



Blood and Transplant

NHSBT Board Meeting in Public

28 March 2023

Chief Executive's Report

Status: Official

In my final report of the financial year I have taken the opportunity to reflect on some of the important achievements throughout the year as well as key headlines since the January Board meeting. When I reflect on the full year there are four things that really stand out for me:

- an unwavering dedication by our people to delivering the products and services that people need – evidenced through our delivery of critical products and services through industrial action, bad weather and staff and donor illness;
- a drive to innovate and develop new products, services and treatments – evidenced through our successful expansion of services and research outcomes;
- a recognition and commitment to improve what it's like to work here – evidenced by the steps we have taken in our Equality, Diversity and Inclusion work and modernising our operations; and
- strong collaboration with DHSC sponsor team and Ministers on key policies, including increasing UK self-sufficiency on Plasma, improving organ utilisation and blood supply resilience.

Our 2023/24 business and investment plans, presented at this Board for approval, build on our successes and detail the next steps we will take to deliver on our vision to ensure every patient gets the donation they need.

1. Innovation in Clinical Services

We have successfully expanded red cell exchange services for sickle cell disease via the Med Tech Funding Initiative. The initiative provides funds for Trusts to expand, or set up, red cell exchange provision, improving equity of access to this critical therapy for sickle cell patients. We have collaborated with Manchester, North Middlesex and UCL Trusts to provide treatments under the scheme and several other collaborations are under discussion.

Our Genomics Programme has made good progress this year. Our 3-year collaboration to jointly develop a full gene, allelic resolution HLA typing technique with Oxford Nanopore has the potential to transform HLA typing for transplantation. We also continue to work with ThermoFisher as part of the collaborative international Blood transfusion Genomics Consortium project and have started the genomics testing on the blood donors recruited to the STRIDES BioResource. The STRategies to Improve Donor ExperienceS (STRIDES) study aims to improve blood donor experiences by

implementing changes to the standard practice of blood donation and aims to reduce the numbers of donors fainting in future. We have completed recruitment of over 1.37M people, with approximately 83,000 of those also recruited to the STRIDES BioResource. A collaboration between NHSBT and the University of Cambridge, the study results should be available soon.

Some highlights from our research include:

- The public launch of our RESTORE world-first in man clinical study of red cells grown from stem cells. The trial tests whether these cells last longer in the circulation than standard donated blood because the cells are all brand new. There was significant national and international media interest in the study, and the number of new blood donors registering was twice normal levels during this media activity.
- We were awarded £4.9M funding from the Ministry of Defence to assess the feasibility of NHSBT producing a UK derived and manufactured dried plasma product, which can easily be reconstituted with water in situations where using frozen plasma is not possible. This is in response to concerns over the global sufficiency and resilience of supplies currently sourced outside the UK. This may also be useful in some civilian situations, to be assessed as part of the project.
- The successful end of a project to assess proof of concept for a medical device to render plasma blood group universal. Funding has been approved for 2 years to extend this work, to assess whether this could be used to also make platelets blood group universal, since the gains of doing so will be greater than plasma alone, and even greater if we can do both together.

More recently the Clinical Biotechnology Centre (CBC) was opened this month by Professor Dame Sue Hill, NHS England Chief Scientific Officer. This followed the completion of the project to build a new, expanded facility in Filton, on budget and with a delay of only 6 months during the pandemic. GMP grade plasmid manufacturing is now underway at the new facility and validation of gene therapy viral vector manufacturing has started. This represents an amazing step forward for UK cellular and gene therapies.

The Statistics team was once again asked to open the recent British Transplantation Society Congress with a series of talks based on their analyses of the UK organ transplant registry. This was very well received and later in the conference, as part of an awards ceremony, the team won an award for 'Exceptional Team,' for their support to NHSBT and wider clinical organ donation and transplantation colleagues, facilitating patient benefiting advances.

2. Organ and Tissue Donation and Transplantation

We are working hard with our partners including NHS England to reduce waiting times for a corneal transplant, as part of wider NHS recovery efforts. As of now, 272 patients have been waiting over 2 years and we are determined to reduce this backlog. NHS

ocular donation rates have increased in some recent weeks, but it has become clear that efforts to grow existing donation pathways will not be enough on their own to deliver the step change needed.

Corneas are in short supply internationally, but we know that some tissue bank partners have a surplus. So, in the short-term, we will work with regulators to improve the process for importing corneas from respected international colleagues. We will work with tissue banks and domestic partners to import and distribute additional corneas in the safest way. While this will not be enough to solve the UK's shortage, we know that every single cornea is the chance of sight for our patients.

We are therefore also working on a longer-term approach to resolve this problem, and we will share more details in the coming months. Working with NHS England our vision is a national commissioned service for deceased tissue donor referrals to NHSBT, including all of the information required for our specialist nurses to approach the potential donor's family. This will take some years to build, but it is right that we aim to solve the shortage as soon as we can.

In December we saw the highest number of proceeding organ donors since 2019 (142 donors), the number of patients meeting referral criteria for organ donation then dropped resulting in 123 donors proceeding in January and 112 in February. Consent / authorisation remains below expectations and consequently donation rates have been slightly behind target, but we have still been able to improve the lives of an increasing number of patients due to the focus on organ utilisation. We continue to increase the number of transplants faster than rates of donation and we forecast a 5% year-on-year increase in deceased donation transplants, from 2% more donors.

We were very pleased to see the Department of Health and Social Care publish the Organ Utilisation Group report on the 21st February 2023. The report provides recommendations on how to improve the equity and sustainability of the transplant service, placing an emphasis on empowering patients and supporting innovation. The DHSC is establishing an Implementation Steering Group for Organ Utilisation which will be discussed later in the meeting.

The other focus remains deceased organ donation consent, where we must also continue to improve rates towards their strategic potential. Our Specialist Nurses - Organ Donation continue to implement best practice to maximise consent across the UK. February's high rates of consent in Northern Ireland coincided with increased public awareness of organ donation as the Northern Ireland Department of Health and Social Care announced that their Deemed Consent legislation, known as Dáithí's law, will be implemented on June 1st, 2023. Heightened public promotion is anticipated to continue in the lead up to the law change which will be driven by Northern Ireland colleagues in the Department of Health and Public Health Agency. We will reflect on this as we develop our plans for promotion in the rest of the UK.

We launched our Be A Lifesaver campaign on the 20 February to encourage the public to act now to save lives by registering their decision to be an organ donor on the NHS Organ Donor Register. The six-week campaign is a regional pilot in the North-West of England and Wales which will help to inform future marketing activity. The campaign includes a media partnership with Global across radio and out of home advertising,

regional media activity and engagement with partners and stakeholders to amplify the campaign.

Our Research and Development team have been working with an organ transplantation surgeon to develop decellularised rectus sheath fascia, which will be used to close the wound following surgery. This development of an existing product is moving into testing and, if successful, may offer more patients the chance of healing thanks to its universal properties. This shows excellent collaboration across organs and tissues to meet the needs of patients, and the important role we have in making human tissue more accessible to all.

3. Delivering a Stable Blood Supply

This quarter we have provided high levels of service to hospitals and have maintained overall red cell stocks at target levels. I have been so proud to witness the collaboration across our supply chain to achieve such exceptional results in the face of unprecedented challenges including industrial action, bad weather and illness among our staff and donors. From extraordinary planning/forecasting to our operational agility and the dedication of our donors; these factors have combined to ensure our products get to patients who need them. I also want to pay special tribute to our incredible front-line staff. Despite the current industrial disputes over pay and conditions across the NHS, our teams have continued to show professionalism and dedication for the work they do.

At the time of writing NHS strike action has been paused as Government and trade unions reach a pay deal. If pay talks were to collapse, the risk of escalatory and coordinated strike action between trade unions is high and while we have safely navigated blood and platelet stocks through some strike dates so far, this has been largely due to the goodwill of our staff who have covered critical activity such as collection of short shelf-life platelet products. It will therefore be increasingly challenging to manage the impact of escalating action if trade union and staff goodwill is eroded through a breakdown in negotiations.

We have mitigated impact with some tactical interventions, including by continuing to recruit and train more colleagues and increasing appointment capacity in locations where we are well staffed. The Donor Experience team have been working tirelessly to balance the need for regular donors with known blood groups and recruit more new donors, both to boost the size and diversity of our whole blood donor base and to grow the A negative platelet base. A highlight has been a new campaign coinciding with World Cancer Day to promote the need for more platelet donors.

Of course, hospitals have also been regrettably impacted by many of the same challenges that have affected our supply chain. Consequently, hospital demand has been increasingly variable. For instance, in recent weeks red cell demand has swung between c3% above forecast to c8% below forecast. This level of demand variability (when coupled with our own peaks and troughs in blood collections) has made the need for additional supply chain resilience more important than ever. Therefore, in addition to our tactical supply mitigations above, we continue to work with DHSC to develop plans for more strategic interventions to improve resilience across our supply chain, both to aid with these short-term challenges and support us in the longer-term.

Reflecting on the year, the progress which has been made to enable the Testing Development Programme to move into a more stable position is a testament to the efforts of many colleagues across the organisation. We are on track to replace all our Prisms to Allinty machines by the end of March and are making progress on other business cases to maintain the testing infrastructure.

4. Working towards UK self-sufficiency in Plasma

Dialogue has recommenced on the fractionator procurement contract. It is anticipated that final bids will be received in late April 2023, and an award made in late May 2023. We continue to work closely in support of NHS England throughout this final selection to determine the successful bidder and contract award.

In March the European Medicines Agency hosted a multi-stakeholder workshop on shortages. A key focus at the meeting was the supply of immunoglobulin medicine. As more countries experience disruption to supply, there is an increased focus on improving immunoglobulin availability.

On 7th March a “Safety profile of plasma for fractionation donated in the United Kingdom, with respect to variant Creutzfeldt-Jacob disease” was published. This scientific review concluded that UK plasma is safe for fractionation.

We have worked closely with stakeholders to secure a risk assessment for Albumin. The Commission on Human Medicine (CHM) have completed their review and a formal announcement is pending.

Blood Supply and Plasma for Medicines collaborated during the course of the year to transform Manufacturing and Hospital Services to enable processing of recovered plasma for medicines and diagnostics at scale. This represents a significant change management achievement.

5. Reducing Health Inequalities related to Diversity of Donor Base

Our donor base of people with the Ro blood type continues to grow as we prioritise engagement and appointments to new donors of Black heritage. The donor base is now over 26,000 contributing to over 44,000 validated Ro units over the last 12 months. 33% of the Ro donor base is now of Black heritage, of which over 3,000 are new donors.

To reduce the supply risk of O negative blood, for both Ro substitutions and O negative patients, we are increasing the mix of new O negative donors by typing enrolees before they book for the first time. Since launching our home typing pilot at the end of 2022, we have sent over 30,000 kits to enrolees. Around 25% of donors complete and log their results online. To date over 1,000 new O negative donors have used this new experience and logged their test results. While there is opportunity to improve the effectiveness, these results demonstrate the feasibility of identifying an extra 5,000 O negative donors every year.

We have also launched our off-session sampling for prospective stem cell donors. Over 100,000 invitation emails for cheek swab testing have been sent to registered donors, tests will be returned to and tested by our H&I lab in Colindale and logged with the Stem Cell register. The new testing pathway eliminates the current dependency for prospective stem cell donors to successfully give blood. This allows us to increase the number of Stem Cell registrations and prioritise those we know are of minority or mixed ethnicity to increase the diversity.

6. Improvements in People and Culture

2022 has been a significant year for Recruitment, with work being done to revamp our approach, during a year of significant vacancy volumes. To give an indication of volume in Blood Donation, between July to mid-December, we were able to recruit in and train as many Donor Carer colleagues as we normally would expect to deliver in a full year. Our work to date includes the launch of a new eRecruitment system in September 2022, which enables us to deploy a more dynamic attraction strategy. Alongside this we rolled out a new Employee Value Proposition, branded as “We’re looking for All Types of people.” This started in October to support the Blood Donation recruitment campaign and prompted considerable interest from our target applicants. Using new EVP messaging and careful targeting, the online campaign delivered 536,701 impressions, meaning our advert appeared in front of over half a million relevant people and alerted them directly to our opportunities.

Health, Safety and Wellbeing is at the forefront of all that we do and over the last year we have implemented a new Occupational Health contract; made a new referral portal access available to all managers; put in a new physiotherapy help line for all staff; and improved our needlestick management. April 2023 sees the end of the 5-year plan for HS&W, which is on target to deliver a year on year 5% reduction in harm incidents.

In September 2022 the NHSBT Executive Team approved a people transformation strategy which recognises the need to invest in NHSBT Managers and Leaders. Since then, we have embarked on a process of building and rolling out a suite of development products and services that will enable Managers and Leaders to thrive in their roles and create high performing, intentionally inclusive teams. This includes ensuring learning is more accessible to managers as well as creating a culture where colleagues see management and leadership as a profession. A full update on our intentionally inclusive and anti-racism programme is on the agenda.

Finally, we had another fabulous year celebrating the diversity of our organisation. A wide range of events and conferences were hosted by our Staff Networks and D+I team, ranging from webinars on Psychological Safety, through to specific sessions to honour Black History Month; Disability Awareness Month; LGBT+ month; International Women’s Day; and Neurodiversity week.

7. Digital, Data and Technology Services

Significant improvements in Modernising our Operations have been achieved through the delivery of a number of initiatives, including the deployment of our first Blood Technology Modernisation releases, the move of our secondary data centre,

substantial improvements in our cyber security position and the migration of our Oracle Financials system on to the Oracle Cloud Infrastructure.

Technology has played a key role in transformation initiatives across NHSBT targeted at Growing and Diversifying our Donor base, Driving Innovation and scaling new services through Collaboration. We have delivered our first digital service for Plasma donors, commenced deployment of Automatics Results Transfer for NHSBT's Cellular and Molecular Therapies (CMT) laboratories, and completed the build of our new data platform – which will form a pivotal part of our Data and Insight Transformation Programme in FY23/24.

Our people have continued to develop and team members have been celebrating gaining qualifications and accreditations to grow their careers. The creation of a Leadership Development Community is helping to foster relationships for those staff that have the important job of managing people. The aim of the community is to support each other and provide career development and growth.

8. Finance

The Annual Report and Accounts for the financial year 2021/22 has now been presented to Parliament and was released for publication on 21st February 2023.

After 11 months into this financial year the overall position continues to track ahead of plan, with operational over-spends predominantly in Blood Supply off-set by reduced transformation. Latest information indicates we will finish the year slightly better than budget, which is a small improvement from the last forecast reported from quarter 3 and provides additional Blood cash reserves of c£3m for next financial year.

The 2023/24 budget will be presented for approval at the March Board and has currently been set within the pricing and funding envelopes agreed by the National Commissioning Group in February. There are, however, ongoing discussions with both DHSC / NHSE, which could potentially result in a higher level of funding being made available next year, albeit we would expect these to be matched to costs, so no change to the overall surplus/(deficit) position. Expenditure budgets have been reviewed and assured by Directors, with potential known risks mitigated within plans and ring-fenced contingencies.

Author: Wendy Clark, Interim Chief Executive Officer

Date: March 2023