

**NHSBT Board**

**Blood Tech Modernisation Programme – Status Update**

2<sup>nd</sup> December 2021

**Status: Official**

**1. Summary and Purpose of Paper**

The Blood Technology Modernisation (BTM) programme has been established to deliver the stabilisation and security of blood IT. This paper outlines the progress that has been made in reducing the risk to blood IT and provides an update on progress for the remaining activity.

Delivery of the first modernised code is progressing well, however there are challenges with progress against what was laid out in year 1 Full Business Case. Increasing complexity, higher resource costs and increasing demand for additional changes are placing pressure on the overall programme cost and duration, as set out in the Strategic Outline Case.

The programme is still in it's first year and more time is needed to explore opportunities to bring the programme back on track and mature the delivery and estimating capability. At this stage we are confident that the approach we are taking is the right one and that we should remain focussed on shipping the first release of new code later this financial year. Post this release we will have real data on which to base future plans.

The Board is asked to note that:

- The risk to overall blood IT has reduced significantly
- Year one delivery is well underway but is impacted by an 8-week delay
- Overall programme cost and duration is under pressure

**2. Background**

Pulse is the critical system that powers blood supply. Two years ago Pulse was a significant risk to the organisation due to the ageing nature of the technology that it was built on. Over the last 18 months significant progress has been made in reducing that risk.

<b>Pulse Technology</b>	<b>Status at January 2020</b>	<b>Status NOW</b>
Database Infrastructure (Itanium)		Replaced June 2020
Compute & Storage (Cisco Hyperflex)		Replaced August 2021
Database (Mimer)		Upgraded Q1 2020*
Application (Delphi)		In progress

\*Database is still on Mimer which is a niche product that currently limits cloud first strategy. Options will be developed as part of the programme.

The BTM programme has been approved as a 5-year programme to deliver the stabilisation and security of blood IT set out in the Blood Technology Strategy. The programme has established a new blood technology product centre to:

1. Grow existing and establish new capabilities to deliver releases in months not years
2. Convert the application to a supported language (C#)
3. Re-platform the database from Mimer to a mainstream database
4. Enable access to real-time data for improved decision making (PowerBI)
5. Improve the integrations between Pulse and other applications (Donor Portal, OBOS, SO99, etc.)

The programme is now focussed on building the capability within the product centre and converting the application to a supported language.

### 3. Detail of report

#### **The first release of new code is scheduled for mid-March**

The first modernised code moved into user acceptance testing on the 19<sup>th</sup> November, it is now scheduled to go live 20<sup>th</sup> March, 2021, which is 8 weeks later than initially planned. Achieving this milestone lowers the risk of further disruption, but the release date could still change if a major issue is found such as an issue with staff unavailability or the business cannot support an outage on go-live dates.

The delay to this release will have a knock-on impact to the next release, pushing it out of 21/22 reporting year and into Q1 22/23.

#### **Risk to overall Programme delivery is increasing**

Development of the 2022/23 FBC is well underway. There are three issues that are putting the Programme under pressure:

- **An increase in code complexity and delivery effort** – At last month's board we presented the challenge of the increased effort for the delivery of the code modernisation. The Strategic Outline Case (SOC) estimated 8.5k development days to deliver the full code conversion. The reassessment of this estimate based on the first delivery of code suggested this is more likely to take 13.5k development days. We have identified levers to bring this number down to a target of 9.7k, and four discoveries have been setup to explore them in more detail. Planning for 22/23 FBC will be based on a cautious 11.6k development days.
- **Failure to attract permanent staff to replace externals** - The recruitment of some roles has been much more difficult than anticipated. This is driven by market forces and our lack of competitiveness in the current market. This means we are moving into next year much more reliant on external partner resources than planned. This risk has been upgraded to Very High and are we are assessing options to increase internal capability.
- **Increasing demand for Pulse changes from strategic initiatives** as we look to next year, we can see a marked increase in additional demand for both Pulse change and reliance on resources allocated to BTM. There is a risk that we will be unable to ramp up to meet this demand, resulting in delays to other programmes or

the BTM programme. Continued support will be required from Executive colleagues to schedule work in a way that minimises the impact on this strategic programme.

We are working through the impact of these risks and for the FY22/23 FBC but it is already clear that these risks will increase costs and require use of the full in-year contingency.

Whilst there are challenges to the duration and cost of the programme we also recognise we are still in year 1 and more time is needed to explore opportunities to bring the programme back on track and mature the delivery and estimating capability. We plan to revisit this in Q2 22/23 when more modernised code has been delivered and we have completed a set of discoveries looking at options to reduce overall effort.

### **Programme finances and assurance**

The Gate 0 Programme Assurance review has been re-scheduled to Jan 22 due to availability of reviewers.

2020/21 Programme Finances for year 1 remain on track to deliver within budget

### **Sign off**

Next Board report January 2022. Next significant milestone: March 2022 release which delivers Core Donor Management (26.1) and Discretionary Testing and Panel Management (27.1).

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