

**NHS BLOOD AND TRANSPLANT  
ORGAN DONATION AND TRANSPLANTATION DIRECTORATE  
THE TWENTY-EIGHTH MEETING OF THE RETRIEVAL ADVISORY GROUP  
ON TUESDAY 28 SEPTEMBER 2021 FROM 9:30 UNTIL 3:00 VIA MICROSOFT TEAMS**

**MINUTES**

**Present:**

Ian Currie ( <b>Chair</b> )	UK Clinical Lead for Organ Retrieval
Elijah Ablorsu	NORS lead, Abdominal, Cardiff
Aimen Amer	NORS lead, Abdominal, Newcastle
Liz Armstrong	Head of Transplant Development, NHSBT
John Asher	Clinical Lead – Medical Informatics, OTDT, NHSBT
Marius Berman	Associate Clinical Lead for Organ Retrieval
Andrew Butler	Chair, Multi-visceral Advisory Group, NHSBT
Miriam Cortes Cerisuelo	NORS lead, Abdominal, Kings
Sarah Cross	National Operational Coordinator, QUOD
Dale Gardiner	Associate Medical Director Deceased Donation
Jeanette Foley	Head of Clinical Governance, OTDT, NHSBT
Victoria Gauden	National Quality Manager, NHSBT
Shamik Ghosh	Lay Member for RAG, NHSBT
Rebecca Hendry	Statistics and Clinical Research, NHSBT
Rachel Hogg	Statistics and Clinical Research, NHSBT
Michael Hope	Abdominal Recipient Coordinator Representative
James Hunter	Clinical Science Coordinator, QUOD
Mubassher Husain	Retrieval Surgeon, Harefield (Guest)
John Isaac	Deputy Chair, Liver Advisory Group
Anand Jothidasan	Retrieval Surgeon, Harefield (Guest)
Pradeep Kaul	NORS lead, Cardiothoracic, Papworth
Derek Manas	Associate Medical Director for Governance (Retrieval and Transplantation)
Vipin Mehta	NORS lead, Cardiothoracic, Manchester
Hynek Mergental	NORS lead, Abdominal, Birmingham
Majid Mukadam	NORS lead, Cardiothoracic, Birmingham
Gavin Pettigrew	Chair, RINTAG
Theodora Pissanou	NORS lead, Abdominal, Royal Free
Rutger Ploeg	Principal Investigator, QUOD
Hannah Poulton	Lay Member for RAG, NHSBT
Richard Quigley	Cardiothoracic Recipient Coordinator Representative
Isabel Quiroga	NORS lead, Abdominal, Oxford
Mark Roberts	Head of Commissioning Development, OTDT, NHSBT
Rachel Rowson	Regional Manager, London Team, OTDT (Guest)
Antonio Rubino	Intensive Care Physician, Royal Papworth Hospital (Guest)
Vishnu Saroop	Representing NORS Lead, Abdominal, Leeds
Avinash Sewpaul	NORS lead, Abdominal, Edinburgh
John Stirling	Head of Operations, Organ Donation (Northern Ireland, Scotland, Northern, Yorkshire & North West)
Afshin Tavakoli	NORS lead, Abdominal, Manchester
Ines Ushiro-Lumb	Consultant, Virologist Microbiology Services, NHSBT
Chris Watson	Joint Chair, Novel Technology Implementation Group
Steve White	Chair, Pancreas Advisory Group, NHSBT
Julie Whitney	Head of Service Delivery, OTDT Hub, NHSBT
Bartholomeij Zych	NORS lead, Cardiothoracic, Harefield

**In Attendance:**

Ms Hannah Westoby	Clinical and Support Services, OTDT, NHSBT (Minutes)
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		<b>ACTION</b>
<b>1.</b>	<b>WELCOME, INTRODUCTION &amp; APOLOGIES</b>	
	<ul style="list-style-type: none"> <li>Welcome</li> <li>Apologies were received from Ayesha Ali, Catherine Coyle, Olive McGowan, Rommel Ravanan, Douglas Thorburn, Karen Quinn and Chris Callaghan.</li> <li>Welcome Antonio Rubino, Rachel Rowson, Ines Ushiro-Lumb, Anand Jothidsan, Mubhasher Husain and Vishnu Sharup to the meeting.</li> </ul>	
<b>2.</b>	<b>DECLARATIONS OF INTEREST</b>	
	No declarations of interest were reported. Noted regarding minutes and papers to be published on NHSBT OTDT website and asked members to declare if papers have sensitive content and not to be published.	
<b>3.</b>	<b>MINUTES, ACTION POINTS AND MATTERS ARISING</b>	
3.1	<u>Minutes</u> – The Minutes of the last RAG meeting on 30/03/21 were approved with a small amendment on the attendance list.	
3.2	<u>Action Points</u> - The Action Points from the previous meeting on 30/03/21 were updated as follows:	
AP1	<b>Chest closure</b> has been an issue. Standard practice is morticians stitch with heavy silk. <b>Action: agreed not to use prolene but to use ethibond, nylon or heavy silk as appropriate</b>	Completed
AP2	<b>Guidelines for swab counts in retrieval to be circulated</b> , amended as required and added to NORS guidelines for Autumn 2021. <b>Action:</b> 1. Cecelia McIntyre to finalise doc with I. Currie and circulate document to perioperative community. 2. Add document to NORS guidelines	Completed
AP3	<b>Action:</b> RAG members should email IC, DM or MB with an expression of interest to join the organ damage photography working group	Agenda item for Autumn 2021
AP4	Circulate DCD heart report from Marian Ryan	Completed
AP5	<b>DCD lung retrieval with NRP</b> CT NORS leads to discuss operative approach with NORS surgeons; 30 minute stand off after cold perfusion of lungs to allow NRP to run	Completed
AP6	<b>QUOD Myocardial Biopsy:</b> change to 2 x 4 mm biopsies from each ventricle in untransplantable hearts; <b>protocols to be updated</b>	Agenda item Autumn 2021
AP7	<b>Blue light Group</b> – <b>Action:</b> Communications on blue light use will be sent round to the NORS teams in the coming weeks.	Completed
AP8	<b>Imaging in Organ Retrieval -Action 1:</b> John Asher to liaise with Vipin Mehta <b>Action 2:</b> John Asher to discuss setting up a group to include Vipin Mehta, Chris Callaghan, Colin Wilson, Marius Berman, Derek Manas and Shamik Ghosh	Actions completed
AP9	<b>Focused Intensive Care Echo (FICE) - Action:</b> Antonio Rubino to circulate the FICE paper to RAG members. MB/AR to explore feasibility and benefits of FICE with CLOD community.	Agenda item
AP10	<b>NORS Team Safety Initiative – Action: IC to set up a safety forum for NORS teams</b>	Agenda item
AP11	<b>NORS Refreshment Report</b> – <b>Action:</b> Cecilia McIntyre to take forward; share feedback amongst all NORS teams (anonymised)	Completed

AP12	<b>NORS Mustering Report</b> – The new mustering time protocol was approved. Action: MR to take forward with SMT	Completed
AP13	<b>FTWU for NORS Contract Review Meetings</b> – Action: All NORS leads to email IC/MB with views on format and content of contract review meetings	Completed
AP14	<b>NORS Guidelines Update</b> – Action: Members to share with NORS teams once released, and to ensure that NORS surgeons read the document	Completed
<b>4.</b>	<p><b>OTDT Medical Director's Report</b></p> <p>DG reported that donor numbers are down by 10%, transplanted numbers vary and cardiothoracic lungs are down but numbers for hearts are up, livers and kidneys numbers are down. It was noted that pressures are immense on intensive care centres and many units do not have a full complement of staff, along with a lack of beds, lack of nursing staffing across intensive care. There are backlogs of surgery, cancer treatments with heart-breaking stories along the way following the trend across the NHS.</p> <p>Covid is still affecting everything but it is the lack of nursing staff that is more impactful on the intensive care units across the UK causing stress to staff and others. If you compare the numbers of transplantation and cancer surgery the numbers look bleaker for cancer as there are more waiting times across the hospital system, there are 4 hour waits and ambulance admissions.</p> <p>The organ utilisation group is looking for feedback on the consultation so please send in comments to:</p> <p><a href="#">OUG Online Call for Evidence Form</a></p> <p>The form will be open to submissions from 8 am 13<sup>th</sup> September until 5 pm 25<sup>th</sup> October 2021. A reminder email will be sent round following RAG meeting.</p> <p>The Winton Centre will be sending out communications shortly on the lung risk communication tool as per the below link:</p> <p><a href="https://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/">https://www.odt.nhs.uk/transplantation/tools-policies-and-guidance/</a></p> <p>The NHSBT Lung Risk Communication Tool has gone live, with kidney tool to follow in October and other organs by end of year. It is suggested that it can be used by clinicians as well as patients (alongside clinicians). It includes adjusted waiting times, waiting list outcomes, post-transplant survival, and other useful tools. There was a short discussion, and a possible risk is that patients would see that other centres would see better results than a nearby centre, but DG confirmed that this would be good competition amongst teams and to be transparent in the data.</p>	
<b>5.</b>	<b>Update from Advisory Group Chairs</b>	
	<ul style="list-style-type: none"> <li>• <b>MCTAG</b> – A Butler – progress is being made as all units are now open and the backlog of patient lists has decreased.</li> <li>• Some changes were made to retrieval of small bowel previously to streamline the service and reduce the delays in cross clamping. It was reported that discussions are still taking place between cardiothoracic and multi-visceral retrieval teams with regard to the sequence of</li> </ul>	

	<p>retrieval procedures. Unfortunately, the agreed changes are still not happening which causes tensions between the abdominal and cardiothoracic retrieval teams. It was noted in the NORS guidelines that the multi-visceral team retrieving should start procedures, however, this is not happening routinely. It was agreed that further discussions need to take place offline and IC/MB will take it further with AB.</p> <p><b>Action: IC/MB to have further discussions with AB regarding governance matters.</b></p> <ul style="list-style-type: none"> <li>• <b>CTAG Hearts</b> - Apologies</li> <li>• <b>CTAG Lungs</b> – Notification under ARCS for various organs and including lungs to increase the rate of lung transplantation which will include all five transplant centres and looking to involve GOSH. There would be no change in practice but communications will be sent round in the coming months, and no change to the activity of RAG at the present time.</li> <li>• <b>KAG</b> - Apologies</li> <li>• <b>LAG</b> – LAG meetings taking place twice a year, along with the sub group every six weeks, and centre director meetings every two weeks, which all allows a close watch on activity across the centres. Centre activity has dipped but to be expected during covid times, Transplantation rates and performance are being monitored carefully. Patients are being transferred between centres and allowing more bespoke offers but it is leading towards a national database of liver patients which in the future will allow a more seamless transfer between centres. Protocols are being shared across centres and ongoing discussions regarding VITT and positive PCR donors.</li> <li>• <b>PAG</b> - nothing new to report from the advisory group. IC and SW discussed pancreas retrieval from split liver donors and all has been finalised and dealt with. Have also discuss donors who may be PCR positive and it is not an issue. Use of a buddy centre in case of problems with ICU/HDU bed availability. Still struggling with the issue of Hep C donors and trying to get over the line for potential pancreas transplant donors but as been said before if it is suitable for a kidney then it should be suitable for a pancreas. Will report back at the next meeting on progress on Hep C potential pancreas transplant donors.</li> <li>• <b>RINTAG</b> – not available during the meeting (Gavin Pettigrew; problems with teams on the day).</li> </ul> <p>Thanks were extended to each of the Advisory Groups and their members for their exemplary work in still maintaining the service during a difficult eighteen months period.</p>	<p><b>IC and MB</b></p>
<p><b>6.</b></p>	<p><b>NORS and COVID</b></p>	
<p><b>6.1</b></p>	<p>It was reported that as numbers have gone up in infections since the children have gone back to school in Scotland and now England.</p>	

	<p>It was reflected that the past few weeks has been the greatest challenge of the pandemic due to staff shortages and the world is more open. The rates in Scotland have now started to go down.</p> <p>Re-instated the NORS resilience twice-weekly to check teams are doing ok. So far very little in the way of service interruption and managed with very little cross-cover required, but keep ploughing through, and thanks are extended to all teams for their exceptional service throughout and beyond the pandemic, every donor has been attended to throughout the pandemic and very proud of the service provided.</p> <p>IC communicated to medical directors whereby NORS teams are housed, transplant unit directors, and the NORS leads so that a dialogue could be established with the various individuals to try and support retrieval even with all the difficulties of being identified as a positive contact and the different trusts and hospitals will have different responses. Isolation of medical and nursing staff as close contacts of COVID-positive cases has resulted in organ retrieval services experiencing sudden staffing shortages across the UK, this has caused the near closure of two retrieval services. If you have been PCR tested and no symptoms, then it is permitted to work with normal patients and logically it is safe to work with organ donors but different hospitals will have a differing view.</p>	
6.2	<p><b>Retrieval from Covid +ve donors. What does the future hold?</b></p> <p>Ines Ushiro-Lumb presented a classification of COVID results in the context of organ donors. A range of potential PCR results was interpreted in the light of previous tests, with residual RNA (detectable on PCR but not infectious) as the most likely to be encountered, and the most likely to be a donor.</p> <p>No doubt that virological opinion would be sought when PCR+ donors were in prospect, and organs offered. NORS team members may wish to determine what their own hospital recommends for PPE when operating on such patients.</p> <p>Seems unlikely that donors with acute symptomatic COVID would be considered as donors.</p>	
7.	<p><b>NORS REPORT 2020-2021</b></p> <p>RH advised members that due to the COVID-19 pandemic, there has been a reduction in activity in the National Organ Retrieval Service due to changes in other aspects of organ donation and transplantation in the UK. There were also changes to the operational workings of NORS, with changes to how teams were mobilised in the first part of the pandemic and team availability.</p> <p>From 1 April 2020 to 31 March 2021, 1,381 potential organ donors were attended by a retrieval team, 1,178 (85%) of these proceeded to abdominal organ donation and 241 (57% of the 426 attended by a cardiothoracic team) proceeded to cardiothoracic organ donation. There was a 29% decrease in the number of donors attended in this financial year compared to the previous year (from 1,942 to 1,381).</p> <p>It was noted that Abdominal Normothermic Regional Perfusion (A-NRP) has been added to the report as well as DCD hearts.</p>	

	<p>It was suggested that the DCD heart hybrid teams could be added for next year's report. <b>ACTION: RH to update report to include DCD heart hybrid teams</b></p> <p>It was noted that the length of retrieval figure presented excluded retrievals involving flights – RH to re-produce this figure including flights and consider update in report. <b>ACTION: RH to produce length of retrieval figures to include retrievals involving flights</b></p> <p>Thanks were extended to Rachel Hogg for the excellent data set.</p>	RH       RH
8.	<p><b>NORS MASTERCLASS</b> NORS masterclass will be a virtual event from Monday 13 December to Wednesday 15 October 2021. It was noted that the masterclass will be similar to last year's event and to contact Caroline Wills (<a href="mailto:caroline.wills@nhsbt.nhs.uk">caroline.wills@nhsbt.nhs.uk</a>) to book a place.</p>	
9.	<p><b>HTK IN KIDNEY ONLY DONORS</b> IC introduced the protocol to members and drew attention to the changes in the previous protocol.</p> <p>There was a discussion whereby it was suggested that a fall-back protocol is also produced and IC will take forward the discussions with stakeholders.</p> <p><b>Action: IC to send further papers on protocol along with the discussions to RAG members.</b></p>	IC
10.	<p><b>NORS CONTRACT REVIEW MEETINGS</b> IC advised members that there are planned changes to the format of these meetings. Going forward, the meeting in the autumn will be split into two parts – for contract discussion and quality reviews. There will then be an interim smaller clinical focussed meeting in the spring to discuss any issues earlier.</p>	
11.	<p><b>ORGAN DAMAGE</b></p>	
11.1	<p><u>Organ Damage Report</u> – Rachel Hogg - this refers to the 24 months from 1 January 2019 until 31 March 2021. The rates of damage are determined according to organs reported with moderate or severe damage as recorded on the HTA-B form by the receiving surgeon.</p> <p>RH highlighted some organs have high number of outstanding HTA-B forms which is being actioned by JW and Hub, but advises careful interpretation of damage data due to this. Highlighted most significant differences in damage are significantly lower damage rates rather than higher.</p>	
11.2	<p><u>The Future of Organ Damage Reporting</u> – Rachel Hogg A fixed term working group was set up in 2019 to review and improve data collection for damage and improve reporting. As part of this, more robust definitions for organ damage grades were produced for data collected on the Retrieval Team Information (RTI) form and the HTA-B form to provide less subjective damage recording. The new grades are shown below.</p>	

	<p>The new grading system was released on 22 July 2021 to both retrieval teams and recipient centres, with work to follow on development of CUSUM monitoring for organ damage.</p> <p><b>RTI form</b></p> <p>10. No Effect/No Damage. Surgical damage is absent or has no clinical effect.</p> <p>11. Mild Effect. Damage is present but organ can be repaired for transplant.</p> <p>12. Moderate Effect. Damage may contribute, with other significant factors, to a decision not to use the organ.</p> <p>13. Severe Effect. Damage is severe and would be sufficient in isolation to result in decline for transplantation. The organ could have been used if no damage was present.</p> <p><b>HTA-B form</b></p> <p>10. No Effect/No Damage. Surgical damage was absent or had no clinical effect.</p> <p>11. Mild Effect. Damage was present but organ was repaired for transplant.</p> <p>12. Moderate Effect. Damage contributed, along with other serious concerns, to the decision not to use the organ.</p> <p>13. Severe Effect. Damage was the primary factor in the decision to decline for transplantation. The organ would have been used if no damage was present.</p> <p>14. Not performed (organ not inspected for damage).</p> <p>The paper is attached for information, work will be undertaken by the Statistics and Clinical Research team alongside a working group for development of CUSUM monitoring for organ damage and updating the regular damage paper for RAG.</p> <p>JW reminded the committee of the importance of sending in the HTA-B forms in a timely manner as there are still gaps in the data.</p>	
11.3	<p><u>NORS Performance Data Group – Ian Currie</u></p> <p>A group is being set up to explore organ quality, the membership will consist of individuals from a clinical perspective as well as provide statistical input along with other interest parties. Hynek Mergental, Abdominal, Birmingham and Pradeep Kaul, CT, Papworth have agreed to co-chair the NORS performance data group. The group have been asked to guide and support the data management and deliver CUSUM and performance management in a more accurate and nuanced fashion at a national level. It was also agreed that Derek Manas or Richard Baker would need to be part of the group as clinical governance leads. The leads were thanked by Ian Currie for taking this work forward.</p> <p><b>Action: HM, PK, and RH to meet outside of the meeting to discuss the work and implementation of the group.</b></p>	HM, PK, RH
11.4	<p><u>NORS Performance Imaging Group – Ian Currie</u></p> <p>A group is being set up to explore organ injury images and to encourage organ utilisation. Elijah Ablorsu and Afshin Tavakoli co-chair the group from the abdominal side and Anand Jothidasan and Mubassher Husain from Cardiothoracic side. The leads were thanked by Ian Currie for taking this work forward.</p>	EA, AT, AJ, MH

<b>12.</b>	<b>NTIG</b>	
12.1	<u>DCD Heart Program Update – Marius Berman</u> Coming to end of first year of JIF. DCD hearts accounting for 30-40% of heart activity and innovation of the hybrid retrieval team between Harefield and Papworth showing good collaboration.	
12.2	<u>Collaborative AB/CT; DCD Lung with NRP – Marius Berman</u> It was reported that there has been a couple of Cardiothoracic Organ Retrieval and ANRP sharing knowledge sessions in August and September 2021. The next session is on 14 October 2021, 9.30am to 12.30pm via Microsoft Teams, all welcome.	
12.3	<u>ANRP Steering Group Update – Updated Protocol on NHSBT website</u> Royal Free have now come on board for ANRP retrievals. A business case has gone to DHSC for funding, Scotland, NI and Wales have already agreed. Updated protocols on OTDT website.	
12.4	<u>Framework Document</u> – refer to ODT website and the ANRP Framework document which is available via link.	
<b>13.</b>	<b>CLINICAL GOVERNANCE</b>	
<b>13.1</b>	<u>NHSBT Clinical Governance Report – J Foley</u> <i>Incident 5311</i> Heart and lung retrieval. Following assessment, both organs accepted. The heart was explanted first, followed by the lungs. The lung block was then transferred to the back end table by holding it with a stapler. During this transfer the lung block slipped from the stapler to the floor. <u>Learning</u> : Following the case it has been agreed internally at this centre to ensure that lungs are transferred to the back table supported by/in a bowl. It is not known if it is wide practice to utilise the staple to transfer and so this case has been highlighted to ensure wider learning.  <i>Incident 5425</i> A pancreas and kidney for a Simultaneous Pancreas and Kidney transplant was received at the transplant centre with no iliac artery. The arch of aorta with short branches was sent. Investigation findings: It was identified that following retrieval of the vessels for the liver, one set of iliac vessels were noted to be insufficient in length. After discussions with the centre it was agreed for the aortic arch and branches with the pancreas to be sent to allow the contralateral iliac side to be sent with the liver. Learning: On reflection by the NORS surgeon, and the Associate Medical Director – Clinical Governance it is highlighted if iliac vessels are not able to be sent, the carotids rather than just arch of aorta should be sent with the pancreas. During the RAG meeting it was discussed to pick up the phone and discuss always if unsure. Add pancreas vessels to the masterclass agenda – IC/DM/MB to discuss outside of the meeting. <b>ACTION: IC/DM/MB to discuss adding pancreas vessels to Masterclass agenda</b>  Incident 5636, refer to letter circulated for further information.	<b>IC/DM/MB</b>
<b>13.2</b>	<u>Communication on DCD Heart angiogram</u> – detailed SOP and donor pathway, and incidents included, and lessons learnt. Discussed and highlighted both with recipient centre and donor centre teams.	

13.3	<p><u>Heart for valves in 'open and close'</u> - Rachel Rowson Background; a potential donor was found to be unsuitable at retrieval with heart placed for valves. The donor surgeon was unsure as there was no abdominal organs to be retrieved and this SNOD was unsure.</p> <p>In this situation, the SNOD should be consulted to determine whether tissue donation can proceed. The SNOD, having referred to the appropriate exclusion criteria, and mindful of the pathological findings noted by the surgeon, will direct the surgeon to retrieve the heart for valve donation if appropriate.</p> <p>In a DBD, this will require exsanguination of the donor as usual by transecting the cava, although no aortic preservation solution is required. In DCD, the heart can be removed directly.</p> <p>Alternatively, the SNOD will direct the surgeon to close the patient if no tissue donation is possible.</p> <p>It was confirmed that this information will be going into the new version of the NORS guidelines.</p> <p>Jeanette Foley highlighted that this had not been reported via the governance route, Rachel Rowson to follow up.</p>	
13.4	<p><u>Recording heart for tissue/research on RTI – R Hogg</u> In July 2021 the RTI form was updated. An option was added for the heart on Section 3 which indicates heart retrieved for tissue. Wording for all organs was updated to capture removal for research as part of the retrieved. Please note the changes in the form.</p> <p>Teams were reminded that they should be indicating that they retrieved the heart if they are the ones who removed from donor, even if they are not the ones who packaged the heart. Teams who did not remove the heart from the donor but packaged it should not report that they retrieved the heart. RH asked if teams who do not currently use the electronic form could start to use them to reduce incidences of forms being returned to teams due to legibility issues.</p> <p><b>ACTION: RH to send link to HW for circulation to NORS teams.</b></p>	RH
14.	<b>RESEARCH AND DEVELOPMENT</b>	
14.1	<p><u>QUOD Data and Governance Report – Sarah Cross</u> Noted over 5,500 QUOD donors with 100,000 samples collected. There has been an incident with a donor having 2x2mm kidney biopsies performed on the one kidney close together causing one large site. This has led to a need for clarity on kidney biopsy where there may be more than one indication.</p>	
14.2	<p><b><u>Kidney Biopsy – how many?</u></b> NHSBT facilitates research and NORS Teams are required to obtain samples during retrieval for QUOD or projects agreed by RINTAG, where appropriate consent/authorisation has been obtained.</p>	

	<p>There is a potential conflict when a research biopsy (e.g. QUOD) is considered in a donor where an organ may have undergone a biopsy for clinical assessment purposes. Kidney biopsies in particular have led to governance incidents. Therefore, the SNOD and the lead surgeon must consider the following priorities specifically for <b>kidney biopsy</b>.</p> <p>Priority 1. Organ Safety Assessment. These biopsies are obtained as there is concern relating to malignancy or other serious disease. Adequate material should be taken to secure a pathological diagnosis, excluding or confirming the diagnosis definitively. Biopsies may be wedge, punch or other as appropriate. The NORS surgeon <b>must discuss with recipient centres without delay</b>.</p> <p>Priority 2. Organ Quality Assessment. Such biopsies (for example, PITHIA), are taken on the clinical request of the implanting centre for their allocated kidney to determine quality. A punch biopsy is recommended. Only one quality assessment biopsy should be taken from that kidney. A quality assessment biopsy (eg PITHIA) may be taken in addition to an organ safety assessment biopsy (Priority 1), if deemed necessary and <b>requested</b> by the recipient centre.</p> <p>Priority 3. QUOD Biopsies. QUOD (research) biopsies should only be taken if <b>no other biopsies are requested or taken</b>. Only one attempt should be made to take a QUOD biopsy, and only one QUOD biopsy should be taken from a kidney.</p> <p><i>For the avoidance of doubt, if a biopsy has been taken for organ safety and/or organ quality, a <b>further research biopsy must not be taken</b>.</i></p> <p>(Wording as agreed on this document and will be added NORS standards, theatre manual, SOP for QUOD)</p>	
14.3	<p><u>INOAR update – Liz Armstrong</u> INOAR launched in January 2021, and thanks were extended to the NORS teams for their support.</p>	
14.4	<p><u>PITHIA update</u> Biopsy on request; numbers are vastly smaller than QUOD. Different justification compared to QUOD, and clinical teams are familiar with the risk and benefit of biopsy for kidney quality assessment rather than research. No significant problems so far. Thank you to NORS teams for continued support and involvement.</p>	
15.	<p><b>NORS MUSTERING TIME – Mark Roberts</b> A letter was circulated in July/beginning of August 2021 on the change in mustering time from 60 to 90 minutes, and it was approved by the OTDT SMT on a trial basis until April 2022. It was advised that the monitoring will start in October 2021. Monitoring will consider breaches of agreed departure times and other appropriate indicators.</p>	

<b>16.</b>	<b>BLUE LIGHT GROUP UPDATE</b>	
16.1	<u>Blue Light Policy Document – Mark Roberts</u> Guidance went to NORS teams and transplant centres in early August 2021 for the use of blue lights and traffic exemptions for the purpose of organ donation and transplantation. Centres may wish to consider a unit policy to manage governance implications of blue light activation.	
16.2	<u>Blue Light Data Collection and Audit – Mark Roberts</u> Collecting data on blue light activation. Data comes through on a weekly basis from the transport provider IMT. It includes journey start and end point, name of the authorising consultant, and the reason for activation of blue lights. MR will be working with Rachel Hogg and OTDT hub to collect data and to report at RAG meetings in future.	
<b>17.</b>	<b>NORS TEAM SAFETY INITIATIVE</b> Agreed to have a further meeting of the group at a suitable juncture, possibly when COVID becomes less prominent.	
<b>18.</b>	<b>NORS GUIDELINES VERSION 10 – UPDATES NOT OTHERWISE DISCUSSED</b>	
	Finalised version to be published after RAG.	
<b>19.</b>	<b>ANY OTHER BUSINESS</b> Request for information regarding antibiotics for donors.  Acknowledgement that early morning departures (3-5 am) are an egregious burden for NORS teams who were otherwise scheduled to be off duty by 8 am, and who now may exceed their duty period by many hours (as many as 12 or more hours added to their 24 hour on call period).	
	<b>DATE OF NEXT MEETING:</b> Next Meeting Tuesday 29th March 2022 to be confirmed as dates not being set at the present time.	