Sustainability and Certainty in Organ Retrieval (SCORE)

Frequently asked questions

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1. General Questions about the Programme

1.1. What is SCORE?

- Following a period of analysis and engagement, NHSBT have launched the SCORE Programme which aims to bring increased certainty to the Organ Donation, Retrieval and Transplantation Pathway with a view to supporting sustainability into the future. This is a key change from the current culture which focusses on donation, retrieval and transplant occurring as fast as possible.
- The Programme is a ten-year programme with the initial focus over the next few years on laying the foundations for stability across the pathway.
- Seven Workstreams have been set up with a wide range of stakeholder representation from donation, retrieval and transplantation communities to contribute to the scoping and definition of the changes that are required to achieve the objectives. The key aims of the first phase of the Programme are to:
    - To increase pathway certainty through a National Organ Retrieval Service (NORS) planned arrival window, while accommodating selected 'priority' cases, providing benefits across the donation and transplantation pathway
    - To increase the probability of donation, improving certainty through a reduction of non-proceeding activity
    - To develop a future model for NORS delivery which modernises our operations and improves resilience and sustainability.
    - To enable a sustainable NORS workforce to improve attractiveness and talent retention of the service.
    - To provide an efficient service in order to ensure financial sustainability.
    - To scale organ retrieval perfusion capabilities for ANRP and DCD Hearts to increase organ utilisation (subject to external investment)

1.2. What services will be impacted by this Programme?

- The SCORE programme is reviewing the breadth of work across the donation and transplantation pathway, which is anticipated to involve:
    - NORS model: specifically exploring whether a planned arrival window for retrieval teams can be established and the impact this will have on the rest of the donation and transplantation pathway.
    - NORS workforce: supporting trusts and health boards to establish and maintain a sustainable NORS workforce.

- The donation pathway: specifically, donor assessment, optimisation, length of time for which organs are offered and the time of day that occurs.
- Support services: Specifically ensuring those specialities we rely upon (e.g., transport, laboratory services) to support donation and transplantation are involved in the design of how we access their services.
- Commissioning: Ensuring that any changes to the delivery of donation and transplantation are accurately and appropriately reflected in the contracts for services we commission.
- Communication and Engagement; Ensuring a programme-wide message is conveyed to all stakeholders along the donation and transplantation pathway, in a consistent and timely manner.

1.3. What is the Planned Arrival Window?

- The Planned Arrival Window (PAW) is the time proposed by SCORE that would be most suitable for NORS teams to arrive, having scrutinised data from across the pathway.
- On the assumption that selected 'priority' cases (i.e., super-urgent liver retrievals) would proceed as per current practice. The aspiration is to have one retrieval per team per night and that donors need to be registered with the Hub by 0800 to give certainty they will be included in the retrieval cycle that night.
- Initially the time proposed was 22:00-03:00, following initial engagement and feedback from colleagues across the pathway, it has been revised to 20:00-03:00. This has been supported by the NORS Service Model workstream.

1.4. What is the Planned Arrival Window Plus?

- Donors registered with the Hub after 0800 and before 1600 could be considered in the PAW that same night if organs are accepted and a NORS availability.

1.5. Which services will not be changed by SCORE?

- The SCORE Programme is currently in the discovery phase, and we continue to identify new areas of impact. Where changes are identified, colleagues working in those areas will be involved in the development of solutions.

1.6. How will you measure success of the SCORE programme?

- We are developing a set of success criteria across the pathway that can be measured to demonstrate successful achievement. The criteria will be finalised on submission of the Programme business case.
- As soon as success measures are confirmed, they will be shared widely with all stakeholders involved.

1.7. How can I be involved?

- This programme will involve several working groups/ workstreams with representation from the donation, retrieval, and transplantation pathway.
- Email SCORE@nhsbt.nhs.uk if you would like to contact us.

1.8. How will these proposed changes be rolled out? Trial, phased or big bang?

- The method for rolling out changes is contingent on the specific area of change. Some aspects will be better implemented through a trial, pilot or phased approach while others will necessitate a 'big bang' approach.
- Regardless of the approach, each change will be thoroughly managed, stress tested, and risk assessed.

1.9. When will SCORE be implemented?

- The SCORE programme is still in the definition phase, with many areas still requiring attention and assessment for feasibility. The ambition is to submit a business case through the NHSBT governance structures by the end of 2024.
- If approval is given, an implementation plan will be devised and communications about when changes may be seen will be shared.

2. Donation workstream

2.1. Some donor families cannot wait extended periods of time for retrieval, how do you propose we manage that?

- Donor families will have more 'certainty' of when retrieval will take place. This allows families to plan their time with their loved ones. Specialist Nurse are experts in managing family expectations and supporting them through extended periods.

2.2 Will there be any flexibility in practice to allow for those families who feel they can't wait an extended period of time to be 'prioritised' in the allocation of a NORS team?

- We hope that giving donor families more certainty of when the retrieval takes place will help manage their expectations. There will always be exceptional cases which will require some clinical decision making at that time. There will be teams available throughout the day to ensure no delay to retrievals for specific 'priority' cases.

2.3 Access to operating theatres in some hospitals can be challenging, how will the SCORE programme affect this?

- Data tells us that the majority of retrievals have moved to daytime, thus creating pressures on operating lists, implanting organs and ICU's. SCORE proposes a 'nighttime' retrieval window to alleviate these pressures.

2.4 Do you anticipate this will increase the length of the donation process?

- Yes. Previous actions to reduce the length of the process have been limited in their success. Thus, a shift in mindset is required from the 'quick as possible' model we currently employ to a 'certain as possible' model in the future.
- The modelling undertaken so far (based on one busy week) indicates that the length of process will increase on average by 5 and 8 hours.

2.5 Do you anticipate an impact on consent rates as a result of the increased length of process?

- No. Based on data from St Georges Hospital, who already prioritise overnight retrieval, demonstrates no difference in family decline rates based on length of process.

2.6. What impact will these proposed changes have on bed occupancy?

- It has been calculated for a 20 bedded ICU, with 15 donors per annum the bed occupancy under the Planned Arrival Window will increase by less than 0.1%.
- To work this out for your own ICU, change the **bold** numbers as needed:

- For a **20** bedded ICU
- **20** beds x 24hrs x 365 days = **175,200** bed hours per year
- **15** donors per annum with extra 8hrs per case (**15**x8) = 120hrs
- 120/175,200 x 100 = 0.07%
- This is assuming NORS teams will arrive at 22:00

2.7. CT Organ acceptance would be higher if an echo was available every time. Can we direct finances to a service or to hospitals to ensure this can happen?

- No. It is not part of the remit of SCORE to mandate availability of echo in all donating hospitals.

2.8. How likely is it that SNs could receive advanced training to support optimisation?

- Existing training is being reviewed with a view to inform whether a higher level of training is required. It is likely any additional training will be undertaken in Business-As-Usual pathways, rather than under the SCORE programme.

2.9. How will PAW/PAW+ fit with faith-based end-of-life requests?

- As per current practice, the SN will liaise and support each family through their donation journey and discuss with them how donation can take place in line with their faith.

2.10. To have more certainty, screening needs to improve. What actions are considered to improve in this area?

- Screening will be undertaken for all organ groups as required. This is to ensure that organs unsuitable for transplant are stood down and lengthy offering processes avoided.
- A formal screening tool will be developed for DBD screening. We anticipate this to be a joint DBD & DCD screening tool, for abdominal and cardio-thoracic organs.

2.11. How will offering change under the proposed changes?

- The offering pathway will need to change to support the Planned Arrival Window. We anticipate that the majority of offering will need to move to daytime activity – there are 2 key reasons for this:
    - To remove anticipated bottlenecks of activity overnight through parallel offering and retrieval activity for Hub Operations and Recipient Coordinators.
    - To enable daytime decision making to include MDTs and reduce late declines through clinician changes.

2.12. How will the Hub manage with an influx of registrations, offers and logistical arrangements at the same time?

- It is not anticipated that the Hub will be overwhelmed by registrations at the same time. SNs are encouraged to register their donors when they are ready to ensure patients on the super urgent liver list are not negatively impacted.
- Daytime offering will allow for organs to be offered in specific windows, meaning offers will arrive at a predictable time. There will also be more time created for the Hub to allocate organs and plan for the next offering window.
- All proposed changes will be thoroughly tested to assess the pressure points and propose the ideal times.

2.13. If most offers are received in the morning, this will impact clinics. What actions are there to mitigate this disruption?

- We are engaging with the transplant centres to understand the impact that they will face. Many centres have started to consider different ways of working that may support the new approach to offering.

2.14. Should there be a limit on the number of offers put out in one tranche to mitigate errors in the Hub or with transplant centres?

- Any offering model proposed and implemented with be thoroughly tested and risk assessed with the Hub and recipient centres to understand the full impact of the changes. Any limits on offering will be considered as part of the testing.

2.15. In the current system I would be more likely to accept 2 livers in a 24-hour period. In the proposed system I think I would be less likely as all the offers will arrive at the same time. How will this be mitigated to avoid an increase in declines as an unintended consequence?

- There is further modelling being done to look at the impact of multiple organs being accepted and then delivered to a centre at a similar time, on a centre-by-centre basis.
- Centres currently decline organs based on logistics; the organs are accepted by a different centre. We expect this will continue.

2.16. If all the offers come in at the same time, will RCPoCs be allocated more time to respond?

- We will be engaging with transplant centres to understand the optimal time required to consider multiple offers and build this into a proposed offering model.

3. <u>NORS Model workstream</u>

3.1. What do you mean by planned arrival window for retrieval?

- The Planned Arrival Window (PAW) is the time proposed by SCORE that would be most suitable for NORS teams to arrive, having scrutinised data from across the pathway.
- On the assumption that selected 'priority' cases (i.e., super-urgent liver retrievals) would proceed as per current practice. The aspiration is to have one retrieval per team per night and that donors need to be registered with the Hub by 0800 to give certainty they will be included in the retrieval cycle that night.
- Initially the time proposed was 22:00-03:00, following initial engagement and feedback from colleagues across the pathway, it has been revised to 20:00-03:00. This has been supported by the NORS Service Model workstream.

3.2. Are you planning to move to nighttime retrieval?

- As above, we aim to identify a planned window for the majority of retrievals.
- There will always be capacity to provide 24-hour cover for specific priority cases e.g., where a Super Urgent liver recipient has been identified or a paediatric case.
- All time frames considered by SCORE have been outside of normal working hours, several options have been modelled.

- SCORE proposes that 20:00-03:00 would be the optimal Planned Arrival Window for NORS teams, in order to ensure the majority of organ implant surgery is within daytime hours to give recipients the best chance of a good outcome.

3.3. What happens with unstable donors or those with super urgent recipients?

- The new working model for NORS will ensure there is capacity to retrieve at any time for super urgent liver recipients or other cases which may require prioritising e.g., paediatrics.
- As per current practice, unstable donors will need to be assessed on a case-by-case basis as unstable donors may deteriorate before a NORS team arrives.

3.4. What is the evidence for surgical outcomes being worse at night?

- UK Guidance strongly discourages overnight elective surgery[1]. There is a rich pool of literature focused on the risks associated with 'out-of-hours' surgery with the largest studies demonstrating consistently worse outcomes and revealing preventable causes of mortality[2][3].
- Surgery conducted overnight presents barriers to accessing the wider MDT, specifically senior support in a timely manner to assist in complex cases and delayed access to services such as blood bank which raises the risk level especially when difficulties are encountered.

3.5. Has SCORE included the use of organ perfusion technologies?

- SCORE is modelling the inclusion of ANRP and DCD hearts, although this is not yet a commissioned service.
- The intention is for ANRP and DCD hearts to be included under the SCORE programme as soon as sustainable funding is secured.

3.6. Do transplant centres have theatre capacity to transplant with offers/organs arriving at around the same time?

- We will be working with Transplant commissioners to ensure that implant theatre capacity does not become a new limiting factor. Greater clarity around timings should allow for better planning processes.

3.7. Is NORS allocation going to change to 'nearest' team to attend? Does that mean the Northern teams are likely to attend fewer retrievals?

- There is no plan to change to a 'nearest' allocation for NORS. With more planning time, NORS teams will be allocated based on the most efficient use of resources.
- SCORE is undertaking capacity and alignment modelling to ensure equity across NORS teams.

3.8. Multi-visceral offers take much longer than average, will those cases be treated any different under the proposed model?

- It is anticipated the new offering model will remove the delays that can be seen with the current pathway.
- There may be reasons some cases need to be considered outside of the planned arrival window, multi-visceral cases may be one.

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[1] A report by the National Confidential Enquiry into Perioperative Deaths (1995/6). "Who Operates When?".
[2] Althoff FC, et al (2021). Effects of night surgery on postoperative mortality and morbidity: a multicentre cohort study. *BMJ Qual Saf* 2021;30:678–688. doi:10.1136/bmjqs-2020-01168,
[3] Cortegiani et al (2020). Association between night/after-hours surgery and mortality: a systematic review and meta-analysis. *British Journal of Anaesthesia*, 124 (5): 623e637 (2020) doi: 10.1016/j.bja.2020.01.019

3.9. How are paediatric cases incorporated into the proposed changes?

- It is anticipated that these cases will be considered outside of the planned arrival window. They will be facilitated as is current practice to ensure access to multi-disciplinary support services are available for the family, as needed.

3.10. A Planned Arrival Window of 10pm is quite late. Can it be earlier or is there a reason why it starts at 10pm?

- Initially the time proposed was 22:00-03:00, following initial engagement and feedback from colleagues across the pathway, it has been revised to 20:00-03:00. This has been supported by the NORS Service Model workstream.
- The aim of the Planned Arrival Window (20:00-0300) is to create a balance between opportunities for successful transplants (daytime surgery) against the needs of the donor and their family.

3.11. A 9th On-Call abdominal team would provide extra resilience. Is it possible to increase NORS capacity?

- SCORE is reviewing the alignment and capacity to address demand and variation in NORS team activity.
- The SCORE programme will need to affect changes within the existing financial envelope.

3.12. It's been said that there will no longer be back-to-back retrievals or no more than 1 in 24 hours per team. Is this a hard rule or is the scope for flexibility?

- There is always scope for flexibility. We recognise that donation, retrieval and transplantation are dynamic pathways and there will always be exceptions.

3.13. Occasionally there are 2 donors in the same hospital at the same time. Would back-to-back retrieval be considered in this case?

- This is the most efficient use of NORS resource, and will be considered in such a scenario, taking into account previous activity and the national picture.

3.14. If there are no NORS teams out and there is theatre availability (i.e., at weekends) can NORS be mobilised outside of the PAW window?

- There are specific 'priority' cases identified (e.g., super urgent liver cases) which would be facilitated outside the Planned Arrival Window.
- NORS teams will be staffed to meet contractual requirements for the Planned Arrival Window and these priority cases, therefore there may not be capacity.

3.15. What impact will these proposed changes have on travel time for the NORS teams?

- With more time for logistical planning in the Hub, NORS teams will be mobilised to donors in the most efficient way.
- Early modelling indicates there will be a reduction in travel time for both abdominal and cardiothoracic NORS teams. More work will be undertaken to confirm this.

3.16. With more time to plan, will the NORS teams be given more time to muster?

- The mobilisation period was extended to 90 minutes in recognition of the additional equipment required to support developments such as NRP and DCD Hearts.

- It is not anticipated that NORS teams will require more time to muster under Planned Arrival Window, due to the ability to plan in advance.

4. NORS Workforce workstream

4.1. What impact will this have on the workload or ways of working for recipient co-ordinators?

- The SCORE programme has identified implementing the PAW may change working patterns for Recipient coordinators. As each centre works slightly differently, this needs to be addressed locally once the proposals have been finalised.
- Laura Stamp (Lead Nurse – Recipient coordinators) has organised some initial engagement sessions with each organ groups recipient coordinators.

4.2. How do you plan to raise the profile of the NORS workforce in their local hospitals? Much of their work is undervalued or not recognised.

- The SCORE programme will be making recommendations for Trusts and Health boards to implement.

4.3. How can we make working in a NORS team more attractive / a career choice?

- One of SCORE's recommendations is to make NORS a career of choice, by promoting and advocating the roles.
- We aim to develop a NORS recruitment and retention toolkit to assist Trusts and Health boards in attracting staff.
- It is anticipated that under the Planned Arrival Window there will be more certainty in working patterns, making the role more attractive.

4.4. The modelling (on a busy week) demonstrates challenges for the Cardio-thoracic team. Will there be scope for increasing the number of On-Call NORS teams.

- SCORE is reviewing the alignment and capacity to address demand and variation in NORS team activity.
- The SCORE programme will need to affect changes within the existing financial envelope.

4.5. Would it be better if there was a standardisation in NORS working patterns? Currently each team is free to choose their start/finish time.

- NORS is a commissioned service for availability rather than defined shift patterns. As such, we do not impose what shift patterns are worked or what time teams start or finish.
- The final decision as to the most appropriate model will be taken within NORS Centres as employers of the NORS Teams.

5. Support Services workstream

5.1. What impact will there be on laboratory services?

- SCORE will be undertaking work in collaboration with colleagues working in laboratory services, to understand any impact.

5.2. In the modelling for travelling, did you account for teams requesting ANRP or requesting to go out of zone? How will this impact the proposed changes?

- ANRP is not currently a commissioned service so was not included in the initial modelling. Further modelling will be undertaken by the SCORE programme and will include this.

5.3. Do our transport providers have capacity to deal with most travel being concentrated at certain times of the day?

- SCORE will be undertaking work in collaboration with transport providers, to understand any impact.
- Out transport provider has welcomed the opportunity to have greater oversight an planning to enable them to make better use of available resources.

6. Commissioning workstream

6.1. When will NORS and Donor Characterisation contracts change?

- Shadow contracts will be issued in advance of any new arrangements being implemented.

6.2. When will we be informed about changes to the contracts?

- Any contractual changes will be communicated as per our usual processes to all for teams to make any operational changes required.

7. Communication and Engagement workstream

7.1. Will donor families be consulted about any changes?

- Yes. SCORE has set up a Public and Patient Sub-Group, comprised of Donor Families, Recipients, people on the transplant waiting list and members of the public interested in NHS improvement initiatives. They will be updated on proposed changes and given the opportunity to feedback their views.

7.2. How are the devolved nations involved in the SCORE programme?

- The SCORE programme is a UK-wide initiative and therefore teams based in devolved nations will be included in any changes. The governments themselves will be updated and have the chance to influence changes through the business-as-usual mechanisms that are long established.

7.3. It feels like retrieval priorities are being imposed on the ICU community. How do you propose this to be more balanced?

- Relevant workstreams have representation from the donation/ICU community who are representing the views and interests of their areas of work.
- Engagement activities have taken place and will continue throughout the duration of the SCORE programme to ensure any implementation is as balanced as possible.

7.4. SNs and CLODS need to feel listened to. How will you be making sure we feel part of the discussion?

- Engagement activities have taken place and will continue throughout the duration of the SCORE programme to ensure any implementation is as balanced as possible.
- As per point 1.7, SNs and CLODs are welcome to join the programme to add their voice to specific workstreams.

8. Business case & finance workstream

8.1. Is this a cost saving exercise?

- The main objective of the SCORE programme is to provide a safe and sustainable service, which must be affected within existing resource and financial envelopes.

8.2. Retention of surgeons in the UK is an issue. Can NHSBT instruct trusts / health boards to use the money provided in a specific way to address this issue?

- No. NHSBT's contractual obligations are strictly limited to the disbursement of funds to the Provider (Trust/Health Board) for all Services that the Provider delivers in accordance with the NORS Contract, i.e., NHSBT's obligations do not extend to and/or include how the NORS funding is to be disbursed by the Provider.
- It would be considered unreasonable and inappropriate for NHSBT to mandate how the Provider's HR/Finance Directorates operate their internal processes and/or for NHSBT to control/govern this operationally for the Provider.
- The Provider remains fully responsible for the disbursement of NORS funding upon receipt from NHSBT. NHSBT is not accountable in relation to how the NORS funding is disbursed by the Provider.

9. Glossary

Term	Definition
ANRP / NRP - Abdominal Normothermic Regional Perfusion	ANRP is a technology that has potential to increase the quality and number of transplantable organs. ANRP involves using a machine to pass blood through organs in a person's body after the heart has irreversibly stopped beating
CLOD – Clinical Lead for Organ Donation	A doctor, usually a consultant who provides clinical leadership within the hospital, to champion and promote the value of deceased organ donation.
CT – Cardio-thoracic	Collective term for the donation, retrieval or transplantation of heart and/or lungs.
DBD – Donation after Brain Death	Donation after Brain Death (DBD) refers to patients/donors whose death has been confirmed using neurological criteria (also known as brain-stem death or brain death).
DCD – Donation after Circulatory Death	Donation after Circulatory Death (DCD), previously referred to as donation after cardiac death or non-heart beating organ donation, refers to the retrieval of organs for the purpose of transplantation from patients whose death is diagnosed and confirmed using cardio-respiratory criteria.
Multi-visceral	A multivisceral transplant means that the liver, small intestine, and other abdominal organs (for example, the stomach and pancreas) are transplanted at the same time.
NORS – National Organ Retrieval Service	A surgical team whose responsibility it is to attend a donor hospital to undertake the organ retrieval operation.
PAW – Planned Arrival Window	A proposed time in which NORS team will arrive at donor hospitals to undertake organ retrieval operations – see 1.3
RCPoC – Recipient Centre Point of Contact (or recipient coordinator)	The role of the Recipient Transplant Co-ordinator is to support and guide the recipient through their transplant pathway.
SCORE – Sustainability and Certainty in Organ Retrieval	The change programme set up to deliver improvements in donation, retrieval, and transplantation pathways – see 1.1
SN – Specialist Nurse	Specialist Nurses support potential donor families and the operational processes of organ donation.