
Pt. seeks advice from:
~ GP
~ NHS Direct
~ Pt self presents at ED

ALL pts should be triage scored ABCD2
- see below -

DIAL 999
Go Direct to Hospital

TRIAGE SCORE - ABCD2
A = Age
B = BP
C = Circulation
D = Duration
D = Diabetes

Maximum Score = 7 pts
A: ≥ 60 yrs = 1 pt
B: Sys ≥ 140 or Dias ≥ 90 = 1 pt
C: Unilateral weakness = 2 pt
Speech impairment = 1 pt
D: < 10mins = 0 pt
10 - 59mins = 1 pt
≥ 60mins = 2 pt
D: Diabetes = 1 pt

Score of < 5
Direct access to one-stop OPD TIA clinic (Ideally within 24 hours)

AM: Nursing assessment
Bloods
MRI/CT head
Carotid Dopplers

PM: Consultant review
Medications (30 days)
Refer back to GP

Score of 5 - 7
Direct access to Emergency Dept

On arrival to ED
~ Rapid Triage
~ Clinical Assessment
~ ?Admit overnight (CDU)

Access to Diagnostics
~ MRI
~ CT
~ Carotid dopplers
~ Diffusion Weighted Imaging
~ Blood Tests
~ ECG

Decision Making for Clinical Assessment by Specialist in Stroke Medicine

SYMPTOMS UNRESOLVED - Admit
See 72 hr Stroke Pathway
Will require follow-up with Stroke MDT 6/52 & 6/12

REFER FOR SURGERY (Endarterectomy)
> 70% narrowing, aim for operation within 48 hours - Will require follow-up via OPD

SYMPTOMS RESOLVED - TIA confirmed
Medical secondary prevention
Echo
24 hr ECG
Will require follow-up

Consider TIA service in the community
~ Would be an ambulatory model
~ could be run by GPwSi/ANP

Would require:
~ Access to diagnostics
(MRI +/- angiography with injection)
~ Real time reporting

NON-STROKE
Echo
24 hr ECG
Establish diagnosis
Refer to appropriate service

TRANSIENT ISCHAEMIC ATTACK (TIA) v3 (71129)

STROKE PATHWAY v5 (PART 1 of 3) – From onset to first 72 hours (80128)

PRE ADMISSION
[Period covers the first 20mins from onset of symptoms]

HYPER ACUTE CARE
[Period between 20mins and 6 hours following onset of symptoms]
Thrombolysis service to be available 24/7

ACUTE CARE
[Period between 6 and 72 hours following onset of symptoms]

Administer thrombolysis within three hours from onset of symptoms

Aim to complete diagnostics within first hour of onset of symptoms

20 min | 1 hr | 3 hr | 6 hr | 12 hr | 24 hr | 36 hr | 48 hr | 60 hr | 72 hr

Gateway to Rehab

PATIENT HAS A CEREBRAL EVENT

Advice sought
~ GP
~ NHS Direct
~ Other

DIAL 999

FAST score completed by Ambulance crew

Arrive at ED

Rapid Triage & Clinical Assessment

ALERT CALL
Ambulance to inform ED of patient arrival & FAST score

Rapid access to diagnostics 24/7
~ CT
~ MRI
~ TCD
~ Carotid scan
~ Angio
~ Carotid Dopplers

HAEMORRHAGE
(Refer to Neurosurgeons)
~ Subarachnoid
~ Intracerebral

Treatment options
~ Neuroradiology (coiling)
~ Neurosurgery
~ Medical management

CLOT / ISCHAEMIC STROKE
(Refer to Stroke Physicians)

Treatment options
~ Thrombolysis (IV)
~ Intrarterial treatment
~ Clot removal
~ Medical management

TRANSIENT ISCHAEMIC ATTACK(TIA)
See TIA Pathway

NON-STROKE
Transfer care to relevant specialty and pathway of care
(Predominantly Elderly care)

DISCHARGE

Post acute treatment / management
Admit to dedicated unit for:
~ Physiological monitoring
- Neuro observation
- Cardiac monitoring
[BP, Pulse, Temp, Oxygen, Fluids, Glucose]
~ Medical management

MDT assessment & plan of care
~ Nursing
~ Medical
~ Swallow
~ Physio
~ Plan for discharge

Structured MDT review & assessment
~ Physical
~ Mental
~ Cognitive
~ Plans for discharge
~ Family involvement

REHABILITATION

See Part 2 of the Stroke Pathway

- **Group 1:** Good recovery Ambulant
- **Group 2:** High dependency patients
- **Group 3:** Death

Need improved public education for stroke awareness & prevention

Clinical skills & competences compatible with High Dependancy care

KPI's

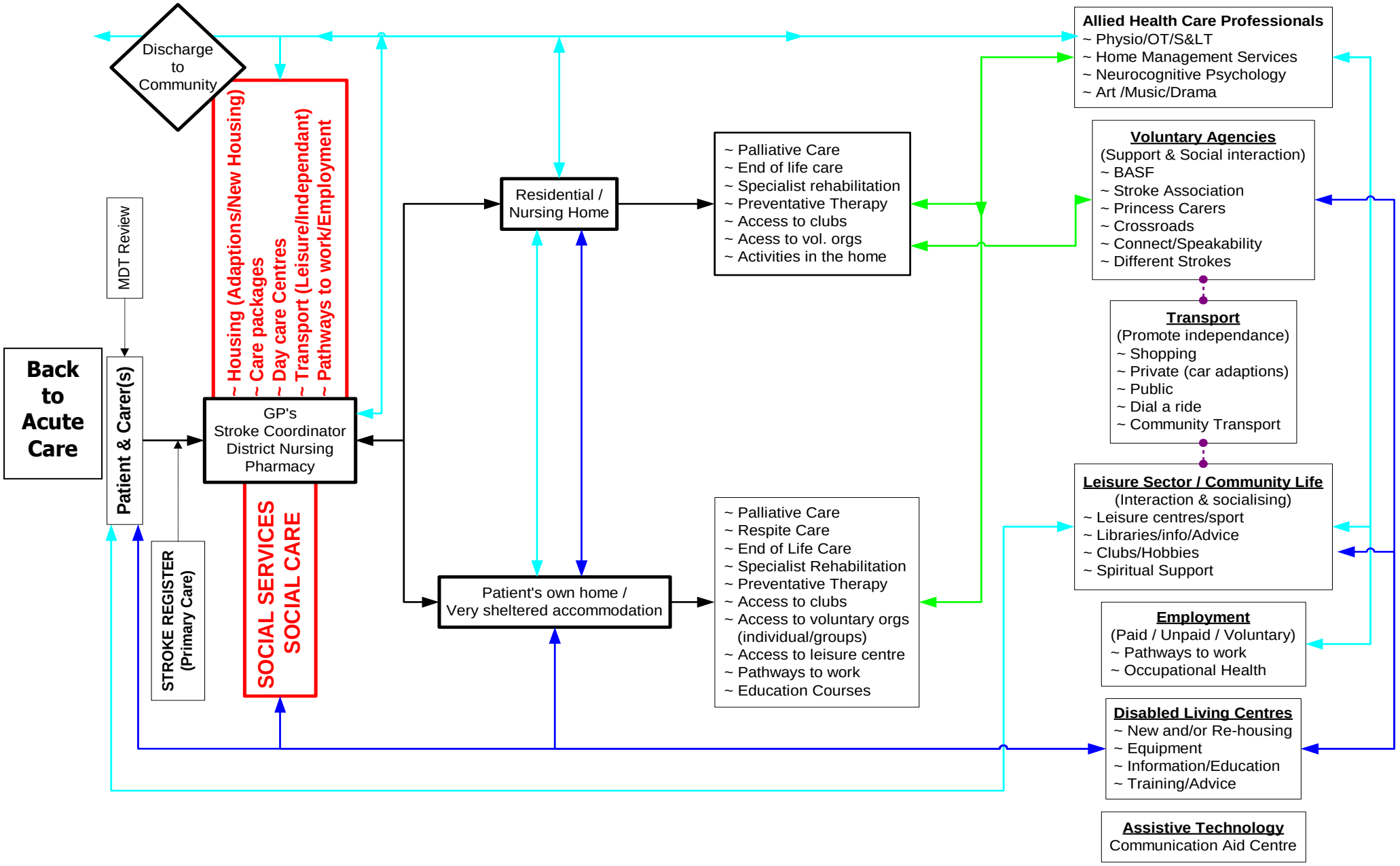
KPI's - PRE ADMISSION:
1. Admission protocol
2. Audit time - call to arrival
3. % pts assessed with FACE
4. % pts compliant with admission criteria
5. Pt satisfaction survey

KPI's - HYPER ACUTE CARE:
1. Protocol's for immediate assessment, triage, referral to diagnostics
2. % use of standarised assessment prootocol
3. % pts admitted directly to a specialist acute stroke unit
4. Audit time - specialist team assessment, achieved in 3 hours
5. Increase number of eligible pts receiving hrombolysis
6. Audit complications of acute stroke, eg: chest infection
7. Audit staff training & role development programmes

KPI's - ACUTE CARE:
1. 100% pts managed on a dedicated acue stroke unit
2. No. of outliers
3. Audit time - swallow screen / assessment
4. Audit of swallowing assessment
5. Agreed drug protocols
6. Audit of carotid doppler imaging
7. Audit discharge/transfer of patients

Appendix 4.x

STROKE PATHWAY v5 (PART 3 of 3) - Discharge & beyond (80605)



Key:

Blue = Communication for adaptations/equipment
Green = Psychological & Emotional support
Turquoise = Training, Education & Advice
Purple = Enables

STROKE PATHWAY v5 (PART 3 of 3) - Discharge & beyond (80605)

Key:

Blue = Communication for adaptations/equipment
Green = Psychological & Emotional support
Turquoise = Training, Education & Advice
Purple = Enables

Community Services Patient Pathway v2

Patient's Pathway

STEP 1: SELF CARE

1. Pt. identifies a health related problem & considers health/advice options
   - ~ Self help (eg: internet, info leaflets
   - ~ Telephone advice (eg: NHS direct)
   - ~ Booked face to face advice (eg: GP)
   - ~ Emergency face to face (eg: GP/ED)
   - ~ Emergency - Dial 999
2. Decision made - self triage occurs

STEP 2: PRIMARY CARE
Pt. attends General Practice

1. Pt. triaged to be seen by most appropriate health care professional
2. Health care professional completes assessment
   - ~ GP/ Nurse/AHP
3. Provisional diagnosis made
   - ~ Supportive diagnostics requested, (eg: ECG, imaging, bloods) & completed in either the community or secondary care
4. Symptom management & definitive diagnosis
5. Treatment plan agreed with patient
   - ~ Self management
   - ~ Long term condition management
   - ~ Interventional management (eg: procedure) undertaken in the community
   - ~ Refer for specialist opinion
   - ~ Direct listing for procedure & pre-operative assessment completed
   - ~ Discharge
   - ~ Other
6. Patient given information
   - ~ Manage pt. expectations
   - ~ Discuss anticipated treatment plan
   - ~ Highlight anticpated length of stay, if acute admission to secondary care is required

STEP 3: INTERFACED SERVICES
Pt. attends appointment for assessment & management
(This could be undertaken in the community or secondary care)

1. Pt. attends for specialist opinion
   - ~ Community
   - ~ Secondary care
2. Outcomes include:
   - ~ Examination
   - ~ +/- Additional diagnostics
   - ~ Minor procedure - conducted under LA in community
   - ~ Requires procedure - added to waiting list
   - ~ Referred - for specialist opinion in secondary care
   - ~ Discharged
   - ~ Other
3. If added to waiting list:
   - ~ Pre-operative assessment completed
   - ~ Date & time of operation guaranteed
4. Pt. given information
   - ~ Manage pt. expectations
   - ~ Discuss operation plan
   - ~ Highlight anticipated length of stay
   - ~ Admission on day of surgery
   - ~ Admit to central pre-op area (staggered arrival time)

Admission & surgery
Links to Step 3 of the surgical pathway

STEP 4: INTERFACED SERVICES
Post op care, discharge & ongoing management

1. Managed pain and post op nausea/vomiting
2. Identify any ongoing management (May require removal of sutures, dressing review)
3. Telephone helpline/Out of hours support

Can also link to Step 4 of the surgical pathway

Operational Issues

OPERATIONAL
1. Patient & health education for self triage
2. Access to GP appts.
3. Other

OPERATIONAL
1. Identify GP triage process
2. Develop community based diagnostics
3. Agree protocols to support diagnostic requesting
4. Referral letter(s)
   - ~ Standrdised format/content
   - ~ Electronic v paper
5. Direct listing/Choose & book
6. Commence pre-op assessment

OPERATIONAL
1. Community OPD slots
2. Develop one-stop clinics (exam & diagnostics)
3. Develop pre-op assessment clinics in community
4. Patient information

OPERATIONAL
1. Nurse-led follow-ups clinics
3. Fast track access if a problem arises

KPI's

Key Performance Indicators
1.
2.
3.

Key Performance Indicators
1.
2.
3.

Key Performance Indicators
1.
2.
3.

Key Performance Indicators
1.
2.
3.

Work force

WORKFORCE DEVELOPMENT (New roles, skills & competences)

Appendix	Completed	
5.i	Yes	
5.ii	Yes	
5.iii	Yes	
5.iv	Yes	
5.v		required from SW
5.vi	Yes	
5.vii	Yes (AJ)	
5.viii	Yes (AJ)	
5.ix	Yes	
5.x	Yes	
5.xi	Yes	
5.xii	Yes	
5.xiii	Yes	
5.xiv	Yes (SW)	
5.xv	Yes	
5.xvi	Yes	
5.xvii	Yes	
5.xviii	Yes	

Appendix 5.i : Population Projections by PCT Area

2007 Population by age band ('000) Updated

Age band	City of Bristol Unweighted population '000	Weighting	City of Bristol Population x weighting	South Gloucestershire Unweighted population '000	South Gloucestershire Population x weighting	North Somerset Unweighted population '000	North Somerset Population x weighting
0-4	23.8	591	14,076	14.7	8,694	10.8	6,387
5-9	20.3	225	4,568	15.3	3,443	11.4	2,565
10-14	20.4	225	4,590	16.7	3,758	12.0	2,700
15-19	26.7	445	11,878	16.0	7,118	11.9	5,294
20-24	45.4	445	20,197	14.7	6,540	9.9	4,404
25-29	40.7	445	18,106	16.0	7,118	10.2	4,538
30-34	32.6	445	14,503	16.5	7,340	10.8	4,805
35-39	30.4	445	13,524	20.2	8,986	14.4	6,406
40-44	28.7	445	12,768	21.9	9,743	15.9	7,073
45-49	24.6	532	13,081	18.8	9,997	14.2	7,551
50-54	21.3	532	11,327	16.0	8,508	13.1	6,966
55-59	19.9	532	10,582	15.8	8,402	14.3	7,604
60-64	17.8	532	9,465	15.5	8,242	14.3	7,604
65-69	14.0	966	13,527	11.6	11,208	10.4	10,048
70-74	12.1	966	11,691	10.1	9,758	9.1	8,792
75-79	11.2	1,584	17,739	8.2	12,988	7.8	12,354
80-84	9.1	1,584	14,413	5.5	8,711	6.1	9,662
85+	7.9	2,358	18,625	4.6	10,845	6.0	14,146
All Ages	406.9		234,660	258.1	151,398	202.6	128,900
UK average weighting			588		588		588
Weighted population			399		257		219

	City of Bristol '000	Bristol North '000	Bristol S&W '000	South Glos '000	North Somerset '000	Total '000
Unweighted population	406.9	213.1	193.8	258.1	202.6	867.6
Weighted population	399.1	209.0	190.1	257.5	219.2	875.8
% Relating to NBT	-	62%	15%	80%	25%	-
NBT unweighted population	-	131.5	29.1	206.5	50.7	417.7
NBT Weighted Population	-	129.0	28.5	206.0	54.8	418.3

2013 Population by age band ('000) Updated.

Age band	City of Bristol Unweighted population '000	Weighting	City of Bristol Population x weighting	South Gloucestershire Unweighted population '000	South Gloucestershire Population x weighting	North Somerset Unweighted population '000	North Somerset Population x weighting
0-4	25.4	591	15,022	15.0	8,871	11.1	6,565
5-9	21.6	225	4,860	15.5	3,488	12.0	2,700
10-14	18.6	225	4,185	15.3	3,443	12.0	2,700
15-19	24.3	445	10,810	16.1	7,162	11.9	5,294
20-24	46.7	445	20,775	15.8	7,029	10.7	4,760
25-29	46.6	445	20,731	18.6	8,275	12.0	5,338
30-34	39.6	445	17,617	18.6	8,275	12.5	5,561
35-39	29.9	445	13,301	17.2	7,652	12.4	5,516
40-44	28.3	445	12,590	20.1	8,942	15.4	6,851
45-49	26.6	532	14,145	21.6	11,486	16.7	8,880
50-54	23.2	532	12,337	19.4	10,316	15.1	8,030
55-59	19.6	532	10,423	15.9	8,455	13.7	7,285
60-64	17.4	532	9,253	14.9	7,923	13.9	7,391
65-69	16.2	966	15,652	15.2	14,686	14.8	14,299
70-74	12.5	966	12,077	11.3	10,918	10.5	10,145
75-79	10.2	1,584	16,155	9.2	14,572	8.6	13,621
80-84	8.5	1,584	13,463	6.7	10,612	6.6	10,454
85+	8.3	2,358	19,568	5.6	13,203	6.8	16,032
All Ages	423.5		242,965	272.0	165,306	216.7	141,423
UK average weighting			588		588		588
Weighted population			413		281		241

	City of Bristol '000	Bristol North '000	Bristol S&W '000	South Glos '000	North Somerset '000	Total '000
Unweighted population	423.5	221.8	201.7	272.0	216.7	912.2
Weighted population	413.2	216.4	196.8	281.1	240.5	934.9
% Relating to NBT	-	62%	15%	80%	25%	-
NBT unweighted population	-	136.9	30.3	217.6	54.2	438.9
NBT Weighted Population	-	133.5	29.5	224.9	60.1	448.1

2003 Population by age band ('000) Updated.

5.i Population Proj

Age band	City of Bristol Unweighted population '000	Weighting	City of Bristol Population x weighting	South Gloucestershire Unweighted population '000	South Gloucestershire Population x weighting	North Somerset Unweighted population '000	North Somerset Population x weighting
0-4	22.4	591	13,248	14.4	8,517	10.3	6,092
5-9	21.7	225	4,883	16.5	3,713	11.4	2,565
10-14	22.1	225	4,973	16.5	3,713	12.0	2,700
15-19	26.3	445	11,700	15.0	6,673	11.1	4,938
20-24	39.0	445	17,350	12.7	5,650	8.3	3,692
25-29	32.7	445	14,547	14.0	6,228	8.4	3,737
30-34	32.7	445	14,547	18.5	8,230	12.0	5,338
35-39	30.4	445	13,524	21.3	9,476	14.6	6,495
40-44	26.7	445	11,878	19.6	8,719	13.9	6,184
45-49	23.3	532	12,390	16.2	8,615	12.9	6,860
50-54	21.3	532	11,327	15.9	8,455	13.5	7,179
55-59	20.5	532	10,901	16.7	8,880	14.9	7,923
60-64	16.1	532	8,561	12.7	6,753	10.9	5,796
65-69	14.0	966	13,527	11.0	10,628	9.7	9,372
70-74	13.5	966	13,043	9.5	9,179	8.7	8,406
75-79	12.0	1,584	19,006	7.3	11,562	7.5	11,879
80-84	9.8	1,584	15,522	5.3	8,394	6.2	9,820
85+	7.0	2,358	16,503	3.8	8,959	5.1	12,024
All Ages	391.5		227,430	246.9	142,344	191.4	121,000
UK average weighting			588		588		588
Weighted population			387		242		206

	City of Bristol '000	Bristol North '000	Bristol S&W '000	South Glos '000	North Somerset '000	Total '000
Unweighted population	391.5	205.1	186.4	246.9	191.4	829.8
Weighted population	386.8	202.6	184.2	242.1	205.8	834.6
% Relating to NBT	-	62%	15%	80%	25%	-
NBT unweighted population	-	126.5	28.0	197.5	47.9	399.9
NBT Weighted Population	-	125.0	27.6	193.7	51.4	397.7

2013 Population by Age Band

Age band	Unweighted population	Weighting	Population x weighting	Unweighted population	Population x weighting	Unweighted population	Population x weighting
0-4	25.4	591	15,022	15.0	8,871	11.1	6,565
5-9	21.6	225	4,860	15.5	3,488	12.0	2,700
10-14	18.6	225	4,185	15.3	3,443	12.0	2,700
15-19	24.3	445	10,810	16.1	7,162	11.9	5,294
20-24	46.7	445	20,775	15.8	7,029	10.7	4,760
25-29	46.6	445	20,731	18.6	8,275	12.0	5,338
30-34	39.6	445	17,617	18.6	8,275	12.5	5,561
35-39	29.9	445	13,301	17.2	7,652	12.4	5,516
40-44	28.3	445	12,590	20.1	8,942	15.4	6,851
45-49	26.6	532	14,145	21.6	11,486	16.7	8,880
50-54	23.2	532	12,337	19.4	10,316	15.1	8,030
55-59	19.6	532	10,423	15.9	8,455	13.7	7,285
60-64	17.4	532	9,253	14.9	7,923	13.9	7,391
65-69	16.2	966	15,652	15.2	14,686	14.8	14,299
70-74	12.5	966	12,077	11.3	10,918	10.5	10,145
75-79	10.2	1,584	16,155	9.2	14,572	8.6	13,621
80-84	8.5	1,584	13,463	6.7	10,612	6.6	10,454
85+	8.3	2,358	19,568	5.6	13,203	6.8	16,032
All Ages	423.5		242,965	272.0	165,306	216.7	141,423
UK average weighting			588		588		588
Weighted population			413.2		281.1		240.5

	City of Bristol '000	Bristol North '000	Bristol S&W '000	South Glos '000	North Somerset '000	Total '000
Unweighted population	423.5	221.8	201.7	272.0	216.7	912.2
Weighted population	413.2	216.4	196.8	281.1	240.5	934.9
% Relating to NBT	-	62%	15%	80%	25%	-
NBT Unweighted Population	-	136.9	30.3	217.6	54.2	438.9
NBT Weighted Population	-	133.5	29.5	224.9	60.1	448.1

Unweighted Population

% increase	-	4.1%	4.1%	5.4%	7.0%	5.1%
Annual increase	-	0.7%	0.7%	0.9%	1.1%	0.8%

Weighted Population

% increase	-	3.5%	3.5%	9.2%	9.7%	7.1%
Annual increase	-	0.6%	0.6%	1.5%	1.6%	1.2%

2018 Population by Age Band

Age band	Unweighted population	Weighting	Population x weighting	Unweighted population	Population x weighting	Unweighted population	Population x weighting
0-4	26.9	591	15,909	15.9	9,404	11.7	6,920
5-9	22.5	225	5,063	15.7	3,533	12.2	2,745
10-14	20.0	225	4,500	15.9	3,578	12.6	2,835
15-19	22.6	445	10,054	14.7	6,540	11.7	5,205
20-24	44.6	445	19,841	15.6	6,940	10.6	4,716
25-29	47.4	445	21,087	19.3	8,586	12.4	5,516
30-34	43.6	445	19,396	20.7	9,209	13.9	6,184
35-39	35.4	445	15,748	19.7	8,764	14.3	6,362
40-44	27.2	445	12,100	17.7	7,874	13.5	6,006
45-49	26.3	532	13,985	20.2	10,742	16.0	8,508
50-54	24.8	532	13,188	21.3	11,327	17.0	9,040
55-59	21.2	532	11,273	18.8	9,997	15.5	8,242
60-64	17.6	532	9,359	15.3	8,136	13.8	7,338
65-69	15.5	966	14,976	14.2	13,720	13.7	13,237
70-74	14.4	966	13,913	14.3	13,816	14.3	13,816
75-79	10.7	1,584	16,947	10.2	16,155	9.8	15,522
80-84	8.2	1,584	12,988	7.5	11,879	7.4	11,721
85+	8.7	2,358	20,511	6.8	16,032	7.8	18,390
All Ages	437.6		250,840	283.8	176,230	228.2	152,302
UK average weighting			588		588		588
Weighted population			426.6		299.7		259.0

	City of Bristol '000	Bristol North '000	Bristol S&W '000	South Glos '000	North Somerset '000	Total '000
Unweighted population	437.6	229.2	208.4	283.8	228.2	949.6
Weighted population	426.6	223.4	203.2	299.7	259.0	985.3
% Relating to NBT	-	62%	15%	80%	25%	-
NBT Unweighted Population	-	141.4	31.3	227.0	57.1	456.8
NBT Weighted Population	-	137.9	30.5	239.8	64.8	472.9

Unweighted Population

% increase	-	3.3%	3.3%	4.3%	5.3%	4.1%
Annual increase	-	0.5%	0.5%	0.7%	0.9%	0.7%

Weighted Population

% increase	-	3.2%	3.2%	6.6%	7.7%	5.5%
Annual increase	-	0.6%	0.6%	1.3%	1.5%	1.1%

2007 Population by Age Band

Age band	Unweighted population	Weighting	Population x weighting	Unweighted population	Population x weighting	Unweighted population	Population x weighting
0-4	23.8	591	14,076	14.7	8,694	10.8	6,387
5-9	20.3	225	4,568	15.3	3,443	11.4	2,565
10-14	20.4	225	4,590	16.7	3,758	12.0	2,700
15-19	26.7	445	11,878	16.0	7,118	11.9	5,294
20-24	45.4	445	20,197	14.7	6,540	9.9	4,404
25-29	40.7	445	18,106	16.0	7,118	10.2	4,538
30-34	32.6	445	14,503	16.5	7,340	10.8	4,805
35-39	30.4	445	13,524	20.2	8,986	14.4	6,406
40-44	28.7	445	12,768	21.9	9,743	15.9	7,073
45-49	24.6	532	13,081	18.8	9,997	14.2	7,551
50-54	21.3	532	11,327	16.0	8,508	13.1	6,966
55-59	19.9	532	10,582	15.8	8,402	14.3	7,604
60-64	17.8	532	9,465	15.5	8,242	14.3	7,604
65-69	14.0	966	13,527	11.6	11,208	10.4	10,048
70-74	12.1	966	11,691	10.1	9,758	9.1	8,792
75-79	11.2	1,584	17,739	8.2	12,988	7.8	12,354
80-84	9.1	1,584	14,413	5.5	8,711	6.1	9,662
85+	7.9	2,358	18,625	4.6	10,845	6.0	14,146
All Ages	406.9		234,660	258.1	151,398	202.6	128,900
UK average weighting			588		588		588
Weighted population			399.1		257.5		219.2

	City of Bristol '000	Bristol North '000	Bristol S&W '000	South Glos '000	North Somerset '000	Total '000
Unweighted population	406.9	213.1	193.8	258.1	202.6	867.6
Weighted population	399.1	209.0	190.1	257.5	219.2	875.8
% Relating to NBT	-	62%	15%	80%	25%	-
NBT Unweighted Population	-	131.5	29.1	206.5	50.7	417.7
NBT Weighted Population	-	129.0	28.5	206.0	54.8	418.3

Unweighted Population

% increase	-	3.9%	3.9%	4.5%	5.9%	4.5%
Annual increase	-	0.6%	0.6%	0.7%	1.0%	0.7%

Weighted Population

% increase	-	3.2%	3.2%	6.4%	6.5%	5.2%
Annual increase	-	0.6%	0.6%	1.2%	1.3%	1.0%

Appendix 5.ii : Growth Rate Assumptions by Specialty

Spec	Spec Name	Type			2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Elective	EL+DC	% Net Growth	0%	-6%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
101	Urology	Elective	EL+DC	% Net Growth	0%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
110	Trauma & Orthopaedics	Elective	EL+DC	% Net Growth	0%	-4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
120	ENT	Elective	EL+DC	% Net Growth	0%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
140	Oral Surgery	Elective	EL+DC	% Net Growth	0%	-11%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
150	Neurosurgery	Elective	EL+DC	% Net Growth	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
160	Plastic Surgery	Elective	EL+DC	% Net Growth	0%	-2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
180	CDU	Elective	EL+DC	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
191	Pain Management	Elective	EL+DC	% Net Growth	0%	-5%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
300	General Medicine	Elective	EL+DC	% Net Growth	0%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
303	Haematology	Elective	EL+DC	% Net Growth	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
313	Immunology	Elective	EL+DC	% Net Growth	0%	-5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
350	Infectious Diseases	Elective	EL+DC	% Net Growth	0%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
361	Nephrology	Elective	EL+DC	% Net Growth	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
400	Neurology	Elective	EL+DC	% Net Growth	0%	-3%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
410	Rheumatology	Elective	EL+DC	% Net Growth	0%	-2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
421	Paediatric Neurology	Elective	EL+DC	% Net Growth	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
502	Gynaecology	Elective	EL+DC	% Net Growth	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
501+560	Obstetrics/Midwifery	Elective	EL+DC	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
710	Neuropsychiatry	Elective	EL+DC	% Net Growth	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
711	Child Psychiatry	Elective	EL+DC	% Net Growth	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
		El Total				-1.66%	1.52%	1.56%	1.59%	1.63%	1.66%	1.70%	1.73%	1.76%	1.80%	1.83%	1.86%	1.89%	1.92%	1.95%	1.98%

Spec	Spec Name	Type			2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
101	Urology	Non Elective	NE	% Net Growth	0%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%
110	Trauma & Orthopaedics	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
120	ENT	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
140	Oral Surgery	Non Elective	NE	% Net Growth	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
150	Neurosurgery	Non Elective	NE	% Net Growth	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
160	Plastic Surgery	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
180	CDU	Non Elective	NE	% Net Growth	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
191	Pain Management	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
300	General Medicine	Non Elective	NE	% Net Growth	0%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
303	Haematology	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
313	Immunology	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
350	Infectious Diseases	Non Elective	NE	% Net Growth	0%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
361	Nephrology	Non Elective	NE	% Net Growth	0%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
400	Neurology	Non Elective	NE	% Net Growth	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
410	Rheumatology	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
421	Paediatric Neurology	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
502	Gynaecology	Non Elective	NE	% Net Growth	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
501+560	Obstetrics/Midwifery	Non Elective	NE	% Net Growth	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
710	Neuropsychiatry	Non Elective	NE	% Net Growth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
711	Child Psychiatry	Non Elective	NE	% Net Growth	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
		Em Total				1.03%	1.04%	1.37%	1.38%	1.39%	1.41%	1.42%	1.43%	1.45%	1.46%	1.47%	1.49%	1.50%	1.51%	1.52%	1.54%

		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Baseline Total Elective Spells	**(FROM FT MODEL)**	**53669**	**52777**	**53584**	**54423**	**55294**	**56199**	**57137**	**58111**	**59122**	**60169**	**61255**	**62380**	**63546**	**64753**	**66004**	**67299**	**68639**
Baseline Non Elective Spells		**33943**	**34297**	**34660**	**35175**	**35703**	**36246**	**36802**	**37373**	**37959**	**38560**	**39177**	**39810**	**40460**	**41127**	**41811**	**42513**	**43234**
Total pre tfer activity		**87612**	**87074**	**88244**	**89598**	**90997**	**92444**	**93940**	**95485**	**97081**	**98729**	**100432**	**102190**	**104006**	**105880**	**107815**	**109812**	**111874**

Annual growth	08/09 to 23/24	08/09 to 13/14
Elective	1.4%	0.9%
Emergency	1.4%	1.3%
Total	1.4%	1.1%
New Outpatients	1.3%	1.1%
Fup Outpatients		-1.1%
Total Outpatients		-0.4%

Annual Growth	14/15 to 18/19	18/19 to 23/24
Elective	1.8%	1.9%
Emergency	1.6%	1.7%
Total	1.7%	1.8%
New Outpatients	1.5%	1.2%

Cumulative growth	0809 to 13/14	13/14 to 18/19	18/19 to 24/25
Elective	4.7%	9.0%	12.1%
Emergency	6.8%	8.1%	10.4%
Total	5.5%	8.6%	11.4%

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Elective	2968	2743	2612	2484	2361	2169	1984	1805	1633	1600	1568	1537	1506	1476	1447	1418	1389
101	Urology	Elective	1738	1688	1672	1739	1808	1880	1858	1831	1798	1870	1945	2022	2103	2188	2275	2366	2461
110	Trauma & Orthopaedics	Elective	5106	4689	4677	4583	4559	4448	4328	4196	4054	4171	4292	4417	4545	4676	4812	4952	5095
120	ENT	Elective	759	727	714	700	685	669	617	562	504	517	530	543	557	571	585	600	615
140	Oral Surgery	Elective	181	265	227	189	152	116	115	114	112	111	110	109	108	107	106	105	104
150	Neurosurgery	Elective	1568	1542	1535	1527	1519	1509	1499	1466	1453	1483	1512	1543	1574	1606	1639	1672	1706
160	Plastic Surgery	Elective	1294	1209	1170	1131	1090	996	953	909	810	818	827	835	843	852	860	869	877
180	CDU	Elective	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
191	Pain Management	Elective	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300	General Medicine	Elective	995	466	416	364	310	253	258	264	269	275	281	287	293	299	305	312	318
303	Haematology	Elective	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Elective	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Elective	7	6	5	4	4	3	4	4	4	4	4	4	4	5	5	5	5
361	Nephrology	Elective	627	496	474	453	430	407	411	416	420	424	428	432	437	441	446	450	455
400	Neurology	Elective	619	543	518	491	460	480	500	521	543	565	589	614	640	667	695	724	754
410	Rheumatology	Elective	175	150	123	96	75	61	62	62	63	64	65	66	67	68	69	70	71
421	Paediatric Neurology	Elective	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
502	Gynaecology	Elective	1243	1121	1041	880	840	800	800	800	800	800	800	800	800	800	800	800	800
501+560	Obstetrics/Midwifery	Elective	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
710	Neuropsychiatry	Elective	250	246	246	246	246	246	246	246	246	246	246	246	246	246	246	246	246
711	Child Psychiatry	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		Elective	17612	15945	15485	14942	14594	14093	13689	13251	12765	13004	13253	13511	13779	14056	14344	14642	14951
Total	Excl 501, 560, 710, 711		17355	15692	15232	14689	14341	13840	13436	12998	12512	12751	13000	13258	13526	13803	14091	14389	14698

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Daycase	5357	5095	5070	5043	5016	5061	5101	5138	5171	5068	4966	4867	4770	4674	4581	4489	4400
101	Urology	Daycase	6027	6349	6687	6954	7233	7522	7920	8339	8778	9129	9495	9874	10269	10680	11107	11552	12014
110	Trauma & Orthopaedics	Daycase	2397	2525	2747	3055	3301	3640	3995	4367	4759	4897	5038	5185	5335	5490	5649	5813	5981
120	ENT	Daycase	729	788	839	891	946	1003	1097	1195	1297	1329	1363	1397	1432	1468	1504	1542	1580
140	Oral Surgery	Daycase	1174	941	968	993	1019	1043	1033	1022	1012	1002	992	982	972	963	953	943	934
150	Neurosurgery	Daycase	283	316	360	406	454	503	554	628	684	698	712	726	741	756	771	787	803
160	Plastic Surgery	Daycase	3831	3829	3919	4009	4101	4247	4342	4439	4592	4638	4684	4731	4778	4826	4874	4923	4972
180	CDU	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Pain Management	Daycase	1721	1631	1672	1714	1757	1801	1847	1893	1941	1989	2039	2091	2143	2197	2252	2309	2367
300	General Medicine	Daycase	4753	5358	5530	5707	5889	6076	6203	6333	6467	6602	6741	6883	7027	7175	7325	7479	7636
303	Haematology	Daycase	3279	3304	3366	3430	3496	3562	3630	3699	3769	3840	3913	3988	4064	4141	4219	4300	4381
313	Immunology	Daycase	897	859	877	895	914	933	953	973	993	1014	1035	1057	1079	1102	1125	1149	1173
350	Infectious Diseases	Daycase	6	8	9	10	11	12	13	13	14	14	15	15	16	16	17	17	18
361	Nephrology	Daycase	1968	2114	2162	2210	2259	2309	2332	2355	2379	2402	2426	2451	2475	2500	2525	2550	2576
400	Neurology	Daycase	314	362	424	491	563	586	611	637	663	691	720	750	782	815	849	885	922
410	Rheumatology	Daycase	551	564	602	640	672	698	708	719	729	740	752	763	774	786	798	810	822
421	Paediatric Neurology	Daycase	162	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
502	Gynaecology	Daycase	2865	2881	2961	3122	3162	3202	3202	3202	3202	3202	3202	3202	3202	3202	3202	3202	3202
501+560	Obstetrics/Midwifery	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
710	Neuropsychiatry	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
711	Child Psychiatry	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			36314	37085	38352	39734	40953	42358	43701	45114	46610	47418	48255	49122	50020	50950	51913	52910	53941
Total	Excl 501, 560, 710, 711		36314	37085	38352	39734	40953	42358	43701	45114	46610	47418	48255	49122	50020	50950	51913	52910	53941

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Total Elective	8325	7838	7681	7528	7377	7229	7085	6943	6804	6668	6535	6404	6276	6151	6028	5907	5789
101	Urology	Total Elective	7765	8037	8359	8693	9041	9402	9778	10170	10576	10999	11439	11897	12373	12868	13382	13918	14474
110	Trauma & Orthopaedics	Total Elective	7503	7214	7423	7638	7860	8088	8322	8564	8812	9068	9331	9601	9880	10166	10461	10764	11076
120	ENT	Total Elective	1488	1515	1553	1592	1632	1672	1714	1757	1801	1846	1893	1940	1988	2038	2089	2142	2195
140	Oral Surgery	Total Elective	1355	1207	1194	1183	1171	1159	1147	1136	1125	1113	1102	1091	1080	1069	1059	1048	1038
150	Neurosurgery	Total Elective	1851	1857	1895	1933	1972	2012	2053	2095	2137	2180	2224	2269	2315	2362	2410	2458	2508
160	Plastic Surgery	Total Elective	5125	5039	5089	5140	5191	5243	5296	5349	5402	5456	5511	5566	5622	5678	5735	5792	5850
180	CDU	Total Elective	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
191	Pain Management	Total Elective	1724	1631	1672	1714	1757	1801	1847	1893	1941	1989	2039	2091	2143	2197	2252	2309	2367
300	General Medicine	Total Elective	5748	5824	5946	6071	6199	6329	6462	6597	6736	6877	7022	7169	7320	7474	7630	7791	7954
303	Haematology	Total Elective	3294	3304	3366	3430	3496	3562	3630	3699	3769	3840	3913	3988	4064	4141	4219	4300	4381
313	Immunology	Total Elective	905	859	877	895	914	933	953	973	993	1014	1035	1057	1079	1102	1125	1149	1173
350	Infectious Diseases	Total Elective	13	13	14	14	15	16	16	17	17	18	19	19	20	21	22	22	23
361	Nephrology	Total Elective	2595	2610	2636	2662	2689	2716	2743	2771	2798	2826	2855	2883	2912	2941	2970	3000	3030
400	Neurology	Total Elective	933	904	942	982	1023	1066	1111	1157	1206	1257	1309	1364	1422	1481	1544	1609	1676
410	Rheumatology	Total Elective	726	714	725	736	747	758	770	781	793	805	817	829	842	854	867	880	893
421	Paediatric Neurology	Total Elective	209	207	207	207	207	207	207	207	207	207	207	207	207	207	207	207	207
502	Gynaecology	Total Elective	4108	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002	4002
501+560	Obstetrics/Midwifery	Total Elective	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
710	Neuropsychiatry	Total Elective	250	246	246	246	246	246	246	246	246	246	246	246	246	246	246	246	246
711	Child Psychiatry	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			53926	53030	53837	54676	55547	56452	57390	58364	59375	60422	61508	62633	63799	65006	66257	67552	68892
Total	Excl 501, 560, 710, 711		53669	52777	53584	54423	55294	56199	57137	58111	59122	60169	61255	62380	63546	64753	66004	67299	68639

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Non Elective	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031	4031
101	Urology	Non Elective	986	961	937	914	891	869	847	826	805	785	766	746	728	710	692	675	658
110	Trauma & Orthopaedics	Non Elective	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842	1842
120	ENT	Non Elective	397	397	397	397	397	397	397	397	397	397	397	397	397	397	397	397	397
140	Oral Surgery	Non Elective	76	77	78	79	81	82	83	84	86	87	88	90	91	92	94	95	96
150	Neurosurgery	Non Elective	1719	1748	1778	1808	1839	1870	1902	1934	1967	2001	2035	2069	2104	2140	2176	2213	2251
160	Plastic Surgery	Non Elective	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454	2454
180	CDU	Non Elective	5541	5652	5765	5880	5998	6118	6240	6365	6493	6622	6755	6890	7028	7168	7312	7458	7607
191	Pain Management	Non Elective	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
300	General Medicine	Non Elective	14062	14203	14345	14632	14924	15223	15527	15838	16154	16477	16807	17143	17486	17836	18192	18556	18927
303	Haematology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Non Elective	28	29	31	32	34	35	37	39	41	43	45	47	49	52	54	57	59
361	Nephrology	Non Elective	1213	1273	1337	1404	1474	1548	1625	1706	1792	1881	1975	2074	2178	2287	2401	2521	2647
400	Neurology	Non Elective	352	357	362	367	372	377	382	388	393	399	404	410	416	421	427	433	439
410	Rheumatology	Non Elective	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
421	Paediatric Neurology	Non Elective	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
502	Gynaecology	Non Elective	1203	1233	1264	1295	1328	1361	1395	1430	1466	1502	1540	1578	1618	1658	1700	1742	1786
501+560	Obstetrics/Midwifery	Non Elective	10771	10879	10987	11097	11208	11320	11434	11548	11663	11780	11898	12017	12137	12258	12381	12505	12630
710	Neuropsychiatry	Non Elective	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
711	Child Psychiatry	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			44719	45180	45652	46277	46917	47571	48241	48926	49628	50345	51080	51832	52602	53390	54197	55023	55869
Total	Excl 501, 560, 710, 711		33943	34297	34660	35175	35703	36246	36802	37373	37959	38560	39177	39810	40460	41127	41811	42513	43234

Spec code	Specialty	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
100	General Surgery	New	11385	11341	11511	11683	11859	12036	12217	12400	12586	12775	12967	13161	13359	13559	13762	13969
101	Urology	New	5395	5368	5449	5531	5614	5698	5783	5870	5958	6047	6138	6230	6324	6418	6515	6612
110	Trauma & Orthopaedics	New	12173	12122	12304	12489	12676	12866	13059	13255	13454	13656	13860	14068	14279	14493	14711	14932
120	ENT	New	5624	5513	5596	5680	5765	5852	5940	6029	6119	6211	6304	6399	6495	6592	6691	6791
130	Opthalmology	New	402	395	401	407	413	419	425	432	438	445	451	458	465	472	479	486
140	Oral Surgery	New	3215	3202	3250	3299	3349	3399	3450	3502	3554	3607	3662	3716	3772	3829	3886	3944
143	Orthodontics	New	475	435	442	449	455	462	469	476	483	491	498	505	513	521	528	536
150	Neurosurgery	New	2758	2751	2792	2834	2876	2919	2963	3008	3053	3099	3145	3192	3240	3289	3338	3388
160	Plastic Surgery	New	7651	7586	7700	7815	7933	8052	8172	8295	8419	8546	8674	8804	8936	9070	9206	9344
170	Cardiothoracic Surgery	New	18	18	19	19	19	19	20	20	20	21	21	21	22	22	22	23
171	Paediatric Surgery	New	217	220	224	227	230	234	237	241	244	248	252	256	259	263	267	271
191	Pain Management	New	3111	3028	3073	3119	3166	3214	3262	3311	3360	3411	3462	3514	3567	3620	3674	3729
300	General Medicine	New	5784	5695	5781	5867	5955	6045	6135	6227	6321	6416	6512	6609	6709	6809	6911	7015
303	Haematology	New	642	634	644	654	663	673	683	694	704	715	725	736	747	758	770	781
313	Immunology	New	755	725	736	747	758	769	781	792	804	816	829	841	854	866	879	893
320	Cardiology	New	3707	3731	3787	3844	3902	3960	4019	4080	4141	4203	4266	4330	4395	4461	4528	4596
330	Dermatology	New	3420	3352	3402	3453	3505	3557	3611	3665	3720	3775	3832	3890	3948	4007	4067	4128
350	Infectious Disease	New	81	80	81	83	84	85	86	88	89	90	92	93	94	96	97	99
360	GUM	New	37	38	38	39	39	40	40	41	42	42	43	44	44	45	46	46
361	Nephrology (Renal)	New	2467	2504	2541	2579	2618	2657	2697	2737	2779	2820	2863	2905	2949	2993	3038	3084
370	Medical Oncology	New	420	420	427	433	439	446	453	459	466	473	480	488	495	502	510	518
400	Neurology	New	2597	2598	2637	2677	2717	2758	2799	2841	2884	2927	2971	3016	3061	3107	3153	3201
410	Rheumatology	New	1180	1153	1170	1188	1206	1224	1242	1261	1280	1299	1318	1338	1358	1379	1399	1420
420	Paediatrics	New	1035	1028	1044	1059	1075	1091	1108	1124	1141	1158	1176	1193	1211	1229	1248	1266
421	Paediatric Neurology	New	108	107	108	110	111	113	115	117	118	120	122	124	126	127	129	131
422	Neonatology/SCBU	New	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
430	Care of the Elderly	New	543	551	559	568	576	585	594	603	612	621	630	640	649	659	669	679
501	Obstetrics	New	5259	5256	5335	5415	5496	5578	5662	5747	5833	5920	6009	6099	6191	6284	6378	6474
502	Gynaecology	New	6993	6910	7014	7119	7226	7334	7444	7556	7669	7784	7901	8019	8140	8262	8386	8512
560	Maternity	New	1818	1700	1726	1752	1778	1804	1832	1859	1887	1915	1944	1973	2003	2033	2063	2094
710	Neuropsychiatry	New	338	335	340	345	350	356	361	366	372	377	383	389	395	400	406	413
711	Child & Adol. Psychiatry	New	0	293	298	302	307	311	316	321	326	330	335	340	346	351	356	361
800	Clinical Oncology	New	93	94	96	97	99	100	102	103	105	106	108	110	111	113	115	116
822	Chemical Pathology	New	34	33	34	35	35	36	36	37	37	38	38	39	39	40	41	41
	Total	New	89735	89218	90556	91915	93293	94693	96113	97555	99018	100503	102011	103541	105094	106671	108271	109895

Spec code	Specialty	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
100	General Surgery	Follow-Up	15833	15829	15848	16086	16327	16572	16821	17073	17329	17589	17853	18121	18392	18668	18948	19232
101	Urology	Follow-Up	11427	10501	10468	10625	10785	10947	11111	11277	11447	11618	11793	11970	12149	12331	12516	12704
110	Trauma & Orthopaedics	Follow-Up	36862	28294	26473	26870	27273	27682	28098	28519	28947	29381	29822	30269	30723	31184	31652	32126
120	ENT	Follow-Up	7482	6803	6851	6954	7058	7164	7271	7381	7491	7604	7718	7833	7951	8070	8191	8314
130	Opthalmology	Follow-Up	640	593	602	611	620	629	639	648	658	668	678	688	698	709	720	730
140	Oral Surgery	Follow-Up	4155	3705	3639	3693	3749	3805	3862	3920	3979	4038	4099	4160	4223	4286	4350	4416
143	Orthodontics	Follow-Up	3253	3227	3275	3324	3374	3425	3476	3528	3581	3635	3690	3745	3801	3858	3916	3975
150	Neurosurgery	Follow-Up	4410	3943	3697	3753	3809	3866	3924	3983	4043	4104	4165	4228	4291	4355	4421	4487
160	Plastic Surgery	Follow-Up	21805	16988	16097	16339	16584	16833	17085	17341	17601	17866	18133	18405	18682	18962	19246	19535
170	Cardiothoracic Surgery	Follow-Up	179	258	261	265	269	273	278	282	286	290	295	299	303	308	313	317
171	Paediatric Surgery	Follow-Up	116	109	110	112	114	115	117	119	121	123	124	126	128	130	132	134
191	Pain Management	Follow-Up	9086	7776	7163	7270	7379	7490	7603	7717	7832	7950	8069	8190	8313	8438	8564	8693
300	General Medicine	Follow-Up	19303	18545	17166	17424	17685	17950	18220	18493	18770	19052	19338	19628	19922	20221	20524	20832
303	Haematology	Follow-Up	5682	5304	5065	5141	5218	5297	5376	5457	5538	5622	5706	5791	5878	5967	6056	6147
313	Immunology	Follow-Up	879	1201	1202	1220	1238	1257	1276	1295	1314	1334	1354	1374	1395	1416	1437	1459
320	Cardiology	Follow-Up	4095	3852	3787	3844	3902	3960	4020	4080	4141	4203	4266	4330	4395	4461	4528	4596
330	Dermatology	Follow-Up	4943	4774	4846	4919	4992	5067	5143	5221	5299	5378	5459	5541	5624	5708	5794	5881
350	Infectious Disease	Follow-Up	3969	4030	4090	4152	4214	4277	4341	4407	4473	4540	4608	4677	4747	4818	4891	4964
360	GUM	Follow-Up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
361	Nephrology (Renal)	Follow-Up	21146	21429	21750	22077	22408	22744	23085	23431	23783	24140	24502	24869	25242	25621	26005	26395
370	Medical Oncology	Follow-Up	574	619	628	638	647	657	667	677	687	697	708	718	729	740	751	762
400	Neurology	Follow-Up	4996	3725	3439	3490	3543	3596	3650	3705	3760	3817	3874	3932	3991	4051	4112	4173
410	Rheumatology	Follow-Up	5217	4593	4402	4468	4535	4603	4672	4742	4814	4886	4959	5033	5109	5186	5263	5342
420	Paediatrics	Follow-Up	2578	2528	2366	2402	2438	2474	2511	2549	2587	2626	2665	2705	2746	2787	2829	2871
421	Paediatric Neurology	Follow-Up	424	416	342	347	352	357	363	368	374	379	385	391	396	402	408	415
422	Neonatology/SCBU	Follow-Up	726	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
430	Care of the Elderly	Follow-Up	1602	1397	1288	1307	1327	1346	1367	1387	1408	1429	1450	1472	1494	1517	1539	1563
501	Obstetrics	Follow-Up	10527	16288	14546	14765	14986	15211	15439	15671	15906	16144	16386	16632	16882	17135	17392	17653
502	Gynaecology	Follow-Up	10055	8678	8372	8497	8625	8754	8885	9019	9154	9291	9431	9572	9716	9861	10009	10159
560	Maternity	Follow-Up	3654	5286	4718	4789	4861	4934	5008	5083	5159	5237	5315	5395	5476	5558	5641	5726
710	Neuropsychiatry	Follow-Up	1614	1419	1333	1353	1373	1394	1415	1436	1458	1479	1502	1524	1547	1570	1594	1618
711	Child & Adol. Psychiatry	Follow-Up	0	2821	2863	2906	2950	2994	3039	3084	3131	3178	3225	3274	3323	3373	3423	3475
800	Clinical Oncology	Follow-Up	227	251	255	258	262	266	270	274	278	283	287	291	295	300	304	309
822	Chemical Pathology	Follow-Up	22	24	24	24	25	25	25	26	26	27	27	27	28	28	29	29
	Total	Follow-Up	217481	205204	196970	199924	202923	205967	209056	212192	215375	218606	221885	225213	228591	232020	235500	239033
				-5.6%	-4.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%

Spec code	Specialty	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
100	General Surgery	Total	27218	27170	27359	27769	28186	28608	29038	29473	29915	30364	30819	31282	31751	32227	32711	33201
101	Urology	Total	16822	15870	15917	16156	16398	16644	16894	17147	17405	17666	17931	18200	18473	18750	19031	19316
110	Trauma & Orthopaedics	Total	49035	40416	38777	39359	39949	40548	41157	41774	42400	43036	43682	44337	45002	45677	46363	47058
120	ENT	Total	13106	12316	12447	12634	12823	13016	13211	13409	13610	13815	14022	14232	14446	14662	14882	15105
130	Opthalmology	Total	1042	988	1003	1018	1033	1048	1064	1080	1096	1113	1129	1146	1164	1181	1199	1217
140	Oral Surgery	Total	7370	6908	6889	6992	7097	7204	7312	7421	7533	7646	7760	7877	7995	8115	8237	8360
143	Orthodontics	Total	3728	3662	3717	3773	3830	3887	3945	4005	4065	4126	4187	4250	4314	4379	4444	4511
150	Neurosurgery	Total	7168	6694	6489	6587	6686	6786	6888	6991	7096	7202	7310	7420	7531	7644	7759	7875
160	Plastic Surgery	Total	29456	24574	23797	24154	24516	24884	25257	25636	26021	26411	26807	27209	27618	28032	28452	28879
170	Cardiothoracic Surgery	Total	197	276	280	284	288	293	297	302	306	311	315	320	325	330	335	340
171	Paediatric Surgery	Total	333	329	334	339	344	349	354	360	365	371	376	382	388	393	399	405
191	Pain Management	Total	12197	10804	10236	10390	10546	10704	10864	11027	11193	11361	11531	11704	11879	12058	12238	12422
300	General Medicine	Total	25087	24240	22947	23291	23640	23995	24355	24720	25091	25467	25849	26237	26631	27030	27436	27847
303	Haematology	Total	6324	5938	5709	5795	5882	5970	6059	6150	6243	6336	6431	6528	6626	6725	6826	6928
313	Immunology	Total	1634	1925	1938	1967	1996	2026	2057	2087	2119	2151	2183	2216	2249	2282	2317	2351
320	Cardiology	Total	7802	7583	7575	7688	7803	7920	8039	8160	8282	8407	8533	8661	8791	8922	9056	9192
330	Dermatology	Total	8363	8126	8248	8372	8497	8625	8754	8885	9018	9154	9291	9430	9572	9715	9861	10009
350	Infectious Disease	Total	4050	4110	4172	4234	4298	4362	4428	4494	4562	4630	4699	4770	4842	4914	4988	5063
360	GUM	Total	37	38	38	39	39	40	40	41	42	42	43	44	44	45	46	46
361	Nephrology (Renal)	Total	23612	23933	24291	24656	25026	25401	25782	26169	26561	26960	27364	27775	28191	28614	29043	29479
370	Medical Oncology	Total	994	1039	1055	1071	1087	1103	1119	1136	1153	1171	1188	1206	1224	1242	1261	1280
400	Neurology	Total	7593	6323	6076	6167	6260	6354	6449	6546	6644	6744	6845	6948	7052	7158	7265	7374
410	Rheumatology	Total	6397	5746	5573	5656	5741	5827	5915	6003	6093	6185	6277	6372	6467	6564	6663	6763
420	Paediatrics	Total	3613	3557	3410	3461	3513	3565	3619	3673	3728	3784	3841	3899	3957	4016	4077	4138
421	Paediatric Neurology	Total	532	523	450	457	463	470	477	485	492	499	507	514	522	530	538	546
422	Neonatology/SCBU	Total	726	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
430	Care of the Elderly	Total	2145	1948	1847	1875	1903	1931	1960	1990	2020	2050	2081	2112	2144	2176	2208	2241
501	Obstetrics	Total	15786	21544	19881	20179	20482	20789	21101	21417	21739	22065	22396	22732	23073	23419	23770	24127
502	Gynaecology	Total	17048	15588	15385	15616	15850	16088	16329	16574	16823	17075	17332	17591	17855	18123	18395	18671
560	Maternity	Total	5472	6986	6444	6541	6639	6738	6840	6942	7046	7152	7259	7368	7479	7591	7705	7820
710	Neuropsychiatry	Total	1952	1754	1673	1698	1724	1749	1776	1802	1829	1857	1885	1913	1942	1971	2000	2030
711	Child & Adol. Psychiatry	Total	0	3114	3161	3208	3256	3305	3355	3405	3456	3508	3561	3614	3668	3723	3779	3836
800	Clinical Oncology	Total	320	345	350	356	361	366	372	377	383	389	395	401	407	413	419	425
822	Chemical Pathology	Total	56	57	58	59	60	61	61	62	63	64	65	66	67	68	69	70
	Total	Total	307215	294422	287526	291839	296216	300660	305170	309747	314393	319109	323896	328754	333686	338691	343771	348928

NBT projected areas of growth in specialist catchment

	Length of stay	Occupancy	2008/9 spells	2008/9 beds	Growth %	2009/10 spells	2009/10 beds	Growth %	2010/11 spells	2010/11 beds	Growth %	2011/12 spells	2011/12 beds	Growth %	2012/13 spells	2012/13 beds	Growth %	2013/14 spells	2013/14 beds	Growth %	2014/15 spells	2014/15 beds
Growth in NBT specialist work																						
DBS/Kinetras	5.0	85%	42	0.7	30%	55	0.9	30%	71	1.1	30%	92	1.5	30%	120	1.9	30%	156	2.5	30%	203	3.3
Kinetras replacements	5.0	85%	25	0.4	30%	33	0.5	30%	42	0.7	30%	55	0.9	30%	71	1.2	30%	93	1.5	30%	121	1.9
Prostatectomies	1.0	85%	128	0.4	15%	147	0.5	15%	169	0.5	15%	195	0.6	15%	224	0.7	15%	257	0.8	15%	296	1.0
Obesity surgery	2.5	85%	102	0.8	30%	133	1.1	30%	172	1.4	30%	224	1.8	30%	291	2.3	30%	379	3.1	30%	492	4.0
Acetabulums	25.0	85%	68	5.5	5%	71	5.8	5%	75	6.0	5%	79	6.3	0%	79	6.3	5%	83	6.7	5%	87	7.0
Renal transplants	10.0	85%	100	3.2	10%	110	3.5	10%	121	3.9	10%	133	4.3	10%	146	4.7	0%	146	4.7	0%	146	4.7
Transplant related (complications etc)	5.0	85%	150	2.4	10%	165	2.7	10%	182	2.9	10%	200	3.2	10%	220	3.5	0%	220	3.5	0%	220	3.5
Total			615	13.4		713	14.9		832	16.6		977	18.7		1151	20.8		1334	22.8		1565	25.4
Increase over 2008/9						98	1.5		217	3.2		362	5.2		536	7.3		719	9.4		950	12.0

Potential transfer from RUH

	Current RUH length of stay	Occupancy	Dr F expected LOS	2007/8 spells	Transfer % to NBT if transfer happens	Probability of transfer by 2013/14	Assumed LOS															
Neurology	48.1	85%	15.3	32	100%	50%	15.3		16	0.8	1%	16	0.8	1%	16	0.8	1%	16	0.8	1%	17	0.8
ENT	1.7	85%	1.9	998	50%	25%	1.9		125	0.8	1%	126	0.8	1%	127	0.8	1%	129	0.8	1%	130	0.8
Oral surgery	1.6	85%	1.9	106	50%	25%	1.9		13	0.1	1%	13	0.1	1%	14	0.1	1%	14	0.1	1%	14	0.1
Complex urology	4.3	85%	5.3	346	75%	50%	5.3		130	2.2	1%	131	2.2	1%	132	2.3	1%	134	2.3	1%	135	2.3
Complex T&O general	10.2	85%	5.9	165	100%	50%	5.9		83	1.6	1%	83	1.6	1%	84	1.6	1%	85	1.6	1%	86	1.6
Complex T&O spinal	10.2	85%	4.3	49	100%	50%	4.3		25	0.3	1%	25	0.3	1%	25	0.3	1%	25	0.3	1%	25	0.4
Complex T&O hands	0.9	85%	2	35	100%	50%	2		18	0.1	1%	18	0.1	1%	18	0.1	1%	18	0.1	1%	18	0.1
Vascular surgery	10.2	85%	6.9	110	65%	25%	6.9		18	0.4	1%	18	0.4	1%	18	0.4	1%	18	0.4	1%	19	0.4
Complex surgery - upper GI	10.9	85%	13.3	128	65%	25%	13.3		21	0.9	1%	21	0.9	1%	21	0.9	1%	21	0.9	1%	22	0.9
Complex surgery - lower GI	12.5	85%	15.6	227	65%	25%	15.6		37	1.9	1%	37	1.9	1%	38	1.9	1%	38	1.9	1%	38	1.9
Total				2196					484	9.0		489	9.1		494	9.2		498	9.3		503	9.4
Total probability adjusted potential increase on 2008/9 baseline						98	1.5		701	12.2		851	14.3		1030	16.5		1217	18.7		1453	21.3
Assume in ABC and financial model						70			158			269			410			531			683	

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Elective	0	-125	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250
101	Urology	Elective	0	-40	-80	-80	-82	-82	-82	-82	-82	-82	-82	-82	-82	-82	-82	-82	-82
110	Trauma & Orthopaedics	Elective	0	-420	-840	-840	-964	-964	-964	-964	-964	-964	-964	-964	-964	-964	-964	-964	-964
120	ENT	Elective	0	330	142	142	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17
140	Oral Surgery	Elective	0	-6	-11	-11	-55	-55	-55	-55	-55	-55	-55	-55	-55	-55	-55	-55	-55
150	Neurosurgery	Elective	0	-4	-7	-7	-205	-205	-205	-205	-205	-205	-205	-205	-205	-205	-205	-205	-205
160	Plastic Surgery	Elective	0	-20	-40	-40	-309	-309	-309	-309	-309	-309	-309	-309	-309	-309	-309	-309	-309
180	CDU	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Pain Management	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300	General Medicine	Elective	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
303	Haematology	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
361	Nephrology	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400	Neurology	Elective	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
410	Rheumatology	Elective	0	0	0	0	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24
421	Paediatric Neurology	Elective	0	0	0	0	-36	-36	-36	-36	-36	-36	-36	-36	-36	-36	-36	-36	-36
502	Gynaecology	Elective	0	-39	-78	-78	-80	-80	-80	-80	-80	-80	-80	-80	-80	-80	-80	-80	-80
501+560	Obstetrics/Midwifery	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
710	Neuropsychiatry	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
711	Child Psychiatry	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		Elective	0	-324	-1165	-1165	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024
Total	Excl 501, 560, 710, 711		0	-324	-1165	-1165	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024	-2024

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Daycase	0	-418	-836	-836	-840	-840	-840	-840	-840	-840	-840	-840	-840	-840	-840	-840	-840
101	Urology	Daycase	0	-323	-645	-645	-670	-670	-670	-670	-670	-670	-670	-670	-670	-670	-670	-670	-670
110	Trauma & Orthopaedics	Daycase	0	-245	-490	-490	-516	-516	-516	-516	-516	-516	-516	-516	-516	-516	-516	-516	-516
120	ENT	Daycase	0	220	160	160	7	7	7	7	7	7	7	7	7	7	7	7	7
140	Oral Surgery	Daycase	0	-106	-211	-211	-483	-483	-483	-483	-483	-483	-483	-483	-483	-483	-483	-483	-483
150	Neurosurgery	Daycase	0	-1	-1	-1	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174
160	Plastic Surgery	Daycase	0	-113	-225	-225	-615	-615	-615	-615	-615	-615	-615	-615	-615	-615	-615	-615	-615
180	CDU	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Pain Management	Daycase	0	0	0	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
300	General Medicine	Daycase	0	-24	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48
303	Haematology	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
361	Nephrology	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400	Neurology	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
410	Rheumatology	Daycase	0	0	0	0	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68	-68
421	Paediatric Neurology	Daycase	0	0	0	0	-110	-110	-110	-110	-110	-110	-110	-110	-110	-110	-110	-110	-110
502	Gynaecology	Daycase	0	-222	-443	-443	-476	-476	-476	-476	-476	-476	-476	-476	-476	-476	-476	-476	-476
501+560	Obstetrics/Midwifery	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
710	Neuropsychiatry	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
711	Child Psychiatry	Daycase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		Daycase	0	-1230	-2739	-2739	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001
Total	Excl 501, 560, 710, 711		0	-1230	-2739	-2739	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001	-4001

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Total Elective	0	-543	-1086	-1086	-1090	-1090	-1090	-1090	-1090	-1090	-1090	-1090	-1090	-1090	-1090	-1090	-1090
101	Urology	Total Elective	0	-363	-725	-725	-752	-752	-752	-752	-752	-752	-752	-752	-752	-752	-752	-752	-752
110	Trauma & Orthopaedics	Total Elective	0	-665	-1330	-1330	-1480	-1480	-1480	-1480	-1480	-1480	-1480	-1480	-1480	-1480	-1480	-1480	-1480
120	ENT	Total Elective	0	550	302	302	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
140	Oral Surgery	Total Elective	0	-111	-222	-222	-538	-538	-538	-538	-538	-538	-538	-538	-538	-538	-538	-538	-538
150	Neurosurgery	Total Elective	0	-4	-8	-8	-379	-379	-379	-379	-379	-379	-379	-379	-379	-379	-379	-379	-379
160	Plastic Surgery	Total Elective	0	-133	-265	-265	-924	-924	-924	-924	-924	-924	-924	-924	-924	-924	-924	-924	-924
180	CDU	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Pain Management	Total Elective	0	0	0	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
300	General Medicine	Total Elective	0	-25	-49	-49	-49	-49	-49	-49	-49	-49	-49	-49	-49	-49	-49	-49	-49
303	Haematology	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
361	Nephrology	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400	Neurology	Total Elective	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
410	Rheumatology	Total Elective	0	0	0	0	-92	-92	-92	-92	-92	-92	-92	-92	-92	-92	-92	-92	-92
421	Paediatric Neurology	Total Elective	0	0	0	0	-146	-146	-146	-146	-146	-146	-146	-146	-146	-146	-146	-146	-146
502	Gynaecology	Total Elective	0	-261	-521	-521	-556	-556	-556	-556	-556	-556	-556	-556	-556	-556	-556	-556	-556
501+560	Obstetrics/Midwifery	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
710	Neuropsychiatry	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
711	Child Psychiatry	Total Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		Total Elective	0	-1554	-3904	-3904	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025
Total	Excl 501, 560, 710, 711		0	-1554	-3904	-3904	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025	-6025

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Non Elective	0	0	0	0	-9	-337	-337	-337	-337	-337	-337	-337	-337	-337	-337	-337	-337
101	Urology	Non Elective	0	0	0	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
110	Trauma & Orthopaedics	Non Elective	0	0	0	0	-347	-749	-749	-749	-749	-749	-749	-749	-749	-749	-749	-749	-749
120	ENT	Non Elective	0	400	400	400	350	350	350	350	350	350	350	350	350	350	350	350	350
140	Oral Surgery	Non Elective	0	0	0	0	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12
150	Neurosurgery	Non Elective	0	0	0	0	-298	-298	-298	-298	-298	-298	-298	-298	-298	-298	-298	-298	-298
160	Plastic Surgery	Non Elective	0	0	0	0	-572	-572	-572	-572	-572	-572	-572	-572	-572	-572	-572	-572	-572
180	CDU	Non Elective	0	0	0	0	-79	-223	-226	-229	-232	-232	-232	-232	-232	-232	-232	-232	-232
191	Pain Management	Non Elective	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
300	General Medicine	Non Elective	0	0	0	0	0	-1668	-1702	-1736	-1771	-1771	-1771	-1771	-1771	-1771	-1771	-1771	-1771
303	Haematology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
361	Nephrology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400	Neurology	Non Elective	0	0	0	0	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
410	Rheumatology	Non Elective	0	0	0	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
421	Paediatric Neurology	Non Elective	0	0	0	0	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28
502	Gynaecology	Non Elective	0	0	0	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
501+560	Obstetrics/Midwifery	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
710	Neuropsychiatry	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
711	Child Psychiatry	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		Non Elective	0	400	400	400	-1029	-3571	-3607	-3644	-3682	-3682	-3682	-3682	-3682	-3682	-3682	-3682	-3682
Total	Excl 501, 560, 710, 711		0	400	400	400	-1029	-3571	-3607	-3644	-3682	-3682	-3682	-3682	-3682	-3682	-3682	-3682	-3682

Examinations		**Plain Film**	**Ultrasound**	**CT**	**MRI**	**Fluoro-scopy**	**Radio-nuclide**	**Mammo-graphy**	**PET ***	**Contingency room****	**Total**
Acute Hospital	2007/08 Acute Hospital	187,266	43,165	34,491	18,511	14,953	4,695	5,298			308,379
	+ Projected growth	18,712	9,589	24,639	9,114	2,388	782	393			65,616
	% growth	1.6%	3.4%	9.4%	6.9%	2.5%	2.6%	1.2%			3.3%
	- Community transfers	-99,034	-18,029	-8,623	-4,500						-130,186
	- ISTC transfers	-7,062	-1,014								-8,076
	2013/14 Acute Hospital	99,882	33,711	50,508	23,125	17,341	5,477	5,691			235,734
Comm Hospital	2013/14 Smd Comm	28,326	4,618								32,944
Total 2013/14		128,208	38,329	50,508	23,125	17,341	5,477	5,691			268,678

Rooms		**Plain Film**	**Ultrasound**	**CT**	**MRI**	**Fluoro-scopy**	**Radio-nuclide**	**Mammo-graphy**	**PET ***	**Contingency room****	**Total**
Acute Hospital	2007/08 Acute Hospital	16	11	3	3.3	7	3	1	0		44.3
	2013/14 Acute Hospital	8	5	4	4	7	2	1	1	1	33
Comm Hospital	2013/14 Smd Comm	2	1								3
Total 2013/14		10	6	4	4	7	2	1	1	1	36

Productivity, utilisation & capacity requirements	**Plain Film**	**Ultrasound**	**CT**	**MRI**	**Fluoro-scopy**	**Radio-nuclide**	**Mammo-graphy**	**PET ***	**Contingency room****	**Total**
Current throughput per room	11,704	3,924	11,497	5,609	2,136	1,565	5,298			
Transfer of acute ultrasound to wards		26%								
Transfer of radionuclide to PET						33%				
New hospital throughput per room	12,821	4,921	12,627	6,170	2,477	1,835	5,691			
Productivity & utilisation improvement	10%	25%	10%	10%	16%	17%	7%			
Rooms required 2013/14	10	6	4	3.7	7	2	1	1	1	36
Rooms planned 2013/14	10	6	4	4	7	2	1	1	1	36

* PET not currently provided, but plan for potential use by 2013/14, with a reduction in radionuclide rooms.

****** Contingency room in light of uncertainty around the rate of growth in demand for diagnostics, with growth currently running ahead of the levels assumed above in some modalities

A&E TOTAL ATTENDANCES

ACTIVITY

		% Growth	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
8/9 SLA plus growth													
Bristol	High	1.50%	8,663	8,793	8,925	9,058	9,194	9,332	9,471	9,613	9,757	9,904	10,052
	Standard	1.50%	2,948	2,992	3,037	3,082	3,129	3,176	3,223	3,271	3,320	3,370	3,421
	MIU	1.50%	26,456	26,852	27,255	27,663	28,077	28,498	28,925	29,358	29,798	30,245	30,698
	sub-total	1.50%	38,067	38,637	39,216	39,804	40,400	41,005	41,620	42,243	42,876	43,518	44,170
South Glos	High	2.02%	12,470	12,722	12,979	13,241	13,509	13,781	14,060	14,344	14,634	14,929	15,231
	Standard	2.02%	3,683	3,757	3,833	3,911	3,990	4,070	4,153	4,236	4,322	4,409	4,498
	MIU	2.02%	26,337	26,869	27,412	27,965	28,530	29,107	29,695	30,294	30,906	31,531	32,168
	sub-total	2.02%	42,490	43,348	44,224	45,117	46,029	46,958	47,907	48,875	49,862	50,869	51,897
North Somerset	High	-2.10%	541	530	519	508	497	487	476	466	457	447	438
	Standard	-2.10%	219	214	210	205	201	197	193	189	185	181	177
	MIU	-2.10%	852	834	817	799	783	766	750	734	719	704	689
	sub-total	-2.10%	1,612	1,578	1,545	1,513	1,481	1,450	1,419	1,389	1,360	1,332	1,304
Other	High	1.18%	171	173	175	177	179	181	183	186	188	190	192
	Standard	1.18%	44	45	45	46	46	47	47	48	48	49	49
	MIU	1.18%	356	360	364	369	373	378	382	386	391	396	400
	sub-total	1.18%	571	578	585	591	598	605	613	620	627	635	642
Total	High	1.73%	21,845	22,217	22,597	22,984	23,379	23,781	24,191	24,609	25,035	25,470	25,912
	Standard	1.69%	6,894	7,008	7,125	7,244	7,366	7,489	7,616	7,744	7,876	8,009	8,146
	MIU	1.71%	54,001	54,916	55,847	56,797	57,764	58,748	59,752	60,774	61,815	62,875	63,955
	total	**1.72%**	**82,740**	**84,141**	**85,570**	**87,025**	**88,508**	**90,019**	**91,558**	**93,127**	**94,725**	**96,354**	**98,013**
Growth				**1,401**	**1,428**	**1,455**	**1,483**	**1,511**	**1,540**	**1,569**	**1,598**	**1,628**	**1,659**
Acute Flows													
Bristol	High	1.50%						-688	-698	-709	-719	-730	-741
	Standard	1.50%						-234	-238	-241	-245	-248	-252
	MIU	1.50%						-1,157	-1,174	-1,192	-1,210	-1,228	-1,246
	sub-total	1.50%	0	0	0	0	0	-2,079	-2,110	-2,142	-2,174	-2,206	-2,239
South Glos	High	2.02%						-1,016	-1,036	-1,057	-1,078	-1,100	-1,123
	Standard	2.02%						-300	-306	-312	-319	-325	-332
	MIU	2.02%						-1,182	-1,206	-1,230	-1,255	-1,280	-1,306
	sub-total	2.02%	0	0	0	0	0	-2,497	-2,548	-2,599	-2,652	-2,705	-2,760
North Somerset	High	-2.10%						-36	-35	-34	-34	-33	-32
	Standard	-2.10%						-15	-14	-14	-14	-13	-13
	MIU	-2.10%						-31	-30	-30	-29	-29	-28
	sub-total	-2.10%	0	0	0	0	0	-81	-80	-78	-76	-75	-73
Other	High	1.18%						-13	-14	-14	-14	-14	-14
	Standard	1.18%						-3	-3	-4	-4	-4	-4
	MIU	1.18%						-15	-16	-16	-16	-16	-16
	sub-total	1.18%	0	0	0	0	0	-32	-33	-33	-33	-34	-34
Total	High	1.73%	0	0	0	0	0	-1,753	-1,783	-1,814	-1,845	-1,877	-1,910
	Standard	1.69%	0	0	0	0	0	-552	-561	-571	-580	-590	-600
	MIU	1.71%	0	0	0	0	0	-2,385	-2,426	-2,467	-2,510	-2,553	-2,597
	total	1.72%	**0**	**0**	**0**	**0**	**0**	**-4,690**	**-4,770**	**-4,852**	**-4,935**	**-5,020**	**-5,107**
Total before comm transfers													
Bristol	High		8,663	8,793	8,925	9,058	9,194	8,644	8,773	8,905	9,038	9,174	9,311
	Standard		2,948	2,992	3,037	3,082	3,129	2,942	2,986	3,030	3,076	3,122	3,169
	MIU		26,456	26,852	27,255	27,663	28,077	27,341	27,751	28,166	28,588	29,017	29,451
	sub-total		38,067	38,637	39,216	39,804	40,400	38,926	39,510	40,102	40,702	41,312	41,931
South Glos	High		12,470	12,722	12,979	13,241	13,509	12,766	13,024	13,287	13,555	13,829	14,108
	Standard		3,683	3,757	3,833	3,911	3,990	3,770	3,846	3,924	4,003	4,084	4,167

A&E TOTAL ATTENDANCES

ACTIVITY

		% Growth	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
	MIU		26,337	26,869	27,412	27,965	28,530	27,925	28,489	29,065	29,652	30,251	30,862
	sub-total		42,490	43,348	44,224	45,117	46,029	44,461	45,359	46,275	47,210	48,164	49,137
North Somerset	High		541	530	519	508	497	451	441	432	423	414	405
	Standard		219	214	210	205	201	182	179	175	171	168	164
	MIU		852	834	817	799	783	735	720	705	690	675	661
	sub-total		1,612	1,578	1,545	1,513	1,481	1,368	1,339	1,311	1,284	1,257	1,230
Other	High		171	173	175	177	179	168	170	172	174	176	178
	Standard		44	45	45	46	46	43	44	44	45	45	46
	MIU		356	360	364	369	373	362	366	371	375	380	384
	sub-total		571	578	585	591	598	573	580	587	594	601	608
Total	High		21,845	22,217	22,597	22,984	23,379	22,028	22,408	22,795	23,190	23,593	24,003
	Standard		6,894	7,008	7,125	7,244	7,366	6,937	7,054	7,174	7,295	7,419	7,545
	MIU		54,001	54,916	55,847	56,797	57,764	56,363	57,326	58,306	59,305	60,322	61,358
	total		**82,740**	**84,141**	**85,570**	**87,025**	**88,508**	**85,329**	**86,788**	**88,275**	**89,790**	**91,334**	**92,906**
Comm tfr - C&E		9/10											
Bristol	MIU			-9,130	-9,267	-9,405	-9,546	-9,296	-9,435	-9,577	-9,720	-9,866	-10,013
South Glos	MIU			0	0	0	0	0	0	0	0	0	0
North Somerset	MIU			0	0	0	0	0	0	0	0	0	0
Other	MIU			-61	-61	-62	-63	-61	-62	-62	-63	-64	-65
Total			**0**	**-9,190**	**-9,328**	**-9,467**	**-9,609**	**-9,357**	**-9,497**	**-9,639**	**-9,783**	**-9,930**	**-10,078**
Comm tfr - Yate		9/10											
Bristol	MIU			0	0	0	0	0	0	0	0	0	0
South Glos	MIU			-5,938	-6,058	-6,180	-6,305	-6,171	-6,296	-6,423	-6,553	-6,685	-6,820
North Somerset	MIU			-184	-180	-177	-173	-162	-159	-156	-152	-149	-146
Other	MIU			-40	-41	-41	-42	-40	-41	-41	-42	-42	-43
Total			**0**	**-6,163**	**-6,279**	**-6,398**	**-6,520**	**-6,374**	**-6,496**	**-6,620**	**-6,747**	**-6,877**	**-7,009**
Comm tfr - K/wood/Cossham		10/11											
Bristol	MIU				-818	-830	-842	-820	-833	-845	-858	-871	-884
South Glos	MIU				-7,483	-7,635	-7,789	-7,624	-7,778	-7,935	-8,095	-8,258	-8,425
North Somerset	MIU				-223	-218	-214	-201	-196	-192	-188	-184	-180
Other	MIU				-56	-56	-57	-55	-56	-57	-57	-58	-59
Total			**0**	**0**	**-8,580**	**-8,739**	**-8,902**	**-8,700**	**-8,862**	**-9,029**	**-9,198**	**-9,371**	**-9,548**
Comm tfr - Thornbury		9/10											
Bristol	MIU			0	0	0	0	0	0	0	0	0	0
South Glos	MIU			-3,251	-3,317	-3,384	-3,452	-3,379	-3,447	-3,517	-3,588	-3,660	-3,734
North Somerset	MIU			-101	-99	-97	-95	-89	-87	-85	-83	-82	-80
Other	MIU			-22	-22	-23	-23	-22	-22	-23	-23	-23	-23
Total			**0**	**-3,374**	**-3,438**	**-3,503**	**-3,570**	**-3,490**	**-3,557**	**-3,625**	**-3,694**	**-3,765**	**-3,838**
Comm tfr - Fr comm		13/14											
Bristol	MIU							-820	-833	-845	-858	-871	-884
South Glos	MIU							-6,981	-7,122	-7,266	-7,413	-7,563	-7,715
North Somerset	MIU							-184	-180	-176	-172	-169	-165
Other	MIU							-51	-52	-52	-53	-54	-54
Total			**0**	**0**	**0**	**0**	**0**	**-8,036**	**-8,186**	**-8,340**	**-8,496**	**-8,656**	**-8,818**

A&E TOTAL ATTENDANCES

ACTIVITY

		% Growth	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
Comm tfr - Smd comm		13/14											
Bristol	MIU							-16,405	-16,650	-16,900	-17,153	-17,410	-17,671
South Glos	MIU							-3,770	-3,846	-3,924	-4,003	-4,084	-4,166
North Somerset	MIU							-99	-97	-95	-93	-91	-89
Other	MIU							-132	-134	-135	-137	-139	-140
Total			**0**	**0**	**0**	**0**	**0**	**-20,406**	**-20,727**	**-21,054**	**-21,386**	**-21,724**	**-22,067**
Total comm transfers													
Bristol	MIU		0	-9,130	-10,084	-10,235	-10,389	-27,341	-27,751	-28,166	-28,588	-29,017	-29,451
South Glos	MIU		0	-9,189	-16,858	-17,199	-17,546	-27,925	-28,489	-29,065	-29,652	-30,251	-30,862
North Somerset	MIU		0	-285	-502	-492	-481	-735	-720	-705	-690	-675	-661
Other	MIU		0	-123	-180	-182	-184	-362	-366	-371	-375	-380	-384
Total			**0**	**-18,727**	**-27,625**	**-28,108**	**-28,600**	**-56,363**	**-57,326**	**-58,306**	**-59,305**	**-60,322**	**-61,358**
% transfer				-22.3%	-32.3%	-32.3%	-32.3%	-66.1%	-66.1%	-66.1%	-66.0%	-66.0%	-66.0%
Total after comm transfers													
Bristol	High		8,663	8,793	8,925	9,058	9,194	8,644	8,773	8,905	9,038	9,174	9,311
	Standard		2,948	2,992	3,037	3,082	3,129	2,942	2,986	3,030	3,076	3,122	3,169
	MIU		26,456	17,723	17,170	17,428	17,689	0	0	0	0	0	0
	sub-total		38,067	29,508	29,132	29,568	30,011	11,585	11,759	11,935	12,114	12,295	12,480
South Glos	High		12,470	12,722	12,979	13,241	13,509	12,766	13,024	13,287	13,555	13,829	14,108
	Standard		3,683	3,757	3,833	3,911	3,990	3,770	3,846	3,924	4,003	4,084	4,167
	MIU		26,337	17,680	10,554	10,767	10,984	0	0	0	0	0	0
	sub-total		42,490	34,159	27,366	27,918	28,482	16,536	16,870	17,211	17,558	17,913	18,275
North Somerset	High		541	530	519	508	497	451	441	432	423	414	405
	Standard		219	214	210	205	201	182	179	175	171	168	164
	MIU		852	549	314	308	301	0	0	0	0	0	0
	sub-total		1,612	1,293	1,043	1,021	999	633	620	607	594	582	569
Other	High		171	173	175	177	179	168	170	172	174	176	178
	Standard		44	45	45	46	46	43	44	44	45	45	46
	MIU		356	237	184	187	189	0	0	0	0	0	0
	sub-total		571	455	405	409	414	211	214	216	219	221	224
Total	High		21,845	22,217	22,597	22,984	23,379	22,028	22,408	22,795	23,190	23,593	24,003
	Standard		6,894	7,008	7,125	7,244	7,366	6,937	7,054	7,174	7,295	7,419	7,545
	MIU		54,001	36,189	28,223	28,689	29,163	0	0	0	0	0	0
	total		**82,740**	**65,414**	**57,945**	**58,917**	**59,907**	**28,966**	**29,463**	**29,969**	**30,485**	**31,012**	**31,548**
Frendoc/Nordoc													
Activity													
Bristol		1.50%	484	491	499	506	514	521	529	537	545	553	562
S Glos		2.02%	573	585	596	608	621	633	646	659	672	686	700
North Somerset		-2.10%	10	10	10	9	9	9	9	9	8	8	8
Other		1.18%	4	4	4	4	4	4	4	4	4	4	4
Total		1.76%	**1,071**	**1,090**	**1,109**	**1,128**	**1,148**	**1,168**	**1,188**	**1,209**	**1,230**	**1,252**	**1,274**
Grand Total Activity			**83,811**	**66,504**	**59,054**	**60,045**	**61,055**	**30,134**	**30,651**	**31,178**	**31,716**	**32,264**	**32,822**

	Baseline			Construction					Operational									
Demand (Spells)	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Projection of underlying elective demand net of Demand Management	**50,599**	**52,592**	**56,580**	**53,926**	**53,030**	**53,837**	**54,676**	**55,547**	**56,452**	**57,390**	**58,364**	**59,375**	**60,422**	**61,508**	**62,633**	**63,799**	**65,006**	**66,257**	**67,552**
Initiatives																			
Of which inpatients	18,945	18,747	18,248	17,612	15,945	15,485	14,942	14,594	14,093	13,689	13,251	12,765	13,004	13,253	13,511	13,779	14,056	14,344	14,642
Of which day case	31,654	33,845	38,332	36,314	37,085	38,352	39,734	40,953	42,358	43,701	45,114	46,610	47,418	48,255	49,122	50,020	50,950	51,913	52,910
Plus/minus impact of new initiatives/reconfigurations:																			
IS schemes					-2351	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701	-4701
ENT transfers					797	797	797	797	797	797	797	797	797	797	797	797	797	797	797
Specialist Paediatric transfers								-2121	-2121	-2121	-2121	-2121	-2121	-2121	-2121	-2121	-2121	-2121	-2121
Adjusted elective demand	**50,599**	**52,592**	**56,580**	**53,926**	**51,476**	**49,933**	**50,772**	**49,522**	**50,427**	**51,365**	**52,339**	**53,350**	**54,397**	**55,483**	**56,608**	**57,774**	**58,981**	**60,232**	**61,527**
Of which inpatients	18,945	18,747	18,248	17,612	15,621	14,320	13,777	12,570	12,069	11,665	11,227	10,741	10,980	11,229	11,487	11,755	12,032	12,320	12,618
Of which day case	31,654	33,845	38,332	36,314	35,855	35,613	36,995	36,952	38,357	39,700	41,113	42,609	43,417	44,254	45,121	46,019	46,949	47,912	48,909
Projection of underlying non-elective demand net of Demand Management	**47,905**	**49,514**	**48,279**	**44,719**	**45,180**	**45,652**	**46,277**	**46,917**	**47,571**	**48,241**	**48,926**	**49,628**	**50,345**	**51,080**	**51,832**	**52,602**	**53,390**	**54,197**	**55,023**
Initiatives																			
Plus/minus impact of new initiatives/reconfigurations:																			
Acute Flow transfers									-2542	-2578	-2615	-2653	-2653	-2653	-2653	-2653	-2653	-2653	-2653
ENT transfers					400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
Specialist Paediatric transfers								-1429	-1429	-1429	-1429	-1429	-1429	-1429	-1429	-1429	-1429	-1429	-1429
Adjusted non-elective demand	**47,905**	**49,514**	**48,279**	**44,719**	**45,580**	**46,052**	**46,677**	**45,888**	**44,000**	**44,634**	**45,282**	**45,946**	**46,663**	**47,398**	**48,150**	**48,920**	**49,708**	**50,515**	**51,341**
Elective growth -before transfers		**3.9%**	**7.6%**	**-4.7%**	**-1.7%**	**1.5%**	**1.6%**	**1.6%**	**1.6%**	**1.7%**	**1.7%**	**1.7%**	**1.8%**	**1.8%**	**1.8%**	**1.9%**	**1.9%**	**1.9%**	**2.0%**
Elective growth -after transfers		**3.9%**	**7.6%**	**-4.7%**	**-4.5%**	**-3.0%**	**1.7%**	**-2.5%**	**1.8%**	**1.9%**	**1.9%**	**1.9%**	**2.0%**	**2.0%**	**2.0%**	**2.1%**	**2.1%**	**2.1%**	**2.1%**
Non-Elective growth -before transfers		**3.4%**	**-2.5%**	**-7.4%**	**1.0%**	**1.0%**	**1.4%**	**1.4%**	**1.4%**	**1.4%**	**1.4%**	**1.4%**	**1.4%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**
Non-Elective growth -after transfers		**3.4%**	**-2.5%**	**-7.4%**	**1.9%**	**1.0%**	**1.4%**	**-1.7%**	**-4.1%**	**1.4%**	**1.5%**	**1.5%**	**1.6%**	**1.6%**	**1.6%**	**1.6%**	**1.6%**	**1.6%**	**1.6%**
Total growth -before transfers		**3.7%**	**2.7%**	**-5.9%**	**-0.4%**	**1.3%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.6%**	**1.6%**	**1.6%**	**1.6%**	**1.7%**	**1.7%**	**1.7%**	**1.7%**	**1.8%**
Total growth -after transfers		**3.7%**	**2.7%**	**-5.9%**	**-1.6%**	**-1.1%**	**1.5%**	**-2.1%**	**-1.0%**	**1.7%**	**1.7%**	**1.7%**	**1.8%**	**1.8%**	**1.8%**	**1.8%**	**1.9%**	**1.9%**	**1.9%**

Efficiency Assumptions -before transfers	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Day case rates	63%	64%	68%	67%	70%	71%	73%	74%	75%	76%	77%	79%	78%	78%	78%	78%	78%	78%	78%
Length of stay - Day case	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length of stay - Ordinary elective	5.0	4.7	4.7	4.3	4.1	3.9	3.8	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Length of stay- Non-elective	7.0	6.5	6.3	6.3	6.0	5.8	5.6	5.4	4.8	4.7	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Occupancy rate - Day Case	83%	82%	87%	90%	90%	88%	88%	86%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Occupancy rate - Ordinary elective	83%	82%	87%	90%	90%	88%	88%	86%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Occupancy rate - Non-elective	83%	82%	87%	90%	90%	88%	88%	86%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%

Efficiency Assumptions -after transfers	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Day case rates	63%	64%	68%	67%	70%	71%	73%	75%	76%	77%	79%	80%	80%	80%	80%	80%	80%	80%	79%
Length of stay - Day case	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length of stay - Ordinary elective	5.0	4.7	4.7	4.3	4.1	4.0	3.9	3.8	3.8	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.6
Length of stay- Non-elective	7.0	6.5	6.3	6.3	6.0	5.8	5.6	5.4	4.7	4.6	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.2
Occupancy rate - Day Case	83%	82%	87%	90%	90%	88%	88%	86%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Occupancy rate - Ordinary elective	83%	82%	87%	90%	90%	88%	88%	86%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
Occupancy rate - Non-elective	83%	82%	87%	90%	90%	88%	88%	86%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%

	Baseline			Construction					Operational									
Beds	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Day case beds required to meet demand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ordinary elective beds required to meet demand	313	294	270	211	177	159	148	133	130	124	118	111	114	116	119	122	125	128	131
Non-elective beds required to meet demand	1,107	1,075	958	769	749	743	728	698	574	575	570	569	570	576	582	588	594	601	608
Provision for increased age and casemix complexity				5	9	14	17	21	21	24	26	29	29	29	29	29	29	29	29
Seasonality and decant and contingency provision				32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Inflow of specialist work				-	2	4	6	8	10	10	10	10	10	10	10	10	10	10	10
Total beds required to meet demand	**1,420**	**1,370**	**1,228**	**1,017**	**969**	**952**	**931**	**891**	**768**	**765**	**755**	**752**	**755**	**763**	**772**	**780**	**790**	**799**	**809**
Beds for 501,560,711				97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97
Total beds required	**1,420**	**1,370**	**1,228**	**1,114**	**1,066**	**1,049**	**1,028**	**988**	**865**	**862**	**852**	**849**	**852**	**860**	**869**	**877**	**887**	**896**	**906**

New Outpatients net of Demand Management Initiatives	Baseline 2005-06	2006-07	2007-08	Construction 2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Operational 2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Projection of underlying demand	91,318	92,551	100,346	89,735	89,218	90,556	91,915	93,293	94,693	96,113	97,555	99,018	100,504	102,011	103,541	105,095	106,671	108,271	109,895
Plus/minus impact of new initiatives/reconfigurations:																			
Shift of care to the community						-20897	-21210	-20733	-21045	-21361	-21681	-22006	-22336	-22671	-23012	-23357	-23707	-24063	-24424
IS schemes					-3811	-7735	-7851	-7969	-8089	-8210	-8333	-8458	-8585	-8714	-8845	-8978	-9112	-9249	-9388
Specialist Transfer								-4417	-4483	-4550	-4618	-4688	-4758	-4829	-4902	-4975	-5050	-5126	-5203
Adjusted New demand	**91,318**	**92,551**	**100,346**	**89,735**	**85,407**	**61,924**	**62,854**	**60,174**	**61,076**	**61,992**	**62,922**	**63,866**	**64,824**	**65,796**	**66,783**	**67,785**	**68,802**	**69,834**	**70,881**
New Outpatients growth -before transfers		**1.4%**	**8.4%**	**-10.6%**	**-0.6%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**
New Outpatients growth -after transfers		**1.4%**	**8.4%**	**-10.6%**	**-4.8%**	**-27.5%**	**1.5%**	**-4.3%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**

Follow-Up Outpatients net of Demand Management Initiatives	Baseline 2005-06	2006-07	2007-08	Construction 2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Operational 2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Projection of underlying demand	222798	230935	245624	217481	205204	196970	199924	202923	205967	209057	212192	215375	218606	221885	225213	228591	232020	235501	239033
Plus/minus impact of new initiatives/reconfigurations:																			
Shift of care to the community						-64781	-65753	-63386	-64336	-65301	-66281	-67275	-68284	-69308	-70348	-71403	-72474	-73561	-74665
IS schemes					-7208	-14632	-14852	-15074	-15301	-15531	-15763	-16000	-16240	-16484	-16731	-16982	-17236	-17495	-17757
Specialist Transfer								-12799	-12991	-13186	-13384	-13584	-13788	-13995	-14205	-14418	-14634	-14854	-15077
Adjusted Follow-Up demand	**222,798**	**230,935**	**245,624**	**217,481**	**197,996**	**117,557**	**119,319**	**111,664**	**113,339**	**115,039**	**116,765**	**118,516**	**120,294**	**122,098**	**123,930**	**125,789**	**127,676**	**129,591**	**131,535**
Follow-Up Outpatients growth -before transfers		**3.7%**	**6.4%**	**-11.5%**	**-5.6%**	**-4.0%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**
Follow-Up Outpatients growth -after transfers		**3.7%**	**6.4%**	**-11.5%**	**-9.0%**	**-40.6%**	**1.5%**	**-6.4%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**
Total Outpatients -before transfers	**314,116**	**323,486**	**345,970**	**307,216**	**294,422**	**287,526**	**291,839**	**296,216**	**300,660**	**305,170**	**309,747**	**314,394**	**319,110**	**323,896**	**328,755**	**333,686**	**338,691**	**343,772**	**348,928**
Total Outpatients -after transfers	**314,116**	**323,486**	**345,970**	**307,216**	**283,403**	**179,481**	**182,173**	**171,838**	**174,415**	**177,031**	**179,687**	**182,382**	**185,118**	**187,894**	**190,713**	**193,574**	**196,477**	**199,424**	**202,416**
Total Outpatients growth -before transfers		**3.0%**	**7.0%**	**-11.2%**	**-4.2%**	**-2.3%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**
Total Outpatients growth -after transfers		**3.0%**	**7.0%**	**-11.2%**	**-7.8%**	**-36.7%**	**1.5%**	**-5.7%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**	**1.5%**

Spec	Spec Name	Type				2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Elective	EL	Inpatient LoS	100ELInpatient LoS	3.2	3.1	3.1	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
101	Urology	Elective	EL	Inpatient LoS	101ELInpatient LoS	3.5	3.2	2.9	2.7	2.5	2.5	2.4	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
110	Trauma & Orthopaedics	Elective	EL	Inpatient LoS	110ELInpatient LoS	5.1	4.9	4.7	4.5	4.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
120	ENT	Elective	EL	Inpatient LoS	120ELInpatient LoS	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
140	Oral Surgery	Elective	EL	Inpatient LoS	140ELInpatient LoS	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
150	Neurosurgery	Elective	EL	Inpatient LoS	150ELInpatient LoS	4.5	4.5	4.5	4.5	4.5	4.3	4.2	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
160	Plastic Surgery	Elective	EL	Inpatient LoS	160ELInpatient LoS	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
180	CDU	Elective	EL	Inpatient LoS	180ELInpatient LoS	0.8	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
191	Pain Management	Elective	EL	Inpatient LoS	191ELInpatient LoS	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
300	General Medicine	Elective	EL	Inpatient LoS	300ELInpatient LoS	3.9	3.7	3.6	3.5	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
303	Haematology	Elective	EL	Inpatient LoS	303ELInpatient LoS	3.3	3.0	2.8	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
313	Immunology	Elective	EL	Inpatient LoS	313ELInpatient LoS	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
350	Infectious Diseases	Elective	EL	Inpatient LoS	350ELInpatient LoS	9.2	8.8	8.6	8.4	8.2	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
361	Nephrology	Elective	EL	Inpatient LoS	361ELInpatient LoS	4.2	4.1	4.1	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
400	Neurology	Elective	EL	Inpatient LoS	400ELInpatient LoS	2.9	2.8	2.7	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
410	Rheumatology	Elective	EL	Inpatient LoS	410ELInpatient LoS	15.0	12.0	9.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
421	Paediatric Neurology	Elective	EL	Inpatient LoS	421ELInpatient LoS	1.6	1.3	1.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
502	Gynaecology	Elective	EL	Inpatient LoS	502ELInpatient LoS	2.5	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
501+560	Obstetrics/Midwifery	Elective	EL	Inpatient LoS	501+560ELInpatient	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
710	Neuropsychiatry	Elective	EL	Inpatient LoS	710ELInpatient LoS	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
711	Child Psychiatry	Elective	EL	Inpatient LoS	711ELInpatient LoS	65.0	65.0	65.0	65.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Baselinel Elective LOS (calculated)						4.3	4.1	3.9	3.8	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

Spec	Spec Name	Type				2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Non Elective	NE	Inpatient LoS	100NEInpatient LoS	7.1	6.5	6.0	5.6	5.3	5.0	4.8	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
101	Urology	Non Elective	NE	Inpatient LoS	101NEInpatient LoS	3.7	3.7	3.6	3.6	3.5	3.4	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
110	Trauma & Orthopaedics	Non Elective	NE	Inpatient LoS	110NEInpatient LoS	12.9	12.3	11.7	10.9	9.6	8.7	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
120	ENT	Non Elective	NE	Inpatient LoS	120NEInpatient LoS	2.8	2.6	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
140	Oral Surgery	Non Elective	NE	Inpatient LoS	140NEInpatient LoS	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
150	Neurosurgery	Non Elective	NE	Inpatient LoS	150NEInpatient LoS	10.5	10.3	10.1	9.9	9.7	9.5	9.0	8.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
160	Plastic Surgery	Non Elective	NE	Inpatient LoS	160NEInpatient LoS	3.6	3.5	3.4	3.3	3.2	3.0	2.8	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
180	CDU	Non Elective	NE	Inpatient LoS	180NEInpatient LoS	2.0	1.9	1.8	1.7	1.6	1.5	1.2	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
191	Pain Management	Non Elective	NE	Inpatient LoS	191NEInpatient LoS	2.0	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
300	General Medicine	Non Elective	NE	Inpatient LoS	300NEInpatient LoS	9.9	9.6	9.3	9.0	8.7	7.1	7.1	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
303	Haematology	Non Elective	NE	Inpatient LoS	303NEInpatient LoS	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
313	Immunology	Non Elective	NE	Inpatient LoS	313NEInpatient LoS	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
350	Infectious Diseases	Non Elective	NE	Inpatient LoS	350NEInpatient LoS	16.0	11.0	9.0	7.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
361	Nephrology	Non Elective	NE	Inpatient LoS	361NEInpatient LoS	10.4	9.3	9.0	8.7	8.4	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
400	Neurology	Non Elective	NE	Inpatient LoS	400NEInpatient LoS	10.2	9.8	9.6	9.4	9.2	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
410	Rheumatology	Non Elective	NE	Inpatient LoS	410NEInpatient LoS	19.0	15.0	11.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
421	Paediatric Neurology	Non Elective	NE	Inpatient LoS	421NEInpatient LoS	3.7	3.2	2.7	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
502	Gynaecology	Non Elective	NE	Inpatient LoS	502NEInpatient LoS	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
501+560	Obstetrics/Midwifery	Non Elective	NE	Inpatient LoS	501+560NEInpatient	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
710	Neuropsychiatry	Non Elective	NE	Inpatient LoS	710NEInpatient LoS	30.0	27.0	24.0	22.0	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
711	Child Psychiatry	Non Elective	NE	Inpatient LoS	711NEInpatient LoS	65.0	65.0	65.0	65.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Overall Non Elective LOS (calculated)						6.3	6.0	5.8	5.6	5.4	4.8	4.7	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Overall LOS EL+NE (Calculated)						5.70	5.52	5.34	5.18	5.00	4.51	4.44	4.36	4.31	4.31	4.32	4.32	4.32	4.33	4.33	4.34	4.34

Appendix 1b

Dr Foster's Unadjusted Los

Dr Foster's Expected Los*
(Casemix adjusted)
0607 Q1 - 0708 Q3

Comparison of Trusts
within 5% of Expected Los
using actual Los

Spec	Spec Name	Type				long term performance aspirations	OBC (Adj to spells)	DR Fosters Upp Q	DR Fosters upper 10%	Dr Foster Casemix Adj Upp Q	NBT	Upper Decile	Upper Quartile	NBT	Rank
100	General Surgery	Elective	EL	Inpatient LoS	100ELInpatient LoS	**2.9**	3.5	3.5	2.9		4.5	3.3	3.6	3.7	34 of 102
101	Urology	Elective	EL	Inpatient LoS	101ELInpatient LoS	**2.5**	2.5	2.3	2.0		3.2	2	2.3	3.9	133 of 142
110	Trauma & Orthopaedics	Elective	EL	Inpatient LoS	110ELInpatient LoS	**3.8**	4.3	3.8	3.3	4.6	4.6	3.4	3.7	5.3	57 of 61
120	ENT	Elective	EL	Inpatient LoS	120ELInpatient LoS	**1.4**	1.4	1.0	0.8		1.6	1	1.2	1.8	11 of 13
140	Oral Surgery	Elective	EL	Inpatient LoS	140ELInpatient LoS	**1.5**	0.7	0.9	0.4		1.7	0.3	0.4	2.9	7 of 7
150	Neurosurgery	Elective	EL	Inpatient LoS	150ELInpatient LoS	**4.0**	5.4	4.6	4.1		5.9	4.2	4.6	5	10 of 28
160	Plastic Surgery	Elective	EL	Inpatient LoS	160ELInpatient LoS	**2.2**	3.1	1.9	0.9		3.1	1	2.1	3.1	32 of 46
180	CDU	Elective	EL	Inpatient LoS	180ELInpatient LoS		0.2	1.0	0.0		2.7	0.3	0.3	0.3	1 of 1
191	Pain Management	Elective	EL	Inpatient LoS	191ELInpatient LoS	**0.8**	1.5	1.0	0.8						
300	General Medicine	Elective	EL	Inpatient LoS	300ELInpatient LoS	**3.3**	5.4	3.6	2.5		6.1	2.8	3.9	5.2	32 of 66
303	Haematology	Elective	EL	Inpatient LoS	303ELInpatient LoS			3.9	1.6		6.5	0.5	2.6	7	30 of 43
313	Immunology	Elective	EL	Inpatient LoS	313ELInpatient LoS	**0.8**	12.8	0.9	0.0		4	7.9	7.9	7.9	1 of 1
350	Infectious Diseases	Elective	EL	Inpatient LoS	350ELInpatient LoS	**8.0**	16.0	5.3	2.0		5.4	7.4	7.4	20.7	3 of 3
361	Nephrology	Elective	EL	Inpatient LoS	361ELInpatient LoS	**4.0**	6.8	2.3	0.8		4.2	0.8	2.6	5.9	39 of 50
400	Neurology	Elective	EL	Inpatient LoS	400ELInpatient LoS	**2.5**	3.6	3.2	1.3		6.5	2	2.9	3.9	14 of 36
410	Rheumatology	Elective	EL	Inpatient LoS	410ELInpatient LoS	**5.0**	6.8	2.2	0.9		7	0.8	2.8	14.6	46 of 48
421	Paediatric Neurology	Elective	EL	Inpatient LoS	421ELInpatient LoS	**0.9**	0.9	2.1	1.1		3.1	0.3	1.6	1.8	5 of 14
502	Gynaecology	Elective	EL	Inpatient LoS	502ELInpatient LoS	**2.1**	2.6	2.4	2.1		3.1	2.2	2.5	2.6	31 of 95
501+560	Obstetrics/Midwifery	Elective	EL	Inpatient LoS	501+560ELInpatient						2.5	1	1.6	4.9	73 of 77
710	Neuropsychiatry	Elective	EL	Inpatient LoS	710ELInpatient LoS	**19.0**		(no benchmark)	(no benchmark)						
711	Child Psychiatry	Elective	EL	Inpatient LoS	711ELInpatient LoS	**15.0**		38.0	4.0						
Baselinel Elective LOS (calculated)											4.9	3.3	3.5	4.7	18 of 29

Spec	Spec Name	Type				long term performance aspirations	OBC (Adj to spells)	DR Fosters Upp Q	DR Fosters upper 10%	Dr Foster Casemix Adj Upp Q	NBT	Upper Decile	Upper Quartile	NBT	
100	General Surgery	Non Elective	NE	Inpatient LoS	100NEInpatient LoS	**4.1**	4.6	5.0	4.6		6.3	4.7	5.2	7	60 of 68
101	Urology	Non Elective	NE	Inpatient LoS	101NEInpatient LoS	**3.2**	4.1	3.9	3.3		4.7	3	3.4	4.5	34 of 55
110	Trauma & Orthopaedics	Non Elective	NE	Inpatient LoS	110NEInpatient LoS	**6.5**	8.3	7.7	6.5	8.7	9.4	6.8	8	14.6	68 of 68
120	ENT	Non Elective	NE	Inpatient LoS	120NEInpatient LoS	**2.2**	2.1	2.2	1.4		2.8	1.7	2.1	3.9	65 of 69
140	Oral Surgery	Non Elective	NE	Inpatient LoS	140NEInpatient LoS	**2.2**	1.6	1.1	0.0		2.1	1.2	1.7	3.3	37 of 40
150	Neurosurgery	Non Elective	NE	Inpatient LoS	150NEInpatient LoS	**8.0**	11.5	10.2	7.4		12.4	11.4	11.4	11.4	1 of 6
160	Plastic Surgery	Non Elective	NE	Inpatient LoS	160NEInpatient LoS	**2.5**	3.2	1.5	0.5		2.6	1.5	1.7	3.9	20 of 21
180	CDU	Non Elective	NE	Inpatient LoS	180NEInpatient LoS	**0.6**	0.4	0.9	0.6		1.8	0.9	1.2	1.8	11 of 23
191	Pain Management	Non Elective	NE	Inpatient LoS	191NEInpatient LoS	**1.0**		1.0	0.0						
300	General Medicine	Non Elective	NE	Inpatient LoS	300NEInpatient LoS	**5.8**	8.3	5.9	5.0	7.1	8.3	6.3	7	10.4	61 of 63
303	Haematology	Non Elective	NE	Inpatient LoS	303NEInpatient LoS	**3.4**	9.2	6.6	3.4		9	4.4	7.3	10.8	53 of 84
313	Immunology	Non Elective	NE	Inpatient LoS	313NEInpatient LoS	**1.0**	11.3	1.0	0.0		10	10	10	10	1 of 1
350	Infectious Diseases	Non Elective	NE	Inpatient LoS	350NEInpatient LoS	**6.4**	14.8	7.3	4.3		7.7	6.2	6.3	34.4	8 of 8
361	Nephrology	Non Elective	NE	Inpatient LoS	361NEInpatient LoS	**8.0**	12.3	7.7	6.3		10.5	7.2	8.1	11.5	38 of 50
400	Neurology	Non Elective	NE	Inpatient LoS	400NEInpatient LoS	**9.0**	10.1	5.0	0.5		16.4	1	1.7	12.5	10 of 16
410	Rheumatology	Non Elective	NE	Inpatient LoS	410NEInpatient LoS	**6.0**	20.4	7.1	3.8		8.3	0.6	4.2	21.4	12 of 12
421	Paediatric Neurology	Non Elective	NE	Inpatient LoS	421NEInpatient LoS	**2.0**	5.2	3.7	1.2		8.3	1	3.9	5.5	4 of 6
502	Gynaecology	Non Elective	NE	Inpatient LoS	502NEInpatient LoS	**0.9**	1.0	1.3	0.9		1.7	1.1	1.3	1.4	15 of 48
501+560	Obstetrics/Midwifery	Non Elective	NE	Inpatient LoS	501+560NEInpatient						1.7	1	1.3	1.5	26 of 84
710	Neuropsychiatry	Non Elective	NE	Inpatient LoS	710NEInpatient LoS			(no benchmark)	(no benchmark)						
711	Child Psychiatry	Non Elective	NE	Inpatient LoS	711NEInpatient LoS										
Overall Non Elective LOS (calculated)											5.1	4.2	4.4	5.9	77 of 79

Overall LOS EL+NE (Calculated)

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	long term performance aspirations	OBC (Adj to spells)
100	General Surgery	Elective	3.2	3.2	3.3	3.3	3.3	3.3	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	**2.9**	3.5
101	Urology	Elective	3.5	3.2	3.0	2.8	2.6	2.6	2.5	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	**2.5**	2.5
110	Trauma & Orthopaedics	Elective	5.1	5.0	4.8	4.6	4.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2	**3.8**	4.3
120	ENT	Elective	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	**1.4**	1.4
140	Oral Surgery	Elective	1.5	1.5	1.5	1.5	2.2	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	**1.5**	0.7
150	Neurosurgery	Elective	4.5	4.5	4.5	4.5	4.3	4.2	4.1	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	**4.0**	5.4
160	Plastic Surgery	Elective	3.0	2.9	2.8	2.7	2.9	2.9	2.9	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	**2.2**	3.1
180	CDU	Elective	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.2
191	Pain Management	Elective	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.8**	1.5
300	General Medicine	Elective	3.9	3.7	3.6	3.5	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	**3.3**	5.4
303	Haematology	Elective	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
313	Immunology	Elective	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.8**	12.8
350	Infectious Diseases	Elective	9.2	8.8	8.6	8.4	8.2	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	**8.0**	16.0
361	Nephrology	Elective	4.2	4.1	4.1	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	**4.0**	6.8
400	Neurology	Elective	2.9	2.8	2.7	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	**2.5**	3.6
410	Rheumatology	Elective	15.0	12.0	9.0	7.0	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.1	**5.0**	6.8
421	Paediatric Neurology	Elective	1.6	1.3	1.1	1.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	**0.9**	0.9
502	Gynaecology	Elective	2.5	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**2.1**	2.6
501+560	Obstetrics/Midwifery	Elective	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
710	Neuropsychiatry	Elective	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	**19.0**	
711	Child Psychiatry	Elective	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**15.0**	
Overall Elective LOS (calculated)			4.3	4.1	4.0	3.9	3.8	3.8	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.6	3.6		

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	long term performance aspirations	OBC (Adj to spells)
100	General Surgery	Non Elective	7.1	6.5	6.0	5.6	5.3	5.0	4.8	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	**4.1**	4.6
101	Urology	Non Elective	3.7	3.7	3.6	3.6	3.5	3.4	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	**3.2**	4.1
110	Trauma & Orthopaedics	Non Elective	12.9	12.3	11.7	10.9	9.5	8.4	8.2	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	**6.5**	8.3
120	ENT	Non Elective	2.8	3.0	2.9	2.8	2.6	2.5	2.5	2.5	2.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	**2.2**	2.1
140	Oral Surgery	Non Elective	2.4	2.3	2.2	2.2	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	**2.2**	1.6
150	Neurosurgery	Non Elective	10.5	10.3	10.1	9.9	10.0	9.8	9.2	8.7	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	**8.0**	11.5
160	Plastic Surgery	Non Elective	3.6	3.5	3.4	3.3	3.7	3.5	3.2	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	**2.5**	3.2
180	CDU	Non Elective	2.0	1.9	1.8	1.7	1.6	1.5	1.2	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	**0.6**	0.4
191	Pain Management	Non Elective	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	**1.0**	
300	General Medicine	Non Elective	9.9	9.6	9.3	9.0	8.7	7.1	7.2	7.1	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	**5.8**	8.3
303	Haematology	Non Elective	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**3.4**	9.2
313	Immunology	Non Elective	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**1.0**	11.3
350	Infectious Diseases	Non Elective	16.0	11.0	9.0	7.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	**6.4**	14.8
361	Nephrology	Non Elective	10.4	9.3	9.0	8.7	8.4	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	**8.0**	12.3
400	Neurology	Non Elective	10.2	9.8	9.6	9.4	9.3	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	**9.0**	10.1
410	Rheumatology	Non Elective	19.0	15.0	11.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**6.0**	20.4
421	Paediatric Neurology	Non Elective	3.7	3.2	2.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**2.0**	5.2
502	Gynaecology	Non Elective	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	**0.9**	1.0
501+560	Obstetrics/Midwifery	Non Elective	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
710	Neuropsychiatry	Non Elective	30.0	27.0	24.0	22.0	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2		
711	Child Psychiatry	Non Elective	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Overall Non Elective LOS (calculated)			6.3	6.0	5.8	5.6	5.4	4.7	4.6	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.2	4.2		
Overall LOS EL+NE (Calculated)			5.7	5.5	5.4	5.2	5.1	4.5	4.4	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1		

Spec	Spec Name	Type	DR Fosters Upp Q	DR Fosters upper 10%	Dr Foster Casemix Adj Upp Q
100	General Surgery	Elective	3.5	2.9	
101	Urology	Elective	2.3	2.0	
110	Trauma & Orthopaedics	Elective	3.8	3.3	4.6
120	ENT	Elective	1.0	0.8	
140	Oral Surgery	Elective	0.9	0.4	
150	Neurosurgery	Elective	4.6	4.1	
160	Plastic Surgery	Elective	1.9	0.9	
180	CDU	Elective	1.0	0.0	
191	Pain Management	Elective	1.0	0.8	
300	General Medicine	Elective	3.6	2.5	
303	Haematology	Elective	3.9	1.6	
313	Immunology	Elective	0.9	0.0	
350	Infectious Diseases	Elective	5.3	2.0	
361	Nephrology	Elective	2.3	0.8	
400	Neurology	Elective	3.2	1.3	
410	Rheumatology	Elective	2.2	0.9	
421	Paediatric Neurology	Elective	2.1	1.1	
502	Gynaecology	Elective	2.4	2.1	
501+560	Obstetrics/Midwifery	Elective			
710	Neuropsychiatry	Elective	(no benchmark)	(no benchmark)	
711	Child Psychiatry	Elective	38.0	4.0	

Overall Elective LOS (calculated)

Spec	Spec Name	Type	DR Fosters Upp Q	DR Fosters upper 10%	Dr Foster Casemix Adj Upp Q
100	General Surgery	Non Elective	5.0	4.6	
101	Urology	Non Elective	3.9	3.3	
110	Trauma & Orthopaedics	Non Elective	7.7	6.5	8.7
120	ENT	Non Elective	2.2	1.4	
140	Oral Surgery	Non Elective	1.1	0.0	
150	Neurosurgery	Non Elective	10.2	7.4	
160	Plastic Surgery	Non Elective	1.5	0.5	
180	CDU	Non Elective	0.9	0.6	
191	Pain Management	Non Elective	1.0	0.0	
300	General Medicine	Non Elective	5.9	5.0	7.1
303	Haematology	Non Elective	6.6	3.4	
313	Immunology	Non Elective	1.0	0.0	
350	Infectious Diseases	Non Elective	7.3	4.3	
361	Nephrology	Non Elective	7.7	6.3	
400	Neurology	Non Elective	5.0	0.5	
410	Rheumatology	Non Elective	7.1	3.8	
421	Paediatric Neurology	Non Elective	3.7	1.2	
502	Gynaecology	Non Elective	1.3	0.9	
501+560	Obstetrics/Midwifery	Non Elective			
710	Neuropsychiatry	Non Elective	(no benchmark)	(no benchmark)	
711	Child Psychiatry	Non Elective			

Overall Non Elective LOS (calculated)

Overall LOS EL+NE (Calculated)

Spec	Spec Name	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	**long term performance aspirations**	OBC Submitted	DR Fosters Upp Q	DR Fosters upper 10%
100	General Surgery	64%	65%	66%	67%	68%	70%	72%	74%	76%	76%	76%	76%	76%	76%	76%	76%	76%	**76%**	76%	70%	75%
101	Urology	78%	79%	80%	80%	80%	80%	81%	82%	83%	83%	83%	83%	83%	83%	83%	83%	83%	**83%**	83%	78%	82%
110	Trauma & Orthopaedics	32%	35%	37%	40%	42%	45%	48%	51%	54%	54%	54%	54%	54%	54%	54%	54%	54%	**54%**	40%	54%	65%
120	ENT	49%	52%	54%	56%	58%	60%	64%	68%	72%	72%	72%	72%	72%	72%	72%	72%	72%	**72%**	72%	54%	87%
140	Oral Surgery	87%	78%	81%	84%	87%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	**90%**	38%	98%	100%
150	Neurosurgery	15%	17%	19%	21%	23%	25%	27%	30%	32%	32%	32%	32%	32%	32%	32%	32%	32%	**32%**	14%	32%	49%
160	Plastic Surgery	75%	76%	77%	78%	79%	81%	82%	83%	85%	85%	85%	85%	85%	85%	85%	85%	85%	**85%**	78%	99%	100%
180	CDU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	100%	100%
191	Pain Management	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**	100%	100%	100%
300	General Medicine	83%	92%	93%	94%	95%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	**96%**	75%	92%	96%
303	Haematology	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**	100%	96%	98%
313	Immunology	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**	100%	100%	100%
350	Infectious Diseases	46%	56%	64%	70%	74%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	**78%**	77%	76%	87%
361	Nephrology	76%	81%	82%	83%	84%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	**85%**	70%	84%	99%
400	Neurology	34%	40%	45%	50%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	**55%**	79%	99%	100%
410	Rheumatology	76%	79%	83%	87%	90%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	**92%**	92%	98%	100%
421	Paediatric Neurology	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%		0%	83%	90%
502	Gynaecology	70%	72%	74%	78%	79%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	**85%**	93%	72%	79%
501+560	Obstetrics/Midwifery	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
710	Neuropsychiatry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			(no benchmark)	(no benchmark)
711	Child Psychiatry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		9%	0%	25%
Trust		67%	70%	71%	73%	74%	75%	76%	77%	79%	79%	79%	79%	79%	79%	79%	79%	79%				

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Elective	87%	86%	85%	84%	83%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%
101	Urology	Elective	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%
110	Trauma & Orthopaedics	Elective	91%	92%	92%	93%	93%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
120	ENT	Elective	80%	80%	82%	82%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
140	Oral Surgery	Elective	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
150	Neurosurgery	Elective	90%	90%	90%	90%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
160	Plastic Surgery	Elective	91%	90%	89%	87%	86%	85%	84%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
180	CDU	Elective																	
191	Pain Management	Elective	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
300	General Medicine	Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
303	Haematology	Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
313	Immunology	Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
350	Infectious Diseases	Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
361	Nephrology	Elective	92%	92%	92%	92%	92%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
400	Neurology	Elective	90%	90%	90%	90%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
410	Rheumatology	Elective	86%	86%	86%	86%	86%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
421	Paediatric Neurology	Elective	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
502	Gynaecology	Elective	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
501+560	Obstetrics/Midwifery	Elective																	
710	Neuropsychiatry	Elective	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
711	Child Psychiatry	Elective	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
420	Paediatrics	Elective	60%	60%	60%	60%	60%	60%	60%	60%	60%	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Spec	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Non Elective	87%	86%	85%	84%	83%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%
101	Urology	Non Elective	82%	82%	82%	82%	82%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
110	Trauma & Orthopaedics	Non Elective	98%	98%	98%	98%	98%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
120	ENT	Non Elective	80%	80%	82%	82%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
140	Oral Surgery	Non Elective	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
150	Neurosurgery	Non Elective	90%	90%	90%	90%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
160	Plastic Surgery	Non Elective	91%	90%	89%	87%	86%	85%	84%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
180	CDU	Non Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
191	Pain Management	Non Elective	90%	90%	90%	90%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
300	General Medicine	Non Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
303	Haematology	Non Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
313	Immunology	Non Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
350	Infectious Diseases	Non Elective	90%	90%	87%	87%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
361	Nephrology	Non Elective	92%	92%	92%	92%	92%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
400	Neurology	Non Elective	90%	90%	90%	90%	90%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
410	Rheumatology	Non Elective	86%	86%	86%	86%	86%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
421	Paediatric Neurology	Non Elective	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
502	Gynaecology	Non Elective	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
501+560	Obstetrics/Midwifery	Non Elective	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%
710	Neuropsychiatry	Non Elective	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
711	Child Psychiatry	Non Elective	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
420	Paediatrics	Non Elective	60%	60%	60%	60%	60%	60%	60%	60%	60%	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Overall Bed Occupancy	**90%**	**90%**	**88%**	**88%**	**86%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**	**84%**

ELECTIVE THEATRES REQUIRED - 50 WEEK YEAR, 90% UTILISATION, 4/5 HOUR SESSIONS

	Elective Theatres	2013/14 Elective Spells	% of Spells Having Op	Multiple Op Rate	Estimated Theatre Ops	Average Hours per Op	Operating Hours per Year	No. of Weeks P.A.	% List Uptake	% Needle to Skin	% Utilisation	List Length (hrs)	Theatres Lists per Week	Theatres if 5 Day Week
100	General Surgery	6,139	50%	1.02	3,157	1.50	4,750	50			90%	4	26	2.6
101	Urology	8,650	28%	1.01	2,439	1.41	3,450	50			90%	4	19	1.9
110	Trauma & Orthopaedics	6,608	94%	1.02	6,328	1.63	10,285	50			90%	5	46	4.6
120	ENT	1,662	95%	1.01	1,594	1.39	2,211	50			90%	4	12	1.2
140	Oral Surgery	621	73%	1.00	454	1.13	513	50			90%	4	3	0.3
150	Neurosurgery	1,633	81%	1.20	1,584	2.52	3,987	50			90%	5	18	1.8
160	Plastic Surgery	4,319	95%	1.01	4,165	1.10	4,567	50			90%	4	25	2.5
180	A&E	2	0%	1.00	0	0.00	0	50			90%	4	0	0.0
191	Pain Management	1,793	41%	1.00	731	0.53	384	50			90%	4	2	0.2
300	General Medicine	6,280	1%	1.01	75	0.32	24	50			90%	4	0	0.0
303	Clinical Haematology	3,562	0%	1.00	2	0.46	1	50			90%	4	0	0.0
313	Immunology	933	0%	1.00	0	0.00	0	50			90%	4	0	0.0
350	Infectious Diseases	16	7%	1.00	1	0.72	1	50			90%	4	0	0.0
361	Nephrology	2,716	23%	1.05	656	1.33	876	50			90%	4	5	0.5
400	Neurology	1,065	5%	1.00	58	0.79	46	50			90%	4	0	0.0
410	Rheumatology	666	4%	1.03	30	0.57	17	50			90%	4	0	0.0
421	Paediatric Neurology	61	75%	1.00	46	0.83	38	50			90%	4	0	0.0
502	Gynaecology	3,446	86%	1.00	2,976	0.69	2,041	50			90%	4	11	1.1
	Total	**50,174**	**47%**	**1.02**	**24,296**	**1.37**	**33,189**	**50**			**90%**	**4**	**169**	**16.9**

Elective theatre requirement **17.0**

EMERGENCY THEATRES REQUIRED - 52 WEEK YEAR, 85% UTILISATION, 4 HR SESSIONS

	Emergency Theatres	2013/14 Emergency Spells	% of Spells Having Op	Multiple Op Rate	Estimated Theatre Ops	Average Hours per Op	% In Hours (9-6pm) Mon-Fri	% OOH (6pm-9am) or Sat/Sun	Operating Hours per Year In Hours	Operating Hours per Year OOH	% Utilisation	List Length (hrs)	Lists Per Week In Hours	Theatres if 5 Day Week
100	General Surgery	3694	29%	1.16	1241	1.8	56%	44%	1250	994	85%	4	7.1	0.7
101	Urology	861	13%	1.08	124	1.1	71%	29%	96	40	85%	4	0.5	0.1
110	Trauma & Orthopaedics	1094	74%	1.11	897	1.6	65%	35%	943	503	85%	4	5.3	0.5
120	ENT	747	16%	1.18	138	1.2	61%	39%	105	67	85%	4	0.6	0.1
140	Oral Surgery	70	59%	1.10	46	2.0	52%	48%	47	44	85%	4	0.3	0.0
150	Neurosurgery	1572	63%	1.32	1315	2.5	53%	47%	1714	1514	85%	4	9.7	1.0
160	Plastic Surgery	1882	77%	1.19	1707	1.4	63%	37%	1517	905	85%	4	8.6	0.9
180	A&E	5895	2%	1.07	101	1.3	57%	0%	72	0	85%	4	0.4	0.0
191	Pain Management	2	33%	1.00	1	1.3	100%	0%	1	0	85%	4	0.0	0.0
300	General Medicine	13554	1%	1.18	162	1.3	68%	0%	137	0	85%	4	0.8	0.1
303	Clinical Haematology	0	0%	1.00	0	0.0	100%	0%	0	0	85%	4	0.0	0.0
313	Immunology	0	0%	1.00	0	0.0	100%	0%	0	0	85%	4	0.0	0.0
350	Infectious Diseases	35	13%	1.75	8	1.0	43%	0%	4	0	85%	4	0.0	0.0
361	Nephrology	1548	17%	1.12	293	1.4	67%	33%	275	138	85%	4	1.6	0.2
400	Neurology	368	7%	1.22	33	1.4	72%	0%	34	0	85%	4	0.2	0.0
410	Rheumatology	0	6%	1.00	0	1.4	100%	0%	0	0	85%	4	0.0	0.0
421	Paediatric Neurology	0	46%	1.36	0	1.1	93%	0%	0	0	85%	4	0.0	0.0
502	Gynaecology	1353	13%	1.01	178	0.9	70%	30%	108	46	85%	4	0.6	0.1
	Total	**32675**	**16%**	**1.18**	**6244**	**1.7**	**60%**	**40%**	**6304**	**4251**	**85%**	**4**	**35.7**	**3.6**

Emergency theatre requirement **4.0**

TOTAL REQUIREMENT

Elective theatres	**17**
Emergency theatres	**4**
Specialist catchment growth and contingency	**1**
Total	**22**

Spec Code	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Elective	30	27	25	24	23	21	18	17	15	15	14	14	14	13	13	13	12
101	Urology	Elective	20	18	16	15	15	15	15	13	12	12	13	13	14	14	15	16	16
110	Trauma & Orthopaedics	Elective	78	63	55	51	47	48	46	45	43	44	46	48	49	51	53	54	56
120	ENT	Elective	4	5	4	4	3	3	3	3	2	3	3	3	3	3	3	3	3
140	Oral Surgery	Elective	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
150	Neurosurgery	Elective	21	21	21	21	17	18	17	16	16	16	16	17	17	18	18	18	19
160	Plastic Surgery	Elective	12	11	10	9	7	6	6	5	4	4	5	5	5	5	5	5	5
180	CDU	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Pain Management	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300	General Medicine	Elective	12	5	5	4	3	3	3	3	3	3	3	3	3	3	3	3	3
303	Haematology	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
361	Nephrology	Elective	8	6	6	6	5	5	5	5	5	5	6	6	6	6	6	6	6
400	Neurology	Elective	5	5	4	4	3	4	4	4	4	5	5	5	5	5	6	6	6
410	Rheumatology	Elective	8	6	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1
421	Paediatric Neurology	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
502	Gynaecology	Elective	11	9	8	6	6	5	5	5	5	5	5	5	5	5	5	5	5
501+560	Obstetrics/Midwifery	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
711	Child Psychiatry	Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EL Total		Elective	211	177	159	148	133	130	124	118	111	114	116	119	122	125	128	131	134
EL Total	Exc 501,560 & 711	Elective	211	177	159	148	133	130	124	118	111	114	116	119	122	125	128	131	134

Spec Code	Spec Name	Type	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
100	General Surgery	Non Elective	90	84	78	74	70	62	59	58	57	57	57	57	57	57	57	57	57
101	Urology	Non Elective	12	12	11	11	10	10	9	9	8	8	8	8	8	7	7	7	7
110	Trauma & Orthopaedics	Non Elective	67	63	60	56	40	30	29	29	28	28	28	28	28	28	28	28	28
120	ENT	Non Elective	4	8	8	7	7	6	6	6	6	2	2	2	2	2	2	2	2
140	Oral Surgery	Non Elective	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1
150	Neurosurgery	Non Elective	55	55	55	54	47	49	48	46	44	45	46	47	48	49	50	50	51
160	Plastic Surgery	Non Elective	27	26	26	26	22	21	20	19	18	18	18	18	18	18	18	18	18
180	CDU	Non Elective	34	33	33	31	31	29	24	18	12	13	13	13	13	14	14	14	15
191	Pain Management	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300	General Medicine	Non Elective	425	415	420	415	419	311	321	324	331	333	335	337	339	341	343	346	348
303	Haematology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
313	Immunology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
350	Infectious Diseases	Non Elective	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
361	Nephrology	Non Elective	38	35	36	36	37	40	42	44	46	49	51	53	56	59	62	65	68
400	Neurology	Non Elective	11	11	11	10	10	11	11	11	11	11	12	12	12	12	12	12	13
410	Rheumatology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
421	Paediatric Neurology	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
502	Gynaecology	Non Elective	5	5	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5
501+560	Obstetrics/Midwifery	Non Elective	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97
711	Child Psychiatry	Non Elective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NE Total		Non Elective	866	846	840	825	795	671	672	667	666	667	673	679	685	691	698	705	712
NE Total	Exc 501,560 & 711	Non Elective	769	749	743	728	698	574	575	570	569	570	576	582	588	594	601	608	615
TOTAL	Exc 501,560 & 711	EL+NE	980	926	902	876	830	**705**	699	687	681	684	692	701	709	719	728	738	749
Provision for increased age and casemix complexity			5	9	14	17	21	21	24	26	29	29	29	29	29	29	29	29	29
Seasonality and decant and contingency provision			32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Inflow of specialist work			0	2	4	6	8	10	10	10	10	10	10	10	10	10	10	10	10
TOTAL	Exc 501,560 & 711	EL+NE	1017	969	952	931	891	**768**	765	755	752	755	763	772	780	790	799	809	820
TOTAL	All specs	EL+NE	1114	1066	1049	1028	988	865	862	852	849	852	860	869	877	887	896	906	917

	Baseline year (2007/08)	First operational year (2014/15)	5 years into operational period (2018/19)	10 years into operational period (2023/24)
Activity (Spells):				
- Elective inpatients	18,248	11,665	11,229	12,618
- Elective day case	38,332	39,700	44,254	48,909
- Non-Elective	48,279	44,634	47,398	51,341
Total Elective	56,580	51,365	55,483	61,527
Total Elective and Non-Elective	104,859	95,999	102,881	112,868
Changes in activity (Spells) from baseline year due to:				
Elective:				
- underlying growth		810	4,928	10,972
- IS schemes		-4,701	-4,701	-4,701
- ENT transfers		797	797	797
- Specialist Paed Transfers		-2,121	-2,121	-2,121
Non-elective:				
- underlying growth		-38	2,801	6,744
- Acute Flow transfers		-2,578	-2,653	-2,653
- ENT transfers		400	400	400
- Specialist Paed Transfers		-1,429	-1,429	-1,429
Key assumptions - after transfers				
- Day case rate (%)	68%	77%	80%	79%
- ALOS inpatient elective (days)	4.7	3.7	3.7	3.6
- ALOS non-elective (days)	6.3	4.6	4.4	4.2
- Occupancy elective (%)	87%	84%	84%	84%
- Occupancy non-elective (%)	87%	84%	84%	84%
Capacity;				
- Total beds	1,276	862	860	906

Spec code	Specialty	%Growth	13/14 Base-New	13/14 Comm-New	13/14 ISTC-New	13/14 Transf-New	13/14 Adj-New	13/14 Acute Clinics-New	13/14 Base-FUp	13/14 Comm-FUp	13/14 ISTC-FUp	13/14 Transf-FUp	13/14 Adj-FUp	13/14 Acute Clinics-FUp
100	General Surgery	1.5%	12036	4580	1728	-29	5699	12	16572	9807	2246	-23	4496	5
101	Urology	1.5%	5698	1562	1154	-5	2977	7	10947	4741	2192	-14	3999	4
110	Trauma & Orthopaedics	1.5%	12866	2709	2727	-2116	5314	12	27682	7560	6688	-3888	9546	13
120	ENT	1.5%	5852	1385	789	-94	3584	12	7164	1873	953	-51	4287	7
130	Opthalmology	1.5%	419	0	0	-42	377	1	629	0	0	-252	378	1
140	Oral Surgery	1.5%	3399	118	353	-224	2703	9	3805	2123	487	-378	817	1
143	Orthodontics	1.5%	462	0	0	-160	302	1	3425	0	0	-1138	2287	4
150	Neurosurgery	1.5%	2919	173	13	-275	2458	8	3866	352	17	-595	2902	5
160	Plastic Surgery	1.5%	8052	982	420	-1233	5417	12	16833	2978	1093	-5954	6808	7
170	Cardiothoracic Surgery	1.5%	19	0	0	0	19	0	273	0	0	0	273	0
171	Paediatric Surgery	1.5%	234	1	0	0	233	1	115	0	0	0	115	0
191	Pain Management	1.5%	3214	206	0	-19	2989	18	7490	3928	0	-10	3552	12
300	General Medicine	1.5%	6045	1011	76	-17	4940	16	17950	8096	304	-13	9538	16
303	Haematology	1.5%	673	0	0	-1	672	2	5297	0	0	0	5297	9
313	Immunology	1.5%	769	0	0	0	769	3	1257	20	0	0	1237	2
320	Cardiology	1.5%	3960	2176	0	-4	1780	6	3960	2250	0	0	1711	3
330	Dermatology	1.5%	3557	335	0	-41	3182	10	5067	1189	0	-76	3803	6
350	Infectious Disease	1.5%	85	0	0	0	85	0	4277	0	0	0	4277	7
360	GUM	1.5%	40	0	0	0	40	0	0	0	0	0	0	0
361	Nephrology (Renal)	1.5%	2657	0	0	0	2657	13	22744	0	0	0	22744	55
370	Medical Oncology	1.5%	446	0	0	0	446	1	657	0	0	0	657	1
400	Neurology	1.5%	2758	481	0	-10	2267	7	3596	787	0	-4	2805	5
410	Rheumatology	1.5%	1224	287	0	-1	935	3	4603	1591	0	-1	3012	5
420	Paediatrics	1.5%	1091	138	0	-131	822	4	2474	1004	0	-288	1182	3
421	Paediatric Neurology	1.5%	113	0	0	-73	40	0	357	0	0	-298	59	0
422	Neonatology/SCBU	1.5%	0	0	0	0	0	0	0	0	0	0	0	0
430	Care of the Elderly	1.5%	585	144	0	0	441	1	1346	1005	0	0	341	1
501	Obstetrics Ante-Natal	1.5%	5578	2029	0	0	3549	8	15211	7355	0	0	7856	9
502	Gynaecology	1.5%	7334	2584	829	-4	3917	9	8754	3976	1321	-3	3454	5
560	Maternity/midwifery	1.5%	1804	0	0	0	1804	6	4934	2146	0	0	2788	5
710	Mental illness/Neuropsychiatry	1.5%	356	144	0	-2	210	1	1394	325	0	-4	1064	3
711	Child & Adol. Psychiatry	1.5%	311	0	0	0	311	4	2994	1231	0	0	1763	12
800	Clinical Oncology	1.5%	100	0	0	0	100	0	266	0	0	0	266	1
822	Chemical Pathology	1.5%	36	0	0	0	35	0	25	0	0	0	25	0
Grand Total		1.5%	94693	21045	8089	-4483	61076	190	205967	64336	15301	-12991	113339	205

Clinic Assumptions				
New Mins	FUp Mins	Weeks PA	Hours/Clinic	Clinic Utilisation
20	10	50	4	80%
20	10	50	4	80%
20	12	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
20	10	50	4	80%
30	15	50	4	80%
24	12	50	4	80%
55	30	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
44	22	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
30	15	50	4	80%
50	25	50	4	80%
30	15	50	4	80%
60	30	50	4	80%
30	15	50	4	80%
20	10	50	4	80%
22	14	50	4	80%
30	15	50	4	80%
60	30	50	4	80%
120	60	50	4	80%
44	22	50	4	80%
50	25	50	4	80%

Spec code	Specialty	DNA rate	Rooms per Clinic	13/14 Acute Clinics New	13/14 Acute Clinics FUp	13/14 Acute Clinics Total	Rooms Needed	Clusters Needed (if 8 rooms per cluster)
100	General Surgery	5%	2.5	12	5	17	4.4	0.6
101	Urology	5%	2.8	7	4	11	3.1	0.4
110	Trauma & Orthopaedics	5%	3.4	12	13	24	8.2	1.0
120	ENT	5%	3.4	12	7	19	6.5	0.8
130	Opthalmology	5%	3.6	1	1	2	0.7	0.1
140	Oral Surgery	5%	2.5	9	1	10	2.6	0.3
143	Orthodontics	5%	2.4	1	4	5	1.1	0.1
150	Neurosurgery	5%	3.8	8	5	13	4.9	0.6
160	Plastic Surgery	5%	3.3	12	7	19	6.4	0.8
170	Cardiothoracic Surgery	5%	0.0	0	0	1	0.0	0.0
171	Paediatric Surgery	5%	0.0	1	0	1	0.0	0.0
191	Pain Management	5%	3.3	18	12	30	9.7	1.2
300	General Medicine	5%	2.5	16	16	32	7.9	1.0
303	Haematology	5%	3.3	2	9	11	3.6	0.5
313	Immunology	5%	4.0	3	2	5	1.8	0.2
320	Cardiology	5%	3.7	6	3	9	3.2	0.4
330	Dermatology	5%	2.1	10	6	17	3.6	0.4
350	Infectious Disease	5%	3.6	0	7	7	2.6	0.3
360	GUM	5%	0.0	0	0	0	0.0	0.0
361	Nephrology (Renal)	5%	0.0	13	55	68	0.0	0.0
370	Medical Oncology	5%	0.0	1	1	3	0.0	0.0
400	Neurology	5%	3.4	7	5	12	4.1	0.5
410	Rheumatology	5%	3.3	3	5	8	2.7	0.3
420	Paediatrics	5%	1.9	4	3	8	1.5	0.2
421	Paediatric Neurology	5%	5.3	0	0	0	0.1	0.0
422	Neonatology/SCBU	5%	0.0	0	0	0	0.0	0.0
430	Care of the Elderly	5%	3.2	1	1	2	0.6	0.1
501	Obstetrics Ante-Natal	5%	0.0	8	9	16	0.0	0.0
502	Gynaecology	5%	0.0	9	5	15	0.0	0.0
560	Maternity/midwifery	5%	0.0	6	5	10	0.0	0.0
710	Mental illness/Neuropsychiatry	5%	4.0	1	3	5	1.9	0.2
711	Child & Adol. Psychiatry	5%	3.8	4	12	16	6.0	0.7
800	Clinical Oncology	5%	3.6	0	1	1	0.4	0.0
822	Chemical Pathology	5%	0.0	0	0	0	0.0	0.0
Grand Total				190	205	395	88	10.9

	Baseline year (2007/08)	First operational year (2014/15)	5 years into operational period (2018/19)	10 years into operational period (2023/24)
Activity :				
New outpatients	100,346	61,992	65,796	70,881
Follow-Up outpatients	245,624	115,039	122,098	131,535
Total	345,970	177,031	187,894	202,416
Changes in New outpatients from baseline year due to:				
- underlying growth		-4,233	1,665	9,549
- shift to care in the community		-21,361	-22,671	-24,424
- IS schemes		-8,210	-8,714	-9,388
- Specialist Transfer		-4,550	-4,829	-5,203
Changes in Follow-Up outpatients from baseline year due to:				
- underlying growth		-36,567	-23,739	-6,591
- shift to care in the community		-65,301	-69,308	-74,665
- IS schemes		-15,531	-16,484	-17,757
- Specialist Transfer		-13,186	-13,995	-15,077

Bed Capacity Requirement

				B	D	E
Beds				**ABC**	ABC act	ABC act/DC
Spec Code	Spec Name	Type		**Current**	0708 Los & DC	Upp Q Los
100	General Surgery	Elective	EL	**21**	26	25
101	Urology	Elective	EL	**15**	27	14
110	Trauma & Orthopaedics	Elective	EL	**48**	80	44
120	ENT	Elective	EL	**3**	7	3
140	Oral Surgery	Elective	EL	**1**	1	0
150	Neurosurgery	Elective	EL	**18**	21	19
160	Plastic Surgery	Elective	EL	**6**	12	5
180	CDU	Elective	EL	**0**	0	0
191	Pain Management	Elective	EL	**0**	0	0
300	General Medicine	Elective	EL	**3**	3	3
303	Haematology	Elective	EL	**0**	0	0
313	Immunology	Elective	EL	**0**	0	0
350	Infectious Diseases	Elective	EL	**0**	1	0
361	Nephrology	Elective	EL	**5**	17	3
400	Neurology	Elective	EL	**4**	7	4
410	Rheumatology	Elective	EL	**1**	9	0
421	Paediatric Neurology	Elective	EL	**0**	0	0
502	Gynaecology	Elective	EL	**5**	10	6
501+560	Obstetrics/Midwifery	Elective	EL	**0**	0	0
711	Child Psychiatry	Elective	EL	**0**	0	0
EL Total		Elective		**130**	222	128
EL Total	Exc 501,560 & 711	Elective		**130**	222	128

Baseline Length Of Stay assumptions for Bed Capacity (pre-transfer)

Los	ABC	Upper Quartile	Upper Decile	0708 actual
Spec	2013-14	2013-14	2013-14	2013-14
100	3.1	3.6	3.3	3.5
101	2.5	2.3	2.0	4
110	4.0	3.7	3.4	5.2
120	1.4	1.2	1.0	2.5
140	1.5	0.4	0.3	1.9
150	4.3	4.6	4.2	4.5
160	2.5	2.1	1.0	3.2
180	0.2	0.3	0.3	1
191	0.8	0.8	0.8	1
300	3.3	3.9	2.8	3.9
303	2.5	2.6	0.5	3.6
313	0.8	7.9	7.9	10.3
350	8.0	7.4	7.4	18
361	4.0	2.6	0.8	5.9
400	2.5	2.9	2.5	3.3
410	5.0	2.8	0.8	16.3
421	0.9	1.6	0.3	2.1
502	2.1	2.5	2.2	2.5
501+560	2.0	1.6	1.0	4.6
711	15.0	15.0	15.0	87.8

Daycase rate

DC	ABC	Upper Quartile	0708 actual
Spec	2013-14	2013-14	2013-14
100	70%	71%	68%
101	80%	79%	78%
110	45%	56%	32%
120	60%	80%	53%
140	90%	99%	84%
150	25%	25%	15%
160	81%	79%	73%
180	0%	0%	0%
191	100%	100%	100%
300	96%	94%	96%
303	100%	97%	100%
313	100%	100%	100%
350	78%	78%	29%
361	85%	81%	67%
400	55%	80%	39%
410	92%	97%	74%
421	78%	82%	79%
502	80%	72%	68%
501+560	0%	0%	0%
711	0%	0%	0%

Spec Code	Spec Name	Type		ABC Current	ABC act 0708 Los/DC	ABC act/DC Upp Q Los
100	General Surgery	Non Elective	NE	**62**	82	64
101	Urology	Non Elective	NE	**10**	13	10
110	Trauma & Orthopaedics	Non Elective	NE	**30**	46	25
120	ENT	Non Elective	NE	**6**	11	6
140	Oral Surgery	Non Elective	NE	**0**	1	0
150	Neurosurgery	Non Elective	NE	**49**	63	59
160	Plastic Surgery	Non Elective	NE	**21**	29	12
180	CDU	Non Elective	NE	**29**	47	23
191	Pain Management	Non Elective	NE	**0**	0	0
300	General Medicine	Non Elective	NE	**311**	478	306
303	Haematology	Non Elective	NE	**0**	0	0
313	Immunology	Non Elective	NE	**0**	0	0
350	Infectious Diseases	Non Elective	NE	**1**	4	1
361	Nephrology	Non Elective	NE	**40**	59	40
400	Neurology	Non Elective	NE	**11**	15	2
410	Rheumatology	Non Elective	NE	**0**	0	0
421	Paediatric Neurology	Non Elective	NE	**0**	0	0
502	Gynaecology	Non Elective	NE	**4**	6	6
501+560	Obstetrics/Midwifery	Non Elective	NE	**97**	97	97
711	Child Psychiatry	Non Elective	NE	**0**	0	0
NE Total		Non Elective		**671**	951	651
NE Total	Exc 501,560 & 711	Non Elective		**574**	854	555
TOTAL	Exc 501,560 & 711	EL+NE		**705**	**1076**	**683**
Provision for increased age and casemix complexity				**21**	21	21
Seasonality and decant and contingency provision				**32**	32	32
Inflow of specialist work				**10**	10	10
TOTAL	Exc 501,560, 710 & 711	EL+NE		**768**	**1139**	**746**
Community hospital step-down beds				96		96
Total acute and community beds for specialties in the PFI				864	1139	842
Variance to baseline ABC assumptions					276	-22

Los Spec	ABC 2013-14	Upper Quartile 2013-14	Upper Decile 2013-14	0708 current 2013-14
100	5.0	5.2	4.7	6.7
101	3.4	3.4	3.0	4.5
110	8.7	8.0	6.8	14.8
120	2.2	2.1	1.7	3.7
140	2.2	1.7	1.2	3.1
150	9.5	11.4	11.4	12.1
160	3.0	1.7	1.5	4.1
180	1.5	1.2	0.9	2.4
191	1.0	1.0	1.0	1
300	7.1	7.0	6.3	10.5
303	3.4	7.3	4.4	11.2
313	1.0	10.0	10.0	7
350	6.4	6.3	6.2	35
361	8.0	8.1	7.2	11.9
400	9.0	5.7	1.0	12.8
410	6.0	4.2	0.6	42.3
421	2.0	3.9	1.0	3.6
502	0.9	1.3	1.1	1.3
501+560	2.0	1.3	1.0	1.5
711	15.0	15.0	15.0	61.6

5.xix Bed Sensitivity by Los

	Baseline			Construction					Operational										
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	**2013-14**	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Day and elective inpatient beds needed to meet demand	1,133	1,074	929	1,017	969	952	931	891	**768**	765	755	752	755	763	772	780	790	799	809
A) Underlying elective demand grows 1% pa above projections																			
Beds	1,133	1,074	929	1,017	973	957	937	898	**776**	774	765	762	767	777	787	797	808	820	832
Variance for 1.0% above projections					4	5	6	7	8	9	10	10	12	13	15	17	19	21	23
Variance for 0.5% above projections					2	2	3	3	4	4	5	5	6	7	8	8	9	10	11
B) Underlying elective demand grows 1% pa below projections																			
Beds	1,133	1,074	929	1,017	966	948	925	885	**760**	757	746	742	744	751	758	765	773	781	790
Variance for 1.0% below projections					- 4	- 5	- 6	- 6	- 8	- 8	- 9	- 10	- 11	- 12	- 14	- 15	- 16	- 18	- 19
Variance for 0.5% below projections					- 2	- 2	- 3	- 3	- 4	- 4	- 5	- 5	- 5	- 6	- 7	- 7	- 8	- 9	- 10
C) Underlying non-elective demand grows 1% pa above projections																			
Beds	1,133	1,074	929	1,017	984	975	960	927	**803**	807	802	805	815	830	845	861	878	896	914
Variance for 1.0% above projections					15	23	30	36	35	41	47	53	60	67	74	81	89	97	105
Variance for 0.5% above projections					8	11	15	18	18	21	24	27	30	33	37	41	44	48	52
D) Underlying non-elective demand grows 1% pa below projections																			
Beds	1,133	1,074	929	1,017	954	930	902	857	**734**	726	711	702	701	703	705	708	712	715	719
Variance for 1.0% below projections					- 15	- 22	- 29	- 34	- 34	- 39	- 44	- 49	- 55	- 60	- 66	- 72	- 78	- 84	- 90
Variance for 0.5% below projections					- 7	- 11	- 14	- 17	- 17	- 20	- 22	- 25	- 27	- 30	- 33	- 36	- 39	- 42	- 45
E) Overall variance to base for total activity :																			
0.5% per annum below projections					- 9	- 13	- 17	- 20	- 20.6	- 24	- 27	- 29	- 33	- 36	- 40	- 43	- 47	- 51	- 55
1.0% per annum below projections					- 18	- 27	- 35	- 41	- 41	- 48	- 53	- 59	- 65	- 72	- 80	- 87	- 94	- 102	- 110
0.5% per annum above projections					9	14	18	21	21.7	25	28	32	36	40	44	49	54	59	64
1.0% per annum above projections					19	27	36	42	43	50	57	64	72	80	89	98	107	117	127

Bidder Evaluation - Team Responsibility and ITPD Evaluation Criteria

Evaluation Group	Role
Clinical Specification Group	Design functionality
Commercial Group	Project agreement and payment mechanism
Design Group	Overall design and construction including master plan and planning issues
Equipping Group	Equipment and commissioning issues
Finance Group	Value for money, affordability, payment mechanism
FM Group	Facilities management for hard FM services and bidder designs supporting Trust's soft FM service delivery
IM&T Group	IM&T issues
Sustainability Group	Wider sustainability issues including performance, socio-economic, engineering and construction issues
User and Access Group	Public and patient access and related design issues

These sub-groups were supported by team members from specialist areas including:

Evaluation Group	Role
Central Project Team	Project management, deliverability and compliance in relation to commercial and legal issues
Clinical Sub-groups	Design functionality for specific clinical areas
Engineering and Enabling	Technical issues including M&E, construction proposals, enabling plans and programmes
Fresh Arts Committee	Arts, wayfinding and interior design proposals
Workforce Group	Workforce related issues both for hard FM services and the impact of bidder designs on Trust workforce including soft FM services.

The evaluation criteria and associated score weighting at both interim and final bid submission are set out in the table below. The table also includes the teams responsible for scoring each of the evaluation criteria:

Table: Evaluation Criteria and Scores

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
DESIGN AND CONSTRUCTION:				
• **Character and innovation** Character • The building should generate a sense of wonder	**3**	**3**	**3**	Design Group

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
• The new hospital should be a notable and iconic Bristol building • The building should be timeless as opposed to trendy • The building should be a sophisticated civic building and the design should reflect its importance • The building should reflect local history in terms of the area and the life of the Frenchay and Southmead hospitals Innovation • The building should demonstrably act as a beacon for other hospital developments • The design should enable state-of-the-art clinical services • There should be innovative use of materials, engineering systems and sustainable solutions • There should be innovative use of technology	**3**	**3**	**3**	
• **Form and materials** Form • The building should have presence but not feel overwhelming. It should have human scale. • The building form should blend with surroundings • The design should be oriented in a sensitive way to take advantage of climate, sun paths etc. • The building should be composed in a logical and attractive manner and not appear as a Frankenstein's monster (it should grab you by the heart not by the throat). Materials • The external materials and detailing should be of high quality and non-institutional • The external finishes should be durable • The internal finishes should be high quality and non-institutional	**3** **3-6**	**3** **3**	**3** **6**	Design Group

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
• The internal finishes should be durable • The workmanship should be of high quality				
• **Staff and patient environment** • There should be creative and abundant use of natural light • The inside should be effectively connected to the outside • Internal dimensions should be of the correct scale • The main public spaces must be particularly attractive and available to sit in • Circulation routes should be attractive • Patient areas should be comfortable, private and afford dignity • Patients should clearly feel that they are in a private space • Staff areas should be lovely, attractive and of high quality • Private/separate space for staff should be provided • Colour should be used effectively and imaginatively • Environmental conditions should be excellent.	**4-9**	**4**	**9**	Design Group/ Clinical Spec Group/ User & Access Group
• **Urban and social integration** • The scheme should develop a well connected public realm • The hospital site should be a coherent 'place' that flows as a continuation of adjoining neighbourhoods • The whole site should be logical, organised and clear with a central and distinctive heart • The master plan should work effectively at each phase of development and should not rely on completion of later stages before it achieves success	**4-6**	**4**	**6**	Design Group/ Fresh Arts Committee

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
• Buildings should be configured into perimeter blocks with clear public fronts and private backs • There should be a logical and legible network of routes, intersections and spaces • The site should be an attractive, multi-functional public realm • Scale & massing of buildings should be appropriate to street type and width • Resource efficiency: There should be efficient use of land and property resources to maximise opportunities for future use of land for expansion				
• **Performance** • The building should be a sustainability exemplar • The building should be easy to operate, maintain and clean • The design should maximise energy efficiency • The scheme should have an exemplary EMS • The building must use recycled materials and achieve a minimum recycled content level of 20% by value. In addition, it must be demonstrated that the top ten Quick Win opportunities to increase the value of materials derived from recycled and reused content have been identified and a good practice level of recycled content achieved wherever technically and commercially viable.	**2-6**	**2**	**6**	Sustainability Group
• **Engineering** • The building should not be over-engineered with an appropriate balance of cost of engineering; • The engineering systems should be well designed, flexible and efficient; • The engineering systems should exploit	**1-3**	**1**	**3**	Design Group/ Sustainability Group

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
any benefits from standardisation and prefabrication; • There should be effective emergency backup systems; • Fire systems should be safe and efficient; • The primary infrastructure should be efficient and future-proofed.				
• **Construction** • Phased planning and construction should be well organised • There should be minimal impact on service delivery; • The construction should be robust; • The construction should allow easy access to engineering systems for maintenance, replacement and expansion; • The construction should exploit benefits from standardisation and prefabrication • The construction must minimise waste generation through the development of a Site Waste Management Plan (SWMP);	**1-3**	**1**	**3**	Design Group/ Sustainability Group
• **Use** • The building should facilitate efficient and effective working; • The building should allow the Trust to implement its clinical models and FM support services; • The building should have flexibility to support change; • The building should have a logical complement of standardised rooms; • The building should provide a state- of-the-art, secure, and infection free environment for patients and staff; • Storage and support facilities should be logically planned.	**20-25**	**20**	**25**	Clinical Spec Group
• **Access** • There should be encouragement for public transport, cycling and walking by the layout, structure and feel of the site;	**5-6**	**5**	**6**	Design Group/ User & Access Group

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
• The site needs to be treated as a whole entity with logical interconnections; • The site needs the capacity to develop naturally over time and maintain its logic; • The new hospital should have a clear cohesive identity with a minimum number of access points; • Accepting the above principle services should be directly accessible where possible avoiding the need for multiple layers of reception and receipt; • Again, accepting the above principle, it should be easy for patients and visitors to re-orientate to their destination if they arrive at the wrong zone; • Wayfinding should be logical, where possible by the senses rather than by signage; • The circulation distances for staff, patients and visitors should be minimised by the layout. Travel distances should encourage the ease of providing 1-stop services • Staff should be given opportunities to mix informally as part of the circulation strategy; • Clashing types of activities should be kept apart; • Access routes should aid privacy and dignity for example access to the mortuary. • Access routes should be secure and appropriately lit; • Car parks should be discrete, ideally invisible and dispersed.				
• **Space** • The design should achieve appropriate space standards; • Space should be used intelligently to maximise useful space and minimise left-over areas; • There should be an intelligent use of breakout space; • Dead space should be avoided.	**1**	**1**	**1**	Design Group/ Clinical Spec Group/ User & Access Group

ITPD Evaluation Criteria	Weighting Range (%)	Actual Weighting Interim Submission (%)	Actual Weighting Final Bid (%)	Project Teams scoring each criteria
DELIVERABILITY AND APPROACH including: • Commercial and legal ○ Response to PA in relation to DHSF and project specifics ○ Response to Payment Mechanism in relation to DHSF and project specifics	**4-10**	**10**	**4**	Commercial Group
• Equipment and IT	**3-5**	**5**	**3**	Equipping Group/IT Group
• Financial	**4-20**	**20**	**4**	Finance Group
• Project management ○ Working relationship ○ Capacity of team to meet contract deadlines ○ Capacity of team to meet construction deadlines ○ Overall cohesion of team	**5**	**5**	**5**	Project Team
HARD FM SERVICES • Approach to the management of services & staffing	**10**	**10**	**2**	FM Group
• Approach to statutory compliance, quality assurance and monitoring			**2**	
• Method Statements ○ FM 3.1 General Services ○ FM 3.2 Estates Maintenance Services ○ FM 3.3 Grounds Maintenance services ○ FM 3.4 Utilities Management Services ○ FM 3.5 Pest Control Services ○ FM 3.6 Helpdesk			**6**	
Total Score		**100**	**100**	

ITPD Volume 4 - APPENDIX 1

ABC Appendix 7.ii

BIDDER DELIVERABLES

1. INTRODUCTION

This document sets out the deliverables that bidders will be required to submit to the Trust at defined stages during the course of the competitive dialogue (CD) process which starts once bidders have been selected from the pre-qualification stage.

Please note that the Trust will require information on progress as part of the dialogue process outside of these formal submission dates. The sections below set out the deliverables required at the three submission stages.

2. PRODUCTION OF BID DELIVERABLES

2.1 Overall Approach

Bidders are required to provide sufficient information to enable the Trust to assess and evaluate the proposals and the bidder's approach to managing the obligations and responsibilities, as set out within the ITPD.

2.1.1 Variant Bids

The information requirements stated are for the reference bid. Any variant bid must be accompanied by a clear statement of departures from the reference bid. The basis of departures relating to design and construction proposals must be supported by a similarly detailed set of information to that required for the reference bid. Depending on the nature of the variant bid, this may also include a requirement for an information category not specified in these deliverables.

3. BID DELIVERABLES AT INTERIM SUBMISSION AND DRAFT/FINAL BID STAGE

The table below sets out the bid deliverables required for the interim and draft/final stages of the competitive dialogue process. The format for responses is also included in the table and must be provided with respect to all of the facilities. Where stated, bidders are

required to submit information using Trust proformas. These proformas are issued as separate documents. Guidance on the expected level of information to be included in the capital cost, lifecycle and financial model proformas is included at Annex A.

3.1 DESIGN AND CONSTRUCTION

3.1.1 Design and Construction (Project Co Proposals)

In relation to design and construction, a full set of Project Co Proposals will be required at the final stage to give cost certainty. The Trust reserves the right to request further design and construction information in order to fully evaluate a bidder's tender proposals and a fully developed set of Project Co Proposals are required for the final deliverables.

The information requirements for each element of the scheme are stated in terms of a single building development proposal. Bidders are required to provide the information to identify separately the design, specification, area and costs of each building, section or phase within the overall development. Where bidders propose a multi-phase building development for any element, they are required to provide the information to identify separately the design, specification, area and costs of each building, section or phase within that element.

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
SECTION D1: CHARACTER AND INNOVATION Character • The building should generate a sense of wonder • The new hospital should be a notable and iconic Bristol building • The building should be timeless as opposed to trendy • The building should be a sophisticated civic building and the design should reflect its importance • The building should reflect local history in terms of the area and the life of the Frenchay and Southmead hospitals					
D1.1	**Main Design Concepts** to be applied to the scheme – the 'big ideas' and differentiators of the scheme over the PSC.	**D1.1f**	**Main Design Concepts** to be applied to the scheme that demonstrate its character. These should include specific description/illustration of the character of the scheme: the 'big ideas' and differentiators of the scheme over the PSC. The Bidders should address the question-'what is it that gives this building and its surroundings a wonderful, timeless character?'.	Scaled drawings and artistic impressions plus max 2 pages of explanatory text	
D1.2	**Historical Reference Statement** indicating linkage with local history	**D1.2f**	**Historical Reference Statement** including illustrations of how the scheme incorporates links with local history and heritage. The Bidders should demonstrate how the building and surroundings are recognisably part of Bristol.	Scaled drawings and artistic impressions plus max 2 pages of explanatory text	
		D1.3f	**Model at 1:1250 scale** showing how the design will support achievement of the 'Character' objectives.	3D model	
		D1.4f	**Statement of Commitment to and Preservation of Items** listed on the Trust's 'Memories Asset Register' which will include: • Items of Historic Interest (this could include items of old equipment): • Items for which there is a strong attachment • Arts assets;	1 page text plus programme	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			• Important species of flora A decommissioning programme showing how the 'Memories' Assets will be removed, preserved and relocated.		
Innovation • The building should demonstrably act as a beacon for other hospital developments • The design should enable state-of-the-art clinical services • There should be innovative use of materials, engineering systems and sustainable solutions • There should be innovative use of technology					
D1.5	**Innovation Statement** identifying main innovations in the design with examples and illustrations	**D1.5f**	**Innovation Statement** identifying main innovations in the following areas: • Overall design • Construction • Engineering • Clinical systems. This should include a statement on how the innovations contribute to an overall cohesive design. The Bidders should demonstrate how this building is on the cutting-edge of hospital and building development and breaks new ground.	2-3 pages of text plus illustrations	
D1.6	**Illustrations of scheme** with explanations to support achievement of Trust 'Character' objectives		**N/A**		
D1.7	**Photo-file** setting out visual examples of how bidders interpret 'sense of wonder'	**D1.6f**	**AEDET Analysis**	AEDET forms	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
SECTION D2: FORM AND MATERIALS <u>Form</u> • The building should have presence but not feel overwhelming-it should have a human scale • The building form should blend with surroundings • The design should be oriented in a sensitive way to take advantage of climate, sun paths etc. • The building should be composed in a logical and attractive manner and not appear as a Frankenstein's monster (it should grab you by the heart not by the throat)					
D2.1	**1:200 Scaled Architectural Elevation Drawings** and sections of all areas, sufficient in number and detail to demonstrate the proposed forms of construction and heights of any enclosed public space.	**D2.1f**	**1:200 Scaled Architectural Elevation Drawings** (including architecturally significant engineering services e.g. boiler flues, major plant etc.) and sections of all areas sufficient in number and detail to demonstrate the proposed forms of construction and heights of any enclosed public space. These shall be supported by sections indicating floor levels, floor to ceiling heights and adjoining ground levels.	Drawings	
D2.2	**An Outline Landscape Strategy** describing the overall approach to landscape, use of historic buildings, green space and flora and connections between the external and internal spaces. This should include an explanation of how the Bidder intends to ensure that the occupants of the building experience the outside from staff, patient and circulation spaces.		**Moved to D4.2f**		
D2.3	**A description of how the proposed landscape will look** at Completion of the Facilities, at 5 years, 15 years and at 25 years		**N/A**		
D2.4	**Orientation Statement** illustrating orientation of entrances, openings in	**D2.2f**	**Orientation Statement** illustrating orientation of the building, entrances, windows and facades	Drawings plus supporting text (max	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	relation to environment		to show how the design responds positively to the local environment.	2 pages)	
		D2.3f	**An Analysis of Form** demonstrating the elements and the composition of the building in the context of the whole site**.** This should include modelled components of the building at 1:500 to demonstrate massing and harmony of form	Studies, illustrations, models (plus explanatory text max 2 pages).	
		D2.4f	**External Dimensions and Scale Statement** showing the building dimensions and scale.	Drawings and explanatory text max 2 pages	
Materials • The external materials and detailing should be of high quality and non-institutional • The external finishes should be durable • The internal finishes should be high quality and non-institutional • The internal finishes should be durable • The workmanship should be of high quality					
D2.5	**Outline Design Quality Statement** explaining how quality will be maintained throughout the design process and in particular the finishes within and outside the building and the associated level of quality and workmanship. This should include a response to the Trust's aspiration for a high quality, durable, long-life approach to materials and outline the materials specifications.	**D2.5f**	**Detailed Design Quality Statement** to demonstrate how the Trust's aspiration for high quality, durable, long-life materials and finishes will be met.	1-2 pages of text with illustrations	
D2.6	**Finishes Strategy and Illustrations** with key examples for: - • Exterior including hard surfaces and landscape • Elevations including roofs and fenestration	**D2.6f**	**Finishes Statement** itemising materials and finishes for all elements of the scheme including exterior hard surfaces. This should include detailed specifications for all components and description of product ranges to be selected from.	Tables of text plus supporting drawings	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	• Main Public Spaces • Circulation routes • Openings including canopies • Sample staff areas • Sample patient areas				
D2.7	**Outline Glazing Strategy**	**D2.7f**	**Glazing Strategy** illustrating glazing %, and illustrations of internal and external glazing. This should include detailed specifications.	Drawings and detailed specifications plus explanatory text max 2 pages	
D2.8	**N/A**	**D2.8f**	**Kit-of-Parts** to demonstrate the quality of the fit-out of the hospital. This should illustrate how a generic group of components are used throughout the hospital. and how these components are thoughtfully designed, not only to meet minimum technical specifications, but combined to form an integrated system that ensures a high level of design quality for these areas – a Kit-of-Parts for Interior Fit-Out. The Trust seeks, from each Bidder, its own proposals; at a minimum, these should comprise: • Typical wall construction, including horizontal and vertical wall partitions, handrails, and internal glazing. • Door assemblies for walls and cross-corridors, including glazing and protection. • Ceiling systems including solid and removable sections, access panels, lighting patterns and fixtures, HVAC grilles, annunciations, etc. • Floor finishes and skirting details. • IPS panels. • Patient headwalls (if these have not been	Technical drawings plus illustrations, images and explanatory text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			presented in the room mock-up). • Approach to off-site manufacture, if relevant. The Trust seeks explanation, from each bidder, on how these components have been coordinated into a technically and aesthetically unified system. Each of the elements should be illustrated with a technical drawing amplified where possible /necessary with 3D illustrations/photographs.		
SECTION D3: STAFF AND PATIENT ENVIRONMENT • There should be creative and abundant use of natural light • The inside should be effectively connected to the outside • Internal dimensions should be of the correct scale • The main public spaces must be particularly attractive and available to sit in • Circulation routes should be attractive • Patient areas should be comfortable, private and afford dignity • Patients should clearly feel that they are in a private space • Staff areas should be lovely, attractive and of high quality • Private/separate space for staff should be provided • Colour should be used effectively and imaginatively • Environmental conditions should be excellent.					
D3.1	**Outline Interior Design Proposal** for public areas and typical patient areas, showing how this links to the arts strategy.	**D3.1f**	**Detailed Interior Design Proposals** for public areas and typical patient areas, including generic sample boards, illustrations of ceilings/walls/floors and proposals for artwork and colour. This should include supporting detailed specifications.	Drawings, sample boards plus explanatory text	
D3.2	**External Connection Strategy** with selected examples of how the building might connect the outside with the interior with illustrations and 1:200 plan	**D3.2f**	**External Connection Statement** illustrating how the building effectively connects the outside with the interior. This should include illustrations, lay-outs of key connections e.g. circulation to	Illustrations, drawings and supporting text max 2 pages	

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	of building.		courtyards, and 1:200 summary drawing of building and connecting views/outside spaces.		
D3.3	**Statement on Natural Light Strategy** showing how light will be drawn into the building	**D.3.3f**	**Natural Light Calculations** including: • Daylight models for all external rooms • Plan of hospital coded to show access to: ○ Direct Natural Light and Views ○ Direct Natural Light ○ Borrowed Natural Light ○ No Natural Light	Drawings, models and explanatory text max 2 pages	
D3.4	**Internal Dimensions and Scale Strategy** showing approach to ceiling heights, main public space dimensions, corridor plans and scales and waiting area dimensions.	**D3.4f**	**Internal Dimensions and Scale Statement** showing all ceiling heights, main public space dimensions, corridor plans and scales and waiting area dimensions.	Drawings and explanatory text	
D3.5	**External Dimensions and Scale Strategy** showing approach to external spaces including green-spaces, courtyards and buildings		**Moved to D2.4f**		
D3.6	**Environmental Conditions Strategy** showing approach to naturally ventilated/comfort cooled/air conditioned space with examples of key areas.	**D3.5f**	**1:200 Environmental Condition Analysis** indicating (by colour coding) the areas of proposed environmental treatment including natural ventilation, mechanical ventilation supply, extract, dirty extract, peak lopping, comfort cooling and air conditioning. This shall include the provision of a detailed summertime temperatures model to demonstrate the temperatures prevalent and hours of exceedance within the buildings.	Drawings, temperature model plus explanatory text	
D3.7	**Statement with illustrations** showing how patients will have access to and perceive themselves to be in a private	**D3.6f**	**Illustrated Privacy Statement** showing how patients will have access to and perceive themselves to be in a private space where appropriate.	Illustrations plus explanatory text max 2 pages	

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	space				
D3.8	**Outline lighting strategy**	**D3.7f**	**Lighting Strategy** including detailed proposals/specifications/product ranges showing the quality and type of light fittings to be utilised and details of their co-ordinated aesthetic approach. The strategy should be cross-referenced to the kit of parts.	Table of specifications, drawings / images and explanatory text	

SECTION D4: URBAN AND SOCIAL INTEGRATION

- The scheme should develop a well connected public realm
- The hospital site should be a coherent 'place' that flows as a continuation of adjoining neighbourhoods
- The whole site should be logical, organised and clear with a central and distinctive heart
- The master plan should work effectively at each phase of development and should not rely on completion of later stages before it achieves success
- Buildings should be configured into perimeter blocks with clear public fronts and private backs
- There should be a logical and legible network of routes, intersections and spaces
- The site should be an attractive, multi-functional public realm
- Scale & massing of buildings should be appropriate to street type and width
- Resource efficiency: There should be efficient use of land and property resources to maximise opportunities for future use of land for expansion
- There should be effective, integrated and abundant public art
- There should be a strong focus on local regeneration

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D4.1	**Site Master Plan** (1:1250 minimum) with accompanying **Design Code** and response to Trust aspirations for a site that works logically and sympathetically within its surroundings. The Design Code should demonstrate how the new development will be in keeping with the suburban surroundings and avoid pitfalls such as 'shape-making'. The master plan, which will address the whole site design, must be effective at each development stage, and should not rely on later development phases (outside the scope of the PFI development) before it becomes successful.	**D4.1f**	**Development Control Plan** including: • A **Site Master Plan** (1:1250 minimum) at PFI completion. This Plan, which will address the whole site design, must be effective at the PFI opening, and should not rely on later development phases (outside the scope of the PFI development) before it becomes successful. • A **Long Range Development Plan** • An **Outline Design Code**. The Design Code should demonstrate how the new development will be in keeping with the suburban surroundings and avoid pitfalls such as 'shape-making',	Drawings plus 3-4 pages of text	
D4.2	**Statement demonstrating the balance between building height and footprint** and explaining how the land will be used efficiently	**D4.2f**	**A Detailed Landscape Strategy** demonstrating the interactions between the overall neighbourhood, the hospital site, the PFI site and the building. This should include a description of how the proposed landscape will look at completion of the Facilities, at 5 years, 15 years and at 25 years, fully supported by layout drawings and detailed specifications	Drawings and table showing planting species and locations plus explanatory text max 5 pages	
D4.3	**An Outline Arts Strategy** to demonstrate the Bidder's approach to integration of an arts programme into the fabric and environment of the building. This strategy should include approach to funding/fundraising and Bidder's proposals on how this can be secured within the necessary timescale.	**D4.3f**	**A Detailed Public Arts Strategy** demonstrating the Bidder's proposals for public art commissions within the Southmead Hospital site. This should include both permanent (stand alone and integrated) and transitional, as well as architectural based commissions (rooms) and event based projects / programmes. The strategy should incorporate: • Details of dedicated websites, publication(s) and advertising which can be used to	3-4 pages text plus supporting drawings / images	

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			publicise the project and the commissions • A plan showing the anticipated location of the public art elements. • Details of the type of artwork to be provided in each of the identified locations (this does not require a design to have been produced, rather an indication of the type of solution) • The total value of the public art programme, and details of how the programme will be funded (construction budget, build costs, etc) as well as details of any fundraising targets • A realistic and deliverable fundraising strategy to augment the bidders art proposal • A schedule / methodology demonstrating how the public art programme will be secured within the necessary timescales • Statement of commitment to running the Joint Arts Group.		
D4.4	**Planning Statement** including Bidder response to mitigations outlined in the Environmental Statement and a commentary from Bristol City Council and other key stakeholders on Bidder's scheme.	**D4.4f**	**Planning Statement** setting out how the Bidder's scheme has responded to key points raised by Bristol City Council during the CD process. This should also address how the Bidder will mitigate issues identified in the Environmental Statement.	Text and supporting drawings	
D4.5	**N/A**	**D4.5f**	A **Letter of Pre-Planning Application Advice** from the Local Planning Authority that sets out the Planning Officer's response to the Bidder's proposals and how well the design proposals address local and national planning policies and requirements, with respect to the granting of Full Planning Approval.	Letter	
D4.6	**Confirmation of Cost Allowances**	**D4.6f**	A **Planning Cost Statement** confirming that all costs associated with obtaining detailed planning consent have been included in Bidder's proposals.	Text	
D4.7	**N/A**	**D4.7f**	**Planning Process Statement** that provides	Table plus	

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			details on the process and timing for obtaining full planning permission.	explanatory text	
D4.8	**Statement of Commitment to Economic Regeneration** including outline details of procedures for local recruitment, equality of opportunity, training for the local workforce and support for local enterprise. This should include level of compliance with 'The Bristol Charter Commitments' as set out in Bristol City Council's 'Bristol Charter for Local Recruitment, Training and Enterprise Support'.	**D4.8f**	**Statement of Commitment to Economic Regeneration** including detailed procedures for local recruitment, equality of opportunity, training for the local workforce and support for local enterprise. This should include: • Level of compliance with 'The Bristol Charter Commitments' as set out in Bristol City Council's 'Bristol Charter for Local Recruitment, Training and Enterprise Support'; • A letter of acceptance from the Bristol City Council in relation to the economic regeneration proposals as part of the pre-planning application advice.	3-4 pages text plus letter	
SECTION D5: PERFORMANCE • The building should be a sustainability exemplar • The building should be easy to operate, maintain and clean • The design should maximise energy efficiency • The scheme should have an exemplary EMS • The building must use recycled materials and achieve a minimum recycled content level of 20% by value. In addition, it must be demonstrated that the top ten Quick Win opportunities to increase the value of materials derived from recycled and reused content have been identified and a good practice level of recycled content achieved wherever technically and commercially viable					
D5.1	**Sustainability Statement** outlining how the proposals minimise waste, ensure ease of operation, employ recycled materials and minimise energy consumption and maximise carbon efficiency.	**D5.1f**	**Sustainability Statement** detailing how the proposals minimise waste, ensure ease of operation, employ recycled materials, minimise energy consumption and maximise carbon efficiency. This statement shall also include detailed proposals with respect to the use of renewables and firm commitment to achieving BCC renewables targets. In addition there should	4-5 pages text	

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			be explanation of how recycling across the Site and within the buildings will be enabled.		
D5.2	**Outline Energy Policy** statement for the development, including commentary on Trust energy targets and Bidder energy target proposals (thermal and electrical) where these differ from Trust targets and methods for achieving this performance level, along with approximate maximum demands and utilities capacity requirements	**D5.2f**	**Detailed Energy Strategy**, including: • All energy targets (thermal and electrical) and separate figures for any retained estate, this shall also separately define the proportion provided by each renewable. • Proposals for renewable energy and energy conservation techniques/systems • Risk management assessment including how the risk to the Trust of using non-PASA sources will be minimised. • A detailed energy model for the concession period to support the energy target including Heated Volume calculations in accordance with ENCODE 07 – 02 • An energy monitoring strategy • Details of any Bidder plans to utilise contracts operated by the NHS Purchasing and Supply Agency • Full details of all utilities including supply capacity, connected load and anticipated maximum demands (on a service by service basis)	Text, tables plus supporting drawings	D5.2f – energy model content
D5.3	**N/A**	**D5.3f**	**Recycled Content Strategy, including:** • Evidence in the form of a WRAP Online Toolkit standard report to demonstrate that the project has been modelled (at an outline level only) and can exceed the minimum target of at least 20% of the value of materials being derived from recycled sources. (www.wrap.org.uk/construction)	3 pages text plus completed WRAP toolkit	

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			• A strategy for modelling the various construction elements (i.e. building and external works) and combining these into a single measure of recycled content for the project • A list of the top 10 Quick Wins, evidence that they have been identified and a good practice level of recycled content achieved wherever technically and commercially viable • Detailed method statements / specifications		
D5.4	**N/A**	**D5.4f**	**NEAT Assessment** fully completed with clear statements as to how all credits are actually achieved and demonstrating that an excellent rating has been achieved.	NEAT submission plus 2 pages of explanatory text	
SECTION D6: ENGINEERING • The building should not be over-engineered with cost of engineering appropriately balanced • The engineering systems should be well designed, flexible and efficient • The engineering systems should exploit any benefits from standardisation and prefabrication • There should be effective emergency backup systems • Fire systems should be safe and efficient • The Primary Infrastructure should be efficient and future-proofed					
D6.1	**An Outline Engineering Design Philosophy Statement** with schematics for all major systems with approximate sizes of major plant and levels of resilience. This should include an outline of proposals on a service-by-service basis and proposals for the site-wide services infrastructure at 1:1250.	**D6.1f**	**Engineering Design Statement** including: • 1:200 scale schematics indicating the departmental zoning philosophy of all mechanical and electrical systems • Duties, sizes and locations of all major plant and equipment and their resilience (e.g. n + 1) including all plant room sizes and locations. Block plan layouts must be provided for all plant areas at 1:100 scale along with predicted maximum demands for	Drawings/schematics for each service plus explanatory text	

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			gas, electricity, cooling and water consumption and connected loads		
D6.2	**N/A**	**D6.2f**	**1:200 Infrastructure Plans** for all energy supplies, utilities and road/path infrastructure along with a letter of support from all utility providers. This shall include a clear statement that all costs in association with the provision of all utilities supplies/discharges from the site have been included.	1:200 drawings plus letters	
D6.3	**N/A**	**D6.3f**	**1:50 Complex Engineering Layouts/Detailed Specifications** for selected complex installation areas, (e.g. Theatres, ICU/HDU/Radiology) demonstrating design development and 'buildability'. These should be accompanied by a statement that all costs in association with the room requirements for all equipment have been included (including floor loadings, room finishes, support structures, environmental services, service supplies or discharges).	1:50 drawings plus explanatory text	
D6.4	**N/A**	**D6.4f**	**A Specialist Engineering Philosophy Statement** for any specialist areas created as part of the overall proposed design solution (e.g. atria).	1:100 layouts / sections plus explanatory text	
D6.5	**N/A**	**D6.5f**	**Detailed Engineering Specifications** for all mechanical and electrical systems and components.	Table and explanatory text	
D6.6	**Proposals for achievement of environmental conditions** set out in Trust specifications	**D6.6f**	**Statement on Achievement of Environmental Conditions** set out in Trust specifications.	2-3 pages of text	
D6.7	**Outline Acoustic Approach** identifying main issues for the Bidder's design and any potential deviations from the latest HTM. This should take account of	**D6.7f**	**Detailed Acoustic Strategy** including levels of reverberation to be achieved, demonstrating any potential deviations from the latest HTM, with supporting 1:200 layouts.	Tables and 1:200 layouts plus explanatory text	

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	minimisation of reverberation				
D6.8	**Fire-code Compliance Statement** and outline fire strategy.	**D6.8f**	**1:200 Scaled Fire Plans** of all areas developed indicating compartmentation, escape routes and fire fighting access along with a Fire-code compliance statement and detailed fire strategy, together with evidence of any responses from Building Control, Fire Officer, and the Fire Brigade etc. which form the basis of the submission. The plans shall include external hydrant layouts/locations and coverage of any auto-suppression systems. A statement shall be provided confirming that all costs in association with Fire-code compliance have been incorporated.	1:200 drawings plus explanatory text	
D6.9	**N/A**	**D6.9f**	Fully detailed **Engineering Commissioning / Decommissioning Method Statements** indicating proposals for testing, setting to work commissioning and decommissioning for all the major engineering service elements. This should include an overall programme and typical documentation and standard forms to be used. These should be accompanied by a statement to confirm all commissioning of the building will be fully completed prior to Practical Completion.	Text and programmes	
D6.10	**N/A**	**D6.10f**	A detailed **Back-up Systems Strategy** indicating the size, mode of operation, and location of all standby, emergency plant and duplication of supplies with respect to all of the major elements of the engineering services, including utilities.	Table plus text and supporting schematics	
D6.11	**N/A**	**D6.11f**	A fully detailed **Engineering Flexibility Statement** with respect to the engineering services and the level of spare capacity provided	Table plus text and supporting schematics	

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			on each system. This should allow for additional future capacity in engineering systems and should include diversity calculations for electrical load.		
SECTION D7: CONSTRUCTION • Phased planning and construction should be well organised • There should be minimal impact on service delivery • The construction should be robust • The construction should allow easy access to engineering systems for maintenance, replacement and expansion • The construction should exploit benefits from standardisation and prefabrication • The construction should minimise waste generation through the development of a Site Waste Management Plan (SWMP)					
D7.1	**Statement of Structural Concepts** including outline construction method statements and outline materials and components specification.	**D7.1f**	**Structural Design Statement** including: • 1:200 outline structural proposals at all levels including roof • 1:50 sections indicating floor to floor height and structural depth • 1:50 typical details of key structural elements including service zones • 1:500 / 1:200 site drainage drawing, including phasing requirements as necessary. Supported by evidence of agreement with relevant authorities • 1:200 foundations and retaining walls layout • Supporting philosophy and detailed specifications	Drawings plus supporting text	
D7.2	**A Technical Standards Issues Analysis** identifying any key areas where the scheme may not meet relevant Health Technical Memoranda, Health Building Notes and Industry Standards. This should include a schedule of potential derogations, along with outline	**D7.2f**	**A Technical Compliance Statement** with respect to the Health Technical Memoranda, Health Building Notes and industry standards in relation to the proposed design solution, including all good practice standards to be adopted. This should include a schedule of proposed derogations with supporting statements for all	Table plus explanatory text	

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	specifications.		alternative solutions.		
D7.3	**Outline Construction Method Statement Statements** including materials and component specifications and their performance benchmarks. This should include the approach to all construction phasing.	**D7.3f**	**Detailed Construction Method Statement** including detailed materials and component specifications and their performance benchmarks. This should include the detailed approach to all construction phasing, with supporting schematics / site plans and detailed programmes.	Text plus supporting drawings, schematics and programmes.	
D7.4	**Continuity Statement** setting out the primary issues for continuity of Trust services and infrastructure arising out of the Bidder's scheme.	**D7.4f**	**Phasing Analysis** indicating how the Bidder's sequence of construction and development will be phased (and segued with the Trust enabling programme). This should demonstrate how continuity of the Trust's services will be achieved during construction and how the whole site will be developed over the construction period.	Drawings and schematics plus explanatory text	
D7.5	**N/A**	**D7.5f**	**1:500 External Works Drawing**, including retaining walls, roads, parking, hard standings /gradients, levels, cross falls, etc, with supporting detailed specifications.	Drawing plus accompanying text	
D7.6	**N/A**	**D7.6f**	**Detailed Site Investigation and Condition Reports Analysis,** listing all reports and investigations that have been used to develop proposals. This analysis should demonstrate how these reports have been used to construct Bidders' proposals. Where areas have not been investigated, Bidders should indicate a strategy for completing this work and provide a risk matrix to identify how these subsequent analyses will impact upon the Bidders' proposals.	Text and supporting drawings	
D7.7	**Outline Strategy for Managing Construction and Demolition** on a live site.	**D7.7f**	**Detailed Strategy for Managing Construction and Demolition** on a live site including a health and safety plan.	Text plus supporting drawings	
D7.8	**Outline strategy for implementing a Site Waste Management** Plan (as defined by the DTI 'Guidance for	**D7.8f**	**Detailed Strategy for Implementing a Site Waste Management Plan** (as defined by the DTI 'Guidance for Construction Contractors and	Text	

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	Construction Contractors and Clients, 2004)		Clients', 2004).		
D7.9	**N/A**	**D7.9f**	**Decommissioning Method Statement** for decommissioning vacated buildings, property and associated services installations. The detailed statement must identify building and engineering work appropriate to different types of construction and property.	Text and supporting drawings	
		D7.10f	**Responsibility and Interface Matrix** indicating where responsibility for construction/ provision of buildings and services lies. Where choices are indicated this should be accompanied by a total cost consequence schedule indicating impact upon the UP.	Table, and explanatory text/drawings	
SECTION D8: USE • The building should facilitate efficient and effective working • The building should allow the Trust to implement its clinical models and FM support services • The building should have flexibility to support change • The building should have a logical complement of standardised rooms • The building should provide a state-of-the-art, secure, and infection free environment for patients and staff • Storage and support facilities should be logically planned					
D8.1	**High Level Critique of the Trust's Model of Care, the associated Clinical Adjacency Matrix and Schedule of Accommodation** This should include an analysis of the model, suggested improvements, clinical adjacency bubble diagrams and a Schedule of Accommodation (giving Net department, circulation and communication/plant space). This includes the historic buildings.	**D8.1f**	**Design Functionality Statement** summarising the main strengths of the bidders' functional design and its contribution to delivering the Trust's model of care. This should include a fully detailed schedule of accommodation including size and number of rooms, planning allowances, circulation areas, communication spaces, plant rooms (separate identification for the energy centre and vertical risers) and a comparison with the Trust's schedule of accommodation. The schedule of	Tables and 2-3 pages of explanatory text	

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			accommodation should fully align with the 1:200 drawings (see D8.4F).		
D8.2	**1:500 Scaled Concept Design Plans** at all floor levels showing functional relationships and space allocation by gross departmental areas; communication space and plant allocation should be identified on the plans.	**D8.2f**	**1:500 Scaled Concept Design Plans** at all floor levels showing functional relationships and space allocation by gross departmental areas (communication space and plant allocation should be identified on the plans).	Drawings plus explanatory text	
D8.3	**1:500 Diagrammatic stacking arrangements**	**D8.3f**	**1:500 Diagrammatic Stacking Arrangements**	Drawings plus explanatory text	
D8.4	**1:200 Scaled Departmental Plans** for 80% of the building detailing room relationships (where there is a repeating pattern, a single template will suffice e.g. Inpatient Unit). These should only include the Historic Buildings if Bidders intend to use them.	**D8.4f**	**1:200 Scaled Departmental Plans** for 100% of the building, detailing room relationships. The plans shall indicate the individual room areas in m^2, and show all planning allowances, circulation, communication, FM and plant space. Drawings should clearly identify departmental boundaries.	Drawings	
D8.5	**Response to Trust Standard Rooms** - **1:50 Loaded Drawings of Standard Rooms** with accompanying **Room Data Sheets**.	**D8.5f**	Fully populated **Room Data Sheets** for all rooms indicating the room name, function, occupancy, required relationships, finishes, and equipment, outlets, temperatures, ventilation rates, lighting levels, acoustics and general level of service and equipment provision in ADB format.	Data sheets	
D8.6	**N/A**	**D8.6f**	**1:50 loaded (equipment/M&E) and Dimensioned Drawings** to demonstrate that the design is developed sufficiently to provide a fixed price. These drawings should cover a minimum of 80% of the building	Drawings	
D8.7	**Statement of design flexibility** that will allow for change in the Trust's operational requirements including : • The ability for the Trust to flex the number of in-patients within bed areas up and down on a daily basis by flexing	**D8.7f**	**Statement of Design Flexibility** that will allow for change in the Trust's operational requirements including: • The ability for the Trust to flex the number of in-patients within bed areas up and down on a	2-3 pages of text and drawings	

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	departmental boundaries; • The ability to incorporate future developments in terms of telemedicine links from community bases to acute consultation rooms; • The flexibility to replace diagnostic modalities, for example, when room use needs to change to reflect changes in technology or the migration of traditional operative techniques to diagnostic based interventional technology (for example, converting an operating theatre into an interventional radiology lab); • The ability to take advantage of hand held/wireless technology (for example, echo-cardiology, ultrasound) to achieve integrated patient pathways. • The ability to change FM service models		daily basis by flexing departmental boundaries • The ability to incorporate future developments in terms of telemedicine links from community bases to acute consultation rooms • The flexibility to replace diagnostic modalities, for example, when room use needs to change to reflect changes in technology or the migration of traditional operative techniques to diagnostic based interventional technology (for example, converting an operating theatre into an interventional radiology lab) • The ability to take advantage of hand held/wireless technology (for example, echo-cardiology, ultrasound) to achieve integrated patient pathways. • The ability to change FM service models.		
D8.8	**Change in Capacity Proposals showing** opportunities for the continued redevelopment of the remaining hospital estate **-** including 1:500 layouts for: • +/- 2 x 96 bed clusters; (showing a phased and incremental development in blocks of 32 beds) • +/- 1 x OPD cluster • Incorporation of the NBT Women's Services	**D8.8f**	**Change in Capacity Proposals** including 1:200 layouts for: • + 2 x 96 bed clusters (showing a phased and incremental development in blocks of 32 beds) • + 1 x OPD cluster • Incorporation of the Trust's Women's Services These proposals should also illustrate how the additional capacity blends successfully with the main scheme and allows the services to operate successfully.	1:200 drawings, flow diagrams plus text max 2 pages for beds and OPD. Master plan drawing for Women's Service plus 1:200 plans showing any connections with the new main hospital	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
D8.9	**Change in Capacity Statement** confirming the operational feasibility of the changes in capacity in terms of how this links and is integrated with the main facilities design, the Trust's clinical models, soft FM services and patient flows and traffic/parking issues	**D8.9f**	**Incorporated into D8.8f**		
D8.10	**Community Hospital Design Statement** describing how the Bidder's scheme meets the requirements as set out in the Clinical Output Specifications.	**D8.10f**	**Detailed Community Hospital Design Statement** describing how the Bidder's scheme meets the requirements for the Community Hospital.	2-3 pages of text plus illustrations	
D8.11	**Outline Security Strategy** demonstrating the high level concepts and benefits of the scheme.	**D8.11f**	**Detailed Security Strategy including:** • Demonstration of how the scheme offers best practice in line with the 'Secure by Design' document • Details of all specialist systems and levels of provision for CCTV (internal/external) and associated external lighting, Intercoms, access control, intruder alarms, attack alarms, induction loops, digital displays, staff call, Bleep system, pneumatic tube, etc • Fully detailed specifications for all of the above.	1:200 Drawings plus explanatory text	
D8.12	**Operational Policy Statement** setting out where Bidders see an advantage in using their operational policies which differ from those of the Trust.	**D8.12f**	**Soft FM Analysis including:** • **Operational Policy Statement** setting out the assumptions and policies that support the Bidder's design proposals • **FM Enabling Statement** showing how the design will accommodate the requirements of Soft FM services • Detailed **Soft FM Schedule of Accommodation** for all Soft FM services (a sub-set of the main SoA)	Text, tables and drawings	

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			• **FM Flows Statement** with detailed diagrams illustrating the proposed service flows (vertical and horizontally) around the facility (and the whole site) as well as contingency routes allowed for within the design associated with soft FM service delivery. This is required for both items coming into the facility for ward / department use and also for those items such as waste, dirty linen etc. being collected from ward / department level and moved for collection off site. • **Waste Compound Design** showing how this supports the Waste Management Strategy. • **Staff and Visitor Catering Service Statement** showing how these services support the requirements of the Trust, how they are laid out to provide efficient operation and how they can be flexible/adaptable to change • **Building Protection Analysis** indicating how FM routes and other parts of the hospital will be treated in respect of wall/door protection etc. • **Value Added Statement showing** selected areas of FM design e.g. the service yard, R&D areas, FM aggregations, to demonstrate how their design will aid efficiency and add value to the Trust		
D8.13	**Statement of Validation of Trust Healthcare Planning Assumptions** confirming: • acceptance of PSC Schedule of		**N/A**		

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	Accommodation and associated activity volumes or • identified scope for additional activity throughput through PSC SoA or • proposed SoA revision with justification for changes and confirmation of compliance with model of care				
D8.14	**Infection Control Statement** including explanation of how the Bidder has met the Trust requirements for control of infection. This should include how the choice of materials and finishes support the Trust's requirements.	**D8.13f**	**Infection Control Statement** including explanation of how the Bidder will meet the Trust requirements for control of infection. This should include detailed specifications on the choice of materials, finishes, components and design solutions to support the Trust's requirements	Table plus 2-3 pages of explanatory text	
		D8.14f	**Radiation Protection Strategy** identifying key areas for consideration e.g. wall protection in a high-tech room, and details of how the design responds.	Table	
		D8.15f	**Storage Statement** including plans showing hierarchy of storage in key locations	2 -3 pages of text plus plans	

SECTION D9: ACCESS

- There should be encouragement for public transport, cycling and walking by the layout, structure and feel of the site
- The site needs to be treated as a whole entity with logical interconnections
- The site needs the capacity to develop naturally over time and maintain its logic
- The new hospital should have a clear cohesive identity with a minimum number of access points
- Services should be directly accessible where possible avoiding the need for multiple layers of reception and receipt
- It should be easy for patients and visitors to re-orientate to their destination if they arrive at the wrong zone;
- Wayfinding should be logical, where possible by the senses rather than by signage
- The circulation distances travelled by staff, patients and visitors are minimised by the layout. Travel distances should encourage the ease of providing 1-stop services
- Staff should be given opportunities to mix informally as part of the circulation strategy

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	• Clashing types of activities should be kept apart • Access routes should aid privacy and dignity for example access to the mortuary; • Access routes should be secure and appropriately lit. • Car parks should be discrete, ideally invisible, and dispersed				
D9.1	**Development Control Plan and Access Strategy** for the whole Southmead site including the bidder facilities (1:1250 minimum) identifying proposed phasing, access proposals and arrangements for separations of traffic and pedestrians, access of emergency vehicles, public transport, car parking (Staff and Public), separation of FM traffic flows and any impact on adjacent public highways, external works features and proposals for adaptability and flexibility of use. Bidders must demonstrate how the existing car parking provision, site traffic and pedestrian routes will be maintained during and after construction across the whole site.	**D9.1f**	**Site Access Strategy** demonstrating: • Flows of pedestrians, cycles, motorcycles, cars, emergency vehicles, public transport, FM deliveries etc. into and around the Site. • Access to car parking • Impact on adjacent public highways, • Proposals for adaptability and flexibility of use • Arrangements for organising Site traffic, pedestrian routes and car parking during construction across the whole Site.	Drawings, flow diagrams plus supporting text max 3 pages	
D9.2	**Strategy on Car Parking** setting out Bidder's proposals on locations, size, aspect, type and maintenance of total car parking spaces during construction.	**D9.2f**	**Parking Design Proposals** including layouts to demonstrate flows, equipment, security arrangements, number, size and location of all car/motorcycle parking spaces, drop offs, disabled provision and all cycle storage and location. This shall cover: • Provision during construction • The 1500 places to be provided by the Bidder • The 1200 spaces provided by the Trust	Drawings plus supporting text	

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D9.3	**1:500 Circulation Computer Simulation/Flow Analysis** demonstrating how staff, patients, visitors and FM internal traffic can move easily around the building and how key departments are connected. Different types of traffic should be separately identified.	**D9.3f**	**Analysis of Staff, Patient, Visitor and FM Internal Traffic Flows**. This analysis should include:
			• 1:200 drawings
			• Matrix of all hospital street, corridor and circulation widths and associated protection
			• Computer aided 3-D walk-through of key patient and visitor pathways including:
			  ○ Main reception to ward
			  ○ Main reception to outpatient clinic
			  ○ Patient transfer from ward to imaging
			• Patient journey scenarios to demonstrate how the Trust's adjacency matrix has been achieved and how the building provides simple and logical journeys for patients
			• Staff journey scenarios including flow between PFI building and Trust Retained Estate.
				Drawings and computer modelling plus explanatory text	

D9.4	**Outline Vertical Transportation Strategy** including stair numbers, lift numbers, segregation proposals, (visitors / patients, FM, waste), lift sizes and alternative methods of transport such as escalators.	**D9.4f**	**Vertical Transportation Strategy** including: • Lift traffic analysis • Lift sizes and numbers • Detailed lift specifications and product ranges • Stair traffic analysis • Stair sizes and numbers • Segregation proposals (visitor / patients, FM, Waste) • Analysis of balance between stairs, lifts, escalators and other modes of transportation	Text with supporting drawings	
D9.5	**Statement on Equity of Access** detailing how the needs of disabled people will be addressed, especially with respect to the requirements of BS 8100.	**D9.5f**	**Detailed Statement on Equity of Access** detailing how the needs of those with disabilities will be addressed, especially with respect to the requirements of BS 8100, with fully detailed supporting strategy and specifications	Text with supporting drawings	
D9.6	**Outline Wayfinding Strategy**	**D9.6f**	**Detailed Wayfinding Strategy** describing	Text with supporting	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	describing internal and external way finding methodology including clear demonstration of the method of progression from site entry to final destination within the building. This should identify any innovative methods of wayfinding. Provide a range of examples to show how the wayfinding strategy is integrated into the overall design including the link with interior design proposals		internal and external way finding methodology including clear demonstration of the method of progression from site entry to final destination within the building, along with fully detailed supporting specifications. This should identify any innovative methods of wayfinding. Provide a range of examples to show how the wayfinding strategy is integrated into the overall design including the link with interior design proposals	drawings	
SECTION D10: SPACE • The design should achieve appropriate space standards • Space should be used intelligently to maximise useful space and minimise left-over areas • There should be an intelligent use of breakout space • Dead space should be avoided					
D10.1	**Outline Statement on Consumerism** indicating Bidder's approach and statement of compliance.	**D10.1f**	**Confirmation of Compliance with Consumerism Standards –** Bidders are required to complete the proforma	Proforma	D10.1 D10.1f
D10.2	**Outline Analysis of Space Standards** highlighting any departure from guidance and identifying where the proposals have maximised the efficient use of space to strengthen the design.	**D10.2f**	**Analysis of Space Standards** highlighting any departure from guidance and identifying where the proposals have maximised the efficient use of space to strengthen the design.	Text	
D10.3	**Illustrations showing how break-out space can be used efficiently**	**D10.3f**	**Illustrations showing** how **break-out space** can be used efficiently and a summary setting out how **dead space** has been minimised	Illustrations and text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
SECTION D11: CAPITAL COSTS AND GENERAL DESIGN					
D11.1	**Capital Cost Schedule in OBC Format** Linked to the Schedule of Accommodation as per the proformas ;	**D11.1f**	**Moved to F8.1f**		
D11.2	**N/A**	**D11.2f**	**Moved to F8.2f**		
D11.3	**Capital cost schedule for the additional capacity proposal in the same format as D11.1.**	**D11.3f**	**Moved to F8.3f**		
D11.4	An outline **Quality Control Procedures Statement** including quality plans, control audits and sample proposals in accordance with relevant British and European Standards.	**D11.4f**	**Covered in C2 schedule 8 part 8**		
D11.5	Provide an initial scored **AEDET Assessment (as amended by the Trust)** with clear statements as to how all credits are actually achieved.	**D11.5f**	**Moved to D1.7f**		
D11.6	Full details of all the design team members, detailing basis of appointment, responsibilities, resources available and management structure. Provide a statement of the approach that will be adopted in managing the design process during this stage of the project and an overview of how the process will be managed through the remaining stage to practical completion.	**D11.6f**	**Covered in P**		
D11.7	N/A	**D11.7f**	**Covered in P**		

3.2 COMMERCIAL: SECTION C

By the time of the interim submission, bidders and the Trust will have had discussions about the project specific elements of the Project Agreement and Schedules (including the Payment Mechanism). Discussions may have concluded in respect of some elements and be continuing in relation to others. Therefore, the commercial interim submission will be a snapshot of the position at that time.

By the time of submission of final bids, the Trust will have discussed and resolved all commercial and price sensitive issues and the Project Agreement and Schedules will be agreed in respect of this position with only minimal non price sensitive issues left to be addressed in the Project Agreement and Schedules. Any new issues raised or previously withdrawn points re-raised at final bid stage, will render the bid non-compliant.

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
C1	**Acceptance of the Draft Project Agreement** Confirmation from bidders on behalf of all members of the bidding consortium (in the form set out in Appendix 1 of Volume 4) that the Draft Project Agreement and Schedules ("Draft Project Agreement")[1] issued in Volume 3 of the ITPD is accepted in its entirety, subject to a written list of comments submitted in accordance with C2 below. Departures from the NHS Standard Form are exceptional unless a project specific or clear value for money justification applies. All such matters require approval from the Department of Health's Private Finance Unit.	**C1f**	**Acceptance of the Draft Project Agreement** Bidders should confirm in respect of all elements of their bid submission (including the technical submission) and on behalf of all members of the bidding consortium: • that they accept the Draft Project Agreement issued in the ITFB in its entirety and without amendment; or • that they accept the Draft Project Agreement in its entirety issued in the ITFB and without amendment save for those issues expressly set out in the Agreed List. If as a result of discussions during the Dialogue, the Draft Project Agreement issued in the ITFB is in agreed form, bidders should	Proforma plus text	C1

[1] The Draft Project Agreement is based on Department of Health standard form Project Agreement and Schedules (Version 3), as amended July 2004, February 2006, November 2006 ("DHSF") and has been tailored to reflect the specific elements of the Project.

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			formally confirm their acceptance of same. If it is the case that an Agreed List of outstanding issues on the Draft Project Agreement has been agreed by the Trust with each bidder then bidders may confirm acceptance of the Draft Project Agreement as amended to reflect the issues on that Agreed List. Bidders should be aware, that when evaluating responses, the number and nature of issues remaining to be resolved will be taken into consideration when awarding bidders a score under the legal evaluation criteria.		
C2A	**N/A**	**C2Af**	**Agreed List** An all-inclusive list of outstanding project specific issues to be resolved between the parties developed and agreed with bidders (an "Agreed List"). Bidders (on behalf of all members of the bidding consortium) should provide a detailed written list of comments to reflect all elements of the bid where the bidder considers a departure from the Draft Project Agreement (including ALL Schedules) issued in the ITFB is required, together with a justification for this. The Trust expects the commentary to be wholly consistent with the discussion held with bidders and the Agreed List developed during the pre-final bid deliverable meetings. It is incumbent upon all parties (and, in	Text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			particular, the bidders) to maximise the benefit of the dialogue phase of this process. Bidders should reflect their commercial bid proposals in the Agreed List following the review and development of all Schedules.		
C2	**Commentary** The Trust will undertake detailed discussions with bidders during the pre-bid deliverable meetings. The purpose of these meetings is to develop the Draft Project Agreement in conjunction with bidders with the intention of agreeing the final form of the Draft Project Agreement to reflect each bidder's solution reflecting all elements of the bid. At the discretion of the Trust, a short list of outstanding project specific issues to be resolved between the parties may be developed and agreed with bidders (an "Agreed List"). It is incumbent upon all parties (and, in particular, the bidders) to maximise the benefit of the dialogue phase of this process. Bidders (on behalf of all members of the bidding consortium) should provide a detailed written list of comments to reflect all elements of the bid where the bidder considers a departure from the Draft Project Agreement issued in Volume 3 of the ITPD is required, together with a justification for this. The Trust expects the commentary to be wholly consistent with the discussion held with bidders and the Agreed List developed during the pre-bid deliverable meetings.	**C2Bf**	**Confirmation Letter** The confirmation letter in the form set out in Appendix 1 of Volume 4 and signed by each member of the bidder's consortium confirming: • that they have no comments on the Draft Project Agreement and that the same is acceptable to them and their legal and technical advisers; **OR** all of their comments and concerns (including any comments or concerns of their respective legal or technical advisors) have now been reflected in the Draft Project Agreement or are on the Agreed List; • that their bid has been priced on the basis of the Draft Project Agreement issued in the ITFB by the Trust and does not reflect any other comments, reservations, qualifications or amendments [(including those on the Agreed List)]; • that any savings directly associated with any proposed Project specific amendments set out in the Agreed List have been identified in such list together with a detailed explanation regarding how each such proposed	Proforma	C2f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	Bidders should review and include comments on Schedule 18 (Payment Mechanism) including the calibration of, and tolerances built into, the payment mechanism. Bidders are expected to address: • practicality; • value for money impact; and • ability to obtain funding. Bidders should indicate any project-specific areas of the payment mechanism which may offer opportunities for innovation. Specifically, bidders should comment on their acceptance of: • Use Parameters • Minimum Unavailability Deduction • Unavailability and Performance Failures (including deductions and Service Failure Points) • Bedding in provisions • Weightings • Service Level Specifications including performance parameters and rectification/remedial timings • Temporary repair provisions • Tolerance provisions • Service Failure Point thresholds (as set out in Clauses 29 and 44 of the Project Agreement). [*Note*: the Trust will require confirmation that		Project specific amendment will realise such costs savings, the basis of calculation and any and all caveats relating to the calculated cost savings and the basis of calculation; • that no legal due diligence is outstanding in relation to the Draft Project Agreement; • that subject only to the Agreed List, they accept fully the allocation of risks between the parties set out in the Draft Project Agreement; and • that they have the ability to proceed to successful contractual/financial close in accordance with the timetable set out in the ITFB.		

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	subcontractors also agree to such thresholds within the Project Agreement.]				
C3	**Statement of completeness** Confirmation from bidders (on behalf of all members of the bidding consortium) that no further points will be raised other than those set out in response to C2 above.	**C3f**	**Statement of Completeness** Bidders should confirm in respect of all elements of their bid submission (including the technical submission) and on behalf of all members of the bidding consortium that no further points will be raised other than those set out in the Agreed List.	1 page text	
C4	**Schedule of potential revenue generating proposals**	**C4f**	**Confirmation of Revenue Generation Drafting** demonstrating that deliverable C1f includes all drafting amendments for agreed revenue-generating proposals.	1 page text	
C5	**Deferred investigations** Identification of areas where there are deferred investigations after the submission of final bids, the approach to risk allocation to such deferred matters or alternative proposals to settle such matters prior to final bids.	**C5f**	**Deferred Investigations** Bidders should submit detailed drafting to address the identification of all areas where there are deferred investigations after the submission of final bid. In addition, Bidders should complete the pro forma to clarify the position in relation to ground conditions and asbestos risk.	Text and proforma	C5f
C6 **C6.1**	**Completion of non-price sensitive issues after preferred bidder** Methodology for the completion of non-price sensitive issues to be addressed in the Draft Project Agreement issued after the appointment of preferred bidder.	**C6f** **C6.1f**	**Completion of Non Price-sensitive Issues after Preferred Bidder** Detailed methodology for the completion of non price-sensitive issues to be addressed in the Draft Project Agreement issued in the ISFB after the appointment of preferred bidder	Text	
C6.2	**N/A**	**C6.2f**	**Risk Management Analysis** An explanation of the bidder's risk management procedure for each risk identified by the bidder, including identifying	Text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			the consortium member or sub-contractor responsible for any proposed cap.		
C7	**Details of sub-contracts** Heads of terms of the sub-contracts agreed or to be agreed with the proposed design and build contractor and service provider(s).	**C7f**	**Details of Sub-contracts** Drafts of the sub-contract documentation agreed with the proposed design and build contractor and service provider(s). Bidders should highlight clearly any changes to the details supplied as part of the Interim Submission stage.	Text	
C8	**Consortium arrangements**	**C8f**	**Consortium Arrangements**	Organisational chart plus text	
C8.1	Details of principal sub-contractors and their relationship with Project Co.	**C8.1f**	Confirmation that the details of principal sub-contractors and the relationship with Project Co remain as detailed in the Interim Submission	As C8f	
C8.2	Details of the shareholders and proposed shareholdings in Project Co.	**C8.2f**	Confirmation that the details of the shareholders and the shareholdings in Project Co remain as detailed in the Interim Submission.	As C8f	
C8.3	Details of the various classes of capital (including the rights and obligations of each class) in Project Co.	**C8.3f**	Confirmation that the details of various classes of capital (including the rights and obligations of each class) in Project Co remain as detailed in the Interim Submission.	As C8f	
C8.4	A diagram depicting the relationships of the various parties including Project Co showing the key contractual relationships together with	**C8.4f**	Confirmation that the diagram depicting the relationship of the various parties and the accompanying explanatory notes as submitted	As C8f	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	explanatory notes.		in the Interim Submission remains correct.		
C8.5	Details of whether Project Co will be owned directly and wholly by the shareholders or by a holding company that is wholly owned by the shareholders.	**C8.5f**	Confirmation that the statement in the Interim Submission as to whether Project Co will be owned directly and wholly by the shareholders or by a holding company that is wholly owned by the shareholders remains correct.	As C8f	
C8.6	Details of the security arrangements (e.g. Parent Company Guarantees and Construction Bonds) in place for Project Co.	**C8.6f**	Evidence of and confirmation that the security arrangements (e.g. Parent Company Guarantees and Construction Bonds) remain in place for Project Co as detailed in the Interim Submission.	As C8f	
C8.7	**N/A**	**C8.7f**	A copy of the proposed Memorandum and Articles of Association for Project Co.	As C8f	
C8.8	A summary outlining the essential terms to be included in the Shareholders' Agreement.	**C8.8f**	A draft Shareholders Agreement and confirmation that it is not anticipated that any material changes will be made to the same between the submission of this deliverable and Financial Close.	As C8f	
C8.9	Identification of any party who bidders anticipate may acquire an interest in Project Co at some future date.	**C8.9f**	Confirmation of any party who bidders anticipate may acquire an interest in Project Co at some future date (other than those identified in the Interim Submission).	As C8f	
C8.10	N/A	**C8.10f**	**Biomass Arrangements** Draft of the sub-contract documentation agreed with any biomass subcontractor (if applicable).	Text	
C9	**Insurance**	**C9f**	**Insurance**	Text and	C9 –C9f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	Completion of insurances proforma at Appendix 1 of Volume 4 and confirmation that the insurance costs reconcile with those identified in the Financial Model. Statement of assumptions applied in determining the 'long run median level' for premiums as per SoPC3 Guidance (section 24.8.2). Confirmation of acceptance of the Insurance Cost Sharing provisions contained within Schedule 21 of the Project Agreement issued in Volume 3 of the ITPD and statement of the level of any risk/contingency premium required.		Completion of insurances proforma at Appendix 1 of Volume 4 and confirmation that the insurance costs reconcile with those identified in the Financial Model. Statement of assumptions applied in determining the 'long run median level' for premiums as per SoPC3 Guidance (section 24.8.2). Confirmation of acceptance of the Insurance Cost Sharing provisions contained within Schedule 21 of the Project Agreement issued in the IFTB and statement of the level of any risk / contingency premium required**.**	completed proformas	
C10	**PQQ Validation Certificate** A PQQ Validation Certificate (in the form set out in Appendix 3 to Volume 4) signed by each bidder.	**C10f**	**PQQ Validation Certificate** A PQQ Validation Certificate (in the form set out in Appendix 3 to Volume 4) signed by each bidder.	Completion of Certificate	
C11	**Non-Canvassing Certificate** A Non-Canvassing Certificate (in the form set out in Appendix 3 to Volume 4) signed by each bidder.	**C11f**	**Non-Canvassing Certificate** A Non-Canvassing Certificate (in the form set out in Appendix 3 to Volume 4) signed by each bidder.	Completion of Certificate	
C12	**Non-Collusion Certificate** A Non-Collusion Certificate (in the form set out in Appendix 3 to Volume 4) signed on behalf of each member of the bidder's consortium.	**C12f**	**Non-Collusion Certificate** A Non-Collusion Certificate (in the form set out in Appendix 3 to Volume 4) signed on behalf of each member of the bidder's consortium.	Completion of Certificate	
C13	**Confidentiality Undertaking** A confidentiality undertaking (in the form set out in Appendix 3 to Volume 4) signed on behalf of each member of the bidder's	**C13f**	**Confidentiality Undertaking** A confidentiality undertaking (in the form set out in Appendix 3 to Volume 4) signed on behalf of each member of the bidder's	Completion of Certificate	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	consortium.		consortium.		
C14	Where the bidder wishes to propose deviation from the Trust's stated commercial position as set out in the Project Agreement and Schedules, they should include a detailed position paper on the given point. Please note the Trust has a strong preference to minimise the number and degree of deviations.			Text	

3.3 FACILITIES MANAGEMENT

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
Section FM1 **HARD FM - APPROACH TO THE MANAGEMENT OF SERVICES AND STAFFING**					

FM1.1	**Confirmation of scope of service** to be provided.	**FM1.1f**	**Confirmation of Scope of Service** to be provided identifying exclusions. This should include:
			• Overview of service model
			• Areas within scope e.g.
			  ○ Buildings
			  ○ External areas
			  ○ Glazing to be cleaned
			• Start/mobilisation dates for all phases and services
			• Hours of operation for each of the FM Services
			• Detailed proposals for establishing and maintaining a 24 hour, 7 day single point
				Text and drawings	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			of contact in respect of service requests, service provision, complaints and proposals for effectively managing the complaints procedures.		
FM1.2	**Indicative management structure**.	**FM1.2f**	**Detailed Management Arrangements** including: • Organisational chart and responsibilities • Management WTE with on/off-site responsibilities (tied in to proposed phases) • Arrangements for liaising with Trust • Approach to ensuring Hard FM input into design process with details of resources/timetable/methodology	Chart, tables and text	
FM1.3	**Indicative workforce structure** for each service to be provided.	**FM1.3f**	**Workforce Structure** for each Hard FM service to be provided including: • Staffing levels with roles and responsibilities including numbers • Remuneration bands linked to hours of operation • Job descriptions and person specifications for all roles • Staff rosters	Tables and accompanying text.	
FM1.4	**Outline description of risk management arrangements**.		**N/A**		
FM1.5	**Outline description of staff and management training and development arrangements**.		**N/A**		
FM1.6	**Outline description of quality management arrangements**.	**FM1.4f**	**Detailed description of quality management arrangements**.	Text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
FM1.7	**Confirmation of acceptance of performance measurement criteria and their relationship to payment mechanism**.	**FM1.5f**	**Confirmation of Acceptance of Performance Measurement Criteria and their Relationship to the Payment Mechanism** including a detailed spreadsheet modelling Service Failure Points for each service.	Text plus Spreadsheets – MS Excel	
FM1.8	**Benchmark costs** produced to indicate understanding of project scope.	**FM1.6f**	**Detailed Cost Analysis** for each Hard FM service including: • Full breakdown by WTE and item of non-pay: • VfM analysis with comparisons against benchmark costs • Unit costs including cost per sqm GIA All lump sum figures should have a detailed breakdown and explanation.	Spreadsheets – MS Excel plus explanatory text	FM1.8/ FM1.8f – a) to d)
FM1.9	**An accompanying list of clarifications and assumptions** relied on for producing the interim estimate.	**FM1.7f**	**A List of Assumptions** relied on for producing the final price for FM services including: • The areas the FM cost is based on, both gross internal floor area of the facility and the grounds. • Number of car parking spaces • Annual indexation allowances included within the financial model for staff and non staff costs • Cross referencing of Cost proformas to the workforce proformas • Identification as to where risk is costed and what risk costings are for	Text	
FM1.10	**Initial description of how design will accommodate the requirements of Hard and Soft FM services**.		**N/A**	Text + Drawings	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
FM1.11	**Critical analysis of the Trust's schedule of accommodation for facilities management.**	**FM1.8f**	**Detailed Schedule of Accommodation for all Hard FM Services** demonstrating how this will support the Hard FM service models**.**	MS excel Spreadsheet plus explanatory text	
FM1.12	**Outline proposals for HR strategy** for staff employment including proposals for recruitment and retention of new staff		**N/A**		
FM1.13	**Outline proposals for Pension provision for new recruits** including details of the pension arrangements to be put in place for new recruits		**N/A**		
FM1.14	**Examples of job descriptions** from other projects being considered for this scheme.		**N/A**		
FM1.15	**Examples of training plans for managers and staff** from other projects being considered for this scheme.		**N/A**		
FM1.16	**Provide examples of Bidder's experience of managing change** during transitional periods on relevant large projects. Submissions shall include examples of difficulties encountered and solutions applied particularly in respect of service continuity.		**N/A**		
FM1.17	**Details of pay strategies and terms of employment** to be applied including new recruits who will be employed in the delivery of the services.		**N/A**		
FM1.18	**Provide examples from other schemes for consulting with staff and their representatives** (particularly trades unions).		**N/A**		

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
FM1.19	**Outline proposals of the human resources support** which will be made available. Personal profiles of relevant staff should be included.		**N/A**		
FM1.20	**Outline proposals for the Bidder's training and development strategy** and Bidders shall further identify the required programme with regard to the release of trust employees to the Bidders for familiarisation prior to service commencement to enable the Trust to fully assess the impact this may have upon Trust current service provision.		**N/A**		
FM1.21	**Examples of any issues associated with the acceptance of HR policies** and procedures from other similar schemes.		**N/A**		
FM1.22	**Outline proposals for how the Bidders intend to recruit and retain staff**, with particular reference being made towards incentivisation, pay structures and staff development.		**N/A**		

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
		FM1.9f	**Transition Statement** explaining arrangements for mobilising services, ensuring seamless move to new services and management of transition between phases. This should include proposed additional resources and management of the mobilisation programmes. The statement should also include a detailed explanation of the effect of building and phasing proposals on the continuous delivery of services to patients, visitors and staff, including specifically addressing the issues of maintaining clean facilities during the building phases.	Text	
		FM1.10f	**Value Added Statement** demonstrating how the service will add value to the Trust and provide flexibility.	Table	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
Section FM2 **HARD FM -APPROACH TO STATUTORY AND MANDATORY COMPLIANCE, QUALITY ASSURANCE AND MONITORING**					
FM2.1	**Examples of approach to undertaking all risk assessments** as required by relevant legislation and how Bidders will support the Trust in its obligation to manage risk in line with Risk Pooling Schemes for Trust (RPST) and Clinical Negligence Scheme for Trusts (CNST).	**FM2.1f**	**Statement of Compliance** in respect of all Trust mandatory and legislative requirements. The submissions should (by way of comprehensive references to applicable legislation and mandatory policies in respect of each service, including the general service) demonstrate an understanding of relevant legislation and mandatory requirements and the impact this has on service delivery. This shall include providing practical evidence of how bidders will comply with legislation and mandatory requirements specific to each of the services being proposed. In addition bidders shall also identify on a service by service basis how changes to mandatory and legislative requirements, will be identified and then implemented.	Text	
FM2.2	**Examples of approach for implementing relevant 'Standards for Better Health' requirements.**		**N/A**		
FM2.3	**Examples of proposals that address sustainability issues** across the full range of specified services.		**N/A**		

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
FM2.4	**Assumptions/clarifications of the performance monitoring process** required by the Scheme including regimes for incorporating the Trust's monitoring and audit results and survey results, into the output scores. The submission shall clearly state any constraints or limitations that Bidders may wish to apply to the Trust's involvement in monitoring.	**FM2.2f**	**A Statement of Acceptance of the Performance Monitoring Process** required by the Scheme including regimes for incorporating the Trust's monitoring and audit results and survey results, into the output scores. The submission shall clearly state any constraints or limitations that Bidders may wish to apply to the Trust's involvement in monitoring.	Text	
FM2.5	**Outline proposal of the proposed** monitoring system, demonstrating the mechanics through which monitoring results will drive the performance and payment Mechanism, and indicating representative frequencies and volume of monitoring. This should include how performance failures are identified and reported and how compliance with all statutory and mandatory obligations including the provision of activity data will be addressed.	**FM2.3f**	**Clear and Detailed Explanation of the Proposed** monitoring system demonstrating: • The mechanics through which monitoring results will drive the performance and Payment Mechanism, • Representative frequencies and volume of monitoring • Description of how performance failures will be identified and reported, and how compliance with all statutory and mandatory obligations including the provision of activity data will be addressed	Text MS Excel Spreadsheet	
FM2.6	**Worked examples or scheme specific monitoring and reporting systems** that you are likely to be using for the services provided.	**FM2.4f**	**Scheme Specific Worked Examples of Monitoring and Reporting Systems** for each service to demonstrate the integrity of the system	MS Excel Spreadsheet plus explanatory text	
FM2.7	**Copies of all existing company Quality Manuals** relevant to the services being provided.		**N/A**		
FM2.8	**Provide examples of the achievement of formal registration/accreditation** of Trust specific quality systems to ISO or equivalent levels that will be used for this scheme for providing the services.	**FM2.5f**	**Detailed Proposals, Including Timescales, for the Achievement of Formal Registration/Accreditation of the Quality Systems,** to ISO or equivalent levels, that will be adopted.	Text and tables	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
FM2.9	**Provide the desired approach to cross referencing between the Trust's service level specification and performance standards** as contained in [Volume 2] and the appropriate sections of the Bidder's Quality Manuals.		**N/A**		
FM2.10	**Outline proposals as to how the Bidder's quality systems will provide relevant information** in respect of the NHS [Standards for Better Health] reporting and elements of the NHS Plan requirements as contained within the Service Specifications in [Volume 2].		**N/A**		
FM2.11	**Provide Examples of the application of technology toward managing monitoring quality,** with particular emphasis on the acceptability of IT systems to meet Scheme requirements. The response shall include schematic examples of applications to services.	**FM2.6f**	**Description of Monitoring Technology** with particular emphasis on the acceptability of IT systems. The response shall include schematic examples of applications to services.	Text and schematics	
Section FM3 **HARD FM -METHOD STATEMENTS**					
FM3.1.	**Provide a relevant example of a method statement,** that has clear referencing to Schedule 14 (service level specifications), relating to the General services.	**FM3.1f**	**Detailed Method Statements** that have clear referencing to Schedule 14 (service level specifications) and schedule 18 (payment mechanism) for: • General Services • Estate Maintenance Services • Grounds Maintenance Services • Utilities Management Services • Pest Control Services • Helpdesk	Text	

3.4 EQUIPMENT AND IT

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
SECTION E1: EQUIPMENT RESPONSIBILITIES					
E1.1	**Equipping Strategy** – response to the Trust's strategic approach to equipment	**E1.1f**	**Method Statement** describing the strategy for the ongoing development of the ADB database during the preferred bidder stage. This should identify Trust involvement and confirmation of Trust access to the database.	Text	
E2.1	**N/A**	**E1.2f**	**Consistency Statement** to confirm acceptance of: • ERM responsibilities in schedule 13 of the PA • ADB code descriptions included in the Trust's equipment database (and that they will be used going forward).	Text	
E2.2	**N/A**	**E2.1f**	**A1 Equipping Price Fix Statement** confirming that category A1 equipment will be a fixed price based on bidders' own designs which will not change because of remaining work on 1:50s.	Text	
E3.1	**First Cut Costing Schedule** including cost of equipment and commissioning.	**E2.2f**	**Category A2/F Investment Plan** (will be an Appendix to Schedule 13) taking into account the category A2/F specifications and the linked category A2/F preferred manufacturers. Method statement for the delivery of the category A2 equipment service.	Proforma plus text	E2.2f
E3.2	**Commentary on Content of baseline specifications for new equipment**		**N/A**		
E3.3	**Commentary on Commissioning Approach** as set out in Schedule 12 including views on length of time between Trust's final decision on		**N/A**		

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	type/make of equipment and installation				
E4	**Assessment of bidder costs to be charged for transferring equipment (categories C and D)**	**E2.3f**	**Category B Costing Schedule** (will be an Appendix to schedule 13) taking into account the category B specifications and the linked category B preferred manufacturers. Method statement for the delivery of the category B equipment service.	Proforma plus text	E2.3f
E5		**E3.1f**	**A1 Method Statement** on procurement and replacement strategy for Cat A1 equipment taking into account the suitability of the equipment to the room/area.	Text	
E6		**E3.2f**	**Patient Entertainment Method Statement** concerning the bidder's proposed strategy for accommodating a (to be specified) patient entertainment system.	Text	
E7		**E3.3f**	**Fixed FM Method Statement** outlining the proposed strategy for Trust consultation on fixed soft FM equipment.	Text	
IM&T					
E4.1	**Commentary on Trust's Information Management and Technology strategy**	**E4.1f**	**Review of Trust's Information Management and Technology Strategy** with recommendations for enhancement/development to ensure leading edge practice.	3-4 pages of text	
E4.2	**Infrastructure proposals.** This should include: - • An outline statement indicating the adopted philosophy for incorporating the network into the building proposals with particular emphasis on flexibility and access for servicing and maintenance of that network and its active components • Outline Support and disaster recovery	**E4.2f**	**Detailed IT and Telecommunication Infrastructure Proposals** This should include: • Conceptual and schematic drawings showing the design of the IT and telecoms infrastructure • Examples of how the proposals have been developed and implemented in a health	Drawings and accompanying text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	arrangements, engineering services strategies including the approach to building services and the manner in which the integration of new and existing buildings will be achieved (if appropriate). • A statement summarising the bidders intentions (or otherwise) in relation to network convergence and whether systems employ conventional or IP based technologies.		environment • Explanation of how the network/infrastructure is incorporated into the building demonstrating flexibility and access for servicing and maintenance of that network and its active components • Schematic showing how the infrastructure links to external networks demonstrating the necessary resilience. • Full specifications, supplier details and quantities of key components proposed • Description of communications cabinet rooms detailing power supply, fire suppression, environmental monitoring, access control, etc. • Details of infrastructure design and installation subcontractors/suppliers including accreditation • Details of infrastructure warranty and named underwriters • CV's of infrastructure Project Manager and designers • Arrangements for support and maintenance of the infrastructure • Sample test certificates and proposed acceptance criteria for sign off • Detailed support and disaster recovery arrangements, engineering services strategies including the approach to building services and the manner in which the integration of new and existing buildings will be achieved. • A clear statement and proposals from the		

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			bidders in respect of network convergence and which systems, if any, will operate on converged networks. This should include a description of the communications technologies to be employed (eg DECT, infra red, WIFI, etc.) where applicable and a demonstration of how resilience of individual systems will be delivered		
E4.3	**IT and Telecommunication proposals.** This should include detailed statements of the proposed infrastructure, approach to design, installation, commissioning and how this will allow the Trust to achieve its IM&T objectives.		**Deleted**		
E4.4	**Outline cost plans** setting out the cost of specifying, procuring, installing and commissioning (inclusive of certification) of proposed solution.	**E4.3f**	**Detailed Cost Plans** setting out the cost of specifying, procuring, installing and commissioning (inclusive of certification) of the solution.	Excel spreadsheet	
E4.5	**Outline method statement** setting out approach to the specifying, procuring, installing and commissioning, approach, plus details of all assumptions used. Set out approach to updating specifications to deliver a contemporary solution	**E4.4f**	**Detailed Method Statement** setting out approach to the specifying, procuring, installing and commissioning, approach, plus details of all assumptions used. Set out any significant changes made since issue of interim deliverable.	Text and plans	
E4.6	**Outline technical description of solutions, including diagrams setting** out outline approach to the specifying, procuring, installing, commissioning, plus details of all assumptions used.	**E4.5f**	A **Methodology** that shows how the Bidder's ICT design and implementation proposals will ensure the maintenance of full functionality and interoperability of Trust ICT systems and interim developments, irrespective of location within the Trust. This should include parking and access controls, security, IT, telephone services and infrastructure as a minimum		

3.5 PROJECT MANAGEMENT

Ref No.	Interim Deliverable	Ref No. FINAL	Draft/Final Deliverable	Format	Proforma Ref.
P1	**Description of Management Arrangements:** with detail of roles and responsibilities of managers within each service provided (including *both* the construction of facilities and facilities management) and how these will be integrated into one coherent whole. Where construction, facilities management, equipment or IM&T inputs are to be provided by contractors other than the Principal Service Provider(s), the Bidder should make clear the selection process for such sub contractors or the experience of those already selected.	**P1f**	**Statement of Management Arrangements and Key Personnel** with detail of roles and responsibilities of personnel for each phase of the development/concession period following selection of Preferred Bidder. This statement should explain how all disciplines will combine to deliver the scheme. Where construction, facilities management, equipment or IM&T inputs are to be provided by contractors other than the Principal Service Provider(s), the Bidder should make clear the selection process for such sub contractors or the experience of those already selected.	Organisational structure charts with explanatory text max 2 pages	
P2	**N/A**	**P2f**	**Deleted**		
P3	**Collaborative Working Mission Statement** including a description of how the Bidder will work with the Trust to ensure value for money and sustain a long-term partnership. The response should be illustrated with proposed management structures prior to financial close and from commencement of the concession period and the process to maintain continuity.	**P3f**	**Collaborative Working Mission Statement** including a description of how the Bidder will work with the Trust to ensure value for money and sustain a long-term partnership.	2 pages text plus supporting organisational structure charts	
P4	**Management Programme(s)** identifying lead in activities, design, construction, technical commissioning, operational commissioning and transfer periods. The programme(s) must show key activities and milestone events,	**P4f**	**Management Programme(s)** identifying lead in activities, design, construction, technical commissioning, operational commissioning and transfer periods. The programme(s) must show key activities and	Programme in PDF format	

Ref No.	Interim Deliverable	Ref No. FINAL	Draft/Final Deliverable	Format	Proforma Ref.
	including: - • Confirmation of Trust's brief and scheme design development • Financial close and Project Agreement • Detailed design and performance specifications • Obtaining necessary approvals and authorities • Date for commencement of construction • Procurement of principal contracts/packages • Construction testing, technical commissioning and snagging • Practical completion of the construction contracts • Operational commissioning by the Trusts and Bidders • Transfers • Commencement of use • Decommissioning of vacant properties • Phasing		milestone events.		

3.6 FINANCIAL

General

Should variant bids be required, Bidders will only be required to indicate where the variant differs from a reference bid;

All values in the text referring to capital and operating costs must be reconciled and cross-referenced to the reference bid models;

Bidders are requested to submit responses to these deliverables as a red line against their interim submission in electronic format to accompany the clean printed copies.

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
SECTION F1: FUNDING GENERAL					
F1.1	Set out suitable funding packages for the Project and explain why. The Bidder is expected to utilise this opportunity to demonstrate an understanding of the Trust's project-specific circumstances and to propose innovative funding solutions where available. Any preferred funding routes should be clearly stated. This should include the Bidder's view on the funding market and the associated risks. Please include confirmation that your proposals are viable with/without EIB involvement; without the inclusion of any additional cost.	**F1.1f**	Set out detailed funding packages suitable for the Project. This should include the Bidder's view on the funding market and the associated risks.	Text maximum of 5 pages	
F1.2	Provide a comprehensive outline of the proposed risk capital (i.e. all finance ranking below senior debt) structure for the Project and an explanation of why it is considered suitable. Responses should include a risk capital term sheet covering all proposed forms of risk capital	**F1.2f**	Provide a comprehensive outline of the proposed risk capital (i.e. all finance ranking below senior debt) structure for the Project and an explanation of why it is considered suitable. Responses should include a risk capital term sheet covering all proposed forms	Text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	and at a minimum should contain: • Real and / or nominal return requirements (blended and per tranche, as applicable); • Any minimum and / or maximum investment requirements; • Identity of the guarantor for any deferred risk capital subscription; • Confirmation of willingness to obtain letters of credit (or other acceptable forms of credit support), if required by funders or rating agencies. The level of support proposed by the Bidder must, based on the Bidder's prior experience, be at a level sufficient for an investment grade rating and an AAA/Aaa-rated monoline if a wrapped funding structure is proposed. Bidders must ensure the full cost is separately identified and reflected in the Financial Model; and • Dividend and voting rights attached to each subscription. With respect to mezzanine debt, bidders should indicate: • Willingness to incorporate a tranche of third party mezzanine debt on a competitive basis as part of the funding competition post-preferred bidder; and • If so willing, an indication of any impact on the risk capital terms requested above (e.g. any impact on the required return).		of risk capital and at a minimum should contain: • Real and / or nominal return requirements (blended and per tranche, as applicable); • Any minimum and / or maximum investment requirements; • Identity of the guarantor for any deferred risk capital subscription; • Explicit confirmation of willingness to obtain letters of credit (or other acceptable forms of credit support), if required by funders or rating agencies. The level of support proposed by the Bidder must, based on the Bidder's prior experience, be at a level sufficient for an investment grade rating and an AAA/Ana-rated monoline if a wrapped funding structure is proposed. Bidders must ensure the full cost is separately identified and reflected in the Financial Model; and • Dividend and voting rights attached to each subscription. With respect to mezzanine debt, bidders should indicate: • Willingness to incorporate a tranche of third party mezzanine debt on a competitive basis as part of the funding competition post-preferred bidder; and • If so willing, an indication of any impact on the risk capital terms requested above (e.g. any impact on the required return).		
F1.3	N/A	**F1.3f**	Bidders are requested to complete in full the		F1.3f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			summary financial pro forma.		
SECTION F2: DELIVERABILITY OF FUNDING					
F2.1	Indicate the anticipated level of due diligence to be undertaken by the Sponsor's legal and other advisers and a programme for the completion of any outstanding work to financial close in the context of competitive dialogue. Deliverability of the bids (and hence bankability) is essential for a Bidder to proceed	**F2.1f**	Describe the level of due diligence already undertaken by the Sponsor's legal and other advisers to provide F2.1f and a programme for the completion of any outstanding work to financial close in the context of competitive dialogue. Deliverability of the bids (and hence bankability) is essential for a Bidder to proceed. Bidders are expected to have an independent (stage 1 i.e. preliminary) financial model audit report. (A Stage 2 / final report will be required as part of the preferred bidder funding competition.) Bidders are also required to repeat the confirmation given during the interim bid submission clarification stage that all errors and issues discovered in the model post submission of final bids (i.e. as a result of the final model audit) are solely for the account of the consortium. The extent of the model audit undertaken at this stage is therefore left to the bidders' discretion.	Text due diligence should be a maximum of 2 pages; the audit report will not be subject to this limit	
F2.2	Set out the following for each funding route proposed by the Bidder, including key sub-contract (inter alia construction and FM) heads of terms. These heads of terms should include at least the following: • Identity of patent company guarantor(s) and evidence of their support; • Long stop requirements; • Indexation; • Proposed liability caps, termination caps,	**F2.2f**	Set out the following for each funding route proposed by the Bidder, including detailed sub-contract heads of terms for key subcontracts (*inter alia* construction and FM). These heads of terms should include at least the following: • Identity of parent company guarantor(s) and letters of support; • Detailed long stop requirements;	Text	Please draft with reference to the Funding assumptions set out in proforma reference F3.2/F3.2f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	surety bonds and other contractor support that Bidders believe will be acceptable to funders (inc. AAA/Aaa rated monolines where applicable) / rating agencies; and • Any third party support (i.e. credit support) that Bidders believe will be required by rating agencies / funders (inc. AAA/Aaa financial guarantor). To the extent the key subcontracts escalate at values other than RPI, Bidders shall clearly identify such escalations and provide a rationale (see also F3.2). The total subcontractor support packages must be capable of achieving an investment grade rating and satisfying the requirements of an AAA/Aaa-rated monoline (where wrapped options are submitted) and the full cost of such support must be reflected in the financial model.		• Indexation; • Proposed liability caps, termination caps, surety bonds and other contractor support that Bidders believe will be acceptable to funders (inc. AAA/Aaa rated monolines where applicable) / rating agencies; and • Any third party support (i.e. credit support) that Bidders believe will be required by rating agencies / funders (inc. AAA/Aaa financial guarantor). To the extent the key subcontracts escalate at values other than RPI, Bidders shall clearly identify such escalations and provide a rationale. The total subcontractor support packages must be capable of achieving an investment grade rating and satisfying the requirements of an AAA/Aaa-rated monoline (where wrapped options are submitted) and the full cost of such support must be reflected in the financial model.		
F2.3	N/A	**F2.3.f**	Performance bonding – The Trust is seeking comfort that the level of surety bonding proposed is sufficient to attain an investment grade rating for the project. To this effect you are required to provide the following: • Details of the surety bonding required on comparable projects undertaken by the consortium with a corresponding rationale as to why you understand this was acceptable to the rating agencies;		Funding assumptions set out in proforma reference F3.2/F3.2f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
			• • How the proposed level relates to the current financial strength of the bidder entity guaranteeing the D&B contract; • • Describe the scenario(s) you have run to support the quantification, with reference to key assumptions / specific variables such as delay in replacing the contractor, increased construction costs as a result of the replacement, any deferred risk capital injections are brought forward to the date of the insolvency, delay in draw of bond and any other variables you consider relevant to fully support the proposed level of surety bonding; • • Provide the results and details of any further scenarios you believe are required to fully support the proposed level of surety bonding; and • Confirmation of the Sponsors' acceptance that any additional bonding required post submission of final bids shall be for the consortiums account alone.		
SECTION F3: FINANCIAL ASSUMPTIONS					
F3.1	Highlight any potential issues/advantages of the Bidder's design and commercial solution which they consider will impact upon the overall affordability envelope of the Project including (for example) lower soft FM costs reduced enabling works expenditure, lower	**F3.1f**	Highlight any potential issues/advantages of the Bidder's design and commercial solution which they consider will impact upon the overall affordability envelope of the Project including (for example) lower soft FM costs reduced enabling works expenditure, lower energy bills or other impact on Trust costs.	Text; calculations may be presented in MS Excel	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	energy bills or other impacts on Trust costs.		Bidders should include detailed assumptions and calculations of the projected savings.		
F3.2	Submit a financial model based on the assumptions set out in Proforma Ref. F3.2. Bidders should submit one model (or, preferably, a single model with separate scenarios) for each of the three Service Payment indexation approaches set out in Volume 3 of the ITPD. As such, there will be 3 reference bid models. The financial scenario for each reference bid model (e.g. bank, indexed bond, etc.) should be that which generates the lowest NPV of Service Payments. Bidders should indicate the proposed x value for the RPI+x Service Payment indexation mechanic and justify same with reference to the underlying Project costs per F2.3. Bidders should indicate the proposed proportion of the Service Payment to be indexed (at RPI or RPI + x, as appropriate) with reference to the underlying Project costs. See additional detail in Volume 3 of the ITPD. There is no requirement to submit a hard copy of the financial model. The financial model should incorporate as a minimum: • Funding plan; • Projected profit and loss account; • Projected balance sheet; • Projected cashflow statement; • Lifecycle and other reserve accounts as required;	**F3.2f**	Submit a full financial model based on the assumptions set out in Proforma Ref. F3.2f This model should be an updated version of the model submitted at the interim bid stage (and of any subsequent version thereof shared with the Trust as part of the competitive dialogue process). It should comply with all the requirements set out at the interim stage and contain an up to date audit trail of all the changes made since the interim bid submission. There is no requirement to submit a hard copy of the financial model. The financial model should incorporate as a minimum: • Funding plan; • Projected profit and loss account; • Projected balance sheet; • Projected cashflow statement; • Lifecycle and other reserve accounts as required; • Cash waterfall; • Taxation schedule; • Depreciation schedule; and • Cover ratios and IRR calculations. Construction start should be assumed as financial close. Key dates such as completions of phases, commissioning and final repayment of finance should be clearly identified.	The financial model should comply with the following general format: • Microsoft Excel 2003 compatible; • Financial projections on a monthly basis during construction, and semi-annual thereafter; • Expressed in £'000 sterling; • Not include any password protection (or the password must be disclosed); • Contain no protected macros or hidden	F3.2/F3.2f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	• Cash waterfall; • Taxation schedule; • Depreciation schedule; and • Cover ratios and IRR calculations. Construction start should be assumed as financial close. Key dates such as completions of phases, commissioning and final repayment of finance should be clearly identified.			sheets; and • All functions, formulae and linkages should be operational.	

F3.2 (cont)	**Outputs of the model** should include as a minimum:
	• Nominal and real IRRs, both pre and post project tax for the:
	  • Project; and
	  • Risk capital (both blended and individually for all forms of risk capital)
	• The debt coverage ratios set out in Proforma Ref F3.2;
	• Timing and phasing of risk capital injections and treatment in return calculations;
	• NPV of real Service Payments assuming 100% performance and an NPV base date / discount rate assumptions as set out in Proforma Ref F3.2;
	• A breakdown of all bid, development and SPV running costs;
	• A breakdown of major cost categories in NPV terms which reconciles to the total NPV of the Service Payment; and
	• The average loan life of each debt instrument.
	The model should clearly specify the required
		F3.2f (cont.)	**Outputs of the model** should include as a minimum:
			• Nominal and real IRRs, both pre and post project tax for the:
			  ○ Project; and
			  ○ Risk capital (both blended and individually for all forms of risk capital) clearly stating whether commitment and/or arrangement fees are included in the calculation
			• The debt coverage ratios set out in Proforma Ref F3.2f
			• Timing and phasing of risk capital injections and treatment in return calculations;
			• NPV of real Service Payments assuming 100% performance and an NPV base date / discount rate assumptions as set out in Proforma Ref F3.2f
			• A breakdown of all bid, development and SPV running costs;
			• A breakdown of major cost categories in NPV terms which reconciles to the total
				As above	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	Service Payment.		NPV of the Service Payment; and • The average loan life of each debt instrument. • The model should clearly specify the required Service Payment.		
F3.3	The price base date set out in Proforma Ref F3.2 should be assumed for the Service Payment and all facilities management, lifecycle, insurance and SPV costs. Indexation of the Service Payment should be in accordance with Schedule 18 of the Project Agreement and the three indexation options set out in Volume 3 of the ITPD.	**F3.3f**	The price base date set out in Proforma Ref F3.2f should be assumed for the Service Payment and all facilities management, lifecycle, insurance and SPV costs. Indexation of the Service Payment should be in accordance with Schedule 18 of the Project Agreement and the three indexation options set out in Volume 3 of the ITPD.	N/A as contained within F3.2f	F3.2/F3.2f
F3.4	Provide a full data book and user guide to the financial model. Such user guide shall include, at a minimum, the following: • The key values input into the Financial Model including total capital cost, equipment cost, FM, lifecycle and SPV costs and cross-references between these inputs and the related source in the bid text; • An explanation of how the optimisation has been undertaken and the key constraints applicable; • A brief summary of the purpose and operation of all macros; • A breakdown of development costs; and • Confirmation that the coverage ratio definitions correspond to those at Proforma Ref F3.2	**F3.4f**	Provide a full data book and user guide to the financial model. Such user guide shall include, at a minimum, the following: • The key values input into the Financial Model including total capital cost, equipment cost, FM, lifecycle and SPV costs and cross-references between these inputs and the related source in the bid text; • An explanation of how the optimisation has been undertaken and the key constraints applicable; • A brief summary of the purpose and operation of all macros; • A breakdown of development costs; and • Confirmation that the coverage ratio definitions correspond to those at Proforma Ref F3.2f	Text	F3.2/F3.2f
F3.5	The financial model must be capable of running sensitivities in all key areas usually required by	**F3.5f**	The financial model must be capable of running sensitivities in all key areas usually	F2.5f- Part of the financial	F3.2/F3.2f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	funders / rating agencies (including those set out for typical cash breakeven scenarios and as per the funding assumptions set out in Proforma Ref F3.2) including *inter alia*: • Delay to Financial Close and the construction programme; • Increases in capital, facilities management, lifecycle, and insurance costs; • Interest and inflation rate changes; • Corporate tax and VAT rate changes; and • Payment mechanism deductions. Bidders should provide details of key sensitivity analyses undertaken. For financing options involving a credit rating, Bidders should include a confirmation that the Financial Models submitted have factored in the impacts of running key sensitivities (such as rating agency cash breakevens including those set out at Proforma Ref F3.2) and that the Financial Model can meet or exceed the breakeven thresholds set out therein.		required by funders/ rating agencies (including those set out for typical cash breakeven scenarios and as per the funding assumptions set out in Proforma Ref F3.2fincluding *inter alia*: • Delay to Financial Close and the construction programme; • Increases in capital, facilities management, lifecycle, and insurance costs; • Interest and inflation rate changes; • Corporate tax and VAT rate changes; and • Payment mechanism deductions. Bidders should provide details of key sensitivity analyses undertaken. Bidders should include a confirmation that the Financial Models submitted have factored in the impacts of running key sensitivities (such as rating agency cash breakevens including those set out at Proforma Ref F3.2f and that the Financial Model can meet or exceed the breakeven thresholds set out therein.	model, F3.2f. Sensitivity detail may be provided in both A4 text and MS Excel. Confirmation that the financial model can meet or exceed thresholds set out in Proforma May be presented as A4 text	
SECTION F4: TAXATION AND ACCOUNTING ASSUMPTIONS					
F4.1	Provide a detailed description of the tax and accounting assumptions made in the financial model including: • The accounting treatment adopted; • Confirmation that the financial model has been developed on a composite trader basis and, if not, why the alternative tax treatment provides better value for money to the Trust; • The split between different tax Schedules	**F4.1f**	Provide a detailed description of the tax and accounting assumptions made in the financial model including: • The accounting treatment adopted; • Confirmation that the financial model has been developed on a composite trader basis and, if not, why the alternative tax treatment provides better value for money to the Trust;	Text	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	(A, D(I) and D(III)); • Tax treatment of interest and SPV costs during the construction phase; • Tax treatment of development costs including any disallowable costs; • Tax relief for lifecycle costs; • Deductibility of risk capital interest; • Confirmation of the marginal tax rate and an explanation if this differs from the assumed corporation tax rate; • The treatment of tax losses; • Confirmation of any tax relief assumed (e.g. small / marginal rates and group / consortium relief); and • VAT treatment and any irrecoverable VAT assumed.		• The split between different tax Schedules (A, D(I) and D(III)); • Tax treatment of interest and SPV costs during the construction phase; • Tax treatment of development costs including any disallowable costs; • Tax relief for lifecycle costs; • Deductibility of risk capital interest; • Confirmation of the marginal tax rate and an explanation if this differs from the assumed corporation tax rate; • The treatment of tax losses; Confirmation of any tax relief assumed (e.g. small / marginal rates and group / consortium relief); and VAT treatment and any irrecoverable VAT assumed.		
F4.2	Confirm that the tax and accounting treatment within the model is underwritten by the Bidder and that any changes to assumptions (with the exception of changes in the rate of Corporation Tax made up to financial close) will not increase the Service Payment to the Trust. Bidders should assume a Corporation Tax rate of 28%. Changes in the rate of Corporation Tax up to financial close will be a Trust risk similar to interest rate risk. The financial model must be in accordance with IFRS.	**F4.2f**	Confirm that the tax and accounting treatment within the model is underwritten by the Bidder and that any changes to assumptions (with the exception of changes in the rate of Corporation Tax made up to financial close) will not increase the Service Payment to the Trust. Bidders should assume a Corporation Tax rate of 28%. Changes in the rate of Corporation Tax up to financial close will be a Trust risk similar to interest rate risk. The financial model must be in accordance with IFRS.	Confirmation in A4 text-maximum of 2 pages.	N
F4.3	Confirm the extent of any tax and accounting due diligence undertaken, the programme for undertaking any further due diligence post-	**F4.3f**	Confirm the extent of any tax and accounting due diligence undertaken, the programme for undertaking any further due diligence post-	Text maximum 2 pages	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	preferred bidder and the programme for obtaining any pre-clearance from HM Revenue & Customs prior to financial close.		preferred bidder and the programme for obtaining any pre-clearance from HM Revenue & Customs prior to financial close.		
SECTION F5: PREFERRED BIDDER FUNDING COMPETITION					

F5.1	If selected at as Preferred bidder, confirmation of the consortium:
	• Will agree a list of potential funders with the Trust;
	• will assemble the following information for potential funders inter alia:
	  • Project overview;
	  • Sub-contracts - detailed heads of terms;
	  • Detailed term sheet requirements (for clarity the funding assumptions detailed in Proforma Ref F3.2 will not be binding and funders will be free to innovate where this offers the project better VfM and does not impact on the underlying contract price or risk allocation per F1.1);
	  • The full project agreement and associated schedules; and
	  • Due diligence reports specific to the preferred bidder (to include technical, legal and insurance)
	• Issue of above agreed information to funders; preferred bidder evaluation of the responses on an open book basis with the Trust. The evaluation will need to take account of the relative impact on price, future contract flexibility and be within the requirements of the competitive dialogue
		F5.1f	Reconfirm commitment to this process. All amendments must ensure that the process remains in line with PFU guidance. They should also confirm their proposed evaluation methodology for selecting the bidder in the funding competition	Text- maximum 5 pages	F3.2/F3.2f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
	process; and ■ Will make the selection of funder and preferred funding route in agreement with the Trust. The bidder should detail how they propose to evaluate funders in the funding competition				
SECTION F6: THIRD PARTY INCOME					
F6.1	**Proposals for the generation of third party income**, to be provided together with likely turnover, profit sharing arrangements and a guaranteed level of income for the proposals. Reference should be made to the service provider, their experience and previous proven solutions. Bidders should indicate the features of their third party revenue proposals which they expect will permit the funder(s) to count the benefit of the third party revenue in the debt service coverage ratios. The Bidders should demonstrate the deliverability of its proposals and that they are stand alone with no impact on the overall programme to financial close or where there is an impact, this should be highlighted. Bidders are required to set out the amount they are prepared to underwrite and the term for which this applies. The Trust is expecting to see income for the full operational period.	**F6.1f**	Bidders should provide proposals for the generation of third party income, to be provided together with likely turnover, profit sharing arrangements and a guaranteed level of income for the proposals. The identity of the guarantor should be clearly stated. Reference should be made to the service provider, their experience and previous proven solutions. Bidders should indicate the features of their third party revenue proposals which they expect will permit the funder(s) to count the benefit of the third party revenue in the debt service coverage ratios. The Bidders should demonstrate the deliverability of its proposals and that they are stand alone with no impact on the overall programme to financial close or where there is an impact, this should be highlighted. Bidders are required to set out the amount they are prepared to underwrite and the term for which this applies. The Trust is expecting to see income for the full operational period.	F6.1 and F6.1f A4 text and MS excel where applicable	

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
SECTION F7: SERVICE PAYMENT PHASING					
F7.1	Bidders are required to include a two-stage Service Payment, the first stage applying at completion of Phase 1 and the second applying at the completion of Phase 2. Bidders should justify the timing and amount of such phasing with reference to the actual costs incurred for each phase in a manner that can be easily reconciled to the financial model. Additional detail on the phasing is set out in the Project Agreement.	**F7.1f**	Bidders are required to include a two-stage Service Payment, the first stage applying at completion of Phase 1 and the second applying at the completion of Phase 2. Bidders should justify the timing and amount of such phasing with reference to the actual costs incurred for each phase in a manner that can be easily reconciled to the financial model. Any incentivisation proposals should also be set out clearly in the submission.	Text and inclusion in the financial model (F3.2 and F3.2f)	
F7.2	N/A	**F7.2f**	Bidders are required to provide details of the planned construction phasing, including anticipated timescales for demolition / construction of each building, who is responsible for decant and demolition works, etc.	Phasing plans and A4 text.	
SECTION F8: CAPITAL					
		F8.1f	**Full Capital Cost Schedule** in accordance with the proformas, this should include supporting detailed cost plans and a risk register. This shall also be presented in FBC format on Forms 1 – 4 inclusive (complete with all back-ups)	Proformas	F8.1f
		F8.2f	**Full Lifecycle Cost Schedules** including details of life expectancy for all materials and components in accordance with the proformas	Proformas	F8.2f
		F8.3f	**Supplementary Capital Cost Schedule** for the additional capacity proposal in the same format as D11.1f.	Proformas	F8.3f

Ref No.	Interim Deliverable	Ref No.	Draft/Final Deliverable	Format	Proforma Ref.
		F8.4f	**Cost Assumptions Schedule** listing assumptions for costs not included in fixed price e.g. asbestos in particular areas and providing a formula for assessing their impact on price	Proforma	
		F8.5f	**Bid Costs** Bidders shall provide a fully itemised breakdown of all bid costs that have been incurred to date identified as variable or fixed and overhead costs).	Proformas	F8.4f

4. POST-SELECTION OF PREFERRED BIDDER

The products completed at this point will be as follows:

Element	Deliverable
Design (Project Co Proposals)	Completion of Schedule 8 Part 1 Planning Consent
	Completion of Schedule 8 Part 2 Safety During Construction
	Completion of Schedule 8 Part 4 PCPs with final version of 1:50 room loaded drawings (including reflected ceiling plans and internal elevations for all room types) and all other drawings and statements in the bid submission
	Completion of Schedule 8 Part 6 Room Data Sheets
	Completion of Schedule 8 Part 8 Quality Plans
	Mock-ups of:
	En-suite WC
	Staff base
	Bedroom - single
	Bedroom - four bed
	Consult/exam

Element	Deliverable
	Treatment room
	Heavily engineered room (large), (theatre/ interventional radiology room/catheter lab)
	Admin room – five person office/seminar
Equipment	Agreed list of equipment with product and commissioning costs: • Supplied by Project Co • Supplied and commissioned by Project Co
Commercial	Minimal non price sensitive issues to be addressed in the Project Agreement and Schedules, as agreed prior to the appointment of Preferred Bidder

SOFT FM VALUE FOR MONEY ASSESSSMENT

Combined Soft FM		**Transfer to PFI Contract**			**Retain In-House**		
Criterion	**Weighting**	**Advantages**	**Score**	**Weighted Score**	**Advantages**	**Score**	**Weighted Score**
Programme level objectives and outputs	**5%**	The Trust will use the Department of Health Standard Form Project Agreement Version 3. A number of Health projects have been closed using the current version of the Standard Form Project Agreement that demonstrates that the proposed contract structure is operable but also marketable and deliverable. The Specifications allow the Trust to set out the scheme's service requirements objectively defined in output terms with their delivery measured against clear performance standards.	5	25	The Trust has experience of establishing Soft FM contracts. The methodology for setting standards and measuring them is well established and the Trust should be able to apply these standards to the in-house contract. However, it is potentially more difficult to set standards for in-house services when there is sometimes a tendency to proceed without a clear set of internal targets. This issue will be offset to a degree by the national measurements used to measure Trust's overall performance.	3	15
Operational flexibility	**15%**	The PFI structure does provide a degree of rigidity to the services it covers and the variation procedure could potentially be a barrier to enabling making short-term changes. This has been the reported experience of some Trusts.	2	30	The exclusion of Soft FM services potentially allows the Trust to respond to changes in policy and approach in areas such as infection control without variation to the contract. This is a particular issue at the moment where there are rapidly changing targets in the field of Soft FM with a requirement to alter targets and specifications. The lifecycle of these new standards and policies can be less than 1 year.	5	75
Equity, efficiency and accountability	**5%**	Overall, the PFI contract should allow the provision of equitable, efficient and accountable services.	4	20	Overall, the Trust should be able to provide equitable, efficient and accountable services.	4	20

SOFT FM VALUE FOR MONEY ASSESSSMENT

Risk management	**15%**	The advantages of transfer include alignment of risk between hard and soft FM services, and transfer of risks associated with the new building including design of FM areas and harmonisation between the lifecycle and FM approaches. Risk however to the Trust's reputation cannot easily be transferred under services directly managed by a third party PFI operator	4	60	Retaining the Soft FM services in-house misses the opportunity to transfer risks associated with the hard/soft fm interface and to shift design risk to the PFI provider. Greater control over maintaining/enhancing the Trust's reputation with retained services	2	30
Innovation	**10%**	The PFI process has shown it can deliver innovation in design and in operational areas particularly with regard to multi-skilling	4	40	The Public Sector has the potential to innovate but perhaps not the same degree of incentive that the PFI provider will have. Choose & Book & Foundation status opportunities may well act as a catalyst for greater innovation with services under direct control	3	30
Service provision	**30%**	Although the transfer of services to the Private Sector does not automatically mean that there will be a gap between the Soft FM and Trust clinical teams, there is a lack of Direct managerial control that will potentially make it harder to synchronise activities and approach. The key interface between hard and soft FM that will now be under single management by the PFI provider is replaced by an interface between FM and clinical services. This is potentially problematic with the renewed focus on combining	3	90	Patient Choice is seen as a key driver in terms of future Trust performance and success. Soft FM services increasingly need to reflect consumer requirements and have a high executive profile within any Trust (e.g. control of infection issues & MRSA) and more importantly with those Trusts moving towards foundation status. As such, soft service provision is viewed as a core service that requires strong control and ownership. Any transfer of such a service supply to the private sector from the Trust will result	5	150

SOFT FM VALUE FOR MONEY ASSESSSMENT

		ward clinical and FM teams.			in a loss of direct control, which the Trust considers is an essential strategic requirement for the delivery of this core supporting service.		
Incentive and monitoring	**5%**	The PFI contract provides a very clear set of incentives and targets but the Trust has to dedicate resources to this task to make it effective. This task has been made more difficult in the past by a very complex payment mechanism.	4	20	Incentives are less clear with an in-house solution although linking back to the overall Trust Balanced Scorecard has improved levels of monitoring.	3	15
Lifecycle costs and residual value	**5%**	There is an automatic benefit of combining responsibility for hard and soft FM in terms of decisions around VfM of investment decisions.	5	25	The distinction between hard and soft FM services makes it more difficult to draw all the links in decision –making between lifecycle and operational costs.	3	15
Transaction costs and client capacity	**5%**	The inclusion of Soft FM in the main deal tends to make the process more complex and requires the client to be able to deal with a number of decision-making processes in a relatively short period. The focus on soft FM could potentially be less acute than in a Soft FM only tendering process.	3	15	The separation of Soft FM selection processes from the main deal potentially makes it a simpler process for the client.	4	20
Competition	**5%**	The PFI process provides a competitive process with built-in market testing. There are some problems with the inclusion of these services in an overall deal that can tend to hide specific issues relating to the soft FM services. Also the market testing period is relatively long.	3	15	The Trust retains the flexibility to market test at shorter intervals and with a dedicated process on each soft FM service. There is potential to lose focus on this issue however, if not governed by a prescriptive PFI process.	3	15
		Total		**340**	**Total**		**400**

Appendix 7.iv (a)

North Bristol NHS
NHS Trust

INTEGRATED COMMUNITY HOSPITAL SPECIFICATION

INTEGRATED COMMUNITY HOSPITAL

Southmead Community Hospital will be identifiable as the 'local hospital within the hospital'. Although a significant degree of integration with acute facilities is planned, the facilities, which make up the community hospital need to reflect the largely different nature of the service provision which will be delivered.

This facility will be used by the local population as their first 'port of call' for services, which are not provided by their GP or at another local centre. It will have a local feel and a strong local identity, both for the local population and local practice based commissioners.

The Southmead acute hospital will focus increasingly on the needs of the most ill and injured. The acute services will be designed to provide care to a more well – defined set of patients than traditionally served by acute hospitals to date. Lengths of stay will become shorter thus creating a need to provide more local, less intensive care.

The community hospital will offer the essential infrastructure for developing new and effective ways of providing care for patients, particularly the high volume, low risk presentations which are increasingly going to be provided via redesigned patient pathways.

The community hospital will provide comprehensive assessment, which meets the majority of the local population's needs. The overall 'fit' needs to enable the patient journey to be provided in a seamless way within a patient friendly, calm and supportive environment.

These principles apply to emergency and elective care, in hours and out of hours.

1 Philosophy of Service

The ability of patients to access appropriate, high quality, responsive healthcare provision quickly, is a key objective identified within the NHS Plan. The need to modernize healthcare in terms of facilities and processes has led to a range of new initiatives and models of care delivery mechanisms. The key function of the Community Hospital is to ensure access to local, high quality healthcare provided within a modern, patient friendly environment

The establishment of access to diagnosis and treatment facilities is a major objective for the clinical services, whose clinical pathways will increasingly require the ability to undertake one stop assessment and diagnosis.

The provision of local intermediate care beds will enable the avoidance of admissions to the acute hospital when inpatient care is required and also enable speedy transfer of care when acute patients become medically stable.

Models of care will change in response to the needs of patients and their expectations. Services must therefore be provided in a manner that can respond to changing requirements.

Referral sources will be as follows

- Self
- Primary Care
- Southmead acute
- Internal (from within community hospital)
- External (other community hospitals, community health care and external primary care facilities).

2 Core Content

The introduction to this specification sets out the Health Community's vision in respect of the "local hospital within the hospital". It is intended that the core content of the Community Hospital will be configured in a way that enables it to function as a single entity.

The Community Hospital will consist of the following clinical service areas:

- A Community Hospital 32 inpatient bed cluster to the same generic standard as the inpatient units as described within the Inpatient Zone Specification, but with the following specific accommodation
  - Reception area to serve the Community Hospital Inpatient area
  - Local waiting facility
  - Sitting and dining area
  - Additional patient sanitary facilities
- A generic outpatient cluster to the same standard as those described in the Ambulatory Zone specification
- Minor Injury Minor Illness (MIMI) facilities with provision for a GP out of hours (OOH) Service
- Community Therapies facilities including provision for physiotherapy, occupational therapy and speech and language therapy

plus shared diagnostics, including imaging, and supplementary non-clinical accommodation including offices and a Community Hospital seminar room.

3 Strategic Design Principles

The key objective is to provide an integrated community hospital with its own identity, capable of functioning as a single identity.

The different elements of the community hospital will be accessed by a spectrum of patients in terms of their diagnosis, their level of ill health and the range of services that

they require. The design of the Community Hospital needs to be capable of supporting patients and visitors of all mobility levels. The overall design must account for the fact that patients attending the Community Hospital will often be required to undergo assessment and/or treatment in several departments/locations.

To reflect the philosophy of service, a number of strategic design principles will apply as follows:

- Patients attending the hospital will often be required to undergo assessment and/or treatment in several different departments/locations. The way finding solution must therefore support the identity of the community hospital, the relationship with facilities shared with acute services, the easy recognition of departments and most appropriate access routes for all levels of mobility.
- The design should access the research available on hospital environments, particularly for older people: for example, all toilet rooms the same colour, contrasted with other doors, colour co-ordinating of bed areas to allow patients to identify their area.
- Special consideration should be given to the means of temperature control in the examination rooms. All offices, reception areas, waiting areas and clinical examination/consultation rooms will require natural light and ventilation
- Appropriate physical access restrictions should apply to the community hospital inpatients areas. Facilities used for Out of Hours services should be separated from the rest of the building according to the hospital operational policy.
- Access to external areas providing fresh air and both social and therapeutic facilities is essential to the recovery process for patients potentially remaining in hospital for extended periods. Community inpatient areas must maintain access to safe external areas which may be used for individual and group therapy in addition to being a regular social facility for patients and visitors. The areas should provide a range of ground levels including some steps. There should also be adequate durable seating. The provision of sensory and technical stimulation in terms of landscape design would be advantageous

These requirements should be read in conjunction with the related appropriate strategic design principles described in the relevant Zonal specifications.

4 Projected Activity

The assumptions regarding activity are described in the Outline Business Case. For convenience, the activity forecast for the Community Hospital is summarised in the following table:

Table 1

Activity	Per Annum
Outpatients and Triage	26,242
Minor Injuries	24,000
Diagnostic Tests (Plain film and ultrasound)	33,661
Therapy Appointments	30,000
Inpatient spells to avoid admission to acute hospital	657
Inpatient spells for community rehabilitation	500

4.1 Visitors

Although it is anticipated that many patients attending the hospital will be accompanied by at least one person, the number of general visitors is anticipated to be low, and ordinarily limited to the inpatient area. Visitors should not need to pass through any clinical areas except the one to be visited and should enter and exit the community hospital via well designated and designed routes.

5 Hours of Service

All areas within the Community Hospital will be operational or require access 24 hours, 7 days a week.

Visiting hours to the inpatient area will be expected to be between the hours of noon and 8pm but may need to change over time

The Community Hospital accommodation within the Ambulatory Zone is intended to be open 07.00 to 22.00 Monday to Saturday 6 days per week. It is not anticipated that procedures or treatments will be undertaken overnight although occasional emergency access will be required for diagnostics.

The Minor Injuries Unit and urgent care accommodation will need to be open 24 hours, 7 days a week.

6 Specific Exclusions

In developing the Model of Care, a number of services have been identified as not being core to the community hospital provision and the following are therefore specifically excluded:

- Emergency assessment and treatment for all patients which will be provided at the acute hospital
- Inpatient services for patients who are not medically stable
- Integrated Critical Care
- Obstetric Services
- General Surgery and procedures requiring general anaesthesia
- Inpatient and daycase paediatrics

- Mental Health Services – patients accessing the Community Hospital who have mental health conditions will be supported in terms of the diagnosis and treatment of their physical condition, but the patients' ongoing psychological care and support will be managed by the Mental Health Trust
- Child and Adolescent Mental Health Services

7 External Functional Relationships

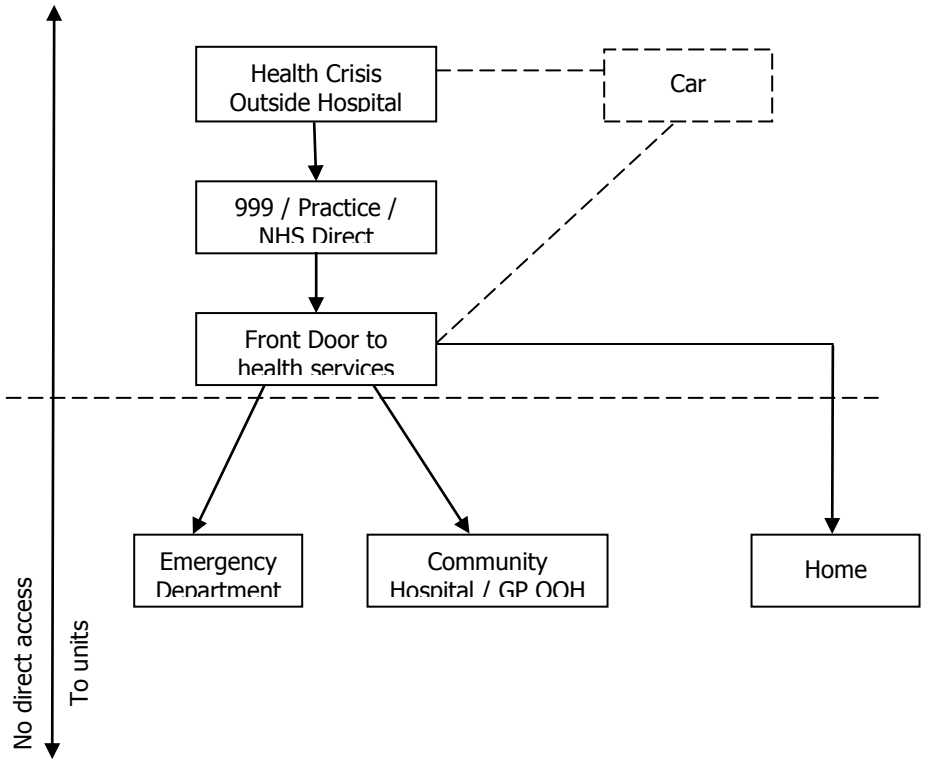
External referral sources include:

- Self presentation
- Primary Care
- The new acute hospital
- Other community hospitals, community health care and external primary care facilities

The Community Hospital's MIMI Unit forms part of an agreed vision of Urgent and Emergency Care. The relationship between Emergency Care facilities within the acute hospital and the MIMI Unit is of paramount importance

The following figure illustrates the overarching patient pathway:

Figure 1 Patient Pathway via Front Door to Health Services



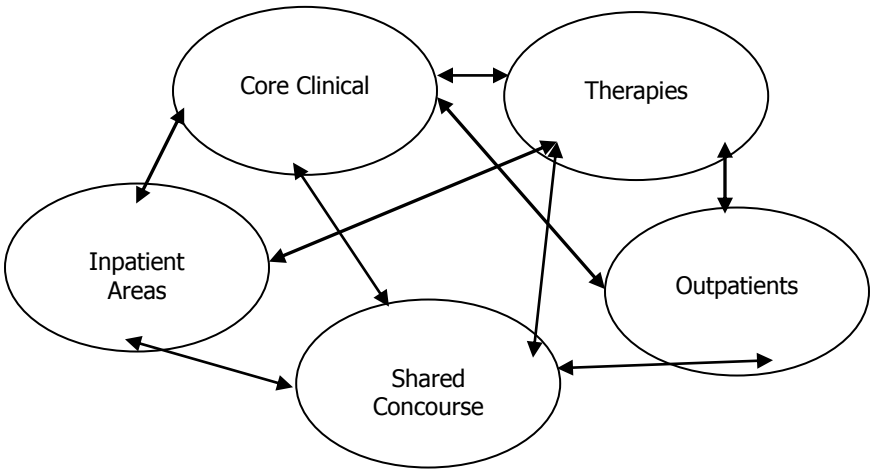
The diagram above illustrates the vision of Emergency and Urgent Care. The outcomes being sought are to:

- Deliver the right care in the right setting for patients
- Improve the cost effectiveness of the local provision
- Improve public understanding of the use of services
- Roll out good practice.

8 Internal Functional Relationships

The Integrated Community Hospital will consist, in part, of a number of directly managed areas (as detailed in section 2 of this specification). Patient flows are described in the following diagram:

Figure 2 Community Hospital Internal Relationships and Flows.



The Community Hospital will also need to relate to zonal staff facilities, shared facilities, notably diagnostics (including imaging), hydrotherapy pool, multi faith facilities and public areas.

9 Functional Content

Although a summary of the main functional areas is provided here, reference should be made to the detailed Schedules of Accommodation. Additionally, these requirements should be read in conjunction with the related appropriate sections of the relevant zonal specifications.

9.1 Reception

The initial contact point for the Integrated Community Hospital is described within the concourse facilities within the Inpatient Zone. Additionally a local reception point is provided for the community inpatient beds

9.2 Clinical Services

9.2.1 Inpatients

- Reception for 2 members of staff to serve the Community Inpatient area
- Waiting for 15 people including 2 wheelchair waits
- 32 beds in the form of a single grouping
- Sitting and dining area to accommodate 8 patients on upright chairs at dining tables with a second area to accommodate coffee tables and 8 armchairs
- Patient sanitary facilities - in addition to the en-suite facilities for the single bedrooms and multi-bed rooms, there will be 2 assisted bathrooms
- Manager's Office
- Switchgear
- Procedure room
- Resuscitation trolley/call system
- Pantry/beverage making area
- Linen trolley bay
- Clean Utility room
- Staff toilet

9.2.2 MIMI

- Patient waiting area
- Children's waiting play area
- See and treat
- 9 x consult/exam rooms
- 1 x ENT Ophthalmic consult/exam room
- 2 x double sided consult/exam
- 1 x gynae consult/exam
- Interview/counselling room
- Height/weight bay
- Staff base
- Clinical notes write up
- Pneumatic tube outlet

9.2.3 Community Ambulatory Generic Outpatient Cluster

To the same specification as the acute hospital's generic OP clusters as described in the Ambulatory Zone specification.

9.2.4 Community Therapies

- Shared Therapy Support
  - Reception
  - Waiting Area
  - Toilets – ambulant, partially assisted and fully assisted

- Administration office
- Office/resource base
- Meeting room
- Beverage area
- Staff toilets
- Domestic services
- Dirty utility
- Disposal hold
- Switchgear

- Occupational Therapy
  - Treatment area
  - Splint making/ice making area (shared with Physiotherapy)
  - Quiet room
  - Technical workshop
  - Technician's office
  - Clean equipment store
  - Dirty equipment store
  - Wood storage area
  - Toilet – fully assisted
  - Switchgear

- Physiotherapy
  - Patient changing area
  - Gymnasium musculo-skeletal
  - Gymnasium rheumatology
  - Treatment cubicles
  - Treatment rooms
  - Seated treatment stations
  - Switchgear

- Podiatry
  - Biomechanics room
  - Procedure room
  - Office – head of service
  - Switchgear

9.2.5 Supplementary Accommodation

- Zonal staff change facility
- Education and workforce development
  - IT suite
  - Seminar room
  - Store

9.2.6 Clinical Offices

- Single occupancy
- Multi-occupancy
- Reprographics room
- Beverage area
- Staff toilet
- Domestic services
- Disposal hold
- Switchgear

10 Staffing

The staff working in the Community Hospital are included in the numbers which appear in the zonal specifications. It should be noted that the Community Hospital will be staff by a mixture of core and "visiting" staff.

It is agreed that Community Hospital staff will utilise zonal staff changing, showering and storage facilities. Secure lockable storage will be required for personal property whilst staff are on site.

11 IM&T

Details of the active components associated with IM&T can be found in the data room.

All aspects of the Community Hospital will need to be integrated with the overall site IM&T and communications infrastructure and be to the same overall quality standards.

12 Education and Workforce Development

A generic seminar room together with an IT suite is required. These facilities will be available for multi-disciplinary teams and will include workstations and informal seating.

North Bristol NHS
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Appendix 7.iv (b)

CORE CLINICAL ZONE SPECIFICATION

CORE CLINICAL ZONE

1 Philosophy of Service

The core clinical zones should be flexible facilities that are able to employ and adapt to the latest developments in medical technology. These zones need to look outwards as patients will access these services from all other zones within the hospital as well as directly from the community.

The principles that underlie this main concept are:

- The contribution of these facilities towards one-stop patient pathways with minimum travel distances between services
- The development of an open and fluid culture within the new hospital that encourages joint working and avoids isolation of teams and services
- A no wait philosophy
- Standard design and Trust-wide co-ordination so that rooms are used but not "owned" by individual teams
- A requirement to encourage multi-professional education and training and link front-line services with training and education facilities.

2 Core Content

The Core Clinical Zone services to be provided include:

- Imaging department
- Operating theatres
- Endoscopy
- Medical Illustration
- Pharmacy
- Body store
- Clinical Equipment & Medical Physics services
- Reablement Services

3 Strategic Design Principles

To reflect the philosophy of service, a number of key strategic design principles will apply as follows:

- The zones must be directly accessible for patient and staff from the community, Urgent and Emergency Care, Inpatient and Ambulatory zones and the Integrated Community Hospital
- Patients will be attending on the day of their surgery or procedure. They must be able to access these areas in a straightforward manner and be accommodated in a comfortable, relaxing and non-institutionalised environment prior to their admission or appointment

- The standard design of all facilities will ensure maximum flexibility allowing services to adapt in response to peaks and troughs in demand
- Facilities need to be future-proofed and able to accommodate changes in technology, service models and specialty configurations
- Children and young people will be cared for throughout the zone and their specific needs in terms of facilities, safety, reassurance and entertainment will need to be addressed
- The zone should be able to accommodate additional types of diagnostic technologies e.g. PET scanners
- To maintain the privacy and dignity of patients using services within the Core Clinical Zone, separate and distinct access and waiting will be needed for ambulant patients and for those on a trolley/bed.

4 Projected Activity

The likely capacity requirements for the services contained within the Core Clinical Zone are described in the Outline Business Case.

5 Hours of Service

Most areas within the Zone will require access 24 hours every day, however, the working hours of the different functional areas within the zone will vary.

6 Relationships with Other Zones

The Core Clinical Zone services will be accessed directly from all other zones (patients will enter the zone via one of the concourse areas supporting the Inpatient, Ambulatory, Urgent and Emergency Care Zone or integrated Community Hospital. Patients should not have to pass through any other patient or clinical area in order to access the relevant Core Clinical Zone function). The main zonal relationships are as follows:

- The Urgent and Emergency Care Zone – A low volume of patients will require very rapid transfer to the Operating Theatres. If these facilities are not located on the same floor there must be prioritised access. There must also be an immediate adjacency with CT and plain film.
- Inpatient Units – Patients will move frequently between inpatient units and Theatres so the immediate adjacency of a number of clusters to the theatres would be a significant advantage. Vertical adjacency would be acceptable with the provision of appropriate dedicated lifts.
- Integrated Community Hospital – community patients from the Ambulatory, Inpatient and MIMI areas need to access aspects of the Core Clinical Zone, in particular "shared diagnostics" including ultrasound and plain film imaging.
- Maternity- although Maternity Services will be provided on site the PSC assumes that relevant accommodation will be located within existing facilities.
- Pathology services - for rapid turnaround of results. The provision of an automatic distribution system is assumed in the PSC for this purpose.

The movement of patients should be separated from that of goods (dirty or clean) and the public or visitors in order to ensure that the privacy and dignity of patients is not compromised.

7 Departmental Relationships

The following adjacencies are key:

- Imaging - will be used by patients from each zone, the Community Hospital and direct access patients, so must be accessible to all
- Cardiac Catheterisation – must be directly accessible from the Urgent and Emergency Care zone, CCU, recovery beds and from the community.
- Endoscopy - patients will attend on a planned or emergency basis at any time so access will be required from all zones and directly from the community.
- Therapy Re-ablement Base – this base for the re-ablement team requires staff only access.
- Pharmacy – the dispensary will incorporate robotic dispensing, automated ward stock picking and utilise automated distribution (e.g. pneumatic tube). Staff and patient access will be required.
- Mortuary (without a PM facility) – access for staff and visitors to the storage and viewing facility will be required at all times. Transfers to the mortuary must be undertaken in such a way that the dignity of the deceased is maintained at all times, whilst ensuring that the needs of the living are managed sensitively. Access to the viewing area must be sensitively and appropriately located. There would be significant benefits for relatives if there was ready access from the viewing facilities to the Multi-faith Centre.
- Zonal facilities – access to staff changing and rest facilities required at all times.
- All departments have a requirement for direct external access for delivery and collection purposes.

8 Functional Content

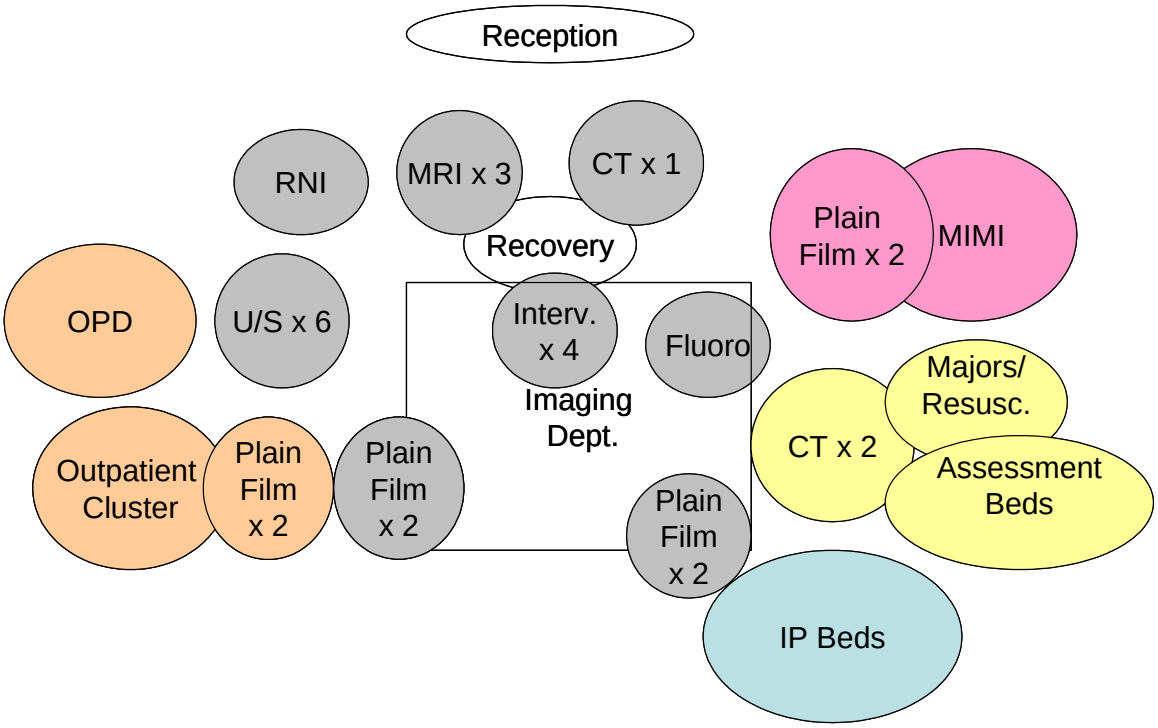
The Core Clinical Zone will comprise the following facilities:

8.1 Imaging Department

This department will provide services to the whole site for all modalities (excluding Obstetric Ultrasound), plus direct community access for some modalities.

The Imaging service will provide imaging and associated interventional services with static and mobile modalities. Ideally, the service will be provided within a single location although in order to achieve appropriate adjacencies it is acknowledged that vertical and horizontal distribution of modalities may need to be considered.

The relationships between key areas of the department and other areas of the hospital are shown in the diagram below:



The static modalities to be provided are:

- General x-ray (Plain film)
- Computerised Tomography (CT)
- Ultrasound (US)
- Magnetic Resonance Imaging (MRI)
- Angiography and interventional radiology
- Fluoroscopy
- Radionuclide Imaging (RNI)
- Mammography.

The mobile modalities are:

- General x-ray
- Ultrasound
- Image Intensifiers.

There will be a requirement for the provision of external facilities to accommodate articulated vehicles such as CT or MRI scanners to provide backup cover for routine maintenance and breakdown, emergency planning and future flexibility.

The service model is based upon maintaining separate flows for different patient groups (acute/community, planned/unplanned, inpatient/outpatient) but does not assume the provision of dedicated equipment or facilities for any individual cohort. Although scheduling will provide a significant contribution to this approach Project Co is asked to minimise the crossover between patient groups. The design should provide an interface between the Imaging Department and the Urgent and Emergency Care Zone, incorporating the key modalities, especially general imaging and CT scanning.

Imaging rooms should be located to achieve a balance between:

- minimising patient travel distances, particularly when patients are attending a "one-stop" consultation
- segregating elective and emergency flows
- retaining economies of scale by clustering high volume modalities

It is anticipated that two main hubs to the department will be created – a well-defined reception as the first point of contact for patients and other visitors, and a central staff hub, possibly created through the combination of staff bases and utilising circulation space. The reporting areas need to be distributed so that there are areas for "hot" reporting where individuals can be interrupted, and also multi-reporting areas remote from interruption.

The design must also ensure flexibility for future changes in service volume and use of space. The overall design should as a minimum, be based upon the principles contained within HBN 06, including room adjacency, services, radiation protection and layout.

The schedule of accommodation has assumed a level of sharing based upon adjacencies achieved within the PSC. Should Project Co not achieve the appropriate adjacencies it may be necessary to review the Schedule to ensure that full functionality is delivered.

The Department will comprise:

Reception
There will be a single reception point for all patients, which must be accessible 24 hours per day, seven days per week. All patients will register at this facility prior to being directed to the designated waiting area. Consideration may be given by Project Co to the provision of multiple stations and privacy zones to prevent bottlenecks.

Waiting Area including children's play
A waiting area including wheelchair provision, with an adjacent children's play area. A screened holding area large enough to accommodate a bed or trolley with sufficient space for nursing either side of the patient will be required.

Administration
The Trust wishes to separate the reporting function from that of the general administration needs of the medical and clinical staff. The reporting rooms will therefore be separate from the office/resource bases, but it is important that the two functions are co-located and not close to public areas.

Other Shared Facilities
The facilities shared by all imaging modalities will include:

- Mobile equipment bays
- Workshop/equipment maintenance
- General and linen stores
- Seminar room
- Staff common room with beverage facilities
- Staff sanitary facilities
- Domestic services and disposal hold

Recovery
The Stage 1 recovery facility will be utilised by CT, MRI and Interventional Radiology and must be centrally located. The area will be designed to the same standards as the Stage 1 Recovery Area of the Operating Theatre.

The Stage 2 recovery area will also accommodate sufficient space for bed waiting plus comfortable seating, beverage bay, staff base with clean utility and dirty utility (with macerator).

Plain Film
The accommodation includes:

- General Purpose rooms - these high volume, rapid turnover rooms should be located close to the main waiting area and patient entrances. Some rooms must be co-located with the Urgent and Emergency Care Zone and immediate access to plain film from the outpatient clusters is essential. All rooms should have ready access to clean and dirty utility areas without staff passing through patient waiting areas.
- Image Processing - this area should be co-located with the diagnostic rooms although not immediately adjacent to the public areas.
- Sub waiting, including space for wheelchairs.
- Patient sanitary facilities - there should be a toilet shared between each pair of rooms to avoid the need for patients to enter more public areas during their examination.
- Patient ambulant and assisted changing facilities – these should be immediately accessible from the waiting area. Once gowned, patients should access a non-public sub-wait adjacent to the relevant investigation room. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.
- Staff base with clean utility area.
- Domestic services

Fluoroscopy Suite
The accommodation includes:

- Sub waiting, including wheelchair wait

- Ambulant patient changing cubicles. Once gowned, patients should access a non-public sub-wait adjacent to the relevant investigation room. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.
- Non-interventional fluoroscopy rooms - the control area of the rooms must allow good visibility of the patient through all the possible movement positions of the equipment. There should be easy access to the patient throughout any examination. Both rooms must be equipped with C-arms.
- Scrub bay - scrub sink facility shared between the two diagnostic rooms.
- Patient sanitary facilities – toilet and bidet ensuite to each non-interventional fluoroscopy room.

Radionuclide Imaging Suite
This suite must be self-contained but have ready access to the ultrasound, CT and general imaging areas of the department.

Within the self contained suite there will be a need to group "hot" rooms where radioactive materials will be present, separately from "cold" rooms (no radioactive materials present. Room adjacencies should assist the flow of patients from the sub wait to the injection room, post injection sub wait, and to the Gamma Camera Rooms.

The accommodation includes:

- Sub waiting – a dedicated pre injection area including wheelchair waits
- Patient Changing Area - ambulant and assisted changing cubicles with adjacent secure locker facilities
- Injection Room - patient injection room with limited local lead shielded storage provision for pre-prepared radiopharmaceuticals.
- Sub waiting – Post Injection - a dedicated area for post injection patients including wheelchair waits. Some patients may have to spend long periods (about one hour) here while a suitable time interval elapses prior to their examination.
- Patient sanitary facilities - assisted shower/toilet facilities. The WCs must be designated for use by radionuclide imaging patients who have received radioisotope injections. The effluent will be radioactive and the drainage system must be designated accordingly.
- Gamma Camera Room - in addition to the floor mounted gamma camera the room must accommodate up to four work stations for viewing and processing of images, plus up to four collimators. The room should be zoned to ensure that administrative functions are separated from the patient/camera area. Each room must have a control area that provides excellent vision of the patient and easy access to them if required. The doors to these rooms must be equipped to prevent unauthorised access. Immediate access to the post injection sub waiting is required. Pendent medical compressed air should be provided in each room and consideration must be given to the implications of the procedures in which radionuclide is administered via inhaled aerosols or involving other ventilation tests.

- Disposal Hold – dedicated disposal facilities for the secure holding of radioactive waste before disposal. This will include partially used doses or contaminated materials including needles and syringes.

Ultrasound suite
The ultrasound suite is focused upon high volume, rapid turnover investigations and must be located close to the main waiting area and patient entrances.
The accommodation includes:

- Examination rooms – these rooms should have blackout, ability to vary light levels locally and be capable of accommodating a patient in a bed. Each must be equipped for standard ultrasound procedures and the performance of interventional procedures including biopsies and ultrasound guided interventions. The rooms must be equipped with in-room patient monitoring facilities, piped medical gases (air and oxygen) and suction.
- Sub waiting including wheelchair waits.
- Ambulant or assisted patient changing cubicles for each examination room plus lockers with access to a non-public sub-wait area adjacent to the relevant investigation room.
- Patient ambulant sanitary facilities

Magnetic Resonance Imaging (MRI) suite
Access from the Inpatient Zone will be essential as will immediate access from the Operating Theatre Suite where intra operative scanning may be required. Immediate access to the shared Imaging recovery area will be required.

The accommodation includes:

- Patient preparation rooms - this facility should be adjacent to the scanning rooms and the sub wait areas. The rooms must be capable of accommodating a patient on a trolley, or bed for the administration of intravenous contrast. A contrast warmer should also be located in each room. In the event that a general anaesthetic is required it will be administered within the patient preparation rooms and therefore appropriate medical gases and scavenging will be required. The design will need to allow for the four preparation areas to be shared between CT, MRI and Fluoroscopy.
- Scanning Rooms - each scanning room must be adjacent to a control room with visual and aural contact and direct access. The scanner must be aligned to the patient observation window in order to provide the radiographer with a full-length view of the MRI scanner together with the centre of the scanner gantry form the control room. The scanning rooms should be co-located to allow the flexible operation of the unit and the potential for sharing of control rooms. Staff will need to communicate with patients in the scanning room by intercom or equivalent.
- Control rooms - access to the scanning room directly from the control room is essential as is the ability to access the control room from the corridor. The rooms must accommodate the MRI control desk and workstation, monitoring equipment, limited storage and hard and soft copy viewing. The room occupancy will average three to four persons.

- Trolley Bay - space to accommodate up to two trolleys at any one time.
- Storage (to be shared with Interventional Radiology)
- Sub waiting including wheelchair waits
- Fully assisted patient sanitary facilities
- Assisted patient changing plus lockers. Once gowned, patients should access a non-public sub-wait adjacent to the relevant investigation room. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.

Computerised Tomography
In view of the clinical urgency of certain cases the CT suite must be immediately accessible for patients referred from the Urgent and Emergency Care Zone and for Neurosciences patients from the Inpatient Zone. It will also require immediate access to the shared Imaging recovery area.

The accommodation includes:

- Scanning Rooms – the rooms should be co-located to allow the flexible operation of the unit and the potential for sharing of control rooms. Each must be adjacent to a control room with visual and aural contact and direct access. The scanner must be aligned to the patient observation window in order to provide the radiographer with a full-length view of the CT scanner together with the centre of the scanner gantry form the control room. The room will accommodate the CT scanning unit and the associated patient couch, which will be integrated with the CT scanning gantry and limited storage facilities
- Scanner Control Room - the entrance doors to the CT scanning room must be visible from the control room and staff must have good observation of the patient through the long axis of the CT from the control desk or workstation. Staff will need to communicate with patients in the scanning room by intercom or equivalent. Access to the scanning room directly from the control room is essential as is the ability to access the control room from the corridor.
- Laser Imaging area for the printing of CT images (this could be shared with other modalities). This is required when PACS or related systems are down.
- Patient Preparation - this should be adjacent to the scanning room and the sub wait area and shared between CT, MRI and Fluoroscopy.
- Storage - to be shared with Interventional Radiology
- Sub waiting including wheelchair waits
- Patient ambulant and assisted changing cubicles plus lockers with access to a non-public sub-wait area adjacent to the relevant investigation room.
- Patient assisted sanitary facilities

Interventional Radiology
These rooms must be readily accessible from any inpatient area and the Urgent and Emergency Care Zone, and be adjacent to the shared imaging recovery facility. There would be significant advantage in these rooms being co-located with theatres to take advantage of sharing admission and recovery facilities. The facility includes:

- Interventional Rooms – each room will be constructed to the same standard as an Operating Theatre. In view of the training requirements a direct televisual (including audio) link is required from the rooms to the adjacent control rooms.
- There must be direct access from the interventional room to the operator's room and between the scrub area and the interventional room. As ERCPs are undertaken within the Interventional Suite provision must be given to the process for transporting scopes for decontamination and their storage.
- Scrub bay - must be adjacent to the relevant interventional room, and capable of accommodating three staff.
- Control Rooms – these must be adjacent to the interventional rooms and ensure observation of the patient and have direct vision to the entrance doors to the interventional room. In addition to accessing the operator's area from the interventional room, access must also be capable from the departmental corridor. Each of control rooms will serve a pair of interventional rooms .
- Patient preparation room - this should be adjacent to the scanning room and the sub wait area and shared between CT, MRI and Fluoroscopy.
- Storage - two storage areas – one general equipment store and one for sterile equipment, part of which requires bespoke facilities for the safe storage of coils etc.
- Sub waiting including wheelchair waits
- Ambulant and assisted patient changing with lockers with access to a non-public sub-wait area adjacent to the relevant investigation room.
- Partially assisted patient sanitary facilities
- Clean utility prep
- Dirty utility
- Domestic services

8.2 Cardiac Catheterisation Suite

The accommodation includes:

- Catheterisation Laboratories - fully equipped large laboratories which will including imaging equipment. The laboratories need to be immediately adjacent to the CCU with recovery facilities. The rooms need to have x-ray shielding/lining and comply with IRMER.
- Pacing Room - for temporary implantation and will include imaging equipment. The room needs to be immediately adjacent to the CCU. The rooms need to have x-ray shielding/lining and comply with IRMER.
- Control rooms – these must be adjacent to the catheterisation laboratories and ensure observation of the patient and have direct vision to the entrance doors. In addition to accessing the operator's area from the laboratories, access must also be capable from the departmental corridor.
- Preparation Room - this should be adjacent to the laboratories and the sub wait area. It must be capable of accommodating a patient on a trolley/ bed or couch. In the event that a general anaesthetic is required it will be administered within the patient preparation room and therefore appropriate medical gases and scavenging will be required.

- Scrub bay - must be adjacent to the relevant laboratory and capable of accommodating three staff.
- Stage 1 recovery
- Staff base plus clean utility
- Clean utility prep
- Dirty utility
- Resuscitation trolley bay
- Domestic services
- Sub waiting including wheelchair waits
- Ambulant and assisted patient changing cubicles and adjacent secure lockers
- Partially assisted patient toilets
- Storage for general equipment, pacing equipment and sterile supplies
- Clean & dirty utilities and domestic services.

8.3 Lithotripsy Suite

Although managed and operated by the Urology Department the Lithotripter Suite must be co-located with the Imaging Department in order to ensure good access to pre-treatment diagnostic x-ray and allow the patients to access the shared support areas including reception and post procedure recovery.

The accommodation includes:

- Lithotripter Room – Within the room there will be a large control panel area lead shielded from the treatment area. The room must be capable of supporting a patient who has been administered with sedation or general anaesthetic, i.e. piped gases and suction facilities. There must be direct access from the sub wait area and ready access to the recovery facility.
- Scrub bay - must be adjacent to the Lithotripter Room, and be capable of accommodating up to 3 staff.
- Sub waiting including wheelchair
- Assisted changing cubicles plus adjacent lockers
- Patient assisted sanitary facilities
- Resuscitation trolley bay
- Storage
- Dirty utilities

8.4 Operating Theatres

This suite will provide services to the whole site for all specialties excluding Obstetrics.

To maximise flexibility the operating theatre suites must be standard in design and suitable for non-elective and elective activity including day cases. This includes the capability for invasive surgery, laser surgery, and an ultra clean environment. All theatre suites must also be designed to appropriate radiation protection standards (IRMER) and be of a rotated not handed design. The theatre suite will also be co-located with the Endoscopy procedure rooms in order to maximise the potential for shared support and options for future flexibility.

There would be significant advantages in co-locating theatres with the cath labs and interventional radiology rooms to share admission and recovery facilities.

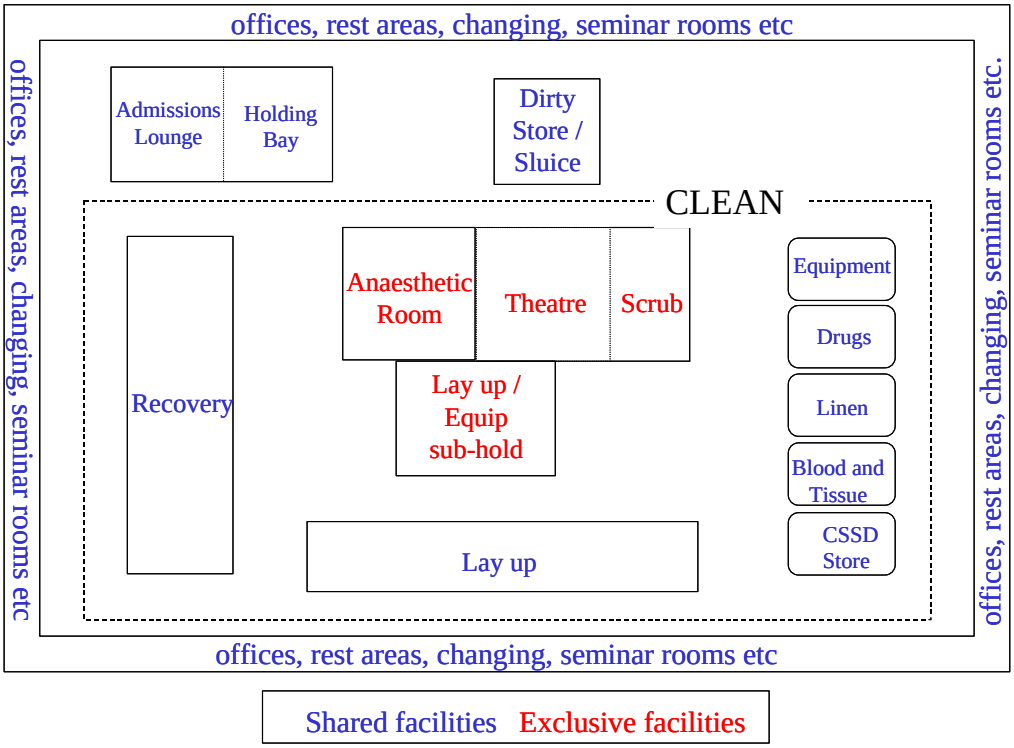
The overall design should be based upon the principles contained within the HBN, including room adjacency, services, air flow/changes, radiation protection and layout.

Although the workflow of the complex will be generally between 07.30 and 19.30 there will be 6 dedicated Emergency theatres to which access will be required twenty-four hours per day.

The accommodation should be provided in a single location and have an immediate adjacency to the Integrated Critical Care Unit. If the ICCU or any theatres are on more than one floor there must be dedicated lifts capable of accommodating patients with full critical care equipment and the team.

Although there is a requirement to maintain high levels of sterility in key areas of the complex the Trust does not wish to necessarily develop a design based upon "clean" and "dirty" corridors but rather a "clean core". Staff will require ease of access to instruments, equipment, blood and tissue products, drugs and linen from all operating theatres and the Stage 1 recovery areas.

The diagram below shows key relationships between areas of the department:



Admissions area

- Reception - The model of care indicates that patients accessing the hospital for pre-planned surgery will arrive on the day of treatment or investigation. All such patients will be directed to a single registration area in theatres where they will undergo their administrative and clinical registration including any preparation required prior to commencement of their treatment or investigation. For patients being admitted the day before surgery, such preparation will take place in the referring zone. Transfer to a nursing unit will take place after the procedure or investigation has been completed. It is therefore essential that there is a close relationship between this area, the operating theatres and the nursing units
- Patient waiting – pre- change area
- Patient ambulant and assisted sanitary facilities
- Porters Base - base/staff room for in-house porters. In addition to lounge chairs and coffee tables a PC workstation and telephones are required.
- Theatre Pre-Admission area – individual cubicles where patients can change and wait, and where staff can examine and consult with patients before their procedure (if required). Ideally, this area will be designed so it can be used flexibly through the day – initially as a pre-admission area and subsequently as a discharge lounge type facility for those undergoing day procedures.
- Seminar/meeting room
- Holding Bay - for patients on trolleys/beds prior to procedure.
- Staff Base and clean utility/supplies
- Store
- Domestic services and disposal hold
- Dirty utility

Operating Theatre Suite

The operating theatres should be provided on the basis of individual suites including dedicated anaesthetic room, scrub and preparation.

The majority of elective patients will enter the anaesthetic room on foot from the waiting area. Inpatients will have had their administrative and clinical details checked on the ward and will be escorted directly to the holding bay.

Access to the operating room will be via the anaesthetic room (foot first) and on completion of the procedure the patient will proceed directly to the stage 1 recovery area without passing through the anaesthetic room.

Each theatre suite will comprise the following accommodation:

- Operating Theatre - in order to support the training requirements of the Trust all of the operating theatres must have audiovisual links with the EWDC (2 way audio 1 way visual). Consideration should be given to the ability to supervise the proceedings within different theatres. Consideration should also be given to the potential for increased use of robotics and automation within the operating theatre. The design solution must be capable of accommodating ceiling and wall mounted equipment rather than the traditional floor mounted.
- Anaesthetic room

- Scrub Up - three place including ability to be gowned with assistance. Could be grouped.
- Preparation - could be grouped.
- Exit Bay - Holding bay for an empty bed / trolley whilst patient is in theatre, which will require wall sockets to facilitate the charging and maintenance of equipment.
- Dirty utility - could be grouped.
- Storage

Stage 1 Recovery
All patients will undergo their initial recovery in this area, before returning to the referring zone for Stage 2 recovery management.

There would be significant benefits in sharing recovery between theatres, endoscopy and interventional radiology.

There must be direct access to the Stage 1 recovery area from all the theatres. This area is for patients requiring frequent monitoring following extubation. Patients will be on a trolley, and each trolley space will be provided with full bed head services including gases, suction, emergency call, power outlets etc. Consideration should be given to the provision of a ceiling hoist system to all recovery spaces within the open plan areas and single bedrooms.

It is anticipated that the recovery facility will be operated as more than one functional unit. There will be the equivalent of 1.75 recovery spaces per operating theatre, of which 87.5% will be in an open plan area, with appropriate regard for the privacy and dignity of patients, and at least 12.5% single bedrooms to support patients who are high risk in terms of infection control.

The stage 1 recovery accommodation includes:

- Single trolley bays
- Single bedrooms
- Staff bases, each for two staff
- Resuscitation trolley bays
- Dirty utilities with macerators
- Stores for sterile supplies

Clinical Support Facilities
In view of the likely size of the complex it is anticipated that the clinical support facilities will be distributed to support a proportion of the theatres, not centralised, although the Trust is willing to consider creative solutions which ensure that appropriate access can be achieved.

With the exception of flexible endoscope cleaning there will be no decontamination or sterilisation of instruments undertaken within the operating theatre complex.

The supporting accommodation includes:

- Reporting Rooms

- Blood Banks - for fridges and freezers for the storage of blood, blood products, tissue and bone. The room must be secure and adequately temperature controlled to ensure the safe operation of the issue fridge. Space for a computer workstation is required.
- Near Patient Testing - an area where a limited range of analytical equipment (e.g. blood gas analyser, coagulometers) is housed to provide stat laboratory investigations.
- Flexible endoscope cleaning and store - for onsite cleaning of flexible endoscopes.
- Mobile equipment bays - storage for x-ray equipment, image intensifier and lead aprons (~30).
- Resuscitation and cardiac arrest trolleys - an area for location of the cardiac arrest/emergency trolleys. Minimum of one per four theatres plus one in recovery and one in patient preparation areas.
- Disposal holds & domestic services
- Satellite pharmacy – pharmacy stock areas – particularly for the storage of bulk IV fluids.
- Bulk stores
- Equipment stores
- Linen store
- Medical gas cylinder stores

Operating Theatres: Staff Facilities
Staff will not generally be expected to leave the Operating Theatre complex during their shift and therefore provision for education/training and staff welfare facilities must be made within the facility, although it is not anticipated that these should be located within the clinical core of the department.

Staff facilities include:

- Staff change – to include footwear washing facilities
- Staff rest - to be co-located with beverage facilities.
- Staff toilets & shower facilities – ambulant and assisted

Operating Theatres: Administration
The administrative support for the complex should be centrally located but not within the Clinical Core of the department.

The accommodation includes:

- Offices/resource bases
- Seminar room

8.5 Operating Theatres: Department of Anaesthetics

Although the Department should be adjacent to the Operating Theatre complex with an adjacency to the ICCU the facilities should not be provided within the clinical complex.

The accommodation includes:

- Offices
- Reprographics
- Staff beverage facilities
- Staff ambulant and assisted sanitary facilities
- Domestic services

8.6 Endoscopy

The endoscopy service will provide inpatient and outpatient diagnostic and therapeutic services for patients with Gastro-intestinal (GI) symptoms, plus other GI investigations including breath tests, motility tests, capsule endoscopy, Endoscopic retrograde cholangiopancreatography (ERCP) and Endo-ultrasound. The unit will also provide other endoscopic procedures such as bronchoscopy and percutaneous gastromy. There will be no service for paediatric patients.

The service model is based upon maintaining separate flows for different patient groups (acute/community, planned/unplanned, inpatient/outpatient) but does not assume the provision of dedicated equipment or facilities for any individual cohort.

The model of care indicates that patients accessing the hospital for pre-planned inpatient endoscopy will arrive on the day of treatment or investigation. If required, transfer to an inpatient-nursing unit will take place after the procedure or investigation has been completed.

Patients attending for planned outpatient procedures may be booked for their procedures at a time after their outpatient appointment or attend one-stop clinics at the same time as their outpatient appointment. It is essential that there is straightforward access between the endoscopy rooms and an outpatient cluster within the Ambulatory Zone.

Access for unplanned patients will be required from both the Inpatient and Urgent and Emergency Care Zones and the integrated Community Hospital. In these cases, it is essential that privacy and dignity is maintained at all times and therefore the Trust will require identification of distinct access to these areas and waiting from the patients arriving directly into the relevant zone.

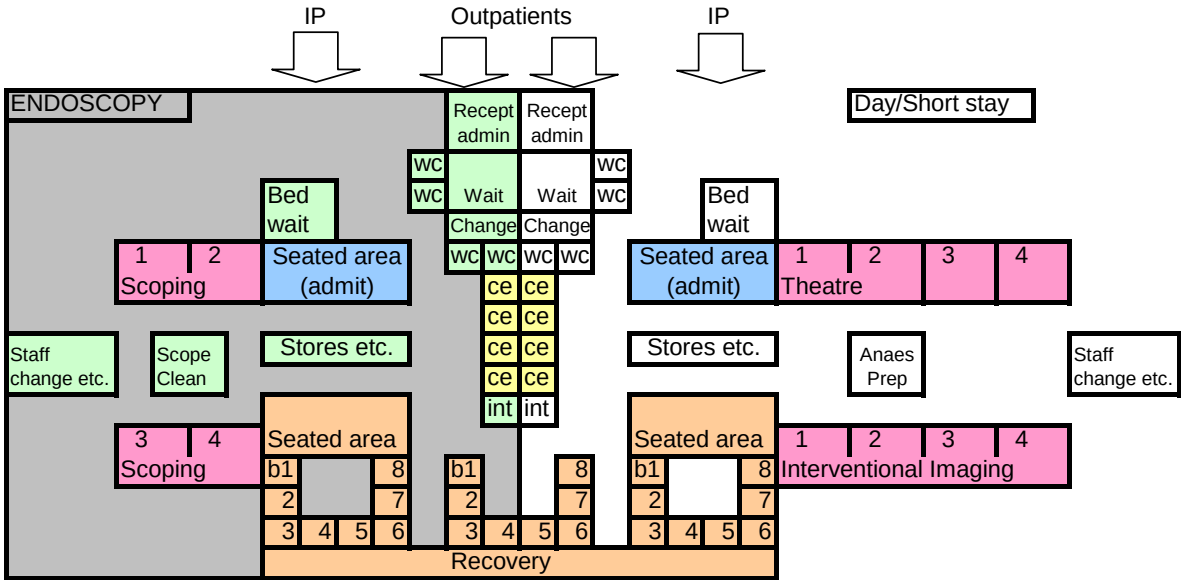
The overall design should take account of the principles contained within HBN 52, including room adjacency, services, radiation protection (IRMER) and layout.

The Endoscopy generic accommodation includes:

- Reception
- Pre-procedure sub waiting including wheelchair waits
- Patient ambulant and assisted changing facilities plus adjacent lockers. Once gowned, patients should access a non-public sub-wait adjacent to the relevant procedure room.
- Patient preparation - preparation rooms adjacent to the endoscopy rooms and the sub-waiting area. Each must be capable of accommodating a patient on a trolley, couch or bed. In the event that a general anaesthetic is required it will be

administered within the patient preparation room and therefore adequate medical gases, scavenging and suction will be required.

- Staff base for two plus clean supplies
- Patient sanitary facilities including bidets
- Consulting/examination rooms
- Endoscopy rooms - the rooms must be located together, with access to scope cleaning. The rooms all require medical gas, suction and emergency call with the capability of allowing general anaesthetic procedures. These rooms must also be enabled for x-ray procedures with the capacity to install a C- Arm. Audio-visual links will be required from these rooms to seminar and teaching facilities.
- Recovery/Holding bay - the stage 1 recovery areas and holding bay for beds must be adjacent to the treatment rooms. Endoscopy could share recovery facilities if the design locates Endoscopy adjacent to theatres.
- Endoscope cleaning - the room should be large enough to accommodate automated endoscope reprocessing machines as recommended in the British Society of Gastroenterology Guidelines for Decontamination of Equipment for Gastrointestinal Endoscopy, October 2003.
- Male & female staff changing and locker facilities
- Staff sanitary and shower facilities
- Staff beverage facility
- Office/resource base
- Storage
- Dirty utility with macerator
- Mobile x-ray equipment and image intensifiers parking.
- Domestic services and disposal hold
-
- The layout of the unit and its potential co-location is shown in the following diagram:



8.7 Medical Illustration

The Medical Illustration Department provides support to the Trust's clinical and educational activities. The service includes:

Clinical photography

- On-demand response to theatres, wards and post mortem examinations
- Ability to attend clinics as required
- Maintain presence in department for outpatients and hospital staff
- Video recording of clinical conditions.

Technical services

- Preparation of electronic presentations (slide and flat bed scanning)
- Digital photography of x-rays and other original material
- Video conferencing and audio-visual support
- Non-clinical photographic service.

The accommodation includes:

- Clinical Photography Studio - it is essential that the photographic areas achieve the ergonomic parameters outlined below allowing the appropriate lenses to be used when photographing patients. The clinical photography studio needs to be 6.0 x 4.0 metres with a minimum ceiling height of 2.9 metres to accommodate overhead photographic lights and tracks. This room requires blackout facilities (windows are not required). The ceiling must be capable of safely supporting background paper rolls. Both studio areas (clinical photography and video) require a ceiling mounted hi-glide lighting system to allow the mounting and movement of photographic lighting units including the ceiling mounted electrical power points. Hand washing facilities are required.

- Studio -Video - - it is essential that the photographic areas achieve the ergonomic parameters outlined below allowing the appropriate lenses to be used when videoing patients. It is essential that the fixed distance required for video gait analysis is achieved (6.0 metres x 7.5 metres) with a minimum ceiling height of 2.9 metres to accommodate overhead photographic lights and tracks. This room requires blackout facilities (windows are not required). The ceiling must be capable of safely supporting background paper rolls. A background curtain mounted on a track is required, which is wide enough to allow the filming of patient movements against a continuous background. The video studio needs to be soundproofed to a level that excludes all external sounds and the acoustics need to be such that sound does not travel throughout the studio. The studio should have only one set of doors and these need to be airtight. The studio will require a quiet air conditioning system. Hand washing facilities are required.
- Retinal Screening Room - the dimensions of the retinal screening room must be adequate to position the camera appropriately. This room requires black-out facilities (windows are not required). Hand washing facilities are required.
- Interview Counselling Room

- Work Room (Posters) - the room needs to be large enough to accommodate a poster printer (dimensions 1650 mm wide x 700 mm deep x 1800 mm high) and a large free standing format paper cutter (1800 x 600 x 1000) with sufficient circulation space to allow access to different cable connections and to facilitate the changing of paper rolls and ink cartridges.
- Copy Room - the graphics editing area should be sufficiently large to accommodate all of the relevant equipment (Light box (750mm x 600mm) on a bench 450mm inches high, copy stand 1200mm x 600mm and bench/table 1200 x 600mm) whilst providing space to view the work in production on a screen at a workstation.
- Video editing -The video editing area must accommodate all the related equipment and provide enough space for clinicians and department staff to review tape footage and undertake video production procedures. This room should be sound attenuated to allow voiceovers to be recorded free from outside noise
- Storage - secure area with suitably sized shelves required for negatives, CDs, DVDs and video tapes plus secure equipment storage area to house digital cameras and lenses.
- One-person reception aligned to one of the offices
- Sub-waiting including wheelchair waiting for. The photographic studios and retinal screening room should be accessed directly from the waiting area
- Patient assisted sanitary facilities
- Assisted patient changing facilities.
- Staff sanitary facilities
- Offices
- Beverage facility
- Domestic services and disposal hold

8.8 Pharmacy

The hospital pharmaceutical service is responsible for all aspects of Medicines Management across the Trust in accordance with legal and professional requirements to meet the needs of its customers and consumers.

The key functions undertaken within the Pharmacy are:

- The management of medicines for all patients in all clinical zones including dispensing for individual patients (inpatient or outpatient) and supplying stocks of medicinal products to nursing units and departments some of which will require aseptic preparation,;
- The provision of advice and information to patients, medical, nursing and other professional staff to ensure the safe and appropriate selection, use and administration of medicines;
- The procurement and storage of pharmaceuticals and pharmaceutical products. For the purposes of this document the terms the storage of pharmaceutical products does include bulk intravenous fluids.

The Trust does not wish to develop a service model based upon multiple dispensing points but a single dispensary, which is accessed discreetly by staff supporting the Core Clinical, Urgent and Emergency Care and Inpatient Zones and patients from the Ambulatory Zone and the Integrated Community Hospital.

The management of pharmaceutical supplies will require direct delivery and storage of bulk items. It is therefore essential that the department has direct access for such deliveries and would therefore anticipate location at ground level.

Although it is acknowledged that a limited supply of intravenous fluids will be retained within the Pharmacy this specification has been developed upon the assumption that such items will be capable of ward/departmental direct deliveries, and this is reflected in the storage allowances within the schedule of accommodation.

The Trust would also anticipate that full advantage is taken in developing the design solution of the advances in technology that affect Pharmacy services, including electronic prescribing and automation of stock control for dispensing and distribution. The provision of automatic distribution systems forms part of the Trust's requirements.

It is anticipated that the department will operate seven days per week 08.00 until 20.00. There will be an emergency service requirement, the supply function of which is assumed to be on the basis of automated delivery of emergency medicines to a secure collection point. Initiation of this delivery will be via remote access to the Pharmacy IT system.

The service model is centred upon proactive involvement of the pharmacy team in the care of the patient, which will necessitate significant input from the pharmacy team within the patient areas including ICCU and the nursing units.

The accommodation includes:

- Reception - will be a focal point for patient information and will provide facilities for privacy to allow patient specific information, advice and instruction on compliance to be given. An administration function will take place in the reception area therefore telephones and workstations will need to be provided.
- Dispensary - the hub of the department operating closely with all of the key sections. It is essential that the dispensary, stores and distribution areas are in close proximity with ease of access to and from the management support offices to ensure appropriate supervision of the dispensing activity and general communication. The main dispensary is likely to accommodate up to 20 staff, and consideration must be given to the interrelationship with the robotic units and volume of work in progress within the section, including dispensing, checking and materials management.
- Goods Receipt Distribution and Storage - the goods receiving bay must have direct access for road vehicles, including articulated vehicles, and have facilities for the immediate checking of goods. There should be immediate access from the receiving bay to the store area. The temperature controlled area and bulk fluids store must be accessed directly from the main store. The relationship between the store area and the main dispensary is vital and there should be clear delineation between any stock control robots and a dispensing bay within the space. The unlicensed medicines store should also be accessible directly from the dispensary area. The functionality may alter for the distribution of products dependent upon the arrangements for direct ward delivery by manufacturers. It is assumed that

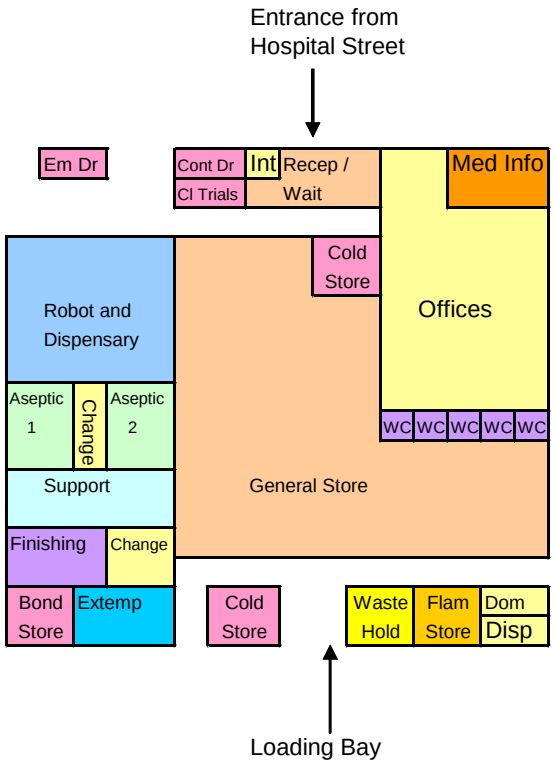
such a system will be in place and therefore the distribution role will be minimal, there will however be a requirement for workstation facilities in order to process orders, together with a quarantine store, with appropriate disposal facilities, for the management and processing of returned drugs including some cytotoxics.

- Controlled Drug storage - for security the Controlled Drug storage area should open directly from the main dispensary and be designed to meet the relevant Home Office Construction guidance.
- Temperature controlled cold storage area - walk-in area adjacent to the main storage facilities.
- Offices and Seminar room
- Medicine information – to accommodate six staff
- Staff sanitary facilities
- Staff rest room & beverage facility
- Domestic services & disposal hold
- Preparation Unit/Aseptic Suite - the facility will dispense items required as sterile products together with high risk products including parenteral nutrition, cytotoxic drugs and pre-filled syringes. The suite will comprise:

    - Clean rooms
    - First and second change rooms
    - Aseptic support room
    - Finishing area
    - Extemporaneous preparation
    - Assembly area
    - QA area

- The Medicines Information section will accommodate various electronic databases and reference material which will be widely utilised by the majority of pharmacy staff in addition to the staff permanently operating in the area and must therefore have an adjacency to both the Dispensary and the Clinical Pharmacists work areas.

The Purchasing section should be located to ensure an adjacency with both the store and with the main dispensary. The Procurement Pharmacist should however be co-ocated with the store. The main adjacencies for the department are shown below:



All accommodation is to be provided in line with HBN14-01, formally HBN29

8.9 Pathology Services

Pathology accommodation is part the Enabling Scheme and as such the specification is not included – however information will be available on request should Project Co propose to re-provide this facility.

8.10 Mortuary

Post mortems will not be performed, the mortuary will have body storage and viewing facilities only. All rooms and areas based on HBN20.

- Body Store - for fifty-seven bodies in twelve compartment bays as follows (assumes five shelves per compartment):
  Fifty refrigerated (double ended)
  Five refrigerated extra wide (double ended)
  Two refrigerated/freeze (double ended)
- Viewing Facility - the viewing room will have temperature control, adjustable lighting and room for two chairs in addition to the plinth.
- Sub waiting including wheelchair
- Telephone booth
- Visitor assisted sanitary facilities
- Domestic services and disposal hold
- General store

- Staff sanitary facilities
- Trolley bay for three trolleys
- Body handling area including administration area

8.11 Clinical Equipment Service including Medical Physics

Clinical Equipment Service
The Clinical Equipment Service (CES) provides an in-house service for the purchase, acceptance, management, repair and maintenance of medical equipment used throughout the North Bristol Trust and local PCT's under specific service agreements.

In view of the important relationship with the clinical departments and the role of the medical equipment library in support of all of the clinical functions, straightforward, internal access within the main hospital building is essential.

Although it is not anticipated that the department will operate a dedicated receipt and distribution area there would be significant advantages of an adjacency to the hospital R&D area.

The accommodation includes:

- Reception – two-person reception. Controlled entry system to department with door high doors to access large items of equipment. Seating area for patients etc waiting for medical equipment.
- Goods Receipt and Dispatch - the goods inward requirement will support deliveries of new equipment and spare parts from suppliers together with items returned for repair or following loan from the equipment library. Consideration must be given to issues of control of infection including the potential for providing separate dirty and clean entrances. This area will accommodate a large rack (0.6m deep x 6m long x 2m high) with five shelves and a floor area of 1.5m x 6m in front to accommodate goods in and out for medical equipment.
- Decontamination Room - for the cleaning and decontamination of returned equipment prior to repair. (Dirty utility in schedule)
- General store – for ordering, acceptance, QA and storage of components/spare parts used in the maintenance and repair of medical equipment. This store should have racking on three walls for relatively small items. Ladder system to access higher storage. Storekeeper's office ensuite to general store.
- Large equipment store to include the storage of medical gas backup equipment (emergency manifolds, medical gas cylinders etc.)
- Store for beds and mattresses – this area will also provide facilities for bed and mattress maintenance and cleaning.
- Offices
- Medical Equipment Library - this area to include a work station for the library manager. A store for spare parts required for the repair and maintenance of the library equipment must be incorporated within the main library area. In view of the constant movement of equipment to and from the library it is anticipated that this will be close to the entrance to the department, but has no specific adjacency requirement to any of the mechanical workshop areas. One long wall racked out

for storage of medical equipment. Ten double 13 amp power sockets for charging medical equipment on each wall. Double high doors to access large items of equipment.
- Domestic Services and Disposal Hold
- Staff ambulant and assisted sanitary facilities
- Beverage facilities
-

Mechanical Engineering
The accommodation should be adjacent to the main receiving area and include:

- Workstations including bench space for technicians with an integral work station for the head of section/supervisor.
- Mechanical Workshop - with a load bearing floor to accommodate a range of large machine tools, which individually can weigh up to 1000kg and shall be adjacent to the Medical Engineering Section and linked by an internal door. There will be two Harrison M250 centre lathes (559 Kg each), one Bridgeport universal miller (997 Kg), two pillar drills, one Startrite power band saw, one power hacksaw and a number of smaller tools. There is a requirement to accommodate a large rack of service manuals and other controlled documents for this section. The space will accommodate a printer and scanner. Earth leakage protection and/or RCD is essential to all benches. Double high doors are required to access large items of equipment. A large sink is required in this area. Single and 3-phase electricity will be required. Dust and fume extraction will be required to some machines.
- Grinding Workshop - located adjacent to the mechanical engineering section and linked by an internal door. This will house the dirty processes such as grinding machines and welding bay. There will be three off hand grinding machines, one power lynisher, one off hand polisher, one TIG welding set and a number of smaller tools. A steel welding bench with full extract hood will be required, this should be surrounded by a flexible welding curtain. A S/S sink will be required. Single and 3-phase electricity will be required. Dust and fume extraction will be required to some machines. Earth leakage protection and/or RCD is essential.

Medical Electronics
This accommodation should be close to the main receiving area and include:

- Workstations including bench space for technicians with an integral workspace for the head of section/supervisor. There is a requirement to accommodate a large rack of controlled documents for this section. The space will accommodate a printer and scanner. Earth leakage protection and/or RCD is essential to all benches. Double high doors are required to access large items of equipment. A large sink is required in this area.

Anaesthetic and Lung Ventilators section
This accommodation should be close to the main receiving area and include:

- Workstations including bench space for technicians with an integral workspace for the head of section/supervisor. There is a requirement to accommodate a large rack of service manuals and other controlled documents for this section. The space

will accommodate a printer and scanner. Earth leakage protection and/or RCD is essential to all benches. Double high doors are required to access large items of equipment. Medical gas terminal units will be required at each bench. Oxygen, MA4 & 7, Vacuum and AGSS (Nitrous oxide may not be necessary by 2013).

Medical Physics
Although performing different functions the CES and Medical Physics teams should be co-located due to the overlap in terms of service delivery and planning. The accommodation includes:

- Office for Head of Service.
- Workstation including bench space for one technician.
- Storage for test equipment, consumables and emergency supplies.

8.12 Reablement Services

The focus for these therapy & reablement staff is helping minimise inpatient lengths of stay in the Acute Hospital. This administration and resource base will be located in the Core Clinical Zone and used in conjunction with the treatment facilities within four of the Acute Hospital inpatient ward clusters. The base will comprise of the following:

- Single and multi- occupancy offices for Service Leads
- Resource bases for therapists, students, social workers
- Pantry/beverage facilities
- Seminar room
- Reprographics
- Storage
- Equipment cleaning room
- Staff ambulant and assisted sanitary facilities
- Domestic services & disposal hold

8.13 Staff Change

Facilities will be provided at Zonal level and must be sufficient to provide for the number of staff requiring changing, storage and shower facilities at any one time (estimated maximum 250). Shift and working patterns will need to be considered in agreeing the final design. Secure lockable storage will be required for personal property whilst staff are on site. Facilities will be:

- Staff sanitary facilities
- Locker area
- Staff showers
- Changing area

9 Staffing

The total number of staff will be approximately 600. It must be recognised that the majority of the departments (Imaging, Operating Theatres, Pharmacy, Therapies, Clinical

Engineering) undertake significant training functions at both undergraduate and post-graduate levels. Student numbers have been omitted from the above.

10 Patients

Patients utilising the facilities within the Zone will generally be adults, whose medical condition will range from the critically ill to the fully ambulant. All patients must have equity of access to all facilities and it must be recognised that the local population mirrors that nationally with an increasing proportion of older patients accessing healthcare.

The design solution for the functional areas within the Zone must also be sensitive to the differing cultural and religious requirements of the population, especially in terms of maintaining the privacy and dignity of individuals who may be partially clothed awaiting investigation/treatment/results. As a principle, the Trust does not wish patients who have changed or partially changed to share waiting facilities with those who have not.

11 Relatives, Carers and Visitors

It is not anticipated that relatives, carers or visitors will have regular access to the functional units within the zone. However there will be exceptional circumstances when access will be required for relatives and carers. In such cases access must be controllable whilst ensuring individuals are welcomed and feel able to arrive and leave as needed.

12 Planning and Design Principles for the Core Clinical Zone

12.1 Ambience and Decoration

The aim is for a family-friendly, homely and non-institutional environment with particular emphasis on the use of colour, contrast and texture to provide a stimulating, non-threatening environment for all patients regardless of ability or impairment.

The design should access the research available on hospital environments, particularly for older people: for example, all toilet doors the same colour, contrasted with other doors. Consideration should be given to the clear differentiation of each Zone.

The Zone must be designed to meet the needs of the patient, providing ease of access and an environment that enhances the reduction of anxiety and supports patient dignity.

12.2 Wayfinding

Patients attending the Core Clinical Zone may need to attend different departments to undergo assessment and/or treatment. The wayfinding solution must therefore support the identity of the Zone, the easy recognition of departments and most appropriate access routes for all levels of mobility.

12.3 Security and Observation

Areas must be secured out of hours to prevent unauthorised access whilst ensuring easy exit. Consideration must be given to the design of the systems to ensure that the legal

rights of patients wishing to leave are not compromised whilst ensuring confused patients cannot accidentally leave.

12.4 Privacy and Acoustic Control

The design should provide an environment, which respects the needs of all patients in terms of privacy and dignity as well as facilitating the delivery of good clinical practice and care.

12.5 Environmental Parameters

Generally, all public areas, concourses, seminar meeting rooms offices and areas not occupied by patients will be controlled by a BEMS system to the requirements of HTM 2025 in respect of temperature and humidity; the following rooms will require a degree of local control

- Consulting rooms
- Blood bank
- Mortuary viewing room

The following rooms within Pharmacy must not exceed 24 degrees C:

- Dispensary
- General Store (including clinical trials)
- Clean Rooms

Project Co shall ensure that the humidity effects of any temperature adjustments are automatically compensated for.

12.6 IM & T

Details of the active components associated with IM&T can be found in the Data Room Sheets to the Equipment Services Specification.

It is assumed that all patient records will be electronic and note entry/review and result/diagnostic information will take place within the Core Clinical Zone.

12.7 External Space and Courtyards

Access to outside spaces (balconies, courtyards, gardens etc.) is highly desirable for patients, staff and relatives. The areas should provide a range of surfaces and levels with adequate suitable seating and tables.

North Bristol NHS
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Appendix 7.iv (c)

AMBULATORY CARE ZONE SPECIFICATION

AMBULATORY CARE ZONE

1 Philosophy of Service

The purpose of the Ambulatory Care Zone is to provide a flexible suite of facilities where patients can be rapidly assessed, diagnosed, and treated. The principles that underpin this are:

- Creation of a network of multi-disciplinary specialist teams that will pull clinical services into ambulatory settings and away from inpatient episodes
- The ability of these teams to offer multiple different patient pathways ranging from a single consultation with an expert to a complex one-stop diagnostic and treatment event
- Integration of community and hospital professionals within these teams
- A no-wait philosophy
- The development of an open and fluid culture within the new hospital that encourages joint working and avoids isolation of teams and services
- Standard design and Trust-wide co-ordination so that rooms are used but not "owned" by individual teams
- A requirement to encourage multi-professional education and training and link front-line services with training and education facilities.
-

2 Core Content

The facilities to be provided in the Ambulatory Zone include:

- Ambulatory Care Concourse
- 16 standard clusters of consultation/examination rooms with support accommodation, including 1 cluster which forms part of the Integrated Community Hospital
- Specialist outpatient accommodation to accommodate a limited range of patients
- Specialist cardiac, respiratory, urological, vascular and neurophysiology diagnostic investigation facilities distributed between the clusters
- A 15 station acute dialysis facility with support accommodation
- A therapy facility, including hydrotherapy
- A suite for medical day care co-located with the therapy and dialysis facilities
- Zonal support facilities

3 Strategic Design Principles

To reflect the philosophy of service, a number of key strategic design principles will apply as follows:

- The design should balance the need for flexibility and ebb and flow of patients between spaces with the need to create private and reassuring areas for groups of patients
- The facilities should have a non-institutional atmosphere with a clean, friendly, calm and therapeutic environment
- Facilities need to be future-proofed and able to accommodate changes in technology, service models, clinical education and specialty configurations.
- There will be a standard design and specification for all consultation/ examination rooms and they will be grouped in clusters of rooms that can respond flexibly to changes in demand for individual specialties in the short and long term
- Patients should be able to directly access services without having to pass through layers of reception/waiting. In addition, it must be possible for patients who have received distressing news to leave without passing through public areas
- Facilities should be designed to cultivate the no-wait philosophy and include techniques such as electronic queues, tracking systems, electronic screens and relationships between waiting areas and clinical rooms
- Facilities should be designed to facilitate one-stop interventions and treatments, including longer stays for complex assessment and treatment.
- Children and young people will be cared for throughout the zone and their specific needs in terms of facilities, safety, reassurance and entertainment will need to be addressed
- The environment must be appropriate to support patients with psychiatric conditions who will attend for diagnosis and treatment of their physical illness
- The emphasis will be on bringing the services to the patient rather than patients having to make lengthy or complex journeys between services. Clinical rooms should be designed to allow a mix of uses including diagnostic tests, phlebotomy, consultation, examination and minor procedures and be sound attenuated to ensure voice privacy.
- Diagnostic facilities should be easy for patients to access and could share waiting areas with outpatient clusters/other diagnostics where appropriate. It should also be possible for patients from different specialty teams or referred by GPs to access these diagnostics
- It should also be possible for small numbers of inpatients to access these diagnostics without compromising their privacy and dignity
- Supplies and stores should be readily at hand and secure where appropriate. These supplies should not be littered around corridors and waiting areas
- The movement of patients should be separated from that of goods and the public and visitors in order to ensure that the privacy and dignity of patients are not compromised.

4 Projected Activity

Activity projections for the Ambulatory Care Zone are described in the Outline Business Case. A major theme is a transfer of ambulatory work away from the acute hospital and into community settings.

5 Hours of Service

The facility is intended to be open 07.00 to 22.00 Monday to Saturday 6 days per week. It is not anticipated that procedures or treatments will be undertaken overnight although occasional emergency access will be required for diagnostics.

6 Specific Exclusions

One service has been identified as not appropriate for provision in the zone:

- Obstetrics (although allowance needs to be made for this to happen in the future)

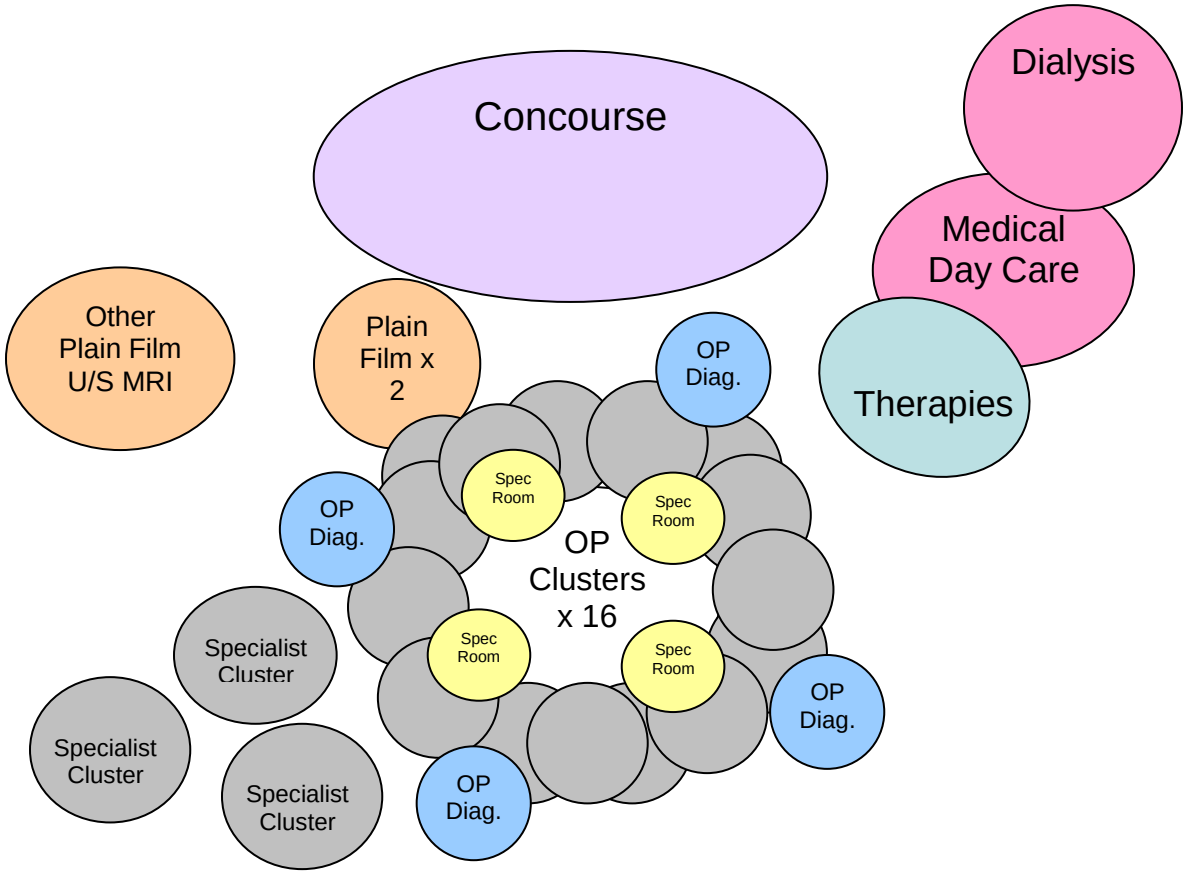
7 External Functional Relationships

The main links with other services are as follows:

- Imaging: elements of imaging need to merge into the zone where possible. Plain film should be directly accessible from some of the clusters (ideally sharing waiting areas) to allow single pathways for musculo-skeletal and chest patients. Other modalities such as MRI also need to be immediately adjacent.
- Pathology and Pharmacy - A distribution system e.g. pneumatic tube system is required for specimen samples and drugs. This should distribute to and from individual clusters.
- Inpatient Zone – some inpatients will also require access to services, particularly diagnostic tests. It is essential that their privacy and dignity is maintained at all times and therefore the Trust will require identification of distinct inpatient access and waiting for the patients arriving from the Inpatient Zone.
- Integrated Community Hospital – the Community Hospital outpatient cluster needs to be capable of interacting with all other components of the overall Community Hospital which needs to be capable of functioning as a single entity.
- Patients accessing the Therapy Services and Haemodialysis Unit often have marked disabilities it is necessary for them to have access to disabled parking and a transport set-down facility close to these services i.e. within 100 metres.

8 Internal Functional Relationships

The ambulatory zone is made up of a number of services that need to combine and integrate to provide the most efficient service for patients. These services need to relate to each other as described in the following diagram:



9 Functional Content

9.1 Ambulatory Care Concourse

The concourse (that could be part of a larger main hospital concourse) must be welcoming, non-institutional, family friendly and provide a range of seating, toilets and retail and vending facilities. The concourse seating should accommodate 100 people (not in regimented rows) in addition to that provided within the retail and food court areas. It is anticipated that this area will also be utilised by patients awaiting transportation home following their appointments and therefore accommodation for patients with wheelchairs must also be considered.

Meet and Greet, General Enquiries including security
The reception area must be strikingly visible and provide a meet & greet service. This position will provide a base for those staff who will act as wayfinders or guides for those who are unfamiliar with the layout of the hospital, or require advice as to the location of

a particular department, as well as a base for a security presence. The general enquiries desk must provide an accessible and welcoming first point of contact.

Wheelchair Parking
There should be provision for the storage of wheelchairs for the temporary use of patients on arrival.

Sanitary Facilities
Patient sanitary facilities are required including baby feeding and changing facilities.

Public Access Offices
A resource base and office accommodation will be used by the Patient Advice and Liaison Service who will address problems, concerns and comments that patients or relatives may have about the care and service received. These offices must be located within the concourse area with clear signposting to identify their location.

Information Centre
This area will provide space for the display and storage of information pamphlets on diseases, healthcare and support groups with appropriate facilities for internet access.

A resource will be provided for patients to undertake research as required.

Patient Training/Education Room
A room with a capacity for 50 people plus storage for training aids, with the ability to divide into two. This room will be used by any department within the Ambulatory Zone to meet the regular training requirements of patients e.g. Dietetics, Diabetes, SaLT, Renal etc.

Retail and Core Catering
There should be high quality retail space to include the provision of hot and cold beverages and snacks for patients, relatives and other visitors.

It is anticipated that an Automated Teller Machine service will be provided within this concourse area. The location should be considered sensitively, providing an appropriate balance between privacy and security.

Staff Rest
The Trust wishes to encourage staff to move away from their immediate work area whilst taking breaks. Therefore a shared provision is required adjacent to the main clinical areas. The staff-only areas should provide beverage preparation facilities, comfortable seating, low tables and hand rinse facilities.

Other Facilities

- Staff sanitary facilities
- Domestic Services
- Disposal hold

9.2 Standard Outpatient Cluster

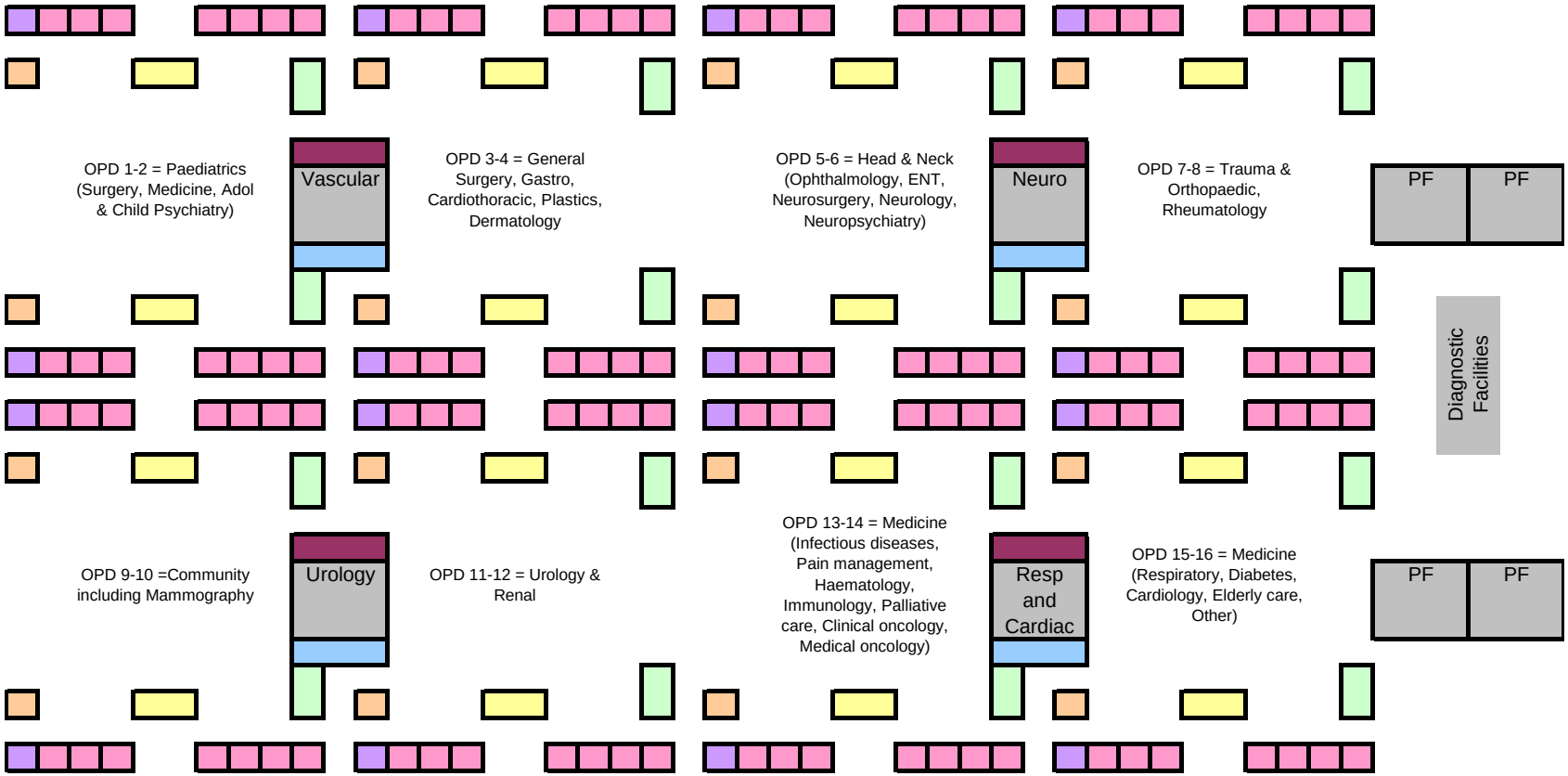
The clusters will be generically designed to allow change of use over time. The clusters should also be able to blend into each other in order to allow clinics to expand and contract without losing their coherence. The clusters should also blend with associated diagnostic services to avoid multiple queues and fractured patient pathways. The clusters include the following accommodation:

- Reception
- Resource base (5)
- Waiting areas
- Consulting examination rooms
- Clinical measurement room
- Procedure room
- Interview/Counselling room
- Specialist room (one between four clusters)
- Staff base (2)
- Clean & dirty utilities
- Patient sanitary facilities
- Storage
- Domestic Services and disposal hold (one between two clusters)
- A distribution system e.g. pneumatic tube (one between two clusters)
- Beverage bay (one between four clusters)
- Resuscitation trolley bay

Although the facilities should allow generic use, these clusters should be designed to create distinct areas that can be used to break-up the volumes of patients attending the zone into discrete clusters. This should allow the creation of a warm human feel to the facilities and allow teams to deliver personalised and patient-friendly services.

One of the generic outpatient clusters will need to function as part of the Integrated Community Hospital and will need to conform to the overall identity of the Community Hospital.

To facilitate the delivery of one-stop assessment and diagnostic processes the relationship between clusters and diagnostic facilities is critical as shown in the following diagram:



Consult/exam	13.5
Procedure room	17
Interview/counselling	10
Clinical measurement room	14
Specialist room	34
Staff base	5
Diagnostic facilities	
Storage/utility	

9.3 Specialist Outpatients

There are three specialist outpatient clinics described in this section:

- Dental including Oral Surgery and Orthodontics
- Audiology
- Laser Centre

Dental including Oral Surgery and Orthodontics

The accommodation has two distinct areas, the clinic site and the dental laboratories.

The Dental Clinic will have the following accommodation:

- Reception for 2 staff
- Waiting for up to 30 patients and relatives/carers, including wheelchair waiting, and will serve the dental, oral surgery and orthodontic clinics.
- A distribution system (e.g. pneumatic tube)
- Ambulant and fully assisted patient sanitary facilities
- Staff sanitary facilities
- Clean & dirty utilities
- Domestic services & disposal hold
- Dental Rooms require the same functionality as a standard consult/examination room, plus suction, overhead adjustable lights and the capability to perform dental x-rays.
- Recovery room will provide short-term chair-based recovery for patients who have undergone examinations or procedures as part of the orthodontic, maxillofacial or oral surgery services.
- Clean laboratory will require benching for up to 4 staff, plus a separate area for colour matching which will also require a natural light source. Two fume cupboards will be fitted within the laboratory. A compressed air supply needs to be accommodated, with appropriate ventilation. Non-slip flooring is essential due to the nature of the work.
- Dirty laboratory will incorporate a casting facility, sandblasters, polishing units and two small ovens.
- Plaster laboratory will need to incorporate bench space for 3 staff, plus plaster storage areas and silos. A dust extraction system, non-slip floor and suitable drainage are required.
- Storage facilities must be accessible from all the areas at all times. Items to be stored include dental study moulds, dental equipment and general storage.

Audiology
Full Audiology services for the Trust will be provided from a specialist outpatient cluster and will comprise a suite of basic and acoustic Audiology rooms plus an earmould workshop and balance assessment. The cluster needs to be situated in a quiet area with room to expand to provide future flexibility. Adequate communication/panic/fire systems for the deaf and hard of hearing are required.

Facilities other than those mentioned below are shared with other clusters:

- Reception for one member of staff to serve the Audiology cluster
- Sub-waiting
- Patient ambulatory sanitary facilities
- Staff sanitary facilities
- Administration office (single occupancy) co-located with reception
- 6 standard audiology rooms to be sound attenuated having an ambient noise level below 30Db
- 6 acoustic audiology rooms all soundproofed. Need to allow room for sound proofing ventilation systems. All soundproofed rooms to be located together sharing a common viewing room.
- Earmould Workshop - this room will accommodate a polisher and grinder with all the necessary dust extraction systems to meet H&S standards. A raised bench with suitable lighting to enable repairs to hearing aids is required. Room for a PC workstation also required.
- Balance function assessment - dedicated diagnostic auditory and balance function assessment room which needs to house a centrally situated couch that can be moved to different positions within the room. Additionally there must be adequate space for a sway platform.

Laser Centre
The Laser service for the south west will be provided from this cluster. Different laser systems are used to treat a variety of skin conditions, including vascular and pigmented lesions. It would be beneficial if patients could access this service discreetly and wait in a more private area as some may have facial disfigurements.

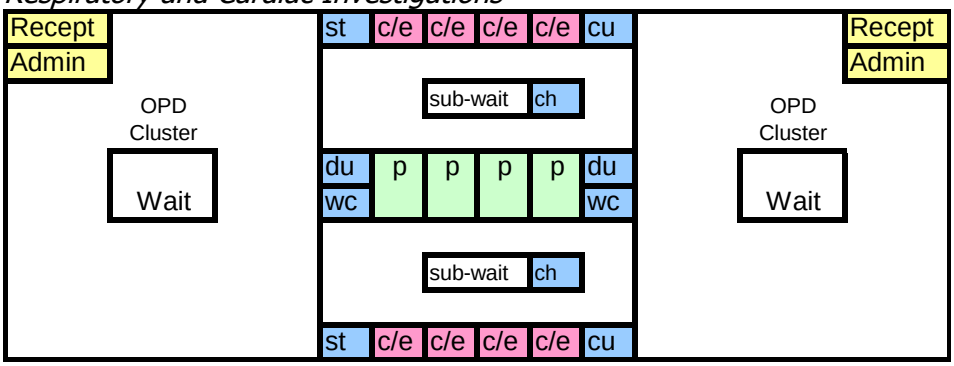
The Laser Centre facilities will include:

- Reception
- Waiting
- Office, co-located with reception
- Patient sanitary facilities
- Stores
- Consult/examination rooms
- Procedure rooms, compliant with laser protection regulations
- Camouflage room, which must have natural light
- Clean and dirty utilities

9.4 Diagnostic Services

Diagnostic services will be distributed within the zone and co-located with the appropriate outpatient cluster, e.g. respiratory investigations with chest outpatients as shown below. These services should share wait and reception wit outpatient areas and should not be closed off standalone departments.

Respiratory and Cardiac Investigations



Cardiac Investigations

This service will undertake the following as part of one-stop pathways:

- Exercise tolerance tests
- 24/48 hour Electrocardiogram (ECG)
- 24 hour ambulatory Blood Pressure (BP)
- Cardiac Echo's
- GP ECGs
- Event and loop recorders
- Tilt table testing
- ECG 12 lead recording

The Cardiac Investigations facilities include:

- Sub-waiting for 12 people
- Patient ambulant sanitary facilities
- Patient ambulant and assisted changing facilities. The standard patient change areas should be immediately accessible from the waiting area. Once gowned, patients should access a non-public sub-wait adjacent to the relevant investigation room. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.
- Clean & dirty utilities
- Storage
- Double-sided procedures rooms. Exercise and tilt procedures carried out in these rooms. All procedure rooms require piped oxygen and suction.
- Single sided investigation/procedures rooms. These rooms will be used for monitor fitting and analysis, echo and pacing follow up. All the investigation rooms must be co-located. Two investigation rooms must be provided with black out capability. Adjustable lighting will be required, as echo examinations will be undertaken in these rooms.

Respiratory Investigations

These investigative facilities will provide assessments for patients with suspected or established lung disease. The testing to be undertaken will include:

- Full pulmonary function testing

- Nebuliser assessment
- Oxygen assessment
- Heaf testing
- Skin prick testing

A significant proportion of the outpatient attendances will part of a longer episode involving other investigations and outpatient consultation potentially before and after their respiratory event. If the facilities are not located at ground level access the patient journey from the entrance must be as short as practical as patients have little exercise tolerance.

Access to the facilities must be directly from the sub waiting area. There is a requirement for patients to be tested whilst walking, (departmental circulation space could be used for this purpose although patient privacy and dignity must be maintained).

The Respiratory Investigations facilities include:

- Sub-waiting for 6 people
- Patient ambulant sanitary facilities
- Storage
- Procedures room - The procedure rooms should be immediately adjacent although interconnecting doors are not required. These will require piped medical gases to support the analysers, together with the provision of adequate ventilation from both the patient and equipment perspective.

Urodynamics
This department will undertake investigations of the upper and lower urinary tract for in patients and outpatients. A full range of investigations will be undertaken in the department including:

- Flow studies
- Standard cystometry
- Video cystometry
- Ambulant monitoring
- Pad tests
- Electromyography (EMG) and urethral pressure profiles
- Ultrasound assessment of residual urine
- Anal physiology

The Urodynamics facilities include:

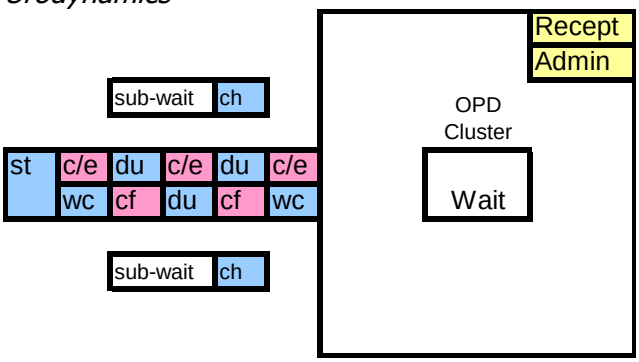
- Sub-waiting for 6 people
- Patient ambulant sanitary facilities
- Patient ambulant and assisted changing facilities. The patient change areas should be immediately accessible from the waiting area. Once gowned, patients should access a non-public sub-wait adjacent to the relevant

investigation room. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.

- Storage
- Procedures rooms - one of the procedure rooms needs to be suitable for the performance of fluoroscopy and will accommodate an image intensifier. This room should also be equipped with an electrically operated ceiling mounted hoist. All of the procedures rooms must be co-located and be equipped with adequate benching and storage.
- In addition to the shared facilities, both the clinical flows and procedures rooms require direct access to an en-suite dirty utility. Double swing doors are required from each room into a dirty utility so that doors can be opened without the need to touch handles.
- Clinical flows: flow studies and ultrasound assessment of residual urine will be carried out in this area. Blackout capability and appropriate adjustable lighting will be required as ultrasound examinations will be undertaken in these rooms.

These facilities and their relationship to the OP cluster set-up are illustrated below:

Urodynamics



Vascular Laboratory

This service will provide tools and tests for the diagnosis, pre-operative assessment and post-operative surveillance of arterial and venous disease. Although there is a clear relationship with the inpatient and outpatient vascular service there are also clinical linkages with stroke and renal services.

The tests to be undertaken within the department include:

- Doppler ultrasound for ankle and toe pressure measurement
- Duplex ultrasound for non-invasive imaging of arteries and veins.
-

The Vascular Laboratory facilities include:

- Sub-waiting for 6 people
- Patient ambulant sanitary facilities
- Storage
- Procedures rooms – Duplex scanning. These rooms must accommodate an electric tilting examination couch, and be capable of accommodating an additional exercise treadmill. Piped oxygen and suction will be required.

- Exercise room – Treadmill: all round access to the treadmill is required plus sufficient space to accommodate resuscitation equipment, Doppler pressure machine and waveform analysis equipment. The room must include space for dressing changes and storage of dressings.

Clinical Neurophysiology
The work of this department includes the diagnosis and management of a wide range of neurological and orthopaedic conditions e.g. epilepsy, neuropathy and nerve entrapment syndromes, multiple sclerosis and motor neurone disease. Patient activity in relation to inpatients will be adult only. However outpatient activity will include children and therefore specific consideration must be taken of this in the design solution.

The Neurophysiology accommodation includes:

- Sub-waiting for 6 people
- Patient ambulatory sanitary facilities
- Storage
- Procedures Rooms – Nerve Conduction Study. Space is required for a patient couch, equipment (mobile-based PC measurement recording systems) and up to four staff. Shielding of electrical cabling and distance from all potential sources of electrical noise (generators, lifts and major radiological devices for sensitive electro-diagnostic equipment) is essential.
- Electroencephalography (EEG) Rooms. Space is required for a patient couch and equipment. Shielding of electrical cabling and distance from all potential sources of electrical noise (generators, lifts and major radiological devices for sensitive electro-diagnostic equipment) is essential. Soundproofing will be required within all of the EEG rooms as these rooms undertake sleep recordings, which may require aid sleep induction.
- Evoked Potential (EP) Room. Space is required for a patient couch, equipment (mobile-based PC measurement recording systems) and up to 3-4 staff. Shielding of electrical cabling and distance from all potential sources of electrical noise (generators, lifts and major radiological devices for sensitive electro-diagnostic equipment) is essential.

The use of fluorescent lights should be avoided in all neurological investigation rooms.

Mammography
The mammography service operates a one-stop breast clinic. The mammography room should be attached directly to an outpatient cluster. It is essential that women can be seen by members of the multi-disciplinary team and move easily between the sub-wait, procedure room consult/exam rooms and mammography room whilst maintaining their privacy and dignity. Accommodation for this service includes:

- Sub-waiting for 6 people.
- Mammography room - a plain film room suitable for mammography shall be used for the one stop breast clinic. It must meet the requirements of the Ionising Radiation (Medical Exposure) Regulations 2000. All round access to

mammography equipment required, plus sufficient space for control station and PC workstation.
- Patient changing - the patient change areas should be immediately accessible from the waiting area. Once gowned, patients should access a non-public sub-wait adjacent to the relevant investigation room. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.

9.5 Medical Day Care

This unit is designed to treat patients on a slower stream than the 1-stop outpatient facilities. Typically, patients will stay here for hours rather than minutes.

Patients will attend the unit for:
- Investigations and treatments such as biopsies, joint injections and lumbar punctures.
- Intravenous therapy either in the form of chemotherapy or blood transfusions, or drug infusions and blood withdrawal.
- Complex multi-disciplinary assessment and diagnosis

It is essential that the design solution allows segregation of those patients who may be immuno-compromised from other patients and that specialist nursing teams can focus on caring for specific patient groups

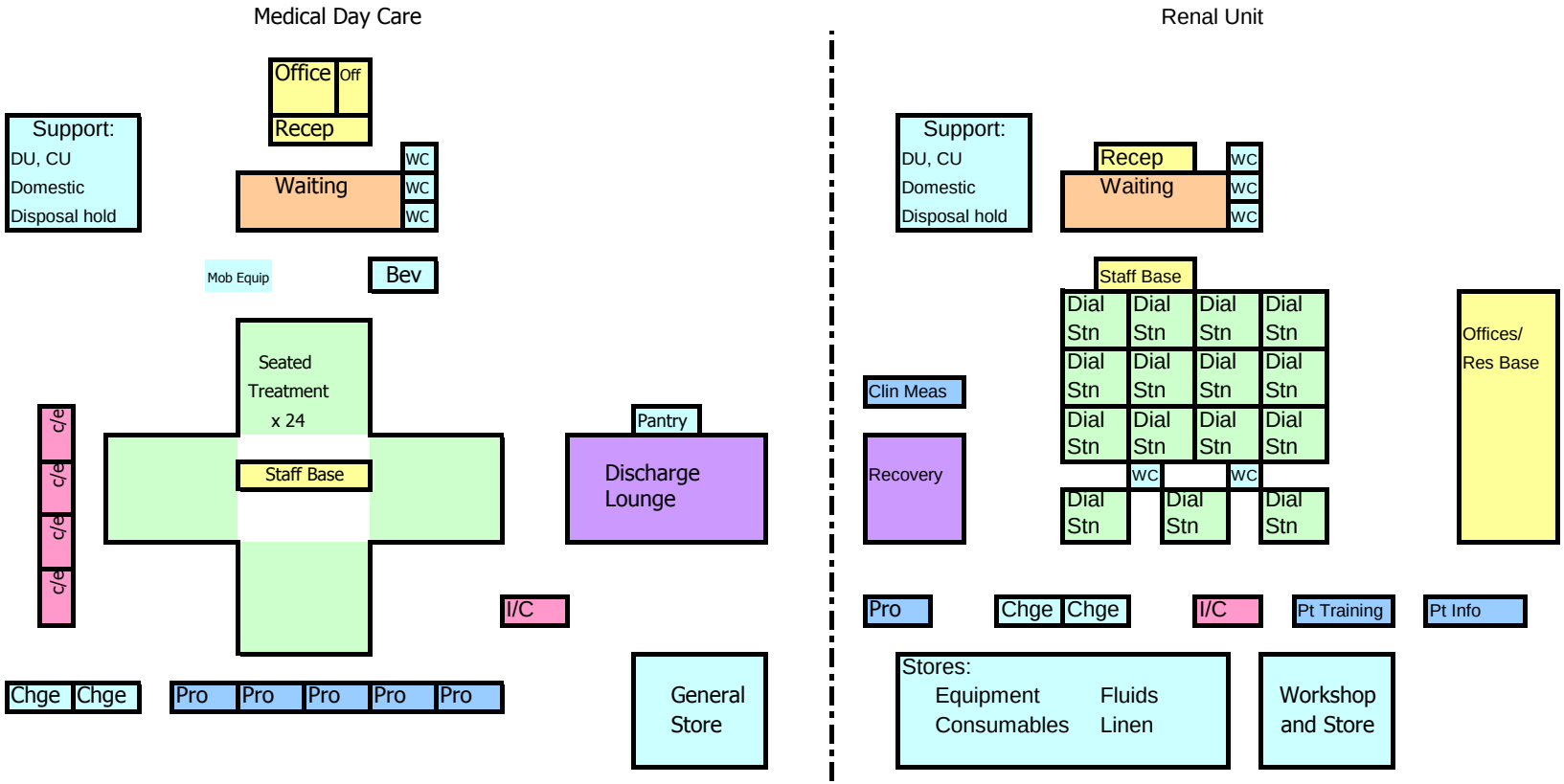
The Medical Day Care/ Day Case accommodation includes:

- Reception and waiting areas
- Consult/examination rooms
- Procedure rooms
- Interview/Counselling
- Staff base
- Patient beverage facility required which will need to be easily accessed from the discharge lounge and the day care area.
- Patient change areas immediately adjacent to the investigation rooms. Secure patient lockers will be provided adjacent to the changing cubicles for the storage of patient belongings.
- Office accommodation
- Clean utilities located as close as practicable to the procedures rooms
- Dirty utilities with macerator located as close as practicable to the procedures rooms
- Mobile equipment bay
- Resuscitation trolley bay
- A distribution system (e.g. pneumatic tube)
- Store
- Domestic services and disposal hold
- Discharge Lounge-an area with comfortable seating for up to twenty patients to allow for recovery following interventions or treatments. Access to television will be required.

- Medical Day Care - Area for chair (x24) recovery or treatment – chemotherapy, blood transfusion, drug infusion and blood withdrawal. The patients will be nursed in a recliner chair for the duration of their stay, which could last from 15 minutes to 8 hours. Many patients will require infusion pumps therefore space is required in each patient area for a drip stand and up to three infusion pumps. It must be possible for individual patients to choose visual privacy from other patients, or the ability to interact, whilst not reducing the staffs' ability to observe patients from the staff base. Nurse call will be required by each chair. Accessible hand-wash facilities are essential.

An adjacency between the outpatient therapy area and the Medical Day Care Unit would be highly beneficial in allowing therapy staff to contribute to the multi-disciplinary assessment of patients attending the day care facility. There should be straightforward access to a blood bank.

The relationships between the facilities are shown in the following diagram:


Medical Day Care
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Res Base
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Chge
Chge
I/C
Pt Training
Pt Info
Stores:
Equipment
Fluids
Consumables
Linen
Workshop
and Store

9.6 Renal Dialysis and Ambulatory Service

This service will be twinned with the medical day-care unit (see adjacency diagram above) and could potentially share some facilities. This service is part of a renal programme that cares for patients with chronic kidney disease, acute renal failure and end stage renal failure and includes outpatients, day cases, peritoneal dialysis, central, home and satellite dialysis, transplantation and patient training.

The Renal Dialysis unit provides haemodialysis for those patients who have recently started haemodialysis and are not yet ready for home or satellite dialysis. It also provides a service for patients who experience deterioration in their condition, or have a particular problem.

Office and resource base accommodation is also required for the Renal Teams providing expertise and patient care in renal transplantation, home dialysis and peritoneal dialysis.

The accommodation for the renal unit includes:

- Reception for 2 members of staff
- Waiting for 10 including wheelchair waits
- Double occupancy office
- Patient ambulant and assisted sanitary and changing facilities
- Interview/counselling room
- Staff base and resuscitation trolley bay
- Resuscitation trolley bay
- Storage for equipment, consumables, bulk fluids and linen
- Single, double and multi-occupancy offices and resource bases
- Staff sanitary facilities including emergency shower and changing facilities
- Domestic services and disposal hold
- Clean & dirty utilities
- Patient information - this area will provide space for the display and storage of information pamphlets on diseases, healthcare and support groups with appropriate facilities for internet access etc.
- Procedures room - this area provides a service for outpatients, haemodialysis and peritoneal dialysis patients. The room will be used to undertake renal biopsies, insertion of neck lines and other clinical procedures as the need arises. As invasive procedures are carried out in this room the scrub-up and sterilisation facilities will need to be the same as those of a minor operating room. The room needs to be large enough to accommodate a bed/trolley.
- Recovery (Renal Observation/Assessment Area/Day Case Unit) - this area will be used for iron infusions, recovery from renal biopsies and unblocking fistulas. It is also used as an observation/assessment unit for decisions regarding potential admission of patients. A minimum of five bed/trolley spaces required. This facility could be shared with Medical Day Care.
- Patient Training Room for training patients in peritoneal dialysis. This room needs to be adjacent to the Renal Day Case Unit.
- Haemodialysis Unit – 15 Dialysis stations including 3 single stations

- Patient Monitoring/Clinical Measurement area for obtaining and recording physical measurements of patients.
- Equipment maintenance workshop for the repair and maintenance of dialysis equipment with 4 to 5 machines in the workshop at any one time. There should be a workbench along the length of the workshop to accommodate 2 technicians. The workshop should have an integral workshop equipment store.
- Specialist water supply plant to consist of the following:

    - Input filtration
    - Duplex softeners
    - Duplex carbon removal stacks
    - Duplex reverse osmosis machines
    - Ultra filter supply module incorporating the sanitation control heater for the loop disinfectant.

9.7 Outpatient Therapies

The accommodation for therapies includes the following:

- Reception and Waiting
- Patient ambulant and assisted sanitary facilities
- Multi-occupancy office and resource bases
- Meeting
- Storage
- Staff sanitary facilities
- Clean & dirty utilities
- Disposal hold & domestic services

Occupational Therapy

- Treatment Areas for 3 patients with space for plinths and hi-lo tables plus computer workstations
- Splint & ice making area - space for seating and adjustable table, double sink unit with draining boards and worktop. To incorporate storage area for splinting materials and off-the-shelf splints (vertical storage). Water supply and drainage facilities with air conditioning/temperature control are required.
- Consultation/examination room
- Interview/counselling/quiet room (single office)
- Technician Workshop with space for 3 workbenches, machinery, band saw with adequate space for approach and dust extraction. Storage for tools and four metre lengths of mopstick and sheets of plywood. External access required for vehicle loading and unloading.
- Clean Equipment Store for storage of clean equipment and small aids for patient use.
- Dirty Equipment Store for storage of used equipment and small aids prior to cleaning and/or returning to community storage facility. Domestic sink facility required.

- Wheelchair Storage for the storage of wheelchairs. Ground floor access required for vehicle delivery and collection.
- Patient assisted sanitary facilities

Physiotherapy
The accommodation includes:

- Patient ambulant and assisted changing facilities - the changing areas should be adjacent to the treatment areas. Secure patient lockers will be provided adjacent to the changing cubicles for storage of patient belongings.
- Gymnasium facilities – two gymnasia for high volume/activity levels of individuals and groups. Each area requires 6 Bobath plinths, parallel bars, treadmills, rowing machines and multi-gym (weights). Non-slip flooring is required. Ventilation and temperature control appropriate to use. Oxygen and suction plus hoist facilities are required.
- Treatment Cubicles - curtained multi-cubicle treatment area with plinth in each cubicle.
- Treatment Rooms - 2 consulting/examination rooms, one to be child friendly.
- Seated Treatment Stations - therapy area with individual seated treatment stations (curtained), adjacent to multi-cubicle treatment area and in close proximity to splint room (shared with OT). This area could be provided as a partitioned area adjacent to one of the gymnasia.

Speech and Language Therapy
A specialist speech and language therapy (SaLT) service will be provided, utilising generic consult/examination rooms in an outpatient cluster. However, there is an important adjacency with the outpatient therapies area for joint use of gyms and other assessment areas as well as multi-disciplinary working. SaLT needs to be located in a quiet area.

Hydrotherapy
The hydrotherapy facility will comprise:

- Pool area
- Staff base
- Resuscitation trolley bay
- Transfer area
- Trolley/wheelchair parking
- Patient changing room
- Staff changing room
- Assisted toilet
- Staff shower
- Pool trolley user access shower
- Recovery/rest area
- Equipment storage
- Laundry/utility room
- Domestic services

Podiatry
The accommodation for Podiatry will include:

- Biomechanics room - used for biomechanical assessment. The room must be at least 10 metres long to accommodate the equipment.
- Procedure rooms
- Recovery room
- Clean and dirty utilities
- Single office

9.8 Education & Workforce Development - Zonal Accommodation

A suite of seminar rooms, to be utilised for formal and informal education and training, together with an IT suite is required. These facilities will be available for the multidisciplinary teams and will include workstations and informal seating.

9.9 Staff Change

Facilities will be provided at zonal level and must be sufficient to provide for the number of staff requiring changing, storage and shower facilities at any one time (estimated maximum 460). Shift and working patterns will need to be considered in agreeing the final design. Secure lockable storage will be required for personal property whilst staff are on site.

10 Staffing

The total number of staff will be approximately 1,170 (headcount) 1,092 (wte). It must be recognised that a number of departments undertake significant training functions at both undergraduate and post-graduate levels. Student numbers have been omitted from the above.

11 Patients

The ambulatory zone will provide services for adults and children whose mobility will range from those on trolleys to the fully ambulant.

The design solution for the functional areas within the zone must also be sensitive to the differing cultural and religious requirements of the population, especially in terms of maintaining the privacy and dignity of individuals who may be partially clothed awaiting investigation or treatment and results.

12 Relatives, Carers and Visitors

Patients may be frequently accompanied by relatives/carers over the period of their attendance or treatments. The design should provide informal seating areas to permit relatives and escorts to sit with patients or wait whilst interventions are completed.

13 Planning and Design Principles for the Ambulatory Care Zone

13.1 Ambience and Decoration

Facilities should be family-friendly, homely and non-institutional with particular emphasis on the use of colour, contrast and texture to provide a stimulating, non-threatening environment for all patients regardless of ability or impairment.

The design should access the research available on hospital environments, particularly for older people: for example, all toilet doors the same colour, contrasted with other doors. Consideration should be given to the clear differentiation of each cluster.

13.2 Wayfinding

Patients attending the Ambulatory Zone may need to attend different departments to undergo assessment and treatment. The wayfinding solution must therefore support the identity of the zone, the easy recognition of departments and most appropriate access routes for all levels of mobility. Way finding must be clear, unambiguous and cater for the needs of those with visual, hearing and communication difficulties.

13.3 Security and Observation

It is essential that staff can observe patients and patients can see staff in order to feel reassured and safe.

Outpatient areas must be secured out of hours to prevent unauthorised access whilst ensuring easy exit. Consideration must be given to the design of the systems to ensure that the legal rights of patients wishing to leave are not compromised whilst ensuring confused patients cannot accidentally leave.

13.4 Privacy and Acoustic Control

The design should provide an environment which respects the needs of all patients in terms of privacy and dignity as well as facilitating the delivery of good clinical practice and care.

13.5 Environmental Parameters

Project Co shall ensure that temperature and humidity control are in accordance with the HTMs and HBNs; however there are requirements under the NHS agenda for consumerism for patients to be able to control, within limits, the temperature of their environment. There is also a requirement for the temperature in certain areas to be adjusted outside of the parameters laid down in HTM 2025.

Generally all public areas, concourses, seminar meeting rooms, offices and areas not occupied by patients will be controlled by a BEMS system to the requirements of HTM 2025 in respect of temperature and humidity; the following rooms will require a degree of local control:

- Consulting / Examination rooms

- Therapy gymnasium and treatment rooms

13.6 IM & T

It is assumed that all patient records will be electronic and note entry and note review will take place within the ambulatory zone.

Audio-visual links will generally be required between clinical rooms and other locations including the academic centre.

Diagnostics – Clinical Neurophysiology
In addition to the facilities within the department there is a need to provide network linkages to the Neuropsychiatry Unit in order to support video EEG monitoring.

Renal Dialysis
Renal Services are linked with national renal systems (Proton and UKTSS). The systems facilitate the management of patient care and research and provide information for monitoring activity, drug usage and expenditure and national renal provision.

13.7 External Space and Courtyards

Access to outside spaces (balconies, courtyards, gardens etc.) is highly desirable for staff and relatives. The areas should provide a range of surfaces and levels with adequate suitable seating and tables.

North Bristol NHS Trust

Appendix 7.iv (d)

INPATIENT ZONE SPECIFICATION

INPATIENT ZONE

1 Philosophy of Service

The main idea behind the Inpatient Zone is to create a single flexible bed-base within the new Hospital that can be used for a range of differing patient groups over time. The principles that underlie this main concept are:

- The ability to flex the bed base to accommodate different types of patient on a short-term operational and long term strategic basis
- Generic design and ownership where the Inpatient zone is clearly not sub-divided into individual specialty territory
- Fast-throughput acute care, with the emphasis on limiting admissions to those in need of complex or acute care
- The drive to encourage seamless patient journeys between hospital and community settings
- Effective multi-disciplinary team working
- Increased scope for collaborative inter-agency working
- An emphasis on front-line learning opportunities alongside the provision of clinical services.

2 Core Content

Within the Inpatient Zone the facilities to be provided include:

- Entrance and Concourse
- 576 generic acute inpatient beds (where possible in clusters of 32).
- This includes a 32 bed community bed cluster, that forms part of the Integrated Community Hospital
- This also includes a 16 bed Coronary Care Unit that can be provided as a part of a larger inpatient bedded Unit
- A 48 bed Integrated Critical Care Unit
- Support facilities including a Multi Faith Centre

3 Strategic Design Principles

The key objective is to provide a fully integrated zone of inpatient beds with supporting facilities, which can be utilised by any adult acute specialty for patients remaining in hospital overnight whether that admission is pre-planned or following appropriate investigation/stabilisation within the Urgent and Emergency Care Zone.

To reflect the philosophy of service, a number of strategic design principles will apply as follows:

- There will be a generic design for inpatient facilities based upon nursing units of 32 beds linked in groups of three to provide 96 bedded clusters. A minimum of 75% of the bedrooms must be single.

- There should be sufficient localised support facilities (e.g. storage and utilities) to allow nurses and other staff to access their requirements without having to leave the clinical shop-floor. This approach relies upon centralised distribution and storage facilities with appropriate top up systems to support the nursing units.
- Capacity should be easily flexed (upwards, downwards or between patient groupings) in order to cope with general future changes in demand and to allow operational flexing on a day-to-day basis.
- Facilities will need to reflect a team-based rather than individual approach with an emphasis on supporting the coherence of specialist teams.
- Elective patients should be able to attend on the day of their surgery without using a bed before the procedure. Patients should also be able to access a bed after their operation without passing through a public area.
- The emphasis will be on bringing interventions and treatments to the patient, therefore bedrooms will need to be able to accommodate diagnostic equipment such as echo, ECG and ultrasound as well as administrative and reporting functions using portable IT devices.
- The environment should be conducive to the rapid recovery of patients with a combination of clean and clinical surroundings in a friendly, healing, well-lit environment.
- The environment must be appropriate to support patients with psychiatric conditions who will attend for diagnosis and treatment of their physical illness
- Facilities should facilitate multi-professional education.

4 Projected Activity

The Trust's assumptions regarding activity are described in the Outline Business Case. The Inpatient Zone is intended to accept patients that do not require/have already passed through the emergency and acute assessment centre or are unsuitable for the short stay beds within the Treatment Centre. It is also intended that rehabilitation and slower stream care is provided at home, in community hospital beds or in alternative social care facilities. For these reasons it is anticipated that the Inpatient zone will cater for the most complex or acutely ill patients.

5 Hours of Service

All areas within the Inpatient Zone will be operational (or require access) 24 hours, 7 days a week.

Visiting hours would be expected to be between 12.00 noon through to 20.00 in the evening but will need to change over time and between individual units.

6 Specific Exclusions

A number of services have been identified as not appropriate for provision within the zone:

- Obstetric & Gynaecology beds are located outside the PFI development.
- Children & Young People will not be admitted to beds at Southmead but there may be the need to accommodate older adolescents within the Inpatient Zone.
- Long stay and rehabilitation - it is anticipated that the majority of admissions to the acute hospital beds within the zone will not exceed five days, although there will be

individual exceptions. The focus for longer term, less acute care will be in a community setting.

7 External Functional Relationships

Inpatient accommodation should be provided with linkages to the internal hospital street network to ensure rapid and/or appropriate access, with easy access to the following key departments:

- Imaging – although a principle will be to bring imaging to the patient's bedside, for complex imaging (including intervention) access is required at any time including overnight and at weekends. For some patients it is important to be able to access MRI and CT rapidly and conveniently.
- Urgent and Emergency Care Zone – there need to be straightforward routes of transfer between this zone and the inpatient zone
- Pathology – pathology services need to be provided by a distribution system (e.g. pneumatic tube) to each 32 bed unit.
- Endoscopy – intervention and diagnosis will be required for patients within the Inpatient Zone on a planned or emergency basis (including overnight and at weekends).
- Diagnostic Investigations in the Ambulatory Zone – access will be required for routine and complex diagnostics e.g. respiratory.
- Operating Theatres – in view of the frequency of movement of patients between the Operating Theatres and the nursing units, an immediate adjacency of a number of clusters and the theatres would be a significant advantage. Where vertical adjacency is to be considered this would be acceptable with the provision of appropriate dedicated lifts.
- Mortuary - transfers to the mortuary must be undertaken in such a way that the dignity of the deceased is maintained at all times, whilst ensuring that the needs of the living are managed sensitively. There must be clear and easy access to the viewing area for relatives. There would be significant benefits for relatives if there was ready access from the viewing facilities to the Multi-faith Centre.
- Blood Bank - there is a regular requirement to access blood and blood products. Staff from the Inpatient Zone must therefore have ease of access to this facility.
- Re-ablement services – there should be convenient staff access between the Inpatient zone and the re-ablement base.

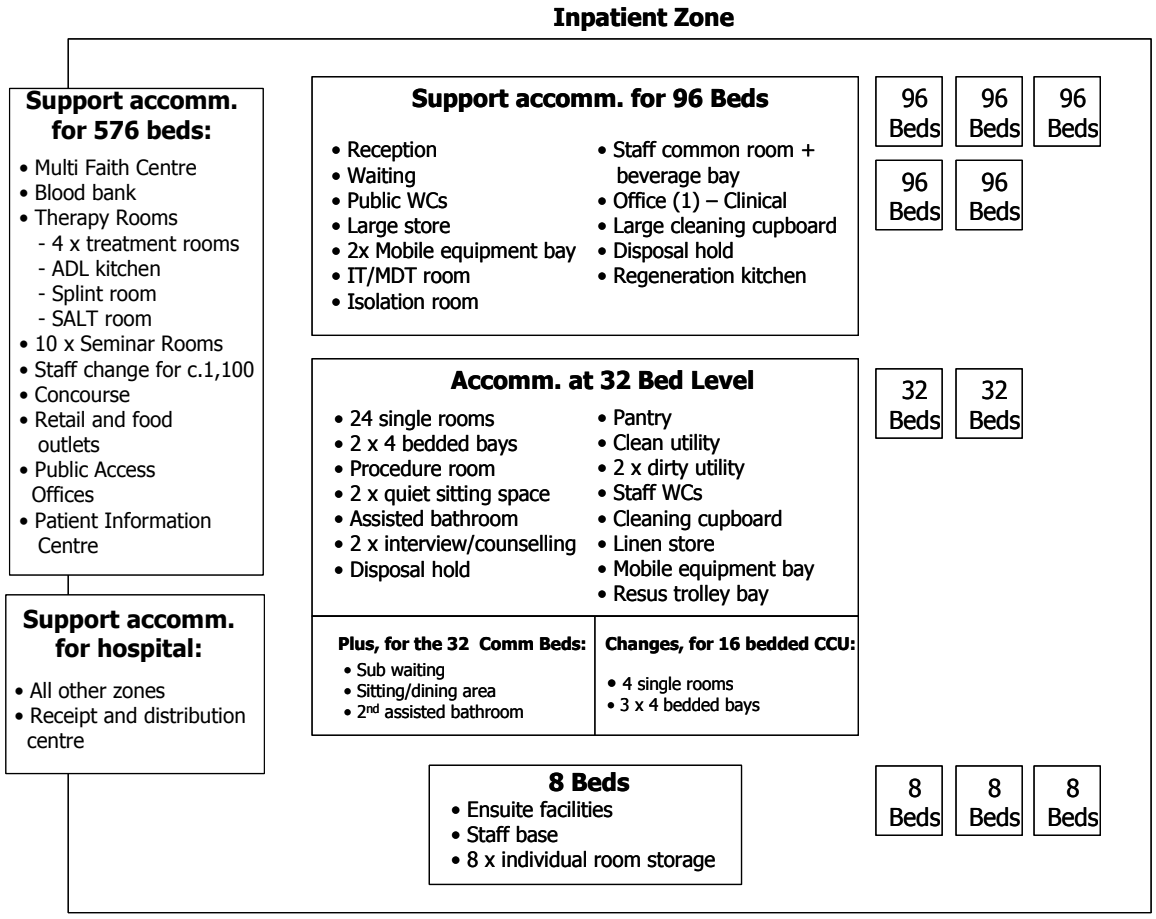
In the event that patients within the Inpatient Zone require access to services located within either the Core Clinical or Ambulatory Care Zones it is essential that privacy and dignity is maintained at all times and consideration must be given to the identification of a separate inpatient access to these areas.

Easy access must also be provided for the delivery of bulk items such as food and linen.

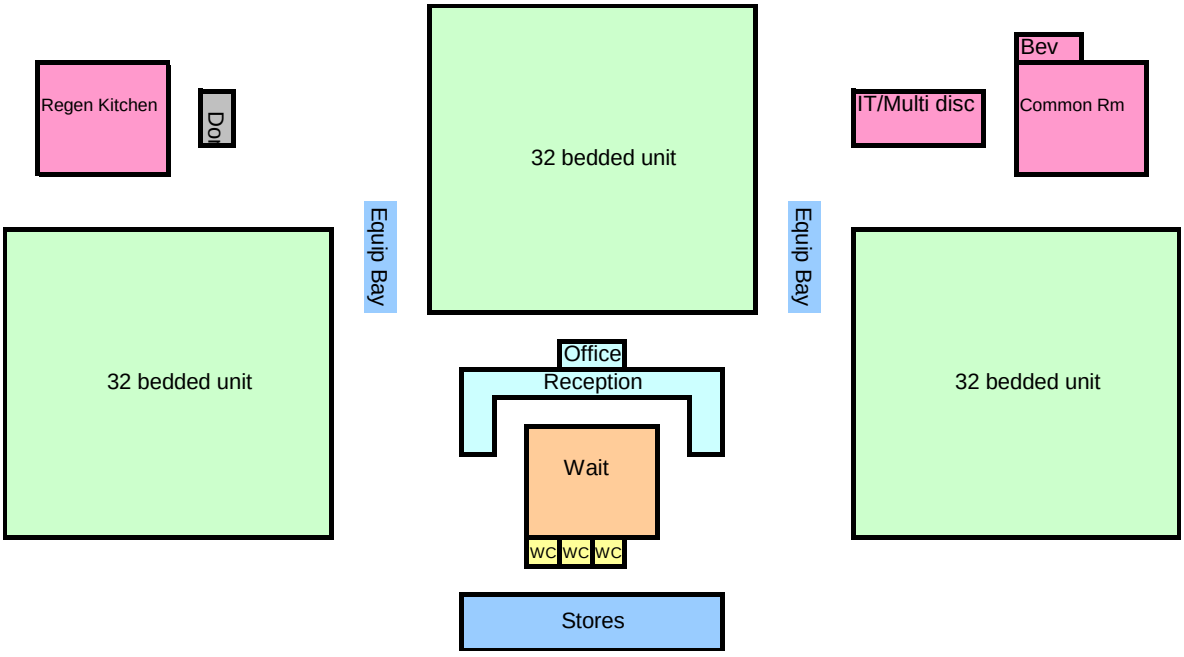
There are significant therapeutic benefits from providing patients with access to external areas. Where nursing units are not at ground level, patients should have easy access to safe, secure and therapeutically designed external space.

8 Internal Functional Relationships

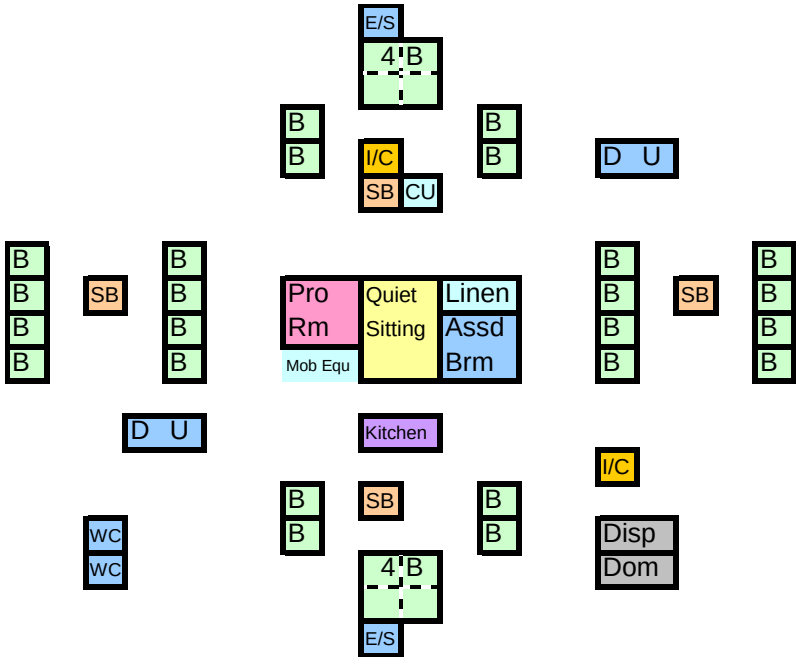
A hierarchy of support accommodation should be provided at varying levels throughout the zone, ensuring that staff travel times are kept to a minimum, as shown in the diagram below:



The 96 bed clusters will be managed as individual entities and as such will require a sense of identity. The 96 bed clusters will have their own reception and support facilities as well as using zonal support functions. A design challenge for these clusters will be to ensure that access to these units is clear and controlled without forcing visitors to pass through lengthy corridors/other units to reach the patient. The reception needs to communicate effectively with the 8bed clusters. The relationships within these clusters are summarised in the following diagram:



The adjacencies within each 32 bed unit should allow staff to appropriately observe patients and have straightforward access to all support accommodation. This concept is illustrated in the following diagram:



There is also a requirement to ensure that staff support areas are conveniently placed for clinical areas and that staff do not need to leave their place of work to access support facilities unnecessarily.

9 Functional Content

The Inpatient Zone will comprise the following key facilities. Although a summary of the main functional areas is provided here reference should be made to the detailed Schedule of Accommodation.

9.1 Inpatient Concourse

The Inpatient Concourse (that could be part of a larger main hospital concourse) will be accessed by patients, visitors and staff by a dedicated entrance adjacent to a patient drop-off zone. Access to the concourse will be required at all times for patients and staff, but may be managed via remote monitoring for secure access.

The location and size of the concourse area and range of facilities must reflect the function of this area and will comprise the following:

Concourse
The concourse must be designed with a 'wow factor' and also be welcoming with a non-institutional feel. The concourse should provide a range of seating for 30 people (not in regimented rows), in addition to the seating provided within the retail and food court areas. Visitors' toilets and appropriate retail and vending facilities will be available. It is anticipated that this area will also be utilised by patients awaiting transportation home following their discharge from the nursing units and therefore accommodation for patients with wheelchairs must also be considered.

Meet and Greet, General Enquiries
The reception area must be strikingly visible, welcoming and as non-institutional as possible and will provide a meet and greet service, and information regarding the location of wards and patients. There will be further reception desks adjacent to each cluster of ninety-six beds, where the ward clerks will provide the administrative support to the clusters and provide assistance to patients and visitors. The general enquiries desk must provide an accessible and welcoming first point of contact.

This position will provide a base for those staff who will act as way-finders or guides for those who are unfamiliar with the layout of the hospital, or who require advice as to the location of a particular unit or department.

There should also be facilities for security behind the reception.

Patients arriving for an elective admission or treatment will be directed to the Central Admissions Area (scheduled within the Core Clinical Zone) for detailed registration and preparation for their treatment or investigation.

Wheelchair Parking
There should be provision for the storage of wheelchairs for the temporary use of patients on arrival in the zone.

Sanitary Facilities
Patient sanitary facilities are required including baby change and feed facilities.

Public Access Offices
A resource base and office accommodation will be used by the Patient Advice and Liaison Service, who will address problems, concerns and comments that patients or relatives may have about the care and service received. Interview/counselling rooms will be available that could also be used for quiet reflection.

Information Centre
This area will provide space for the display and storage of information pamphlets on diseases, healthcare and support groups with appropriate facilities for internet access etc.

A resource will also be provided for patients to undertake research.

Retail Outlet and Food Court
There should be high quality retail space to be provided as a contributing factor in the delivery of a good patient experience. This should include the provision of hot and cold beverages, meals and snacks for patients, relatives and other visitors.

It is anticipated that an Automated Teller Machine service will be provided on site within this concourse area. The location should be considered sensitively, providing an appropriate balance between privacy and security.

Staff Rest
The Trust wishes to encourage staff to move away from their immediate work area whilst taking breaks. Therefore a shared provision is required adjacent to the main clinical areas. The staff-only area should provide comfortable seating, low tables and hand rinse and beverage facilities.

9.2 Nursing Unit – 32 Beds

In order to support the model of care the nursing unit has been set at 32 beds. This in turn should be divisible into sub-units of 8 that can be aggregated or disaggregated as required. A fundamental requirement of the Trust will be the need to flex the size of the bed units to reflect the patient dependency levels during any given period of time. For example should the patient dependency within a cluster be significantly higher than normal, the number of beds to be supported by a group of nurses may be reduced to ensure sufficient patient care is available.

The accommodation must be provided in a manner that allows patients with varying levels of intensity of care and dependency levels to be treated within the same area. Additionally, flexible accommodation must be provided which will allow any patient group specialty to be treated in any of the ward areas. Additionally, the accommodation must allow for changes in medical, nursing and therapy needs of patients; changes in models of care and service delivery; and future reconfiguration and expansion.

Each unit of the 32 beds will comprise a mixture of single and multiple occupancy bedrooms, (with a minimum of 75% single rooms).

The design needs to ensure that beds can be reallocated between clusters and units according to changing needs. In varying cluster and unit sizes consideration must therefore be given to the impact of this flexibility on key infrastructure including emergency call.

The design should provide an environment that respects the needs of patients for privacy and dignity, as well as enabling good clinical practice and care.

The patients will have varying types and degrees of disability and therefore it is essential that space is allowed for wheelchair access throughout the whole building and that the design incorporates features which enables all patients to be as independent as possible.

There should be sufficient space within each 32 bed area for the parking of meal trolleys during lunch and supper service.

Each unit will comprise:

Bed Areas
Bed areas must be of sufficient size to enable patient care to be delivered at the bedside, behind curtains for privacy. Space must be available for a wheelchair, hoist, seat, therapists and up to 2 carers and facilities need to be designed to accommodate obese patients. There must also be the capability to support patient monitoring equipment at the bedside. Bed areas should be able to accommodate trolley to bed transfers The specialist nature of a number of the clinical services will also influence the range of equipment needed within the immediate bed areas and must be considered in the development of generic facilities capable of utilisation by all specialties.

All single rooms within each nursing unit will have ceiling mounted tracking to enable the use of a hoist to facilitate bed to chair or trolley transfers.

Bed areas must be observable from an appropriate staff workstation and with reasonable access to the quiet sitting area.

Each single room will have space allocated for family and clinical support.

It is anticipated that the level of storage in each bedroom will support the needs of patients for a maximum of 24 hours, and storage must take account of the requirements for the control of infection.

The Medicines Management Policy for the Trust has been developed on the assumption that the self medication boxes will be provided by Project Co at each bed, preferably wall mounted, taking account of both ambulant patients and patients with special needs. Provision for discharge drugs will be included.

Other accommodation will include:

- Patient sanitary facilities - in addition to the en-suite facilities for the single bedrooms separate assisted bathrooms, showers and WCs are required for the multi-rooms.
- Quiet sitting rooms - areas intended to provide a change of environment where patients, who will be out of their beds for as much of the day as possible, can relax, talk with

visitors or other patients and take part in therapeutic activities. Where possible these areas should be provided as small local facilities rather than large centralised areas which patients might find threatening. They should also be spread across the facility. One of these rooms also serves as the 'female only quiet room' in response to the NHS consumerism agenda.

- Staff base - each staff base/workstation will support 8 beds, however it is essential that staff at each workstation can view the call indicator panel for the full 32 bed nursing unit. Provision must be made at each staff base/workstation to accommodate a resuscitation trolley. The staff base should be planned with the utility, interview and storage space to provide light and airy facilities for staff with clear views of the beds. One workstation per 32 bed unit will accommodate the pneumatic tube station or equivalent.
- Mobile equipment bay for the storage of charging equipment, mobile hoists, wheelchairs etc.
- Interview/counselling rooms for private interviewing, counselling or comforting of patients, relatives and carers.
- Procedure room
- Pantry/beverage making - for the preparation of regular and ad hoc patient beverages throughout the day - includes hot water boiler, toaster, microwave, dishwasher and storage for crockery & consumables, WHB assembly and space for beverage trolley incorporating integral water boiler for fresh brew drinks.
- Storage, clean & dirty utilities, disposal holds, domestic services and staff sanitary facilities - planned to minimise distance of travel from bed areas.

9.3 Cluster – 96 Beds

It is anticipated that clusters will link 3 nursing units (96 beds).

There should be an area allocated for the display of team and clinical information relevant to the cluster and in support of the information provided in the Patient Information Centres in the Concourse.

There is also a requirement for the provision of one bedroom in each cluster of 96 beds to be designed as isolation rooms using both positive and negative pressure. Consideration must be given to how these could be centrally located in order to maximise the concentration of specialist nursing skills and minimise the potential risks to the isolated and remaining patients.

Clusters will share the following accommodation:

- Reception - a shared facility close to the entrance to each cluster. The desk must be capable of accommodating up to 3 staff simultaneously.
- Family friendly waiting area – for up to 6 people including a wheelchair
- Storage - Clean Supplies & Equipment - in addition to the local provision within each patient bedroom the Trust wishes to maximize the benefits of central provision of storage of clean supplies for up to 3 nursing units. This storage facility must be accessible from all of the units at all times and accommodate up to 3 days' requirements within appropriate storage systems, i.e. to meet infection control and manual handling requirements.

- IT / Multidisciplinary team room
- Mobile equipment bays
- Single office
- Staff common room with co-located beverage facility
- Clearly designated visitors' ambulant and assisted sanitary facilities
- Domestic services
- Regeneration Kitchen - to support up to 96 beds. This area will be used for the regeneration of meals, which will be accommodated in a combined oven and delivery trolley designed to facilitate bulk delivery for plating food within the ward area. The design of these shared ward kitchen facilities shall ensure there is no need to locate food trolleys on corridors. All crockery, cutlery and trays used for the service of meals and to patients will be washed and stored in this area. The kitchen accommodation should include:

    - WHB assembly
    - Pass through dishwasher
    - Food storage for dried goods
    - Chilled food storage for 192 max Cook Chill meals (daily delivery)
    - Chilled storage for dairy goods, sandwiches, salads etc. for patient meal service
    - Regeneration bay within the kitchen for three regeneration trolleys, each capable of holding a minimum of 32 meals
    - Storage racks for cups, sauces, plates, side plates and bowls
    - Three cutlery storage trolleys
    - Storage for specialist feeding equipment
    - Three general purpose stainless steel trolleys – for breakfast
    - Stainless steel sink with waste disposal unit fitted
    - Space for other equipment e.g. microwave, toasters, ice machine

9.4 Community Hospital Inpatient Area

The community hospital inpatient unit will be of the same generic standard as all the inpatient units but will have some additional specific accommodation:

- Reception for 2 members of staff to serve the Community Inpatient area.
- Waiting for 15 people including 2 wheelchair waits.
- Additional patient sanitary facilities are required (one bathroom with assisted toilet).
- Sitting and dining area to accommodate 8 patients on upright chairs at dining tables with a second area to accommodate coffee tables and 8 armchairs.

9.5 Cardiac Care Unit

The zone will include a CCU that will be integrated into the main bed base but have a clearly defined identity. The rooms will generally require the same services and facilities as the acute inpatient beds. There will be however, some additional facilities including a generic procedures room for stress testing and other procedures. A close proximity to the Catheter Labs and the opportunity for swift transfers from the Urgent and Emergency Care Zone are required. Consideration should be given to designing CCU beds in such a way that they can change function with general inpatient beds over the course of time.

9.6 Acute Stroke Unit

The zone will also include beds designated for the care of acute and sub-acute stroke patients. These beds will require the same services and facilities as the acute inpatient beds plus non-invasive monitoring. In the earlier stages of their care these patients will require a rapid transfer from the Urgent and Emergency Care Zone and the easy ability to access interventional radiology. Subsequently, patients will require access to large pieces of equipment, in particular, specialist seating and the unit will also require an adjacency to one of the large inpatient therapy rooms.

9.7 Burns Patients

Due to the particular requirement to be able to combine bathing/showering patients with treatments and dressing changes, the procedure room in the unit where burns patients will be cared for should also be designed as a wet room. The assisted bathroom will require a specialist bath suitable for burns patients.

9.8 Shared Clinical Facilities for the Whole Zone

The following accommodation will be shared across the IP zone:

- Seminar rooms
- Interview/Counselling room
- Domestic and disposal hold
- Therapy & rehabilitation rooms - although the main therapy facilities will be provided within the Ambulatory Zone the Trust is seeking to provide limited therapy facilities within easy reach of the nursing units, to provide treatment and rehabilitation to medically unstable inpatients. Therapy Rooms must be capable of accommodating a range of activities including both assessment and treatment and include space for Bo-bath plinths, hi-lo tables, administration zone and clinical support facilities. There should be an area where patients have the ability to prepare hot and cold beverages under the supervision of an Occupational Therapist or Dietician. These therapy rooms must be fitted with a hearing loop system.
- Therapy store
- Splint room - to accommodate splint-making facilities for the whole inpatient area with storage facilities for 'off-the-shelf' splints and leg casts. To be aligned to the burns nursing section. Access to water, splint oven, and drainage is essential.
- ADL kitchen - to include the provision of key appliances including gas and electric cookers, microwave refrigerator and dishwasher. Patients should have the ability to prepare hot and cold beverages under the supervision of an Occupational Therapist or Dietician. A separate hand washing facility is required in addition to the normal range of domestic casework and sinks. This facility should be located adjacent to the Community Inpatient beds.
- Speech & Language Therapy Room (Stroke) - a dedicated room aligned to one of the nursing units is required to accommodate four people around a table (with wheelchair

access). The room will include clinical hand-washing facilities, a small storage area for equipment and materials, a hearing loop system and an administration station.
- Blood Bank - a secure room housing an issue blood bank refrigerator and computer workstation is required. This must be adequately temperature controlled to ensure the safe operation of the issue fridge. This blood bank will serve all the inpatient areas.
- Store for resuscitation equipment.

9.9 Integrated Critical Care

There will be a single Integrated Critical Care Unit, which will support the full range of adult clinical specialties.

The unit will accommodate patients requiring level 2 and level 3 care. A level 2 classification is for patients who require more detailed observation or intervention including support for a single failing organ system or post-operative care and those "stepping-down" from higher levels of care. A level 3 classification defines patients who require advanced respiratory support alone, or basic respiratory support together with the support of at least two organ systems. This level includes all complex patients requiring support for multi-organ failure.

The Critical Care Unit must be located such that transfer times from the emergency zone and operating theatres into the unit for seriously ill or unstable patients are minimised. If not located on the same floor appropriately designed and located lifts will be required. It will also be necessary to take very ill and or clinically unstable patients to the imaging department in particular for plain film, CT, MRI and angiography.

The unit will have 48 single rooms divided such that a nursing team will manage a maximum of 12 bed spaces.

The key design consideration is balancing the need for microbiological separation of patients with the need for staff to cross-cover between patients, maintain lines of sight and maintain patient privacy. It is also important to be able to adjust staffing according to the dependency of the patient: either 1 to 1 nursing or 1 nurse to 2 patients.

12 Bedded Nursing Section

Each 12 bed section should include 2 centrally located single rooms, with both positive and negative pressure ventilation, together with an isolation lobby.

There should be sufficient space around each bed so that there is clear access to all areas, including the bed head. Although patients to be cared for in this area are critically ill there is a requirement to maximise the availability of natural daylight.

Each nursing section will require immediate access to clean and dirty utility rooms and storage for IV fluids, sterile supplies and linen. Project Co should provide an innovative solution which minimises travel distances whilst maximises the benefits of shared facilities.

Although the unit must be designed to support all specialties, with no physical barriers to delineate and establish boundaries between specialties, the specific requirements of key services

must be addressed within the design (including the requirement for purified water supply for those patients undergoing renal replacement therapy and access to assisted bathrooms and dressings areas for Burns patients).

Each 12-bedded nursing section will include:

- Staff base for 3 including resuscitation trolley bay
- Patient assisted sanitary facilities
- Clean utility
- Dirty utility with macerator
- Storage for linen, IV fluids & sterile supplies
- Single occupancy office

In addition the ICCU will have the following accommodation:

- Reception - with co-located clinical double office
- Waiting for 20 including 4 wheelchair waits
- Ambulant and assisted sanitary facilities
- Relatives overnight stay suite - family bedroom with ensuite shower and toilet facilities. The accommodation needs to be flexibly fitted to allow day and night rest facilities for relatives, e.g. sofa beds, easy chairs, coffee tables. There will need to be separate beverage facilities. The suite must be an integral part of the Unit but not located within prime clinical space. The location must allow relatives to experience a calm, more domestic environment in which they can rest and undertake a period of quiet contemplation. Access to public telephone is required
- Interview/counselling rooms
- Offices
- Seminar room
- Storage - in addition to the local provision within each 12-bedded unit the Trust wishes to maximize the benefits of central provision of storage of clean supplies for the 4 nursing units. This storage facility must be accessible from all of the units at all times and accommodate up to 3 days' requirements within appropriate storage systems, i.e. to meet infection control and manual handling requirements. This will be provided in a suite of generic & bespoke storage facilities for equipment, furniture, bulk fluids and sterile supplies
- Mobile equipment bays for the storage and charging of mobile x-ray, ultrasound and ECG equipment
- Ward Pantry for the preparation of regular and ad hoc patient beverages throughout the day – this will include a hot water boiler, toaster, microwave, dishwasher and storage for crockery & consumables, WHB assembly and space for beverage trolley incorporating integral water boiler for fresh brew drinks
- Patient assisted bathroom and toilet
- Equipment Service Room - for the use of Clinical Engineering Services and Medical Physics staff for in-house repairs and maintenance of departmental equipment
- Laboratories where a limited range of analytical equipment (e.g. blood gas analyser, coagulometer) is housed to provide stat laboratory investigations
- Domestic services and disposal hold
- Staff common room plus beverage facility.

9.10 Multi Faith Centre/Bereavement Suite

The accommodation should be suitable for personal and group prayers, contemplation, counselling and specific religious needs of the hospital patients, visitors and staff.

It is acknowledged that not all faith groups can be separately accommodated, but the environment must be sensitively developed to ensure flexibility and avoid offence to any individual or group whilst ensuring that the appropriate supporting articles of faith and materials are available as needed.

The facility must have 24 hour access from all clinical areas, particularly the inpatient wards of the Acute and Integrated Community Hospital. It should be noted that patients wishing to access the centre may have limited mobility and will therefore be brought via beds or wheelchairs. It is anticipated that although the centre will be centrally located within the zone, there will be quiet rooms distributed elsewhere within the facility for individual or small group contemplation.

The Trust is also seeking to provide a place of peace and contemplation for visitors and carers on the site, and therefore an adjacency to the entrance concourse would be a significant advantage.

Within the centre there are a number of key relationships, which must be considered:

- Group Worship and Prayer Rooms - this area must be capable of combined use or sub division into 2 areas with appropriate acoustic attenuation and direct access to each individual room. The rooms will be used for group prayers and other forms of worship, which could result in high noise levels. It is essential that these do not disturb other areas of the faith centre or other areas of the hospital. There is also a requirement to separate male and female worshippers at key times. The room should contain no symbols or images which could cause offence to any faith, and the décor should be sensitive to the needs of the different users. It is recognised that key symbols may need to remain in the room if they are fixed. If this is the case they should be appropriately shielded whilst other faiths utilise the facility. It is anticipated that there will be a regular requirement to broadcast services from the main room to inpatients unable to attend the centre. The maximum-seated audience will be 40. Chairs must be removable and stackable to accommodate wheelchairs and patients in beds and the requirements of some faiths to kneel or sit on the floor. The room must contain a kiblah and the entrance should not be on the south-eastern side of the room.
- Personal Preparation - these facilities must be adjacent to the 24 hour entrance and accessed prior to entry into the areas of prayer and worship. There must be separate facilities for use by males and females that enable individuals to sit whilst washing using running water. There is also a requirement for a wash hand basin. At the entrance to each preparation area there should be a shoe storage area. The room must be carpeted with consideration given to the requirement to ensure the sanctity of the floor area.
- Vestry for storing articles of faith and supporting materials for the main religious groups. This facility must allow the items to be treated with the utmost respect and ensure that all of the specific storage requirements are met. The vestry will be used for ministers and

faith leaders to gather where they will robe and prepare for services including personal washing.
- Interview/counselling rooms should be located close to the administrative support area. These rooms may also be utilised for small group meetings, prayer and worship on an ad hoc basis.
- Waiting area
- Secure deceased belongings store with lockers
- Resource base.
- Beverage facilities.
- Domestic Services.
- Sanitary facilities.

9.11 Education & Workforce Development and Administration

The Inpatient Zone will include a range of education and meeting facilities that are readily accessible from the rest of the zone, have the ability to accommodate a variety of teaching and training activities and include facilities for IT training. These rooms should also have the facility to connect up to other locations and sites through teleconferencing.

There should also be some generic office space, reprographics, beverage and staff sanitary facilities.

9.12 Staff Change

Facilities are required at Zonal level sufficient to provide for the number of staff working in the Zone requiring changing and showering facilities at any one time (estimated maximum 1,023). Shift and working patterns will be considered when agreeing the final design. Secure, lockable storage is required for personal property whilst staff are on site. It is estimated that ~1,100 lockers will be required at peak times.

10 Staffing

The total nursing and medical staff will be approximately 2,790 staff (headcount), 2,250 (wte). Additionally a number of departments undertake significant training functions at both undergraduate and post-graduate levels. Student numbers have been omitted from the above.

11 Patients

Elective patients will generally be admitted on the day of their intervention or investigation, having undergone pre-operative assessment prior to admission. Such patients will therefore be admitted into the Central Admissions suite located with the main operating theatre suite. Post procedure patients will be transferred to the ward areas, from the Operating Theatres; diagnostic department; or ICCU. Those emergency patients admitted via the AAU will have undergone initial investigation and stabilisation with treatment plans identified.

12 Relatives, Carers and Visitors

The design should provide informal seating areas within the circulation allowances for the 96 bed cluster to permit relatives/visitors to sit with patients or wait whilst staff interventions are completed.

Access and security arrangements need careful consideration as visitors can be present at all hours, particularly when visiting seriously ill patients. Access must be controllable whilst ensuring visitors are welcomed and feel able to come and go as they wish.

It is not envisaged that separate relatives overnight stay facilities will be provided to support the Inpatient Zone (other than dedicated facilities within ICCU). There will be an occasional requirement for relatives to be accommodated within the patient bedroom.

13 Planning and Design Principles for the Inpatient Zone

13.1 Ambience and Decoration

The facility is to be family-friendly, homely and non-institutional with particular emphasis on the use of colour, contrast and texture.
The design should access the research available on hospital environments, particularly for older people: for example, all toilet doors the same colour, contrasted with other doors; colour coding of bed areas to allow patients to identify "their" area. Consideration should be given to the clear differentiation of each cluster.

Although intensive clinical care will be delivered in these units, from a patient perspective an environment which appears as non clinical as possible is desired with a pleasant outlook and it is important that an attractive and stimulating environment is provided by the appropriate use of colour, textures and finishes. Windows should be low level to allow patients to look out while sitting down or reclining in bed.

13.2 Security and Observation

Inpatient areas must be secured out of hours to prevent unauthorised access whilst ensuring easy exit. Consideration must be given to the design of the systems to ensure that the legal rights of patients wishing to leave are not compromised whilst ensuring confused patients cannot accidentally leave.

In developing the ward accommodation it must be recognised that although the treatment of confused patients is not the primary function of these wards some of the patients will require specialist support and therefore appropriate wander loops should be established.

Observation into all of the rooms from the circulation space requires careful consideration. It is anticipated that to maximize patient support and staff flexibility there will be no central staff base but a workstation will be provided to support a maximum of 8 beds. The bed areas nearest the workstation require maximum observation and layout arrangements should maximise through-vision, with capability of maintaining privacy and dignity. It is anticipated that in order to maximise this visibility the ensuite facilities will be located on the external wall, Project Co are however expected to evaluate alternative locations for the ensuite for discussion with the Trust.

It is essential that staff can observe patients, and that patients can see staff in order to feel reassured and safe.

13.3 Privacy and Acoustic Control

The design should provide an environment which respects the needs of patients in terms of privacy and dignity as well as facilitating the delivery of good clinical practice and care.

Inpatient Areas
Consideration should be given to the provision of acoustic treatment so those patients who may be distressed and or disruptive can be nursed without disturbing others. Consideration should be given to the sensitive management of disturbed patients.

Multi Faith Centre
Led group prayers will take place in the centre which can result in significant levels of noise. It is essential that this noise is appropriately contained.

13.4 Environmental Parameters

Project Co shall ensure that temperature and humidity control are in accordance with the HTMs and HBNs; however there are requirements under the NHS agenda for consumerism, for patients to be able to control, within limits, the temperature of their environment. There is also a requirement for the temperature in certain areas to be adjusted outside of the parameters laid down in HTM 2025.

Generally, all public areas, concourses, seminar meeting rooms, offices and areas not occupied by patients will be controlled by a BEMS system to the requirements of HTM 2025 in respect of temperature and humidity; the following rooms will require a degree of local control

Patient single rooms	+/- 2^{oC}	Adjust at the patient bed head
Multi bedded rooms	+/- 2^{oC}	Adjust at the bay entrance

Burns Patients
A number of beds will be designated for burns patients although they may also be used by general inpatients. Temperature adjustment +/- $2^{o}C$ will still be required at the patient bed head, but where the temperature has to be raised further for burns patients, this needs to be readily possible for clinical staff up to $37^{o}C$. Staff must also be able to raise the temperature in support rooms on the 32 bed unit such as the procedure room and assisted bathroom.

Renal Patients
Beds in two units of 32 beds will require access to plumbing for ultra pure water for bedside haemodialysis. Consideration should be given to the requirement for outpatient dialysis and dialysis within the ICCU when locating the water treatment works.

13.5 External Space and Courtyards

Access to external areas providing fresh air and both social and therapeutic facilities are essential to the recovery process for patients remaining in hospital for extended periods. All

nursing sections must be able to access safe, secure, external areas which will be used for individual and group therapy in addition to a social facility for patients and visitors. The areas should provide a range of ground surfaces and ground levels including some steps. There should also be adequate, suitable seating. The provision of sensory and textual stimulation in terms of landscape design is also a significant advantage.

North Bristol NHS
NHS Trust

Appendix 7.iv (e)

Southmead Hospital Redevelopment Project

URGENT AND EMERGENCY CARE ZONE SPECIFICATION

URGENT AND EMERGENCY CARE ZONE

1 Philosophy of Service

The Urgent and Emergency Care Zone is part of the integrated network of facilities across North Bristol and South Gloucestershire which will provide assessment and treatment services for adults and children who require unplanned care; 24 hours a day, every day. It will contain services provided by both the acute and community hospitals.

The zone brings together the staff and facilities to manage patients previously treated in settings such as the traditional emergency department, the medical assessment unit, care for minor injuries and the primary care out-of-hours service.

The principles that underlie this main concept are:

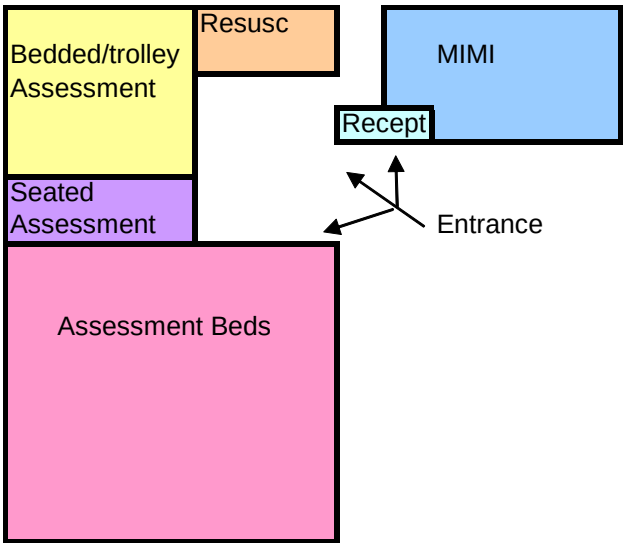
- A no-wait philosophy
- Effective streaming of patients to an appropriate point of care,
- The see and treat principle
- A co-ordinated "one-stop shop" approach for unplanned care providing equitable access to all agencies including mental health liaison teams, social services, REACT etc.
- Minimisation of patient moves
- Minimisation of steps in processes/hand-offs
- Integration of diagnostic and assessment processes
- Using the skills and expertise of professional staff flexibly, with joint training in order to transfer skills

2 Core Content

Within the Urgent and Emergency Care Zone, the facilities to be provided include:

- Entrances and concourse;
- Minor Injuries Minor Illness Centre (MIMI) for the minor injuries, minor illness and the GP out of hours (GP OOH) service which forms part of the Integrated Community Hospital;
- Emergency and Acute Assessment Service including:
  - Resuscitation unit
  - Bed/trolley assessment area
  - Seated assessment area
  - Acute assessment beds for patients who require investigation / stabilisation before a transfer home or into the acute or community hospitals
  - Clinical site management facilities, including hospital at night
  - A range of support accommodation

This content is summarised in the following diagram:



3 Strategic Design Principles

The key objective is to provide a facility where teams from the acute and community hospitals can provide a rapid and comprehensive assessment, diagnostic and early treatment service.

To reflect the philosophy of service, a number of strategic design principles will apply:

- Concentration of entrances;
- With consideration to the above point, there should be direct access for patients to the correct part of the service (e.g. avoiding sick patients having to pass through layers of reception, getting pre-assessed patients directly to a bed/service);
- Removal of bottlenecks and opportunities to wait;
- Simple and visible waiting areas and circulation;
- Careful balancing of need for privacy and visibility
- An environment that facilitates communication amongst the wider multi-disciplinary team, including the rapid response teams, therapists and social services staff who will be focused on preventing avoidable admissions
- Standard rooms in the MIMI so that any practitioner (e.g. Emergency Nurse Practitioner, GP or specialist physiotherapist) can use any room for patient examination and treatment
- Standard rooms in the Emergency Assessment Unit to enable flexible use and allow for changes in medical, nursing and therapy needs of patients
- Plain film and diagnostic facilities integrated into the zone
- Separation of waiting and appropriate environments for children
- Appropriate environment for patients with psychiatric conditions

4 Hours of Service

The service will operate 24 hours every day.

5 Specific Exclusions

A number of services have been specifically excluded from the Urgent and Emergency Care Zone:

- Expected tertiary referrals (e.g. Neurosurgery) will be seen by the receiving specialty in their own wards;
- Maternity patients will be seen by maternity services.

A number of patients referred by their GP will be transferred directly to an inpatient bed and will bypass the Urgent and Emergency care zone. These patients will include:

- Specialist plastics
- Obstetrics and early pregnancy problems
- Renal dialysis patients

Children with major clinical problems will not be admitted to Southmead but will be transferred to the Bristol Children's hospital (after being stabilised if this is necessary).

6 External Functional Relationships

The following services need to be easily accessible:

- Plain Film and CT (should be integrated into the zone)
- Other diagnostics
- Helicopter landing facilities,
- ICCU,
- Cardiac Catheter facilities
- Theatres
- Pathology services including Haematology, Biochemistry, Transfusion and the blood bank
- Support services such as security, the body store, laundry and catering

The design should facilitate the separate flows of patients, visitors and goods wherever possible. This is particularly important where there is the potential for patients to be in a state of undress and/or distress.

7 Internal Functional Relationships

The following adjacencies will be key:

- Patients must be able to access the Urgent and Emergency Care Zone via a dedicated entrance and concourse area that is adjacent to a patient drop off,

including capacity for ambulance transfers and movements. Access to the concourse will be required at all times for patients and staff.

- The Minor Injuries & Minor Illness unit and GP out of hours service will be sited close to the Concourse and form part of the Integrated Community Hospital which should be capable of functioning as a single entity
- There will be a patient assessment area close to the ambulance entrance to allow the team to complete a rapid initial assessment of each patient and commence appropriate diagnostics and/or treatment
- The patient decontamination area will have direct external access and be adjacent to an external area suitable for the erection of an inflatable decontamination facility

8 Functional Content

The Urgent and Emergency Care zone will contain the following facilities. Although a summary of the main functional areas is provided here, reference should be made to the detailed schedule of accommodation.

8.1 Concourse

The concourse must be welcoming and as non-institutional as possible and provide a range of seating, visitors' toilets, baby change and feeding facilities and appropriate retail and/or vending facilities. It should include a waiting area with seating for thirty people in addition to any seating provided within the retail area.

Meet and Greet
This position will provide a base for staff who will provide an information and 'meet and greet' service for patients and their carers.

Wheelchair parking
An area to park and store up to ten wheelchairs for temporary use by patients on arrival within the Urgent and Emergency Care Zone is required.

Retail Unit Shop
The Trust requires high quality retail space to be provided as a contributing factor in the delivery of a good patient experience. It is anticipated that this will include the provision of hot and cold beverages and snacks for patients and visitors.

Security Base and CCTV control room
The main security base will be in the Urgent and Emergency Zone concourse.

This position will act as a base 24 hours a day, every day, for a security presence for the hospital. It will include a controlled access area for the CCTV console (in line with latest standards, currently BS 8418:2003, the Code of Practice for Installation and Remote Monitoring of Detector Activated CCTV systems), radio base station and access control centre. There will also be one triple office (shared with police).

Staff Rest

The Trust wishes to encourage staff to move away from their immediate work area whilst taking breaks. Therefore a shared provision is required adjacent to the main clinical areas. The staff-only area should provide comfortable seating, low tables, hand rinse and co-located beverage facilities.

The generic accommodation includes:

- Patient and visitor sanitary facilities
- Domestic services and disposal hold

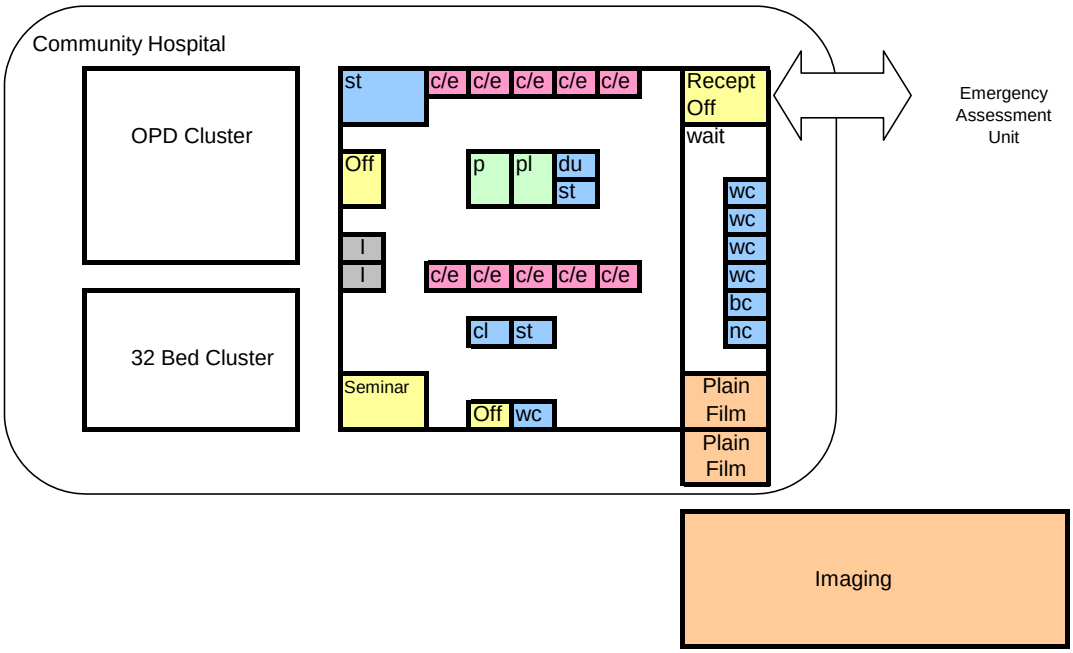
8.2 Reception

There will be a reception area associated with the MIMI. This will provide the opportunity to get patients requiring MIMI straight into the service whilst enabling direction of sick patients into the emergency and acute assessment service.

Some patients and relatives or carers may attend the Urgent and Emergency Care Zone in a highly emotional, disturbed or violent state. Therefore, the reception area must be designed so as to provide a working environment where staff feel safe whilst still providing appropriate access to all those attending, including those with a disability.

8.3 Minor Injuries and Minor Illness Unit

This area which forms part of the Integrated Community Hospital will accommodate the MIMI service during the day and include the GP OOH service during the evening and night hours. The relationships between different aspects of the accommodation are shown in the diagram below:



Waiting

This area will provide generic waiting for up to thirty patients, relatives and carers serving MIMI including wheelchairs. A linked, but separate, play and waiting area for children is required which provides a secure area for children to play whilst offering good visual access for adult supervision. Baby change and feeding facilities will be provided. Waiting areas should balance safety with a pleasant environment. Design principles known to reduce stress and the potential for violence and aggression should be incorporated.

Consulting Examination
The generic consulting examination rooms will be provided for triage, assessment and treatment of minor injuries or minor illnesses (one of these rooms requires particular privacy to accommodate gynaecology patients.

Consulting Examination: ENT and Ophthalmology
Based upon a generic consulting examination a specialist ENT / ophthalmology room shall be provided which includes black out facilities. This room is to be accessible from both the trolley bays and MIMI rooms.

Counselling (Psychiatric Assessment)
The counselling (psychiatric assessment) rooms must be easily accessible from any part of the zone and not in an isolated area of the department. The rooms should have a domestic rather than clinical environment whilst maintaining a high level of safety for staff and patients. Two doors to each room will be required, as will an accessible but not intrusive panic alarm and unbreakable fixtures and fittings that cannot be used for self-harm. Natural light would be highly desirable.

Procedure Room
The procedure room must be centrally located within the clinical area ensuring that all the consultation and examination rooms can achieve immediate access. Typically, suturing, biopsies or drainage of abscesses may be done in this facility. The level of services required will be the same as a generic procedure room with the additional requirement that the design of the room shall meet the specific standards outlined in HBN 52 volumes 1 and 2 and include the provision of a scrub sink

Plaster Room
The plaster room needs to be accessible from all the consultation and examination rooms and must have direct access to the plaster store. The room will accommodate one patient on a trolley and one seated patient, with tracked curtains providing visual privacy. There must be a plaster sink with plaster trap and two WHB. Good ventilation is required, and access to natural light is desirable. A workstation will be required for administrative tasks and viewing of radiology images using PACS.

As manipulations will be undertaken in this room, oxygen, suction and monitoring facilities will be required in the trolley bay.

Staff Base
The four person staff base will support the consulting examination rooms. It is essential that staff in the base can view the call indicator panel for each room from the workstation. Facilities will be required for staff to make telephone calls, complete administrative tasks

and use computers. There will be a designated space where a resuscitation trolley may be located.

The MIMI will also include:

- Reception
- Office co-located with reception
- Patient and visitor sanitary facilities (ambulant and assisted)
- Staff ambulant & assisted sanitary facilities
- Dirty utility
- Domestic services
- Office accommodation
- Seminar room
- Stores for clean supplies and drugs located to provide straightforward access from all treatment areas
- Plaster store
- Appliance store - for a range of aids from Zimmer frames to smaller aids such as tap turners.

8.4 Emergency/Acute Assessment Unit

The accommodation, whilst having discreet areas for assessing patients and resuscitation, must enable flexible use and allow for changes in the clinical needs of patients, changes in models of care, service delivery or future reconfiguration.

The patients will have varying types and degrees of disability so it is important that space is allowed for wheelchair access throughout the whole zone and that the design incorporates features which enable all patients to be as independent as possible. The design layout must enable clear signing to optimize patient flow.

Staff Base/Reception
For two staff

Waiting
Generic waiting for ten including two wheelchairs with co-located ambulant and assisted patient sanitary facilities

Departmental Porters
A base accommodating up to two in-house porters with workstation and seating

Utilities
Clean utility prep and dirty utility with macerator.

The rooms below require bespoke accommodation:

Emergency Assessment Area

This area will provide space for the multi disciplinary team to assess rapidly patients who have been brought in by ambulance. Up to eight team members may be present at any one time and the area will require visual and auditory privacy.

Resuscitation: Adult resuscitation bays
The access to this area will be direct from the outside, giving ease of access and the ability to by pass reception as patients are likely to have suffered major trauma. The bays need to provide island bed bases for access around the head, ceiling mounted imaging and video facilities and have immediate access to blood gas analysers. Up to 15 staff may be attending to a patient in a bay at any one time.

The level of services required will be the same as a Stage 1 Recovery bed with clinical hand wash facilities by each bay. It must be possible to provide privacy for individual patients whilst not reducing the staffs' ability to monitor patients continuously. Both overhead and swing arm lighting will be required, plus temperature control.

One of the resuscitation bays must be suitable for caring for babies and children up to 16 should they require stabilising prior to transfer to the children's hospital. At other times the bay may be used for contaminated or highly contagious adult patients. Both types of patients will require a design solution that offers visual and physical accessibility for staff whilst maintaining a protective barrier from the rest of the area.

There will be considerable storage requirements for both disposables and equipment (such as blood gas analyser and fluid warmers) to which immediate access is required.

Resuscitation: Staff Base
The staff base will support the adult resuscitation bays. It is essential that staff in the base can view the call indicator panel for each bay from the workstation and be able to visually monitor all patients. Facilities will be required for staff to make telephone calls with a degree of auditory privacy, observe cardiac monitors, complete administrative tasks and use computers.

Resuscitation: Mobile Equipment Bay
This area will accommodate up to three items of mobile equipment on charge such as ultrasound, x-ray and ECG machines.

Resuscitation: Trolley Bay
This area will accommodate resuscitation trolley and defibrillator equipment.

Resuscitation: Decontamination room
This room should be located with direct access to an external entrance and to the majors area of the EAU. There should be provision for patients to undress (dirty zone), shower (intermediate zone) and then gown (clean zone) in privacy. The room must be watertight, have appropriate ventilation (air exchange unit) and contained drainage. There should be an external area adjacent to this room where an inflatable decontamination tent can be erected and provided with a warm water supply. As this room may have to be used to care for critically ill patients, piped oxygen and suction will also be required.

Bedded/Trolley Assessment Area
Patients in these bays may be in a critical condition and will require high medical input. It must be possible for staff to monitor and observe patients continuously, particularly from the staff bases, whilst providing visual privacy for individual patients. The bays should be easily accessible from the ambulance entrance, with immediate access to diagnostic facilities. The level of services required will be the same as a level 1 recovery bed. A maximum of 50% of these treatment areas may be provided as curtained bays and the remainder must be rooms. A proportion of the patient sanitary facilities must be co-located with this area

The procedure room and therapy assessment rooms must be readily accessible.

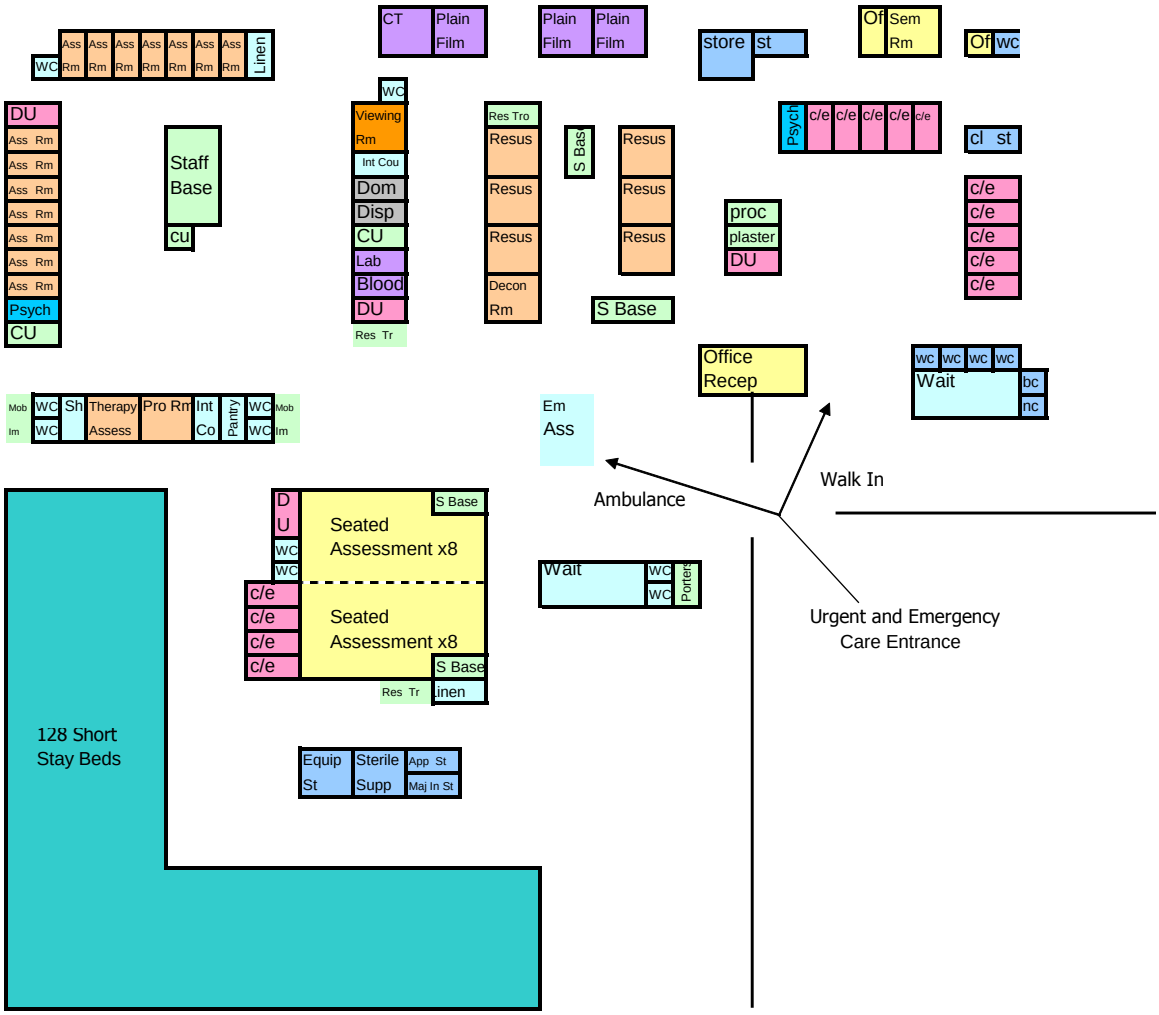
Seated assessment area
This area will accommodate "walking wounded" patients. Patients will be seated in high-backed easy chairs, and will be assessed within the adjacent consulting and examination rooms. The design must allow for patients to have equipment for diagnosis or treatment (e.g. drip stands) next to their chair. It must be possible to provide visual privacy for individual patients whilst not reducing the staff's ability to observe patients from the staff base. Nurse call facilities will be required by each chair.

Some patients will be recalled to the seated assessment area unit following discharge from the EAU, for outpatient review. Easy access from the reception and main waiting areas is essential.

Accommodation will include:

- Consulting examination rooms provided adjacent to the seated assessment area. These may be used for seated assessment patients or outpatient review
- Staff bases to support the assessment area and the seated assessment area. It is essential that staff at the bases can view the call indicator panel for each bay from the workstation and be able to visually monitor all patients. Facilities will be required for staff to make telephone calls with a degree of auditory privacy, observe cardiac monitors, complete administrative tasks and use computers.
- Linen stores
- Clean utility space
- Dirty utility with macerator
- Resuscitation trolley bays
- Mobile equipment bay

The relationships between different aspects of the accommodation are shown in the diagram below:



Support Facilities
The shared clinical generic accommodation includes:

- Patient ambulant and assisted sanitary and shower facilities
- Stores for linen, clean supplies and drugs located to provide straightforward access from all treatment areas
- Dirty utility with macerator
- Clean utility prep
- Near patient testing laboratory located close to resuscitation and the assessment areas
- Interview/counselling rooms

Blood Bank
A secure area to be provided where staff may access blood products stored in a blood fridge. Access to power and temperature control are essential.

Therapy / Assessment
A room will be provided for therapy assessment of patients. This room will be for physiotherapists, occupational therapists and other members of the REACT team to assess

the ability of patients prior to discharge or transfer. The room will be equipped to allow team members to assess patients' mobility using a variety of aids and equipment such as high backed arm chairs, an adjustable bed and assessment stairs with banisters. A limited kitchen assessment may also be required, so the room must have a kettle, microwave and WHB. A workstation will be required to allow staff to update patient records.

Procedure Room
There will be a procedure room which is to be centrally located within the clinical area ensuring that all the assessment areas and short stay beds can achieve immediate access. Typically, suturing, insertion of chest drains; biopsies or drainage of abscesses may be done in this facility. The level of services required will be the same as a generic procedure room with the additional requirement that the design of the room shall meet the specific standards outlined in HBN 52 volumes 1 and 2 and include the provision of a scrub sink.

Viewing Room
The deceased will be transferred to this room where relatives or friends may attend. Comfortable seating for two and adjustable lighting are necessary. Sound attenuation and the ability to cool the room are also required. There should be a mechanism for indicating whether or not the room is occupied.

Bespoke Storage
Medical Gases – storage is required for up to 6 cylinders of oxygen or air on trolleys with simple access to the outside for ease of deliveries .

The shared non-clinical generic accommodation will include:

- Interview/counselling rooms
- Sterile supplies – will require enclosed adjustable shelving
- Appliances – storage required for a range of aids from Zimmer frames to smaller aids such as tap turners.
- Major incident – mobile team's equipment, additional telephones, decontamination suits and sundry items will be stored.
- Equipment storage
- Staff common room
- Beverage facilities
- Staff sanitary facilities
- Domestic services and disposal hold

Pantry
For the preparation of ad hoc patient beverages and light snacks throughout the day. It will include hot water boiler, toaster, microwave, dishwasher, storage for crockery & consumables and a wash hand basin

Short Stay Beds
The functional requirements of the one hundred and twenty-eight short-stay beds are contained within the Inpatient Zone Specification. These beds should be located at the interface between the Urgent and Emergency Care and Inpatient Zones.

The short stay beds are for patients (in the main aged 16 or over) who require a stay of up to 24 hours. Patients will either be transferred from within the Urgent and Emergency Care Zone or referred by their GP and may arrive by private transport or ambulance. Patients may stay in the unit before transfer to a specialist bed if it is felt their condition can be optimised before transfer.

Patients may be admitted to commence a treatment that can then be continued in a community setting, to access appropriate diagnostics or for stabilisation prior to surgery. There will be early senior involvement in the assessment and investigation process, prompt access to all appropriate diagnostics and rapid clinical decision making with clear management plans. An underlying principle will be that this service initiates the hospital based care pathway for emergency patients and that patients will be placed appropriately according to their presenting condition, acuity and predicted length of stay.

Those who are acutely ill or unstable will need to be nursed in an area where close monitoring is possible before being moved to a "step-down" area. It is possible that a number of these beds will need to be designed specifically in order to maximise the visiibilty of patients to staff.

8.5 Clinical and Site Management

Clinical Site Management (CSM) Administration and Hospital at Night Team

Clinical Site Management is a key component of the Hospital at Night team that requires accommodation throughout each day. Flexible space is therefore required for both.

The following facilities will be required:

- Offices
- CSM and Hospital at Night base room - a range of seating for up to 20 will be required (with an allowance for tabled seating), plus whiteboards and a resource base for three. This room will be used as a seminar room during office hours
- A staff quiet room allowing for protected breaks out of hours. This can be used as a generic facility during office hours.
- Staff beverages
- Staff sanitary facilities
- Appliance store

8.6 Education & Workforce Development - Zonal Accommodation

A suite of generic seminar rooms, to be utilised for formal and informal education and training, together with an IT suite is required. These facilities will be available for the multidisciplinary teams and will include workstations and informal seating.

8.7 Staff Changing

Facilities are required in the zone sufficient to provide for the number of staff working in the zone requiring changing, showering and storage facilities at any one time (estimated maximum 485). Shift and working patterns will need to be considered in agreeing the final design. Secure lockable storage will be required for personal property whilst staff are on site.

9 Staffing

The total number of staff will be approximately 580. It must be recognised that a number of departments undertake significant training functions at both undergraduate and post graduate levels. Student numbers have been omitted from the above.

The number of staff at handover points for the short stay beds will be up to 35.

10 Patients

Patients attending the Emergency Assessment Unit will, in the main, be aged 16 years and over. They will attend with a broad range of emergency and urgent problems. The MIMI will be accessible to patients of all ages

It is essential that patients do not pass through clinical areas unless they need to do so for their assessment and treatment.

11 Relatives, Carers and Visitors

Usually patients are accompanied by 1 to 2 relatives or carers, but can be up to 5. Facilities are required to accommodate these numbers whilst medical treatment is undertaken.

The design should provide informal seating areas within the circulation allowances to permit relatives and visitors to sit with patients or wait whilst staff interventions are completed. The access and security arrangements will need careful consideration as visitors will often be present at all hours. Access must be controllable whilst ensuring visitors are welcomed and feel able to arrive and leave as they wish.

12 Planning and Design Principles

12.1 Ambience and Decoration

The design shall access the research available on hospital environments. Waiting areas shall be designed to balance safety with a pleasant environment, using principles known to reduce stress and the potential for violence and aggression. Opportunities shall be taken to maximise natural ventilation and natural light in the patient areas. Special consideration shall be given to the means of temperature control and fresh air in the clinical areas. Unless otherwise stated all offices, reception areas, waiting areas and clinical examination rooms will require natural light and ventilation.

12.2 Wayfinding

Wayfinding shall be clear and unambiguous. Signs in the Urgent and Emergency Care Zone shall clearly demarcate separate clinical areas, and enable the separation of staff and patient flows.

12.3 Security and Observation

There will be Security staff on site on a 24 hour, 7 days per week basis.

The security of staff, patients and visitors is of paramount importance. The presence of a security base within the Urgent and Emergency Care Concourse will facilitate this. CCTV will be installed throughout the department. It is essential staff can observe patients and that patients can see recognisable staff in order to feel reassured and safe.

Security will be arranged on a zoned basis to secure discreet areas if required, whilst retaining access to the associated support facilities (for example, Plaster room) for the Emergency Assessment Unit.

12.4 Privacy and Acoustic Control

The design of the Urgent and Emergency Care Zone needs to support patients and relatives in times of crisis, providing an environment which respects the needs of all patients, in terms of privacy and dignity as well as facilitating the delivery of confidential communication.

12.5 Environmental Parameters

Generally, all public areas, concourses, seminar meeting rooms, offices and areas not occupied by patients will be controlled by a BEMS system to the requirements of HTM 2025 in respect of temperature and humidity; the following rooms will require a degree of local control

- Consulting / Examination rooms
- Procedure rooms

12.6 Flexibility

The design needs to support staff in managing the fluctuating demand for service as well as aggression from patients and relatives.

12.7 IM & T

One of the staff bases in the Emergency Assessment Area will require a specific communication link with the Ambulance Service. This shall have a hotline phone, standard radio and telemedicine links for ECG transmission etc.

It is assumed that all patient records will be electronic and note entry and note review will take place at or close to the patient treatment areas.

12.8 External Space and Courtyards

Access to outside spaces (balconies, courtyards and gardens) is highly desirable for staff and relatives. The areas shall provide a range of surfaces and levels with adequate suitable seating and tables.

Space shall also be required for an emergency inflatable structure – see section on decontamination facilities

North Bristol NHS
NHS Trust

Appendix 7.iv (f)

SUPPORT SERVICES SPECIFICATION

SUPPORTING SERVICES

1 Philosophy of service

The services described vary significantly in terms of their service delivery model and the nature of the support provided to the clinical functions.

However, the service models all assume adoption of the best available technology for delivering services, accessing information and monitoring performance. The vision is to use opportunities to work across boundaries and form alliances to deliver customer focused services.

2 Core Content

The supporting services to be provided within the new hospital include:

- Car Parking
- Corporate & Clinical Administration
- Estates Maintenance
- Facilities Management (FM)
- Health Records
- Hotel Services
- Receipt and Distribution
- Residences
- Security
- Staff supplementary accommodation
- Sterile Services
- Voluntary Sector

3 Strategic Design Principles

The key objective is to provide supporting services that are fully integrated into clinical pathways and which assist in the delivery of excellent patient care.

To reflect the philosophy of service, a number of key strategic design principles will apply as follows:

- The plans for services must be flexible in order to respond to future changes in both the clinical model of care and the way support services are delivered. This will include technological developments.
- The supporting services are unlikely to be provided as a cohesive physical entity but the resources and facilities should be appropriately distributed to support clinical services.
- It must be possible to separate patient and visitor flows/journeys from supporting services flows/journeys.
- The movement of patients should be separated from that of goods (dirty or clean) and the public or visitors in order to ensure that the privacy and dignity of patients is not compromised

- There should be no requirement for external transport or movement of patients, goods or equipment
- With a limited number of exceptions, all office accommodation will be in an open plan environment to help improve communication and encourage team working
- Centralised distribution and storage facilities will be maximised with appropriate top up systems to support all areas
- All systems should
  - Be simple to use
  - Allow activities to be carried out in the safest means possible
  - Enable operations to be as streamlined as possible
  - Allow standardisation of activities
  - Provide consideration to sustainability
- Where curtains are used they should be a standard installation and height
- All surfaces should have high levels of protection against accidental damage
- All surfaces should be able to withstand Trust cleaning processes and materials

4 Hours of Service

All departments will be operational (or require access) 24 hours, 365(6) days a year.

5 External Functional Relationships

Much of the accommodation for the Supporting Services will require linkages to the internal hospital street network to ensure rapid and appropriate access to the full range of clinical departments located within the Southmead Hospital.

For those facilities used only by staff, a physical link to the main building is not essential although travel distances and times and security must be given consideration.

Access to buildings other than the new acute and integrated community hospital will also be required and facilities must be appropriately distributed to allow this.

5.1 Facilities Management

Summarised below are the key external relationships for FM services:

- Clinical Zones - the provision of soft FM services will be an integral part of the clinical services and responsive, efficient and effective services will be key to the delivery of patient care. The relevant support facilities must therefore be co-located with the clinical departments that they serve to minimise journey times and distances
- Site Deliveries - many of the departments will require access to high volume deliveries on a regular basis. This must however be balanced with the Trust requirement for a single receipt and distribution point for the Southmead site. There must be discreet access, restricted to authorised personnel, to the receipt and distribution point but have convenient and protected access to the internal hospital street network.

- The site layout should include dedicated lorry routes for goods deliveries and collections. From a safety and noise perspective the lorry routes should be separated from other site traffic and screened as far as possible from hospital buildings. The largest vehicles are used by waste contractors and are up to 36 tonnes in weight and/or articulated.

6 Internal Functional Relationships

The key objective is to provide identifiable, essential non-clinical services that support the clinical zones of the hospital. The services will require the provision of facilities that support both routine and ad hoc service activities which are responsive to the demands of the clinical services. In addition to a range of centralised facilities it is anticipated that the physical requirements of service provision will be distributed amongst the clinical departments. It is not anticipated that any patient care activity will take place within any departments.

- Facilities Management Services - in addition to the central co-ordination functions and a retail catering facility, these services must be co-located with the clinical services they support. Consideration must be given to the specialist requirements for the rapid delivery of goods to key areas including Pharmacy and Pathology.
- Corporate & Clinical Administration - the departments identified are those which do not require co-location with any specific clinical function. However the interrelationship with the clinical services is vital and therefore consideration must be give to the accessibility to and from clinical areas.
- Health Records - it is the Health Community's objective to ensure that at the point of completion of this hospital patient and other records will be fully electronic. However it is recognised that there will be a requirement to manage smaller volumes of documentation. The facility will support all departments but does not require location in prime clinical space.
- Overnight Stay - the provision is minimal but will be required to support clinical services, therefore location within ready access of key departments would be a significant advantage

7 Functional Content

Although a summary of the main functional areas is provided here reference should be made to the detailed schedule of accommodation. In describing the accommodation and its functional relationships the facilities have been separated into their basic functionalities.

The Supporting Services will require the following key facilities:

7.1 Health Records

The Health Community is working towards the introduction of the fully electronic patient record in line with the NPFIT programme. However it is recognised that there will be an ongoing requirement to provide limited access to hard copy documentation.

Although operating in support of the clinical services within the hospital the location of these facilities does not require core clinical space, but should be readily accessible from the clinical departments. The security of this area is critically important.

The Health Records (including Clinical Coding) facilities will include:

- Case Note Sorting - this area should be designed to accommodate a range of pigeon-holes or equivalent for the sorting of case notes which have been delivered to the department from external or internal sources. Sorting may result in onward transfer to a clinical area, return to a central archive and filing within the case note library area. All such outcomes should be accommodated within this single area. This area is also to be used for the scanning and copying of records
- Case Note Library - the Trust require mobile racking supplemented with fixed shelving and facilities for sorting of notes prior to filing or forwarding to the main sorting area. 100,000 records to be accommodated @ 15,000 records per metre run
- Offices and resource bases
- Reprographics
- General store
- Staff sanitary facilities
- Domestic services & disposal hold

7.2 Patient and Visitor Services

7.2.1 Patient Advice and Liaison Services (PALS)

Public access offices including those for the PALS staff must be located within the main concourse areas of the hospital with clear signposting to identify their location. It is essential that these facilities are accessible for visitors and patients however short their episode of care or visit to the hospital. Access to the facility must not require patients or visitors to first pass through any clinical or support area. This facility is included in the specification for the Inpatient and Ambulatory Care Zones.

7.2.2 Voluntary Sector

Volunteers working in support of the health facilities on the site do so through many routes, but all require co-ordination and management. It is anticipated that the office accommodation will be co-located with the Corporate Administration section of the development.

7.2.3 Cashier

A single office with a safe shall be provided supported by appropriate security arrangements and ideally located in the main concourse.

7.2.4 Bereavement Suite

Located within the main concourse area close to the Multi-Faith Centre (MFC) enabling the sharing of the MFC interview/counselling rooms, beverage and sanitary facilities. A waiting room and offices for registrars, counselling personnel and doctors, plus secure storage for deceased patients belongings are required in additional to the MFC accommodation.

7.2.5 Job Shop

To be located in the main concourse area. The accommodation will include:

- Reception area/resource base with tables chairs and information boards etc.
- Office for employment services staff (to assist with completion of application forms etc)

7.3 Corporate Administration

The Corporate Administration functions operate in support of the organisation. Although some of the departments do have direct contact with patients there is no requirement for any immediate adjacency to the clinical space within the hospital. It is essential however that the facilities are located within ready access of the main facilities

In view of the relationship of the corporate administration functions to the clinical administration functions the adjacency of these facilities should be given consideration.

The accommodation will comprise the following:

7.3.1 Operations Directorate

- Multi-offices and resource bases
- Reprographics
- Beverage facilities
- Staff sanitary facilities
- Domestic services and disposal hold

7.3.2 Finance

- Multi-offices and resource bases
- Reprographics
- Beverage facilities
- Staff sanitary facilities
- Domestic services and disposal hold

7.3.3 Strategic Development/Projects

- Multi-office

7.3.4 Community Non-clinical

- Single and multi-offices
- Reprographics
- Beverage facilities
- Staff sanitary facilities

7.3.5 Human Resources

- Single, multi-offices and resource bases
- Meeting rooms
- Reprographics
- Beverage facilities
- Staff sanitary facilities
- Domestic services and disposal hold

7.3.6 Executive/Corporate Director Team

- Single and multi-offices
- Meeting rooms
- Waiting area
- Reprographics
- Beverage facilities
- Staff sanitary facilities
- Domestic services and disposal hold

7.3.7 Clinical Governance

- Double and multi-offices

7.3.8 Seminar Suite

- Seminar rooms
- Meeting room
- General store
- Pantry
- Assisted and ambulant sanitary facilities
- Domestic services

A large meeting room (Board Room) will be required to accommodate up to 80 people for public meetings, but should be capable of subdivision into 2 smaller rooms utilising flexible partitions with appropriate levels of sound attenuation. This room should be equipped with fixed projection and presentation facilities and a hearing loop or equivalent.

Within the corporate meeting room facility one room suitable for 12 people must be equipped to support the "Silver Control" role as designated within the Mass Evacuation Plan which is held in the Data Room.

7.4 Clinical Administration

The clinical administration facilities referred to within this section are those individuals/functions which although linked to the clinical services do not require immediate co-location with any specific service or zone.

In view of the relationship of these functions with the clinical departments it is essential that these facilities be located within the main hospital building, although facilities could be distributed across a number of levels.

A key issue in the location of these facilities is the need to maximise flexibility within the clinical and support accommodation and the avoidance of the development of fixed points or specialty village.

The accommodation will comprise the following:

7.4.1 Central Clinical Accommodation *(including Clinical Support Directorate, Critical Care Directorate & Infection Control (to include accommodation for Directorate GMs & AGMs))*

- Offices and resource bases
- Beverage facilities
- Staff sanitary facilities

7.4.2 Medicine Directorate *(including Renal Services)*

- Single and multi-offices (for consultants and secretaries) and resource bases (for registrars, CNS etc.)
- Beverage facilities
- Reprographics
- Staff sanitary facilities
- Domestic services & disposal hold

7.4.3 Musculoskeletal Directorate

- Single and multi-offices (for consultants and secretaries) and resource bases/hotdesks (for registrars, CNS, visiting consultants etc.)
- Beverage facilities
- Reprographics
- Staff sanitary facilities
- Domestic services & disposal hold

7.4.4 Neurosciences Directorate

- Single and multi-offices (for consultants and secretaries) and resource bases (for registrars, waiting list coordinators, CNS etc.)
- Beverage facilities
- Reprographics
- Staff sanitary facilities
- Domestic services & disposal hold

7.4.5 Oncology/Haematology/Immunology

- Single offices (for consultants and secretaries) and multi-offices and resource bases (for registrars, waiting list coordinators, CNS etc.)
- Beverage facilities
- Reprographics
- Staff sanitary facilities
- Domestic services & disposal hold

7.4.6 Surgical Directorate *(including Plastics)*

- Single and multi-offices (for consultants and secretaries) and resource bases (registrars, waiting list coordinators, CNS etc.)
- Beverage facilities
- Reprographics
- Staff sanitary facilities
- Domestic services & disposal hold

7.4.7 Community/Rehabilitation/Social Services

- Single, multi-offices and resource bases
- Beverage facilities
- Reprographics
- Staff sanitary facilities
- Domestic services & disposal hold

7.5 Overnight Stay

Residences

Retained residence facilities will be situated in Monks Park House and will not be part of the PFI scheme.

Overnight Stay

It is anticipated that only limited residential accommodation will be provided which should be co-located with the clinical zones within the main hospital building, these will be on-call rooms for clinical staff. These will be accessed on a need-to-use basis and serviced/restocked as required. The overnight stay accommodation will include:

- Ten bedrooms with ensuite ambulant showers and sanitary facilities
- Kitchen/dining rooms
- Sitting room
- Domestic services & disposal hold.
- Linen stores.

7.6 Supplementary Accommodation - Staff Change

Facilities are required sufficient to provide for the number of staff requiring changing and showering facilities at any one time (estimated maximum 400). Shift and working patterns will be considered when agreeing the final design. Secure, lockable storage is required for personal property whilst staff are on site. It is estimated that ~400 lockers will be required at peak times.

Changing, showering and locker facilities are required appropriate for the numbers of Southmead Hospital staff bicycle users as outlined in the NBT Cycle Strategy held in the Data Room.

7.7 Education & Workplace Development

A range of education and meeting facilities should be readily available and have the ability to accommodate a variety of teaching and training activities and include facilities for IT training. These rooms should also have the facility to connect up to other locations and sites through teleconferencing.

7.8 Third Party Users *(not defined elsewhere in this document)*

- Research & Education
- Social Workers
- Crèche.

7.9 Whole Hospital Support

7.9.1 Whole Hospital Support - Estates Maintenance Service – Help Desk

It is assumed at this stage that the provision of the Helpdesk will be utilised for the delivery of all FM services, hard and soft, irrespective of the decision on where these services sit in terms of the services to be included within the PFI scheme.

It is proposed that the Trust's helpdesk will be the first point of contact for the following soft FM services:

Car parking
Catering
Crèche
Domestics
Estates Maintenance [retained estate]
Linen & Laundry
Non-Patient Transport
Portering
Reprographics
Residences
Security
Waste management

Calls relating to Materials Management & Switchboard/IM&T services will be managed directly by those services. However it is anticipated that there will be a technical solution enabling hospital staff calling a single helpdesk number to be routed to the appropriate service helpdesk.

The helpdesk will also act as the main call centre for all calls relating to facilitate services for the remaining buildings on the Southmead site and off-site locations where services are provided. The Trust's helpdesk will act as the main 'first contact' for all calls relating to estates maintenance, pest control, window cleaning and utilities enquiries for the new building and Treatment centre and other users such as AWP, PCTs etc. before immediately routing these calls onto Project Co to action directly.

It is envisaged that the Trust's helpdesk will be preferably co-located with other facilities services operations and function 24 hours per day, 7 days per week. The helpdesk centre should as a minimum allow space for 4 workstations, with the flexibility to increase that number by a 1 further workstation.

Project Co's helpdesk system shall also be capable of interfacing with the trusts existing Facilities Management Planet software, or equivalent.

7.9.2 Whole Hospital Support – Retained Estate Maintenance Service

The following schedule of accommodation is required if located within the PFI build:

- Electrical workshop
- Mechanical workshop
- Joiners' workshops
- Fitters' & plumbers' workshop
- Grounds and Gardens compound
- Corrosive liquid store
- Equipment store
- Materials store
- PFI workshop
- PFI store
- Office and resource base
- Meeting room
- Reprographics
- Reception
- Staff common room and beverage facility
- Staff sanitary and changing facilities
- Domestic services and disposal hold

7.9.3 Whole Hospital Support - Patient Bed Head Services

It is envisaged that the Patientline facility could be located anywhere on the site, although there needs to be links to cabling infrastructure in relevant buildings/wards. The functionality of the space includes:

- A temperature controlled IT room accommodating the equipment to support the service.
- Repair/testing workbench area sufficient for a minimum of 6 workstations, at which technicians will commission and repair bedside equipment.
- Double office
- Store

Access to suitable staff changing, WCs and beverage facilities will be required.

7.9.4 Whole Hospital Support - Security

It is envisaged that the main security base will be located adjacent to the main concourse within the Emergency Zone. It is also envisaged that this area will contain all the CCTV monitors associated with the new building and existing cameras, outside of the development zone, required to be re-located to this area. There will be a satellite security base in the Inpatient concourse.

Project Co will need to ensure that for all existing cameras to be retained elsewhere on site, provision is made to relocate those CCTV monitors into the new building. The CCTV system, operable 24/7, should have the capacity to capture clear images onto tape/DVD, suitable for use in a Court of Law as evidence if required. Recording should be flexible in so much as to allow real time or time-lapse recording. The minimum standard to which the CCTV system should be designed is BS 8418:2003 or the most relevant standard of the

day. Further details of the Trust's requirements in this respect are described under section 7.3.3.20 CCTV System.

This space will also need designing to carryout the following minimum functions; processing of staff/visitor identity badges, including photographing personnel, central location for key management, interviewing and responding to planned, routine and emergency call outs.

The central control room will also require appropriate communications facilities for the control room (base) to communicate with guards out on patrol. Security will also need a suitable IT interface with any access control point that Project Co are responsible for designing and installing, with the right to grant and revoke assess to all personnel as and when required. Arrangements will also be required for Project Co to relocate any existing access control system and, with a suitable interface, connect onto any new system.

Appropriate storage within the central security control room will be required for equipment connected with this service. A separate interviewing room will be required, preferably adjacent to the control room. It is envisaged that security staff will utilise the main generic staff changing facility.

The Trust is extremely keen to ensure that appropriate security measures are embedded throughout the design of the hospital, maximising the benefits of technological solutions operating in conjunction with the physical presence of security operatives across the site and strategically located within high profile departments. The specific requirements regarding security standards will be produced separately by the technical advisory team.

7.9.5 Whole Hospital Support - Car Parking

The car parking function will be provided by an external service provider, managed directly by the trust. The car parking service provides staff & visitor car parking, including traffic management across the whole Southmead site. The service operates 24 hours per day 365(6) days per year on a planned and ad hoc basis.

Ideally the car parking office will be co-located with the security team on the main hospital concourse. Car parking administration employs 2 members of staff. The service will also comprise of administration of a computerised permit system and the collection of income. The service provider will also manage all assets associated with car parking from this location.

Suitable IT/equipment interfaces will be required back to the Security control room to key CCTV located in each public or staff car park.

7.9.6 Whole Hospital Support - Transport

The range of services operated includes the inter-site bus service and internal hospital transport, (patient meals, waste, linen, consumable products, other materials, specimens, clinical notes). The transport department not only provides a comprehensive service on the Southmead site but to other Trust properties, NHS Clinics and other NHS organisations

within the West Country. The transport department is also responsible, on behalf of wards, clinical and non-clinical departments for co-ordinating the ordering of patient taxis, and courier services. The service operates 7 days/wk nominally during core hours.

The range of vehicles utilised are petrol, diesel or electric. It is envisaged that the fleet strength in the future will be two 11 ton tail lift vehicles, 2 'escort' type vans, 12 'transit' type vans, 2 cars and approximately 6 electric vehicles of various sizes. Project Co will need to ensure in the design that appropriate parking and pick-up/drop-off provision is made at the appropriate entrances to and exits from the new facilities. Additionally overnight secure parking facilities with charging bays for electric vehicles, complete with electricity supplies for the vehicle charging units are required and that they are sited with fuel run off.

Ideally the transport facility and storage compound for all vehicles would be away from clinical activity and integral to other 'industrial areas' where for example other goods are delivered (e.g. - Materials Management, Waste & Catering).

The transport base will comprise offices and rest room with beverage facility. Whilst it is envisaged that staff will utilise the changing accommodation located elsewhere for changing at the beginning and end of working periods, a cloakroom will be provided adjacent to the staff base for (potentially wet) outdoor clothing for transport staff to access between calls/work assignments. It is further envisaged that calls to the department will be handled by the Trust's central helpdesk and electronically routed to the transport department for processing/action. The Transport base will need to have connectivity to the Trust IT (voice and data) system for the provision of a Trust end-user helpdesk PC and handheld data devices for each user.

A range of technologies will be required to support this operation which will include networked IT links, GPS vehicle tracking and base-vehicle 2-way radio.

7.10 Information Management & Technology

The accommodation for the IM&T services will include:

- Open plan offices and resource bases
- Single office
- Bespoke IT suite
- Reprographics
- Seminar room
- Beverage facility
- Staff sanitary facilities
- Domestic services and disposal hold

7.11 Switchboard

The switchboard could be located anywhere on site and will comprise 6 work bases. It will need

- Links to the data and voice cabling within relevant buildings.
- To be in safe and secure area

- Staff common room including beverage and snack meal (micro wave) facility
- Sanitary facilities
- Domestic services and disposal hold

7.12 Sterile Services

The Sterile Services function will be provided by an external 'Super Centre'. The Receipt & Distribution core facility will need to include a temperature controlled storage/holding area for all processed instruments received from the Super Centre. The storage point will need to be adjacent to a collection/distribution point for the main hospital departments.

7.13 Automated Distribution System

The new hospital will require an automated distribution system primarily for the transportation of Pathology specimens and Pharmacy products, but may also be used for transporting documents. It is anticipated the system of choice will be a pneumatic tube.

Due to the distance and location of the Pathology and Pharmacy departments from the main hospital clinical areas the system is likely to:

- Provide a distribution system between Phase I Pathology (Blood Sciences and Genetics Laboratory), Pathology Phase II (Microbiology and Cellular Pathology) and Pharmacy to the whole hospital site. (Phase II Pathology may be distant from Phase I Pathology)
- Have 2 transfer areas (redistribution areas) (Possibly 1 in Pharmacy and 1 in Elgar House area)
- Have 4 – 5 zones
- Hold 24 carriers (pods) in each redistribution area
- Have the capacity to move circa 160 – 200 carriers per hour, including empties
- Have circa 52 stations in total

    - 1 station per 32 bed unit plus 2 stations in the Critical Care Unit (23 stations)
    - I per 2 outpatient clusters, 1 for Medical Day Care and 1 for Renal Dialysis (10 stations)
    - 1 each for Majors, Minors and Resus (3 stations)
    - 4 for Theatres
    - 3 for Pharmacy
    - 4 for Pathology Phase I
    - 4 for Pathology Phase II
    - 1 Dump station

- Have 12 lines from sorter
- Utilise 110mm system rather than 160mm (using a selection of different pod lengths)

Issues to be addressed are:

- The provision of secure receipt cabinets for Pharmacy products or utilisation of a 'smartcard system', to include consideration of data protection issues
- Location of the Control Centre (Estates?)
- The distribution system will need to include Women & Children Services

7.14 Hotel Services

The soft FM service departments will comprise both central and core facilities and distributed amenities to support the key clinical areas of the buildings.

The Trust will operate directly the services listed in this section as part of the Soft Facilities Management Services. Project Co will be required to read this section, which describes how the trust intends operating facilities services, in conjunction with each relevant service output specification listed within Volume 3 of the ITPD, when designing facilities to support these services.

The Hotel services will provide support to all areas of the hospital sites for clinical and non-clinical functions. It is anticipated that although the services will be centrally managed, the facilities to support the key clinical and departmental areas will be dispersed and located within a number of strategically located FM hubs. The design requirements outlined below will therefore address both the centralised and local provision.

The service model is based upon the provision of fully integrated services delivered by an appropriately structured and trained workforce who will undertake a range of functions across all of the relevant disciplines.

7.14.1 Hotel Services – Administration Base

Double and multi offices for managers and secretaries.

7.14.2 Hotel Services - Receipt and Distribution Centre

The Trust require a single Receipt and Distribution (R&D) point which will serve the whole of the Southmead Campus as well as any locations serviced from the Southmead Campus. The area must therefore be capable of handing the full range of regular and ad hoc deliveries including catering, pharmacy and pathology.

The receipt and distribution centre should be located at ground or basement level, away from clinical activity, with direct access to main service corridors and departments, and with access to generic goods only lifts. There should be direct access to the main FM Yard and FM service corridor.

Goods delivered to site will be via the external hospital road system into the receipt and distribution industrial area. Whilst 'just-in-time' procurement will be key for effective supply chain management it is likely that daily deliveries of goods will take place from various suppliers.

Certain goods will also be delivered direct to departments such as perishable food goods (Catering), pharmaceuticals, and SSD instrument packs.

Due to the nature of the stores operation, its central location and areas it must visit within the Southmead Campus Project Co, through the overall design, must ensure noise and disruption to other adjacent clinical and non-clinical services, staff and members of the general public are kept to an acceptable minimum.

Goods transported internally shall not be on the main hospital street used by visitors and clinical staff. Where possible on internal streets electric tugs or other automated aids should be utilised. Design of storage space throughout the new building should ensure there is no need to locate cages holding stores on public corridors.

Project Co will need to ensure that corridors within the R&D areas are designed to accommodate electric tugs or automated guided vehicles with sufficient segregation between vehicles and personnel, together with wall protection and automated doors.

Goods delivered to remote facilities on the Southmead site will be via an electric or other suitable vehicle. Each department will either have their own dedicated store or access to a shared facility.

There will be a significant proportion of bulk deliveries including pallets and therefore consideration must be given to the range of handling and moving equipment which will be required, including its movement and storage.

The materials management team, whilst operating during normal working hours (Monday - Friday 08.00-17.00), will deliver goods within the hospital at quieter times outside of these hours. Access to the main R&D store will also be required on a 24/7 basis. The areas identified below must be secured out of hours;

The following section describes the required R&D facilities:

- Goods Receiving Area - the goods receiving bay must have direct access for road vehicles and have facilities, including IT, for the immediate checking of goods. The external bay must be capable of accepting deliveries form the full range of vehicles including articulated, pantechnicon and vehicle with and without tail lifts. The external goods area shall be of sufficient size to accommodate two loading bays (one for receipt or un-packing and one collection or returns), including turning, internal distribution or delivery vehicles and waste compactor or skips. The area should be of sufficient size to accommodate up to four deliveries at any one time. There will be space for four electric vehicles parking and charging in this area.
- Storage/Holding Areas - there shall be immediate access from the delivery bay to the secure store area. The temperature controlled area and bulk fluids store must be accessed directly from the main store. The area should be equipped with appropriate racking and space to accommodate both palletised goods and multiple cages. Storage facilities for redundant/surplus equipment will be included.
- Goods Dispatch Area - there will be a significant requirement for the distribution of goods to all areas of the site, many of which will be time critical. A distribution office must be located within the dispatch area for the management and observation of the goods receipt and dispatch functions. It is anticipated that the

processes for the receipt of goods and identification of goods for dispatch will be technology driven and minimise the requirement for multiple handing of items.
- Reception - this area must be co-located with the goods receiving and dispatch areas to ensure that all deliveries are supervised.
- Double and multi-offices
- Beverage facilities
- Sanitary facilities
- Domestic services and disposal hold

7.14.3 Hotel Services - Linen Laundry and Uniforms

It is not anticipated that there will be a laundry on site. It is envisaged that linen and laundry will be provided as a fully managed service.

A temporary central linen receipt & distribution centre shall be provided as part of the Enabling Programme and will support the totality of the Southmead Campus. Once the new hospital is built this main central facility will transfer over. The main central facility will also house the emergency buffer stock for use outside normal working hours. Clinical & Portering staff will require access to this during these periods.

Linen delivered to site will be at least twice daily by heavy goods vehicles. It is envisaged that this facility will be co-located adjacent to the main Receipt & Distribution centre. Linen storage therefore should be located at ground or basement level and away from clinical activity, with direct access to main service lifts/corridors and departments.

The holding area will need to be sufficient size to typically accommodate one heavy goods vehicle, loading and off-loading, including an adequate turning circle and be weatherproof. The space shall also be large enough to locate an internal electric vehicle for laundry deliveries around site. The design of the linen storage space shall require adequate separation between clean and dirty to avoid any risk of cross contamination.

The main holding area space shall be flexible enough to accommodate the potential increase in clean linen deliveries or dirty collections that may result from a decrease in patient length of stay or infection outbreaks.

Clean & dirty linen transported internally within the new clinical zone must not be on the main hospital street used by visitors and clinical staff. Where possible power movers will be utilised to transport linen cages. Design of local ward linen storage, whether shared or dedicated, should ensure there is no need to locate cages holding clean or dirty linen on public corridors. Each ward shall be fitted out with adequate storage for the full range of linen available and to sustain a minimum stock level of 2-days clean and 1-day dirty. Dirty and clean linen should be adequately segregated and should not by poor building design be stored on ward corridors.

Linen delivery to the remaining buildings on the Southmead site will be via an electric vehicle. Project CO must ensure that corridors are designed to accommodate electric tugs or automated guided vehicles and personnel. Appropriate wall protection and automated

doors will also be required. Noise, as with materials management, will be an important factor Project Co will need to cater for.

The Hotel Services team will on a pre-determined frequency visit all wards and departments to both collect and deliver clean linen, this operation will be undertaken 7-days week. In the event of an emergency supplies being required these will be drawn from the emergency buffer store.

The linen and laundry accommodation will include:

- Uniform adjustment - the Trust does require a uniform measurement and adjustment service but does not anticipate the presence of a sewing room on site. A facility for the sizing and adjustment of uniforms should be provided adjacent to the main uniform issue point
- Uniform Issue - staff will be issued with uniforms in line with the Trust's Uniform Policy. It is anticipated that staff will change on site at the commencement and termination of their shift with uniforms laundered. It is therefore essential that these areas are located close to or easily accessible from staff changing facilities. It is anticipated that they will be co-located with the uniform return area
- Uniform Return - it essential that these areas are located close to or easily accessible from staff changing facilities. It is anticipated that it will be co-located with the uniform issue areas.

7.14.4 Hotel Services - Catering

The service model will be cook chill, with an on site food production unit. The catering service will support both patients and staff, including the provision for function catering. The design must meet as a minimum the requirements of HBN 10 and the 2006 legislation with regards to food safety. It is envisaged that the central kitchen and restaurant will be co-located.

The Patient service will be on the basis of a hot meal choice at both lunch and supper including speciality diets and one off individual meal requests. Snack boxes and ward kitchen service 24 hours per day will also be available. Hotel services staff will be responsible for delivering patients meal items to the zonal regeneration areas for the PFI wards and direct to ward kitchens for those existing wards that are scheduled to remain.

The central catering facility will provide provisions for wards and departments on a top-up basis including perishables such as daily milk and bread.

The staff service will operate from a single staff only dining facility. Staff to have access to hot/cold food/beverages 24 hours per day. A managed vending service will support this. Ad hoc functions will be supported via the functions pantry and delivered to departments on a pre-ordered basis. There will also be a function room facility for providing dinners, seminars, presentations and other income generating ventures. Ad hoc functions will be supported within departments on a pre-ordered basis. Consideration should be given to the provision of external dining facilities for staff for use in good weather.

The design must meet the requirements of HBN 10 and the *Regulation (EC) No 852/2004 on the Hygiene of Foodstuffs* and the *Food Hygiene (England) No 2 Regulations 2005* on food handling.

Key points/Design Principles

- Non-hand operated wash hand basins and appropriate drying facilities to be installed in all food prep, cooking and service areas. Also in dry food store
- The design, layout and fixed equipment provided must be such as to ensure that high risk foods are kept separate to raw and unprepared items
- There must be clearly defined work areas to ensure correct work flow to maximise efficiency and to fully comply with food safety standards
- Any internal window ledges must be sloping to avoid them being used for storage
- Any external windows in the food preparation, cooking and storage areas must have suitable flying insect protection fitted
- Adequate ventilation must be provided for cooking and dishwashing areas
- All finishes used must be easily cleanable and capable of withstanding frequent cleaning
- Where ever practical and safe to do so equipment to be mobile i.e. on castors to allow ease of cleaning

Catering Administration
Dedicated offices will be provided for Catering Management. There will also be an open plan office for administration that will house a secretary and an accounts clerk and associated filing cabinets and stationery cupboard. Also an area for patients' meal collation including diets. It is intended that as far as possible ordering will be on line. However hard copies would still need to be produced for food production purposes. Access to the hospital network and other catering IT systems will be required in all areas.

Delivery Bay Area- incoming goods
A delivery bay area is required for the reception and checking in of all raw food materials and other goods associated with operating a catering service. Whilst goods are being checked they should be under cover and not be exposed to poor weather. The covered delivery bay area will also require space for secure holding of returnable containers and pallets.

A hose reel and drain should be provided for cleaning the area.

The yard space must be sufficient to allow for a range of daily deliveries with at any one time two vehicles of HGV size (7.5 tonnes plus) in the area.

In addition external space for a compactor for catering use is required.

Catering Stores
The catering storage accommodation will include:

- Stores office - a double occupancy office equipped with networked IT, Fax line and specialist catering system. The location to allow for vision of both delivery area and internal stores.
- Dry provisions - an area for the receipt, storage and issue of dry provisions for the central kitchen, dining areas and vending plus wards and departments. It should be co located with the stores office. Shelving to be of mobile type in order to maximise on space.
- Walk-in refrigerator - to house dairy related products such as milk, cream, butter portions etc. prior to issue to wards, departments and catering areas.
- Walk-in freezer - to house frozen items including ice cream prior to issue to wards, departments and catering areas.
- Chemical store - a secure store to house cleaning chemicals and related products prior to issue to catering areas.
- Disposables & small equipment store - a secure store to house disposables, crockery, cutlery, serviettes etc.
- Walk-in refrigerators and freezer for issued goods/ direct deliveries for production use:
    - Raw meat and fish products refrigerator
    - Raw vegetables and salads refrigerator
    - Frozen food products freezer

Catering – Food Production

It is anticipated that the main production facility will be located off the main hospital site and will be subject to a separate specification. The details within this document will relate to the local service needs. The specification has been written on the basis of a cook/chill or cook/freeze process of production. The accommodation includes:

- Entrance hand wash area - located at the entrance to the food production/preparation area for washing hands prior to entry. This would be via a trough system with appropriate hand cleaning and drying facilities. In addition non-hand operated wash hand basins to be located at each kitchen prep area
- Raw meat prep - for the preparation of raw meat and meat products, poultry and fish prior to cooking
- Vegetable prep - for the preparation of vegetables and salads
- Pastry prep - for the preparation of pastry goods and desserts
- Cooked prep - for the preparation of items which require no further cooking
- Sandwich prep - for the preparation of rolls and sandwich items for both patients and staff. It requires a temperature controlled room operating at 10°C
- Walk in cold room and freezer [staff restaurant] - for storage of chilled and frozen items required for restaurant service
- Cooking area - where prime cooking equipment is located for the production of both patients and staff meals
- Day-to-day store - for secure storage of day-to-day food items
- Portioning room - for cooked items to be portioned for blast chillers prior to being placed in holding refrigerators
- Blast chillers x2 - for use in chilling down food to between 0 and 3°C.
- Holding refrigerators x2 - to hold cooked chilled items below 3°C

- Despatch room - temperature controlled room (10°C) which houses the clean ward delivery boxes and ancillary menu items for wards. Direct access is required from this room to the holding refrigerators where the prepared chilled menu items are stored ready for service. This room to lead out into dedicated service area for transfer by hotel services staff of food boxes to ward and departments
- Walk -in refrigerator and freezer (restaurant) - to house products for use in the restaurant and coffee shop
- Pot wash including trolley wash - for cleansing of cooking utensils, general purpose trolleys and cook chill internal transfer trolleys. Access is required from this area to a doorway onto a service area to receive food boxes returned from ward level so they can be cleaned and stored in the dispatch room
- Pot store - for storage of clean utensils and internal transfer trolleys from pot wash.
- Diet kitchen and store - a small self-contained diet kitchen is required for the preparation, cooking, portioning and chilling of patient's diet, cultural and food requirements that cannot be supplied by the main central cooking unit. Equipment should be provided to cater for the small numbers likely to be required. To ensure that the temperature of the diet food is compatible with patient's chilled food service, a small tabletop blast-chiller is required. Also equipment for the production of texture modified foods is also needed. A free standing refrigerator and freezer would also be required as would a dedicated co-located secure store.

Other catering department accommodation will include:

- Cleaners store/room - for the storage of chemicals in daily use and cleaning equipment. Will require a sink/sluice for dirty water
- Central wash-up [restaurant] - all crockery, cutlery and associated equipment used for the service of staff meals from the restaurant and coffee shop will be mechanically washed in this area via a flight type dishwasher. The area should be sited adjacent to the pot & trolley wash-up area and staff restaurant and have appropriate clearing systems. It should link up with automated tray clearance equipment leading from the restaurant and, if practical, the coffee shop
- Kitchen office - for the head chef/production manager located within the central kitchen area. IT network links required and all cold rooms to be linked to an alarm system located in this office. Access will be required to stock control and food production and restaurant IT systems
- Staff sanitary and rest room facilities - dedicated facilities are required for approximately 40 personnel. This should include separate male/female changing, shower & toilet facilities. The split should reflect the fact that ratios can change between male and female members of staff. These facilities must be readily accessible from all areas of the central kitchen and restaurant areas. A staff rest room will also be required within the main catering area to minimise the need for staff to leave the catering environment during their shift

Restaurant (Staff only)

- Servery/dining room - facilities will be required to support a wide range of hot/cold choices. It is anticipated that staff will be served plated hot meals but self serve

salads and other cold items. A back bar and call order facility and service will also be required to address peak meal times. The dining area should provide adequate seating for up to 200 covers, based upon distributed tables of between four and six people. An appropriate system should be provided for the clearing of used trays & crockery, based on a self- clear policy. Effective use should be made of IT within this area, for example, cash-less payment, rapid check-out and tills linked to raw material/production control.

- Cashiers/restaurant managers' office - sufficient for a restaurant manager and assistant. Ideally this should be located within the restaurant and have line of sight with the tills. A safe shall be provided for cashing-up supported by appropriate security arrangements. Links to the main restaurant tills, stock control and food production will also be required.
- Coffee shop - a separate coffee/beverage servery shop, ideally co-located with main restaurant and CPU, to include informal seating sufficient for 40.This to comprise mainly of upright coffee shop style chairs and tables and also so informal settee/ lounge chair area. The shop shall also be capable of serving pre-prepared sandwiches, cakes, crisps. It is envisaged that this facility will operate independent of the main restaurant when closed.
- Vending - there should be a separate area where a managed vending service is available for staff only access for both hot & cold food, snacks & beverages. This facility must be accessibility 24 hours/day. This facility could be located adjacent to either the restaurant or coffee shop but must have the facility to prevent access to restaurant, coffee shop and catering areas out of hours.
- Function pantry - for making up of hot and cold drinks and compiling functions requests with items produced elsewhere e.g. sandwiches for delivery around the site and for service in the function room
- Function room - located next to and with direct access to function pantry. Its purpose is to generate additional income for the trust from outside agencies, other trusts and individuals
- Customer toilets - restaurant staff should have access to appropriately located male/female toilet facilities. Toilet facilities will also be required for staff using the restaurant. Ideally these should be adjacent to the restaurant.
- Clean linen and uniform store - for the storage of clean staff uniforms and disposable protective clothing. It is essential that sufficient space is provided to ensure that staff have a change of clothing daily and for supplying protective clothing to visitors to the unit. The thermal wear or anoraks used by food handlers in the cold rooms will be held in here.
- Dirty linen and uniform store - for holding mobile laundry bins of soiled uniforms awaiting collection.
- Cleaners Room - to house cleaning products and equipment. Also to have a sluice sink facility for disposal of dirty water.
- Store (dry goods) - secure store for day-to-day items which need to be kept under lock and key

7.14.5 Hotel Services - Reprographics

The Trust requires a central reprographics (photocopying) service. This base will also provide a service to the remaining buildings on the Southmead site and other parts of the organisation.

Individual photocopying machines will be located within each main department. This will be on the basis of either a shared or dedicated copier and subject to the likely volume of copying required for that department.

The Reprographics accommodation will include:

- Central print room - the range of services offered from this location would include bulk photocopying (2 large copiers), guillotining, binding & laminating documents. In addition to the bulk production the print room should be designed to provide office accommodation for three people. The area would need to be large enough to accommodate equipment and be suitably ventilated and have good lighting, including networked IT links.

7.14.6 Hotel Services - Domestic Services

All Domestic staff will utilise the main staff changing facility.

It is proposed that the service will operate at two levels. Staff who will be dedicated within each clinical zone, for example housekeeping staff allocated to wards or departments, and those staff who will service common and circulation areas.

Core duties undertaken by each will include the following: planned routine and reactive cleaning, processing of waste, food service to patients and support to clinical staff at ward or departmental level. The cleaning service will provide regular programmed activities and respond to ad hoc requests including spillages as identified within the Infection Control Policy.

Whilst the Trust will wish to remain flexible regarding cleaning equipment it will use, typically it will include the following: vacuum cleaners, buffing machines, wet/dry cleaners, heavy duty wet cleaners for large areas, wet pick-up machines. Electrical and charging facilities will be required in each domestic store, including washing facilities for cleaning down equipment.

It is not envisaged that each domestic store will hold large quantities of consumable products, but sufficient for daily replenishment for the area(s) it supports, with 1 - 2 days reserve stock. Supported by the materials management team topping up stocks in each area will take place on a pre-determined frequency.

The Domestic Services accommodation will include:

- Offices/resource bases, some of which is shared with the portering supervisors.
- Central equipment store - this central facility will accommodate the items for use by Team Cleaners including bulky items such as the sit-on scrubbing and carpet cleaners, items used infrequently and replacement items to replace departmental equipment requiring servicing or repair.
- Domestic services rooms - these appropriately sized rooms have been scheduled within their respective departmental area. The room will accommodate the regular cleaning equipment and materials to reflect the department to which support is to

be provided. The room should also be equipped with a combined bucket sink and hand rinse basin. It is anticipated that only items and materials for immediate use will be stored in this room. In ward areas this room must be accessible out of hours.

7.14.7 Hotel Services - Portering

It is proposed that Portering personnel will operate on two levels, staff assigned directly to a clinical department, for example the Emergency Centre, Operating Theatres and Imaging and those staff who will operate out of a central pool. All other departments will be supported from the central pool.

All Portering staff will utilise the main staff changing facility.

The Portering pool will operate 24/7 and the following accommodation is required:

- One double occupancy office
- Resource base for supervisors (shared with Domestic Services supervisors) for work allocation with networked computer facilities
- Storage for wheelchairs, trolleys and electric bed movers located close to the concourse area
- Staff allocation room and beverage facility
- Staff sanitary facilities

Portering - Post Room

The post room should be co-located with the central portering control point. Dependent upon the process of delivery to clinical and non-clinical departments appropriate storage for trolleys will be required. A fully equipped post room and distribution centre easily accessible to the Royal Mail, couriers and other external organisations and internal customers is required. This should clearly separate internal and external post receipt and provide a method of sorting deliveries from whatever source. Internal mail will be organised on a predetermined frequency which will be combined with a collection round. The post room therefore must be secure and allow delivery and collection without entering the sorting area.

7.14.8 Hotel Services - Waste Management

North Bristol NHS Trust has a proactive waste management action plan. This plan must be reflected in the final solution and take into account progress in technology and statutory development.

The Trust require that waste handling by personnel is kept to an absolute minimum in both how it directly manages this service and the transportation equipment it utilises, from the point of waste generation through to the final collection point before leaving site. Project Co is required to take this philosophy into account when designing facilities.

The Trust will also wish to retain flexibility in adapting its service philosophy in the event that more efficient or safe waste disposal methods or storage products become available.

It is proposed that a central waste handling and holding facility be located on the Southmead Campus, co-located with the main Receipt & Distribution centre and the linen receipt and distribution area.

Facilities will be required so departmental waste can be segregated at source, held if necessary and disposed of in an appropriate waste container. It is essential that the appropriate levels of security and safety are provided at each level of storage both internal and external.

Waste transported internally shall not utilise any main hospital street used by visitors or clinical staff. Project Co should ensure that corridors are designed to accommodate electric tugs or other guided vehicles with sufficient segregation between vehicles and personnel, together with appropriate wall protection and automated doors.

There should be minimal storage at a local level and any storage required must be designed with due regard for the following issues:

- Minimal handling
- Safety and security
- Appropriate capacity
- Infection control requirements

Although it is recognised that there a number of new approaches to the management of clinical waste including on-site autoclaving the Trust would only wish to pursue this approach should the efficacy and efficiency of such systems be fully proven. It is however a key objective to substantially reduce the volume of clinical waste moving off the site.

External Waste Compound
It is proposed that the waste compound will be located as close as possible to local disposal points with appropriate space for all forms of waste generate by the Trust, typically sharp clinical waste, infectious and non-infectious clinical waste, sensitive clinical waste, hazardous waste, domestic, confidential, recyclable, low level radioactive, ferrous and non-ferrous and garden waste.

The size of compound should allow for a minimum storage capacity of 72 hours, including space for holding and transferring waste from the retained estate. Space and charging facilities should also be allowed for vehicles that will collect waste from the Southmead Campus. The external waste compound should be adjacent to the FM yard.

Waste to be collected for final disposal will be via the external hospital road system by articulated, Heavy Goods Vehicles (HGV) vehicles into the waste compound. Collections are likely to be daily for main waste streams. Waste collected from the remote buildings on the Southmead site will be via an electric or other suitable vehicle.

7.15 Emergency Helicopter Landing Facility

Provision needs to be made for an emergency helicopter landing zone, provided close to the Urgent Care and Emergency zone. Transfer time and distance between the landing

facility and this zone must be minimal. The landing zone will need to allow for approximately 20 landings per month and provide for future expansion. Types of helicopter currently are light single rotor air ambulances and police air observation aircraft and medium lift single rotor helicopters used by air and sea rescue and the Armed Forces.

8 Access

Patients, relatives and their visitors will not generally have access to supporting services facilities. Where this does occur it will be via one of the concourse areas supporting the clinical zones and patients should not have to pass through any other patient or clinical area in order to access the relevant function.

Staff, contractors and other 3rd parties will access services in line with the operational policy. Access will be required at all times for staff, but this may be managed via remote monitoring for secure access.

9 Staffing

The total staff will be approximately 900 staff (headcount), 855 (wte). Student/trainee numbers have been omitted from the above.

10 Patients

Patients should not access or pass through any key support functions in order to access the clinical facilities to which they have been referred. Wherever practical Support Services facilities should not be open to or visible from patient areas.

11 Supporting Facilities

The services within this specification will draw on other supporting services of the hospital including domestic, catering and portering services, together with supplies and waste disposal.

12 Planning and Design Principles for Supporting Services

12.1 Ambience and Decoration

Family-friendly, homely and non-institutional with particular emphasis on the use of colour, contrast and texture to provide a stimulating, non-threatening environment for all patients regardless of ability or impairment.

The design should access the research available on hospital environments, particularly for older people: for example, all toilet doors the same colour, contrasted with other doors. Consideration should be given to the clear differentiation of each cluster.

12.2 Wayfinding

Patients will not normally enter Supporting Services facilities, however the wayfinding solution must support the easy recognition of departments and most appropriate access routes for all levels of mobility. Way finding must be clear and unambiguous

12.3 Privacy and Acoustic Control

The design should provide an environment that respects the needs of patients in terms of privacy and dignity as well as facilitating the delivery of good clinical practice and care.

12.4 Environmental Parameters

Project Co shall ensure that temperature and humidity control are in accordance with the HTM's and HBN's; however there are requirements under the NHS agenda for consumerism, for patients to be able to control within limits, the temperature of their environment. There is also a requirement for the temperature in certain areas to be adjusted outside of the parameters laid down in HTM 2025.

Generally, all public areas, concourses, seminar meeting rooms offices and areas not occupied by patients will be controlled by a BEMS system to the requirements of HTM 2025 in respect of temperature and humidity. The Trust TCRs cover areas that may require local control.

12.5 Flexibility

The accommodation must enable flexible use and allow for changes in models of care and or service delivery.

12.6 IM & T

Details of the active components associated with IM&T can be found in the Data Room. See also cross-reference to the Equipment Services Specification.

12.7 External Space and Courtyards

Access to outside spaces (balconies, courtyards, gardens etc.) is highly desirable for staff. The areas should provide a range of surfaces and levels with adequate suitable seating and tables.

SOUTHMEAD HOSPITAL REDEVELOPMENT PROJECT

COMMENTARY ON THE MERITS OF THE 2 BIDDER SCHEMES COMPARED WITH THE TRUST'S PUBLIC SECTOR COMPARATOR

	Carillion Ave Score	Skanska Ave Score	PSC Score	PSC Commentary and overall comparison	Carillion specific comparison with PSC	Skanska specific comparison with PSC
Character	4.5	5.0	4.0	• The PSC achieved a good sense of space and structure overall but a more classic and civic approach would be preferred. • The atrium ran along the width of the diagnostic and treatment blocks with a gallery leading from the atrium along the length of several of the ward blocks but did not bring the benefit of a generous, open and airy concourse through to all main parts of the hospital.	• The Carillion building offers a well formed sense civic quality and presence which exceeds the PSC. This has been achieved through the overall structure of the building with its impressive glass atrium. • The generous concourse offers advantages over the PSC design in bringing light into and interest along the length of the concourse • The choice of materials in the Carillion scheme support an 'of Bristol' character to the building.	• The Skanska building has a more classic and timeless feel and a greater sense of civic presence than both the PSC and the Carillion scheme. This has been achieved, particularly through the architecture of the elevation fronting the main public square. The sense of civic presence is achieved through a grand entrance. • The Skanska concourse has open views to the side on to the inpatient courtyards. This was also achieved in the PSC via a gallery leading at right angles from the main atrium through to the rear of the inpatient wards. Overall it was felt that the sense of space and light achieved by linking the courtyards to the main concourse on the Skanska scheme gave an advantage over the PSC.
Innovation	4.6	4.7	4.0	• The PSC offered an acceptable structure with good use of the technical core linked to the lower teach ward areas. • Good innovation was achieved on both bidder schemes with the arrangement of accommodation around a	• Carillion have offered innovative solutions to energy than seen in other PFI hospitals including the use of wind towers to naturally cool the atrium. • The hospital has been designed to accommodate Automated Guided Vehicles (AGVs) for distribution around the building	• The single room with the interstitial bathroom between regular shaped rooms and external Venetian blinds gives Skanska the edge on innovation • The hospital has been designed to accommodate Automated Guided Vehicles (AGVs) for distribution around the building •

	Carillion Ave Score	Skanska Ave Score	PSC Score	PSC Commentary and overall comparison	Carillion specific comparison with PSC	Skanska specific comparison with PSC
				central street.		
Form	4.9	5.1	4.5	• The PSC achieved a logical and well structured form. The overall plan was based on a central greenspace as the principal public realm focus within the site. • The greenspace was defined by large scale trees and the use of existing historic buildings along its north-western edge. • Landscape was effectively drawn through the building. • The PSC made good use of the site topography.	• Overall, the site is well structured, adopting a similar approach to the PSC through the use of a central square enclosed on 2 sides by the new hospital and the historic buildings. • The Carillion building is well formed on the site using the land topography to separate general from emergency flows. This has used a similar approach to the PSC. • The closure of the ends of the ward blocks has had a positive effect on the external elevations onto Dorian Way, giving the street a greater sense of enclosure than the PSC which had a looser frontage to Dorian Way. • The Carillion design offers greater expansion potential than either the PSC or the Skanska scheme.	• The Skanska building is well finished overall, with the design of all elevations fully completed. • Whilst the building does not use the topography of the site to separate out flows as was achieved by the PSC and Carillion's design, its overall form is very effective and well structured. • The Skanska building is regular in shape lending it a more classic appearance than the PSC or Carillion design. • It also uses a central square, linear gardens across the site and courtyards to blend well with the existing site • The ward blocks are orientated wards towards the best views to the west, with potential room overheating having been resolved through the use of external Venetian blinds.
Materials	5.1	4.8	4.0	• This aspect was not developed for PSC but was assumed to be adequate given the cost allowances. • Both schemes offer good quality materials and finishes, particularly inside the building.	• Carillion has paid a great deal of attention to the use of 'of Bristol' materials such as Bath and Pennant stone to dress the public elevations of the hospital to very good effect. • The Carillion lighting scheme is very attractive, and wider use of high quality finishes such as floor to ceiling glazing and wooden wall protection systems gives a higher score than Skanska or the PSC.	• Skanska's proposals are finely detailed and show great attention to architectural detail. • A high quality of internal and external materials was offered which, whilst not quite meeting the Carillion specification were in excess of the PSC.

	Carillion Ave Score	Skanska Ave Score	PSC Score	PSC Commentary and overall comparison	Carillion specific comparison with PSC	Skanska specific comparison with PSC
Staff & patient environment	4.7	5.0	4.5	• The PSC had a good approach to bringing external space into the building including good access to light for all ward areas. The PSC proposed a high quality environment overall. • Further improvements could be made in bringing more light into the building overall, improving outpatient clusters, optimising visibility into single rooms.	• The Carillion proposal pipped the PSC at the post with the effective achievement of a light and airy building with very few areas not having direct or indirect access to daylight. Natural light is brought in throughout patient and staff areas including natural light into most operating theatres. • Many departments achieve a connection with the outside through the use of courtyards in both the ward and diagnostic and treatment areas.	• The Skanska design is based on a very effective connection between inside and out using the large courtyards between the wards to bring light into the building • The multi-height outpatient atrium offers advantages over both the PSC and Carillion scheme in creating a very high quality space for outpatients. • Skanska has achieved a small advantage over Carillion and the PSC through the aspect from the patient bedrooms into the very large courtyards.
Urban and social integration	4.6	4.6	4.5	• Permeable and welcoming site designed. Well connected facilities and human in scale. Master plan would benefit from greater legibility. • The master plans for all 3 designs are well developed, providing a good response to urban design. The PSC is considered more human in scale than the 2 bidder proposals but integrates less well with the Dorian Way and Kendon Way roads.	• The Carillion building has a more interesting and effective form when viewed from outside the site than the PSC proposal.	• The Skanska landscape is highly sophisticated offering a richness greater than the PSC proposal.
Performance	4.9	4.7	4.0	• Not developed for PSC but assumed to be adequate. Comparison with the bidder schemes is therefore made on the basis that both	• Carillion has addressed the issue of sustainability as an integral part of the design of the hospital. • Carillion has achieved naturally ventilated wards through their	• Skanska has addressed the issue of sustainability within their proposals but the overall approach was less integrated than the Carillion proposals.

	Carillion Ave Score	Skanska Ave Score	PSC Score	PSC Commentary and overall comparison	Carillion specific comparison with PSC	Skanska specific comparison with PSC
				schemes would need to exceed an 'adequate' score of 4 to perform more favourably than the PSC	orientation. • The Carillion energy model shows the 45GJ/100m3 energy target is more easily achievable than Skanska.	• The use of external Venetian blinds to protect the wards from the hot afternoon sun and enable naturally ventilated wards was a good design solution.
Engineering	4.6	4.2	4.0	• Not developed for PSC but assumed to be adequate. Comparison with the bidder schemes is therefore made on the basis that both schemes would need to exceed an 'adequate' score of 4 to perform more favourably than the PSC	• Carillion has an embedded energy centre offering a more efficient engineering system with less pipe-run distance.	• Skanska have developed a very clear engineering solution.
Construction	4.4	4.0	4.0	• Separate ward template allows pre-fabrication. Regular shape aids speed of construction.	• Carillion's fast construction programme and integrated approach to phasing and demolitions marks it slightly higher than the PSC and Skanska design.	• The regular structure supports east of fabrication, including pre-fabrication but their longer programme gives a score equivalent to the PSC.
Use	4.4	4.9	4.0	• Good separation of flows. • Building is flexible and will allow for easy adaptation of use. • Some improvements would benefit scheme including visitor access to wards, consistent layout of corridors, more integrated access to FM facilities and improved cohesion between acute and community hospital.	• The Carillion scheme offers good separation of flows, flexibility and ease of adaptation as the PSC. It has achieved a higher score than the PSC due to its integrated FM centre, more consistent access arrangements, especially access to wards for staff and visitors	• The Skanska scheme offers good separation of flows, flexibility and ease of adaptation as the PSC. It has achieved a higher score than the PSC due to its well planned clinical layouts, integrated FM centre and shorter travel distances between services. It offers a greater number of connections between key units such as A&E and assessment wards and outpatients and imaging.
Access	4.6	5.0	3.5	• Travel distances are quite long to wards and between wards and imaging. The 'L' shaped wards could lead to orientation difficulties.	• The PSC provides a multi-storey car park to the north east of the site which is not considered as successful as the Carillion multi-storey placed at the hospital	• Overall the Skanska scheme scores more highly than the PSC due to its very clear and logical access routes and shorter travel distances between services.

	Carillion Ave Score	Skanska Ave Score	PSC Score	PSC Commentary and overall comparison	Carillion specific comparison with PSC	Skanska specific comparison with PSC
				• The 2 bidder schemes both offer good access, with the central square gathering traffic from the 3 main entrances. The access arrangements are considered clearer than the PSC due to the logical and simple road layouts, offering easy access and egress for buses and cars. • Both schemes encourage use of buses and have made provision for cycle lanes. • Internally both schemes gather departments together around a central street which is consider more logical than the PSC .	building entrance • Access to the Carillion wards is much easier than in the PSC.	
Space	4.4	4.9	4.5	• Logical and regular buildings offer good space with generous areas.	• The Carillion design is considered slightly less space efficient due to the irregularity of some of the rooms when compared with Skanska or the PSC.	• Overall the more regular form of Skanska leads to less awkward leftover spaces and is considered slightly ahead of the PSC due, in part, to the excellent regularly shaped inpatient room.

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CONTRACT NOTICE

SECTION I: CONTRACTING AUTHORITY

I.1) NAME, ADDRESSES AND CONTACT POINT(S)

Official name:	North Bristol NHS Trust	
Postal address:	Trust Headquarters, Frenchay Hospital, Beckspool Road, Frenchay	
Town:	Bristol	Postal code: BS16 1JE
Country:	United Kingdom	
Contact point(s):		Telephone: +44 (0)117 9595030
For the attention of:	David Powell (Project Director for the Southmead Hospital Redevelopment PFI)	
Email:	projectoffice@nbt.nhs.uk	Fax: +44 (0)117 9595052

Internet address(es) *(if applicable)*

General address of the contracting authority *(URL):* www.nbt.nhs.uk/services/capitalprojects

Address of the buyer profile *(URL):*

Further information can be obtained at:

- ○ As in above-mentioned contact point(s)
- ◉ Other: please complete Annex A.I

Specifications and additional documents (including documents for competitive dialogue and a dynamic purchasing system) can be obtained at:

- ○ As in above-mentioned contact point(s)
- ◉ Other: please complete Annex A.II

Tenders or requests to participate must be sent to:

- ○ As in above-mentioned contact point(s)
- ◉ Other: please complete Annex A.III

I.2) TYPE OF THE CONTRACTING AUTHORITY AND MAIN ACTIVITY OR ACTIVITIES

- ○ Ministry or any other national or federal authority, including their regional or local sub-divisions
- ○ National or federal agency/office
- ○ Regional or local authority
- ○ Regional or local agency/office

- ☐ General public services
- ☐ Defence
- ☐ Public order and safety
- ☐ Environment
- ☐ Economic and financial affairs

- ◉ Body governed by public law
- ○ European institution/agency or international organisation
- ○ Other

(please specify):

- ☒ Health
- ☐ Housing and community amenities
- ☐ Social protection
- ☐ Recreation, culture and religion
- ☐ Education
- ☐ Other

(please specify):

The contracting authority is purchasing on behalf of other contracting authorities

- ◉ yes
- ○ no

SECTION II: OBJECT OF THE CONTRACT

II.1) DESCRIPTION

II.1.1) Title attributed to the contract by the contracting authority

Southmead Hospital Redevelopment PFI

II.1.2) Type of contract and location of works, place of delivery or of performance

(Choose one category only - works, supplies or services - which corresponds most to the specific object of your contract or purchase(s))

(a) Works ☐

- ○ Execution
- ○ Design and execution
- ○ Realisation, by whatever means of work, corresponding to the requirements specified by the contracting authorities

(b) Supplies ☐

- ○ Purchase
- ○ Lease
- ○ Rental
- ○ Hire purchase
- ○ A combination of these

(c) Services ☒

Service category: No 14

(For service categories 1-27, please see Annex II of Directive 2004/18/EC)

Main site or location of works

Main place of delivery

Main place of performance

Southmead and/or other suitable sites in Bristol, North Somerset and/or South Gloucestershire

NUTS code UKK11

II.1.3) The notice involves

- ◉ A public contract
- ○ The setting up of a dynamic purchasing system (DPS)
- ○ The establishment of a framework agreement

II.1.4) Information on framework agreement *(if applicable)*

Framework agreement with several operators ☐

Number , *OR, if applicable,* maximum number of participants to the framework agreement envisaged

Framework agreement with a single operator ☐

Duration of the framework agreement:

Duration in year(s):

or month(s):

Justification for a framework agreement, the duration of which exceeds four years:

Estimated total value of purchases for the entire duration of the framework agreement *(if applicable; give figures only):*

Estimated value excluding VAT: Currency:

OR Range: between and Currency:

Frequency and value of the contracts to be awarded: *(if known)*:

II.1.5) Short description of the contract or purchase(s)

The Contracting Authority is seeking tenders for the provision and maintenance of a mixture of new build and refurbishment of existing acute and community hospital facilities and associated information management and technology (IM&T) infrastructure. The project will involve the centralisation and reconfiguration of acute health services and will include an integrated community hospital. The facilities to be constructed and maintained by Project Co will be used for emergency and acute services (including emergency assessment and treatment, inpatients, daycases, theatres and rehabilitation services), critical care, ambulatory care services including outpatients, therapies and diagnostics, minor injuries and intermediate care services. The contract is also likely to include, but will not necessarily be limited to the provision of the following services: estates and maintenance, grounds and gardens, pest control, window cleaning, utilities, help desk, retail (including non-patient catering and other retail services) and some equipment. The project shall be subject to a funding competition after the appointment of preferred bidder. Further information is available in the information memorandum which is available through the contracting authority's eTendering portal (see Section VI.3).

II.1.6) Common procurement vocabulary (CPV)

	Main vocabulary	**Supplementary vocabulary** *(if applicable)*
Main object	74200000	
Additional object(s)	50700000	
	45215100	
	74873000	
	50941000	
	32571000	
	45314300	
	50421000	
	45215140	
	55300000	
	45112700	
	77314000	
	74722000	
	74721200	
	52000000	
	65000000	
	31311000	
	33000000	

II.1.7) Contract covered by the Government Procurement Agreement (GPA)

◉ yes ○ no

II.1.8) Division into lots *(for information about lots, use Annex B as many times as there are lots)*

○ yes ◉ no

If yes,tenders should be submitted for *(tick one box only)*

○ one lot only ○ one or more lots ○ all lots

II.1.9) Variants will be accepted

◉ yes ○ no

II.2) QUANTITY OR SCOPE OF THE CONTRACT

II.2.1) Total quantity or scope *(including all lots and options, if applicable)*

The estimated overall capital value of the project (including any traditional funding available) is in the region of 336 million GBP.

If applicable, estimated value excluding VAT *(give figures only):* Currency: GBP

OR Range: between and Currency:

II.2.2) Options *(if applicable)*

○ yes ◉ no

If yes, description of these options:

If known, provisional timetable for recourse to these options:

in months: *or* days: (from the award of the contract)

Number of possible renewals *(if any):* *or* Range: between and

If known, in the case of renewable supplies or service contracts, estimated timeframe for subsequent contracts:

in months: *or* days: (from the award of the contract)

II.3) DURATION OF THE CONTRACT OR TIME-LIMIT FOR COMPLETION

Duration in months: 360 *or* days: (from the award of the contract)

OR Starting *(dd/mm/yyyy)*

Completion *(dd/mm/yyyy)*

SECTION III: LEGAL, ECONOMIC, FINANCIAL AND TECHNICAL INFORMATION

III.1) CONDITIONS RELATING TO THE CONTRACT

III.1.1) Deposits and guarantees required *(if applicable)*

The contracting authority reserves the right to request deposits, guarantees, performance bonds or other forms of security.

III.1.2) Main financing conditions and payment arrangements and/or reference to the relevant provisions regulating them

This project is considered suitable for the application of the UK government's private finance initiative (PFI) or an alternative public private partnership (PPP).

III.1.3) Legal form to be taken by the group of economic operators to whom the contract is to be awarded *(if applicable)*

A consortium tender is acceptable but the contracting authority will expect to contract with a special purpose vehicle.

III.1.4) Other particular conditions to which the performance of the contract is subject *(if applicable)*

◉ yes ○ no

If yes, description of particular conditions

The contracting authority will include obligations within the Contract documentation relating to workforce matters which are consistent with the Cabinet Office's Statement of Practice "Staff Transfers in the Public Sector" and the "Code of Practice on Workforce Matters in Public Sector Service Contracts" together with the HM Treasury "Fair Deal for Staff Pensions" guidance. These obligations will require the selected bidder to protect the terms and conditions (including pensions) of transferring staff and to employ new joiners on terms and conditions that are, overall, no less favourable than those of transferred employees and to give new joiners reasonable pension arrangements. Bidders will be required to take account of these obligations in preparing their bid and negotiating the Contract.

III.2) CONDITIONS FOR PARTICIPATION

III.2.1) Personal situation of economic operators, including requirements relating to enrolment on professional or trade registers

Information and formalities necessary for evaluating if requirements are met:

In accordance with Articles 45 to 50 of Directive 2004/18/EC and Regulations 23 to 25 of the Public Contracts Regulations 2006 and as set out in the pre-qualification questionnaire available through the contracting authority's eTendering portal (see Section VI.3).

III.2.2) Economic and financial capacity

Information and formalities necessary for evaluating if requirements are met:	Minimum level(s) of standards possibly required *(if applicable):*
In accordance with Article 47 of Directive 2004/18/EC and Regulation 24 of the Public Contracts Regulations 2006 and as set out in the prequalification questionnaire which is available through the contracting authority's eTendering portal (see Section VI.3).	As set out in the prequalification questionnaire.

III.2.3) Technical capacity

Information and formalities necessary for evaluating if requirements are met:	Minimum level(s) of standards possibly required *(if applicable):*
In accordance with Articles 48 to 50 of Directive 2004/18/EC and Regulation 25 of the Public Contracts Regulations 2006 and as set out in the prequalification questionnaire which is available through the contracting authority's eTendering portal (see Section VI.3).	As set out in the prequalification questionnaire.

III.2.4) Reserved contracts *(if applicable)*

○ yes ◉ no

The contract is restricted to sheltered workshops ☐

The execution of the contract is restricted to the framework of sheltered employment ☐

programmes

III.3) CONDITIONS SPECIFIC TO SERVICES CONTRACTS

III.3.1) Execution of the service is reserved to a particular profession

○ yes ◉ no

If yes, reference to the relevant law, regulation or administrative provision:

III.3.2) Legal entities should indicate the names and professional qualifications of the staff responsible for the execution of the service

◉ yes ○ no

SECTION IV: PROCEDURE

IV.1) TYPE OF PROCEDURE

IV.1.1) Type of procedure

○ Open

○ Restricted

○ Accelerated restricted

Justification for the choice of accelerated procedure:

○ Negotiated

Candidates have already been selected

○ yes ○ no

If yes, *provide names and addresses of economic operators already selected under Section VI.3) Additional information*

○ Accelerated negotiated

Justification for the choice of accelerated procedure:

◉ Competitive dialogue

IV.1.2) Limitations on the number of operators who will be invited to tender or to participate

(restricted and negotiated procedures, competitive dialogue)

Envisaged number of operators

OR Envisaged minimum number 3 and *, if applicable,* maximum number 4

Objective criteria for choosing the limited number of candidates:

As set out in the prequalification questionnaire which is available through the contracting authority's eTendering portal (see Section VI.3)

IV.1.3) Reduction of the number of operators during the negotiation or dialogue *(negotiated procedure, competitive dialogue)*

Recourse to staged procedure to gradually reduce the number of solutions to be discussed or tenders to be negotiated

◉ yes
○ no

IV.2) AWARD CRITERIA

IV.2.1) Award criteria *(please tick the relevant box(es))*

Lowest price ☐

OR

The most economically advantageous tender in terms of ☒

☐ the criteria stated below *(the award criteria should be given with their weighting or in descending order of importance where weighting is not possible for demonstrable reasons)*

☒ the criteria stated in the specifications, in the invitation to tender or to negotiate or in the descriptive document

Criteria	Weighting	Criteria	Weighting
1.		6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

IV.2.2) An electronic auction will be used

○ yes ◉ no

If yes, additional information about electronic auction *(if appropriate)*

IV.3) ADMINISTRATIVE INFORMATION

IV.3.1) File reference number attributed by the contracting authority *(if applicable)*

IV.3.2) Previous publication(s) concerning the same contract

○ yes ◉ no

If yes,

○ Prior information notice ○ Notice on a buyer profile

Notice number in OJ: **/S -** of *(dd/mm/yyyy)*

Other previous publications *(if applicable)* ☐

IV.3.3) Conditions for obtaining specifications and additional documents *(except for a DPS)* **or descriptive document** *(in the case of a competitive dialogue)*

Time limit for receipt of requests for documents or for accessing documents

Date: 13/07/2007 *(dd/mm/yyyy)* Time: 17:00

Payable documents

○ yes ◉ no

If yes, price *(give figures only):* Currency:

Terms and method of payment:

IV.3.4) Time-limit for receipt of tenders or requests to participate

Date: 13/07/2007 *(dd/mm/yyyy)* Time: 17:00

IV.3.5) Date of dispatch of invitations to tender or to participate to selected candidates *(if known)*

(in the case of restricted and negotiated procedures, and competitive dialogue)

Date: 01/08/2007 *(dd/mm/yyyy)*

IV.3.6) Language(s) in which tenders or requests to participate may be drawn up

ES	CS	DA	DE	ET	EL	EN	FR	IT	LV	LT	HU	MT	NL	PL	PT	SK	SL	FI	SV
☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Other:

SECTION VI: COMPLEMENTARY INFORMATION

VI.1) THIS IS A RECURRENT PROCUREMENT *(if applicable)*

○ yes ◉ no

If yes, estimated timing for further notices to be published:

VI.2) CONTRACT RELATED TO A PROJECT AND/OR PROGRAMME FINANCED BY EU FUNDS

○ yes ◉ no

If yes, reference to project(s) and/or programme(s):

VI.3) ADDITIONAL INFORMATION *(if applicable)*

Section I.1 - The Trust will be providing the community hospital facilities to Bristol PCT under a contract between them.
Section II.1.2(c) - Additional service categories: 12.
Section II.1.6 - The list of CPV codes is not exhaustive.
Section II.1.9 - Variants will be accepted in addition to standard bid (as set out in the tender/contract documents) provided the contracting authority's core requirements are met and provided they are in accordance with the tender/contract documents.
Section II.3 - It is envisaged that the construction works will begin in July 2009 and the project agreement will have a duration of approximately 30 years.
Section III.1.2 - Essential to the success of the project will be ensuring that the proposals made display appropriate transfer of risk, affordability and value for money. Payments will be made on the basis of agreed quality and performance targets.
Section IV.3.3 - The contracting authority will be using an eTendering portal for this procurement both for accessing and submitting tender documents. The pre-qualification questionnaire and information memorandum are only available through this system. Please follow the instructions below to access these:
A. Register your company on the North Bristol NHS Trust eTendering portal (this is required only once).
1. Browse to the North Bristol NHS Trust eTendering portal at: www.nbnhstrust.bravosolution.com
2. Click the "Click here to register" link.
3. Accept the terms and conditions and click "continue".
4. Enter your correct business and user details.
5. Note the username you chose and click "Save" when complete.
6. You will shortly receive an e-mail with your unique password (please keep this secure).
B. Express an Interest in the Tender and Access PQQ
1. Login to the portal at www.nbnhstrust.bravosolution.com with the username/password.
2. Click the "Open Access PQQs" link.
3. Click on the relevant PQQ to access the content.
4. Click the "Express Interest" button in the "Actions" box on the left-hand side of the page. This will move the PQQ over to the "My PQQs" page.
5. Click on the PQQ code, you can now access any attachments by clicking the "Setting and Buyer Attachments" in the "Actions" box on the left-hand side of the page.
C. Responding to the Tender (PQQ)
1. You can now choose to "Reply" or "Reject" (please give a reason if rejecting).
2. You can now use the "Messages" function to communicate with the contracting authority and seek any clarification.
3. Note the deadline for completion, then follow the onscreen instructions to complete the PQQ.
If you require further assistance the BravoSolution helpdesk is available Monday - Friday 8am-6pm or e-mail:help@bravosolution.co.uk. Phone: 0800 011 2470/Fax: 020 7080 0480. Alternatively, please see Annex A.I.
Section IV.3.4 - Requests to participate must be made by completion and submission of the pre-qualification questionnaire by the date and time specified in Section IV.3.4.
Section IV.3.5 - It is anticipated that the invitation to participate in the dialogue will be available to shortlisted bidders by 01 August 2007 via the eTendering portal used for this procurement.

VI.4) PROCEDURES FOR APPEAL

VI.4.1) Body responsible for appeal procedures

Official name:	North Bristol NHS Trust	
Postal address:	Trust Headquarters, Frenchay Hospital, Beckspool Road, Frenchay	
Town:	Bristol	Postal code: BS16 1JE
Country:	United Kingdom	
Email:	projectoffice@nbt.nhs.uk	Telephone: 0117 9595030
Fax:	0117 9595052	
Internet address (URL):	www.nbt.nhs.uk	

Body responsible for mediation procedures *(if applicable)*

Official name:		
Postal address:		
Town:		Postal code:
Country:		
Email:		Telephone:
Fax:		
Internet address (URL):		

VI.4.2) Lodging of appeals *(please fill heading VI.4.2 OR if need be, heading VI.4.3)*

Precise information on deadline(s) for lodging appeals:

In accordance with Regulation 32 (Information about contract award procedures and the application of standstill period prior to contract award) and Regulation 47 (Enforcement of Obligations) of the Public Contracts Regulations 2006

VI.4.3) Service from which information about the lodging of appeals may be obtained

Official name:		
Postal address:		
Town:		Postal code:
Country:		
Email:		Telephone:
Fax:		
Internet address (URL):		

VI.5) DATE OF DISPATCH OF THIS NOTICE:

15/05/2007 (dd/mm/yyyy)

ANNEX A
ADDITIONAL ADDRESSES AND CONTACT POINTS

I) ADDRESSES AND CONTACT POINTS FROM WHICH FURTHER INFORMATION CAN BE OBTAINED

Official name:	North Bristol NHS Trust	
Postal address:	See details in Section VI.3 relating to the contracting authority's eTendering portal. If you continue to experience difficulties with the use of the eTendering portal and require further assistance, please contact the Trust at the e-mail address below.	
Town:	Bristol	Postal code:
Country:	United Kingdom	
Contact point(s):		Telephone:
For the attention of:		
Email:	projectoffice@nbt.nhs.uk	Fax:

Internet address (URL): www.nbnhstrust.bravosolution.com

II) ADDRESSES AND CONTACT POINTS FROM WHICH SPECIFICATIONS AND ADDITIONAL DOCUMENTS (INCLUDING DOCUMENTS FOR COMPETITIVE DIALOGUE AS WELL AS A DYNAMIC PURCHASING SYSTEM) CAN BE OBTAINED

Official name:	North Bristol NHS Trust	
Postal address:	See details in Section VI.3 relating to the contracting authority's eTendering portal.	
Town:	Bristol	Postal code:
Country:	United Kingdom	
Contact point(s):		Telephone:
For the attention of:		
Email:		Fax:

Internet address (URL): www.nbnhstrust.bravosolution.com

III) ADDRESSES AND CONTACT POINTS TO WHICH TENDERS/REQUESTS TO PARTICIPATE MUST BE SENT

Official name:	North Bristol NHS Trust	
Postal address:	See details in Section VI.3 relating to the contracting authority's eTendering portal.	
Town:	Bristol	Postal code:
Country:	United Kingdom	
Contact point(s):		Telephone:
For the attention		

of:

Email: Fax:

Internet address (URL): www.nbnhstrust.bravosolution.com

Reference Cost position in 2006/7 at specialty level

Directorate	Specialty description	NBT activity	NBT £ trimmed	NAV £ trimmed	Var %	NBT XS £	NAV XS £	NBT £ untrimmed	NAV £ untrimmed	Var. NBT - NAV untrimmed £	Var %
Child Health	CHDU	449	453,544	496,254	-9%			453,544	496,254	-42,711	-9%
	Child & Adolescent Psychiatry	9,271	3,715,818	2,837,671	31%			3,715,818	2,837,671	878,147	31%
	Community Paediatrics	3,964	1,175,366	851,885	38%			1,175,366	851,885	323,480	38%
	Neonatology	587	673,853	649,795	4%	9,130	133,359	682,983	783,155	-100,172	-13%
	NICU	9,918	5,172,723	7,246,007	-29%			5,172,723	7,246,007	-2,073,283	-29%
	Paediatric Neurology	292	309,934	273,907	13%	15,122	27,878	325,056	301,786	23,270	8%
	Paediatric Surgery	726	165,214	261,115	-37%	0	1,085	165,214	262,200	-96,986	-37%
	Paediatrics	11,064	3,564,844	4,038,964	-12%	173,884	338,523	3,738,728	4,377,486	-638,759	-15%
	Physio	16,987	1,430,960	1,275,394	12%			1,430,960	1,275,394	155,566	12%
	PICU	288	1,883,111	527,801	257%			1,883,111	527,801	1,355,310	257%
	School Nurses	23,682	969,568	822,331	18%			969,568	822,331	147,237	18%
	Specialist Nursing	11,830	1,163,191	517,395	125%			1,163,191	517,395	645,795	125%
Child Health Total		**89,058**	**20,678,125**	**19,798,519**	**4%**	**198,136**	**500,845**	**20,876,260**	**20,299,365**	**576,896**	**3%**
Clinical Support	Pathology	2,957,053	6,151,902	6,077,742	1%			6,151,902	6,077,742	74,159	1%
Clinical Support Total		**2,957,053**	**6,151,902**	**6,077,742**	**1%**			**6,151,902**	**6,077,742**	**74,159**	**1%**
Critical Care	Anaesthetics	12,674	1,756,002	2,135,599	-18%	0	3,788	1,756,002	2,139,387	-383,385	-18%
Critical Care Total		**12,674**	**1,756,002**	**2,135,599**	**-18%**	**0**	**3,788**	**1,756,002**	**2,139,387**	**-383,385**	**-18%**
Medicine	A&E	13,438	4,098,268	3,522,751	16%	707	9,735	4,098,975	3,532,485	566,490	16%
	CCU	4,346	1,558,041	1,957,039	-20%			1,558,041	1,957,039	-398,998	-20%
	CDU	85,756	8,006,983	6,676,702	20%			8,006,983	6,676,702	1,330,281	20%
	Clinical Haematology	9,892	1,442,226	2,484,917	-42%	3,702	12,428	1,445,928	2,497,345	-1,051,417	-42%
	Clinical Immunology	2,759	755,144	982,237	-23%	0	2,213	755,144	984,450	-229,305	-23%
	Dermatology	9,238	1,061,148	798,246	33%			1,061,148	798,246	262,902	33%
	Dietetics	659	21,714	28,840	-25%			21,714	28,840	-7,126	-25%
	General Medicine	76,107	35,132,396	36,411,204	-4%	8,303,846	4,160,795	43,436,242	40,572,000	2,864,242	7%
	HIV / AIDS	2,706	776,236	2,543,922	-69%			776,236	2,543,922	-1,767,686	-69%
	Infectious Diseases	153	337,105	146,783	130%	261,883	22,496	598,988	169,279	429,709	254%
	OT	7,882	835,733	394,207	112%			835,733	394,207	441,526	112%
	Speech Therapy	8,370	788,750	528,189	49%			788,750	528,189	260,561	49%
Medicine Total		**221,306**	**54,813,744**	**56,475,037**	**-3%**	**8,570,138**	**4,207,666**	**63,383,882**	**60,682,703**	**2,701,178**	**4%**
Musculoskeletal	Physio	76,625	1,730,553	2,599,587	-33%			1,730,553	2,599,587	-869,034	-33%
	Rheumatology	8,073	2,009,651	1,692,495	19%	607,511	88,470	2,617,162	1,780,965	836,197	47%
	T&O	68,715	34,883,282	29,690,683	17%	1,480,347	1,492,823	36,363,629	31,183,506	5,180,123	17%
Musculoskeletal Total		**153,413**	**38,623,486**	**33,982,765**	**14%**	**2,087,858**	**1,581,292**	**40,711,344**	**35,564,058**	**5,147,286**	**14%**
Neurosciences	Audiology	26,838	1,158,499	1,545,772	-25%			1,158,499	1,545,772	-387,273	-25%
	ENT	17,507	5,326,043	4,983,185	7%	159,206	213,091	5,485,249	5,196,276	288,973	6%
	Neurology	10,494	4,267,691	3,039,486	40%	588,562	384,575	4,856,253	3,424,060	1,432,192	42%
	Neuro-Physiology	2,666	174,956	439,328	-60%			174,956	439,328	-264,372	-60%
	Neuropsychiatry	5,140	1,827,760	1,068,993	71%			1,827,760	1,068,993	758,767	71%
	Neurosurgery	10,709	15,249,348	14,554,556	5%	933,728	1,218,663	16,183,075	15,773,219	409,856	3%
	Opthalmology	1,546	132,211	116,189	14%			132,211	116,189	16,023	14%
	Oral Surgery	9,662	2,931,061	1,935,041	51%	51,877	51,126	2,982,938	1,986,167	996,771	50%
	Orthodontics	3,897	258,889	378,788	-32%			258,889	378,788	-119,899	-32%
	Paediatric Neurology	445	187,367	107,080	75%			187,367	107,080	80,287	75%
Neurosciences Total		**88,904**	**31,513,826**	**28,168,417**	**12%**	**1,733,371**	**1,867,455**	**33,247,197**	**30,035,871**	**3,211,326**	**11%**
Renal	Nephrology	19,713	8,104,717	9,381,512	-14%	910,572	670,320	9,015,289	10,051,832	-1,036,543	-10%
Renal Total		**19,713**	**8,104,717**	**9,381,512**	**-14%**	**910,572**	**670,320**	**9,015,289**	**10,051,832**	**-1,036,543**	**-10%**
Surgery	General Surgery	51,795	22,219,362	24,356,391	-9%	968,485	1,335,512	23,187,847	25,691,903	-2,504,056	-10%
	Plastic Surgery	37,673	15,901,039	13,805,772	15%	587,584	810,052	16,488,623	14,615,824	1,872,798	13%
	Urology	26,772	9,577,563	10,229,507	-6%	264,935	480,167	9,842,498	10,709,674	-867,176	-8%
Surgery Total		**116,240**	**47,697,963**	**48,391,670**	**-1%**	**1,821,004**	**2,625,731**	**49,518,967**	**51,017,401**	**-1,498,433**	**-3%**
Womens Health	Community Midwifery	35,160	1,833,137	1,721,266	6%			1,833,137	1,721,266	111,871	6%
	Family Planning	7,548	436,285	375,276	16%			436,285	375,276	61,009	16%
	Gynaecology	20,048	7,130,848	7,744,938	-8%	61,902	196,891	7,192,750	7,941,829	-749,078	-9%
	Obstetrics	64,611	13,636,373	16,436,457	-17%	237,682	1,272,334	13,874,055	17,708,791	-3,834,736	-22%
Womens Health Total		**127,367**	**23,036,643**	**26,277,936**	**-12%**	**299,584**	**1,469,225**	**23,336,226**	**27,747,161**	**-4,410,935**	**-16%**
Trustwide Index Score		**3,785,728**	**232,376,407**	**230,689,198**	**1%**	**15,620,664**	**12,926,323**	**247,997,070**	**243,615,521**	**4,381,549**	**2%**

Calculation of Unitary Payment:Turnover Ratio (at 2008/09 prices)	At PFI Re-appraisal £ million 2005/06	At ABC £ million 2008/09	Min During Concession £ million 2008/09	Max During Concession £ million 2008/09
UP at 2009/10 as per Bidder model		**35.0**	**35.0**	**35.0**
UP at 2008/9 prices (£m)		**34.1**	**34.1**	**34.1**
Provision for UP adjustment and risk to financial close		0.12	0.12	0.12
Provision for risk between preferred bidders and Financial Close				
Delay in Financial close for 9 months x 50% probability in ABC		0.06		0.13
Design/planning risks - 1.5% x 50% probability in ABC		0.20		0.40
Unitary Payment during full operational concession, including all contingencies	**36.40**	**34.51**	**34.25**	**34.77**
Soft Services (if excluded from scope of PFI)	5.84	7.75	7.75	7.75
Equipment - MES / IT if excluded from scope of PFI	2.40	2.40	2.40	2.40
Cost of other services outside the scope of the PFI	0.00	0.00	0.00	0.00
Adjustments if not whole hospital replacement:				
Gross capital charges for unaffected estate	1.84	1.30	1.30	1.30
Hard and soft FM on retained estate	1.88	1.46	1.46	1.46
Impact of accounting on balance sheet	-3.60	-3.31	-3.31	-3.31
Normalised Unitary Payment	**44.76**	**44.11**	**43.84**	**44.37**
Total income per Trust Accounts	367.00	462.75	462.75	462.75
Less - one off income - e.g. transitional income		-23.70	-23.70	-23.70
Less - other adjustments to normalise income:	0.00	0.00	0.00	0.00
Additional future income resulting from new PFI	0.00	0.00	0.00	0.00
Normalised Turnover	**367.00**	**439.05**	**439.05**	**439.05**
Ratio	**12.20%**	**10.05%**	**9.99%**	**10.11%**
Expected maximum normalised turnover	**367.00**	**458.93**	**458.93**	**458.93**
Expected minimum normalised turnover	**367.00**	**419.95**	**419.95**	**419.95**
Expected maximum ratio	**12.20%**	**10.50%**	**10.44%**	**10.57%**
Expected minimum ratio	**12.20%**	**9.61%**	**9.55%**	**9.67%**

North Bristol NHS Trust

New Hospital Savings

Keys Legend	
Two or more Departments reduced to one Design Related Savings	S
	D
Performance Improvement enabled by new hospital	P

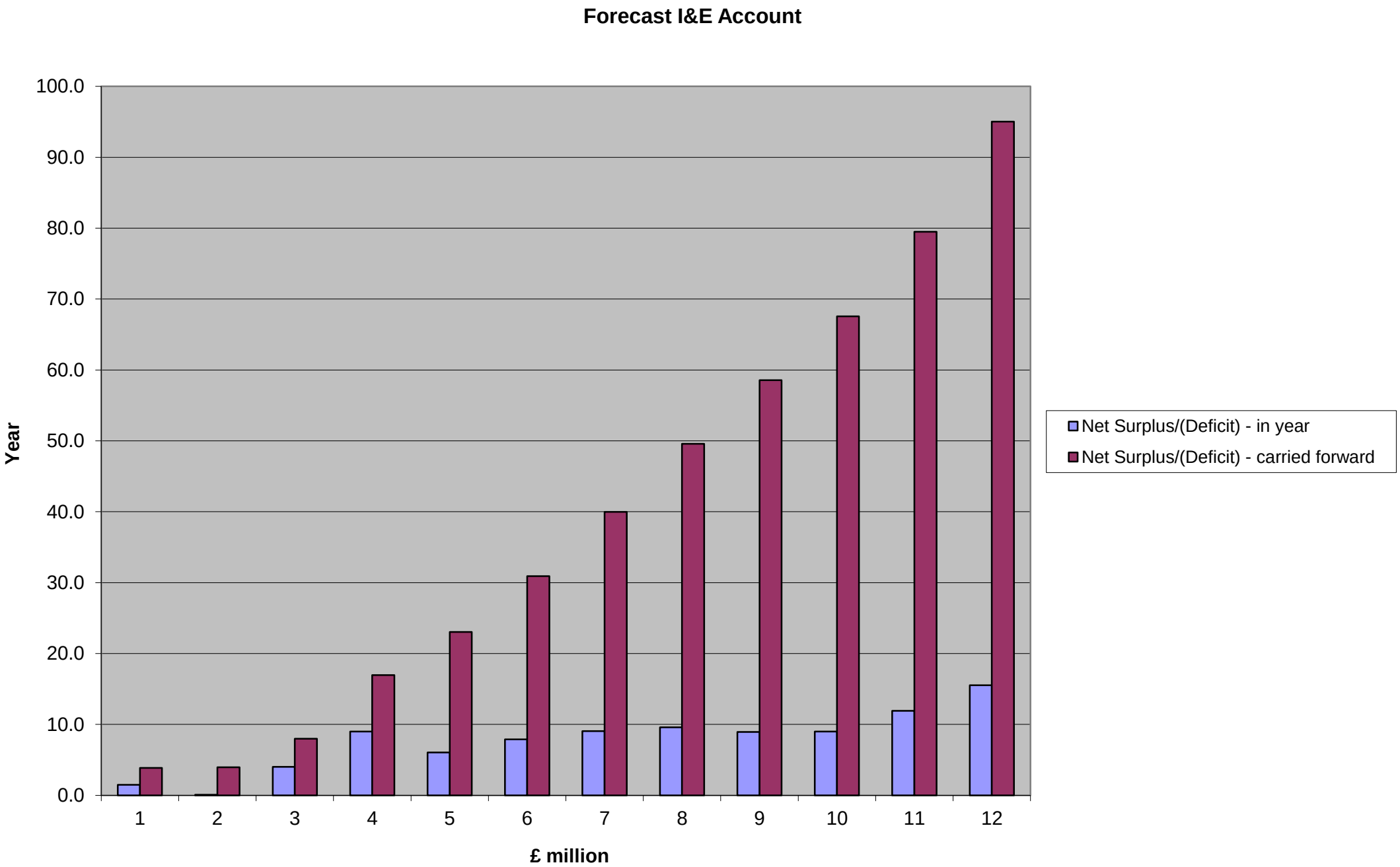
Synergy savings	Savings 08/9 prices £000/year	wte	Key	Description
Neuro sciences				
Oral Surgery	**78**	**3.0**	**S**	Single oral surgery outpatient department
Critical care				
Consolidating day cases wards & recovery a	1,004	58.2	**S**	Single day case ward
Clin Equip Svcs	29	0.5	**S**	Management Reduction
Sterile Svcs	292	0.0	**S**	senior ATO and admin staff savings from combination of 2 departments into 1
Management	30	0.6	**S**	Specialty Director sessions and 0.4 ICU H Grade
Theatre porters	272	16.0	**S & D**	Red'n staffing due to increase day cases & closer proximities of new site
Emergency theatre lists	682	25.2	**S**	Red'n of one list per week from combining out of hours lists onto single site
	2,309	**100.4**		
Pharmacy	393	11.3	**S**	Single pharmacy resulting in reduction in pharmacists
Radiology	340	9.0	**S**	Centralisation of Radiology dept. Radiographer, admin and portering savings.
Pathology	417	11.0	**S**	Single site team
	1,149	**31.3**		
Facilities				
CPU	394	30.6	**S**	Single CPU
Restaurant	268	18.5	**S**	Single Restaurant
Quality monitoring	33	1.0	**S**	Reduction in number of sites and departments
Transport	155	6.0	**S**	Reduction in inter-site transport
Portering	417	18.1	**S**	Single site & closer proximities
Stores	58	3.0	**S**	Single stores
Management (domestic)	131	3.0	**S**	Reduction in size and no. of departments
Domestics	0		**S**	Reduction in no. of domestic departments
Security	250		**S**	Reduction in size of hospital at Frenchay
	1,707	**80.2**		
Surgery				
Specialist nurses	101	3.1	**S**	Synergy savings in pre-operative assessment,specialist and senior nurses
Endoscopy	37	1.4	**S**	as result of concentration on activity onto a single site
	138	**4.5**		
Medicine				
Therapy services	380	11.0	**S**	Single department
Clinical Investigations	32	1.0	**S**	Single department
Specialist Nurse	38	1.0	**S**	Centralisation of specialist services
	450	**13.0**		

Keys Legend	
Two or more Departments reduced to one	S
Design Related Savings	D
Performance Improvement enabled by new hospital	P

		Savings 08/9 prices £000/year	wte	Key	Description
Corporate Services					
Finance		24	1.0	S	Reduction in cashier offices
Procurement		52	2.0	S	Reduction in number of departments holding stock & volume of orders
Education Research & Development		85	4.0	S	Receptionists & admin savings from merger of departments
Human Resources		23	1.0	S	Savings in employment services from merger of two depts on single site
Clinical Site Management Costs		420	9.0	S	Reduction in staffing for single site service
NBT Management Costs		600	4.7	S	Synergy savings from concentrating all actvities onto main site
		1,204	**21.7**		
Travel & Transport		300		S	Reduced requirement for intersite transportation costs
Junior Doctor rota's		419		S	Reduced cost of banding supplements, with merged rotas on single site
Musculo (plaster room)		115	3.0	S	Rationalisation of main service onto single site
Consultant on-call		108		S	Reduced on-call commitments with concentration onto single site
PACS		271		S & D	Reduction in number of locations
PALS		40	1.0	S	Patient advice provided from single site
Chaplains		34	1.0	S	Reduced staffing due to concentration onto single site
IM&T		115		S	Single site
Training		104		S	Savings as result of concentration on to main site
Shared Admin/reception		230	13.0	S & D	Reduced staffing due to move to integrate departments (especially outpatients). Major change from current dispersal of departments leading to separate receptions
Non-pay harmonisation/procurement		150		S	Harmonisation of purchasing based on best practice & reduction in wastage
Outpatient nursing		149	6.3	S	Synergy savings from combining services in 6 locations into one.
		2,035	**24.3**		
Total synergy savings		**9,070**	**278.3**		
Lower Nursing costs of larger wards		1,638	65.8	D	Reduction in Wte per bed following move to 32 bedded flexible wards from current mixed configuration of between 13 and 28 bedded wards
Total non performance savings		**10,708**	**344.2**		
Bed savings	50 beds	2,594	62.5	P	Element of overall bed reduction from improved length of stay that is attributable to the new hospital
Futher performance savings	50 beds	2,594	62.5	P	
Total savings		**15,897**	**469.2**		

Nursing	300.9
Ancillary health professionals & other clinical support	43.3
Admin and management	31.8
Healthcare support staff	93.2
	469.2

I&E FORECASTS AT OBC/ABC/FBC	Actual	Actual	Actual	Out-turn	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
USE THIS SPREADSHEET FOR PFI,	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17
P21 AND PUBLIC CAPITAL SCHEMES	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Interest rate assumption	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
NHS Clinical Income:												
PbR Income	68.9	222.5	222.7	212.4	215.8	217.6	223.9	220.5	221.2	229.2	237.5	246.2
Non-PbR income	227.5	100.1	128.9	146.9	162.5	167.5	174.4	177.6	184.3	192.3	200.6	209.6
Non NHS Clinical income	2.9	5.5	6.2	10.7	11.1	11.4	11.8	12.2	12.6	13.1	13.7	14.2
Other income - recurrent	54.3	48.7	43.0	51.5	51.4	50.9	51.6	52.2	53.0	54.0	55.0	55.9
Other income - non-recurrent	16.6	3.3	20.0	4.7	11.0	17.2	15.1	15.6	30.4	15.5	13.1	10.4
Total Income	**370.2**	**380.1**	**420.9**	**426.2**	**451.9**	**464.6**	**476.8**	**478.1**	**501.5**	**504.1**	**519.8**	**536.3**
Pay Costs	244.6	254.6	259.9	273.8	285.6	286.5	292.4	285.6	284.7	291.5	299.0	306.9
Drug costs	17.0	18.6	20.2	23.7	26.5	28.8	32.6	36.4	39.8	44.0	48.6	53.4
Clinical supplies and services	36.3	38.5	43.8	50.2	50.9	50.1	49.7	50.5	52.7	53.5	53.9	54.7
Other Costs - recurrent	45.9	44.2	49.1	40.6	45.9	47.6	49.9	51.0	52.8	53.7	54.8	55.9
Other Costs - non-recurrent	0.0	0.0	0.0	0.0	0.5	0.6	1.1	1.1	0.0	0.0	0.0	0.0
Scheme specific costs - PFI												
PFI Service charges	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	5.5	5.4	5.5
UP Contingency / Optimism Bias	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.5
UP Capitalised	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Release of PFI deferred asset												
Revenue impact of demolitions												
Procurement costs, incl. advisers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Double running costs/transitional costs	1.4	1.5	1.4	1.7	2.0	1.7	1.6	2.1	21.3	6.4	4.2	1.8
New Hospital Savings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6.0	-18.4	-18.9	-19.4
Premises Costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5	-0.5
Scheme specific costs - P21 / Public Cap												
Capital charges impact												
Additional FM costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lifecycle costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0
Maintenance costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other I&E implications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Costs/contingencies/premises costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Costs	**345.1**	**357.3**	**374.4**	**390.1**	**411.3**	**415.4**	**427.4**	**426.8**	**448.5**	**436.0**	**446.4**	**458.7**
EBITDA	**25.1**	**22.8**	**46.5**	**36.06**	**40.5**	**49.2**	**49.4**	**51.3**	**53.0**	**68.1**	**73.4**	**77.5**
Profit / loss on asset disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Asset impairments	0.1	0.1	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciation & Amortisation + ACC Dep	14.6	15.7	16.3	15.8	22.0	29.5	27.9	28.7	23.9	22.1	23.0	23.1
Total interest receivable/ (payable)	-0.4	-0.7	-0.8	-0.6	-0.6	-0.630	-0.6	-0.7	10.4	33.5	34.9	35.1
Total interest payable on Loans and leases	0.0	0.1	2.6	2.3	1.7	1.3	0.8	0.4	0.0	0.0	0.0	0.0
PDC Dividend	9.4	9.2	6.7	9.5	11.4	11.1	12.3	13.3	9.6	3.5	3.5	3.8
Other	0.0	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Surplus/(Deficit) - in year	**1.5**	**0.1**	**4.0**	**9.0**	**6.1**	**7.90**	**9.1**	**9.6**	**9.0**	**9.0**	**11.9**	**15.5**
Net Surplus/(Deficit) - brought forward	2.4	3.9	4.0	8.0	17.0	23.0	30.9	40.0	49.6	58.6	67.6	79.5
Net Surplus/(Deficit) - carried forward	**3.9**	**4.0**	**8.0**	**17.0**	**23.0**	**30.9**	**40.0**	**49.6**	**58.6**	**67.6**	**79.5**	**95.0**
Fixed Asset impairments				**8.9**	**23.1**	**6.4**	**0.0**	**1.2**	**165.6**	**17.4**	**0.0**	**0.0**
Net Surplus/(Deficit) - after impairments				**0.12**	**-17.1**	**1.5**	**9.1**	**8.4**	**-156.7**	**-8.4**	**11.9**	**15.5**


Forecast I&E Account
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90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Year
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7
8
9
10
11
12
£ million
Net Surplus/(Deficit) - in year
Net Surplus/(Deficit) - carried forward

INCOME MOVEMENTS

Appendix 10.vii

£

SOUTH GLOUCESTERSHIRE	Budget 2008-09	2009-10	2010-11	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	£	£	£	£	£	£	£	£	£	£	£
Baseline	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465	100,762,465
Chronic disease growth		291,927	592,891	903,436	1,194,235	1,492,509	1,782,932	2,046,983	2,316,572	2,591,921	2,873,259
		8.1%	7.7%	7.4%	6.5%	6.2%	5.7%	4.9%	4.8%	4.7%	4.5%
Other Growth		183,881	374,032	570,691	774,107	984,541	1,202,264	1,427,561	1,660,727	1,902,073	2,151,922
		2.6%	2.6%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%	2.8%	2.8%
General Growth		40,534	1,341,088	2,780,099	4,258,316	5,776,644	7,336,025	8,937,440	10,581,907	12,270,487	14,004,282
		0.0%	1.6%	1.7%	1.7%	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%
Productivity gains		-639,079	-1,112,925	-1,196,195	-1,294,729	-1,480,636	-1,448,577	-1,416,157	-1,377,823	-1,338,461	-1,298,055
Transfers											
Other adjustments											
Total Clinical Income	**100,762,465**	**100,639,728**	**101,957,552**	**103,820,495**	**105,694,393**	**107,535,523**	**109,635,109**	**111,758,291**	**113,943,847**	**116,188,484**	**118,493,873**

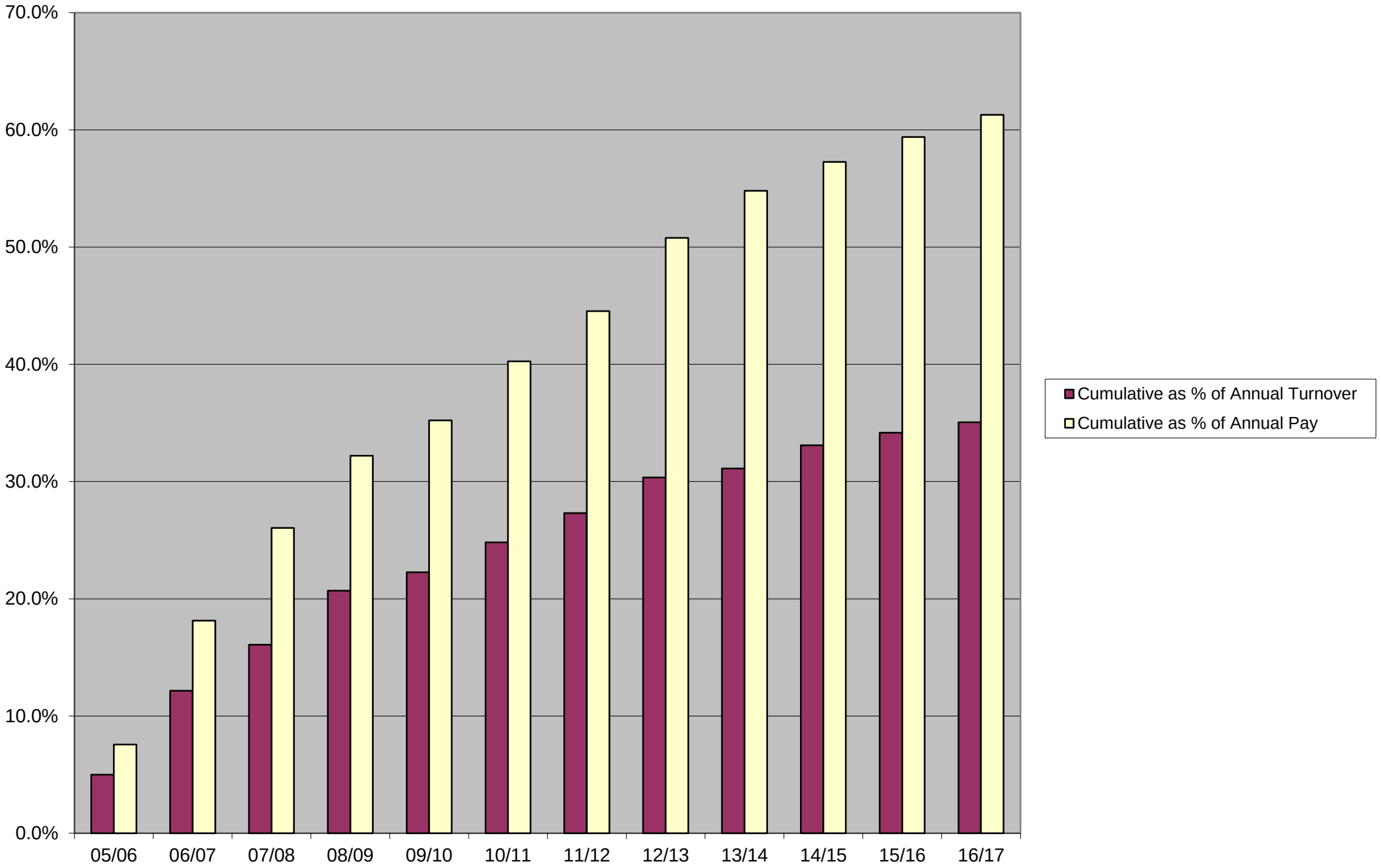
BRISTOL	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	£	£	£	£	£	£	£	£	£	£	£
Baseline	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597	120,523,597
Chronic disease growth		994,254	2,007,988	3,042,370	4,034,194	5,042,129	5,992,580	6,886,192	7,791,740	8,709,702	9,640,574
		10.5%	9.7%	9.0%	7.9%	7.5%	6.6%	5.8%	5.5%	5.3%	5.1%
Other Growth		195,135	396,923	605,617	821,483	1,044,795	1,275,844	1,514,928	1,762,364	2,018,481	2,283,621
		2.6%	2.6%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%	2.8%	2.8%
General Growth		25,612	847,391	1,756,656	2,690,695	3,650,078	4,635,401	5,647,284	6,686,371	7,753,331	8,848,861
		0.0%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%
Productivity gains		-764,412	-1,331,187	-1,430,788	-1,548,646	-1,771,012	-1,732,667	-1,693,888	-1,648,036	-1,600,954	-1,552,624
Transfers											
Other adjustments											
Total Clinical Income	**120,523,597**	**120,974,186**	**122,444,712**	**124,497,452**	**126,521,322**	**128,489,587**	**130,694,756**	**132,878,114**	**135,116,036**	**137,404,156**	**139,744,029**

NORTH SOMERSET	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	£	£	£	£	£	£	£	£	£	£	£
Baseline	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984	31,804,984
Chronic disease growth		228,672	465,881	712,138	939,745	1,174,413	1,406,894	1,614,466	1,827,269	2,045,512	2,269,413
		7.4%	7.1%	6.9%	6.0%	5.8%	5.4%	4.6%	4.5%	4.4%	4.3%
Other Growth		61,909	125,929	192,140	260,626	331,475	404,778	480,631	559,133	640,390	724,509
		2.6%	2.6%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%	2.8%	2.8%
General Growth		13,166	435,615	903,037	1,383,195	1,876,381	2,382,902	2,903,077	3,437,236	3,985,724	4,548,899
		0.1%	1.8%	1.9%	1.9%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Productivity gains		-201,721	-351,287	-377,571	-408,672	-467,353	-457,234	-447,000	-434,900	-422,476	-409,722
Transfers											
Other adjustments											
Total Clinical Income	**31,804,984**	**31,907,011**	**32,481,122**	**33,234,729**	**33,979,878**	**34,719,901**	**35,542,325**	**36,356,158**	**37,193,722**	**38,054,134**	**38,938,082**

OTHER	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	£	£	£	£	£	£	£	£	£	£	£
Baseline	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767	80,344,767
Chronic disease growth		609,766	1,255,956	1,940,756	2,545,977	3,181,325	3,848,004	4,408,399	4,991,114	5,597,042	6,227,110
		5.8%	5.9%	5.9%	4.9%	4.9%	4.9%	3.9%	3.9%	3.9%	3.9%
Other Growth		156,985	319,322	487,216	660,879	840,533	1,026,410	1,218,752	1,417,813	1,623,858	1,837,162
		2.6%	2.6%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%	2.8%	2.8%
General Growth		29,857	987,854	2,047,838	3,136,702	4,255,112	5,403,762	6,583,374	7,794,699	9,038,518	10,315,642
		0.0%	1.5%	1.7%	1.7%	1.7%	1.7%	1.8%	1.8%	1.8%	1.8%
Productivity gains		-509,581	-887,410	-953,808	-1,032,375	-1,180,612	-1,155,049	-1,129,198	-1,098,632	-1,067,246	-1,035,028
Transfers											
Other adjustments											
Total Clinical Income	**80,344,767**	**80,631,795**	**82,020,489**	**83,866,770**	**85,655,950**	**87,441,125**	**89,467,894**	**91,426,095**	**93,449,762**	**95,536,938**	**97,689,653**

TOTAL	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	£	£	£	£	£	£	£	£	£	£	£
Baseline	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813	333,435,813
Chronic disease growth		2,124,620	4,322,717	6,598,700	8,714,151	10,890,375	13,030,410	14,956,040	16,926,695	18,944,176	21,010,356
Other Growth		597,910	1,216,206	1,855,664	2,517,095	3,201,344	3,909,296	4,641,873	5,400,038	6,184,801	6,997,214
General Growth		109,169	3,611,948	7,487,631	11,468,907	15,558,215	19,758,091	24,071,175	28,500,213	33,048,060	37,717,684
Productivity gains		-2,114,793	-3,682,809	-3,958,361	-4,284,423	-4,899,612	-4,793,527	-4,686,243	-4,559,392	-4,429,137	-4,295,429
Transfers		12,648,571	8,434,441	9,837,461	-646,247	-5,389,789	-4,754,681	-3,908,162	-2,788,837	-1,242,308	760,738
Other adjustments	25,855,000	26,043,791	25,702,393	26,078,466	25,383,795	25,067,758	25,468,128	25,879,320	26,303,619	26,748,107	27,204,842
Total Clinical Income	**359,290,813**	**372,845,081**	**373,040,709**	**381,335,373**	**376,589,091**	**377,864,105**	**386,053,531**	**394,389,816**	**403,218,149**	**412,689,511**	**422,831,217**

CIP / CRES DETAILS	Actual 05/06	Actual 06/07	Actual 07/08	Outturn 08/09	Forecast 09/10	Forecast 10/11	Forecast 11/12	Forecast 12/13	Forecast 13/14	Forecast 14/15	Forecast 15/16	Forecast 16/17
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
A: Improve acute bed utilisation					2.2	2.6	2.7	2.7	1.5	1.2	1.0	1.0
B: Improve theatre utilisation/throughput					0.6	0.8	0.8	0.8	0.5	0.5	0.3	0.3
C: Improve outpatient utilisation					0.8	1.0	1.0	1.0	0.6	0.6	0.6	0.6
D: Patient admin efficiencies					0.5	0.6	0.8	0.8	0.5	0.5	0.5	0.5
E: Clinical support efficiencies					1.2	1.5	1.5	1.0	0.6	0.6	0.6	0.6
F :Medical staff productivity					0.5	0.8	0.9	0.7	0.5	0.5	0.5	0.5
G: Nursing and therapies					0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
H: Other clinical productivity					0.7	0.9	0.9	0.9	0.3	0.3	0.3	0.3
I: Corporate and other staff reductions					0.7	0.8	0.8	0.8	0.5	0.5	0.5	0.5
J: Procurement					1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
K: Reduction in usage for non pay costs					0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L: Other schemes	18.5	27.7	21.5	20.5	2.8	2.4	1.8	2.0	2.0	2.0	2.0	1.6
M: Inflation					0.4	0.8	1.2	1.6	1.4	1.7	1.9	2.0
CIP/CRES Required in Year	**18.5**	**27.7**	**21.5**	**20.5**	**12.4**	**14.7**	**14.9**	**14.8**	**10.9**	**10.9**	**10.7**	**10.5**
% High Risk					10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
% Medium Risk					15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Total % High and Medium Risk					**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**
Cum. Project A CIP as % of cost of A					3.9%	4.8%	7.3%	7.5%	14.8%	17.5%	25.9%	20.4%
Cum. Project B CIP as % of cost of B					6.7%	10.0%	6.3%	7.5%	14.0%	0.0%	0.0%	0.0%
Cum. Project C CIP as % of cost of C					2.5%	4.0%	2.4%	3.2%	6.7%	0.0%	0.0%	0.0%
Cum. Project D CIP as % of cost of D					1.5%	8.8%	3.8%	4.5%	8.4%	9.6%	10.8%	12.0%
Cum. Project E CIP as % of cost of E					0.2%	0.8%	0.7%	0.6%	2.7%	5.0%	0.0%	0.0%
Cum. Project F CIP as % of cost of F					7.8%	10.6%	8.0%	12.9%	21.6%	0.0%	0.0%	0.0%
Cum. Project G CIP as % of cost of G					5.0%	8.0%	10.8%	4.8%	6.0%	0.0%	0.0%	0.0%
Cum. Project H CIP as % of cost of H					0.7%	1.2%	1.7%	2.4%	8.3%	41.3%	56.8%	72.3%
Cum. Project I CIP as % of cost of I					2.9%	5.0%	7.5%	8.8%	14.0%	11.2%	12.8%	14.4%
Cum. Project J CIP as % of cost of J					1.2%	2.4%	2.2%	2.8%	3.4%	4.0%	4.6%	5.2%
Cum. Project K CIP as % of cost of K					0.0%	4.8%	6.3%	7.6%	9.5%	11.4%	13.3%	15.2%
Cumulative CIPs and CRES	**18.5**	**46.2**	**67.7**	**88.2**	**100.6**	**115.3042**	**130.2459**	**145.0781**	**156.018**	**166.8953**	**177.5711**	**188.0317**
Cumulative as % of Annual Turnover	5.0%	12.2%	16.1%	20.7%	22.3%	24.8%	27.3%	30.3%	31.1%	33.1%	34.2%	35.1%
Cumulative as % of Annual Pay	7.6%	18.1%	26.1%	32.2%	35.2%	40.3%	44.5%	50.8%	54.8%	57.3%	59.4%	61.3%
Cumulative as % High or Medium Risk					**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**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12/13
13/14
14/15
15/16
16/17
Cumulative as % of Annual Turnover
Cumulative as % of Annual Pay

	Outturn 2007/08 £ million	Forecast 2008/09 £ million	Forecast 2009/10 £ million	Forecast 2010/11 £ million	Forecast 2011/12 £ million	Forecast 2012/13 £ million	Forecast 2013/14 £ million	Forecast 2014/15 £ million	Forecast 2015/16 £ million	Forecast 2016/17 £ million	Total £ million
1. Expenditure											
Enabling programme in OBC											
Academic centre	5.5	13.3	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
Associated pre PFI enabling works	2.4	2.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Sub total OBC enabling	7.9	15.3	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
Equipment within the PFI	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	4.0
Section 106 costs	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.0	0.0	0.0	2.6
Advanced PFI enabling	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
Total PFI enabling	7.9	15.3	15.8	0.0	0.9	0.9	4.9	0.0	0.0	0.0	45.5
Academic Phase 2	0.0	0.0	0.0	0.0	5.5	5.5	0	0	0	0	11.0
Corporate offices	0.0	0.0	0.0	0.0	4	4	0	0	0	0	8.0
Pathology phase 1	5.2	11.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4
Pathology phase 2A	0.0	0.8	1.0	7.6	6.1	0.0	0.0	0.0	0.0	0.0	15.5
Pathology phase 2B		0.0	0.0	2.7	4.0	4.0	1.3	0.0	0.0	0.0	12.0
Existing site infrastructure	5.0	3.6	6.0	3.6	1.0	3.3	2.1	1.0	1.0	1.0	27.6
IT investment	1.8	3.4	3.4	3.7	4.8	4.8	2.4	1.3	2.8	1.6	30.0
Medical equipment	2.6	2.7	3.8	3.0	3.0	2.5	3.0	3.0	3.0	3.0	29.6
Renal dialysis	0.0	0	0.8	3.2	0	0	0	0	0	0	4.0
Cardiac	5.6	0	0	0	0	0	0	0	0	0	5.6
Other	4.7	10.4	5.8	5.6	0.6	2.5	2.4	8.4	6.5	8.1	54.9
Total expenditure	32.9	47.9	41.0	29.4	29.8	27.5	16.1	13.7	13.3	13.7	265.2
2. Funding											
PDC for enabling	6.8	16.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
PDC - other	11.0	16.1	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.1
UoB contribution - Academic schemes	0.0	0.0	2.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	4.3
Normal depreciation	15.1	15.8	16.2	17.6	18.7	19.2	20.1	22.0	22.9	23.1	190.5
Accelerated depreciation	0	0	5.4	11.8	9.1	9.4	5.1	0	0	0	40.8
Other	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total funding	32.9	47.9	41.0	29.4	29.8	28.6	25.2	22.0	22.9	23.1	302.7
Surplus before SHA smoothing provision	0.0	0.0	0.0	0.0	0.0	1.1	9.1	8.3	9.6	9.4	37.5
Provision to repay SHA smoothing	0.0	0.0	0.0	0.0	0.0	0.0	-4.9	-7.4	-7.0	-6.8	-26.1
Surplus available for capital investment	0	0	0	0	0	1.1	4.2	0.9	2.6	2.6	11.5

Summary Sensitivity Analysis

		Price Base
	£ millions	
From last set of Trust audited accounts:		
Turnover	420.92	2007/08
Surplus / (deficit)	4.01	2007/08
Cumulative surplus / (deficit) carried forward	40.79	2007/08
Forecasts		
Forecast I&E Surplus / (Deficit) for current year	9.00	2008/09
Forecast cumulative I&E Surplus / (Deficit) 8 years from ABC	95.01	2016/17
Forecast income growth / reduction from ABC to year 8- real (%) excl transfers	9.88%	2008/09
Cash Forecast inflow / (outflow) cumulatively from ABC to year 8 -real	83.94	2008/09
Impact of cumulative 1% reduction in overall activity -elective patient spells - inpatient and day cases	-2.45	by 2016/17
Impact of cumulative 1% increase in overall activity -elective patient spells - inpatient and day cases	2.45	by 2016/17
Impact of cumulative 1% reduction in overall activity - non-elective patient spells - inpatient and day cases	-2.69	by 2016/17
Impact of cumulative 1% increase in overall activity - non-elective patient spells - inpatient and day cases	2.69	by 2016/17
Impact on I&E position of cumulative 5% reduction in most profitable activity	-1.82	by 2016/17
Impact on I&E position of cumulative 5% increase in most profitable activity	1.82	by 2016/17
Impact on I&E position of cumulative 5% change in the speciality most likely to change (gen medicine)	-6.53	by 2016/17
Cost Improvement Programmes		
Cost improvement programme from ABC to first year of operations	88.32	
Impact of failure to achieve 5% of CIPs	-5.02	2016/17
Impact of achieving 5% more CIPs than forecast	5.02	2016/17
Switching analysis		
Percentage activity change required for scheme to be unaffordable - i.e. affordability envelope is breached - i.e.		
UP estimate plus all contingencies in 2016/17	0.91%	
Percentage CIP change required for scheme to be unaffordable in 16/17	11.72%	

Impairment

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	TOTAL
	£	£	£	£	£	£	£
DV impairment 2009/10	0						0
Impairments	16,447,229	1,200,000				35,613,449	53,260,678
``	1,643,081						1,643,081
Footprint - Accelerated Deprec	3,662,125	3,042,389					6,704,515
Post completion accelerated d	1,532,113	8,350,421	8,745,913	9,014,548	4,845,574	0	32,488,569
Enhancement impairments	11,833,500	5,173,100	0	1,200,000	0	0	18,206,600
NBS (AD)	182,353	373,824	370,425	365,133	264,722		1,556,457
Total impairment/accelelerated	35,300,402	18,139,734	9,116,338	10,579,681	5,110,296	35,613,449	113,859,900
Less revaluation reserve							
- DV impairment	0						0
- Footprint impairment	6,782,316					18,184,740	24,967,056
Total reval reserve available to	6,782,316	0	0	0	0	18,184,740	24,967,056
Net charge to I&E	28,518,086	18,139,734	9,116,338	10,579,681	5,110,296	17,428,709	88,892,844
impairment	23,141,494	6,373,100	0	1,200,000	0	17,428,709	48,143,303
Accelerated Depreciation	5,376,591	11,766,634	9,116,338	9,379,681	5,110,296	0	40,749,541
							88,892,844
Impairment on coming into use							
- Rolled up interest					112,610,000		112,610,000
- Development costs					10,059,000		10,059,000
- Construction					42,972,900		42,972,900
	28,518,086	18,139,734	9,116,338	10,579,681	170,752,196	17,428,709	254,534,744

Summary Affordability Information for OBC, ABC and FBC		**Price Base**
Date of DH Review		
Trust affordability envelope (as calculated by the Trust):		
Expected unitary payment from bidder's model - no need to link model	34.5	**2008/09**
Optimism bias		**20XX/YY**
Other contingencies	3.1	**2008/09**
Total affordability envelope	**37.6**	
Normalised unitary payment to turnover ratio - at DH re-appraisal/last DH approval	**12.20%**	**2006/07**
Normalised unitary payment to turnover ratio - current	**10.11%**	**2008/09**
Capital cost - current Trust PSC	**493**	**2008/09**
Capital cost - current bidder	**435**	**2008/09**
Reference costs (MFF adj and excl excess bed days)		
Monitor Diagnostic Outcomes - only Trusts that applied for FT status		
Monitor Scoring - Financial Management		
Monitor Scoring - Use of Resources		
Monitor Scoring - Value for Money		
Diagnostic Validated by Monitor? Yes / No	**Y/N**	
HCC - rating on use of resources		
EBITDA Margin	8%	2008/09
Return on Average Assets Employed	6%	2008/09
Income & Expenditure Surplus Margin	2%	2008/09
Cashflow ratio	2%	2008/09
Current ratio	0.5%	2008/09
	£ millions	
From last set of Trust audited accounts:		
Turnover	420.9	2007/08
Turnover - normalised	418.6	2007/08
Income and Expenditure Surplus / (Deficit) - last year	4.0	2007/08
Income and Expenditure Surplus / (Deficit) - previous year	0.1	2006/07
Income and Expenditure Reserve carried forward	8.0	2007/08
Total Reserves carried forward	131.1	2007/08
Forecasts		
Forecast I&E Surplus / (Deficit) for current year	9.000	2008/09
Forecast I&E Position Surplus / (Deficit) 9 years from last audited accounts	95.029	2016/17
Forecast income growth / reduction - current to year 8 - real (%)	9.9%	
Potential to generate additional contribution from activity not included in forecasts	0	
Forecast inflow / (outflow) cumulatively from current to year 8 -real	83.94	2008/09
Unitary payment - first full year of operations	34.51	2014/15
Unitary payment - first full year - normalised	44.11	2014/15
Cost Improvement Programmes		
Cost improvement programme from current to first year of operations	88.32	
Cumulative CIPs required as a percentage of turnover	35%	
Percentage of CIPs rated as high risk in terms of delivery	10%	
Percentage of CIPs rated as medium risk in terms of delivery	15%	
Total value of high and medium risk CIPs	25%	
Is there a detailed plan approved by Directorates for CIP delivery?	Y	
Switching analysis		
Percentage activity change required for scheme to be unaffordable	1%	
Percentage CIP change required for scheme to be unaffordable	12%	
Percentage of other factors for scheme to be unaffordable	0	
Impairments		
Impairment Funding Required	254.53	2013/14
Impairment Funding Approved	254.53	
Financial Position of Local Health Economy		
Financial position of main PCTs - audited I&E surplus / (deficit):		
PCT 1 (Bristol) - 28% of total Trust funding)	3.689	2007/08
PCT 2 - (South Glos)(23.6% of total Trust funding)	2.177	2007/08
PCT 3 - (N Somerset)(7.5% of total Trust funding)	0.009	2007/08
Total % of Trust funding covered by PCTs 1- 3	59%	
Forecast I&E Position 3 years from OBC/ABC/FBC		
PCT 1 - Bristol	5.713	2012/13
PCT 2 - S Glos	2.5	2012/13
PCT 3 - N Somerset	0	2012/13
Capital Funding Requirements - related to the PFI but outside PFI scope		
Capital funding required - e.g. for equipment, enabling works	11.0	2013/14
Capital funding surplus / (shortfall)	25.2	2013/14

CASHFLOW FORECASTS AT OBC/ABC/FBC	Actual XX/YY	Actual 2006/07	Outturn 2007/08	Forecast 2008/09	Forecast 2009/10	Forecast 2010/11	Forecast 2011/12	Forecast 2012/13	Forecast 2013/14	Forecast 2014/15	Forecast 2015/16	Forecast 2016/17
DETAILS	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
EBITDA												
Excluding non cash operational I&E items	X	21.67	27.55	36.06	40.51	49.09	49.31	50.61	53.50	68.10	73.40	77.50
Movement in working capital:	X	3.62	-0.24	19.85	-3.87	0.55	0.00	0.65	0.00	0.00	0.00	0.00
Cash Flow from Operations	**0.00**	**25.29**	**27.31**	**55.90**	**36.64**	**49.64**	**49.31**	**51.26**	**53.50**	**68.10**	**73.40**	**77.50**
Capital Expenditure												
Maintenance Capex	X	-4.09	-7.88	-5.60	-6.14	-6.30	-4.47	-5.75	-5.60	-5.33	-5.50	-5.50
Non Maintenance Capex	X	-17.43	-21.81	-42.31	-34.86	-23.10	-25.33	-21.75	-10.50	-8.38	-7.80	-8.20
Cash Exceptional items	X	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash receipt from asset sales	X	0.04	0.01	8.83	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Taxation paid	X	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash Flow before Financing	**0.00**	**3.81**	**-2.37**	**16.82**	**2.14**	**20.24**	**19.51**	**23.76**	**37.40**	**54.40**	**60.10**	**63.80**
Movement in LT debtors	X	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement in LT Creditors	X	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest												
Interest (paid) on loans and leases	X	-0.07	-2.54	-2.35	-1.70	-1.30	-0.80	-0.40	0.00	0.00	0.00	0.00
Interest (paid)/ received on cash balance & WC facility	X	0.77	0.87	0.56	0.60	0.60	0.63	0.60	0.70	0.70	0.70	0.70
Loans												
Drawdown of loans and leases	X	52.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repayment of loans and leases	X	0.00	-2.60	-14.41	-8.15	-8.43	-8.98	-9.45	0.00	0.00	0.00	0.00
Other												
Public Dividend Capital received	X	24.00	15.16	34.15	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Dividend Capital repaid	X	-71.67	-1.08	-26.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unitary payment									-9.31	-34.62	-35.88	-36.79
Movement in Other grants/Capital received	X	0.39	0.75	0.00	2.31	0.00	2.00	0.00	0.00	0.00	0.00	0.00
Dividends paid	X	-9.20	-6.71	-9.54	-11.30	-11.00	-12.20	-13.20	-10.50	-3.30	-3.40	-3.60
Net cash outflow/inflow	**0.00**	**0.03**	**1.48**	**-1.37**	**0.00**	**0.11**	**0.16**	**1.31**	**18.29**	**17.18**	**21.52**	**24.11**
Opening Cash Balance	X	1.13	1.16	2.64	1.26	1.26	1.37	1.54	2.85	21.14	38.31	59.83
Net cash outflow/inflow	0.00	0.03	1.48	-1.37	0.00	0.11	0.16	1.31	18.29	17.18	21.52	24.11
Closing Cash Balance	**0.00**	**1.16**	**2.64**	**1.26**	**1.26**	**1.37**	**1.54**	**2.85**	**21.14**	**38.31**	**59.83**	**83.94**
check												

Sources and Applications of Funds for First Full Year of Operations (at 2008/09 prices)

Source of Funds	2008/09 £m	Application of Funds	2008/09 £m
Additional funding from PCTs (detailed)			
Income generated from activity (PbR)		Unitary payment / Lease Plus Payment / Cash impacts	30.8
Income from non-PbR sources	1.2	Project team and contract managem. costs	
		New ward / facility running costs	
Costs saved:		Capital charges	3.1
Released FM Budgets	10.7	SHA smoothing	0.0
Released capital charges	11.4	Facilities Management	
Savings from other displaced costs		Additional costs (e.g. staff) re any new activity/services	
Ex-NHS Bank Funding from SHA Bundle		Other	10.6
Other Cost Improvement Programmes			
Pay - project A			
Pay - project B			
Non-Pay - Clusters removed	0.1		
Other	15.9		
Total Sources of Funds	**39.37**	**Total Applications of Funds**	**44.49**

Funding Assumptions and Requirements

As the Trust plans to undertake a preferred bidder funding competition, all Bidders are required to use these financing assumptions in their bids up until the time of such competition. The Trust reserves the right to update these assumptions and requirements. Bidder feedback on these terms will be considered as part of the competitive dialogue, as will alternative funding proposals; however unless otherwise advised, all bidders will be required to submit compliant bids on this basis.

Please note that there will be no right to match considered as part of the funding competition.

Financing Cases to be Submitted

Bidders are required to submit, at a minimum, the following base case models:

1. Fully Indexed Service Payment:
    a. Bank (including EIB facilities)[1] + RPI Swap ,
    b. Fixed Rate Bond (including EIB facilities) + RPI Swap,
2. Partially Indexed (at RPI) Service Payment:
    a. Fixed Rate Bond (including EIB facilities),
    b. Bank (including EIB facilities)

Requirements in respect of sensitivity scenarios to be submitted are set out below.

For the variant bid (no advanced works programme), submission of the bank case alone is sufficient although the Trust reserves the right to call for a bond case to be submitted if required.

The PFU have advised that they will take a decision on whether the partially indexed cases need to be continued beyond the selection of the Preferred Bidder shortly

The Trust notes the market rates provided may give rise to difficulties with optimising models of scenarios involving fixed rate funding and fully indexed Service Payments. Bidders are not to assume stepped LIBOR swaps or any other form of accreting swap as part of their Reference Bids.

Confirmation required

Please also confirm with your submission that sponsors are content to inject equity, should it be required, at the same IRR as the final bid submission, to meet cover ratio requirements, and set out any associated restrictions, **.**

[1] Please note the EIB are offering a combination of facilities (guaranteed and unguaranteed) up to a cap of £250m. The unguaranteed tranche is capped at €200m.

Bond Case (please also refer to the EIB terms set out later in this paper)

The following is a summary of key assumptions to be made by bidders in submitting their tender for a bond financed solution:

<table>
<tr><td>Issue Price</td><td>100 per cent</td></tr>
<tr><td>Indicative Terms – Reference Gilt + Bond Margin
(subject to market conditions at Launch)</td><td>Fixed Rate
Reference Gilt: bidders are required to pick the gilt that most closely matches their funding profile (calculated in accordance with sterling bond market convention) from the following benchmark gilts:

<table><tr><th>Gilt</th><th>Yield %</th></tr><tr><td>UK TREASURY 5% 2025</td><td>4.386</td></tr><tr><td>UK TREASURY 4 1/4% 2027</td><td>4.462</td></tr><tr><td>UK TREASURY 4 3/4% 2038</td><td>4.39</td></tr><tr><td>UK TREASURY 4 1/4% 2046</td><td>4.429</td></tr></table>
Bond margin: 3.00%
Plus Buffer</td></tr>
<tr><td>Rating</td><td>A- or better (stable outlook) by Standard & Poor’s and Moody’s respectively</td></tr>
<tr><td>Hedging during construction</td><td>This will take the form of a Guaranteed Investment Contract (GIC) or similar mechanism acceptable to rating agencies. The GIC provider will have an AA-/Aa3 or better rating.</td></tr>
<tr><td>Status of the Bonds</td><td>Senior</td></tr>
<tr><td>Bond Amortisation</td><td>Principal on the Bonds will be redeemed semi-annually in accordance with a sculpted amortisation schedule commencing on a specified date, falling up to 12 months after the end of the construction period, with the final redemption on the Final Maturity Date.</td></tr>
<tr><td>Final Maturity Date</td><td>For a Project length of up to 35 years from financial close, 6 months before the end of the concession. For concession lengths of up to 40 years, 12 months before the end of the concession.</td></tr>
<tr><td>Interest Payment & Bond Amortisation Dates</td><td>31st March and 30th September in each year.</td></tr>
<tr><td>Interest</td><td>Semi-annual interest on principal outstanding accruing on an actual/actual basis on each Interest Payment Date.</td></tr>
<tr><td>Gearing</td><td>As determined by the cover ratio requirements (base case and/or impact of cash breakeven sensitivities) and shareholder return requirements with an upper limit of 87.5%</td></tr>
<tr><td>Pinpoint Equity</td><td>£50,000</td></tr>
</table>

Underwriting & Management Fees	On Issue, the Issuer will be required to pay underwriting and management fees of 0.30% of the aggregate proceeds of the Bonds, subject to a minimum of £200,000. Underwriting and management fees will not be payable in respect of the Variation Bonds until the Variation Bonds are sold into the secondary market.
Credit Rating Costs	£750k
Ongoing Rating / Trustee Fees	During Construction: £60,000 per annum (indexed from Financial close) Post Construction: £30,000 per annum (indexed from Financial close) Payable semi-annually in arrears.
Debt Service Reserve Account	An amount equal to the next 6 months' interest and principal payments on the bonds
Maintenance Reserve Account	An amount equal to 100% of the next year's forecast maintenance expenditure, 66% of the following year's forecast maintenance expenditure and 33% of the following year's forecast maintenance expenditure.
Change in Law Reserve Account	An amount equal to 50% of ProjCo's maximum liability.
Financial covenants	Minimum: ▪ ADSCR 1.20x, subject to meeting cash breakeven sensitivity thresholds ▪ LLCR 1.25x Lock up: ▪ ADSCR 1.10x ▪ LLCR 1.15x Default ▪ ADSCR 1.05x ▪ LLCR 1.09x
Governing Law	The laws of England and Wales.

Senior Bank Debt Case **(please also refer to the EIB terms set out later in this paper)**

The following is a summary of key assumptions to be made by bidders in submitting their tender for a bank financed solution:

Margin	**Senior Term Facility, Change in Law Facility (CiLF):** Construction margin: 2.50% per annum Operating period margin: – Operating margin: 2.25% per annum **Equity Bridge Facility:** Supported by a Parent Company Guarantee 1.50% per annum Supported by a bank Letter of Credit 1.25% per annum (bank rated A-/A3 or better)
Front End Fee	An arrangement fee of 2.50% of the Senior Term Facility, Change in Law Facility An arrangement fee of 1.00% of Equity Bridge Facility is payable to the Arrangers.
Commitment Fees	During the period which each facility is available, fees calculated at the rates indicated below on the daily undrawn amounts of that Facility. Senior Term Facility: 50% of applicable margin Change in Law Facility 50% of applicable margin Equity Bridge Facility: 50%of applicable margin
Agency Fees	During Construction: £35,000 per annum (indexed from Financial close) Post Construction: £25,000 per annum (indexed from Financial close) Payable semi-annually in arrears.
Gearing	As determined by the cover ratio requirements (base case and/or impact of cash breakeven sensitivities) and shareholder return requirements , with an upper limit of 87.5%
Contract Period	The period commencing on Financial Close comprising construction plus 30 years.
Operating Period	The period of time from end of the Construction Period to the end of the Contract Period
Availability	Term Loan: From the date of satisfaction of the Conditions Precedent until the earlier of: (i) 12 months after the actual construction completion date; (ii) the first repayment date; and (iii) 12 months after the expected construction completion date (Borrower to have the entitlement to pre-draw unutilised amounts in relevant circumstances). Equity Bridge Facility: From Financial Close until practical completion

Final Maturity	Term Loan: the earlier of i) 29.5 years from Financial Close and ii) 6 months before the end of the concession. Equity Bridge Facility From Financial Close until practical completion.
Financial covenants	Minimum: ▪ ADSCR 1.175x ▪ LLCR 1.25x Lock up: ▪ ADSCR 1.10x ▪ LLCR 1.14x Default ▪ ADSCR 1.05x ▪ LLCR 1.08x
Debt Service Account (DSRA)	An account equal to the next 6 months' interest, and principal payments.
Maintenance Reserve Account	An amount equal to 100% of the next year's forecast maintenance expenditure, 66% of the following year's forecast maintenance expenditure and 33% of the following year's forecast maintenance expenditure.
Change in Law Facility (CiLF)	An account equal to 100% of ProjCo's maximum liability.
Final repayment Date	The last day of the Term of the Senior Term Facility
Repayment and calculation dates	31 March and 30 September in each year
Governing Law	The laws of England and Wales.

Other Key Assumptions (Applicable to all Scenarios)

<table>
<tr><td>Financial Close Date</td><td>Date to be determined by programme requirements. Note the Trust retains an aspiration for the 30th November 2009</td></tr>
<tr><td>Discount Rate for NPV of Service Payments</td><td>3.5% real</td></tr>
<tr><td>NPV Base Date</td><td>1 April 2009</td></tr>
<tr><td>Price Base Date</td><td>1 April 2009</td></tr>
<tr><td>Buffer</td><td>50bps. The Buffer will be removed at or before financial close (at the direction of the Trust).</td></tr>
<tr><td>LIBOR swap rate</td><td>To be built up based on the following swap curve, plus buffer:

<table>
<tr><th>Swap</th><th>Rate%</th><th>Swap</th><th>Rate%</th></tr>
<tr><td>12 months</td><td>2.5575</td><td>10 years</td><td>3.571</td></tr>
<tr><td>18 months</td><td>1.9675</td><td>12 years</td><td>3.736</td></tr>
<tr><td>2 years</td><td>2.0978</td><td>15 years</td><td>3.909</td></tr>
<tr><td>3 years</td><td>2.4465</td><td>20 years</td><td>3.881</td></tr>
<tr><td>4 years</td><td>2.717</td><td>25 years</td><td>3.75</td></tr>
<tr><td>5 years</td><td>2.9145</td><td>30 years</td><td>3.659</td></tr>
<tr><td>6 years</td><td>3.106</td><td>35 years</td><td>3.6183</td></tr>
<tr><td>7 years</td><td>3.258</td><td>40 years</td><td>3.586</td></tr>
<tr><td>8 years</td><td>3.38</td><td>45 years</td><td>3.6133</td></tr>
<tr><td>9 years</td><td>3.482</td><td></td><td></td></tr>
</table>

Bidders should not assume the use of stepped LIBOR swaps as part of their Reference Bid but are free to do so as a variant.</td></tr>
<tr><td>LIBOR swap counterparty credit margin</td><td>20 basis points</td></tr>
<tr><td>MLAs</td><td>1.5 basis points</td></tr>
<tr><td>Cash balances and reserves</td><td>LIBOR swap rate + Buffer +/- [x] bps.

The Buffer will be removed at or before financial close (at the direction of the Trust).

The relevant LIBOR swap rate will be benchmarked at close. Bidders should propose the mechanism by which the relevant reference rate will be determined (e.g. LIBOR swap with a term corresponding to the average life of the projected cash reserves, etc.). In their responses to deliverable F3.2f and F3.4f, Bidders should propose the spread of [x] bps as a commercial item which will be applied to the benchmarked reference rate at financial close.</td></tr>
<tr><td>Overdrafts</td><td>LIBOR swap rate + Buffer +/- [x] bps.</td></tr>
</table>

<table>
<tr><td>GIC (fixed)</td><td>Based on the 2 year swap rate + buffer</td></tr>
<tr><td>GIC (indexed)</td><td>Based on the fixed rate adjusted for inflation at 2.5%+ buffer</td></tr>
<tr><td>RPI swap rate (gross of credit margin)</td><td>To be built up based on the following swap curve:

<table>
<tr><th>Swap</th><th>Rate%</th></tr>
<tr><td>5 years</td><td>1.489</td></tr>
<tr><td>10 years</td><td>2.947</td></tr>
<tr><td>15 years</td><td>3.402</td></tr>
<tr><td>20 years</td><td>3.615</td></tr>
<tr><td>25 years</td><td>3.583</td></tr>
<tr><td>30 years</td><td>3.56</td></tr>
<tr><td>40 years</td><td>3.48</td></tr>
<tr><td>50 years</td><td>3.36</td></tr>
</table>
</td></tr>
<tr><td>RPI swap counterparty credit margin - bank</td><td>20 bps (covers swap provider)</td></tr>
<tr><td>Inflation rate</td><td>2.5% p/a</td></tr>
<tr><td>Return on Risk Capital</td><td>Blended nominal IRR target return and loan stock / sub debt coupon to be proposed by bidders. Please provide separate term sheets as per the bidder requirement matrix.</td></tr>
<tr><td>Debtors & Creditors Days</td><td>30</td></tr>
<tr><td>Due Diligence Cost Assumptions</td><td>Estimated monitoring fees for the construction phase will be £6700 per month and for the operational phase £7000 per report which will be quarterly, semi annually or annually at the Funder's discretion. Please assume these would expect these will be required quarterly for the full construction period.</td></tr>
<tr><td>Exchange rate (GBPEUR for sizing the EIB facility only)</td><td>1.08</td></tr>
</table>

EIB Facilities

[REDACTED]

Mini Perm terms

Proposed Position for a Soft Mini Perm Mandatory Variant bid

Introduction
Bidders are asked to confirm their willingness to move to a long term debt funded project finance structure whereby early refinancing is encouraged through the use of ratcheting margins and cash sweep mechanisms (a Soft Mini Perm), and where the risk of refinancing is taken solely by the bidder, on the basis described below.
The following applies only to the commercial loan; the EIB loan should be assumed to remain in place throughout on the existing terms provided.

Terms
Bidders are asked to model such a structure based on the following terms. Where terms are not specified, existing bank terms from F3.2/3.2f should be used.

Tenor[2]	29.5 years (legal maturity)
Maximum gearing	87:13
Margins (figures in bps)	Construction 250 Ops 1-2 225 Ops 3-10 325 Ops 11+ 400
Reserves	Please assume accounts in place of facilities for the duration of the financing
Repayment	Repayment profile set based on standard sculpted amortisation over legal maturity. Cash sweep to apply from the end of phase 1 plus 2 years. Cash sweep to utilise all free cash post reserve account movements.
Cover Ratios – Condition Precedent	Cover ratio requirements as per F3.2/3.2f for sculpted amortisation of loan over legal maturity. Please assume these remain at the original terms of x1.175 ADSCR and x1.20 LLCR
Cover Ratios – default	Tests based on sculpted amortisation of loan over legal maturity
Hedging	Interest rate and RPI swap profiles to be based on sculpted amortisation over legal maturity

Submission required
Two different financial models should be provided:

- Mini Perm Base Case - assuming a successful refinancing occurs at the end of phase 1 completion plus 2 years, based on the existing bond terms from F3.2/3.2f
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The equity IRR for the Mini Perm Base Case should be set at a level that leads to an IRR equal to the Mini Perm Downside Required IRR should the Mini Perm Downside case occur. In the event this increased IRR is unacceptable the Trust will wish to discuss limited refinancing risk sharing with the sponsors in return for a reduction in this level and subject to the agreement of PFU.
Bidders will receive 100% of the benefit of any refinancing up to their existing Base Case IRR requirement. Over and above that the standard form sharing of refinancing gains shall apply.
Note all cases must meet the sensitivity requirements set out in F3.2/3.2f.

Sensitivities

Please find below a full suite sensitivities required for the final bid submission for the reference cases (i.e. bank and bond, full indexation). Please also submit the RPI sensitivities for the bank and bond partial indexation cases.

Bidders are required to submit the results of these cases but not the underlying models. For the avoidance of doubt, results should include, at a minimum, the following: LLCR (average, minimum, year of minimum), DSCR (average, minimum, year of minimum), Debt repaid as scheduled? Yes/No, Outstanding Debt Balance at Maturity.

Combined Downside RPI @ 1%, FM +10%, SP -2.5%, Lifecycle +15%

40% Tax Rate

Lifecycle + 20%

SPC costs + 10% (excluding insurance)

FM costs + 10% (assuming no pass down to FM contractors)

All Costs +10%

All Costs + 20%

RPI +2% on All Costs

RPI at –1%

RPI +1%

RPI - 1%

RPI at 0%

RPI at 1%

RPI at 5%

Insurance Costs post completion + 100%

No 3rd party income

10% Service Payment Deduction

100% of Subordinated debt coupon non tax deductible

33.33% of Subordinated debt coupon non tax deductible
Service Payment less 10%

Insurance Premium + 100%

Construction + 10%

6 Month Construction Delay

Change in Law Facility Drawn in Year 10

Construction Cost breakeven

Lifecycle breakeven

SPV cost breakeven (including insurance during operations)

FM costs breakeven

All costs breakeven

Service Payment deduction breakeven

RPI + x% on Lifecycle breakeven

RPI + x% on All Costs breakeven

Insurance Costs Post Completion Breakeven

10% Deduction in Service Payment + All Costs Increase breakeven

10% Deduction in Service Payment + RPI on All Costs increase breakeven

RPI indexation at the same rate as the RPI swap

Required Performance Bonding Sensitivity for the bond case

The Trust is seeking comfort that the level of surety bonding proposed is sufficient to attain an A- grade rating for the project. To this effect you are required to provide the following:

1. Scenario(s) to support the quantification, with reference to key assumptions / specific variables such as delay in replacing the contractor, increased construction costs as a result of the replacement, any deferred risk capital injections are brought forward to the date of the insolvency, delay in draw of bond and any other variables you consider relevant to fully support the proposed level of surety bonding;
2. Any further scenarios you believe are required to fully support the proposed level of surety bonding.

Additional Questions

For the unwrapped bond case:

1. The Trust will require bids to include the impact (price and commercial) of the following, and confirmation that these can be prorated if required:

    a. Putting in place 50% construction letters of credit, valid (from FC) until the start of year 3 of operations, exclusive of LADs.
    b. Long stop dates of 24 months in the Project agreement
    c. Increasing the LAD sub cap to cover Capex for the revised 24 months longstop date
    d. The impact of increasing the FM contractor's annual cap on liability to 150% and extending the termination cap on liability to 200%.

2. Please indicate the price and commercial impact of any other changes to the subcontractor support package you consider would be required to reach a minimum rating of **A-**. Please note where deliverables refer to investment grade rating or monoline requirements these will be updated to reference A- for the bond case. These deliverables include:

    a. F1.2f
    b. F2.2f
    c. F2.3f

For all cases:

1. Please confirm that any changes required, but not priced at the time of submission will be on a transparent, open book basis, and that the bidder will accept an obligation to mitigate costs wherever possible. Any additional equity required will be injected on the basis of the IRR indicated in the final bid models, or lower.

2. Please confirm whether there are any changes to your response to Financial Bid deliverable F1.2f, and if so please resubmit the risk capital term sheet with the revised models.

3. Please confirm, in line with F2.1f, that all errors and issues discovered in the model post submission of final bids (i.e. as a result of the final model audit) are solely for the account of the consortium. The extent of the model audit undertaken at this stage is therefore left to the bidders' discretion.

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5. Resubmit F3.2f to F3.5f- the financial models as outlined above, and Section F8.

6. Please detail any changes required, or confirm these remain unchanged, in respect to:

    a. F3.1f
    b. F4.1f
    c. F6.1f.
    d. F7.1f
    e. F7.2f
    f. Any other sections that have changed as a result of this resubmission.

Key Definitions

Available Cashflow	Available cashflow will be calculated as: ▪ Operating revenue (including the service payment as defined in the Project Agreement and any guaranteed third party income; plus ▪ Net hedging receipts /payments from RPI swap arrangements; plus ▪ Net sums released from/contributed to the MRA and net sums released from/ contributed to the CiLRA; plus ▪ Interest earned on cash accounts (DSRA CiLRA and MRA and other reserve accounts); minus ▪ Project costs; minus ▪ Taxation, duties and working capital requirements; minus ▪ Other associated senior debt costs (such as technical adviser fees).
Annual Debt Service Cover Ratio	For any period the ratio of A:B where: A = Available Cash Flow for the relevant 12-month period; and B = Debt service obligations under the Senior Bank Debt or Bonds for the relevant 12-month period (i.e. interest & principal)
Loan Life Cover Ratio	The Loan Life Cover Ratio is calculated as the ratio of A:B where: A = Net present value of the Available Cashflow from the calculation date to the longest Final Maturity under the bonds, discounted at the weighted average bond yield (adjusted to include deferred premium), plus the outstanding balance of the DSRA, MRA and CiLRA; and B = Outstanding principal on the Bonds at the calculation date. For the purposes of calculating the LLCR, movements to and from the MRA and CiLRA will be excluded from the Available Cashflow. The balances of the MRA and CiLRA will therefore be included in the numerator of the ratio.

16th February 2009 – rates as of 20th January 2009

Funding Clarification

F3.2/3.2f

Contents

Funding Assumptions and Requirements

As the Trust plans to undertake a preferred bidder funding competition, all Bidders are required to use these financing assumptions in their bids up until the time of such competition. The Trust reserves the right to update these assumptions and requirements. Bidder feedback on these terms will be considered as part of the competitive dialogue, as will alternative funding proposals; however unless otherwise advised, all bidders will be required to submit compliant bids on this basis.

Please note that there will be no right to match considered as part of the funding competition.

Financing Cases to be Submitted

Bidders are required to submit, at a minimum, the following base case models:

1. Fully Indexed Service Payment:
    a. Bank (including EIB facilities) [1] + RPI Swap ,
    b. Fixed Rate Bond (including EIB facilities) + RPI Swap,
2. Partially Indexed (at RPI) Service Payment:
    a. Fixed Rate Bond (including EIB facilities),
    b. Bank (including EIB facilities)

Requirements in respect of sensitivity scenarios to be submitted are set out below.

For the variant bid (no advanced works programme), submission of the bank case alone is sufficient although the Trust reserves the right to call for a bond case to be submitted if required.

The PFU have advised that they will take a decision on whether the partially indexed cases need to be continued beyond the selection of the Preferred Bidder shortly

The Trust notes the market rates provided may give rise to difficulties with optimising models of scenarios involving fixed rate funding and fully indexed Service Payments. Bidders are not to assume stepped LIBOR swaps or any other form of accreting swap as part of their Reference Bids.

Confirmation required

Please also confirm with your submission that sponsors are content to inject equity, should it be required, at the same IRR as the final bid submission, to meet cover ratio requirements, and set out any associated restrictions, **.**

[1] Please note the EIB are offering a combination of facilities (guaranteed and unguaranteed) up to a cap of £250m. The unguaranteed tranche is capped at €200m.

Bond Case (please also refer to the EIB terms set out later in this paper)

The following is a summary of key assumptions to be made by bidders in submitting their tender for a bond financed solution:

<table>
<tr><td>Issue Price</td><td>100 per cent</td></tr>
<tr><td>Indicative Terms – Reference Gilt + Bond Margin
(subject to market conditions at Launch)</td><td>Fixed Rate
Reference Gilt: bidders are required to pick the gilt that most closely matches their funding profile (calculated in accordance with sterling bond market convention) from the following benchmark gilts:

<table><tr><th>Gilt</th><th>Yield %</th></tr><tr><td>UK TREASURY 5% 2025</td><td>4.386</td></tr><tr><td>UK TREASURY 4 1/4% 2027</td><td>4.462</td></tr><tr><td>UK TREASURY 4 3/4% 2038</td><td>4.39</td></tr><tr><td>UK TREASURY 4 1/4% 2046</td><td>4.429</td></tr></table>
Bond margin: 3.00%
Plus Buffer</td></tr>
<tr><td>Rating</td><td>A- or better (stable outlook) by Standard & Poor’s and Moody’s respectively</td></tr>
<tr><td>Hedging during construction</td><td>This will take the form of a Guaranteed Investment Contract (GIC) or similar mechanism acceptable to rating agencies. The GIC provider will have an AA-/Aa3 or better rating.</td></tr>
<tr><td>Status of the Bonds</td><td>Senior</td></tr>
<tr><td>Bond Amortisation</td><td>Principal on the Bonds will be redeemed semi-annually in accordance with a sculpted amortisation schedule commencing on a specified date, falling up to 12 months after the end of the construction period, with the final redemption on the Final Maturity Date.</td></tr>
<tr><td>Final Maturity Date</td><td>For a Project length of up to 35 years from financial close, 6 months before the end of the concession. For concession lengths of up to 40 years, 12 months before the end of the concession.</td></tr>
<tr><td>Interest Payment & Bond Amortisation Dates</td><td>31st March and 30th September in each year.</td></tr>
<tr><td>Interest</td><td>Semi-annual interest on principal outstanding accruing on an actual/actual basis on each Interest Payment Date.</td></tr>
<tr><td>Gearing</td><td>As determined by the cover ratio requirements (base case and/or impact of cash breakeven sensitivities) and shareholder return requirements with an upper limit of 87.5%</td></tr>
<tr><td>Pinpoint Equity</td><td>£50,000</td></tr>
</table>

Underwriting & Management Fees	On Issue, the Issuer will be required to pay underwriting and management fees of 0.30% of the aggregate proceeds of the Bonds, subject to a minimum of £200,000. Underwriting and management fees will not be payable in respect of the Variation Bonds until the Variation Bonds are sold into the secondary market.
Credit Rating Costs	£750k
Ongoing Rating / Trustee Fees	During Construction: £60,000 per annum (indexed from Financial close) Post Construction: £30,000 per annum (indexed from Financial close) Payable semi-annually in arrears.
Debt Service Reserve Account	An amount equal to the next 6 months' interest and principal payments on the bonds
Maintenance Reserve Account	An amount equal to 100% of the next year's forecast maintenance expenditure, 66% of the following year's forecast maintenance expenditure and 33% of the following year's forecast maintenance expenditure.
Change in Law Reserve Account	An amount equal to 50% of ProjCo's maximum liability.
Financial covenants	Minimum: ▪ ADSCR 1.20x, subject to meeting cash breakeven sensitivity thresholds ▪ LLCR 1.25x Lock up: ▪ ADSCR 1.10x ▪ LLCR 1.15x Default ▪ ADSCR 1.05x ▪ LLCR 1.09x
Governing Law	The laws of England and Wales.

Senior Bank Debt Case **(please also refer to the EIB terms set out later in this paper)**

The following is a summary of key assumptions to be made by bidders in submitting their tender for a bank financed solution:

Margin	**Senior Term Facility, Change in Law Facility (CiLF):** Construction margin: 2.50% per annum Operating period margin: – Operating margin: 2.25% per annum **Equity Bridge Facility:** Supported by a Parent Company Guarantee 1.50% per annum Supported by a bank Letter of Credit 1.25% per annum (bank rated A-/A3 or better)
Front End Fee	An arrangement fee of 2.50% of the Senior Term Facility, Change in Law Facility An arrangement fee of 1.00% of Equity Bridge Facility is payable to the Arrangers.
Commitment Fees	During the period which each facility is available, fees calculated at the rates indicated below on the daily undrawn amounts of that Facility. Senior Term Facility: 50% of applicable margin Change in Law Facility 50% of applicable margin Equity Bridge Facility: 50%of applicable margin
Agency Fees	During Construction: £35,000 per annum (indexed from Financial close) Post Construction: £25,000 per annum (indexed from Financial close) Payable semi-annually in arrears.
Gearing	As determined by the cover ratio requirements (base case and/or impact of cash breakeven sensitivities) and shareholder return requirements , with an upper limit of 87.5%
Contract Period	The period commencing on Financial Close comprising construction plus 30 years.
Operating Period	The period of time from end of the Construction Period to the end of the Contract Period
Availability	Term Loan: From the date of satisfaction of the Conditions Precedent until the earlier of: (i) 12 months after the actual construction completion date; (ii) the first repayment date; and (iii) 12 months after the expected construction completion date (Borrower to have the entitlement to pre-draw unutilised amounts in relevant circumstances). Equity Bridge Facility: From Financial Close until practical completion

Final Maturity	Term Loan: the earlier of i) 29.5 years from Financial Close and ii) 6 months before the end of the concession. Equity Bridge Facility From Financial Close until practical completion.
Financial covenants	Minimum: ▪ ADSCR 1.175x ▪ LLCR 1.25x Lock up: ▪ ADSCR 1.10x ▪ LLCR 1.14x Default ▪ ADSCR 1.05x ▪ LLCR 1.08x
Debt Service Account (DSRA)	An account equal to the next 6 months' interest, and principal payments.
Maintenance Reserve Account	An amount equal to 100% of the next year's forecast maintenance expenditure, 66% of the following year's forecast maintenance expenditure and 33% of the following year's forecast maintenance expenditure.
Change in Law Facility (CiLF)	An account equal to 100% of ProjCo's maximum liability.
Final repayment Date	The last day of the Term of the Senior Term Facility
Repayment and calculation dates	31 March and 30 September in each year
Governing Law	The laws of England and Wales.

Other Key Assumptions (Applicable to all Scenarios)

<table>
<tr><td>Financial Close Date</td><td>Date to be determined by programme requirements. Note the Trust retains an aspiration for the 30th November 2009</td></tr>
<tr><td>Discount Rate for NPV of Service Payments</td><td>3.5% real</td></tr>
<tr><td>NPV Base Date</td><td>1 April 2009</td></tr>
<tr><td>Price Base Date</td><td>1 April 2009</td></tr>
<tr><td>Buffer</td><td>50bps. The Buffer will be removed at or before financial close (at the direction of the Trust).</td></tr>
<tr><td>LIBOR swap rate</td><td>To be built up based on the following swap curve, plus buffer:

<table>
<tr><th>Swap</th><th>Rate%</th><th>Swap</th><th>Rate%</th></tr>
<tr><td>12 months</td><td>2.5575</td><td>10 years</td><td>3.571</td></tr>
<tr><td>18 months</td><td>1.9675</td><td>12 years</td><td>3.736</td></tr>
<tr><td>2 years</td><td>2.0978</td><td>15 years</td><td>3.909</td></tr>
<tr><td>3 years</td><td>2.4465</td><td>20 years</td><td>3.881</td></tr>
<tr><td>4 years</td><td>2.717</td><td>25 years</td><td>3.75</td></tr>
<tr><td>5 years</td><td>2.9145</td><td>30 years</td><td>3.659</td></tr>
<tr><td>6 years</td><td>3.106</td><td>35 years</td><td>3.6183</td></tr>
<tr><td>7 years</td><td>3.258</td><td>40 years</td><td>3.586</td></tr>
<tr><td>8 years</td><td>3.38</td><td>45 years</td><td>3.6133</td></tr>
<tr><td>9 years</td><td>3.482</td><td></td><td></td></tr>
</table>

Bidders should not assume the use of stepped LIBOR swaps as part of their Reference Bid but are free to do so as a variant.</td></tr>
<tr><td>LIBOR swap counterparty credit margin</td><td>20 basis points</td></tr>
<tr><td>MLAs</td><td>1.5 basis points</td></tr>
<tr><td>Cash balances and reserves</td><td>LIBOR swap rate + Buffer +/- [x] bps.

The Buffer will be removed at or before financial close (at the direction of the Trust).

The relevant LIBOR swap rate will be benchmarked at close. Bidders should propose the mechanism by which the relevant reference rate will be determined (e.g. LIBOR swap with a term corresponding to the average life of the projected cash reserves, etc.). In their responses to deliverable F3.2f and F3.4f, Bidders should propose the spread of [x] bps as a commercial item which will be applied to the benchmarked reference rate at financial close.</td></tr>
<tr><td>Overdrafts</td><td>LIBOR swap rate + Buffer +/- [x] bps.</td></tr>
</table>

<table>
<tr><td>GIC (fixed)</td><td>Based on the 2 year swap rate + buffer</td></tr>
<tr><td>GIC (indexed)</td><td>Based on the fixed rate adjusted for inflation at 2.5%+ buffer</td></tr>
<tr><td>RPI swap rate (gross of credit margin)</td><td>To be built up based on the following swap curve:

<table>
<tr><th>Swap</th><th>Rate%</th></tr>
<tr><td>5 years</td><td>1.489</td></tr>
<tr><td>10 years</td><td>2.947</td></tr>
<tr><td>15 years</td><td>3.402</td></tr>
<tr><td>20 years</td><td>3.615</td></tr>
<tr><td>25 years</td><td>3.583</td></tr>
<tr><td>30 years</td><td>3.56</td></tr>
<tr><td>40 years</td><td>3.48</td></tr>
<tr><td>50 years</td><td>3.36</td></tr>
</table>
</td></tr>
<tr><td>RPI swap counterparty credit margin - bank</td><td>20 bps (covers swap provider)</td></tr>
<tr><td>Inflation rate</td><td>2.5% p/a</td></tr>
<tr><td>Return on Risk Capital</td><td>Blended nominal IRR target return and loan stock / sub debt coupon to be proposed by bidders. Please provide separate term sheets as per the bidder requirement matrix.</td></tr>
<tr><td>Debtors & Creditors Days</td><td>30</td></tr>
<tr><td>Due Diligence Cost Assumptions</td><td>Estimated monitoring fees for the construction phase will be £6700 per month and for the operational phase £7000 per report which will be quarterly, semi annually or annually at the Funder's discretion. Please assume these would expect these will be required quarterly for the full construction period.</td></tr>
<tr><td>Exchange rate (GBPEUR for sizing the EIB facility only)</td><td>1.08</td></tr>
</table>

EIB Facilities

[REDACTED]

Mini Perm terms

Proposed Position for a Soft Mini Perm Mandatory Variant bid

Introduction

Bidders are asked to confirm their willingness to move to a long term debt funded project finance structure whereby early refinancing is encouraged through the use of ratcheting margins and cash sweep mechanisms (a Soft Mini Perm), and where the risk of refinancing is taken solely by the bidder, on the basis described below.
The following applies only to the commercial loan; the EIB loan should be assumed to remain in place throughout on the existing terms provided.

Terms

Bidders are asked to model such a structure based on the following terms. Where terms are not specified, existing bank terms from F3.2/3.2f should be used.

Tenor[2]	29.5 years (legal maturity)
Maximum gearing	87:13
Margins (figures in bps)	Construction 250 Ops 1-2 225 Ops 3-10 325 Ops 11+ 400
Reserves	Please assume accounts in place of facilities for the duration of the financing
Repayment	Repayment profile set based on standard sculpted amortisation over legal maturity. Cash sweep to apply from the end of phase 1 plus 2 years. Cash sweep to utilise all free cash post reserve account movements.
Cover Ratios – Condition Precedent	Cover ratio requirements as per F3.2/3.2f for sculpted amortisation of loan over legal maturity. Please assume these remain at the original terms of x1.175 ADSCR and x1.20 LLCR
Cover Ratios – default	Tests based on sculpted amortisation of loan over legal maturity
Hedging	Interest rate and RPI swap profiles to be based on sculpted amortisation over legal maturity

Submission required

Two different financial models should be provided:

- Mini Perm Base Case - assuming a successful refinancing occurs at the end of phase 1 completion plus 2 years, based on the existing bond terms from F3.2/3.2f
- Mini Perm Downside – assuming no refinancing takes place

Bidders should specify a minimum acceptable IRR requirement for the Mini Perm Downside (the Mini Perm Downside Required IRR) for them to accept the refinancing risk in full (although the Mini Perm Base Case model above assumes a bond refinancing, refinancing could of course be in the bank market).

The equity IRR for the Mini Perm Base Case should be set at a level that leads to an IRR equal to the Mini Perm Downside Required IRR should the Mini Perm Downside case occur. In the event this increased IRR is unacceptable the Trust will wish to discuss limited refinancing risk sharing with the sponsors in return for a reduction in this level and subject to the agreement of PFU.
Bidders will receive 100% of the benefit of any refinancing up to their existing Base Case IRR requirement. Over and above that the standard form sharing of refinancing gains shall apply.
Note all cases must meet the sensitivity requirements set out in F3.2/3.2f.

Sensitivities

Please find below a full suite sensitivities required for the final bid submission for the reference cases (i.e. bank and bond, full indexation). Please also submit the RPI sensitivities for the bank and bond partial indexation cases.

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40% Tax Rate

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SPC costs + 10% (excluding insurance)

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10% Deduction in Service Payment + All Costs Increase breakeven

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1. Scenario(s) to support the quantification, with reference to key assumptions / specific variables such as delay in replacing the contractor, increased construction costs as a result of the replacement, any deferred risk capital injections are brought forward to the date of the insolvency, delay in draw of bond and any other variables you consider relevant to fully support the proposed level of surety bonding;
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    b. F2.2f
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3. Please confirm, in line with F2.1f, that all errors and issues discovered in the model post submission of final bids (i.e. as a result of the final model audit) are solely for the account of the consortium. The extent of the model audit undertaken at this stage is therefore left to the bidders' discretion.

4. Please resubmit your response to F2.3f in line with terms set out in this clarification above. Please note that the package will need to be sufficient to obtain funding in the current market, which may at this time mean a project with a rating higher than the investment grade level cited in the original deliverable.

5. Resubmit F3.2f to F3.5f- the financial models as outlined above, and Section F8.

6. Please detail any changes required, or confirm these remain unchanged, in respect to:

    a. F3.1f
    b. F4.1f
    c. F6.1f.
    d. F7.1f
    e. F7.2f
    f. Any other sections that have changed as a result of this resubmission.

Key Definitions

Available Cashflow	Available cashflow will be calculated as: ▪ Operating revenue (including the service payment as defined in the Project Agreement and any guaranteed third party income; plus ▪ Net hedging receipts /payments from RPI swap arrangements; plus ▪ Net sums released from/contributed to the MRA and net sums released from/ contributed to the CiLRA; plus ▪ Interest earned on cash accounts (DSRA CiLRA and MRA and other reserve accounts); minus ▪ Project costs; minus ▪ Taxation, duties and working capital requirements; minus ▪ Other associated senior debt costs (such as technical adviser fees).
Annual Debt Service Cover Ratio	For any period the ratio of A:B where: A = Available Cash Flow for the relevant 12-month period; and B = Debt service obligations under the Senior Bank Debt or Bonds for the relevant 12-month period (i.e. interest & principal)
Loan Life Cover Ratio	The Loan Life Cover Ratio is calculated as the ratio of A:B where: A = Net present value of the Available Cashflow from the calculation date to the longest Final Maturity under the bonds, discounted at the weighted average bond yield (adjusted to include deferred premium), plus the outstanding balance of the DSRA, MRA and CiLRA; and B = Outstanding principal on the Bonds at the calculation date. For the purposes of calculating the LLCR, movements to and from the MRA and CiLRA will be excluded from the Available Cashflow. The balances of the MRA and CiLRA will therefore be included in the numerator of the ratio.

Process for EIB involvement in Bristol PBDFC

Terms of Engagement

1. EIB is permitted to enter the PBDFC early i.e. prior to any full funding competition between commercial funders, on the basis that their competitiveness is demonstrated throughout the procurement and that their acceptance of the project is firm from ABC approval

2. Specifically, this will be checked at:

   (a) Provision of Term Sheet, which is shown to be better than the Putative Financial Model and justified with regard to any particular stance on termination liabilities (should this still be a factor in EIB involvement); and PA derogations which should be justifiable/reasonable respectively. This is done following review of the Stage 1 Due Diligence Report and prior to issue of the ITFB – so that if there are any specific funding conditions, the Term Sheet provided to bidders can be amended.

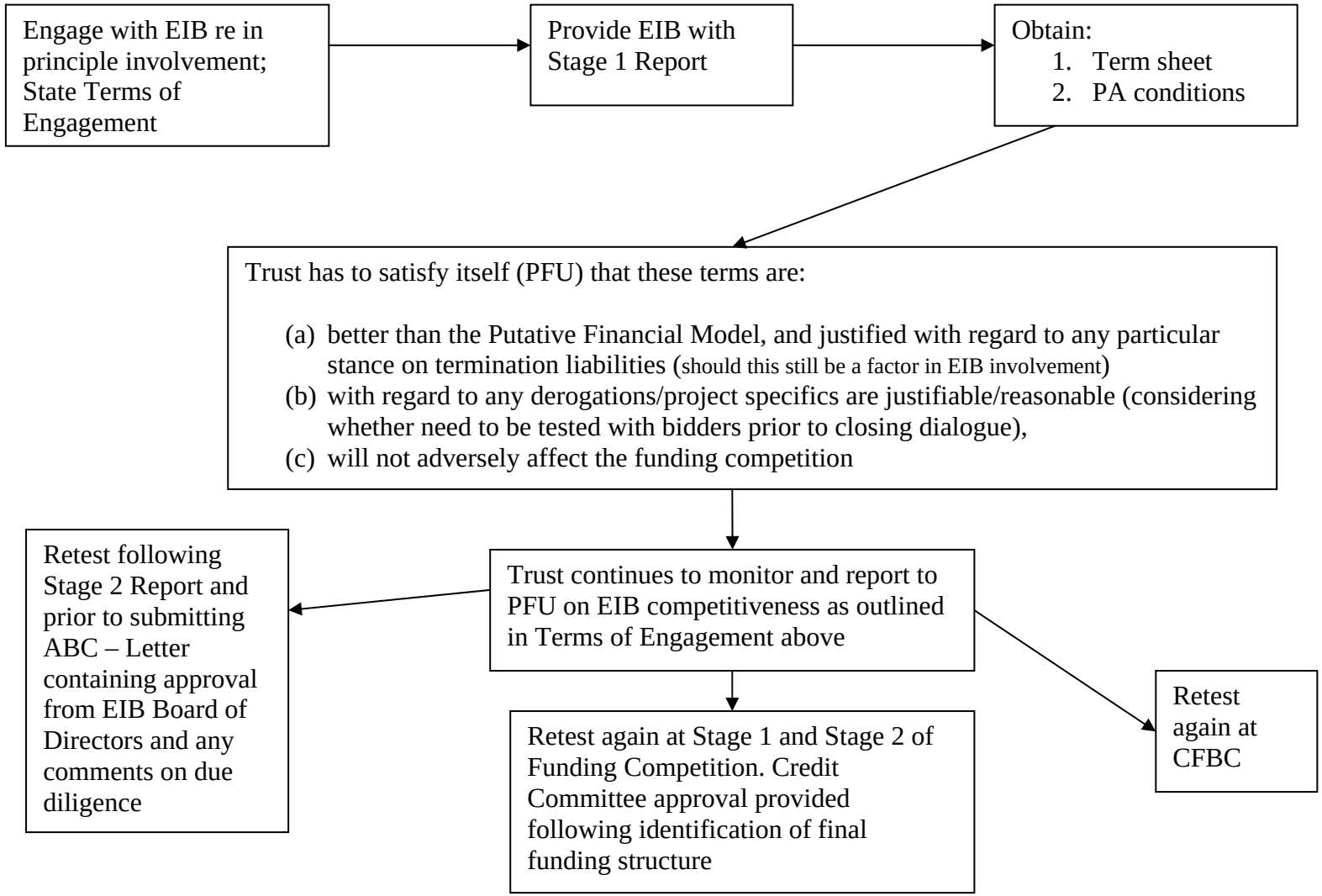
   (b) Before submitting the ABC, all this should be re tested and EIB team also to provide letter confirming EIB Board of Directors approval including reference to any comments on the funder due diligence relied upon. EIB is given the Stage 2 Reports to assist this commitment process

   (c) Stage 1 and Stage 2 of the Funding Competition. Where EIB are to rely on a bank (or monoline?) guarantee they should be consulted during the evaluation of Stage 1 of the funding competition and outline whether guarantees from the banks identified are acceptable for the amount indicated.[1] EIB Credit Committee approval to be provided once final finance structure and preferred funder has been established through Stage 2 of the Funding Competition.

   (d) Confirming Full Business Case

3. If at any point, EIB's terms or commitment are not as competitive as those obtainable in the competition, or otherwise impairs the competition, the Trust reserves the right not to use EIB funding.

[1] This will be subject to no adverse change in their financial position.


Engage with EIB re in principle involvement; State Terms of Engagement
Provide EIB with Stage 1 Report
Obtain:
1. Term sheet
2. PA conditions
Trust has to satisfy itself (PFU) that these terms are:
(a) better than the Putative Financial Model, and justified with regard to any particular stance on termination liabilities (should this still be a factor in EIB involvement)
(b) with regard to any derogations/project specifics are justifiable/reasonable (considering whether need to be tested with bidders prior to closing dialogue),
(c) will not adversely affect the funding competition
Retest following Stage 2 Report and prior to submitting ABC – Letter containing approval from EIB Board of Directors and any comments on due diligence
Trust continues to monitor and report to PFU on EIB competitiveness as outlined in Terms of Engagement above
Retest again at Stage 1 and Stage 2 of Funding Competition. Credit Committee approval provided following identification of final funding structure
Retest again at CFBC

Objectives

1. The primary objective of the funding competition is to encourage competitive proposals for a senior debt funding solution which:

    a. is firm, unqualified and deliverable;
    b. does not undermine the Appointment Business Case ("ABC") approval criteria;
    c. enables the required amount of senior debt to be raised;
    d. reduces the NPV cost of the Service Payments paid by the Trust (compared to that in the Reference Model as defined below); and
    e. does not prevent reaching Financial Close by the proposed date i.e. 31st July 2009; and
    f. does not require any renegotiation of the relevant Project Agreement and Schedules or other draft Project Documents / heads of terms, or any alteration of the risk allocation as agreed between the Trust and Preferred Bidder.

Process

2. Delivery of senior and junior funding is the responsibility of the Preferred Bidder; including *inter alia*:

    a. management of the senior debt funding competition process and of the funders Due Diligence advisers[1];
    b. production of all materials required, and funding all costs incurred, in the funding competition process; and
    c. meeting the timescales set out in the Preferred Bidder letter.

3. The Funding Competition will be run by the Preferred Bidder subject to advance approval from the Trust and their financial advisers in respect of key issues including *inter alia*:

    a. timing of the competition;
    b. developing the list of funders to be approached;
    c. the documentation and level of detail issued to prospective funders;
    d. evaluation criteria and selection of funders; and
    e. final selection of bank vs. other (e.g. monoline and/or capital markets etc.) structure. Any difference in sponsor or other costs arising from the final selection of funding route should be clearly expressed in the Final Bid and will not be amended following selection of Preferred Bidder.

[1] This will include facilitating access to the advisers for the potential funders during the competition

4. Approval of the PFU will be required at each stage including *inter alia*:
    a. the contents of the information memorandum;
    b. any reduction in the list of funders; and
    c. final selection of the preferred funder.

5. Offers solicited from prospective funders must at a minimum:

    a. be deliverable - final submissions from funders must have credit committee approval;
    b. be sufficient (in total across each proposed funding structure) to cover the full required senior debt sum;
    c. accept the ABC approval, Project Agreement, associated Schedules and all other Project Documents / heads of terms in full i.e. accept the risk allocation as set out in the Final Bid – prospective funders are therefore required to raise all detailed issues during the funding competition;
    d. allow the project to reach financial close by the proposed date; and
    e. reflect the detailed funder's due diligence undertaken.

6. Any proposed amendments to the agreed positions that may be suggested in the funder due diligence reports will have been reviewed and dismissed by the Trust and the Preferred Bidder by the time of the funding competition and funders should bid on the basis of the documentation as provided.

7. The Trust will not entertain changes to the Project Agreement or other Project Documents as a result of the funding competition or any other process prior to financial close (e.g. subsequent development of finance documentation). To the extent that any such change has a negative impact on the project it will be an equity risk rather than a risk for the Trust. The Trust therefore expects the bidder to develop the information memorandum to a sufficient level of detail (e.g. including proposed step-downs to subcontractors and funders) to achieve this aim. The same principle applies for all inputs into the financial model with the exception of those set out below in the section "Macroeconomic Changes & Trust Risks".

8. Prospective funders should set out their proposals for interest rate and inflation hedging as part of the funding competition. Prospective funders should propose credit margins as part of the funding competition. The Preferred Bidder and prospective funders will be required to accept the principles of:

    a. competing any GICs at financial close; and
    b. public sector benchmarking of derivatives pricing at financial close.

9. The Preferred Bidder will model all funding competition responses agreed with the Trust to be so modelled. The Preferred Bidder will prepare a summary report

demonstrating the impact of each funding proposal on the initial Service Payment and NPV of Service Payments vs. those in the Reference Model as well as a tabular summary of pricing and key terms & conditions for each proposal (e.g. funders in columns and key funding terms in rows).

Model

10. A financial model containing generic funding terms will be provided to prospective funders ("Reference Model"). Funders are expected to improve on these terms but the dynamics of the model are unlikely to move to such an extent that the fundamental risk profile is materially changed. The model will be updated to reflect the terms of the selected funder in due course. If prospective funders feel that a revised model reflecting an alternative funding structure is necessary for them to perform their assessment of the project then they should outline their rationale to enable the Preferred Bidder and Trust to consider the request.

11. The Reference Model must allow terms for both bank and capital markets / bond financing to be incorporated and all the appropriate sensitivities run in accordance with market practice.

12. The real pre-shareholder tax / post-SPV tax blended equity IRR included in the Reference Model pertaining to the Final Bid will not increase regardless of any change in rates or terms resulting from the Funding Competition.

Macroeconomic Changes & Trust Risks

13. Changes in macro-economic assumptions are wholly for the Trust's account as they are market rates on which the Trust has agreed to take the risk. These assumptions are:

    a. Reference gilt and/or long-term LIBOR swap rate (excluding credit spread);
    b. GIC rates;
    c. Bond margin;
    d. RPI swap rates (excluding credit spread); and

14. The Trust and Preferred Bidder will run the competition in a manner that seeks to minimise the impact of adverse market conditions.

Other Changes

15. Benefits arising in and after the funding competition will be wholly for the account of the Trust including, *inter alia*, the following:

    a. improvements in bank terms such as reductions in bank fees, costs, margins or coverage ratios / increases in tenor;
    b. reductions in bond underwriting fees and associated costs;
    c. improvements in monoline terms such as fees, reserve account / facility requirements and surety bond / contractor support requirements; and
    d. reductions in required senior debt sensitivity thresholds such as rating agency cash breakeven requirements.

16. Benefits from any incorporation of EIB finance are wholly for the account of the Trust.

Involvement of the Trust

17. All correspondence with senior funders in competition will be recorded in writing and available to all procuring parties (i.e. the Trust, the preferred bidder, DH, HMT and advisers).

18. The Trust and its advisers retain the right to attend all significant meetings[2] held with potential funders. 48 hours notice of such meetings must therefore be given to the Trust (at a minimum) including a detailed agenda for such meetings.

19. Regular summaries of significant communications pertaining to the competition and the position of any negotiations to be provided in advance of each meeting.

20. The competition will be run on a transparent, open book basis including access by the Trust to all financial modelling produced to assess submissions. This will include the Preferred Bidder's agreement to run any additional scenarios / sensitivities reasonably requested by the Trust and its advisers. The list of sensitivities as far as possible will be agreed in advance of the competition.

21. The financial decision with respect to the involvement of the EIB sits with the Trust who will consult with the Preferred Bidder accordingly. A paper outlining the PFU's key principles in respect of EIB involvement will be released separately.

[2] For the purpose of this protocol meetings are taken to include significant / all parties conference calls

Workforce
Appendix 13.i - Demographics

An understanding of the demographics of the local population is important not only for design of patient services, but in understanding the basis on which the local population may be able to supply staff for the new hospital.

The following descriptions and tables start to prompt this understanding, to help develop the recruitment and retention strategy.

North Bristol Trust covers 2 unitary authorities, being part of City of Bristol Unitary Authority, and South Gloucestershire Unitary Authority. However the local labour market stretches further afield, and contains Bath and North East Somerset, and North Somerset. In looking at population issues, it is useful to include all these areas, as the composition of each area is significantly different. In the tables below, these 4 authorities are referred to as West of England (WoE).

Population

The population WoE has increased significantly over the last 25 years, and is projected to keep on rising. These increases are at a significantly higher rate (4.6%) than the national average (2.6%) for the last 25 years.

There is also a predicted increase in birthrate.

1. Population change 1981 to 2006

	1981	1991	2001	2002	2003	2004	2005	2006	2001-06
WoE	**928,700**	**956,700**	**994,000**	**999,100**	**1,006,800**	**1,015,500**	**1,032,200**	**1,041,900**	**47,900**
B&NES	161,500	163,100	169,200	170,200	171,400	172,500	174,900	175,600	**6,400**
Bristol	401,200	392,200	390,000	391,000	393,500	397,500	405,600	410,500	**20,500**
N.Som	162,900	179,200	188,800	190,400	192,900	195,500	198,600	201,400	**12,600**
S.Glos	203,100	222,200	246,000	247,500	249,000	251,000	253,100	254,400	**8,400**
South West	4,383,400	4,688,200	4,943,400	4,973,400	5,005,000	5,041,700	5,086,700	5,124,100	**180,700**

Source: National Statistics 2006 Mid Year Estimates (figures may not sum due to rounding) © Crown Copyright.

The projected increases are shown below.

	2006	2011	2016	2021	20262006-2026	%
South West	5,122,400	5,302,100	5,484,400	5,671,900	5,851,000	728,600	14.2
Bath and North East Somerset	175,700	181,700	186,600	191,500	196,800	20,900	11.9
Bristol, City of	404,200	418,100	432,100	445,400	458,000	53,800	13.3
North Somerset	200,500	211,900	223,500	235,200	246,100	45,600	22.7
South Gloucestershire	255,800	267,200	278,900	290,700	301,500	45,700	17.9
WoE	**1,036,400**	**1,078,900**	**1,121,100**	**1,162,800**	**1,202,400**	**166,000**	**16.0**

Source: Office for National Statistics (figures may not sum due to rounding) © Crown Copyright.

The increases are not evenly spread over the age groups, with a significant increase in the elderly population, and a reduction in the 15-24 year olds, with potential impact on the traditional recruitment patterns for new graduates.

West of England breakdown by age

AGE GROUP	2006	2011	2016	2021	20262006-2026	%
0-14	173,600	173,600	177,700	185,800	192,400	18,800	10.8

15-24	152,300	156,600	151,200	147,300	148,800	-3,500	-2.3
25-44	301,900	312,700	328,400	345,500	354,700	52,800	17.5
45-64	245,200	261,200	269,600	276,800	282,100	36,900	15.0
65-74	81,400	90,400	103,200	104,500	105,400	24,000	29.5
75+	81,600	84,900	90,900	102,800	119,000	37,400	45.8
WoE Total	**1,036,400**	**1,078,900**	**1,121,100**	**1,162,800**	**1,202,400**	**166,000**	**16.0**

Source: Office for National Statistics (figures may not sum due to rounding) © Crown Copyright.

Excluding the very young, and over 65s, this predicts a 10 year increase of 50,000 people of around working age.

In terms of the active working population in the areas, the following data is from July 06 – June 07
Of the 1,036,400 people in the WoE, this table shows that less than half (506,000) are economically active as at June 07.

	Working age	**Economically active**		**In employment**		**Economically Inactive**		**Unemployed***	
	number	**number**	**rate %**	**number**	**rate %**	**number**	**rate %**	**number**	**rate %**
Bath & North East Somerset	105,900	83,900	79.2	80,400	76.0	22,000	20.8	3100	3.5
Bristol	248,900	193,300	77.7	185,600	74.6	55,600	22.3	10100	5.0
North Somerset	111,900	93,500	83.6	91,700	81.9	18,400	16.4	3000	3.0
South Gloucestershire	156,700	135,400	86.4	131,900	84.2	21,300	13.6	4100	2.9
West of England	**623,300**	**506,000**	**81.2**	**489,600**	**78.5**	**117,300**	**18.8**	**16,500**	**3.3**
South West	2,989,600	2,432,600	81.4	2,338,600	78.2	557,000	18.6	94,000	3.9

Notes
Economically active includes all persons of working age who are employed or looking to be employed.
Employment rate is proportion of those persons who are of working age who are in employment.
Unemployment % calculated by dividing the number unemployed by the number of economically active of the working age population
Source ONS, Annual Population Survey Jul 2006 - Jun 2007 © Crown Copyright.
* West of England, SW and National data are direct APS results. Unemployment figures for UA's are taken from ONS model-based estimates which provide a more precise measure

In terms of outputs from Education, the following chart shows the number of pupils obtaining 5 or more GCSEs at grade A-C. Over the last 6 years there has been a 10% increase in the number of people who obtain this level of qualification, and this is predicted to continue to rise

GCSEs % of LEA pupils obtaining 5 or more GCSEs (grade A-C)

	2000	2001	2002	2003	2004	2005	2006	2007
B&NES	57.10%	56.40%	58.40%	60.00%	60.20%	63.50%	66.90%	66.10%
Bristol	31.20%	31.80%	31.00%	35.30%	35.10%	36.50%	43.80%	46.90%
N.Som	53.40%	50.80%	53.30%	54.80%	55.00%	57.40%	58.40%	60.30%
S.Glos	47.70%	48.70%	52.40%	54.10%	50.00%	55.50%	54.90%	56.20%
W of E*	**47.40%**	**46.90%**	**48.80%**	**51.10%**	**50.10%**	**53.20%**	**56.00%**	**57.38%**

Source: Dfes 2007
* nb WoE figure is an average of the average figures of four UAs and is therefore not directly comparable

The figures showing the academic ability of the whole population are as follows: A quarter of the working population has achieved at least NVQ4 level (HND, degree etc), although nearly 10% have no qualifications at all.

Qualifications of working age population: January 2006-December 2006

	% with NVQ4+ - working age		% with NVQ3 only - working age		% with Trade Apprenticeships - working age		% with NVQ2 only - working age		% with NVQ1 only - working age	
	number	%	number	%	number	%	number	%	number	%
B&NES	38,700	27.0	20,000	18.9	3,000	2.9	16,800	15.9	11,200	10.6
Bristol	89,500	27.4	29,800	12.0	8,600	3.5	34,500	13.9	34,100	13.7
N.Som	36,200	27.3	17,100	15.3	4,400	3.9	23,700	21.2	17,300	15.5
S.Glos	40,100	27.3	26,200	16.8	10,000	6.4	28,200	18.1	24,700	15.8
W of E	**204,500**	**27.2**	**93,100**	**15.0**	**26,000**	**4.2**	**103,300**	**16.6**	**87,300**	**14.0**
SW	814,600	27.3	509,600	17.1	172,300	5.8	510,000	17.1	454,800	15.2

	% with other qualifications - working age		% with no qualifications - working age		% with NVQ3+ - working age		% with NVQ2+ - working age		% with NVQ1+ - working age	
	number	%	number	%	number	%	number	%	number	%
B&NES	7,800	7.4	8,300	7.9	60,200	56.9	78,500	74.2	89,700	84.8
Bristol	21,200	8.6	30,000	12.1	123,600	49.8	162,500	65.5	196,600	79.2
N.Som	5,100	4.6	8,100	7.2	55,500	49.5	81,400	72.6	98,700	88.1
S.Glos	14,200	9.1	12,700	8.2	71,300	45.6	104,500	66.9	129,200	82.7
W of E	**48,400**	**7.8**	**59,100**	**9.5**	**310,600**	**49.9**	**426,900**	**68.6**	**514,200**	**82.6**
SW	229,600	7.7	293,200	9.8	1,410,400	47.2	2,006,500	67.2	2,461,400	82.4

Qualifications data are only available for the periods Jan-Dec 05 and Jan-Dec 06
Working age people as a % of all working age people.
Notes:
1. No qualifications: No formal quals held
2. Other qualifications: includes foreign qualifications and some professional qualifications
3. NVQ 1 equivalent: e.g. fewer than 5 GCSEs at grades A-C, foundation GNVQ, NVQ 1, intermediate 1 national qualification (Scotland) or equivalent
4. NVQ 2 equivalent: e.g. 5 or more GCSEs at grades A-C, intermediate GNVQ, NVQ 2, intermediate 2 national qualification (Scotland) or equivalent
5. NVQ 3 equivalent: e.g. 2 or more A levels, advanced GNVQ, NVQ 3, 2 or more higher or advanced higher national qualifications (Scotland) or equivalent
6. NVQ 4 equivalent and above: e.g. HND, Degree and Higher Degree level qualifications or equivalent

The following charts show local travel to work areas.

Persons commuting between Unitary Authorities in West of England and England & Wales

	IN B&NES	OUT B&NES	NET B&NES	IN Bristol	OUT Bristol	NET Bristol
B&NES				9,146	4,005	5,141
Bristol	4,005	9,146	-5,141			
N.Som	1,091	1,126	-35	18,963	5,616	13,347
S.Glos	4,259	4,048	211	36,436	27,068	9,368
Outside WoE	**14,715**	**9,190**	**5,525**	**18,859**	**7,872**	**10,987**
TOTAL	24,070	23,510	560	83,404	44,561	38,843
Lives & Works in Area	56,390			132,008		

	IN N.Som	OUT N.Som	NET N.Som	IN S.Glos	OUT S.Glos	NET S.Glos
B&NES	1,126	1,091	35	4,048	4,259	-211
Bristol	5,616	18,963	-13,347	27,068	36,436	-9,368
N.Som				5,863	2,633	3,230
S.Glos	2,633	5,863	-3,230			
Outside WoE	**6,508**	**5,812**	**696**	**15,489**	**8,438**	**7,051**
TOTAL	15,883	31,729	-15,846	52,468	51,766	702
Lives & Works in Area	56,659			75,679		

2001 Census Origin / Destination Tables Special Workplace Statistics (Local Authority level)
Table population: All persons aged 16 to 74 in employment

The ethnicity and religious diversity of the local population is as follows:

Data from the 2001 Census for Bristol gave the following religious breakdown:

	Bristol %	England & Wales %
Christian	62.1	71.8
Buddhist	0.4	0.3
Hindu	0.5	1.0
Jewish	0.2	0.5
Muslim	2.0	3.0
Sikh	0.5	0.6
Other	0.5	0.3
No Religion	24.5	14.8
Not stated	9.3	7.7

Also from the 2001 Census, Bristol has the following ethnic breakdown:

	Bristol %	England & Wales %
White British	88.0	87.5
White Irish	1.1	1.2
White Other	2.7	2.6
Mixed Race	2.1	1.3
Black & Minority Ethnic	6.1	7.4

Public sector employment is shown below to be the largest employer in the area, with nearly 30% working here. Distribution hotels and restaurants are second, with under 30% and the banking financial and insurance industry are the third largest employer.

July 2006 - June 2007 Annual Population survey, National statistics
% All in Employment by Industry

	Bath & North East Somerset		Bristol		North Somerset		South Gloucestershire		West of England	
	number	%	number	%	number	%	number	%	number	%
A-B: Agriculture & fishing	1,100	1.3	600	0.3	800	0.8	800	0.6	**3,300**	**0.6**
C,E: Energy & water	1,000	1.2	700	0.4	1,100	1.1	2,200	1.6	**4,900**	**1.0**
D: Manufacturing	9,000	10.6	17,100	8.8	10,500	10.9	16,600	12.1	**53,100**	**10.4**
F: Construction	5,500	6.5	14,600	7.5	7,300	7.6	12,300	8.9	**39,600**	**7.8**

G-H: Distribution, hotels & restaurants	17,500	20.7	37,000	19.1	19,800	20.6	23,500	17.2	**97,800**	**19.1**
I: Transport & communication	3,700	4.3	10,600	5.5	7,000	7.3	10,000	7.3	**31,300**	**6.1**
J-K: Banking, finance & insurance etc	14,600	17.2	40,700	21.1	17,100	17.8	24,300	17.7	**96,700**	**18.9**
L-N: Public admin, education & health	25,700	30.4	60,200	31.2	27,900	29.0	36,800	26.8	**150,600**	**29.5**
O-Q: Other services	6,300	7.5	11,400	5.9	4,500	4.6	10,400	7.6	**32,500**	**6.4**
Total	67,700	80.1	159,900	82.7	76,300	79.3	104,900	76.5	**408,800**	**80.0**

Notes:

Source: (Table T13: Employment by industry and Flexibility : Workplace Statistics APS)
Figures may not sum due to rounding

The following figures show the Median Gross Earnings in the vicinity.

For comparison purposes, the Agenda for Change pay rate from November 2007 are
Band 2 – £12,577 – £15,523
Band 5 - £ 19,683 - £25,424

Median annual (Gross) earnings of full time employees (by residence) 2002 - 2007

	B&NES	Bristol	North Somerset	South Gloucestershire	W of E*
2002	21,601	19,756	21,329	20,584	**20,818**
2003	22,943	20,538	22,559	22,024	**22,016**
2004	23,118	21,506	24,353	23,628	**23,151**
2005	22,988	22,064	25,246	24,007	**23,576**
2006	24,754	22,315	26,040	24,323	**24,358**
2007	24,553	22,899	26,582	24,860	**24,724**

Source: Annual Survey of Hours and Earnings. National Statistics. Annual pay - Gross (£) - For full-time employee jobs: Residence-based Earnings
Notes:
*West of England Earnings figures are the mean average of the median UA figures, all others are median. West of England figures are therefore not directly comparable to the other figures as they would appear higher.
There is no West of England Median figure. Median figures have still been used for UAs to avoid the skewing effects of extreme values

Role of Southmead Hospital Workforce Redevelopment Group

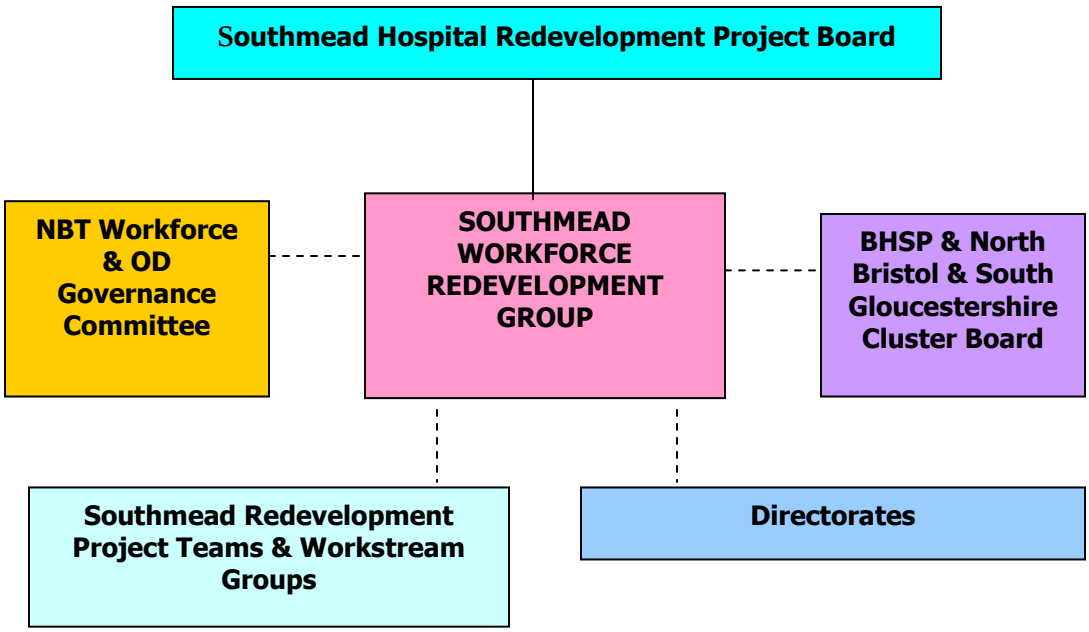
The above group is a sub group of the new hospital project board. It currently meets monthly, with the remit of overseeing developments in the workforce and ensuring that these are in the right direction of travel for staffing the workforce of 2013.

The terms of reference for this group are set out as follows:

Southmead Workforce Redevelopment Group

Terms of Reference

A. GOVERNANCE



Core Membership

Chair - Director of Organisation, People & Performance
Director of Nursing
Deputy Director, Strategic Development
System Redesigner
Staff Side Representative
Deputy Director of Facilities
Assistant Director of HR (Staff Development)
Medical Workforce & Development Manager
Assistant Director of HR (Employment Services)
Equality & Diversity Manager
Medical representative
General Manager / AGM

Frequency & Duration of Meetings : Bi-monthly ; 2 hours-report to Project Board from every meeting.

B. KEY RESPONSIBILITIES

1. Workforce Strategy

1.1 Ensure alignment with the emerging NBT Workforce & OD strategy, NBT's corporate objectives and individual directorate strategies and work programmes

1.2 Work closely with new Heads of Workforce & OD to ensure full integration with directorate-specific workforce and OD strategies and work programmes enabling smooth transition to the new hospital

1.3 Provide an effective link with the NBT Workforce & OD Governance Committee, BHSP, NB/SG Cluster Board, Southmead Redevelopment Project Teams & Workstream Groups and NBT Directorates, taking a key leadership role in the development and implementation of a workforce/OD strategy for the new hospital and its associated developments

1.4 Ensure that NBT's future workforce enacts and promotes the Trust's corporate values (as set out in 'Building Mindsets') as a means to building the desired organisational culture

1.5 Consider all key national drivers – e.g. affordability, plurality and patient choice, market development, service reconfigurations, technological developments, demographics changes, no waits/no delays

1.6 Maximise the use of all national and local strategic workforce developments – e.g. MMC, AfC, ESR, consultants' contract, etc.

2. Workforce Redesign

2.1 Explore workforce models across the UK and abroad, taking a radical and pragmatic approach to workforce design, and consider their applicability to the new hospital programme

2.2 Design a fit-for-purpose workforce aligned to revised clinical models and programmes/pathways of care

2.3 Engage with the clinical redesign workstream and build changes into future workforce requirements

2.4 Ensure that workforce plans are aligned to the new hospitals zones – emergency and urgent care, inpatients, ambulatory care, core clinical, support and the integrated community hospital

2.5 Ensure that workforce plans are aligned to new programmes of care – e.g. simple surgery, complex surgery, critical care, long-term health conditions, etc.

2.6 Commission research and development of new roles, new skills and new ways of working and actively manage progress

2.7 Review and update OBC workforce analysis

2.8 Commission and interrogate workforce plans to ensure that the new hospital employs the right number of staff with the right skills in the right place at the right time

2.9 Review and amend skill mix calculations, working with clinical and non-clinical teams as required

3. Education, Training & Development

3.1 Ensure NBT's education and training commissioning strategies and delivery work programmes are aligned to revised workforce plans and that they enable the delivery of a fit-for-purpose future workforce

3.2 Negotiate changes with education and training providers as necessary

4. Policy Development

4.1 Ensure that the Trust's employment policies and procedures are designed to enable an effective transition to the new hospital and its associated developments, working with and through the JCNC

5. Change Management

5.1 Provide high-level leadership and advice on strategic change management issues ensuring smooth transition and implementation

5.2 Manage all aspects of workforce redesign, workforce expansion and workforce reduction in the transition to the new hospital

6. Architectural Design

6.1 Ensure that the new hospital design enables and promotes a 'Great Place to Work'

7. Staff Communications & Involvement

7.1 Provide a link with the Communications and PPI Workstream ensuring an effective and co-ordinated approach to staff communication

7.2 Work with staff and staff side representatives, promoting effective and productive engagement, involvement and partnership working

7.3 Act as a reference point for all workforce/OD-related issues on the new hospital development programme and associated schemes

8. Interface with other Key Developments

i) Learning and Research

Oversee work of the Academic Centre Project Board, ensuring that it successfully delivers its terms of reference

Ensure that the Academic Centre's role and function reflects the Trust's priorities as set out in its corporate objectives, workforce & OD and research and development strategies and respective work programmes

ii) Pathology Services

Oversee the workforce issues within the new pathology centre, ensuring necessary oversight and governance

iii) Community Services

Manage the interface between the new hospital development and community service developments, ensuring that all workforce development issues are appropriately cross-referenced and managed

iv) Enabling Works

Oversee, consider and manage all workforce/OD issues arising out of the enabling works

9. Implementation

9.1 Implement the workforce plan within the required timescales

9.2 Ensure that all legal and local and national policy requirements are met

9.3 Monitor and manage progress against all key responsibilities as set out in these terms of reference

Appendix C Equality and Diversity

NBT has developed Race, Disability and Gender Equality Schemes in partnership with staff and service users which are available on the public internet site.

We recognise that staff frequently enter work with different expectations, and organisations sometimes make assumptions about their commitment and potential based on gender, race or disability. The mainstreaming approach adopted in our equality schemes will enable us to critically assess the current situation within NBT, and ensure that we are making the best use of the range of talent and experience available within our workforce.

As we strive to increase patient choice and satisfaction, we appreciate that different groups need and use health services in different ways. A universal approach is no longer acceptable. Through increasingly analysing health outcomes in relation to patient profiles, we will be able to improve the flexibility of our services and ensure that we are providing the best possible care for our local community.

In order to assess the impact of current and proposed policies and services on equality groups we have:

- Trained all NBT Executives and 60 senior managers within the Trust on the Equality Impact Assessment process
- The Project Management Guide and the Policy on Policies have been amended to include the requirement for Equality Impact Assessments

Completed Equality Impact Assessments are on the internet to invite public comment.

All in-house training includes an appropriate Equality and Diversity component to ensure awareness and competence continually increase. Access to training, especially management training, is key to career progression and the Staff Development Department are increasing their tracking of educational opportunities through the Managed Learning Environment.

NBT works closely with Bristol PCT and other health care providers including collaboration on several joint projects to achieve improved services for marginalised groups, e.g. through Bristol Race Equality in Health Partnership.

Action plans and evaluations are available within the Equality Schemes on the internet.

North Bristol Trust is accredited as a 'Positive About Disabled People – Double Tick Symbol' employer and is committed to continually improving its recruitment and retention practices in relation to staff with impairments. We have an active staff network run by employees with impairments who share information, support each other and also contribute towards the Trust's strategies and policy formation process, including as members of the Equality and Diversity Committee and Disability Working Party.

We recognise the potential for discrimination, however unintentional, and are currently reviewing the process for support particularly in relation to reasonable adjustments.

However, many of our buildings are outdated and ill-suited for current service delivery practices, which presents significant challenges for both staff and patients. The Trust would welcome the opportunity to secure premises which would mean that not only could our existing disabled staff be accommodated in a more welcome environment but also that we would become a more attractive employer for others.

We are working hard to improve our monitoring systems to enable us to track career progression and access to development opportunities from an equality perspective, and introduced an Electronic Staff Record system in July 2006 which greatly assists with this.

We recognise that attitudes and culture change are key to bringing about change and as such all new staff have 'Disability Awareness' as part of their mandatory induction programme and equality/discrimination is included in all training carried out by our Training Department. Senior managers throughout the Trust have just completed an Equality Impact Assessment training programme by an external provider to enable them to consider access and health outcomes of their services from an Equality perspective.

As a Public body we are currently engaged in a public consultation process to determine the key barriers to accessing our services for disabled users. We recognise that we have a long way to go before we achieve a fully inclusive organisation for our staff and patients but we do have a long-term strategy and are open to learning.

Equality Impact Assessments will be included in NBT's corporate objectives for 2008 and will be an on-going requirement, for example to be included in the development of all new policies. These will currently be performance managed through the PPFC process.

	Headcount				**Percentage in each group**		
	White	**Non White**	**Not Known**		**White**	**Non White**	**Not Known**
Additional Professional Scientific and Technical	226	14	2		93.39	5.79	0.83
Additional Clinical Support	1099	79	11		92.43	6.64	0.93
Administrative & Clerical	1509	36	14		96.79	2.31	0.90
Estates and Ancillary	670	125	13		82.92	15.47	1.61
Healthcare Scientists	374	21	3		93.97	5.28	0.75
Nursing and Midwifery	2104	414	22		82.83	16.30	0.87
Allied Health Professionals	458	18	4		95.42	3.75	0.83
Medical and Dental Staff	523	125	54		74.50	17.81	7.69
TOTAL					**87.94**	**10.51**	**1.55**

APPENDIX 13.iii – Description of the Current Workforce

As at 1st April 2008, North Bristol NHS Trust's workforce had the following characteristics (note – these figures exclude bank staff).

STAFF IN POST

Overall figures for staff employed, by gender and staff group, show that 21% of the Trust's workforce is male, and 79% female. 55% of the female workforce are part time, as opposed to 21% of the male workforce. Overall, 48% of the workforce are part time.

		Female				Male			
		Full Time	Part Time	Gender Total	Gender Total	Full Time	Part Time	Gender Total	Gender Total
		Headct	Headct	wte	Hct	Headct	Headct	wte	Hct
Staff Group	**Role**								
Other Unqualified	**Chaplain**	2	1	**2.80**	**3**	4	1	**4.11**	**5**
	Technician	78	52	**108.50**	**130**	53	5	**55.28**	**58**
	Helper/Assistant	44	81	**85.70**	**125**	11	20	**20.56**	**31**
	Medical Laboratory Assistant	23	28	**39.96**	**51**	11		**11.00**	**11**
	Phlebotomist		9	**5.62**	**9**	1	3	**2.37**	**4**
	Student Technician	16		**16.00**	**16**	8		**8.00**	**8**
	Technical Instructor	1	7	**6.03**	**8**				
	Student Psychotherapist						1	**0.80**	**1**
	Trainee Scientist	3		**3.00**	**3**				
	Total	**167**	**178**	**267.61**	**345**	**88**	**30**	**102.12**	**118**
Administrative and Clerical	**Total**	**559**	**832**	**1078.87**	**1390**	**170**	**23**	**179.55**	**192**
Allied Health Professionals	**Dietician**	17	6	**19.06**	**23**	2	1	**2.80**	**3**
	Occupational Therapist	38	50	**70.21**	**88**	4	6	**8.04**	**10**
	Physiotherapist	58	64	**95.69**	**122**	15	5	**17.58**	**20**
	Radiographer - Diagnostic	52	50	**82.77**	**102**	35	3	**36.84**	**38**
	Speech & Language Therapist	22	56	**52.13**	**78**		1	**0.80**	**1**

	Total	**187**	**226**	**320.30**	**413**	**56**	**16**	**66.06**	**72**
Ancillary	**Total**	**78**	**365**	**289.43**	**443**	**205**	**108**	**271.57**	**313**
Maintenance	**Total**	**4**	**5**	**7.53**	**9**	**69**	**5**	**71.43**	**74**
Scientists	**Biomedical Scientist**	112	46	**140.05**	**158**	106	6	**109.58**	**112**
	Healthcare Scientist	15	8	**20.78**	**23**	6	1	**6.60**	**7**
	Total	**127**	**54**	**160.83**	**181**	**112**	**7**	**116.18**	**119**
Consultant	**Total**	**57**	**33**	**78.46**	**90**	**194**	**30**	**201.83**	**224**
Other Med	**Total**	**176**	**147**	**207.23**	**323**	**245**	**116**	**247.40**	**361**
Nursing and Midwifery Registered	**Total**	**1,174**	**1,166**	**1898.56**	**2340**	**182**	**29**	**202.36**	**211**
Clinical Psychologist	**Total**	**15**	**38**	**35.54**	**53**	**7**	**5**	**11.31**	**12**
Psychotherapist	**Total**	**1**		**1.00**	**1**	**1**		**1.00**	**1**
HCA	**Total**	**294**	**514**	**586.22**	**808**	**65**	**20**	**75.43**	**85**
Pharmacy Staff	**Total**	**72**	**52**	**103.54**	**124**	**32**	**1**	**32.19**	**33**
	TRUST TOTAL	**2911**	**3610**	**5035.12**	**6520**	**1426**	**390**	**1578.43**	**1815**

STAFF ABSENCE

The following table shows the sick and maternity absence for the Trust by staff group, the following figures are for April 07 – March 08

		Sickness % Abs Rate	Maternity % Abs Rate
Staff Group			
Consultant		1.54%	0.83%
Other Medical		1.08%	1.96%
Qualified N&M		5.31%	0.16%
Admin & Clerical		4.12%	0.06%
Maintenance		6.98%	0.00%
Ancillary		7.54%	0.77%
AHPs	**Dietician**	1.40%	0.00%
	Occupational Therapist	3.71%	0.28%
	Physiotherapist	1.90%	0.13%
	Radiographers	2.08%	0.00%
	Speech and Language Therapist	3.03%	0.71%
Healthcare Assistant		7.70%	1.57%
Pharmacy Staff		4.38%	3.58%
Clinical Psychologist		4.12%	3.58%
Psychotherapist		0.21%	0.00%
Scientific Staff		3.01%	2.94%
Other Unqualified Staff		4.72%	2.02%
TOTAL		**4.72%**	**2.29%**

AGE PROFILE

Based on 1st April 2008, the age profile of the workforce is shown below:

For Non medical staff groups, we have shown the age profile for those in AfC Bands 5+ or equivalent, and then separately have looked at those in Bands 1 – 4. Band 5 is the entry gate for professionally qualified nurses, AHPs etc and so can be used as a crude proxy for qualified and equivalent, against unqualified staff. Medical staff are included with this group.

The following is for Bands 5+, and the following groups may have retirement difficulties, with a large percentage of their workforce being over 60 in 2013 (and hence may have retired):

- Qualified nurses (19%) (based on age 51+ as may opt to retire at 55)
- Admin & Clerical (19%)
- Maintenance (70%)

	Consultants	Other Medical Staff	Qualified Nursing	Pharmacy Staff	Maintenance	A&C	Dietician	Occupational Therapist	Radiographer
16 - 20									
21 - 25		49	200	6		10	2	5	16
26 - 30		155	326	31		29	8	14	20
31 - 35	15	160	404	16		47	6	15	17
36 - 40	60	83	411	15		50	7	15	14
41 - 45	91	53	381	10		60	2	13	24
46 - 50	66	35	335	10	1	67		11	12
51 - 55	46	20	276	10	2	79	1	10	21
56 - 60	28	14	149	6	5	57		2	10
61 - 65	13	7	47	1	2	20		1	6
66 - 70	3	3	5			2			
71+	1								

	Physiotherapist	Speech and Language Therapist	Chaplain	Helper/Assistant	Biomedical Scientist	Healthcare Scientist	Technician	Others	Clinical Psychologist
16 - 20									
21 - 25	20	2		2	14	1	11	1	3
26 - 30	30	13		1	31	7	36	3	8
31 - 35	32	12		1	36	5	25	1	8
36 - 40	18	15	1		42	1	22		12
41 - 45	14	9		2	37	6	17		10
46 - 50	13	11	1		27	2	23		11
51 - 55	11	11	2		39	6	15	4	8
56 - 60	3	6	2		19	3	9	1	4
61 - 65	1		1		11		3		1
66 - 70			1		2				

The next section looks at the age profile for those Staff at Bands 1 – 4.

This shows that the following staff groups could face a potential recruitment issue, due to the number of staff age 56 or over, who could be retired in 2013:

- Healthcare Assistants (17%)
- Admin & Clerical (24%)
- Maintenance staff (41%)
- Ancillary staff (27%)
- Technicians (25%)

	Health Care Assistants	Pharmacy Staff	Admin & Clerical	Maintenance	Ancillary	Student Technician	Technical Instructor	Technician	Helper/Assistant	Medical Lab Assistant	Phlebotomist
16 - 20	29	3	12		14	5		4	4	5	
21 - 25	85	11	50		37	12		14	18	10	1
26 - 30	76	6	53		55	1		12	12	11	
31 - 35	83	1	63	3	48	1		4	9	7	5
36 - 40	95	7	113	4	82	4	1	8	19	7	2
41 - 45	124	5	180	9	110	1	1	18	28	5	1
46 - 50	130	7	180	9	116	24	1	16	27	5	1
51 - 55	111	5	227	17	91	1	3	13	15	10	2

56 - 60	84	7	169	16	102	1	1	22	18	10	1
61 - 65	54		84	11	79			7	9	2	
66 - 70	12		25	2	8			1	3		
71 & above	1		3		12						

TURNOVER

The annual turnover for the period 1st April 2007 to 31 March 2008 was examined, with the following figures.

MEDICAL STAFF

	% Turnover Headcount	% Turnover FTE
Consultants	**9.86**	9.39
Other Med Staff	**58.42**	86.04

BANDS 5 +			**BANDS 1 - 4**		
	% Turnover Headcount	**% Turnover FTE**		**% Turnover Headcount**	**% Turnover FTE**
Admin & Clerical	**15.40**	15.74	**Admin & Clerical**	**13.16**	12.91
Clinical Psychologist	**16.36**	17.69	**Clinical Psychologist**		
Psychotherapist	**0.00**	0.00	**Psychotherapist**		
Biomedical Scientist	**9.29**	8.76	**Biomedical Scientist**		
Healthcare Scientist	**11.54**	12.06	**Healthcare Scientist**		
Qualified N&M	**10.71**	10.58	**Qualified N&M**		
Maintenance	**25.00**	27.27	**Maintenance**	**19.18**	18.89
Ancillary	**0.00**	0.00	**Ancillary**	**11.62**	10.51
Dietician	**11.54**	11.87	**Dietician**		
Occupational Therapist	**14.66**	17.66	**Occupational Therapist**		
Physiotherapist	**11.85**	13.31	**Physiotherapist**		
Radiographer	**8.09**	7.55	**Radiographer**		
Speech and Language Therapist	**5.88**	7.24	**Speech and Language Therapist**		

Chaplain	**20.00**	22.64	**Chaplain**		
Helper/Assistant	**0.00**	0.00	**Helper/Assistant**	**17.86**	16.47
HCA			**HCA**	**21.36**	19.56
Medical Laboratory Assistant			**Medical Laboratory Assistant**	**13.86**	15.06
Phlebotomist			**Phlebotomist**	**42.86**	46.19
Medical Laboratory Assistant			**Medical Laboratory Assistant**	**13.86**	15.06
Student Technician			**Student Technician**	**83.33**	81.45
Technical Instructor	**0.00**	0.00	**Technical Instructor**	**0.00**	0.00
Technician	**8.44**	8.63	**Technician**	**15.79**	16.37
Trainee Scientist	**0.00**	0.00	**Trainee Scientist**		
Pharmacy Staff	**8.91**	10.31	**Pharmacy Staff**	**17.31**	18.31

LENGTH OF SERVICE – CURRENT STAFF

We also looked at Length of service for individual staff groups, who are currently employed.

Length of service - Medical staff, and staff Bands 5+

	Consultants	**Other med Staff**	**Qualified Nursing**	**Admin and Clerical**	**Maintenance**	**Ancillary**	**Occupational Therapst**	**Physiotherapist**	**Radiographer - Diagnostic**	**Speech and Language Therapist**	**Dietician**
	FTE	**FTE**	**FTE**	**FTE**	**FTE**	**FTE**	**FTE**	**FTE**	**FTE**	**FTE**	**FTE**
Service											
0 - 1 yrs	33.85	310.97	238.45	30.73	0.43		7.47	16.93	14.39	9.43	2.00
01 - 05	83.60	76.43	827.00	135.84	1.00		29.41	61.83	39.79	18.48	12.76
06 - 10	63.93	12.35	448.88	64.53	2.00	1.00	14.38	16.15	17.71	13.62	4.25
11 - 15	54.87	11.99	162.12	57.76	2.00	1.00	6.29	8.24	11.58	3.20	2.00
16 - 20	20.75	6.16	178.55	53.13	1.00		6.59	5.97	16.17	1.82	0.80
21 - 25	17.29	1.94	133.61	15.67		1.00	4.51	2.40	8.20	3.10	
26 - 30	6.00	1.18	61.27	14.68		1.00	1.83	0.74	5.25	0.80	
31 - 35			25.05	11.81	3.00			1.00	4.73	2.49	
36 - 40		1.00	3.80	1.00					1.00		
40+ yrs			1.00	1.00					0.80		

	Biomedical Scientist	Healthcare Scientist	Chaplain	Helper/Assistant	Technical Instructor	Technician	Trainee Scientist	Clinical Psychologist	Pharmacy	Psychotherapist
	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
Service										
0 - 1 yrs	24.00	11.16	1.00	4.00		16.30	2.00	12.15	8.64	1.00
01 - 05	61.05	4.29	2.11	1.00		46.57	1.00	16.81	31.00	
06 - 10	49.85	2.81	1.80	1.00		43.25		9.92	28.58	
11 - 15	28.27	4.00	1.00			10.18		3.13	4.82	
16 - 20	35.50	4.70				14.78		1.91	10.72	
21 - 25	14.46	1.00	1.00			5.03		2.93	4.63	1.00
26 - 30	14.50				0.80	2.00			1.00	
31 - 35	8.41					3.00			0.61	
36 - 40	1.00									
40+ yrs	3.00									

Length of service – other staff Bands 1 – 4

	Health Care Assistants	Admin and Clerical	Maintenance	Ancillary	Helper/Assistant	Phlebotomist	Student Technician	Technical Instructor	Technician	Pharmacy	Medical Lab Assistant
	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
Service											
0 - 1 yrs	102.83	120.33	5.40	92.79	12.63	5.43	24.00	1.44	12.08	10.89	23.40
01 - 05	235.72	299.14	4.07	236.10	46.13	0.92		1.11	50.73	25.76	18.69
06 - 10	138.62	205.09	11.13	90.27	27.24			2.16	21.89	6.63	7.38
11 - 15	69.01	111.66	5.27	45.35	11.14	0.80		0.52	9.76	1.00	5.70
16 - 20	56.02	91.30	6.00	52.11	7.57	0.85			3.66	0.45	2.72
21 - 25	20.21	32.62	12.00	18.57	2.63					1.00	0.68
26 - 30	17.76	8.43	16.00	7.17	0.69				1.01		0.65
31 - 35	10.12	8.71	5.53	11.19					1.61		
36 - 40	1.88	0.00	2.00	3.56							
40+ yrs	1.00	0.00		2.00							

It is also useful to look at the length of service of those staff who have left in the past 12 months, as a measure to ascertain whether there are issues with induction, etc. The main area of concern to be addressed is the high level of turnover amongst HCAs and also estates and ancillary, as during the first year of employment, these groups lose over one third of all new recruits.

Bands 5 + (headcount)

	Admin &	Nursing &	Dietician	Occupational	Physiotherapist	Radiographer	Speech &	Estates	Chaplain	Technician	Clinical	Pharmacy

	Clerical	Midwif Reg		Therapist			Language Ther	and Ancillary			Psychologist	Staff
Service												
0 - 1 yrs	6	46	2	5	3	8	1	1	1	2	1	4
01 - 05	39	173		12	16		2	2	1	9	7	4
06 - 10	7	13		1								
11 - 15	8	14	1		1					2		
16 - 20	3	8			2	1						
21 - 25		8										
26 - 30		6				1						1
31 – 35		2										
36 – 40		1										
41+	1											

Bands 1 – 4 (headcount)

	Administrative and Clerical	Estates and Ancillary	HCA	Helper/Assistant	Medical Laboratory Assist	Phlebotomist	Student Technician	Technician	Pharmacy Staff
Service									
0 - 1 yrs	33	33	75	13	3	3	14	4	3
01 - 05	92	46	104		9		1	12	5
06 - 10	12	6	6	1	1			4	1
11 - 15	9	6	7	1	1			1	
16 - 20	5	4	2		1				
21 - 25	1	1	4						
26 - 30	3		4						
31 – 35			1					1	
36 – 40									
41+									