

3.2 TELEPHONING RESULTS AND RANGES

Clinical significance

Results may need phoning for a number of reasons:

- a) Results fall outside of phoning limits (see below).
- b) Requested as emergency, e.g. by a telephone request from MO. Urgent written on the request form will **not** generate telephoned results.
- c) There is a clinical reason for telephoning results.
- d) You have received a telephone call from a G.P. surgery- if so see sections on **phoning results** on page 1 and on **issuing results to G.P. surgeries** on page 4 of this SOP

Instructions

Phoning Results

Results can be phoned by BMS, CS, Medical, MTO, MLA, administrative and Clerical Staff who have been trained in the procedure of Telephoning Results.

1. Results will be telephone according to the limits in table 1
2. State the department name.
3. Identify patient by stating any 3 of hospital number, surname, forename, or date of birth
4. State the sample type and date / time of collection.
5. State the results and any other comment(s) (e.g. haemolysed) and ensure that the recipient reads all results and information back for checking. If they refuse to repeat back the results, make a note of this fact on the computer in field 7
6. Qualified staff should take responsibility for telephoning results outside laboratory action limits and should emphasise the particular abnormal results to the clinical end.

Recording results telephoned.

1. This information must be recorded using Labcentre's <TEL>ephoning facility. From Labcentre's 'Authorisation' screen type TEL and then TR or from Labcentre's 'Enquiry' screen type <T>ELEPHONE<R>ESULTS. This will display the results telephoned screen. With the cursor at field 5 "Request Items".
2. Enter the request item codes for the results that you are telephoning in Clinical Biochemistry. In Haematology or Molecular Pathology when there are more than one request item you must record which request has been phoned by entering.
FP in FC1 or FC2 fields when a Full Blood count result is phoned
or
CP in CC1 or CC2 fields when a coagulation result is phoned
3. Record the **recipient's name** in Field 6 "Phoned to". A default message will be displayed in field 7.
4. Save the information to the request's record by entering A - Accept. The comment will be stored in the computer audit trail.

GP 'Out of hour's service'

For some tests, a wider set of ranges operates for samples originating from GPs where results become available out of hours (Monday-Friday 0900-1800). Other results that would normally be telephoned during hours should be referred to the PHON queue and phoned at the next opportunity in normal working hours. However on Saturday mornings results from Friday nights which would normally be phoned through to the G.P. surgery the next normal working day should be phoned that morning to the out of hours service (OOHs) if the G.P. surgery is closed. N.B. normal working hours vary according to surgery – if in doubt try to contact the surgery.

When the OOHs is contacted with an abnormal result, we should provide them with all relevant information that is available to us about the patient including previous results, medical history, patients home telephone number and address. The patient's home telephone number can be accessed by logging onto Lab Centre and selecting from the main menu.

PATIENT MASTER INDEX

PATIENT ENQUIRY

Input HOSPITAL NUMBER

The patient's telephone number will now be displayed

The telephone number for contacting the OOHs is now 111. On occasions this number may be experiencing larger volumes of calls and you will get an answering machine requesting you to leave a message. If this does happen leave your name, explain that you have a very urgent pathology result and request that they contact you ASAP, leave a number where you can be contacted directly or the hospital number and your bleep number. If the results are for a patient who lives outside of Hampshire, you should ask to be transferred to the out of hours service for the area in which the patient lives.

When results are phoned to the OOHs they should also be referred to the PHON AM queue and telephoned through to the G.P surgery at the start of the first normal working day (with the exception of glucose which should be rung the next morning) as described in General SOP 2.3.

Outpatients/Day Wards/Pre-Assessment Clinics

Results from outpatients, pre-assessment clinics or day wards that are closed and that fall outside of the action limits for GP/OPD out of hours should be telephoned to a duty clinician from the firm that originated the request. The hospital switchboard will provide information on availability and bleep numbers of these individuals. If it is not possible to contact a clinician from the originating firm then results should be telephoned to the Medical Registrar on-call.

Requests originating from renal physicians

If the potassium result is greater than 6.5mmol/L the appropriate renal physician should be contacted via bleep via appropriate switchboard.

Southampton
Drs Rogerson / Dathan
SHO on take 2011
SHO on cover 2111
Registrar 9061

Portsmouth
Drs Raman / Mason
SHO 1975
Registrar 1566

This arrangement has arisen following a recent discussion with relevant clinicians at a medical handover review.

All unsuccessful telephoning attempts

An adverse incident form should be completed in cases where all reasonable attempts to telephone abnormal results fail. The incident form should include the number of attempts made and over what period of time. This should be brought to the attention of the Head of Department, the section manager and the Operational manager the next working day and the matter investigated further. Meanwhile, BMS staff should continue to try until they are able to get through. This event should be a rarity.

All unsuccessful telephoning attempts should be recorded in Labcentre as per the 'Recording results telephoned' section above. Either NO ANSWER or ENGAGED should be input into field 5, 'phoned to'.

Clinical Advice

- For adult patients refer the caller to the medical registrar on-call
- For paediatric patients refer the caller to the paediatric registrar on-call
- All clinical queries regarding CSF xanthochromia should be directed to the neurology registrar on call
- All queries regarding interpretation of CSF xanthochromia scans should be discussed with colleagues on shift in the first instance. If not resolved, this should be passed onto BMS staff on the next shift. If still unresolved should be brought to the attention of clinical authoriser the following working day who may bring it to the attention of any consultant available if necessary.

Comments

If abnormal results are produced and patient/specimen details have not yet been entered on the Labcentre attempts should be made to locate and enter the details

If you need to find out which ward a patient is on then telephone Patient Information/Patient location on ext 4885/4886. These extensions should be answered 24 hours a day 7 days a week.

Notes

Any results falling outside of telephoning limits (table 1) must be telephoned at the earliest opportunity. Limits in brackets contain an instruction either to refer the result to the PHONAM or METAB queue as appropriate. Results referred to the PHONAM queue will be phoned as previously described.

Miscellaneous

For significantly abnormal results on GUM patients, results should be telephoned to the sexual health team on 80716770 or 80716756 Monday to Friday 9 am to 5 pm. Out of hours from 5 pm to 9 am and at weekends and bank holidays, all abnormal results to be telephoned to the consultant on call for GU Medicine through the switchboard.

Ordering by Equest makes it compulsory to indicate source and consultant code. There should not be problems telephoning results to firms originating such requests. Where it is a GP request and source or GP code is not indicated, it is suggested to view previous results from the same patient on Labcentre. Usually the GP and source should be available from such screen. Where all necessary steps have been taken and the source of request or GP and consultant codes not available, an adverse form should be completed. This should be brought to the attention of Head of Department, the section manager and the Operational manager the following working day. Hopefully, this should be a rare event.

For patients from other hospitals, check to ensure they were not seen at UHS. More often than not they would have been. In such instances, results should be telephoned to source. However, if such requests are from other hospitals, the results should be telephoned to the source in those hospitals or to the consultant on call in Biochemistry in these hospitals. If still unsuccessful, an adverse incident form should be completed and case discussed with Head of Department, the section manager and the Operational manager the following working day. This should also be a rare event.

Phoning Limits are based on Royal College of Pathologists Guidelines:

The communication of critical and unexpected pathology results: October 2017

Table 1 Chemical Pathology Phoning limits

Test	Condition	Units	Lower	Upper
Serum/Plasma			Lower	Upper
Adjusted Ca⁺⁺		mmol/l	≤1.80	≥ 3.50
ALT		IU/L		If 1 st time presentation and ≥600 in males ≥525 in females ≥500 if <16 years old
Ammonia		umol/l		≥100 (then refer to METAB queue) and e-mail paul.cook@uhs.nhs.uk with result
Amylase		IU/L		If 1 st time presentation and ≥ 500
Bile Acids (external hospitals only)		umol/l		>14 (pregnancy only)
AST		IU/L		If 1 st time presentation and ≥ 600
Cortisol		nmol/L	<100 If 1 st time presentation (unless part of a dexamethazone suppression test)	
AKI alert	AKI stage 2 OR 3 alert			Phone immediately if first time presentation
Creatinine (See also AKI above)	Adults If no AKI alert generated	umol/l		If 1 st time presentation and ≥ 354
	Children (under 18 years) If no AKI alert generated	umol/l		If 1 st time presentation and ≥ 200
CRP	If held on helpdesk queue	mg/L		≥300
Creatine Kinase		IU/L		If 1 st time presentation and CK≥5000
Direct Bilirubin	If held on HELPDESK queue and <12months old	umol/L		≥25 (Refer to PHONAM queue if OOH)

Test	Condition	Units		
Glucose		mmol/l	≤2.5 Check that sample is fluoride oxalate; do not phone if part of insulin stress test	≥25 ≥15 if under 16 years old
Inorganic Phosphate		mmol/L	<0.32	
Magnesium		mmol/L	≤0.4	
NT-Pro BNP (Immulite assay)	Phoned by specialist Biochemistry	ng/L		> 2000 (during routine hours only)
Porphobilinogen		umol/ mmol creat		Any positive result
Potassium		mmol/L	≤2.5 if 1 st presentation ≤2.0 if 2 nd or subsequent presentation	≥ 6.5
Sodium	Adults (16 years and older)	mmol/L	≤120 if 1 st time presentation ≤115 if 2 nd or subsequent presentation	≥160
	Children (under 16 years)	mmol/L	≤130 if 1 st time presentation ≤120 if 2 nd or subsequent presentation	≥160
Total Bilirubin	Up to 12 months old	μmol/L		≥250
Triglycerides				≥20 Forward any result >10 to the LIPID queue
Troponin I	If held on HELPDESK queue	ng/L		≥19
CSF Haem pigments	All external sources regardless of result			
Urine drug screen				Any positive result in a patient <18 years
Carbamazepine		mg/l		≥25
Digoxin		nmol/l		≥3.0

Test	Condition	Units	
Lithium		mmol/l	>1.00 Check that sample is not lithium heparin plasma
Methotrexate	External samples	µmol/L	All results from external sources
Phenobarbitone		mg/L	>70
Paracetamol		mg/L	≥10
Phenytoin		mg/L	≥25
Salicylate		mg/L	≥300
Theophylline		mg/L	≥25
Vancomycin		mg/L	≥40

Table 2 Haematology Phoning limits – results outside these limits must be phoned

For all requests (Inpatients, Out Patients, and GPs)		
<ul style="list-style-type: none"> • REVIEW PREVIOUS RESULTS & CHECK CLINICAL INFO • CHECK SOURCE CODE (?Inpatient ?OPD) /CONSULTANT 		
Patient source	Phone to	
	Routine Hours	Out of hours
Haematology	Ward or Consultant secretary	Haematology SpR on call
Inpatient	Ward – doctor/ nurse in charge	Ward – nurse in charge
Outpatient	Source or Consultant secretary	Consider if result can be delayed and called out the following day. If not contact the on call SpR for the clinical team or OOH GP
GP	GP surgery	Consider if result can be delayed and called out the following day. If not contact OOH GP

Patients whose results fall outside the limits for the first time must be phoned at the earliest opportunity 24/7, but **repeated results** outside of these limits **do not** need to be phoned if there is **no change** from the result that was originally phoned. When phoning every effort must be made to give them to the Doctor or nurse in charge, if this is not possible you must emphasise the importance of relaying the result to a medically qualified person. When phoning, the recipient should be informed that clinical advice is available via switchboard if required.

For your own protection please ensure that all attempts to phone results as well as the name of the person accepting the result is entered in LabCentre as detailed in this SOP. If there are repeated unsuccessful attempts to phone the result request PHONH and validate the result so it is accessible on the clinical systems and refer the result to the PHON queue. The result can then be continued to be attempted to call through.

Test	Units	
Hb	g/l	Less than 70* or More than 200** *Or repeat sample with Hb<70 g/L and drop of >10g/L **If new Hb>200g/L: check sample & mix &retest: if confirmed →PHONE <u>But</u> if OOH for outpatients/GP then Add a film → review film & phone next day after 9am inc weekends & bank holidays.
WBC	X 10 ⁹ /L	More than 50 If *NEW* WBC>50 Review flags. If blasts→urgent film required. If blasts confirmed on film-→ Phone Haem medic
Neutrophils	X 10 ⁹ /L	Less than 0.5 in a chemotherapy patient would not be a cause for concern since they are not 'unexpected' and therefore not require phoning
Platelets	X 10 ⁹ /L	Less than 20 (More than 1000)* *If OOH for outpatients/GP then Add a film →review film & phone next day after 9am inc weekends & bank holidays
Warfarin	ratio	Warfarin / INRs for GPs = Results >8.0 need to be phoned at any

INR		time of the day (OOH if necessary) Results between 5.0 and 7.9 must be phoned to GP surgery, if they are not open then leave on Queue to Phone first thing next working day. On Friday evening and weekends please phone OOH services with ALL INR results of 5.0 and above. INR results less than 1.5 do not require phoning.
Hep APTR	ratio	More than 5.00
Malaria Screen		Positive

Please note:

Discretion and professional judgement must to be exercised when following these phoning guidelines. For example a neutrophil count <0.5 in a chemotherapy patient would not be 'unexpected' and therefore will not require phoning while a fall in Hb from 145 - 85 is clinically significant and does need phoning. Patients showing a significant change from their previous results even if outside these limits should also be phoned to source. If in doubt seek advice from a senior member of staff or the covering haematology registrar/consultant.

Even greater discretion and professional judgment may be required when dealing with abnormal coagulation screen results. After confirming that a patient is not on any anticoagulation treatment, any unexpected coagulation result significantly outside the reference range should be phoned to the requesting source or Haematology Registrar at the earliest opportunity. If in doubt or particularly concerned as to the cause of the abnormality contact a Haematology Registrar.

A new onset of pancytopenia, where more than one cell lineage is reduced, and there is no obvious cause i.e. chemotherapy, needs to be phoned to the Haematology medics and then the requesting source (once sample quality has been checked and a blood film reviewed).

Table 3 Blood Transfusion Phoning limits

Test	Condition	Units	Within normal hours for GPs/OPD. At all times for inpatients.	Out of hours for GPs/OPD only.
Antibody screen	Pre-surgical procedure Any patient in need of urgent blood			Any antibody detected
Blood issued un-crossmatched	Blood needed before testing is complete			Availability and status (U). Post retrospective crossmatch phone results of completed screen and crossmatch
FMH	FMH	ml		All positive results
DAT	Newborn AIHA			Potentially clinically significant positives
HIT	Low platelets following heparin treatment			Phone all results
Other referred tests	Various			phoned only at discretion, i.e. significant rise in antibody level in an antenatal patient
Unacceptable samples	Unlabelled Insufficient or incorrect PID Addressograph Wrong patient			All excluding BANT and SPOA New sample required

If in doubt seek advice from a senior member of staff or the covering haematology registrar/consultant.

Table 4 Molecular Pathology Phoning limits

Test	Condition	Units	Within normal hours for GPs/OPD. At all times for inpatients.	Out of hours for GPs/OPD only.
BCR-ABL		ratio (%)	For all patients with a significant rise in the BCR-ABL/ABL ratio, or new diagnoses, the results will be conveyed to the consultant (by email / fax/ phone / MDT).	
Post transplant chimerism		(%)	For all patients with a significant drop (>5%), the results will be conveyed to the consultant (by email / fax/ phone / MDT).	

Table 5 Immunology Phoning limits

Test	Condition	Units	Within normal hours for GPs/OPD. At all times for inpatients.	Out of hours for GPs/OPD only.
GBM			Positive	
ANCA (MPO/PR3)			Positive	
acute leukaemias			All new/relapsed acute leukaemias must be telephoned to referring consultant	

If you are unable to fulfil the requirements of the telephoning SOP contact the Consultant on-call for advice and note the advice given in the patient notes section of Labcentre.

Issuing results to G.P. surgeries in response to a telephone request

Staffs from G.P. surgeries who telephone for patient results are required to quote both the practice name and password. The password for each surgery is the 'J' number. This is to prevent results being given to unauthorised people. The procedure below describes how to locate the password and record the information.

1. Log on to Labcentre
2. Select 'Result Enquiry'
3. Locate patient's record
4. Enter 'A' to accept record
5. Enter 'TR' to move to telephone record screen
6. Ask for practice name and password
7. Check 'J' number against that displayed in the 'Source Details' line
8. Press 'enter' to move to the 'Phoned To' field
9. Enter enquirer's name and disciplines for which results are being given, e.g. Bloggs CC, HM
10. If for any reason the result cannot be given, enter that reason in the 'Failed Reason' field using the F5 facility for accessible codes
11. Press 'A' to accept entry or 'C' to cancel
12. The audit trail will be updated and the screen will return to the patient's results

Issuing results to Wards, Clinics, other hospitals (who have sent us specimens) or other enquirers in response to a telephone request

Results should only be given to relevant healthcare professionals who are involved with the delivery of care to the patient. Healthcare professionals from outside UHS should only be given patient results if the specimen in question has originated from their establishment. Staffs from wards or clinics who telephone for patient results are required to quote both the ward/clinic name and patient hospital number. Staffs from other hospitals, which have sent us specimens, are required to quote hospital name and ward/clinic name and either the hospital number of the patient at the originating hospital or their hospital's laboratory number. This is to prevent results being given to unauthorised people. If callers are unable to provide this information then laboratory staff should telephone back to the clinic using telephone numbers from an official directory or hospital switchboard. If there is any doubt as to whether results should be issued to the caller (e.g. telephone calls from the police then advice should be sought from one of the Directors or Medical Consultants in Laboratory Medicine). The procedure below describes how to record the information.

1. Log on to Labcentre
2. Select 'Result Enquiry'
3. Locate patient's record
4. Enter 'A' to accept record
5. Enter 'TR' to move to telephone record screen
6. Ask for ward/clinic name and hospital number OR hospital name (if not UHS), patient hospital number or Laboratory Number
- 7.
8. Check hospital number against that displayed in the hospital number line. If not UHS check the lab number against that stored in the area for the lab number of the originating hospital laboratory or the originating hospital's hospital number against that on the scanned image of the request form.
9. Press 'enter' to move to the 'Phoned To' field
10. Enter enquirer's name and disciplines for which results are being given, e.g. Bloggs CC, HM
11. If for any reason the result cannot be given, enter that reason in the 'Failed Reason' field using the F5 facility for accessible codes
12. Press 'A' to accept entry or 'C' to cancel
13. The audit trail will be updated and the screen will return to the patient's results