Remote issue – sharing responsibilities across sites

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Division of Pathology
2 hospitals - one main teaching hospital site + one smaller general hospital site (24 miles away) - 1024 + 184 beds

JCUH - Major trauma centre, tertiary oncology, obstetric, cardio, neuro, ortho etc. 24 operating theatres.

FHN - A/E, ITU, routine surgery, midwife birthing unit, oncology day units

48,000 Group & Screens & transfuse 14,000 rbc/yr.

Transfusion testing centralised at JCUH

FHN - OOH support worker only
Who does what?

- What can non registered staff do (support workers)?

- What can support workers do without direct supervision of BMS in remote laboratory work?

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Why does this matter?

Oh the times they are a-changning

1. Technology i.e. automation, fridges, scanners

2. IT
   Electronic Issue (EI)
   Remote electronic issue (REI)
   Issue fridge control
   Bedside systems

3. Pathology modernisation e.g. centralisation, skill mix, savings targets
9. Hospital blood bank requirements

(1) The person responsible for the management of a hospital blood bank shall -

(a) ensure that personnel directly involved in the testing, storage and distribution of human blood and blood components for the hospital blood bank are qualified to perform those tasks and are provided with timely, relevant and regularly updated training;
Guidelines - BCSH

(Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories 2012.)

2.2 Staff Training and Competency

2.2.1 There must be a documented programme for training laboratory staff, including on-call staff not routinely working in the laboratory, which covers all tasks and testing performed appropriate to the grade of staff and which fulfils the documented requirements of the laboratory (Chaffe et al., 2009). It must also include handling major incidents and emergency situations including contingency plans for major system failures.

2.2.2 Staff must receive regular update training on the principles of Good Manufacturing Practice (GMP).

2.2.3 Laboratory tasks must only be undertaken by appropriately trained staff.

2.2.4 There must be a documented programme for assessing staff competency in all laboratory tasks.

2.2.5 Where decisions are required about interpretation of results, component selection and/or specialist requirements, the staff involved must have the required knowledge (supported by relevant qualification) to do this safely.

2.2.6 Specialist clinical and technical advice should be available at all times from staff who have demonstrated sufficient knowledge, training and competency to do so (Chaffe et al., 2009). This could be from within a network or Blood Service reference laboratory if not available from within a single centre.
Guidelines for UK Transfusion Laboratory Collaborative 2014

1. Staffing

1.1 It is expected that appropriate laboratory staffing levels will be in place to ensure the safe and effective delivery of all transfusion service activities and that they will be subject to annual review, risk assessment and agreement through local governance structures (NHSE, 2014).

1.2 It is expected that laboratories as part of their capacity planning process (BSQR SI50/2005) will have operational protocols to make certain that sufficient staff with an appropriate skill-mix are available to match the workload and its complexity at all times.
3. Knowledge and Skills

3.12 It is expected that all non-registered members of staff or support staff working in a transfusion laboratory will always be supervised by a member of staff registered with the HCPC who also holds a qualification, appropriate to their career framework stage, from those listed in appendices A and B. Support staff must also have a locally defined scope of practice using a professional framework that sets the appropriate limits on their activities (IBMS, 2013c).

3.13 It is expected that there will be a locally defined, annual programme of practical and knowledge-based competency assessment. All members of staff working at any time within a blood transfusion laboratory must actively and regularly participate in this programme. The programme must cover all aspects and levels of competency and include appropriate scientific, methodological, scenario and case-based activities (NHSE, 2014).
It is recognised that there are certain tasks and tests within the generally accepted biomedical scientist repertoire that could be undertaken by laboratory support staff under biomedical scientist supervision. However, there must be biomedical scientists in sufficient number and seniority to provide result interpretation, give scientific advice, direction and leadership within the laboratory.

Irrespective of the systems operated, laboratory support staff (associate practitioners and assistants) are not autonomous practitioners and as such must only work to agreed departmental protocols with supervision by qualified and authorised healthcare staff. It is not appropriate for non-registered staff to deputise for, or supervise, registered staff in biomedical scientist grades.
Supervision is the direction and inspection of the performance of workers or work.

Non-registered individuals may not work unsupervised in an NHS laboratory or a laboratory providing a service to the NHS.

Supervision can be divided into categories: direct, indirect and remote.

Direct supervision is where an appropriately trained and qualified individual works alongside a member of staff to monitor and assess the manner in which the duty is undertaken and to verify compliance with departmental SOPs.

Indirect supervision is where an appropriately trained and qualified (i.e. registered) individual is readily available in physical proximity to provide guidance and advice to a trained and competent but unqualified individual undertaking duties in accordance with departmental SOPs.

Remote supervision is where laboratory work is performed at a remote site, with advice and/or scrutiny and validation by staff at another site, for example remote electronic issue of blood or point of care testing.
c) Remote supervision

Competent support staff working to agreed protocols may not require supervision by an HCPC registered biomedical scientist in the same physical locality.

While the latter would be expected to be aware of, and responsible for, the individual and the tasks they are performing they may not be on the same site, so they can only give advice verbally or electronically. In this context, remote supervision is where laboratory work is performed at a remote site, with advice and/or scrutiny and validation by staff at another site, for example remote electronic issue of blood.

Support staff must not be validating results autonomously.

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IBMS - Policy on Supervision of Biomedical Support Staff 2018

What types of procedures are suitable for remote supervision? A range of pre-analytical and analytical test process including:

- Dispatch of samples to a different site for processing
- Loading and running analysers remotely according to the department policies and procedure; this may include Full Blood Count (FBC) and electrolytes (U&E’s) where the internal quality control (IQC) is auto-validated within defined parameters and the use of rule-based IT technology would auto validate normal results with any abnormalities directed to a validation/authorisation queue for attention of an HCPC registered biomedical scientist.

Management would have to risk assess this strategy and have a plan for business continuity in place for conformation and further investigation of abnormal results, procedures in place in case of analyser failure and process of supervision/site visits to ensure process procedures are being followed and maintained.

- Equipment maintenance
- Measuring and aliquoting
- Stock control

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IBMS - Policy on Supervision of Biomedical Support Staff 2018

Types of procedure not suitable for support workers under remote supervision

- Support workers must not clinically validate or authorise patient results.
- Support workers must not provide to clinicians, or other requestors, validated, but clinically unauthorised, results.
- Unsupervised support workers must not perform manual tests or run an analyser in a remote location that is not electronically linked to the main laboratory to be able to release results that could be automatically authorised.

An HCPC registered biomedical scientist is required to have the visual assurance of interrogating the quality control (QC) and the maintenance records that results could be auto authorised. The biomedical support workforce has roles predominantly in the pre-analytical tasks in a laboratory and certain analytical procedures. Complex analytical investigations and the post analytical phase is the responsibility of qualified, regulated biomedical scientist staff.
Note: Blood Transfusion
In blood transfusion a 'result' is a component/product issued. The overarching principles stated in this document are the same; support staff may issue a blood component when the end to end process is directed by the LIMS but may not where interpretation or decision making is required.

Similarly, a request coming into a blood transfusion laboratory (by phone or sample arrival) will often require decision making as to whether the request is appropriate, a step that should be performed by a registered biomedical scientist.
Summary of requirements and guidance

Å All need to be trained and competent
Å Requirements for HCPC registered scientific staff elucidated
Å Some guidance as to what is restricted scope of practice for non HCPC staff beyond which is limited to HCPC registered staff but not down to specific task level
Å Some guidance on supervision
Å Interpretation or decision making is a BMS function
How do we fit roles into processes

- Process maps
- Critical process points
- Identify adjacencies
Influence of local technology and IT

Â No one solution for all labs
Â Some IT better or more adaptable than others
Â Some technology connects better
Â Consider different clinical demands and ability of systems to deliver
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<th>Qualifications</th>
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<td>Support worker</td>
<td>No subjective interpretation of results</td>
<td>General standard of education NVQ2/3</td>
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### Specific Tasks
- Specimen reception – receive/sort/label samples/follow-up any missing PID
- Scan forms/Despatch Hard copy reports
- Issue Stores/cleaning of equipment
- Deal with telephone enquiries/phonning of results
- Order transport
- Request entry on LIMS/result entry
- Load Analysers/update charts
- Pre-analytical work on specimens (ie centrifugation)
- Stock handling
- Equipment maintenance
- Albumin/Proph D Issue
- Cardea Orders

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South Tees Hospitals NHS Foundation Trust
Level B

Scientist

Follows standard SOPs

BMS graduate. CPD, HPC registration

General Description

Specific Tasks

Responsibility Threshold

Qualifications

- Perform analysis e.g. Manual serology; Ab ID,
- Check test validity
- Escalate abnormal results
- Authorise release of results
- Troubleshoot analytical equip
- Monitor QC
- Calibrate equipment
- Assist in development of new tests/ assessment of new equipment
- Provide advice to clinical staff re Transfusion matters
- Order additional tests appropriate to primary results
- SOPs development
- Supervision of support grade staff
- Training/ competency assessments
- Undertake audit work
- Manage Transfusion stock
- Out of Hours responsibilities

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South Tees Friarage site (FHN)

Currently support workers will:
Accept samples into FHN laboratory and arrange transport for testing.
Routine Equipment management
Stock management of blood components and products including use of Blood Track.
Thaw FFP, and attach labels printed locally (but authorised by BMS at JCUH)
Package and release major haemorrhage packs (red cells and FFP)

Soon support workers will:
Label electronic issued locally stored red cells (by BMS at JCUH) with labels produced locally (following introduction of electronic bag and tag check).

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Training our support workers for Friarage site (FHN)

Led by senior transfusion staff with support from other staff working in transfusion. Intensive period on main JCUH site followed by supported period on FHN site. Specific training/competency manuals that cover:
- Quality management
- General transfusion principles
- Specific tasks required
- Recall
- Contingency plans

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5 years of experience

- Issue fridge problems
- Complete loss of IT connection
- About 4-5 major haemorrhages per year
- Bad weather

- No clinical incidents
The end (of Biomedical scientists?)