NHSBT Board Meeting
March 2019

ODT Hub Programme – 2019/20 Proposal

1.   Status: Official

2.   Executive Summary

2.1   The ODT Hub Programme was initiated in 2015 to meet future challenges and provide a new ODT Hub service for the UK. This remains essential if we are to support increasing numbers of referrals, donations, retrievals and transplants safely and efficiently.

2.2   The Board endorsed the vision for an incremental, multi-year ODT Hub Programme in September 2015. Since January 2016, we have made changes including: a digital donor assessment process, organ offering schemes on new platforms, centralising co-ordination and organ offering and opening the ODT Hub.

2.3   During 2018/19, benefits have continued to be delivered, with an expected under-spend of £0.2m that will be used to support 2019/20 developments in ODT.

2.4   The Programme has been impacted by the closure of the Core Systems Modernisation programme and the urgent introduction of the work required to integrate the Organ Donor Register and the NHS App. In both cases, key resources have become unavailable to the Programme.

2.5   Additionally, ICT has struggled to find and keep resources because of the market in which NHSBT competes. As a result, the Programme has continued to secure higher cost resources. Action must also be taken to reduce the risk that support within NHSBT for IT systems is inadequate at the end of the Programme.

2.6   We will respond by reducing the Programme's scope for 2019/20 and focus on the highest clinical priorities, some of which have emerged since 2015. We will also undertake a Programme review, which will examine solutions to deliver the full scope. This will be presented within 6 months.

2.7   Compared to the vision set out in 2015, this means that we will pause further development of digital donor data sharing (HTA A form) and Transplant List until lower cost solutions can be found.

2.8   In 2019/20, the Programme will continue to deliver valuable changes within NHSBT and for our partners. These will include: releasing the Kidney and Pancreas organ offering scheme changes developed in 2018/19 and further

tools to enable the ODT Hub to improve the process of making and receiving organ offers.

2.9   The original estimates of cost made in 2015 were updated in 2017, once IT platforms and delivery partners had been selected as part of the NHSBT Strategic IT Framework. Those approaches are now under review across NHSBT. We will make an updated assessment of whole Programme costs during 2019.

2.10   The non-recurrent cost of 2019/20 activities is estimated at £1.2m (including £0.2m contingency), plus a further £0.7m recurrent cost. There are key dependencies on internal ICT colleagues and the enabling ODT "Release Train".

2.11   This proposal enables us to take another significant step towards an integrated service that supports world class organ donation and transplantation; with a 24/7 operational ODT Hub at its core and renewed technology as its foundation.

3.   Action Requested

- **To continue transformational activities from April 2019 and deliver benefits during 2019/20, the Board is asked to APPROVE non-recurrent expenditure of £1.2m (excluding VAT and including £0.2m contingency) and recurrent expenditure of £0.7m.**

- **The Board is also asked to note the related expenditure of £0.6m for the enabling ODT Release Train and £0.4m for DonorPath enhancements.**

4.   Programme Background

4.1   The ODT Hub Programme was initiated in 2015 to allow the organisation to meet the challenges of the Taking Organ Transplantation to 2020 strategy. The vision is for an ODT Hub, serving as the 24-hour operations centre for all organ donation and transplantation activity happening in the United Kingdom.

4.2   The Board endorsed the vision for an incremental, multi-year ODT Hub Programme in September 2015 and has approved individual business cases since. Delivery began in January 2016.

4.3   The ODT Hub has also continued its programme of incremental improvements including: clinical leadership; Lean-based improvements to processes and tactical IT and operating changes. These are all consistent with the overall vision.

4.4   Delivery remains contingent on continued development of corporate IT systems and other resources (notably within ICT) being available. A key dependency is the funding of the ODT "Release Train" in 2019/20. This is how we organise colleagues across ODT, ICT and other directorates to manage and co-ordinate IT changes. Together, we use "Agile" methods to

plan and deliver changes so that they are safe, efficient and meet quality standards.

4.5 Since its inception, the ODT Hub Programme has been supported by the 2014 ICT Strategic Framework and related resource model. We have found that some ICT resources are not in place, or capability is less mature than expected.

4.6 During 2018/19 – and after the ending of the Core Systems Modernisation programme in particular – we encountered challenges related to the live release of products.

5. Delivery in 2018/19

5.1 The Board approved the ODT Hub Programme 2018/19 Business Case in March 2018. This governed the period April 2018 to March 2019.

5.2 In July 2018, the delivery of a digital donor data sharing form was de-scoped from delivery in 2018/19, due to the impact of the instruction to integrate the NHS App and Organ Donor Register. The intention was to deliver "HTA A" work in 2019/20 instead.

5.3 The Programme has delivered remaining 2018/19 Business Case benefits as follows:

5.4 The milestone of the digital donor assessment (iPad / DonorPath based) module was delivered in November 2018. This has delivered significant changes including a single national way for nursing colleagues to assess potential deceased organ donors.

5.5 A digital post-transplant outcome record ("HTA B") was released for use in December 2018. This CRM-based product will have over 500 mainly external users at its fullest extent and provides a simple, time-saving way of communicating outcomes and meeting regulatory requirements.

5.6 In February 2019, the model for future Transplant List developments was delivered via the release of a "Beta" to Liver transplant centres, allowing patient registration and amendment via the CRM-based system. This proved challenging to launch into live use, with the release re-scheduled twice since November 2018.

5.7 A new Interactive Matching Run tool, used for controlling the process of offering organs, was delivered for final testing in February 2019 ahead of release in April. The 2018/19 business case intended an Alpha (mock-up), although – with the use of Contingency funds – the Programme was able to deliver a fully usable product for Heart, Lung, Intestinal and Liver organs.

5.8 In March 2019, important Kidney and Pancreas offering scheme developments were completed and handed-over for final testing. These are expected to enter live use during July 2019, depending on testing and clinical readiness.

5.9 The forecast expenditure is £2.7m in 2018/19, including £0.4m Contingency funds. As described in the Board update paper of November 2018, the £0.4 additional cost mainly relates to additional "Interactive Matching Run" tool developed for use to better control organ offers in ODT Hub Operations:

Description	2018/19 Plan £000's	2018/19 Forecast £000's	2018/19 Variance £000's
IT - Platforms	0	0	0
Pathways Solutions	1,585	1,738	-153
Programme Management Office	251	189	62
Business Change	410	352	58
training & Awareness	0	0	0
Cost of Change	0	0	0
Total Non Recurring	**2,246**	**2,279**	**-33**
Contingency	561	375	186
Total Non Recurring with Contingency	**2,807**	**2,654**	**153**
Recurring - IT Operations	316	316	0
Recurring - Hub Operations	385	385	0
Total Recurring Costs	**701**	**701**	**0**
Total Costs	**3,508**	**3,355**	**153**

5.10 The Programme has continued to deliver valuable clinical developments. However, it is has had to respond to two key issues in 2019/20. These are that:

1) the cost of developing and integrating products has not reduced; and
2) NHSBT's ICT capabilities do not yet support our plans.

5.11 During the 2018/19, risks and issues emerged to the ODT Hub Programme because of common IT development and technical support paths, which were shared with the Core Systems Modernisation (CSM) Programme. The main risk is that future software products are later and / or more expensive than planned – notably those enabling and integrating the Customer Relationship Management (CRM) system used for our Transplant List and donor and recipient data sharing.

5.12 We have acted to reduce the impact of these issues by adopting some IT enablement activities within ODT. However, these costs and risks have not been sufficiently mitigated to give full confidence in our plan for a new Transplant List (including Follow-up) or donor data sharing during 2019/20.

6. Scope and Approach in 2019/20

6.1 The Programme's scope was set out in the ODT Hub Programme multi-year business case, which was endorsed by the Board in September 2015.

6.2 The Programme will now respond to the environment described in Section 5 by reducing its scope related to the CRM-based Transplant List and digital donor data sharing (HTA A). We will work closely with ICT and the wider organisation to review our plans for these important products during 2019/20, while pausing developments for now.

6.3 In the meantime, we will continue to develop and release valuable clinical products across existing IT systems during 2019/20. Specifically:

6.4 We will release the Kidney and Pancreas Offering Schemes and co-ordinate their operational implementation. This will complete the removal of organ matching and offering from our NTxD system.

6.5 We will develop and release an Interactive Matching Run to better control organ offering for Kidney and Pancreas, building on developments for other organ groups in 2018/19.

6.6 The Programme will also focus on processes in ODT Hub Operations. We will continue work within ODT Hub Operations to handle the increasing numbers of offers that need to be made more safely, but without significant additional staff cost.

6.7 The Programme will continue to work closely with its stakeholders to develop detailed plans for business and IT change. It will identify the key logical steps and work packages, required to achieve the overall ODT Hub vision and operating model.

6.8 Each work package will have its own project identity and will use the governance of the Programme. The Programme will continue its use of an *Agile* approach.

6.9 Finally, we will work with wider NHSBT and ICT colleagues to determine a cost-effective method for delivery in the future. This will include engaging with the wider NHSBT review of IT system architecture and costs of ownership.

6.10 Once these key decisions are known, we will make a proposal for delivering change in future years in ODT. This will be in the context of not being able to deliver all Programme objectives by 2020 (see Section 12). We aim to do this within 6 months.

6.11 This will include an assessment of the capacity needed to deliver the remaining ODT Hub vision. This could also include a proposal to create a permanent level of change capacity, which future change programmes could utilise.

7.   2019/20 Programme Activities

7.1   In 2019/20, the Programme proposes to deliver the following business changes:

	Q1	Q2	Q3	Q4
Hub: Kidney & Pancreas Matching, Offering & Patient Management	Transition	Transition		
Donor: Digital "HTA A" Forms	Design	Design		
Hub: Interactive Matching Run (Kidney, Pancreas)	Develop	Develop	Transition	
Hub: Interactive Matching Run (organ offering contact and control)		Develop	Develop	Transition
Patient (Recipient): Transplant List	Design	Design		

7.2   Using Scaled Agile Framework methods, the *Develop* phases will produce visible products for demonstration and feedback from stakeholders. The *Transition* phases will see products delivered; prior to implementation and live use.

7.3   In support of the above business change, the Programme must continue to work with ICT to integrate NHSBT-wide IT corporate systems – and review arrangements for when the Programme ends.

8.   Outcomes and Benefits

8.1   The successful completion of Business Change work proposed in 2019/20 will deliver the following outcomes:

Work on:	Contributes to:
• **Donor:** 1) Digital donor data sharing (HTA A form)	**Outcomes in 2019/20:** ✓ Design work only ✓ A cost-effective proposal for further digital donor data sharing developments
• **Hub:** 1) Organ Offering Schemes 2) Organ offering tools	**Outcomes in 2019/20:** ✓ Releases new Kidney & Pancreas Offering Schemes (developed in prior year)

		✓ More controlled organ offering, supporting colleagues in ODT Hub Operations and transplant teams ✓ More relevant offers to transplant centres
• **Patient (Recipient):** 1) Transplant List, including Follow-up	**Outcomes in 2019/20:** ✓ Design work only ✓ A cost-effective proposal for further Transplant List (and remaining ODT Hub) developments	

9. Capacity and Capability to Deliver in 2019/20

9.1 The Programme has developed a detailed resource plan for 2019/20 through working closely with Business Owners and supporting functions. This is available separately upon request.

9.2 The Programme has estimated that it does have the capacity and capability to deliver the reduced scope of 2019/20 activities. Compared to prior years, we will be undertaking fewer activities and will require fewer resources. Remaining requirements have been agreed with ICT and incorporated within this plan.

9.3 The Programme's work in 2019/20 will prepare more changes for live use in a range of settings, including with our partners outside NHSBT. The Programme will therefore be reliant on Subject Matter Expert (SME) and clinician input to ensure the changes proposed are fit for purpose. The Programme will endeavour to inform SMEs as early as possible where their involvement is required.

10. Financial Costs in 2019/20

10.1 Funds requested will be utilised between April 2019 and March 2020.

10.2 During 2017, the Board received a detailed re-assessment of costs compared with the original estimates made in 2015. This later assessment will be reviewed considering the factors described in Sections 5 & 6.

10.3 The table below provides a breakdown of the costs associated with delivering 2019/20 activities, excluding VAT and including contingency:

Description	2015 Plan £000's	2019/20 Plan £000's	Difference £000's
IT - Platforms	0		0
Pathway Solutions	340	712	-372
Programme Management Office	193	41	152
Business Change	0	189	-189
Training & Awareness	75		75
Cost of Change	467		467
Total Non Recurring	**1,075**	**942**	**133**
Contingency	269	236	33
Total Non Recurring with Contingency	**1,342**	**1,176**	**164**
Recurring - IT Operations	401	316	85
Recurring - Hub Operations	**160**	384	-224
Total Recurring Costs	**561**	**702**	**-137**
Contingency	140	0	140
Total Recurring with Contingency	**702**	**702**	**3**
Total Costs	**2,044**	**1,878**	**168**

10.4 The overall cost for 2019/20 is lower than envisaged. However, as detailed in Section 12, not all programme benefits will be achieved.

10.5 Funding will be sourced from the existing Organ Donation & Transplantation baseline budget.

10.6 The Programme depends on the ODT "Release Train", which is the method of co-ordinating all resources (including ICT) to deliver IT change for ODT – including for, but not limited to, the ODT Hub Programme. The cost of this enabling resource is £0.6m, to be funded from the ODT budget in 2019/20.

10.7 The separate, but related DonorPath Enhancements project will include a range of improvements to the DonorPath system used by Specialist Nurses in 2019/20. This project is governed independently, with a cost of £0.4m in 2019/20 to be funded from the ODT budget in 2019/20.

11. Future Years

11.1 In addition to the outcomes and benefits above, 2019/20 activities (notably the Programme's review within 6 months) will position ODT to deliver future activities and will provide a clear plan.

11.2   Future activities to deliver the 2015 vision include (see also Section 12):

- Digital donor data sharing (HTA A), completing existing recipient data sharing (HTA B) developments;
- Finishing deployment of Transplant List capabilities to all organ groups, including for Follow-up.

11.3   Other activities for consideration include:

- Emerging ODT priorities, not envisaged in 2015;
- Living Donation solutions;
- Replacing non-ODT elements of the National Transplant Database (NTxD).

11.4   The non-ODT elements of NTxD chiefly comprise: Ocular service elements; Statistics & Clinical Studies modules and; core NTxD files.

11.5   The critical factors contributing to the success of the Programme and transformation in ODT in future years are:

- Cost-effective models for developing the enabling IT systems and support for those systems after deployment;
- A clear understanding of total costs of ownership of IT systems;
- ICT colleagues having sufficient architecture, development, release and support capacity and capabilities – or a credible and sustainable alternative.

11.6   The Programme will continue with the delivery approach used in previous years but will systematically reflect on that approach and adapt to optimise its performance.

12.   Impact on 5-Year Programme

12.1   The Board endorsed the vision and plan for a 5-year ODT Hub programme in September 2015. The ODT Hub Programme benefits are primarily increasing patient safety and enabling other ODT change initiatives.

12.2   The programme plan and costs were estimated in 2015, before the programme was begun. A re-assessment was undertaken in 2017, considering the experience derived from activities; a better understanding of the costs and; the treatment of Value Added Tax.

12.3   The updated high-level plan in 2017 indicated a total non-recurring cost of up to £10.2m by March 2020, with annual recurring costs of £0.7m. The forecast for total programme cost will be revised during 2019, considering the factors described in Sections 5 & 6.

12.4   This new assessment will examine options to implement the remaining part of the ODT Hub's vision (primarily, HTA A and a fully digital Transplant List including long-term Follow-up). It will recommend a cost-effective implementation or alternatives.

12.5 Compared to the plan and original scope endorsed by the Board in September 2015, the main changes by 2020 will be as follows:

Achieved already	To be achieved in 2019/20
4 new organ offering schemes, on new platforms	2 new organ offering schemes, on new platforms
Clinically-led ODT Hub open	Digital, process controlled organ offering
Digital donor assessment	
Central co-ordination of resources	**Not fully achieved**
Central co-ordination of test results	
All organ offers made by ODT Hub	Co-ordination of nurses by ODT Hub
Digital initial patient outcome (HTA B)	Finish replacement of Transplant List
Beta Transplant List (Liver)	Long-term patient follow-up solution
Super Urgent Liver List	Digital donor data sharing (HTA A)
4 new organ offering schemes	
New telephony	

12.6 As detailed in previous Board updates, a decision was made to de-scope the co-ordination of Specialist Nurses – Organ Donation by the ODT Hub. Instead, a more cost-effective model of co-ordination through 4 regional "clusters" is being delivered through the ODT Workforce Programme.

12.7 The pausing of further replacement of the Transplant List and a Follow-up solution will have primarily administrative impacts for NHSBT and Transplant Centre colleagues. Rather than Transplant Centres submitting new patient registrations and Follow-up details through an exclusively digital system, the current mix of part-digital (primarily ODT Online) and part-paper will continue.

12.8 The pause of digital donor data sharing (HTA A) will impact transplant teams at the point of deciding whether to accept an organ offer. The present situation of a part-digital (E-Offering System) and part-paper (HTA A form) will continue.

13. Impact on Stakeholders and Colleagues

13.1 During 2019/20, the overall impact for colleagues is expected to be safer and simpler ways of working. However, delaying donor data sharing developments (HTA A) will cause disquiet amongst clinical colleagues, for whom this is a priority. Because of delaying further Transplant List developments, there will however be less impact to administrative colleagues in Information Services. There will also be fewer IT developers required to work on these areas.

13.2 A programme of engagement and communication activities will be provided to ODT colleagues and external stakeholders through a communication plan.

The Programme will continue to bring changes to responsibilities related to: administrative tasks; completing donor and recipient information; and organ matching and offering.

13.3   The Programme is not expected, at any stage, to change responsibilities related to: donor identification; consent / authorisation; nor implantation.

14.   Governance and Communication

14.1   NHSBT's programme governance framework applies to the ODT Hub Programme. The Programme will continue to report via a Programme Board, the ODT Change Portfolio Board and then to the NHSBT Transformation Portfolio Board.

14.2   A Communications and Engagement Plan has been developed to provide direction, clarity and purpose to the communications activities during the life of the Programme. It has identified the objectives to be achieved through engagement, who the stakeholders are, and the methods / media chosen for engaging with the different stakeholder groups.   This has informed the focus of the Programme in 2019/20.

14.3   The model for communications has been developed and outputs from the Programme are visible. These include a range of communications materials and reference groups.

14.4   The OGC Gateway process was used to assess the Programme during 2018/19 and we will continue to develop the Programme in response to this and other reviews.

15.   Risks

15.1   Programme-level risks with a mitigated risk score of 8 or above are listed below, with a focus on those with relevance during 2019/20:

Risk Description	Impact	Likelihood	Mitigated Score	Mitigation
Cost of solution development is too high	5	2	**10**	Reduce Programme scope; engage with NHSBT-wide decisions on corporate platforms strategy
Buy-in and engagement of stakeholder groups	5	2	**10**	Early communications and engagement activities; Ensure involvement of key individuals to ensure communication and impact to wider groups is understood.

Risk Description	Impact	Likelihood	Mitigated Score	Mitigation
The resources required to develop, integrate and release IT platforms are not available	5	2	**10**	Reduce Programme scope; close engagement and planning with ICT on the issues identified. Using suppliers to enhance capability in the short term.
Insufficient in-house expertise to support IT products once the Programme has ended	5	2	**10**	Reduce Programme scope; using contractors where NHSBT skills are less mature or do not yet exist; backfill or recruitment to allow involvement of key NHSBT colleagues.
Delivering transformation and existing operational services, while demand continues to grow	4	2	**8**	Ensuring that dedicated roles are put in place where required.
Disruption to operations	5	2	**8**	Minimum standards will be met before implementation occurs, through testing and planning; A dedicated Transition Team integrates changes with operations.

16.   Equality, Sustainability and Employee Impact

16.1   An updated Equality Impact Assessment will be completed during 2019/20.

16.2   The closer co-ordination and consolidation of ODT resources is expected to support the NHSBT sustainability agenda.

16.3   The main impact for colleagues will be safer, simpler, more supported ways of working. The Programme will, during 2019/20, bring changes to responsibilities related to administrative tasks, donor and recipient data and organ offering. A plan for deployment of these changes in the ODT Hub is being developed in partnership with colleagues' staffside representatives.

17. Conclusion

17.1 This proposal responds to the issues and risks experienced by the Programme and the wider organisation. Despite these, we are confident that we can deliver a significant – albeit smaller – step towards the vision during 2019/20. This plan responds to ODT's clinical priorities, which continue to change.

17.2 Through its incremental and Agile approach, the Programme will continue to deliver business and IT changes that are safer, simpler and more supportive.

17.3 We will also participate in organisation-wide review of enabling IT systems, which will allow us to make a proposal for future developments within 6 months.

17.4 These activities deliver products that are beneficial in their own right, in accordance with ODT's clinical priorities. They will provide the basis for assessing future investment decisions, without committing NHSBT to further expenditure.

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Additional information (available on request)
- Costing and resource documentation
- Risk and Impact logs
- Full Programme Business Case and subsequent business cases
- Target Operating Model