Lessons Learned – Covid-19

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Why make a ‘Lessons Learned’ document?

- At request from NBTC Emergency Planning Working Group (EPWG)
- To widely share current learning
- To create documented ‘memory’ for any future events
What is our ‘Lessons Learned’ document?

- Shared Document by NBTC National Transfusion Practitioner Network and Lab Managers’ Group

- Made through submissions from TPs all over the UK, including the devolved countries through our BBTS links.
<table>
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<tr>
<th><strong>Why was action required?</strong></th>
<th><strong>What Worked Well?</strong></th>
<th><strong>What Could Be Improved?</strong></th>
<th><strong>Tips, Tricks and Learning Points</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Sampling</strong></td>
<td>Local dissemination of new guidance including one- or several of the below was created and disseminated promptly by the individual TPs. These documents could be used sent via email and/or used as posters meaning rape. Face training was not required.</td>
<td>ETUs completed risk assessments to protect staff handling the bags. Many ETUs began to quarantine received bags for a certain length of time to reduce risk which reassured staff and did not significantly delay traceability.</td>
<td>Risk assess samples coming into ETU early but be prepared for guidance to change.</td>
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<tr>
<td><strong>Traceability</strong></td>
<td>Many ETUs required paper and barcode traceability tags to be returned to complete traceability but there were concerns that Covid-19 could survive and potentially be transmitted by these tokens.</td>
<td>Devising processes and/or methods to abort/bypass traceability, reduce the risk of infection. This involved clarifying with the store and other teams.</td>
<td>Risk assess routine traceability procedure as part of communication training.</td>
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<td><strong>Administration</strong></td>
<td>Many hospitals used reusable “red boxes” for component collection but these were not permitted into the red zone in some hospitals.</td>
<td>TPs issued local guidance so staff could leave the red collection box in the green zone. Some hospitals used disposable red collection bags to move blood from the green zone into the red zone. Blood receipt occurred in the green zone.</td>
<td>Risk assess delivery of blood to red zones and check with your local infection control team.</td>
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<td><strong>Collection</strong></td>
<td>Some hospitals had satellite blood fridges which happened to be located in critical areas. Hospitals had to communicate directly between the clinical areas and ETUs to decide how to manage these fridges. Changes may include:</td>
<td>TPs were well placed to facilitate communication between clinical areas and ETU. Many TPs reported being proactive in contacting clinical areas to determine logistical changes.</td>
<td>Contact each clinical area to establish their use will change. FFN will be in a green, amber or red zone. Evaluate appropriate stocking levels during pandemics. Allow HTT to review regularly.</td>
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<td><strong>Satellite Blood Fridges</strong></td>
<td>- Satellite Blood Fridges were not used to hold the specified blood products until the pandemic was over.</td>
<td>Some clinical areas were unaware of the time taken to validate and map a new fridge, requiring significant TP and ETU time to find a work-around as normal service was much reduced. Several teams started to use satellite blood fridges without communication with transfusion teams. TPs were not notified and asked to plan for a work-around.</td>
<td>- Evaluate appropriate stocking levels during pandemics. Allow HTT to review regularly.</td>
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Key for what we looked at

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- Why was action required?
- What worked well? (TP)
- What worked well? (BTL)
- What could be improved?
- Tips, Tricks & Learning points
Sampling

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- Centre of Disease Control & Prevention issued guidance on handling Covid-19 positive samples
  

Local dissemination of new guidance including one or several of the below was created and disseminated promptly by the individual TP teams.

- 'Buddy System' for sampling labelling (sample taken in dirty zone, decontaminated, then given to single buddy in clean zone to label)
- 'Double bagging' for sampling (sample taken, labelled and bagged in dirty zone, then dropped into clean bag in clean zone)
- Advice on how to use your ID badge barcode to use PDAs in hot zone (cleaning/photocopying etc)
Access to category 3 flow cabinets is limited in most transfusion laboratories. The concern expressed by BMS staff eased as staff became more familiar with handling these samples.

- During previous incidents involving the handling of potentially dangerous samples (e.g., Ebola outbreaks) most laboratories had implemented a policy of using universal products (i.e., O red cells, A platelets and AB plasma) without the antibody screen so as not to expose the BMS staff to the virus. The number of patients in these cases was low. The prediction with Covid-19 was that patient numbers would be considerably greater so group specific was not sustainable.
Different Trusts came to different conclusions on whether sampling needed adjustment. The infection control team in several hospitals decided that blood sample collection from these samples could be treated in the same way as other infectious patients.

- As this was not developed ahead of time in any hospitals, it meant the TPs had to work quickly to develop new guidance, and distribute it effectively so all sample takers were aware.

- Although The 'Buddy System' reduced the risk of infection, it increased the risk of WBITs as the sample labeler was not the sample taker, however, this risk was reduced by ensuring the sample was labelled immediately. Careful risk assessments were required.

- The receipt of information on handling samples would have prevented a lot of concern. The earliest advice was directed only at microbiology departments. Some laboratories proposed sending all their potentially positives samples to NHSBT.
### Traceability

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- Many BTLs require paper/cardboard traceability tags to be returned to complete traceability, but there were concerns that Covid-19 could survive and potentially be transmitted by these fomites:
  - [https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(20)30003-3/fulltext#seccestitle10](https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(20)30003-3/fulltext#seccestitle10)

- BTLs completed risk assessments to protect their staff handling the tags
- Many BTLs began to quarantine received tags for a certain length of time to reduce risk which reassured staff and did not significantly delay traceability
- MHRA contacted teams to pre-emptively answer queries regarding traceability

- Some hospitals' risk assessment noted little difference between tags and samples so continued using tags as normal maintaining good hand hygiene and/or appropriate PPE (gloves)
- Transfusion teams stopped sending Datix for traceability to alleviate workload in the busiest areas. (Still required later investigation)
- TPs issued advice regarding how to appropriately use their barcodes if hard to access due to PPE
Electronic systems for traceability worked well. The PDAs/Tablets are easily cleaned, and this meant reduced risk from tags being sent to labs. Laboratories using tags found scanning and emailing worked well or exposure to UV light could be used to reduce the risk.

Delays and potentially lost traceability occurred whilst the new processes were designed.

- Hospitals noted a downturn in traceability immediately, probably due to a mixture of clarity issues regarding traceability processes, reduced Datix's, and different staff being involved in the transfusion. This creates lots of cases for the TPs to investigate in the future.
- Where staff struggled to access the barcode on their ID badges, vein to vein PDA use decreased, negatively affecting traceability.
Satellite Blood Fridges

Some hospitals had satellite blood fridges which happened to be located in infectious areas. Hospitals had to communicate clearly between the clinical areas and BTL to decide how to manage these fridges.

TPs were well placed to facilitate communication between clinical areas and BTL

• Many TPs reported being pro-active in contacting clinical areas to determine logistical changes
• Reports that clinical areas were aware of TPs and remembered to contact them for advice
• Inappropriate wastage reduced by good blood stocks management

Reduction of stock in remote issue fridges which were likely to be used less. Closure of fridges if located in areas which may not be in use. Back up plans for maintenance in case of failure of fridges in hot areas
Training & Competency Assessments

Due to social distancing, and increased workload in key areas, completing competency assessments became challenging.

TP/trained trainers continued to perform competency assessments on the ground:

- Some hospitals granted extensions to staff who had not been regularly performing the task
- Some hospitals designed 'self-assessments' for use during Covid-19
- Some hospitals created 'skills cafes' to answer transfusion questions for staff returning to clinical areas

Some laboratories found that the reduction in workload allowed additional opportunity and time for training and competency assessment. Social distancing and the use of PPE helped ensure this opportunity was taken. Laboratory competency assessments were put on hold on some sites during the peak of the crisis. Remote assessments used for staff shielding or in sites where lab staff were wfh.
Some trainers/TPs were redeployed making it harder to perform competency assessments. Delayed consideration to backfilling this role.

- Competency assessments had to be done in very small groups (often max 2) which was more time consuming for the trainer. Delay to move to remote training.
Changes in site staff and patient mix caused challenges in normal blood 'prescribing' practices, especially in hospitals using paper prescriptions.

- Some hospitals allowed Nurses to start signing request for blood components for regularly transfused patients (based on clear guidance).
- One hospital created a blood prescription package inside a system usually used for chemotherapy.
Acknowledgements

• Big Thank You to:

• All the TPs and Lab Managers who contributed feedback to use in the document

• Julie Staves, Chair of the National Lab Manager’s Group

• Emily Carpenter, Lead Transfusion Practitioner, Kings College Hospital
Any Questions?