London & South East Transfusion Science TAG

Meeting held on Thursday 13th June 2019

at Charing Cross Hospital

Sponsored by Clinisys, Deva Medical and Haier BioMedical

1 Attendance Record:

Key: < present >

< *apologies for absence* >

Name	Based at
Aisha Ali	*UCH*
Alex Boateng	*NHSBT*
Andrea Ferringe	Dartford & Gravesham
Andrew Osei-Bimpong	
Andrina Dowling	
Anna Capps-Jenner	TDL Ealing
Anna Demichele	Bedford
Anna Li	Royal Free
Arlene Nubi	Bedford
Beverley Crane	Croydon Health Service
Bob Goddard	*QEQM* Hospital
Carol Stenning	St Richard's
Caroline Subramaniam	*UCL*
Catherine Lorenzen	East Kent
Cathryn McGuiness	
Chloe Orchard	St George's
Chris Hessey	Watford
Chris Robbie	*MHRA*
Cristina Lobato	*GSTT*
David Johnson	St Mary's
David O'Conner	Eastbourne
David Veniard	*PRUH*
Dena Howlett	
Deepa Takhar	*NHSBT CSM*
Donna Wiles	Lewisham
Doris Lam	*NHSBT*
Edgar Malundas	Lister
Elias Bhonda	*NHSBT*
Elizabeth Bergh	GSTT
Emma Sutton	Dartford & Gravesham
Etain Clarke	*TDL QM*
Gareth Heywood-Beldon	Whipps Cross
Helen Nabakka	Epsom & St Helier
Iroro Agba	King's College

London & South East Transfusion Science TAG

Ishmael Carboo	*BUPA* Cromwell
Ismay Humphreys	
Jayne Lambert	Spire Alexandra
Jen Heyes	*NHSBT*
Jenni White	*NHSBT*
Jeyakumar Visuvanathan	St Peters (Chair)
Joanne Lawrence	
Joe Nanuck	*QEH* Woolwich
Joyce Overfield	SPIRE Montefiore
Judy Chetram	
Julia Cheeseman	Royal Marsden Sutton
Julia Lancut	Newham
Julia Stanger	Northwick Park & Central Middlesex
Julie Cole	*RSCH* Brighton
Kasia Ballard	West Middlesex
Ken Amenyah	Kings College
Kirsten King	SPIRE Gatwick Park
Koleva Ivayla	*NHSBT*
Korsheda Naidu	
Kumar Uthayakumar	Hillingdon
Ladan Dirie	Hommerton
Lesley Jones	St Anthony's
Linda Price	
Lloyd Noble	Imperial College
Louise Bingham	*BMI* Chaucer
Lucy Ncube	*HCA* Laboratories
Maria Poole	Heatherwood & Wexford Park
Mark Williams	*NHSBT*
Mike Dawe	*MHRA*
Mohamed Elmi	
Nelsonseelan Johnson	*FHFT*
Nirupa Ruwal	London Independent
Pamela Glinski	Brighton & Sussex
Patricia Richards	
Paul Wadham	Royal Marsden Fulham
Pauline Bigsby	Viapath
Penny Eyton-Jones	Great Ormond Street
Peter Struik	Humble Servant
Rachel Nicholas	Medway/Darent Valley
Randa Bonis	Parkside
Rashmi Rook	Redhill, East Surrey
Richard Whitmore	*NHSBT* Tooting
Rihaf Yassein	
Robert Reilly	Pembury
Roese Spicer	Kent and Canterbury
S Gardner	The London Clinic
Saaba Ahmed-Khaderi	Chelsea & Westminster

Sally Procter	*NHSBT* Education
Sally Sharp	Harefield
Samantha Marston	Whittington NHS Trust
Senait Tesfazghi	Spire Healthcare
Steve Owen	Royal Brompton
Steve Rickard	Nuffield Woking
Sudhakar Vimalanathan	
Susan Mitchell	East Kent
Thais Ferrari	Dartford and Gravesham
Tim Maggs	St Thomas
Tracey Tomlinson	*NHSBT RCI*
Vashira Chiroma	Hammersmith
Vince Michael	St George's
Zoe Sammut	St Richard's

2 Chairman's Opening Remarks:

Jey welcomed everyone to the meeting and as there were again so many new faces asked everyone to introduce themselves. There was again a good turnout and he thanked those who had found time to attend as he was aware how difficult the situation is in so many labs at the moment. However this was still less than a third of the potential number, with 16 Laboratory Managers from our 86 potential laboratories and with very little attendance from the private sector.
We have no confirmed venues for future meetings and suggestions are urgently required, at no cost and preferably in London – contact Jey.
He introduced and thanked the sponsors for their generous support and encouraged people to talk to them later in the day.

3 *NHSBT* Support of Hospital Labs:

Mark William gave a well received presentation outlining the present situation and future plans of *RCI.*
RCI are seeing increasing numbers of samples from patients on monoclonal antibody therapies. Their use will increase in the future and there is a need to develop strategies to deal with them. As they have a good dataset, RCI are just starting an audit of patients undergoing this treatment to see how many make allo-antibodies.
RCI testing is iterative (ie very much not throwing the kitchen sink at every sample) and clinical as well as scientific decision making is required by staff. *RCI* have retained staff and developed their skills and knowledge as so much 'value added' testing is manual – not everything can be done with automation.
Transfusion laboratories generate huge amounts of vital information which is not easily shared across the 20 different *LIMS* from ~12 suppliers, in England, all configured differently by users who choose differing nomenclatures. *Sp-ICE* has >350,000 records available (of which ~100,000 have been viewed). With *NHSd, LIMS* suppliers have developed a standard for data transfer and a pilot study has successfully shown proof of concept. The many antibodies not referred to *RCI* are not on the database but it is hoped that offering cheap, 'cut down' testing of such referred samples will help solve this.

There are few clinically trained people in Transfusion with an interest in laboratory practice – the availability and quality of decisions in transfusion practice is at risk. The vision is a cohort of transfusion specialist consultant clinical scientists with a unique skill mix to meet that need. Currently there are 4 *HSST* transfusion candidates in *RCI* with plans to recruit 1 or 2 annually for the next 3 years, which will provide an effective cohort of staff, but in >5 years.
RCI are working on algorithm referrals based on hospitals' own practice, to allow better understanding of expectations, more efficient and effective testing and focussed training. They are also thinking about 'dry' referrals, assuming that it isn't always necessary to refer a sample, instead taking the hospital laboratory results and interpreting them eg remote interpretation of panel results, as interpretation is a sub-set of *RCI* skills.
The transactional relationship based on sample referral only is not consistent with the growing need. *RCI* have the capability to deliver these future plans but not the capacity.

4 General Discussion Topics:

Perception of differences between *BSQR* and *ISO*
It would be useful to map the 2 standards against each other. As other Pathology disciplines have found, laboratories inspected and compliant with *BSQR* find it easier to meet I*SO*.
The measurement of uncertainty seems to be causing a great deal of grief in Transfusion labs and doesn't necessarily add anything useful. *QC* trending also causes problems, not adding anything although it is useful on inspection day. Variation between assessors is a widely acknowledged problem.

Wireless temperature monitoring systems
How are these managed and what contigency plans do people have?
Not all laboratories use them but there was lengthy discussion by those who had them as a primary system as to what to do when they go wrong. It was acknowledged that laboratories don't have the capacity to monitor temperatures at frequent intervals (hourly) manually. Some labs have retained paper charts to record temperatures, although these clearly need to be maintained and calibrated. Others use a data logger and ensure that the local alarm is working. In the event of failure, for whatever reason, the focus must be to get the wireless system up and running again.
There is a need to test the process fully, and this needs to include the *IT* Department communicating any changes to the hospital network which could have an impact – this is not always the case!
Some systems are completely stand-alone and do not rely on the hospital network or the internet at all.

***MB* treated cryo**
This is an immensely expensive product (£1113.45) and some people have ordered it by mistake. In September *SABTO* are expected to make recommendations about whether there is a continued need for this product.
The only alternative for a situation where it is mandated by regulation is not to use cryo (fibrinogen can be given if required) The main aim is, of course, to keep the patient alive – the regulations do not state that the patient should die. In an

emergency the normal adult product can be given but once stabilised these patients would need to be given the methylene blue treated product.

Longer term service and maintenance contracts
One Trust had insisted that the laboratory have 24 month contract even though it would work out more expensive than their current 12 month one. Other Trusts also push people into these but the consensus was that longer contracts worked well and were more cost effective.

***LIMS* upgrades and validation**
Are suppliers as helpful to users as they could be with documentation, such as validation scripts and release notes? It is difficult for them as laboratories configure systems differently to suit their individual requirements, using the system in different ways. There is also a potential conflict of interest with a supplier providing a validation script. It was suggested that they could be more active in telling users how other laboratories are using the system but this is not their role and more something which should happen at meetings like this one. Suppliers can, if a laboratory wants to do something, explain how to configure the system to best meet that need.
There was a general feeling that release notes would be more useful were they to be 'written in English' and it was agreed that they could, with new releases, explain what is new and requiring extra validation and how to test it.

Suppliers
BPL is back – but not making a fuss about it. (http://www.bplgroup.com/)
Some laboratories have an issue with equipment calibration and validation reports not being sent through until a long time, sometimes several weeks, after the engineer has visited. It is possible to arrange to review data on site with the engineer there to highlight any problems with the full report being sent through later. This needs to be discussed when the contract is being entered into.

O positive K positive units
Recent efforts to get more hospitals to take these units have been successful and led to a reducion in wastage. There are plenty of patients who can use this product which would otherwise be thrown away. Hospitals which accept them have found no problems, but laboratories do have to think about how to manage them: storing them in different colour bags, on a separate shelf or with O positive units have all been done.
Laboratory managers are now probably more divorced from stock management being busy with other things which might account for non-optimal stock ordering.

OOH: who works and who decides?
Different sites have different practices. *MHRA* are content as long as people are trained, compliant, have sufficient remote support and a good quality system.

5 *IoT* Blood Management System:

Haier Biomedical specialise in cold chain devices with an ever growing product range. To address current issues with the intelligent management of blood they have developed an *RFID* system, currently being used in China, where information is captured by a reader via radio waves. Each unit is labelled with an *RFID* tag and refrigerators have a reader on each shelf activated whenever the door is opened.

Blood is tracked through the full cycle in real time without manual intervention. This provides accurate reference data allowing for improved decision making and allows management of resources to increase efficiency.
They make three sizes of U Blood refrigerator for 18, 60 or 88 units, each controlled by onboard software and connected to the Lab via the cloud. They have a touchscreen interface (with fingerprint recognition access as an option) allowing authorised access only. There is automatic inventory update allowing for unified and centralised management of units and real time management of blood stocks. They also have intelligent blood transport boxes with built-in *GPS* so the laboratory can monitor where the box is at any time.

https://www.haierbiomedical.co.uk/

6 Zip Thaw:

Deva Medical produce this dry, portable plasma thawer which will warm 2 units from frozen to 34C in 15 minutes, (often) faster and more convenient than liquid thawers and with less degredation of clotting factors and proteins as the internal temperature never gets above 37C.
The frozen unit is placed in a disposable bag (useable up to 8 times – final cost not yet worked out but probably around £20) which contains spills in the event of a leak and has a sensor which allows the temperature of the unit to be displayed on the display screen built into the thawer. The thawer has a barcode reader allowing the unit to be scanned. The sleeve slots into the thawer and pressing 'start' begins the heating and 'massaging' of the unit by a gel pad, with a red light, visible from a distance and showing that it is in use (The display on the screen is also red in colour, showing the temperature and the time since thawing commenced). The thawer can hold information on 2000 units which can be downloaded when required. The thawer can also be used for stem cells and as a blood warmer.
Once thawed the external light and the display show green with an audible signal. The screen shows the time elapsed since thawing was complete and the thawer maintains temperature until the unit is removed or the 'stop' button is pressed.
They are also developing single and 4 unit warmers.

https://fremonscientific.com/2018/11/29/zipthaw-with-deva-medical-in-the-uk/

7 *NHSBT* Update:

Satisfaction Survey: The results are available and generally good as *NHSBT* listens and responds to improve areas which people aren't happy with. Continued problems with couriers are being taken up with *TNT*.
***OBOS* Update (ver 8.2.3):** A bell icon displays on the order tab of the home page when a standing order is approaching its end date.
Platelet Increments: Whilst it is important that the forms for selected platelets are returned it is suggested that increments are also measured after standard platelet transfusions to see if they have been effective.
High Titre: The flag for this doesn't come across on *EDN*. Most users would like this fixed and, as it should be an easy fix, this will be done.
Selected Platelets: A change to *OBOS* is being considered so that when selected platelets are ordered it will show a 'window' when they can be delivered.
Recall: *MHRA* request that hospitals identify the final fate of a recalled unit within 4 hours, *NHSBT* within 1 hour.

If no fax is available then phone the relevant Hospital Service Department to make them aware if you are returning the documentation via email. Check all paperwork carefully and quarantine the unit to prevent potential issue until the unit can be returned in the BioBottle supplied.

8 Interesting Case(s):

An *OOH BMS* rejected a sample as it appeared haemolysed and asked for a repeat, which was rejected for the same reason. Only after further rejected samples was it realised that it was not haemolysis but the plasma was red in colour, caused by a drug given to the burns patient.
There was no criticism of the *BMS* involved but this led to discussion as to whether, with modern techniques, there was a need to reject haemolysed samples.

9 *UKTLC* Meeting:

A lot of orgnisations link to this group which does have influence. There had been much discussion regarding the communication pathways to *TLMs.* There seems no organised cascade of information from *RTC* to *RTC,* to Laboratory Managers etc so an effort is being made to build up communication lists to aid in sharing information efficiently and to help avoid duplication of effort.

10 Future Meetings:

Tuesday 9th July	*SHOT* meeting
Thursday 26th September	*TAG*
Thursday 5th December	*TAG*