

Blood Strategy - Update

March 2019

Caring Expert Quality

Objectives

- 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

NHS
Blood and Transplant

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

Internal trends – Summary (1/2)

NHS
Blood and Transplant

Patients	Donors
<ul style="list-style-type: none"> ▪ Safety: fewer transfusions, audits indicate still room for better appropriate use ▪ Use: increased proportion in medical conditions ▪ Patients: As people live longer, more demand for better matched components; population diversity leading to more demand of specific types e.g. Ro ▪ New blood components: to continue to improve outcomes e.g., red cells + plasma (trauma), HLA matched red cells (transplants) 	<ul style="list-style-type: none"> ▪ Male/female: skewed towards female donors; lost disproportionate number of male donors in last 5 years ▪ Deferrals growing: Tighter HB testing; future iron mgmt practice could increase deferrals further ▪ Donations: fewer 3&4 times donors replaced with new donors donating less frequently; London continues to be one of the smallest regions ▪ Ro: limited growth in donor base even if >15k new Ro donors recruited in last 4 years; retention critical
Hospitals	M&L
<ul style="list-style-type: none"> ▪ Transfusion labs: deskilling and challenges to recruit expected to continue and driving demand for universal components up. Consolidation of pathology networks (and possibly transfusion labs) ▪ Hospitals: continued financial pressure despite NHS extra funding; health care demand outpacing resources; moving towards a 6-7 days service (more demand on Saturdays/Sunday) 	<ul style="list-style-type: none"> ▪ Service (OTIF): 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 ▪ Processing & testing: consolidation down to 3 and 2 sites, limited scope for more; limited automation ▪ Transport: Deliveries broadly unchanged (fewer units per delivery); extended phenotypes (r2r2, HLA) and more weekend deliveries putting pressure on transport costs

Internal trends – Summary (2/2)

 **Blood and Transplant**

Sessions	Performance
<ul style="list-style-type: none"> ▪ Capacity: In line with strategy: <ul style="list-style-type: none"> ✓ Donor centres: up c35% mainly from lower platelets collections ✓ Mobile teams: down c10%, closure of panels and model shifted to 6 and 9 chairs. ▪ Opening times: 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 ▪ Appointments vs. walk-in: moved to c100% appointments; one of the factors behind disproportionate loss of male donors ▪ Session throughput: higher deferrals creating bottlenecks in screening and more overbooking ▪ Technology: no change in last 5 years; plans to introduce Session Solution this year 	<ul style="list-style-type: none"> ▪ Red cells stock: Occasions when stock for any blood group was < 3 days rare but it became more recurrent in 2018 due to a number of factors ▪ Platelets stock: 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 ▪ Performance: <ul style="list-style-type: none"> ✓ High levels of safety, satisfaction, availability and efficiency achieved between 2014-15 and 2016-2017 ✓ CSM demands and changes in accountabilities/structure in Blood Supply; distraction away from “business as usual”. ✓ Direct operational costs are increasing and likely to require price increases

Summary of key hypothesis Blood Strategy (1/2)

 **Blood and Transplant**

- **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)

NHS
Blood and Transplant

- **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

NHS
Blood and Transplant

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**