

Transformation Priorities in 2020/21

NHSBT Board, July 2020

Status: Official

1. Purpose of the paper

- 1.1. The purpose of this paper is to update the Board on the impact of COVID-19 on our transformation priorities and our specific portfolio of investments in 2020/21. The paper is focused on those activities funded by blood prices as OTDT have separate funding streams for their investments.

2. Action Requested

- 2.1. The Board is asked to discuss the emerging priorities for our transformation portfolio and plans for allocating the funding and managing resources this year.

3. Summary

- 3.1. As we emerge from the acute phase of COVID-19, we have taken stock of our transformation portfolio for 2020/21. Convalescent plasma has emerged as a significant new priority which we must find a way to deliver at pace. Whilst we have received additional funding, we have largely drawn on internal resources to deliver this programme to date. This, together with additional demands on the organisation from COVID-19, has required us to pause or slow some of our original transformation plans for this year. We have therefore started to refresh our portfolio in order to determine how much we can resource and deliver, whilst maintaining critical services.

4. Context

- 4.1. In January we set out a strategic ambition to save and improve even more lives through improvements in transfusion, transplantation, and advanced therapies and diagnostics. We identified some immediate transformation priorities to deliver on this ambition, including: investing in our digital and IT infrastructure and capabilities; improving the diversity and experience of our donors; improving the diversity and inclusion of our workforce; and, restructuring our leadership structures to deliver.
- 4.2. Our transformation budget for 2020/21 was allocated to support a range of projects in these areas, alongside investment to maintain critical activities, safety and regulatory compliance. This made up an ambitious pre-COVID-19 portfolio of estates, IT, procurement and organisational change projects.
- 4.3. The pandemic has inevitably impacted our original plans. In March, we took the decision to pause or slow down some of our projects in order to manage the emergency response. We have structured our response around four key priorities:
 - Safety and wellbeing of staff and donors;
 - Continuity of supply;
 - Support to the wider national response; and,
 - Building our donor base of the future.

- 4.4. Despite the scale of the challenge, NHSBT has performed well against all four priorities. Looking forward, however, we are facing the challenge of not only having to manage the ongoing situation with COVID-19, but also scaling up our convalescent plasma programme to four times the size (in monetary terms) of our original transformation portfolio.
- 4.5. It is in this context that we have reviewed our transformation portfolio for this year – considering not just our pre- and post-COVID-19 transformation priorities, but also how we resource ourselves and organise to deliver.

5. Refreshing our Transformation Priorities

UK Plasma

- 5.1. At the start of the year, plasma did not feature in our immediate plans or transformation portfolio. All that has changed, however, in the space of the last few months. Convalescent plasma has now eclipsed the size of our original transformation portfolio and has accelerated the development of national plasmapheresis infrastructure that, if required, could be repurposed for plasma for fractionation.
 - **Convalescent plasma:** the first phase of work involved using existing infrastructure in the blood supply chain from reaching new donors and, establishing new collections, through to testing, storage and release to hospitals. This was successfully stood-up with the first collections happening by week six. DHSC has just confirmed £80m of additional funding to extend the programme for six months and at an increased collection capacity. Delivering this next phase will require significant efforts to scale up, including on accelerating changes in donor management to enable better targeting of donors and building capacity for increased scale of collections. We are looking at new ways to build capacity (such as bringing in more external resource) and reviewing the delivery model to ensure we can deliver at pace, sustainably (such as reviewing options for shaping the roles and training). (See separate agenda item for more detail)

Plasma for fractionation: The Medicines and Healthcare Regulatory Agency (MHRA) is reviewing the safety of UK plasma as the starting material for the production of plasma derived medicinal products. The decision is due later in 2020. NHSBT is in a strong position to make a contribution to support the supply of plasma for the production of these lifesaving medicines. We are taking action now to start mobilizing to freeze currently discarded units of plasma from existing collection operations of red cells and apheresis platelets, investing £400k this year for estates work and additional freezer capacity. Starting preparations now enables a small project team, drawing on the relevant subject matter experts across the organisation, to build in more detailed design and implementation, to be ready to make the most of our existing plasma collection as soon as the MRHA makes a recommendation. The project team is resourced with part-time internal experts supported by an external QA lead (already recruited) and a dedicated project manager (in the process of recruiting). This proposal assumes NHSBT is still collecting c8,000 units of convalescent plasma/week. If decision is to go above those levels, the timescales of the stock build of discarded plasma would need to be reviewed.

2020/21 Transformation Projects

- 5.2. As we move out of this acute phase of the COVID-19 response, we are reviewing how and what to restart in the projects that we paused. At the start of the year £17.6m was allocated to our 2020/21 transformation budget. The Q1 forecast indicates that

transformation spending in 2020/21 has potentially grown to around £19m as re-planning activity has highlighted additional costs to support previously planned projects. We are continuing to revise projections as programme teams consider the impact of supporting convalescent plasma for an extended period, particularly in cross-cutting areas such as ICT. Additionally, some activity is moving into 2021/22 potentially driving further pressure on next year's already large transformation budget. Taken together with other planning assumptions, a large price increase (5-10%) would be required in 2021/22 to fund baseline costs and project requirements. This is lower than projections in March when a price increase in excess of 10% was anticipated (before mitigation). A revised approach to commissioning/pricing in 2021/22 is being considered, however, and this will be discussed further at the Board.

- 5.3. All previously paused projects will have restarted in some form by September, including the Barnsley project which will home relocating staff from October. A number of other projects are working around the convalescent plasma activity, such as session solution, where the new IT solution will be piloted later this year to ensure delivery of expected benefits, before a full rollout in the next financial year to alleviate impact on blood collection teams. More detail on the status of these projects is included in the table below, and we will keep this under review.
- 5.4. In addition to the projects within the transformation budget, we have a number of significant contracts to tender this year to support ongoing delivery of safe and high-quality services (e.g. international blood packs, testing equipment). The majority of these initiatives were paused at the start of the COVID-19 response, as key management resources were switched to focus on convalescent plasma. The programme of work is now being rescoped for a revised plan to deliver.

Organisational Transformation

- 5.5. We paused work on our operating model and restructure of our senior leadership structures in March because of COVID-19.
- 5.6. The ongoing work in Clinical Services and Blood Supply is being reviewed and options are currently being considered with a view to agreeing a restart plan before the end of this month. Plans are underway for the remaining directorates to develop the next phase of their operating models later this summer.
- 5.7. We are also taking forward work to implement 'smarter working' across NHSBT. COVID-19 accelerated a number of changes in the way we work. We have significantly reduced travel, both between sites and commuting, we are using technology differently to enable remote working, and using our estate differently. This has implications for our ICT, HR, estates, quality and facilities. We will be taking steps to learn from the changes we've made and build a new vision for ongoing future smarter working.

Longer Term Transformation Roadmap

- 5.8. Alongside delivery on the projects set out above, many of which are part of multi-year programmes, we will continue to develop the longer-term transformation roadmap, which will profile ongoing delivery in future years against the following priorities.
- 5.9. **Culture and diversity of our workforce:** In addition to taking immediate action in response to the organisational diagnostic report at Colindale, we have started to build a robust programme for the future, which will be led by the new Chief Diversity and Inclusion Officer. We will create a shared vision, agree a roadmap of targeted actions, and ensure robust measurement and monitoring of progress, using data such as from our people surveys, Workforce Race Equality Standard (WRES) and Stonewall

Workplace Equality Index Feedback. We will establish new and inclusive ways of working to implement the programme. Our immediate priorities are to:

- Ensure that leaders and managers are both supported and held to account creating a Just Culture, ensuring dignity at work and consciously including diversity in every aspect of what we do;
- Improve the informal and formal grievance process so people feel safe to speak up and confident that appropriate action will be taken;
- Revamp our recruitment and promotion processes to remove bias and discrimination, and in in talent development.

5.10. **Agility and robustness of our IT:** there are four key multi-year programmes driving the transformation of our IT and digital capabilities. Collectively these will build more resilience and robust infrastructure, as well as new capabilities to enable digitally delivered transformation across NHSBT. We have undertaken a restructure of IT into product centres as a key enabler to delivering change.

- **Data centre upgrade and central infrastructure programme** (e.g. Pulse) to stabilise and secure our blood IT. This will ensure that system performance and stability does not impact our ability to deliver blood products, strengthen our internal management of mission critical processes, and build in agility to enable changes in Pulse to be delivered in weeks, not years. See Annex A for status update.
- Scaling up our **cyber security** capabilities by initiating a 3-year programme to deliver improvements to process, policy development and technology.
- Upgrades to our internal digital infrastructure through the **Local Infrastructure Programme** (e.g. site server replacement and Windows 10 upgrade).
- Delivering **new business capabilities** that will enable transformation of our donor experience and improve management of blood supply. The blood and donor digital transformation portfolio has been established to build capacity and drive improvements in the provision of digital change. See Annex B for status update.

5.11. **Reimagining the Donor experience:** there are two overarching aims for the donor experience portfolio: (i) closing the Ro supply-demand gap; (ii) improving the general donor experience. The new digital capabilities described above are an important enabler, alongside improving our communication with donors, improving our understanding of the donors, and creating an experience that works. Priority actions where work is underway or planned to start this year include:

- **Closing the Ro supply-demand gap:** bringing in more target donors, for example by creating new community-based roles for donor recruitment from black, Asian and minority ethnic backgrounds, and using other existing government and employer channels to reach potential donors; revisiting the guidelines to reduce in-session deferrals; and, improving engagement and research with our target donors to improve understanding.
- **Improving general donor experience:** segment all donors by archetype and tailor communications; open an additional fixed donor centre in London; create an end-to-end view of donor communications; and, widen the definition of what it means to 'donate' (e.g. through volunteering or financial contributions).

5.12. **Developing new strategies for clinical services,** including forward integration with the NHS, diagnostics and testing, and therapeutics and stem cells.

- **Stem cells and advanced cellular therapies** are among the fastest growing areas in healthcare. NHSBT has an opportunity to build on our existing expertise

and bring together partners and stakeholders to develop a future strategy that delivers a truly system wide approach. The UK Stem Cell Strategic Forum has been commissioned to develop this, with NHSBT playing a key role.

- Reviewing next steps on **Transfusion 2024** and opportunities for greater integration with hospitals.
- We are reviewing the procurement scope of the current programme of **testing** equipment (including Nat Testing, Micro Serology, Bacterial Screening) to ensure we do not compromise future potential opportunities from a longer-term strategy.

5.13. **The Post-2020 Transplant Strategy** is being refreshed in light of recent changes throughout COVID-19 and ongoing stakeholder engagement. We are already taking steps to embed rapid improvements to key pathways to maximise the recovery of UK donation and transplantation services from changes made as part of the COVID-19 response. We are working closely with NHS England and Improvement, as well as providers and clinical networks to take this work forward. (see separate agenda item)

6. Transformation Spending and Resourcing 2020/21

6.1. Taking all this into account, our latest breakdown of the revised Q1 forecast for our 2020/21 transformation budget, BAU resource supporting transformation, and additional funding from DHSC is as follows:

	Status	Funding (£m)
Agility and robustness of our IT <ul style="list-style-type: none"> • Blood and Donor Digital Transformation • Data Centre and central infrastructure • Other IT projects (e.g. video-conferencing, telephony upgrade) 	Many of these projects continued throughout our COVID-19 response. The portfolios have been prioritised to ensure that essential work is undertaken to enable greater transformation in later years.	10.2*
Blood Supply <ul style="list-style-type: none"> • Logistics Review Programme (LRP) • Session Solution • First in Man Red Cells • Gamma Irradiator Disposal • New donor centres 	Work on the LRP was paused for the national rota review. This is now being replanned. The piloting and implementation of session solution is being rescope alongside blood donation teams to manage delivery alongside scaling of convalescent plasma. Plans for new donor centres are being reviewed alongside planning for the next phase of convalescent plasma.	3.8
Estates <ul style="list-style-type: none"> • Barnsley • Colindale 	The move to Barnsley was paused due to COVID-19, but a revised schedule is in place with a planned move into the building from October. Colindale refurbishments are being brought forward to start in this financial year and continue during 2021/22.	2.7
Other including: <ul style="list-style-type: none"> • Medical devices regulation change • EU exit response • Restructuring • Plasma for fractionation 	Implementation of the medical devices regulation changes have been rephased as a result of an extension to the implementation date. Additional funding has been set aside for plasma for fractionation, for initial stock build.	3.3
NHSBT Transformation Fund TOTAL		20.0

Diversity and Inclusion	Funding within baseline budgets being used to build capacity for developing our diversity and inclusion programme.	0.5
Donor Experience	Reprioritisation of funding in year to implement recommendations to reimagine donor experience	0.5
Manchester Phase 1	Replacement of a damaged freezer. Phase 2 will focus on optimisation of staffing and processes within the Manchester operation and is due to start in 2021/22.	0.5
NHSBT baseline budgets funding on transformation priorities TOTAL		1.5
Convalescent Plasma	DHSC funding for phase 1	17.9
	DHSC funding for phase 2	80.0
NHSBT TOTAL TRANSFORMATION FUNDING 2020/21		118.4

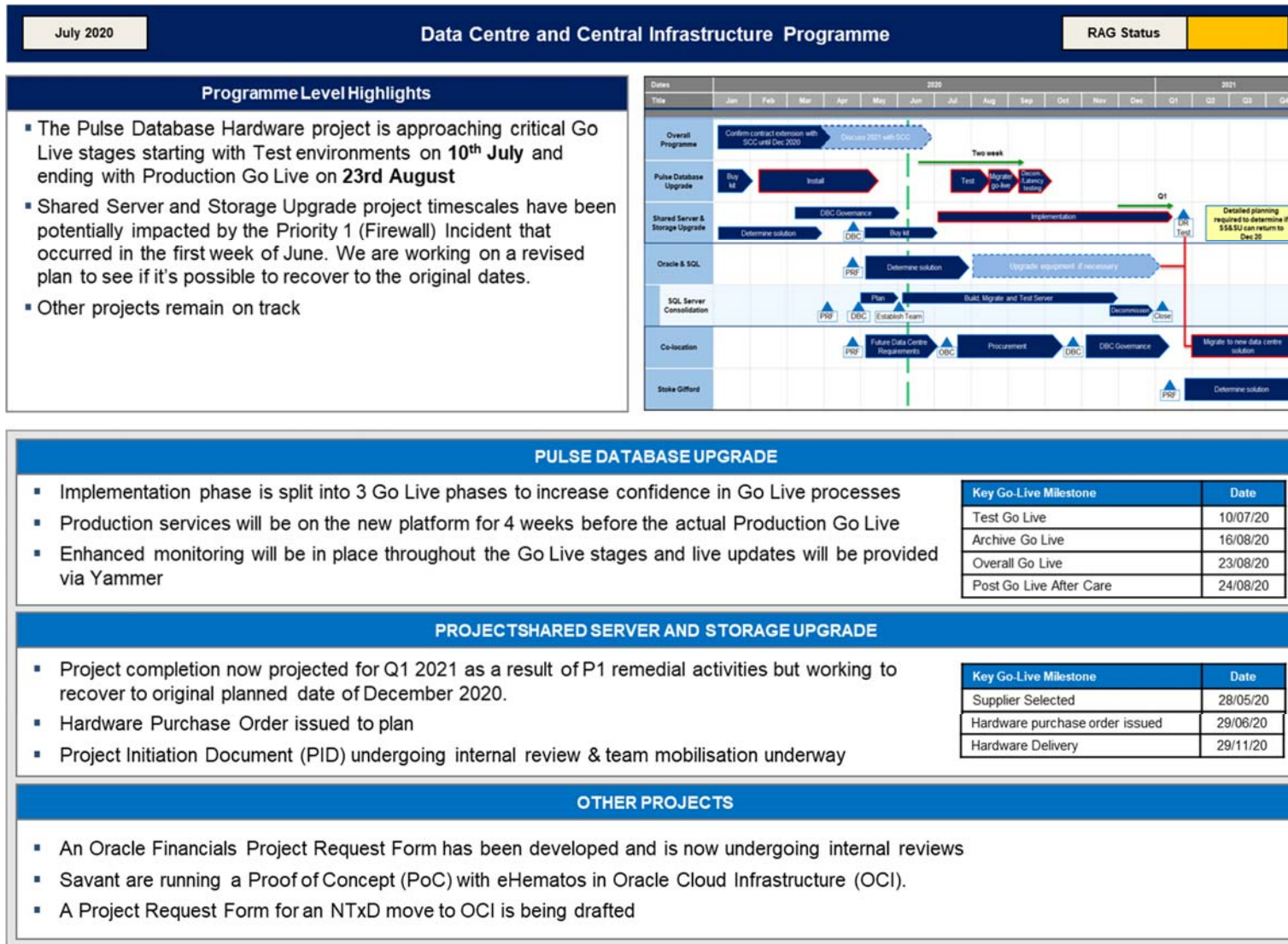
**not including capital funding*

- 6.2. We are working across directorates to ensure we create capacity for delivering on core projects to maintain the safety and quality of current operations, lay the foundations for ongoing transformation across the whole portfolio, while creating and freeing up capacity and capability for the additional work on convalescent plasma. In order to ensure we can deliver on the commitments made this year we have identified where there are potential pressures for particular teams and subject matter experts (SMEs).
- 6.3. We have identified ICT, workforce, blood supply, quality assurance, and project and programme management resources as potential areas of constraint. We are bringing in additional capacity and expertise, including through extended use of existing partner contracts. For specific expertise in blood supply, workforce and quality assurance, we are using our networks to bring in fixed term resource in the short term, alongside commencing recruitment to build capacity and resilience for delivery against the multi-year programmes.
- 6.4. We are seeking to test new ideas in our workforce delivery models for new programmes as they develop, taking on board learning from changes made during our COVID-19 response such as online learning. This could help us to be more agile in our future delivery models for new areas such as convalescent plasma.

7. Next steps and Planning Beyond 2020/21

- 7.1. In parallel to restarting the transformation portfolio this year, we will be bringing together the longer-term strategy across whole NHSBT portfolio and develop a multi-year roadmap to deliver our transformation ambitions. This will bring together integrated planning across the organisation to align expertise and opportunities, including integrating our R&D and business priorities, and how we work as a system leader in our areas of expertise.
- 7.2. We will keep the transformation portfolio under review in light of the extension of convalescent plasma to manage resources and maintain sight of progress on key priorities. We will remain agile in rephrasing or rescoping work to ensure we deliver on key commitments.

Annex A: Data Centre and Central Infrastructure Programme



Annex B: Blood and Donor Digital Transformation Portfolio

In January the board approved the Blood Technology Strategy that set out to stabilise and secure blood IT and build new business capabilities. The approach was to reduce risk incrementally whilst continuing to deliver operational improvements.



Mobilisation and governance

Since January we have moved into the delivery phase and mobilised a new portfolio named Blood and Donor Digital Transformation. Portfolio level governance has been established with Wendy Clark, CDIO as the SRO and board members Greg Methven, David Rose, Katie Robinson, Ian Bateman, Rob Bradburn and David Roberts. The portfolio board has met twice and has agreed prioritisation principles and approved the mobilisation and funding of specific pieces of work.

Delivery progress

Delivery has progressed across both areas.

Reduce Technology Risk

- Pulse database due to cut over to new hardware by end of August
- Pulse shared server and storage procurement has been completed and hardware ordered
- Three proof of concepts to test converting Pulse to C# completed and the final proof of concept is in-flight
- Initiated the move of Clientele (out of support) to CRM

Deliver Operational Improvements

- New Donor Registration Capability has been built and is in AB testing
- Improvements made to donor portal to enable it to manage higher volumes of interest from potential donors
- A new Donor Experience product centre went live at the end of June and a second development team has been procured from Hippo Digital to double our capacity to build new capabilities
- A framework contract has been signed with FutureGov to provide additional capacity for service design, user research and business analysis capabilities

- The Donor Experience Directorate have prioritised the first set of digital capabilities that they would like progressed and these are being translated into a backlog for the product centre
- The Outline Business Case for Pulse life cycle acceleration has been approved and 3-months of work that includes proving test automation has commenced

Impact of COVID-19

We have experienced some delays due to impacts from Covid-19 (access to business resources, availability of management time and other new competing priorities like convalescent plasma), despite that we are now firmly on the modernisation and transformation journey. In August we will complete our first portfolio level plan which will form the baseline against which we measure progress moving forwards.

Finance

There are no finance issues currently, the first year of the portfolio will be delivered within the £5m allocated budget.

Risks

The top risks that we are currently facing are:

Risk	Mitigation
Confidence in the portfolio is eroded because we are unable to provide the NHSBT board with assurance that investment objectives are being met and work is being controlled and delivered effectively.	Establish and operate an engaged portfolio board that is driving the work and surfacing risk early. Create a central portfolio team that will mobilise, plan and track a portfolio of Agile and incremental digital transformation of the end to end blood demand-supply chain. Provide regular oversight and updates to the board with evidence that benefit is being continuously released.
Benefits are not realised and digital transformation is not achieved because work is not defined or prioritised effectively.	Define a vision, benefits and KPIs that will enable us to track progress. Create a central portfolio team that works closely with Donor Experience and Blood directorates to ensure that the highest value business and architectural changes are prioritised and scheduled.
Modernisation of the Pulse application takes longer than anticipated because we have to prioritise other high value initiatives like Convalescent Plasma and Plasma for Fractionation.	Implement a robust prioritisation process that requires executive level approval if priorities affecting the modernisation of Pulse are impacted.