Present:
Rutger Ploeg National Clinical Lead for Organ Retrieval (Chair)
Liz Armstrong Head of Service Development
John Asher Clinical Lead – Medical Informatics (ODT)
Emma Billingham Senior Commissioning Manager, ODT
Roberto Cacciola Associate National Clinical Lead for Organ Retrieval
John Dark Clinical Lead for Governance, ODT, NHSBT
Jeanette Foley Head of Clinical Governance, ODT, NHSBT
John Forsythe Associate Medical Director – ODT, NHSBT
Peter Friend Multivisceral & Composite Tissue Advisory Group Surgical Representative
Victoria Gauden National Quality Manager – ODT, NHSBT
Rachel Johnson Assistant Director of Statistics & Clinical Studies, NHSBT
Debbie McGuckin Senior Commissioning Manager, ODT, NHSBT
Paul Murphy National Clinical Lead for Organ Donation
Jacqueline Newby Head of Referral & Offering, ODT (Duty Office Representative)
Theodora Pissanou NORS Clinical Lead Representative
John Stirling NORS Workforce Transformation Programme Lead
Chris Watson Kidney Advisory Group Surgical representative
Claire Williment Head of Transplant Development, ODT, NHSBT
Colin Wilson British Transplantation Society Surgical Representative
Mike Winter Medical Director, NSD Scotland

In Attendance:
Catherine Dunstan Clinical and Support Services, NHSBT
Gavin Pettigrew Consultant Transplant Surgeon, Cambridge
Kathy Zalewska Clinical and Support Services Manager, NHSBT

Apologies:
Chris Callaghan National Clinical Lead for Abdominal Organ Utilisation, ODT
John Casey Pancreas Advisory Group Surgical Representative
Ben Cole Lead Nurse Service Delivery
Melissa D’Mello Lay Member Representative, NHSBT
Victoria Fox Lay Member Representative, NHSBT
Ben Hume Assistant Director TSS, ODT, NHSBT
Sally Johnson Director of Organ Donation and Transplantation – NHSBT
Derek Manas Liver Advisory Group Surgical Representative
Kate Martin Statistics and Clinical Studies, NHSBT
Cecilia McIntyre Retrieval & Transplant Project Lead Specialist
Gabriel Oniscu Research, Innovation & Novel Technologies Advisory Group Surgical Representative
Karen Quinn Assistant Director – UK Commissioning, ODT (Co-Chair)
Anthony Snape Head of IT Service Management, ODT, NHSBT
Michael Stokes Duty Office Services Manager, ODT, NHSBT
Steven Tsui Cardiothoracic Advisory Group Surgical Representative
Fiona Wellington Head of Operations for Organ Donation (SN-OD representative)
Belinda Wright Finance Business Partner NHSBT
1 DECLARATIONS OF INTEREST IN RELATION TO THE AGENDA – NRG(17)11
There were no declarations of interest in relation to the agenda.

2 MINUTES OF THE NATIONAL RETRIEVAL GROUP MEETING HELD ON WEDNESDAY 29TH MARCH 2017 – NRG(M)(17)1

2.1 Accuracy
The minutes of the previous meeting were agreed as a correct record.

2.2 Action points: NRG(AP)(17)2

AP1 - Histopathology protocol: Work is taking place on reproducing the kidney histopathology protocol for liver and is being led by C Wilson and T Perera.

AP2 - Retrieval of small intestine & bowel: Agreement has been reached between PAG and MCTAG on a protocol for retrieving the pancreas when retrieving the small intestine. P Friend agreed to forward wording to be included within the NORS standards.

AP3 - NORS Research Responsibilities/Proposals: Completed – A letter has been sent notifying NORS teams of their role in the retrieval of organs for research purposes.

AP4 - Use of allogeneic blood and donor blood for novel technologies: Refer to item 5.3.

AP5 - Electronic Quality Form Pilot: Comments sent to J Asher.

AP6 - Clinical Governance:
- Work is in progress to track the number of pancreases that are discarded when they are retrieved and inspected on the back table.
- T Pissanou to liaise with C Callaghan on his work in recognising excellence.
- CUSUM Monitoring for NORS retrieval: Discussion took place at the recent Clinical Retrieval Forum on the measures which should be used for monitoring NORS teams in a similar mechanism to that used for monitoring transplant centres. CRF were happy with the concept of monitoring but felt that transplant outcome would not be a good indicator of good quality retrieval as too many other factors could influence this. It was felt that the mechanism should focus on organ damage and discard. The outcome criteria need to be objective, easily monitored, and easily recorded. A separate taskforce will be established to present ideas and share knowledge in order to agree criteria for monitoring of NORS teams.

AP7 - Organ Damage Report: Completed – This has now been shared with NORS teams at their annual contract review meetings.

AP8 - NORS workforce: Role of Theatre Practitioner – Completed Teams have been reminded of the deadline for the requirement to fill the Theatre Practitioner role. Refer to minute 9.2(b) below.

AP9 - Organ Retrieval Masterclass – Arrangements are in hand to discuss the content of the Masterclass for December 2017.

AP10 - Retrieval KPI Report: Work is in progress to amend the report.

AP11 – Commissioning Performance Report: Add ‘Equality of teams’ to the next NRG agenda at the request of P Friend to discuss the difference in activity between centres.
2.3 **Matters arising, not separately identified**

There were no other matters arising.

3 **ORGAN ADVISORY GROUP PRIORITIES:**

**MCTAG:**

There were no specific items in relation to retrieval to report.

**CTAG – NRG(17)12:**

Members noted a written report from S Tsui on behalf of the Cardiothoracic Advisory Group:

- **Splitting of heart and lung allocation zones**: Heart and lung allocation zones were split in June to allow proportionate allocation of these organs to each transplant centre. This change will be phased in over a six month period to reduce the impact on individual centres.

- **Reduction of offering times for cardiothoracic organs**: After organs have been offered to and declined by all potentially suitable super-urgent and urgent patients, a simultaneous offer is made to all centres. The organ is then allocated to the patient/centre highest on the offering sequence.

- **Scout service**: Following acceptance of the recommendations of the External Scout Review, the Scout Steering Group will be reconvened and work with the NORS Workforce Transformation Board to present to NRG a proposal for a scout service.

**KAG:**

- A KAG working group, chaired by Lay Member, K Preston, had considered how to approach the issue of transplanting kidneys from neonatal donors. The recommendation of the group was that kidneys from a donor aged 1 year and 364 days or less should initially be carried out at only two ‘specialist’ transplant centres, these being Leeds and Guy’s.

- A further working group had considered which kidney (left or right) should be allocated to which centre. The decision was made to prioritise the left kidney for paediatric or highly sensitised patients and then to the centre with the highest point score (unless that centre would prefer the right kidney due to anatomy).

**LAG:**

No representative was available to report on behalf of LAG.

**PAG:**

R Ploeg reported on behalf of J Casey:

- Retrieval damage is an ongoing issue for pancreas. PAG is looking into the suggestion that there may be variation in retrieval team practice leading to an increase in damage.

- Members were reminded that there is now one waiting list for both pancreases and islets. This means that allocation can change between the two options, therefore vessels will be required at all times.

4 **UPDATE ON RESEARCH DEVELOPMENTS**

4.1 **RINTAG**

C Williment updated members on research developments:

- The new policy on the allocation of organs for research was launched in February and will be reviewed after 6 months. No
major issues have been experienced to date.

- A new working group has been established to look at what NHSBT can do to try to address the imbalance between the number of organs requested for research and the number available. The group will submit its recommendations to RINTAG in October.

- NORS teams were being reminded of their obligations around retrieving material from organ donors outside of the transplantation remit, including the need to ensure that no material is removed for the purpose of research unless the study has been approved by RINTAG.

- There have been no further developments on the proposals re olfactory bulbs from Birmingham and London or on uterine transplantation from Imperial.

4.2 Service Development of NRP

This is proceeding well with 83 donors to date and 60 livers and a significant number of kidney pancreases transplanted. The results are encouraging, particularly for liver, and there is sufficient data to support a business case for NRP for livers. This is being written and will be sent to NRG and LAG members for comment prior to submission in September. It is anticipated that the service development will continue whilst funding is available, which is likely to be about another 18 months. C Williment agreed to ask G Oniscu to update the Group on the status of the service development at the next meeting.

E Billingham
C Williment

5 NHSBT UPDATE

5.1 General update & new appointments

- Rachel Johnson has recently been appointed as Assistant Director of Statistics & Clinical Studies at NHSBT

- The ODT website is undergoing renovation and renewal. Members acknowledged the work put in by J Asher and C Williment who have helped to lead on the new website. Agreement has been reach on the inclusion of and funding for a password protected section to be added to the website for information sharing of incidents, and to hold contact details/information on retrieval team contacts. It is planned to add this area within the next couple of months.

- Work on the length of donation process is ongoing.
  - Undertaking simultaneous rather than sequential offering for organs from virologically higher risk donors has been agreed and it is hoped to implement this change within the next couple of months.
  - The time to respond to an offer is to be limited to 45 minutes for all organs. This change requires a software adaption within the Duty Office and teams will be notified before this change is implemented.
  - There is evidence to suggest that some recipient centres, particularly cardiothoracic, are requesting multiple delays to the retrieval process. Members discussed options to limit the number of delays that centres may request. It was felt that a fixed number of delays per centre would be unfair for those centres accepting fast track organs or those with complex patients on VADs or with congenital heart problems; whilst a financial penalty would be difficult to enforce. It was suggested that centres should be allowed 3 requests during a
fixed period of time, to be agreed. If further requests are made then the requests for that centre will be scrutinised in more detail, including the specific reasons for the delay. A threshold of ‘x’ number of hours delay could also be added to the criteria. A multi-disciplinary approach will need to take place, in conjunction with commissioners, to identify the processes involved and the definition of a delay, and to agree thresholds for further scrutiny.

J Forsythe

5.2 Utilisation strategy
The organ utilisation strategy has been published and is being implemented.

5.3 The Use of Bank Blood and Donor Blood for Novel Technologies: NRG(17)13
C Williment reported that confirmation was still awaited from CTAG around thoraco-abdominal processes in order to finalise this paper. R Ploeg agreed to write to all interested parties to request a solution to this issue by a specified date.

R Ploeg

5.4 ODT Hub update
J Newby updated members on the progress of the ODT Hub.
- New super urgent and urgent lung allocation algorithms were introduced in May 2017 and new liver allocation algorithms will be introduced in December 2017. Initial problems with the changes to the lung allocation scheme have been resolved with the introduction of simultaneous offering. Meetings are scheduled with representatives from liver centres to ensure that similar issues do not arise with liver.
- Liver transplant centres will have direct access to waiting lists in 2017 to enable them to register and manage their waiting lists more effectively. This will be rolled out for all organs over the next 2 years.
- It is planned to incorporate a digital referral process into donor path in 2018/19.
- Options are in development for a clinically led central service point (National Referral Centre) to take all paged referrals. This will link with SNOD allocation and deployment.
- Extra resources are to be allocated to the Duty Office, which will officially become the ODT Hub on 25th September 2017. This will increase staffing on each shift and allow an education post to be introduced to improve staff knowledge and skills.
- The Hub will undertake all cardiothoracic offering from September 2017 and liver offering in 2018.

6 DIGITAL PATHOLOGY PROJECT
6.1 Progress towards service and research
G Pettigrew reported on the PITHIA trial which will start in October 2017.
- KAG have endorsed the proposal to use punch biopsies (5mm x 8mm) including appropriate suturing.
- A consortium of histopathologists has now met to agree the process.
- Discussions have taken place with NHSBT on the logistics of moving the biopsies to one of the six specified centres for processing and uploading for digital review.
- Recipient transplant centres will need to have an R & D
agreement in place for the trial.

- QUOD infrastructure will be used where possible to simplify the process and support PITHIA.

7 CLINICAL GOVERNANCE

7.1 Electronic quality form pilot, working group results

Implementation of the new electronic quality forms is scheduled to take place in January 2018 following delivery of the liver allocation work in December. It was noted that a detailed specification for the work will be required and J Asher agreed to take the following suggestions forward for inclusion by the programme developers:

- Add a free text field to give the ability to record biopsies of other organs
- Add a section for the retrieval surgeon to record reasons for any deviation from protocol including missing data on NRP variables and recording blood products used.

Basic datasets with built in validation will be sent to the volunteers identified at the Clinical Retrieval Forum meeting and then to the NRG organ specific representatives/Advisory Group Chairs.

Members were urged to feed back to J Asher on what other data is required from the forms, ie dynamically generated funnel plots from the database. Suggestions included the option for emails to be generated by the system and for individual surgeon data to be generated via the website.

R Ploeg stressed that it was important to finalise the medical content and deliver this, pending IT involvement, to then facilitate implantation.

7.2 Proposed pilot re attaching organ images to selected kidney offers - NRG(17)14

A pilot study involving taking images of deceased donor kidneys at retrieval started on 1st May 2017 within the London and the South East SNOD teams. NRG members received a report on early outcomes from the pilot which is due to end on 31st July 2017. The final results will be reported to NRG and KAG following feedback from regional SNODs and SNOD teams. If successful, a national pilot is planned.

7.3 Clinical Governance report: NRG(17)15

R Cacciola presented a report on Clinical Governance issues.

- There were 41 incidents reported to Clinical Governance from a total of 366 retrievals between 1st April and 30th June 2017.
- Eleven organ losses (1 liver; 4 kidneys; 4 pancreases; 2 lungs)
- Four instances of organ damage not resulting in organ loss – all kidney
- One incident where the biopsy samples were not sent off. The organs were discarded as the malignancy risk could not be assessed.
- Thirteen incidents involving mobilisation/delays – E Billingham will be looking further into these as some may be due to the use of flights and the handover tariff.

Specific items discussed:

- A DCD retrieval was abandoned due to difficulties performing the
bronchoscopy. J Dark will be reporting on the incident at CTAG.

- Two incidents of overcrowding of retrieval theatres due to the use of novel technologies, additional observers, etc. In both of these incidents SNODs raised concerns about the number of people in the theatre. One instance involved an on-call team being mobilised to attend a centre where the local team were out but had mobilised a 2nd abdominal team as they wanted to retrieve using NRP. This resulted in 2 teams being mobilised. In this case the Duty Office should have been informed of the mobilisation of a local 2nd team to avoid the on call team being mobilised. It was confirmed that guidance should be issued to SNODs on the number of people who should be involved and a request made to NORS teams to use common sense. For a standard abdominal NRP retrieval there should only be 2 extra people in addition to the standard retrieval team. R Ploeg agreed to write to the CTAG Chair re the logistical and costing implications of cardiothoracic teams using the OCS machine to retrieve organs they have accepted as this could prevent the team from honouring its on call commitment for the national retrieval scheme.

- NORS teams should respond within 2 weeks to requests for information on incidents. This will be followed up in contract meetings and escalated if necessary.

- Members were reminded that pancreas damage is a constant issue and consideration needs to be given to monitoring this. It was suggested that trends be added to the Clinical Governance reports.

R Ploeg

7.4 Histopathology update

J Dark updated members on the histopathology project focusing on lesions found at retrieval. Current issues include:

- Unclear decision-making at retrieval regarding processing
- More often than not not any testing is undertaken at the liver centre where services are under resourced and often specific only to that centre’s patients.
- Confusion over how results are relayed back with no robust pathway for communication to those centres accepting other organs from the same donor.
- Not all lesions are appropriate for rapid processing, particularly an enlarged lymph gland.
- Pathologists are increasingly specialised and therefore less happy to comment on lesions in organs with which they are not familiar.

Work is taking place on developing a pathway within the remit of NHSBT which involves a robust process for identifying lesions in the donor; a process for the NORS surgeon to discuss results with a senior colleague and/or recipient surgeon(s); the option for the NORS surgeon to discuss the results with a specialist pathologist; and the development of a standardised request form. There will be defined roles for the NORS surgeon, the SNOD and the Duty Office.

Other areas of the pathway which are outside the remit of NHSBT are the logistics of:

- The availability of specialist advice, ie the need to see the lesion/images. An on-call rota may be required.
- Availability of processing - who would do this?
- Obtaining a definitive decision from pathologists when there are 8 specialisms within pathology.
ACTION

It is hoped to have a framework and standardised request form in place by the end of the year for the NHSBT pathway. Work on the pathology part of the pathway will take longer and will need to include engagement with commissioners for pathology services to take this forward.

8 UPDATE ON CLINICAL DEVELOPMENTS

8.1 DCD Heart Retrieval – NRG(17)16

A paper giving an update on DCD heart retrieval was received from S Tsui, CTAG Chair.

• The business case submitted to the four UK Health Departments to support substantive funding of a UK wide DCD heart retrieval service was unsuccessful. The NHSBT Cardiothoracic Patient Group will be raising their concerns with MPs regarding this decision.

• Funding will continue for 2017/18 for the cost of donation, referral, retrieval by NORS teams, transport and transplant costs for those teams which have already secured alternative funds to pay for other additional costs.

• Manchester has joined the programme and attended 3 DCD heart donors, protocored by Papworth as agreed. All 3 hearts were retrieved onto OCS; 2 were transplanted but 1 was discarded due to borderline function and rising lactate.

• RINTAG will oversee the DCD heart retrieval programme and a protocol for undertaking these retrievals has been developed for adoption by new centres joining the programme.

8.2 Update on uterine transplantation

Nothing further to update at this time.

8.3 Abdominal Paediatric Retrieval

D McGuckin reported on a working party on abdominal retrieval from neonatal and small donors (less than 2 years of age). There is an increased trend in donation of these organs and members were asked for their views.

NORS teams are not currently obliged to attend for paediatric retrieval if they are not competent to retrieve from paediatric donors but there is the option for a paediatric specialist from the recipient centre to join the on-call abdominal team. Most teams do not have a problem with those patients over 2 years of age but below that age there is more of an issue. Guy’s and Leeds have been designated as transplanting centres for kidneys from patients under 2 years of age but Guy’s is not currently part of a designated NORS team. R Ploeg agreed to liaise with representatives from Leeds, Guy’s and the ODT Commissioning team to find a suitable resolution.

9 WORKFORCE TRANSFORMATION & TRAINING (WP)

9.1 Update on Workforce Transformation and Training – NRG(17)17

An update was received on the Workforce Transformation Board the Terms of Reference and membership for which have now been agreed. The Board is under the co-chairmanship of K Quinn and R Ploeg and will report to NRG. Members noted that a peri-operative curriculum has been developed and the e-learning package went live recently with positive feedback received.
9.2 (a) Progress on Vanguard Project
This project was launched in response to concerns about shared scrub practitioners within NORS teams in relation to an increase in timings and organ damage. An SOP was created following simulations using shared scrub practitioners in both DCD and DBD multi-organ retrievals. Data is being collected on the length of the retrieval process and set up time, and whether any delays occur due to changing the workforce model as well as noting any changes in organ damage or organ utilisation data. The University of Edinburgh is also looking at how the changes affect individual members of staff in terms of the perception of stress and the professionalism of the team. The project started on 29th May 2017 for a 6 month period. An interim review of data will take place in September.

(b) Role of Theatre Practitioner during retrieval – NRG(17)18
E Billingham presented a paper advising NRG of the current issues with the recruitment by NORS teams of an individual who is trained and competent in cold perfusion and preservation of liver, pancreas and kidneys, or heart and lungs, respectively. Five of the ten abdominal teams are unable to meet the requirement to independently perform this function by the deadline of 1st August 2017. SMT agreed that SNODs should continue to provide this service for those teams until 31st March 2018. If any centres are unable to meet this extended deadline then SMT may consider recouping funding for the role.

(c) Scout Project
An outline business case for the project has been submitted to the Change Programme Board and approved. S Tsui will Chair a sub-group to take this forward.

9.3 Organ Retrieval Masterclass 2017
This year’s Organ Retrieval Masterclass will take place on Monday/Tuesday, 18th/19th December 2017 in Bristol. The Masterclass is aimed at Surgical Fellows, SpRs and trainees as well as perioperative practitioners working at or due to be attached to clinical teams involved in organ retrieval and transplantation.

10 NORS STANDARDS
10.1 The NORS Standards are currently under review and are being re-formatted and updated. These have been circulated to key stakeholders for comment and it is planned to issue the revised Standards in September 2017.

11 NORS TEAM DISPATCH
11.1 • As from 2nd May 2017 the Duty Office took over the mobilisation of NORS teams from SNODs. There have been a number of clinical incidents relating to dispatch of NORS teams and J Newby will be arranging a workshop to identify lessons learned from these. The current NORS mobilisation tool is not particularly user-friendly and this is to be addressed. The tool should identify if a local donor is likely to arise within the next 2 hours. Currently the Duty Officers ring those centres where a consented local donor has been identified to see if they are likely to become a local donor. T Pissanou agreed to liaise with J Newby on this issue.

• A couple of scout mobilisations have taken place without Duty Office involvement.

T Pissanou/ J Newby
12 COMMISSIONING


R Johnson highlighted key points from the Annual Report. It was noted that in April 2016 the number of cardiothoracic retrieval teams reduced to 3 on call at any one time with the closest team attending rather than the designated team. Total attendances increased by 3%. Members were asked to send their thoughts on additional data to analyse to R Johnson.

12.2 Handover Tariff – NRG(17)25

E Billingham outlined the issues reported by part-time NORS teams regarding mobilisation in the hours preceding their handover time to another team since moving to the national handover time of 8 pm on Mondays. ODT Commissioning had also agreed to review the possibility of part-time teams being reimbursed for those occasions when they are out beyond their handover time. The following proposal was submitted to SMT:

- Pay NORS teams in recognition of the occasions they work beyond the handover time
- Pay all part-time NORS teams, not just those who adhered to the 8 pm handover time (this will be reviewed)

NRG consider the proposal but there was concern on behalf of the part-time teams that this did not resolve the issue. E Billingham was asked to cost alternative options and submit these to NRG.

12.3 Commissioning Performance Report – Equality of Teams – NRG(17)22

E Billingham outlined the report for May 2017 for information.

12.4 Team Mobilisation Heatmaps – NRG(17)23

R Johnson submitted data using heatmaps to present how busy NORS teams are according to the time of day and the day of the week. Members noted shifts in mobilisation times between 1 April 2014 and 31 March 2017 by NORS team. Members asked if an evaluation of the effectiveness of changes to travel times could be undertaken. R Johnson agreed to review this and bring a paper back to the next meeting.

12.5 Flight Policy - NRG(17)24

E Billingham reported on a proposal to reduce the number of incidents arising regarding delays to retrieval due to flights being arranged. This is due to the lead-in time taken to source planes and pilots. The current NORS Standards would be rewritten to state that NORS teams will travel by road as standard but that air transport may be used in the following circumstances:

- If road travel is not possible (eg for Northern Ireland)
- If estimated road travel time is more than the estimated travel time by air (including time taken to arrange flights)
- If organ viability might be compromised by any delay
Amending the wording in this way should give SNODs and the Duty Office the opportunity to have the discussion and ensure a common sense approach. M Winter offered to liaise with E Billingham on non-profit organisations with access to free air transportation.

13 FOR INFORMATION: DONOR ATTENDANCES BY NORS TEAMS WHEN NOT ON CALL – NRG(17)21

Noted for information.

14 ANY OTHER BUSINESS

14.1 It was proposed and agreed to reduce the number of NRG meetings per year to two in line with organ Advisory Groups. Any issues of concerns between meetings will be dealt with via email. The NRG Terms of Reference will be updated accordingly.

15 DATE OF NEXT MEETING

10.30 am on Wednesday, 8th November, 2017 at Park Crescent Conference Centre, London