

Title of Document: Out of Hours Protocol – Reporting of Markedly Abnormal Results

Q Pulse Reference

Version N<sup>o</sup>: 1.0

Authoriser: Paul Virgo

## **Out of Hours Protocol - Reporting of Markedly Abnormal Laboratory Test Results.**

A markedly abnormal blood result may indicate that the patient needs urgent treatment. The communication of such important results should be a priority, and in certain circumstances, could be lifesaving.

To enable the OOH clinicians to assess the urgency of the situation full and accurate information is essential. In order for this to be available there needs to be effective communication and organization between the primary care GP, the pathology laboratory and OOH providers.

### **Roles and responsibilities**

#### **1. Primary care**

- Ensure all demographic and clinical details are correct and included on request form (or computer database). To include:

Name

Date of birth

Address

**Telephone number (This is essential)**

GP practice and telephone number

NHS number (non-essential)

- Urgent samples from general practice, so that they may be prioritized for completion within the working day should be marked as such, **and the laboratory telephoned in advance to alert it of the urgency**
- Where an abnormal result is anticipated, and the result is not available before the close of surgery, the OOH service should be notified by the practice. They should formally hand over the patient including giving contact details and the clinical history. This would apply in particular for D dimers and troponins.  
Patient to be warned that they may be contacted by the OOH service.
- Check on any communication from OOH service first thing each morning. There should be a system in place to alert GP's regarding urgent results. Some results may require immediate attention as the OOH service may have decided to leave for the patient's own GP to deal with.

#### **2. Pathology**

- Where possible the laboratory will try to telephone any abnormal result to the patients own GP within surgery working hours.
- The Royal College of Pathology has drawn up nationally agreed action limits for telephoning results and the local laboratories should publish their action limits reflecting these guidelines. (See Appendix).

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- Abnormal results generated after hours will be communicated to the OOH service. This is Monday–Thursday 18:30 – 08:00 and Friday 1830 to Monday 08:00. Brisdoc OOH service has a work flow and capacity coordinator who can be contacted via the professional line 0117 9030017. For a list of surgeries covered by Brisdoc see appendix.

- The laboratory should pass on any contact information along with clinical details, if supplied, or relevant previous results. They should record to whom the result was given.

- Calls to the OOH service will be monitored and audited. This should identify unnecessary delays in specimen transport or analysis which may be rectified.

### **3. OOH service**

- It is OOH's responsibility to accept the abnormal result when telephoned.
- The work flow and capacity coordinator via the professional line will record all the patient demographics, clinical information and relevant previous results on the computer. They should note the laboratory, caller's name and telephone number.
- If the details are incomplete the call handler should;
  - a. Check for any previous encounters on Adastral with correct details
  - b. Try directory enquiries
  - c. Try local A&E – who may be able to provide a telephone number or patient could be in hospital.
  - d. Try local ambulance services who may be able to provide a telephone number.
- If still no contacts then the OOH doctor should review and the outcome be recorded.
- If there is real clinical concern a home visit may be indicated.
- The result and the clinical outcome will be communicated automatically via adastral to the patient's own GP the next morning. Any urgent results should be made obvious.

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APPENDIX

**Out of Hours Reporting to Out Patients and Primary Care (Proposed Limits to be used once the GP practice is closed)**

**Biochemistry<sup>1</sup>**

Analyte	Action limit (s)			Units
	Less than	or	Greater than	
Sodium	<120	or	> 150	mmol/L
Potassium	< 2.5	or	> 6.5	mmol/L
Creatinine			> 400 (>200 in <16yo)	If new or significant change
Glucose	< 2.5	or	> 25	mmol/L
Adjusted Calcium	< 1.8	or	> 3.5	mmol/L
Magnesium	< 0.4	or	> 2.0	mmol/L
Phosphate	< 0.3			mmol/L
Lipase			> 300	U/l
Amylase			> 500	IU/L
ALT			> 600	IU/L
Total bile acids			>14	umol/L
CK			> 5000	IU/L
Ammonia			>40 >100	umol/L
Troponin T			≥ 14	ng/L
Lithium			> 1.5	mmol/L
Digoxin			> 2.5	ug/L
Paracetamol			> 20	mg/L
Salicylate			> 100	mg/L
Theophylline	< 3.5	or	> 25	mg/L
Phenytoin (adjusted)			> 40	mg/L
Carbamazepine			> 25	mg/L
CRP			>300	mg/l

<sup>1</sup> Royal College of Pathologists Document 'Out of hours reporting of laboratory results requiring urgent clinical action' November 2010.

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**Haematology**

Test	Results that need phoning To the OOH service –GP requests
Hb	Less than 70 g/L
	Drop of more than 40 g/L in last 2 weeks
Hb Renal Patient	Less than 60 g/L
INR (Warfarin monitoring)	INR> 8.0
Fibrinogen	Less than 0.5 g/l
Platelets	Less than 30
WBC	Lymphocytosis > 50 or Neutrophilia > 50
Neutrophils	Lower limit: neutropenia < 0.5 with any presence of blast cells
Malaria/Parasites	Always telephone a positive ( <i>De Novo</i> ) result
D-Dimer	Telephone all Positive GP requests
PV	>5.0 mPa

**Immunology**

Immunology laboratory service operates between 08:00 – 18:00 weekdays. As these hours are similar to the opening times of the majority of primary care there is limited requirement for contact with out of hours deputising services.

**Microbiology**

Microbiology laboratory service operates between 08:00 – 18:00 weekdays. An “on call” service operates outside of these hours. As these hours are similar to the opening times of the majority of primary care there is limited requirement for contact with out of hours deputising services. In the event that as a result of processing tests out of hours we discover an abnormal result this is communicated to our medical staff who review the information on a case by case basis and will act accordingly contacting the appropriate deputising service if necessary.