


**NHS**  
*Blood and Transplant*

# Blood Strategy - Update

*March 2019*

Caring Expert Quality



**Objectives**

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- Recap on the key external and internal trends with an impact on blood components
- Share initial hypothesis for the new Blood Strategy
- Share proposed strategic questions for discussion with the Board

## Horizon scanning - Summary

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Political and regulatory	Societal
<ul style="list-style-type: none"> <li>▪ <b>Brexit</b></li> <li>▪ <b>Policy:</b> reduced appetite for austerity</li> <li>▪ <b>NHS strategy:</b> prevention, chronic diseases, integrated care (primary, secondary, social)</li> <li>▪ <b>Regulation:</b> potential revisions to risk prevention measures</li> <li>▪ <b>Environment:</b> increased regulation to reduce CO2 emissions</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Millennials:</b> entering into adulthood (future donors); difference expectations re communication and technology</li> <li>▪ <b>Urbanization:</b> Continued global trend</li> <li>▪ <b>Population:</b> aging and more ethnically diverse (second/third generation)</li> <li>▪ <b>Work:</b> people having &gt;1 job/lifetime, increase in UBER type and part time jobs</li> </ul>
Technological	Economic
<ul style="list-style-type: none"> <li>▪ <b>Genotyping:</b> rapid advancement changing how healthcare is delivered</li> <li>▪ <b>Data analytics and AI:</b> enabling personalized medicine, better prevention</li> <li>▪ <b>Robotics:</b> starting to be used in processing &amp; testing; some blood services investing heavily</li> <li>▪ <b>Logistics:</b> large investments in electric, self driving vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Brexit:</b> economic uncertainty, lowering economic growth expectations</li> <li>▪ <b>Exchange rates:</b> reduced value of £, risk of consumables/services costs go up</li> <li>▪ <b>Import duties:</b> changes following Brexit?</li> <li>▪ <b>Immigration:</b> tighter policies expected to reduce levels of immigration from EU</li> <li>▪ <b>Jobs:</b> high level of employment/workforce participation; potential shortage of some skills (e.g nurses, data scientists)</li> </ul>

## Internal trends – Summary (1/2)

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Patients	Donors
<ul style="list-style-type: none"> <li>▪ <b>Safety:</b> fewer transfusions, audits indicate still room for better appropriate use</li> <li>▪ <b>Use:</b> increased proportion in medical conditions</li> <li>▪ <b>Patients:</b> As people live longer, more demand for better matched components; population diversity leading to more demand of specific types e.g. Ro</li> <li>▪ <b>New blood components:</b> to continue to improve outcomes e.g., red cells + plasma (trauma), HLA matched red cells (transplants)</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Male/female:</b> skewed towards female donors; lost disproportionate number of male donors in last 5 years</li> <li>▪ <b>Deferrals growing:</b> Tighter HB testing; future iron mgmt practice could increase deferrals further</li> <li>▪ <b>Donations:</b> fewer 3&amp;4 times donors replaced with new donors donating less frequently; London continues to be one of the smallest regions</li> <li>▪ <b>Ro:</b> limited growth in donor base even if &gt;15k new Ro donors recruited in last 4 years; retention critical</li> </ul>
Hospitals	M&L
<ul style="list-style-type: none"> <li>▪ <b>Transfusion labs:</b> deskilling and challenges to recruit expected to continue and driving demand for universal components up. Consolidation of pathology networks (and possibly transfusion labs)</li> <li>▪ <b>Hospitals:</b> continued financial pressure despite NHS extra funding; health care demand outpacing resources; moving towards a 6-7 days service (more demand on Saturdays/Sunday)</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Service (OTIF):</b> timing performance improved to 99.5%; “in full” declining due to Ro orders not met; no reduction in SHUs (15); Logistics review planned 19-20</li> <li>▪ <b>Processing &amp; testing:</b> consolidation down to 3 and 2 sites, limited scope for more; limited automation</li> <li>▪ <b>Transport:</b> Deliveries broadly unchanged (fewer units per delivery); extended phenotypes (r2r2, HLA) and more weekend deliveries putting pressure on transport costs</li> </ul>

## Internal trends – Summary (2/2)

Sessions	Performance
<ul style="list-style-type: none"> <li>▪ <b>Capacity:</b> In line with strategy:               <ul style="list-style-type: none"> <li>✓ Donor centres: up c35% mainly from lower platelets collections</li> <li>✓ Mobile teams: down c10%, closure of panels and model shifted to 6 and 9 chairs.</li> </ul> </li> <li>▪ <b>Opening times:</b> no change; limited offer to donate weekends; slots between 6-8pm booked 4+ weeks in advance; Monday-Friday collection, leads to a mid week stock drop</li> <li>▪ <b>Appointments vs. walk-in:</b> moved to c100% appointments; one of the factors behind disproportionate loss of male donors</li> <li>▪ <b>Session throughput:</b> higher deferrals creating bottlenecks in screening and more overbooking</li> <li>▪ <b>Technology:</b> no change in last 5 years; plans to introduce Session Solution this year</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Red cells stock:</b> Occasions when stock for any blood group was &lt; 3 days rare but it became more recurrent in 2018 due to a number of factors</li> <li>▪ <b>Platelets stock:</b> tactical increases of weekend production helped to reduce hospitals notifications mid week; complexity (128 types) and short life shelf leads to substitutions and logistics costs</li> <li>▪ <b>Performance:</b> <ul style="list-style-type: none"> <li>✓ High levels of safety, satisfaction, availability and efficiency achieved between 2014-15 and 2016-2017</li> <li>✓ CSM demands and changes in accountabilities/structure in Blood Supply; distraction away from “business as usual”.</li> <li>✓ Direct operational costs are increasing and likely to require price increases</li> </ul> </li> </ul>

## Summary of key hypothesis Blood Strategy (1/2)

- **Securing the appropriate mix of donors/donations** is likely to become **more challenging** over next 5 years
  - ✓ Risk of higher deferrals particularly for female donors, people only becoming “more busy” in their day to day lives, 3&4 donors declining (older generation of donors)
  - ✓ Disproportionate demand/issues of universal groups but at the same time more demand for specific subtypes (eg. Ro, extended phenotypes)
  - ✓ Millennials are the future donors and have different preferences than prior generations for how to stay informed and communicate with others
- NHSBT needs to **rebalance male vs. female donor base**
  - ✓ Male donors less likely to be impacted by tightening of HB or iron management strategies
  - ✓ Male donors required to make plasma (demand for plasma blood components growing while red cells declining)
- Need to adapt **recruitment and retention strategies** to be more **targeted and inclusive**
  - ✓ Target donors that are more in need for patients (e.g. Ro, black donors, Group A male, O neg )
  - ✓ Respond to an increased ethnic diversity in the population
  - ✓ Build the donor base of the future (Millennials)

## Summary of key hypothesis Blood Strategy (2/2)

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- **Need to review session footprint and sessions operating model**
  - ✓ NHS demand is extending towards the weekend (albeit slowly)
  - ✓ Currently NHSBT has a very limited offer to donors on weekends
  - ✓ Increased urbanization: need to rethink footprint of sessions between rural and urban areas
  - ✓ Potential constraints in availability of some specific skills e.g., nurses.
  
- **Need to review NHSBT offer of blood components and services :**
  - ✓ NHSBT support to hospitals in light of deskilling and increase challenges to recruit in hospital transfusion labs
  - ✓ Testing strategy of donors and patients in light of advances in genotyping and technology
  - ✓ Sustainability of the levels of service in light of declining demand (eg. Number of SHUs, n. of deliveries)
  - ✓ Potential opportunities to increase offer
  
- **Need to shift to a more granular/segmented planning and management of individual blood components and donors.** This would involve:
  - ✓ Modernizing the currently mainly manual systems/tools to mobilize specific donors and ensure specific components go to specific orders/patients
  - ✓ Undertaking a fundamental review of the accountabilities/structure of the Blood supply
  - ✓ Making decisions on how technology and data analytics can help improve safety, service and efficiency across supply chain

## Mission, objective, pillars and behaviours

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**NHSBT Mission: "Save and Improve Lives"**

**Strategic Objective - Blood: To ensure all patients receive safe and appropriate blood components supplied at the right time, via an integrated and cost efficient supply chain.**



## 5 Key Strategic Questions for discussion with the ET/ Board



1. Plasma strategy in light with potential changes in SaBTO guidelines ?–**July**
2. IT – the way forward after CSM? – **TBD**
3. How will NHSBT achieve a sustainable donor base to meet future patients needs? - **Sept**
  - ✓ Recruitment and donor retention strategies to build the donor base of the future?
  - ✓ Geographic footprint?
  - ✓ How sessions would look like?
4. How should the offer/ level of service to hospitals change to meet future patients needs, changes in technology (e.g., genotyping) and financial pressures? – **November**
5. What should be the operating model of Blood Supply (including structure, accountabilities, people, processes, IT tools) - **November**
  - New Blood Strategy Draft Discussion – **Jan 2020**
  - New Blood Strategy Final - **March 2020**