

Paediatric Mass Casualty Recommendations

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Mass Casualty Event: Reception and management of older paediatric patients at North Bristol NHS Trust

Situation

North Bristol NHS Trust does not have any specialist paediatric services or facilities. Regional trauma services for paediatric patients (under the age of 16) are provided by the paediatric Major Trauma Centre (MTC) based at the Bristol Royal Hospital for Children and its supporting paediatric Trauma Units (TU). NHS England guidance has mandated that adult MTCs, such as Southmead Hospital, are required to accept and provide care to severely injured paediatric patients over the age of 12 in the event of a mass casualty event where the capacity of the paediatric MTC is exceeded.

There has been concern regarding the level of care which could be provided to severely injured children at adult MTCs during a mass casualty event. The recommendations in this document address these concerns and outline the service which North Bristol NHS Trust can provide in such a situation.

Background

Major incidents (where special measures are required to manage the incident) and mass casualty incidents (where capacity to manage the incident overwhelms available resources) involving significant numbers of children are extremely rare. Children with major injuries make up less than 10% of the total routine trauma workload and it has been recognised that regional trauma networks have limited capacity to manage large numbers of injured children. Recent UK mass casualty guidelines (1) have suggested that where significant numbers of injured children are present at an incident the most severely injured children and those below the age of 12 should be triaged to the paediatric MTC. Alternative receiving facilities may be necessary for less severely injured children and temporarily for severely injured children older than 12 years of age (Figure 1).

Most trauma units have paediatric facilities on site and less severely injured patients would be triaged from scene to these units. Where seriously injured older children are present and the capacity of the paediatric MTC is exceeded the adult MTC is likely to have the best capacity to receive these patients where the trauma surgical operating capacity and intensive care services could be life saving.

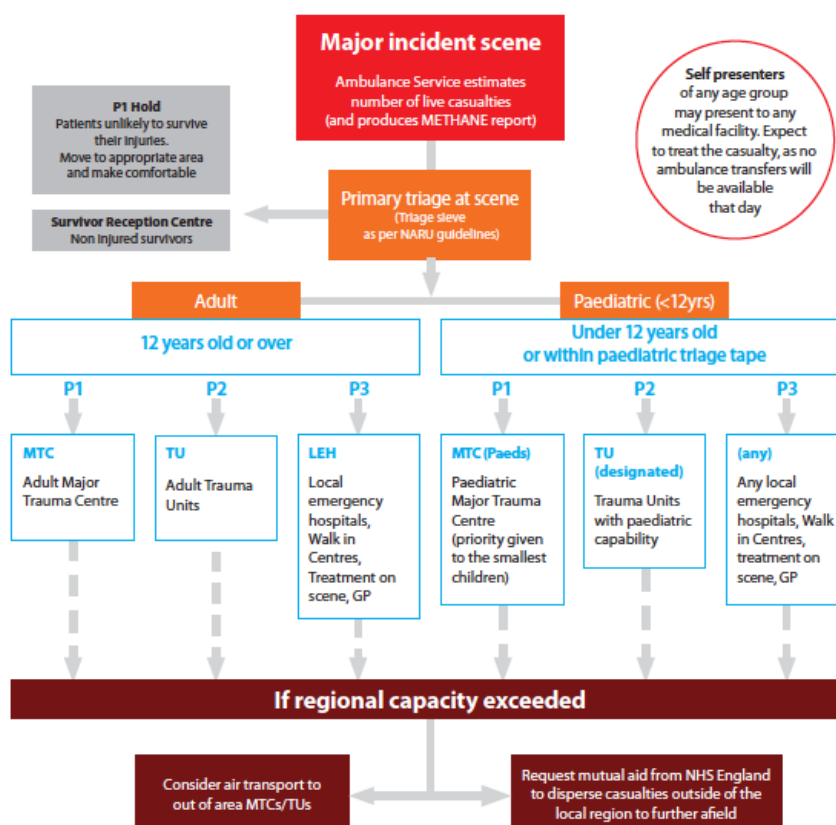


Fig 1: Casualty distribution plan for major incidents (Clinical guidelines for major incidents and mass casualty events. 19 November 2018. NHS England)

Assessment

Justification for reception of children over the age of 12 at the Adult MTC:

We have contacted the National Clinical Director for trauma to understand the position of other adult major trauma centres in the UK on the reception of older children into a non-paediatric facility in exceptional circumstances. The response was that there appears to have been acceptance of the concept outlined in the guidelines and no objections have been made by any of the major trauma networks. The national clinical EPRR lead also commented that ‘the EPRR expectation would be that if Bristol (or another paediatric MTC) were to be overwhelmed EPRR would invoke section 252a of the Health and Social Care act. This gives EPRR central command and control of the NHS and we would mandate the adult MTC to take larger children. We would also stand up the National Ambulance Co-ordination Centre and use that to control air assets to allow longer distance transfers to be facilitated’.

Whilst there will therefore be an expectation that North Bristol NHS Trust will receive children over 12 in a mass casualty event the recommendations below outline the limitations of the service and the level of care which can be provided.

Recommendations

We recommend that all partners in a mass casualty incident (including ambulance services, the major trauma network, commissioners, Bristol Royal Hospital for Children, North Bristol NHS Trust) understand the limitations of treatment of older paediatric patients at the adult MTC.

When senior decision makers at the scene of a paediatric mass casualty incident triage older children to the adult MTC at Southmead Hospital it should be recognised and factored into the decision-making process that:

- Specialist paediatric equipment and expertise is not available at the adult MTC and casualties will be received and treated as ‘small adults.’ In the acute phase, physical size of the child is the primary consideration. Where age is not available clinical judgement with regard to a child now having adolescent physiology will be supported.
- Although many doctors and some nurses may have paediatric experience in their training this cannot be relied on and it is not viable for an adult hospital to maintain competency in paediatric skills and life support courses.
- The adult MTC at Southmead Hospital would expect the paediatric MTC to support the temporary care of severely injured children at a non-paediatric facility using clinicians from BCH or local TUs to provide a paediatric advisor (initially remotely and on-site as soon as possible.) An outreach team consisting of a paediatric trained doctor and a nurse would be considered to attend Southmead as for some patient’s discharge might represent better care than repatriation. They would need a designated trauma co-ordinator host at Southmead Hospital to support them in an unfamiliar environment.
- The adult MTC would expect arrangements to be made as soon as possible to transfer stable critically ill paediatric patients to other UK centres. This will be co-ordinated by the paediatric critical care and retrieval networks and supported by the South West Paediatric Trauma network lead to establish receiving Children’s Trauma Centres in the national trauma network. Outlying children would be discussed at daily Children’s Major trauma MDT with teleconferencing with Southmead Hospital.
- The adult MTC would expect that in a mixed incident (with adult and paediatric casualties) that it would primarily be the receiving centre for seriously injured adults. In a mixed age mass causality event resources at the BRI TU would also be flexed to aid the Children’s MTC as a priority if adult casualties mean Southmead Hospital is unable to assist. This TU will have the number of adult P2 patients sent to it adjusted to take this into account.
- All children will have all possible adjustments made so that a non-severely injured adult they know can stay in hospital with them which ever facility they are admitted to. This will be necessary to help with consent as well as support the young person.
- Bristol Children’s safe-guarding team including the named doctors will provide safe-guarding advice in event that the community paediatric team were unable to deal with any issue.
- The governance for non-paediatric trained clinicians providing care to critically injured children is supported at a national level.
- The above recommendations are supported by a paediatric action card in the North Bristol NHS Trust Major Incident Plan.

We recommend that this document be used to agree and understand the implications and limitations of use of the adult MTC to receive and temporarily manage older children in the unprecedented situation of a paediatric mass casualty incident in the South West.