Department of Health & Social Care

ISOU Workforce Template Symposium - 7 May 2025

Report

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Contents

Executive Summary

Background and aim of the ISOU Workforce Template Symposium

In February 2023, the Department of Health and Social Care published a report Honouring the gift of donation: utilising organs for transplant. This report of the Organ Utilisation Group highlighted the need for improvements in organ utilisation and the opportunities to deliver improvements in the number of people whose lives could be saved or dramatically improved through the gift of transplantation.

The report specifically highlighted that a lack of a clear workforce model leads to variations in the level of care patients receive and recommended that a national transplant workforce template is developed.

The Department of Health and Social Care established the Implementation Steering group for Organ Utilisation (ISOU), with the aim to bring together organisations with a role in driving forward the Organ Utilisation Group recommendations, with patient and lay representatives, to co-ordinate and align the implementation approach.

The ISOU held a Symposium on 7 May 2025, to identify the skills needed to deliver an effective transplant service and design a national transplant workforce template.

The event included representatives from across the transplant landscape including the clinicians, NHS Blood and Transplant (NHSBT), NHS England (NHSE), Patient Representatives, the Royal College of Surgeons, British Society of Histocompatibility and Immunogenetics, British Transplantation Society and British Transplantation Physician Trainees amongst others.

This report outlines the feedback received at the event and recommended actions, to be overseen by ISOU.

Key points of feedback

Delegates fed back positively on a draft Transplant Workforce template shared ahead of the in-person event, with areas to strengthen highlighted such as paediatrics and psychosocial support. The group agreed a revised, high-level template should be produced, to be positioned as a guidance tool, to provide a minimum standard that could be built upon over time. Further consultation on this template is required.

Key areas of strength in the current transplant workforce were highlighted as innovation, collaboration, flexibility, community and patient relationships.

A critical issue raised was surgical staffing, with challenges around the attraction, recruitment and retention of surgical consultants and trainees and the need for more

diversity of the surgical workforce. Additionally, communication with trusts was raised as an issue, with many comments highlighting a disconnect between units and trust management and a view that senior leadership has an incomplete understanding of the complexities of the transplant service.

When asked to consider the modern transplant workforce, Recipient Transplant Coordinators were highlighted as a key role within the transplant unit; however, despite a presence across all units, there is significant variation in the number, job description and training for these roles. More broadly, delegates also highlighted that more needs to be done to ensure that transplantation is promoted early on as a career across medical, nursing and allied health professional training.

Finally, delegates highlighted the need for consideration of future workforce planning, including to address the issues in the transplant workforce described.

Summary of actions to implement recommendation 6 of the Organ Utilisation Report

1. Draft template to be refined, using feedback described above and detailed at Annex E, keeping at a high level.

2. Updated template to be shared with delegates for comment, requesting they seek feedback from colleagues across the units they represent, noting the template is to be positioned as a guidance tool, used to outline key areas such as recruitment, training, and workforce retention.

3. Once finalised, template to be shared with the Transplant Oversight Group (TOG), relevant commissioning structures, trusts with transplant centres, Chairs of all Solid Organ Advisory Groups and the relevant Royal Colleges. Accompanying advice should be shared with Trusts and the clinical community regarding the use of the template to maximise value and practical application, this should be jointly produced by NHSE and NHSBT.

4. ISOU Co-chairs to write to all UK Royal Colleges of Surgeons to:

    a. Detail the issues identified and ask for action from within their specialism, noting the importance of effective job planning.

    b. Encourage transplant fellowships at the end of surgical training.

    c. Ask Colleges, with the Association of Surgeons of Great Britain and Ireland (ASGBI) to consider boosts to training. For example, to make transplant surgery a recognised specialty somewhat separated from general surgery, or to mandate transplant training in the last two years of surgical training for those interested in this specialty.

    d. Encourage they work with relevant commissioning structures, and sight DHSC, in this work as it progresses.

5. To recommend that Postgraduate Surgical specialty training programmes administered across England currently by NHSE Workforce, Training and Education directorate under the responsibility of Postgraduate Deans look to focus expertise in the arrangement of rotations that equip transplant surgery trainees with the requisite opportunities to acquire the skills required to gain a Certificate of Completion of training (CCT) in line with these specific workforce areas. This may be through the provision of a national training programme director.

6. ISOU to raise trust communication issues via appropriate channels, which could include the ISOU Trust Engagement subgroup established communication and contact list and/or commissioners.

7. ISOU Co-chairs to write to NHSBT Lead Nurse for Recipient Transplant Coordination to request that they work with the relevant professional society i.e. British Transplantation Society, to create a template Job Description and Person Specification, develop a training and competency framework and define career path options.

    a. ISOU Co-chairs to inform the Royal College of Nursing of this issue and request they support the process.

8. ISOU Co-chairs to write to the relevant Royal Colleges and Societies to encourage exposure to transplant medicine in early career medical, nursing and allied health professional training, working with relevant commissioning structures, and DHSC, to take this forward.

9. DHSC to ensure that workforce considerations, including identifying and implementing transformation opportunities, and related work to address challenges are embedded into future commissioning structures and into the commissioning cycle. Action is needed to eliminate unwarranted variation in access to care to meet patient need.

Background and Context

The Organ Utilisation Group was established by the Department of Health and Social Care in England and Chaired by Professor Sir Stephen Powis. The Group's remit was to deliver recommendations on how to maximise the potential for organ transplantation and provide a premier healthcare system that delivered equity, excellence, and innovation to meet the needs of those on the transplant waiting list. It was also intended to address how the barriers to organ transplantation could be overcome so that the UK was able to continue as a world-leader in innovation in the field of transplantation and no opportunity for a successful transplant operation was missed.

When the group was established, there had been significant improvements in organ donation rates, with the number of organ donors increasing by 56% over a ten-year period. The introduction of opt-out legislation in England in May 2020 delivered further improvements in the consent rate.

Although there had also been improvements in the transplant rate, these had not kept pace with donation. Increasing age and co-morbidity of both donors and patients were making successful organ utilisation challenging.

The COVID-19 pandemic had also impacted on the waiting list. Whilst the first wave saw fast-tracked improvements to the transplantation service, the reduction in donors and temporary closure of units led to a five-year high of people on the transplant waiting list.

National audits and joint NHS Blood and Transplant / British Transplantation Society summits provided strong evidence of inequalities and variation between units, which were impacting on access to treatment and patient outcomes. These included local limitations on resources and access to novel technologies to support organ transplantation and increase utilisation, which varies between units. Combined, these were leading to inequities in access to transplantation from geographic, socio-economic and ethnicity perspectives.

It was agreed that there was a need to review the organ transplantation infrastructure, to explore how the resources already available could be best utilised, to meet the needs of patients.

The final report, which was published in February 2023, included a section on the creation of a sustainable workforce that is fit for the future, stating there is an urgent need to ensure that the transplant workforce can meet the current and future demands of the service.

The OUG noted it heard very strong feedback from patients regarding the commitment and passion of those in the transplant service to deliver the best possible level of care for their patients. However, the lack of a clear workforce template leads to variations in the level of

care patients receive – particularly regarding recipient co-ordinators, psychological and social care support.

Transplant teams raised concerns regarding the workforce sustainability with difficulty in recruiting and retaining staff. The high vacancy rate and staff turnover leave those who work in transplant units under ever-increasing pressure and fatigued. Transplant clinicians explained that the lack of support causes stress and mental health problems.

The report included the recommendation:

Recommendation 6

> A national transplant workforce template must be developed to provide definitions of the skill mix for an effective, safe and resilient transplant workforce that is fit for current and future demands.

The report also included the following actions to support the successful delivery of this recommendation:

- There must be workforce planning toolkits for all forms of transplantation to support workforce planning and reduce inequities across the service. The number of personnel at each centre would be defined by local demographics, such as waiting list size, catchment areas and so on. However, the expertise required is consistent throughout. Algorithms could be developed to support the planning activity.

- Psychological and social care support must be available for patients both around the time of transplant and in follow-up. The annual review for patients on the waiting list must include a review of psychological and social care support requirements that are tailored to meet the needs of the patient.

- For referral, transplant and follow-up services, consideration is given regarding support for patients when treatment is far away from their home.

Aim of the event

The ISOU Workforce Template Symposium brought together representatives from across the transplant landscape to consider the required skills and expertise within a national transplant workforce template and the required actions and action owners to address current issues to address recommendation 6 of the Organ Utilisation Group (OUG) report.

A copy of the programme for the event is provided at Annex A.

Outcome

The discussion at the Symposium would be reported via ISOU to DHSC Ministers, outlining the approach for implementing recommendation 6 of the Organ Utilisation Group report, identifying which organisations need to act and timescales for action. Once Ministerial clearance is given, actions would be delegated to the relevant organisations, with oversight by ISOU.

Attendees and involved organisations

There were approximately 60 delegates, representing: the clinical workforce, NHS Blood and Transplant, NHS England, Patient Representatives, the Royal College of Surgeons of England, British Society of Histocompatibility and Immunogenetics, British Transplantation Society, British Transplantation Physician Trainees amongst others.

A list of organisations represented at the meeting is provided at Annex B.

Delegates were asked ‘which organ(s) do you specialise in’ and were able to select multiple organs in line with their role. The responses identified:

- Kidney - 30 delegates
- Pancreas/islets - 18 delegates
- Liver/Hepatocytes - 14 delegates
- Heart - 17 delegates
- Lung - 19 delegates
- N/A - 12 delegates

Delegates were asked to state their role in transplantation.

Figures 1 and 2 summarise delegate role and geographic location respectively.

Figure 1: Delegate role in transplantation

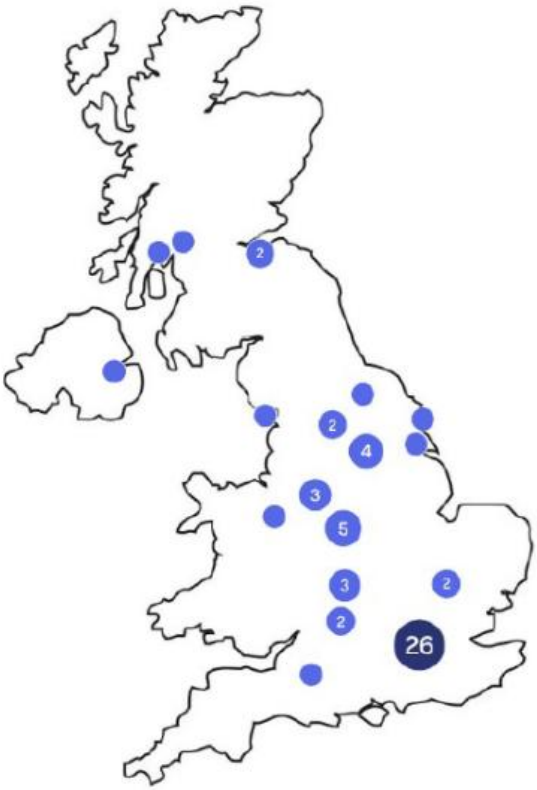


Figure 2: Delegate geographic spread across the UK

Approach

The programme, approach for organising the event and delegate invite list was co-produced with NHSBT, NHSE and patient representatives.

The day started with presentations to set the background to the event and context. An online survey tool was used throughout the event, so that delegates could provide direct feedback to the questions asked.

A draft transplant workforce template (Annex C) was provided to facilitate discussion, and for delegates to feedback on:

- If the template shared was comprehensive
- What was missing from the template
- Any key aspects to be underlined

Delegates were sat in organ-specific tables, to discuss two key topics:

- The skills mix within the transplant workforce, what works well and what needs attention
- The production of a workforce template with critical/mandatory skills across the patient pathway

The group also considered a paediatric renal workforce case study, as an area with specific challenges.

Discussion was captured by the nominated scribe for each table and then submitted via the online survey to provide an instant summary of the discussion to attendees.

Presentations

Delegates were provided with a series of talks and presentations to set the context and perspective for transplant workforce, including:

- The privilege of working in the field of transplantation from the Parliamentary Private Secretary to the Secretary of State for Health and Social Care, Dr Zubir Ahmed
- Surgical Perspective
- Nurse Recipient Coordinator Perspective
- Patient Perspective

- Transplant Physician Perspective
- Retrieval Team Perspective
- Psychologist Perspective
- Nursing across the Team Perspective
- Royal College of Surgeons of England Perspective
- Histopathology diagnostic support for transplantation - transformation opportunity?
- NHSE Workforce Training and Education Perspective

Slides presented at the event are provided at Annex D

Summary of Group Discussion and Next Steps

Consideration of the draft template

Presenter and delegate feedback

Delegates fed back relatively positively on the ISOU Transplant Workforce template (draft for discussion) found at Annex C.

The group identified disciplines where the template had given limited reference to, for example:

- Paediatrics
- Infection
- Histopathology services
- Administration Support*
- Anaesthetics*

*The draft template noted that administration support and anaesthetics was out of its remit, feedback to include these disciplines could be considered in any template refinement.

In addition, there were some areas that needed further focus:

- Holistic psychosocial support
- Eye donation pathway
- Research support
- Training across all disciplines
- Retrieval support

For a complete list see Annex E.

Some delegates fed back that further consideration of the minimum staffing (whole-time equivalents, WTE) was required, with suggestions of quantifying need by population and by organ, to provide a guide for local consideration and allow for regional variation. Alternative concerns were raised regarding specification of minimum staffing WTEs across various specialisms as per the draft template, including the need to consider and align approach with broader DHSC/NHSE policy, which includes commissioning against

national service specifications and standards incorporating a focus on outputs and outcomes, rather than inputs, to enable flexibility of service configuration and use of resources by service providers.

The group discussed the approach to the template; whether to provide a detailed or a high-level template with a potential for further, more detailed iterations in a step wise approach. Views were expressed in support of both approaches, however overall, it was felt best to provide a minimum standard of service depending on discipline, to be available depending on urgency of need that trusts could adopt and build on over time. Further consideration is needed on setting minimum staffing levels specifically for the surgical workforce.

Access to psychosocial support has been highlighted as an issue by both the OUG, the ISOU Patient Engagement subgroup and at the ISOU Commissioning Symposium. Presenter feedback at the ISOU Workforce Template Symposium flagged variable access to transplant Psychologists in the UK, for both patients and families, with varying staffing ratios and access to prehab and post-transplant care varying across units. The importance of offering placements for trainee clinical Psychologists was stressed, to ensure there is a pipeline of Psychologists interested in transplant psychology for the future.

Feedback highlighted that further consultation of the template would be required, alongside the dedicated working groups by organ, with representation from various centres and the Royal Colleges.

Once finalised, consideration should be given to sharing of the template, and the expectations of trusts regarding its use. Work will be required to embed the template as a regular tool to inform workforce planning within trusts This could be supported by annual reporting, enabling trusts to benchmark their own staffing models, identify gaps, and share best practice.

Outcome

1. Draft template to be refined, using feedback described above and detailed at Annex E, keeping at a high level.

2. Updated template to be shared with delegates for comment, requesting they seek feedback from colleagues across the units they represent, noting the template is to be positioned as a guidance tool, used to outline key areas such as recruitment, training, and workforce retention.

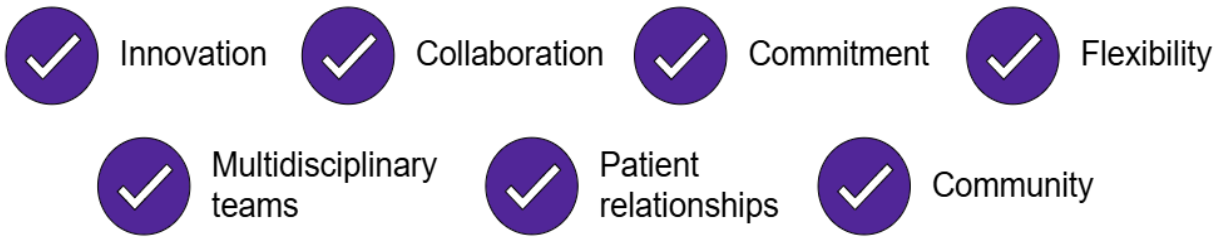
3. Once finalised, template to be shared with the Transplant Oversight Group (TOG), relevant commissioning structures, trusts with transplant centres, Chairs of all Solid Organ Advisory Groups and the relevant Royal Colleges. Accompanying advice

should be shared with Trusts and the clinical community regarding the use of the template to maximise value and practical application, this should be jointly produced by NHSE and NHSBT.

Theme 1: The current transplant workforce

Presenter and delegate feedback

When asked what is working well within the transplant workforce currently, key themes raised (and summarised using Menti AI) include:



When asked what aspects require attention and what the barriers were, feedback noted that although not the only issue, a critical problem within the transplant workforce is surgical staffing. Surgical teams have an intense workload, often working extended/out of hours, and larger units often managing both implant and retrieval surgery. There are therefore significant challenges around the attraction, recruitment and retention of surgical consultants and trainees and the issues with the diversity of the surgical workforce. Notable specialities feeling these pressures include cardiothoracic surgery and paediatric renal transplant surgery.

It was noted that often surgeons complete transplant surgery as an addendum to other workloads, and that this is not always recognised by trusts by building in appropriate time to job plans.

A key area highlighted was the communication within trusts, with many comments highlighting a disconnect between units and trust management and many transplant colleagues reporting a view that senior leadership has incomplete understanding of the complexities of the transplant service. Tensions are felt between transplant colleagues leading a low volume, high pressure transplant service, often in large hospitals, with multiple competing demands.

Figure 3: A sample of delegate workshop feedback highlighting barriers and areas that require attention. A summary of all feedback provided during the workshops can be found at Annex E.

Outcomes

4. ISOU Co-chairs to write to all UK Royal Colleges of surgeons to:

    a. Detail the issues identified and ask for action from within their specialism, noting the importance of effective job planning.

    b. Encourage transplant fellowships at the end of surgical training.

    c. Ask Colleges, with the Association of Surgeons of Great Britain and Ireland (ASGBI) to consider boosts to training. For example, to make transplant surgery a recognised specialty somewhat separated from general surgery, or to mandate transplant training in the last two years of surgical training for those interested in this specialty.

    d. Encourage they work with relevant commissioning structures, and sight DHSC, in this work as it progresses.

5. To recommend that Postgraduate Surgical specialty training programmes administered across England currently by NHSE Workforce, Training and Education directorate under the responsibility of Postgraduate Deans look to focus expertise in the arrangement of rotations that equip transplant surgery trainees with the requisite opportunities to acquire the skills required to gain a Certificate of Completion of training (CCT) in line with these specific workforce areas. This may be through the provision of a national training programme director.

6. ISOU to raise trust communication issues via appropriate channels, which could include the ISOU Trust Engagement subgroup established communication and contact list and/or commissioners.

Theme 2: What should the modern workforce in transplantation look like?

Presenter and delegate feedback

When asked what works well within the workforce now, Recipient Transplant Coordinators were highlighted as a key role within the transplant unit, for patient communication and information delivery as stated by patient representatives as well as for the key roles in organisation and management of the intense workload of a unit. However, despite a presence of Recipient Transplant Coordinators across all units, the number, rota, job descriptions and training for these roles varies significantly.

With regards to modernising transplant training, delegates highlighted that more needs to be done to ensure that transplantation is promoted early on as a career during medical, nursing and allied health professional training.

Amidst current health system changes, including the merging of NHSE and DHSC, the future commissioning structure is under consideration. Effective commissioning will ensure that the workforce is fit for purpose through the process of assessing needs, planning and prioritising, purchasing and monitoring health services, to get the best health outcomes. Delegates highlighted that this needs to consider planning in the present but also consideration of the future workforce, working to address issues and to ensure the template is regularly compared against the workforce in a transplant unit. The unique workforce planning challenges of specialist and super-specialist services such as organ transplantation, typically serving regional or bigger populations, is distinctive compared to workforce needs of local (District General Hospital) services. Patient representatives noted that this planning needs to be centred around the patient need, with consideration of what will provide the best quality of life for patients e.g. provision of multi-specialty support.

Recommendation 12 of the OUG stated:

> Robust commissioning frameworks must be in place, with well-defined roles and responsibilities of the various agencies involved in organ transplantation, particularly focusing on the relationship between NHSBT and commissioners. Memorandums of understanding (MoUs) across the agencies must be created to formalise the process for the joint commissioning of transplant services.

The ISOU Commissioning Symposium report, approved by Ministers and published in April 2025 advised that workforce provision is considered as part of revised service specifications.

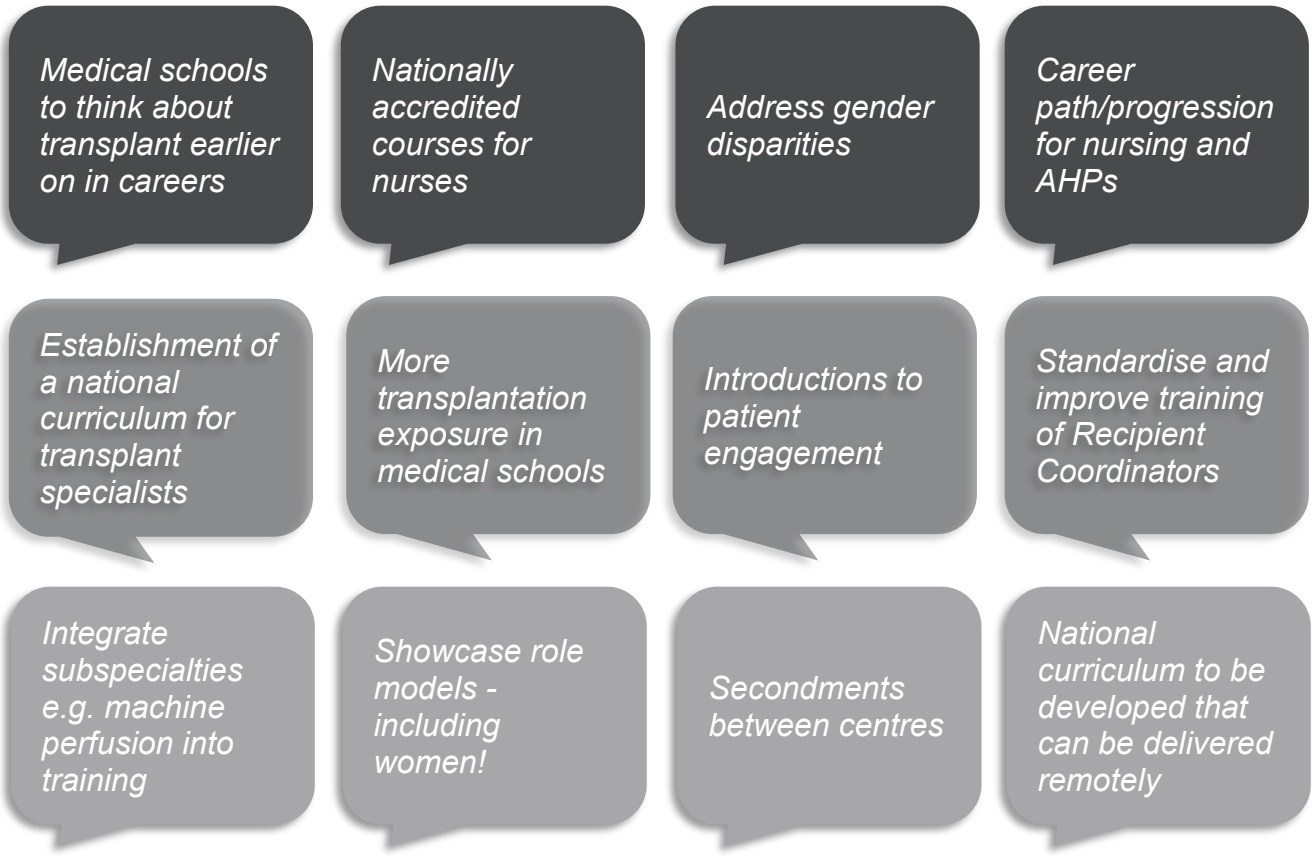


Figure 4: A sample of feedback provided by delegates at the symposium highlighting how we might modernise training for transplantation across all disciplines. A summary of all feedback provided during the workshops can be found at Annex E

Outcomes

7. ISOU Co-chairs to write to NHSBT Lead Nurse Recipient Coordination to request that they work with the relevant professional society i.e. British Transplantation Society, to create a template Job Description and Person Specification, develop a training and competency framework and define career path options.

    a. ISOU Co-chairs to inform the Royal College of Nursing of this issue, and request they support the process

8. ISOU Co-chairs to write to the relevant Royal Colleges and Societies to encourage exposure to transplant medicine in early career medical, nursing and allied health professional training.

9. DHSC to ensure that workforce including identifying and implementing transformation opportunities, and related work to address challenges is part of transplant commissioning responsibilities. Action is needed to eliminate unwarranted variation in access to care to meet patient need.

Annex

Annex A - Programme

Time	Item	Speaker
10:00-10:30	Arrival and refreshments	
10:30-10:40	Welcome and aims	William Vineall, Director, NHS Quality, Safety, Investigations, Department of Health and Social Care John Forsythe, Co-Chair of ISOU, Department of Health and Social Care
10:40-10:45	The privilege of working in the field of transplantation	Dr Zubir Ahmed MP, Parliamentary Private Secretary to the Secretary of State for Health and Social Care
10:45-10:50	Introduction to Menti	John Forsythe, Co-Chair of ISOU, Department of Health and Social Care
10:50-12:00	The Clinical Team and patient perspective Surgical Nurse Recipient Coordinator Patient perspective Transplant Physician perspective Retrieval team perspective Psychologist perspective Nursing across the team	 Chris Callaghan, Consultant Transplant Surgeon, Guy's Hospital Laura Stamp, Lead Nurse Recipient Coordinator, NHS Blood and Transplant Jessica Jones, ISOU Patient representative and Co-chair of the ISOU Patient Engagement subgroup Dr Gareth Jones, Consultant Nephrologist, NHSBT Lead for collaboratives Chair – NHSBT Kidney Advisory Group Marius Berman, Consultant Cardiothoracic & Transplant Surgeon, Surgical Lead for Transplantation and MCS Royal Papworth Hospital Dr Zoey G. Malpus, Consultant Clinical Psychologist, Wythenshawe Heart/Lung Transplant Unit Mike Holwill, Lead Nurse, Liver Transplant & Hepatology, St James's Hospital
12:00-12:10	Tea & Coffee break	

12:10-12:25	Interactive session To consider the ISOU Transplant Workforce template (draft for discussion)	All
12:25-12:35	Royal College of Surgeons perspective	Professor Peter Friend, Vice President of the Royal College of Surgeons of England
12:35-12:45	Histopathology diagnostic support for transplantation - transformation opportunity?	Dr Candice Roufosse, Clinical Reader in Renal Pathology, Centre for Inflammatory Disease, Imperial College London Department of Medicine
12:45-12:55	NHSE Workforce Training and Education perspective	Dr Adrian M Brooke, Medical Director, Workforce Alignment Workforce, Training and Education NHS England
12:55-13:00	Paediatric renal case study introduction	Dr Rommel Ravanan, Consultant Nephrologist, North Bristol NHS Trust
13:00-13:45	Lunch	
13.45-13:55	Reflection from the morning from NHSE	Matthew Day, Director, Clinical Commissioning, National Specialised Commissioning Directorate, NHS England
13.55-14:40	Workshop – The current transplant workforce Discussions focused on: Considering the skills mix within the transplant workforce what works well and what needs attention Tea & Coffee available throughout	All Nominated person (per table) to feedback
14:40-15:25	Workshop – What should the modern workforce in transplantation look like? Discussion focused on: Can we produce a workforce template with critical/mandatory skills across the patient pathway Tea & Coffee available throughout	All Nominated person (per table) to feedback
15.35-15:50	Reflections from NHSBT	Anthony Clarkson, Director of Organ and Tissue Donation and Transplantation (NHSBT)
15:50-16:00	Next steps, thank you and close	John Forsythe / William Vineall

Annex B - Organisations and expertise represented at the ISOU Workforce Template Symposium

Organisations represented:

- Department for Health and Social Care (DHSC)
- NHS Blood and Transplant
- NHS England
- British Transplantation Society
- The Royal College of Surgeons of England
- British Society of Histocompatibility and Immunogenetics
- British Transplantation Physician Trainees
- British Association for Renal Transplant Anaesthesia
- Solid Organ Transplant Pharmacy Association
- British Association of Paediatric Nephrologists
- The Royal College of Pathologists
- NHS National Services Scotland
- NI Department of Health
- Clinicians from various UK trusts

Annex C - ISOU Transplant Workforce template (draft for discussion)

Introduction:

The Organ Utilisation Group (Honouring the gift of donation: utilising organs for transplant - summary report of the Organ Utilisation Group - GOV.UK) report identified the importance of a sustainable and expert workforce (Theme 3 – see Appendix 1) to enable high quality organ transplantation services in the UK. The linked recommendation to this theme included the development of a national transplant workforce template.

In the absence of a readily available or re-usable NHS workforce template, a high-level draft template has been derived to facilitate focussed discussion during the workforce symposium on 7th May 2025. The draft aims to identify all aspects of the multi-disciplinary workforce necessary for high quality transplant service provision. This includes core group members required for delivery of any organ transplant service and organ specific specialist staff plus staff specifically relevant to adult vs paediatric age groups.

Since the OUG report focussed on the transplantation (i.e. implantation of organ into a recipient and subsequent care), this draft also focusses on workforce requirements around transplantation and not on organ donation or retrieval. It is recognised there is significant overlap between workforce involved in organ retrieval and transplantation. Similarly, it is also recognised that there is likely to be between centre variation in tasks performed by different members of the MDT (e.g. recipient coordinators versus resident doctors responsible for receiving organ offers, contacting potential recipients etc).

To help focus discussions on high impact and critical workforce components, a number of underlying assumptions have been made to draw up the template as below. Finally, any inclusions or omissions or text in the tables below should not be read as recommendations. The draft text is just to provide the framework for discussions during the meeting, feedback sought, and text finalised as per consensus.

Underlying assumptions:

Parts of the patient pathway covered in this template:

Pre-transplant assessment and wait-list management, surgical episode of transplantation and long-term post-transplant care, living donor assessment and operative/post-operative care.

Workforce requirements not included in this template:

> (1) In-patient ward (including ITU, HDU) core (medical, nursing, AHP) staffing (2) training medical grades other than Registrars (or equivalent middle grade) (3) all aspects of deceased donor organ retrieval workforce (including islet isolation) (4) workforce in referring (Non-Transplanting) centres (5) Admin and management grades (6) routine diagnostic services (e.g. blood sciences, diagnostic radiology, virology etc) (7) routine theatre staff (scrub nurse, ODP, cons anaesthetist)

Contributing authors: Rommel Ravanan, Chris Callaghan, Andrew Fisher, Marius Berman, Varuna Aluvihare, Andrew Butler

Core group for all organs (both adult and paediatric)

	24/7 on-site availability	Working hours (M-F 9am-5pm) + OOH off-site	Working hours (M-F 9am-5pm) only	Minimum staffing (WTE)
Cons Tx surgeons	Y			5 (adult Tx) 4 (paeds Tx)
Cons Tx physicians	Y			5 (adult Tx) 4 (paeds Tx)
Recipient Tx co-ordinators	Y			5 (adult Tx) 4 (paeds Tx)
Post Tx Nurse specialists			Y	
Surgical middle grade	Y			
Physician middle grade	Y			
Tx pharmacist			Y	
H&I cons clinical scientist		Y		
H&I CS/BMS	Y			
Tx Psychology/MH professional			Y	
Interventional Radiology	Y			5 (adult Tx) ?4 (paeds Tx)
Cons Tx histopathology	?	Y		
Histopathology tech	?	Y		
Cons intensivist	Y			
Dietitians			Y	
Social worker			Y	
Physiotherapy			Y	

Kidney transplant (adults and paediatrics)

	24/7 on-site availability	Working hours + OOH off-site	Working hours only
Living donor coordinator			y
Play therapist			Y (paeds)

Young adult/transition expert			Y
Diabetic specialist nurse			Y (adults only)

Pancreas and Islet transplants

	24/7 availability	Working hours + OOH at request	Working hours only
Cons diabetologist			Y
Diabetic specialist nurse			Y
?Lab tech (islet viability assessment)	Y		

Liver transplants (adult and paediatrics)

	24/7 on-site availability	Working hours + OOH off-site	Working hours only
Living donor coordinator		?Y	Y
Young adult/transition expert			Y
Addiction assessment specialist			Y
Play therapist			Y (paeds only)

Heart and lung transplants (adult and paediatrics)

	24/7 on-site availability	Working hours + OOH off-site	Working hours only
Perfusionist	Y		
Play therapist			Y (paeds only)
Respiratory physiotherapy	Y		
Young adult/transition expert			Y
Cons specialist infectious diseases		Y (Lung Tx)	
VAD coordinators		Y (Heart Tx)	
Donor care physiologists	Y		
ECMO specialist nurse/AHP	Y		

Small bowel transplants

	24/7 on-site availability	Working hours + OOH off-site	Working hours only
Specialist Dietitian		Y	
TPN pharmacist		Y	

Appendix 1:

Theme 3: creating a sustainable workforce that is fit for the future

The OUG heard very strong feedback from patients regarding the commitment and passion of those in the transplant service to deliver the best possible level of care for their patients. However, the lack of a clear workforce template leads to variations in the level of care patients receive – particularly regarding recipient co-ordinators, psychological and social care support.

Transplant teams raised concerns regarding the workforce sustainability with difficulty in recruiting and retaining staff. The high vacancy rate and staff turnover leave those who work in transplant units under ever-increasing pressure and fatigued. Transplant clinicians explained that the lack of support causes stress and mental health problems.

To address these issues, the OUG recommends:

Recommendation 6

A national transplant workforce template must be developed to provide definitions of the skill mix for an effective, safe and resilient transplant workforce that is fit for current and future demands.

The following actions will support the successful delivery of this recommendation:

There must be workforce planning toolkits for all forms of transplantation to support workforce planning and reduce inequities across the service. The number of personnel at each centre would be defined by local demographics, such as waiting list size, catchment areas and so on. However, the expertise required is consistent throughout. Algorithms could be developed to support the planning activity.

Psychological and social care support must be available for patients both around the time of transplant and in follow-up. The annual review for patients on the waiting list must include a review of psychological and social care support requirements that are tailored to meet the needs of the patient.

For referral, transplant and follow-up services, consideration is given regarding support for patients when treatment is far away from their home.

Annex D - Slides from presentations

1.

- **My views, not those of NHS Blood and Transplant, British Transplantation Society, or Guy's and St Thomas' NHS Foundation Trust**

- **Reflect my experiences, belief systems, and (almost definitely) my biases**

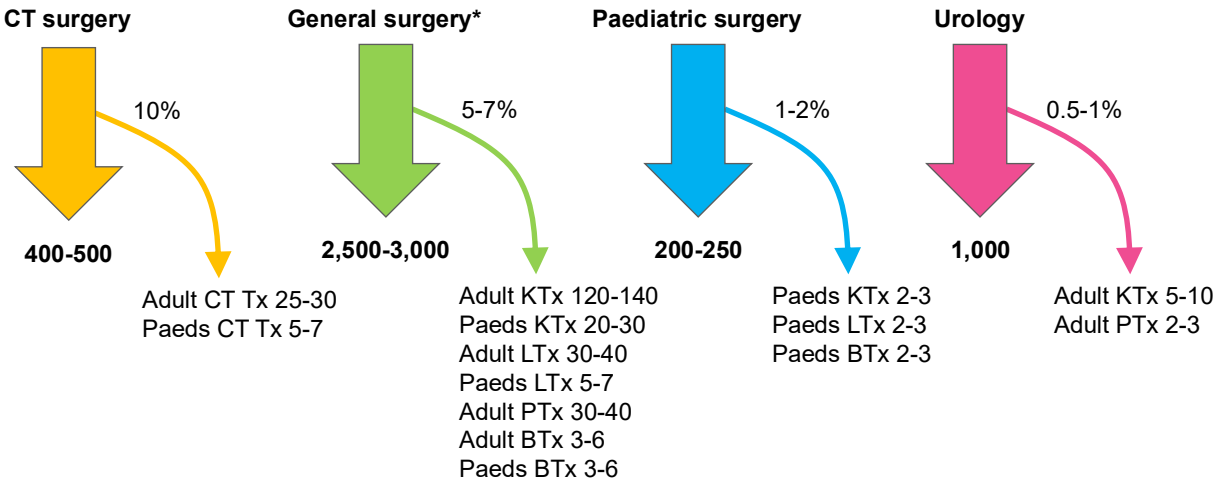
Overview

- **What is the context?**
- **What are my concerns?**
- **Where are the barriers?**
- **How can we build a sustainable transplant surgical workforce?**

showing we care

NHS Guy's and St Thomas' NHS Foundation Trust

Context – training pathways and numbers



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*400 vascular surgeons in the UK, approx. 5-10 do adult KTx

NHS Guy's and St Thomas' NHS Foundation Trust

Context – complexity of roles and variation

Elective CT surgery

On-call CT surgery

NORS **CT Tx**

Dialysis access surgery

On-call general surgery

PTx / paeds KTx

NORS

Transplant urology

HPB surgery **KTx**

Paeds LTx

LTx NORS

HPB surgery

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Transplantation is a technique, not a specialty?

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Context – teamworking

2.3 The surgeon responsible for implantation of the donated organ

2.3.1 It is the ultimate responsibility of the lead surgeon doing or supervising the transplant to decide whether to transplant the organ into a given individual. In many cases, the

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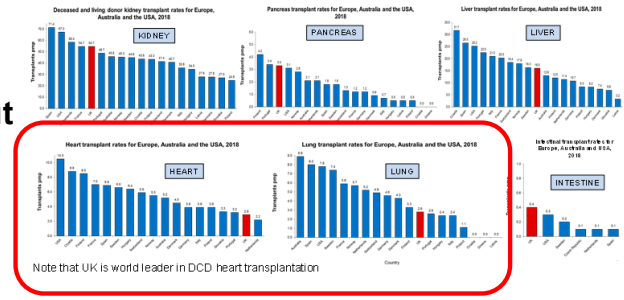
Context – wider issues

- Public dissatisfaction with NHS services
- Increasing concerns about burnout
- High-profile issues within UK surgery

Context – wider issues

- Public dissatisfaction with NHS services
- Increasing concerns about burnout
- High-profile issues within UK surgery
- Existing challenges; more DCDs and higher risk organs



Concerns

- **Exodus of talent**
  - Cardiothoracic transplant surgery
  - Liver transplant surgery

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CT images courtesy of Marius Berman, CT surgeon, Papworth

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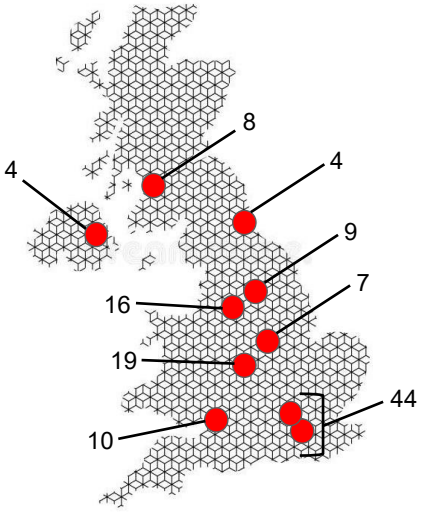
Concerns

Exemplar: paediatric kidney transplantation



- **Exodus of talent**
- **Fragile surgical workforces**
  - Low volume; high complexity
  - Generational change (work:life balance?)
  - Unit closures due to surgical staffing issues
  - Less than 1:5 rotas sustainable?

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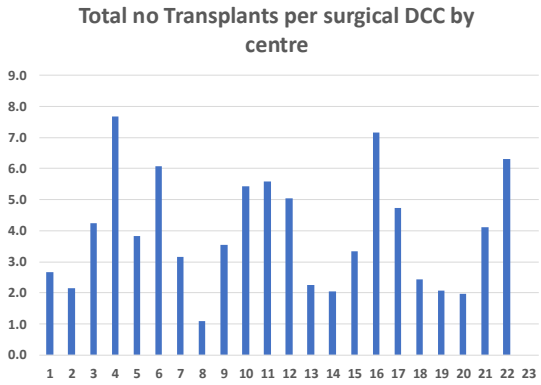
Barriers

- **Lack of comprehensive data**
  - KAG survey 2022
    - Doesn't reflect workload; adult services
  - RCS/NHS surveys not granular enough (and optional)
  - Predicting retirement age is highly inaccurate



Barriers

- **Lack of comprehensive data**
- **Lack of 'ownership'?**

BMA
ASGBI Association of Surgeons of Great Britain and Ireland
BTS British Transplantation Society
NHS Health Education England
NHS Blood and Transplant

Barriers

- **Lack of comprehensive data**
- **Lack of 'ownership'?**
- **Lack of flexibility and understanding?**
  - Focus on cancer targets within surgical services
  - Focus on elective cardiothoracic work (CABG, valves)
  - Job plan structure and pay: 'spiky' workload

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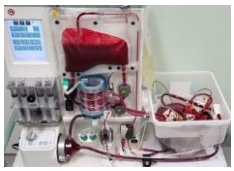
Barriers

- **Lack of comprehensive data**
- **Lack of 'ownership'?**
- **Lack of flexibility and understanding?**
- **'Big system versus small system'**
  - Changing direction in a supertanker
  - Highly dynamic nature of transplantation; MP/ARCs/SCORE



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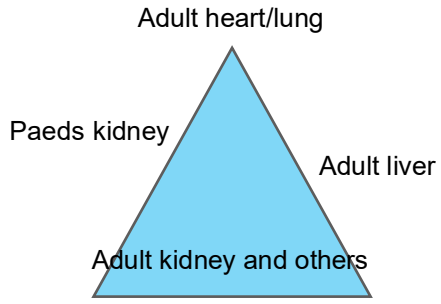
Solutions

- **Recognition and ownership**



'Hierarchy of need'

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Solutions

- **Recognition and ownership**
- **Collect the data**
- **Attract high-quality trainees and keep current consultants**
  - Work:life balance; reach out to medical students and others
  - Diversity and reliance on overseas trainees; close gender gap
  - Remuneration; recognition of impact of NORS; remove block contracts

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Thank you

- **Varuna Aluvihare, transplant hepatologist, London**
- **Marius Berman, cardiothoracic transplant surgeon, Papworth**
- **Shahid Farid, liver transplant surgeon, Leeds**
- **Andy Fisher, lung transplant physician, Newcastle**
- **Derek Manas, liver transplant surgeon, Newcastle**
- **Krish Menon, liver transplant surgeon, London**
- **Aaron Ranasinghe, cardiothoracic transplant surgeon, Birmingham**
- **Rommel Ravanan, transplant nephrologist, Bristol**
- **Doug Thorburn, transplant hepatologist, London**
- **Steve White, liver transplant surgeon, Newcastle**

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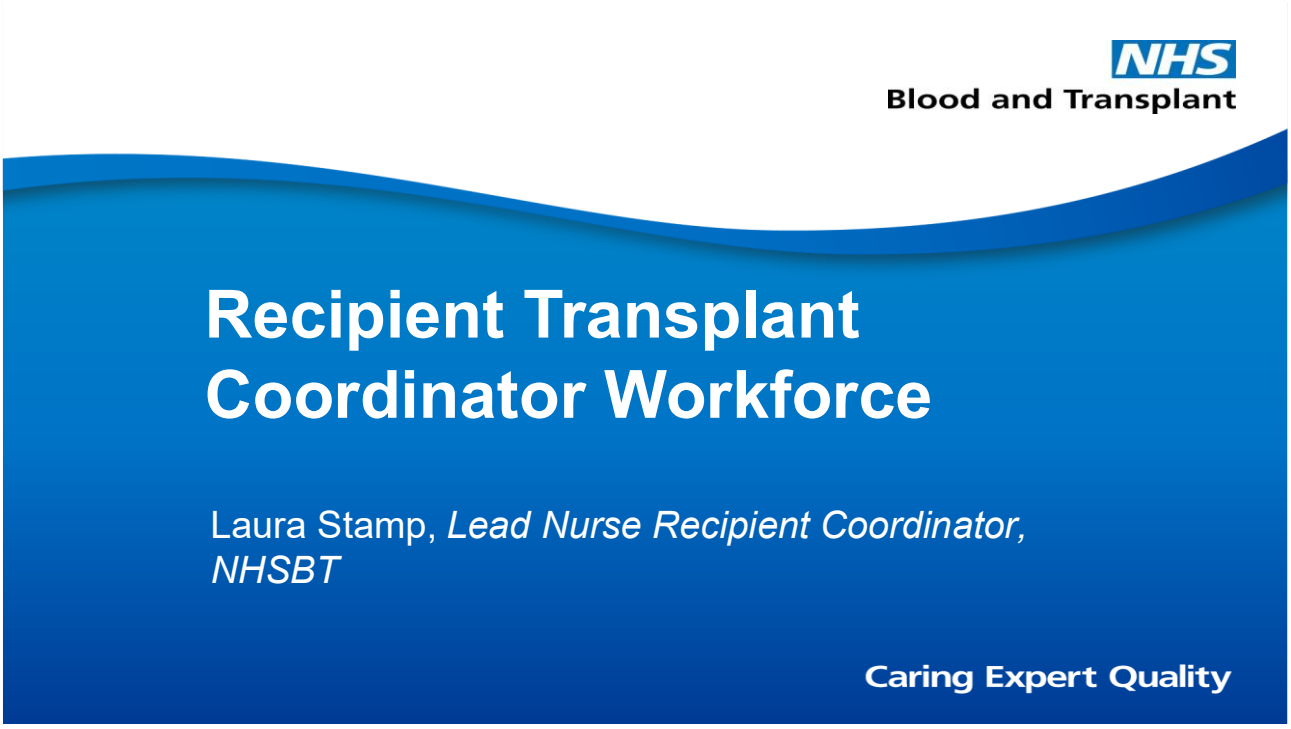


The Current Landscape

NHS Blood and Transplant

- Approx 280-300 Recipient Coordinators across the country
- Cardiothoracic, Liver, Renal, Pancreas, Islets and Paediatrics
- 'Recipient Transplant Coordinator' job title used liberally
- Variable banding structures (band 4 to band 8)
- Pre transplant, post transplant work / combination of both
- On call working
- **What truly makes someone a Recipient Transplant Coordinator?**

On call

NHS Blood and Transplant

Core Activities

- Taking organ offers
- Bed management and theatre logistics
- Mobilising NORs teams, transplant surgical / anaesthetic teams
- Health assessment, transport logistics and pre-theatre preparation of potential transplant recipients

In other words..

- Clinical expertise
- Autonomous practice
- Specialist communication
- Coordination and leadership
- Legal and ethical responsibilities
- Lone working, nocturnal, unsociable hours, broken / no rest

NHS Blood and Transplant

The Natural Benchmark…

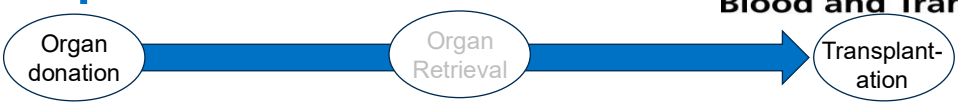
Specialist Nurses – Organ Donation Workforce

SNs employed by NHSBT are **Band 7** on the NHS AfC pay scale because of the **complexity, responsibility, and autonomy** associated with the role.

They have a defined job description, associated competency framework, workforce compensatory rest agreements, education and training packages, nursing strategies and structures…because they fall under one employer

A comparison

NHS Blood and Transplant



SN-OD	RTC
• Clinical expertise	• Clinical expertise
• Autonomous practice	• Autonomous practice
• Specialist communication	• Specialist communication
• Coordination and leadership	• Coordination and leadership
• Legal and ethical responsibilities	• Legal and ethical responsibilities
• 24/7 on call commitment	• 24/7 on call commitment

NHS Blood and Transplant

What the Recipient Transplant Coordinators say….

Caring Expert Quality

"…the RTC role needs to be strengthened and recognised at Trust level, instead of us having to justify our roles and cost to the organisation…"

"…we need to be led by someone who knows and understands our job role…"

"…progression needs to be built into the role to retain the skills, knowledge and experience that is vital to support transplant patients…"

"…when someone leaves it is a vicious cycle of cover, additional workload, training new staff. All this leads to burnout - we need proactive future planning…"

NHS
Blood and Transplant

Solutions and rationale

NHS Blood and Transplant

1. Build in resilience

- Define team size according to donor offer activity, + transplant activity + size of waiting list
- Reward the RTC role with fair and consistent banding across UK (minimum B7 for o/c working)
- Consider band 6 supportive roles with training for o/c working, ready swift transitions for when vacancies arise
- Standardise compensatory rest agreements nationally

NHS Blood and Transplant

2. Standardise the job role

- Create standard JD template for RTC role
- Debate need for associated competency framework (with relevant investment in maintenance)
- Protect the RTC job title, reserving it exclusively for those working o/c within transplant units
- Have credible team leaders who understand, support and advocate for the RTC role

NHS Blood and Transplant

3. Develop avenues for RTC progression

- Retain knowledge, skills and expertise within the transplant teams
- Accommodate personal and professional growth and development
- Formalise the informal by thinking outside the box. Consider upskilling RTCs with formal psychological training?

RTC Workforce template

NHS Blood and Transplant

Recommendation 6

A national transplant workforce template must be developed to provide definitions of the skill mix for an effective, safe and resilient transplant workforce that is fit for current and future demands.

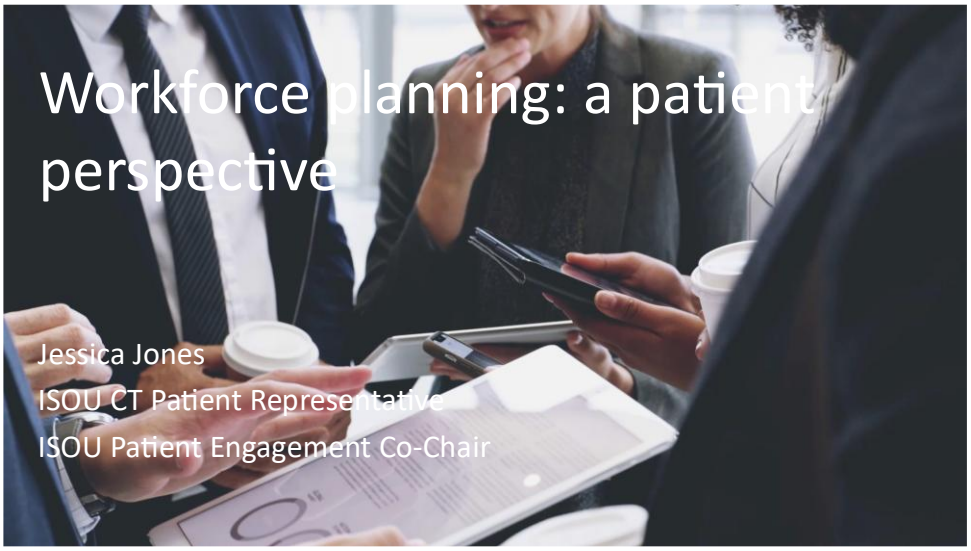
- RTC workforce numbers defined by donor offer activity + proceeding transplant activity, as well as transplant waiting list size
- Over-establishment recruitment of staff to buffer teams for as vacancies arise
- National JD, competency framework +/- training strategies to provide credibility to the RTC role
- Minimum AfC band 7 for any nurse undertaking on call duties
- Plans for progressive roles within the team

Acknowledgements

- *Hanah Griffin, CT Recipient Coordinator, Harefield*
- *Stephen Bond, Abdominal Transplantation Recipient Coordinator and Nurse Consultant, Addenbrookes*
- *Dr Mel Philips, Renal and Pancreas Recipient Coordinator, Edinburgh*

Thank you

Laura.stamp@nhsbt.nhs.uk


Workforce planning: a patient perspective
Jessica Jones
ISOU CT Patient Representative
ISOU Patient Engagement Co-Chair

Context


Patients and families overwhelmingly express gratitude to NHS teams
01
Acknowledge pressures on the service
02
Goal: Raise transplant care up boardroom agendas

Suspend Reality for 10 Minutes

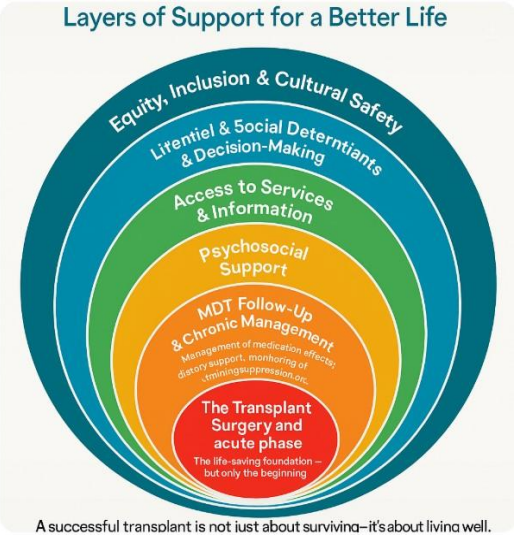
Imagine what the workforce reality feels like through a patient's eyes

What if we built services from the ground up—based on patient need, not existing posts?

What Do Transplant Patients Need?

- Transplant surgery is just the beginning
- Lifelong, multi-layered support is key to making transplants truly effective
- It's about quality of life, not just survival

Stolen Onion of Need



Beyond the Operating Table

- Peri-operative care is crucial—but not the end of the story
- Many patient concerns arise further down the line
- A lung transplant recipient won't benefit if kidney failure stops them living fully

Multi-Speciality Support – Not a Luxury

- Multi-speciality support must be integrated

ie. • Renal care (1 in 3 CT patients need RRT)

  • Dermatology (skin cancer risk)

  • Fertility, dietetics, psychological support

- Comparable to reconstructive surgery in oncology—essential, not 'nice to have'

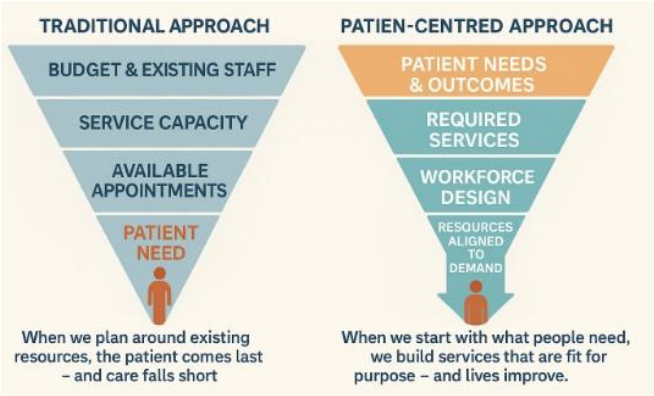
Erecting Your Own Scaffolding

Quality of Life Must Be the Goal

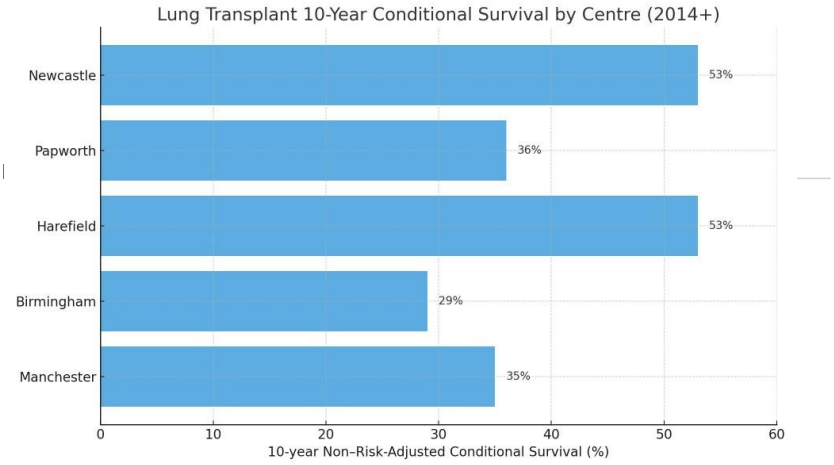
- We need to focus on quality life years from each donor organ
- 90-day survival is not the end goal
- “Alive” should never mean “barely functioning”

Planning healthcare workforce around what matters most: start with the patient

- Not: “Who do we have?”
- Instead: “What do patients actually need?”
- Dermatologist if 25% will develop skin cancer
- Gastroenterologist if bowel cancer risk is high
- False economy not to invest in early, expert support



The Survival Lottery



*NHSBT 2025 data via FOI request

- Survival should not depend on where you are listed

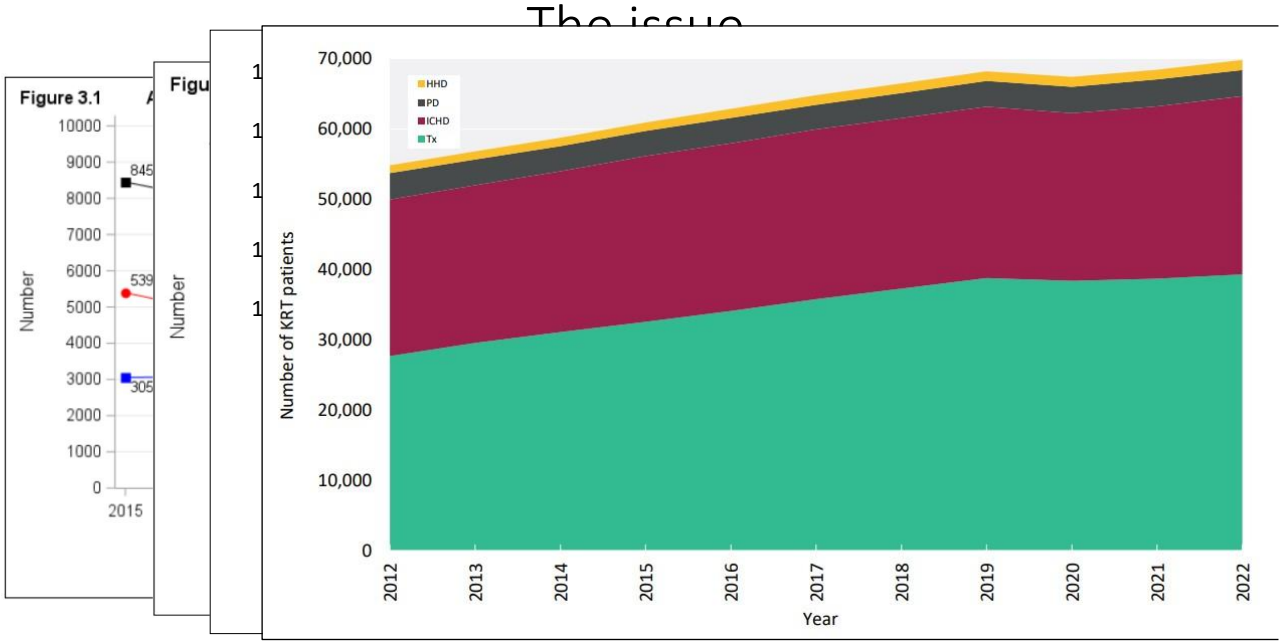
A World-Class System Needs a World-Class Workforce

- NHSBT 2030 vision: be the best in the world
- What do top international centres provide—and how can we learn?
- Let's build a workforce aiming to deliver not just survival, but a life worth living

Transplant Physician Perspective

Dr Gareth Jones
Consultant Nephrologist –Royal Free
UK Lead for Collaboratives
Chair Kidney Advisory Group

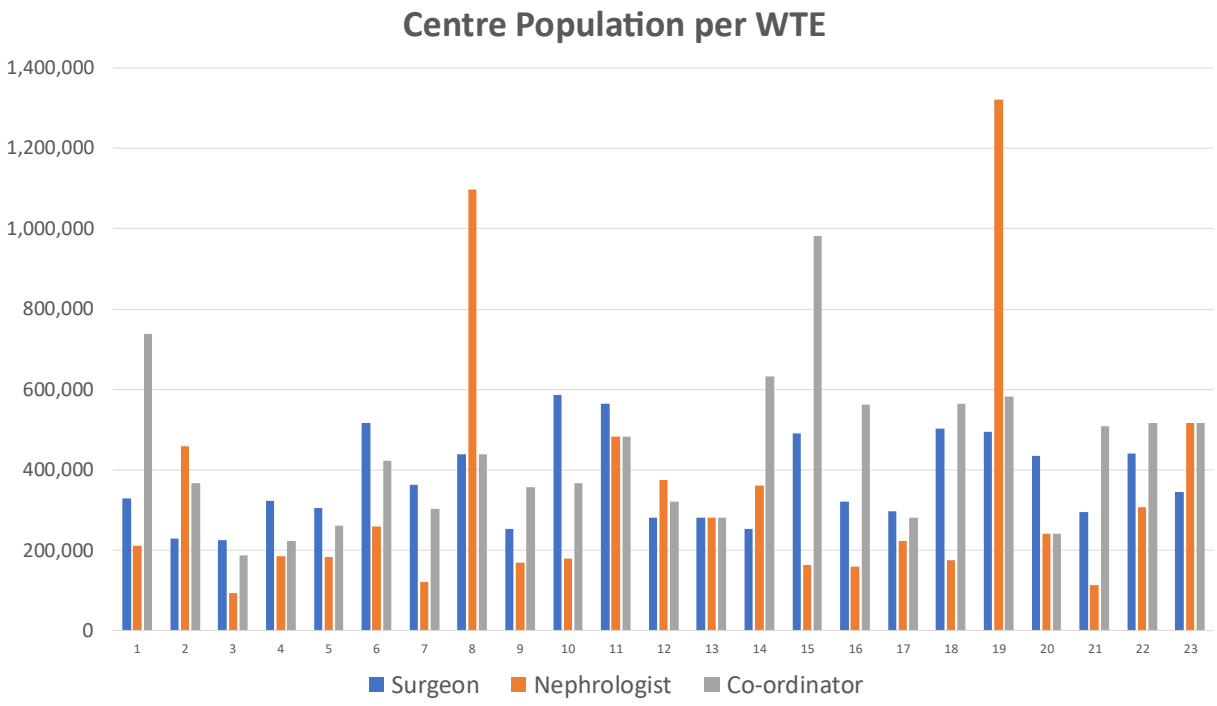
The issue

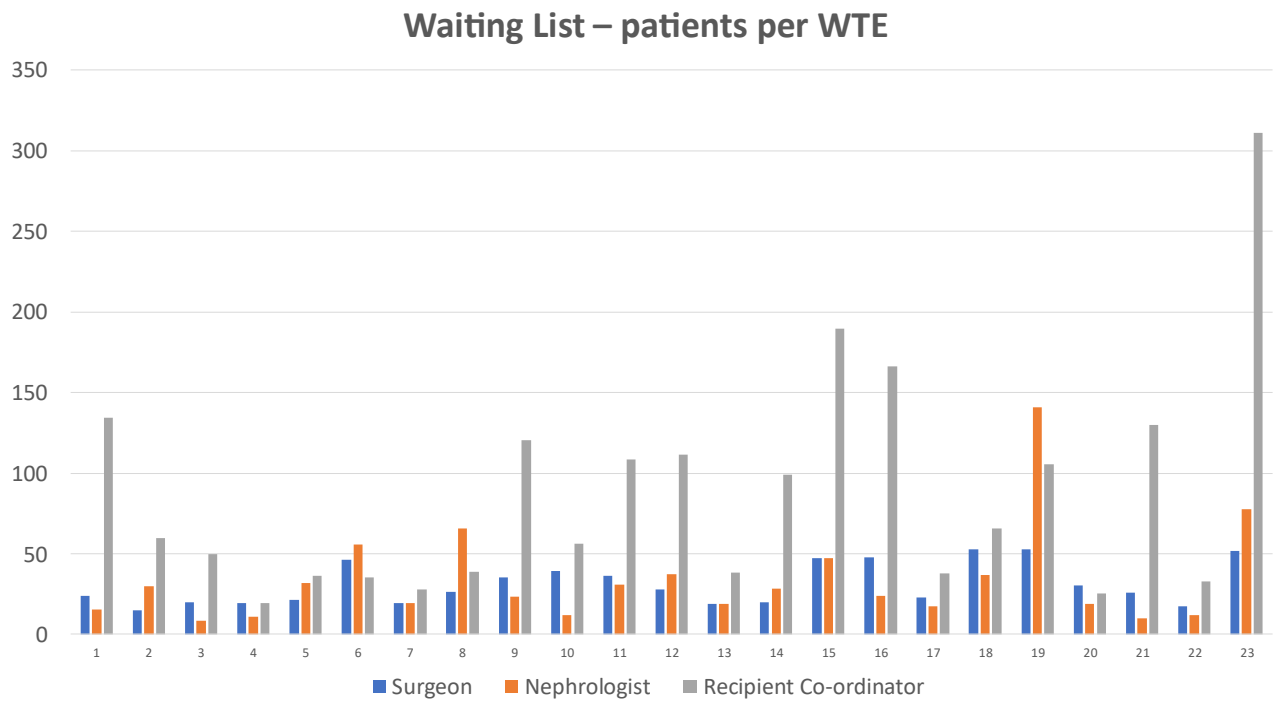


What does a transplant physician do…….

- Transplant assessment
  - Complex medical recipients
  - Cardiac/haemotology/metabolic
  - Highly sensitised/delisting
- Acute transplantation
  - inpatient
  - outpatient
- Long term transplantation
- Patient pathways – assessment, transplant, immunosuppression etc.
- Governance – NHS BT, HTA, response to incidents

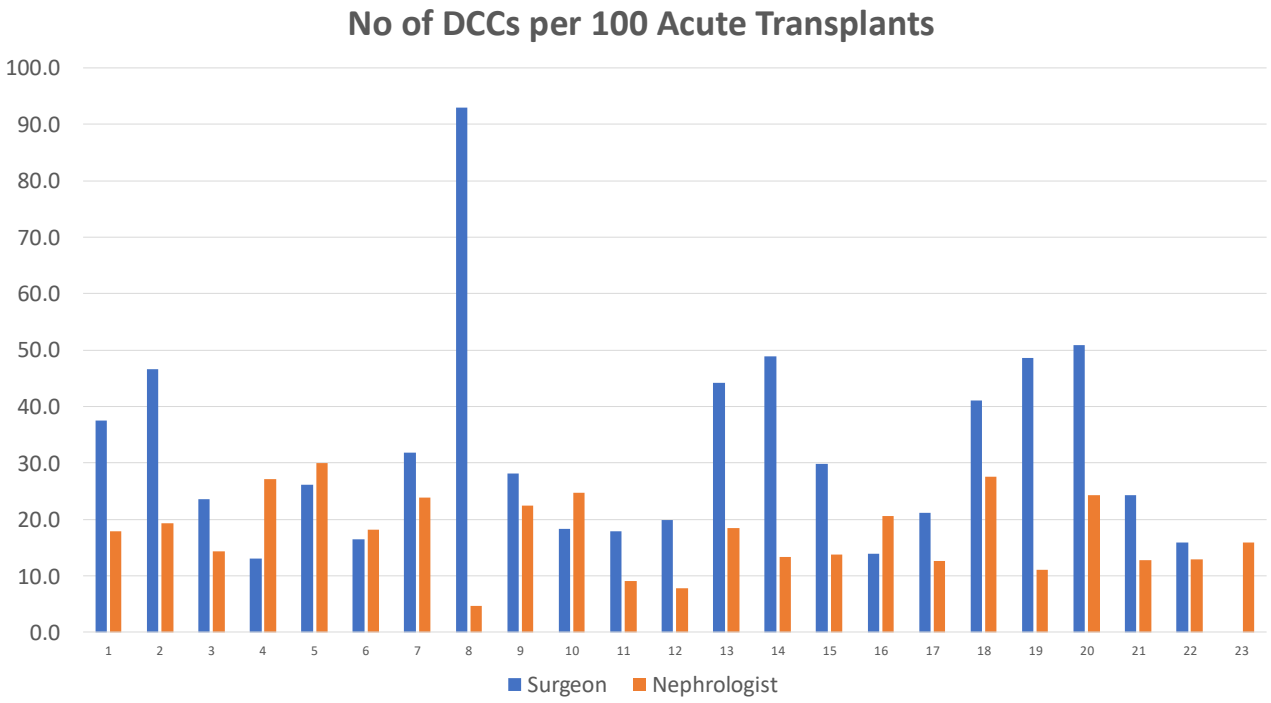
How many transplant physicians does it take to……



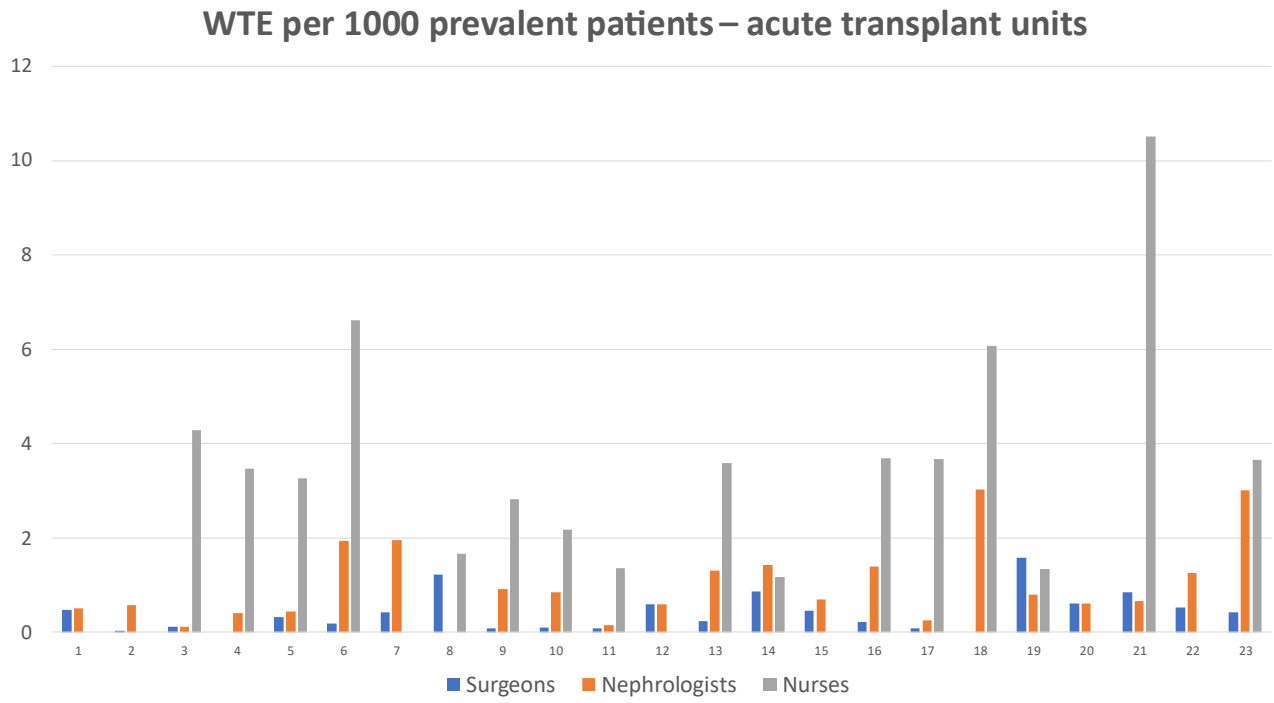


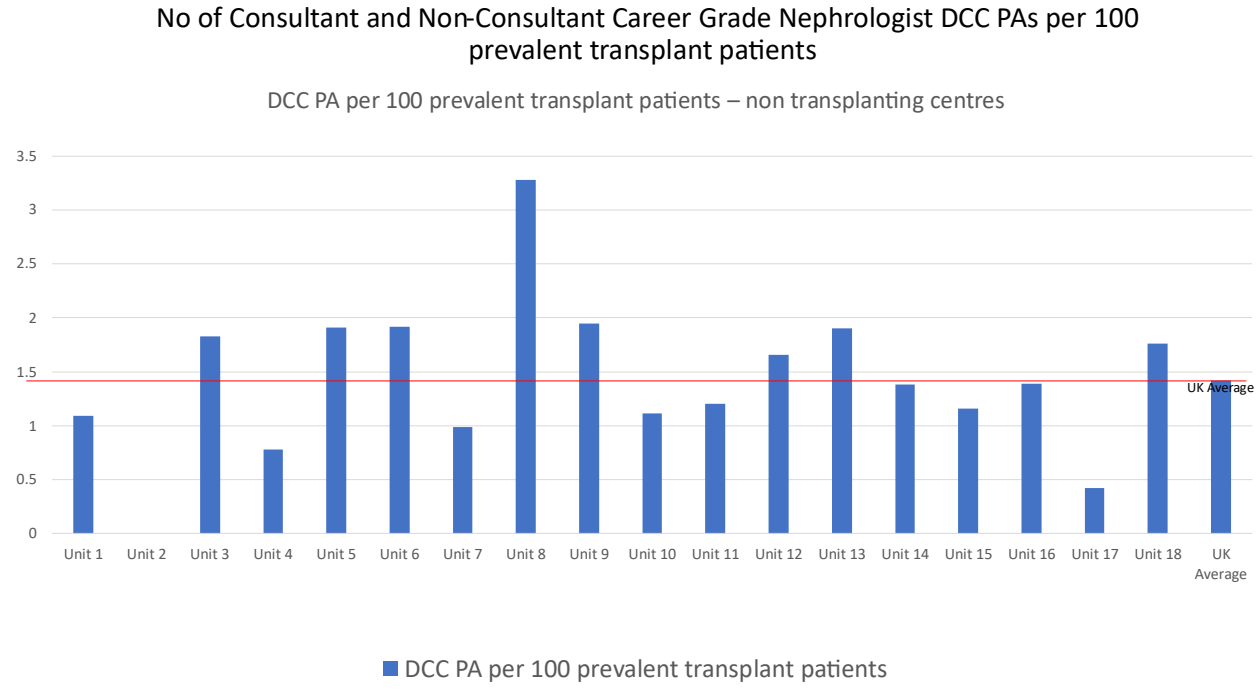
WORKFORCE UNIT PER 100 ACUTE TRANSPLANTS

The higher the column, the greater the staffing



WORK FORCE PER PREVALENT PATIENTS


WTE per 1000 prevalent patients – acute transplant units
12
10
8
6
4
2
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Surgeons
Nephrologists
Nurses

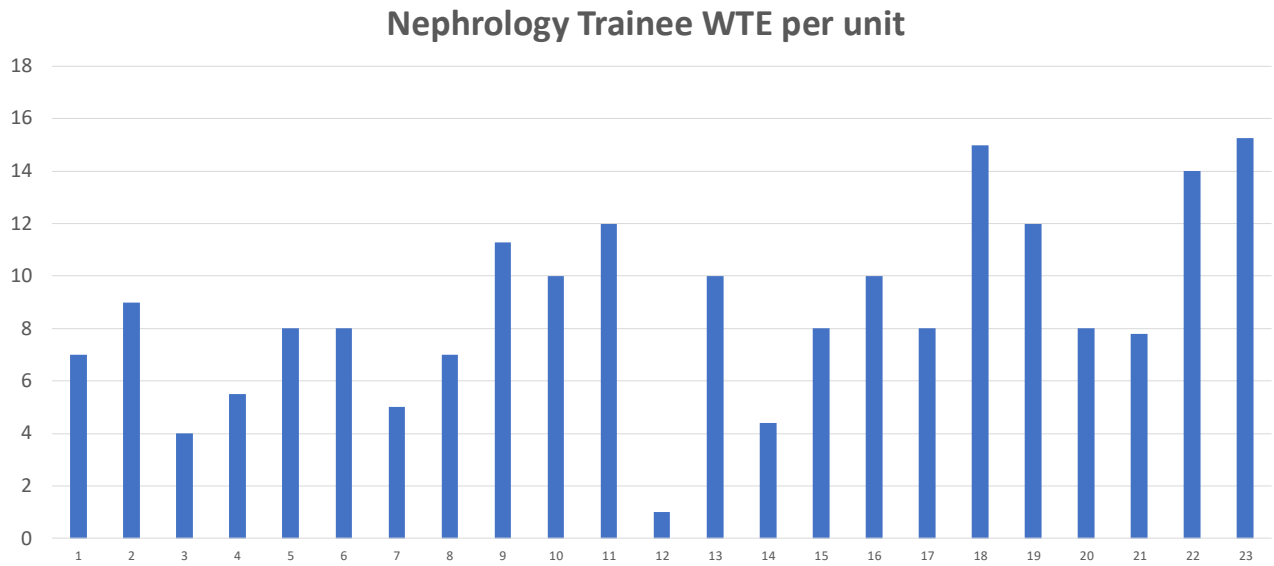

No of Consultant and Non-Consultant Career Grade Nephrologist DCC PAs per 100 prevalent transplant patients
DCC PA per 100 prevalent transplant patients – non transplanting centres
3.5
3
2.5
2
1.5
1
0.5
0
UK Average
Unit 1 Unit 2 Unit 3 Unit 4 Unit 5 Unit 6 Unit 7 Unit 8 Unit 9 Unit 10 Unit 11 Unit 12 Unit 13 Unit 14 Unit 15 Unit 16 Unit 17 Unit 18 UK Average
DCC PA per 100 prevalent transplant patients

Transplant PLC – clinic structure

	Guys	St Georges	Royal Free	Royal London	West London
Dedicated transplant clinics	Yes	Yes	Yes	Yes	Yes
Dedicated acute clinics	No	Yes	Yes	Yes	No
Failing transplant clinic	Yes	Yes	Yes	Yes	Yes
Named consultants	No	No	Yes	Yes	No
Off site follow up	Yes	Yes	Yes	No	Yes

Modelling of capacity across London: No. patients per consultant

		Guys	Barts	St Georges	Royal Free	West London	Average
Lone consultant	Total number of clinic slots per year	560	504	588	504	588	**549**
	Number of patients per consultant (no FGC)	115	100	116	108	122	**112**
	Number of patients per consultant (FGC)	127	109	127	121	135	**124**
Plus a clinic nurse	Additional clinic slots per year	189	92	92	223	0	**119**
	Number of patients per consultant (FGC)	170	129	147	174	135	**151**
Plus a registrar (no nurse)	Additional clinic slots per year	56	76	88	61	147	**86**
	Number of patients per consultant (FGC)	140	125	146	136	169	**143**
Plus a registrar and a nurse	Additional clinic slots per year	245	168	181	284	147	**205**
	Number of patients per consultant (FGC)	182	145	166	189	169	**170**

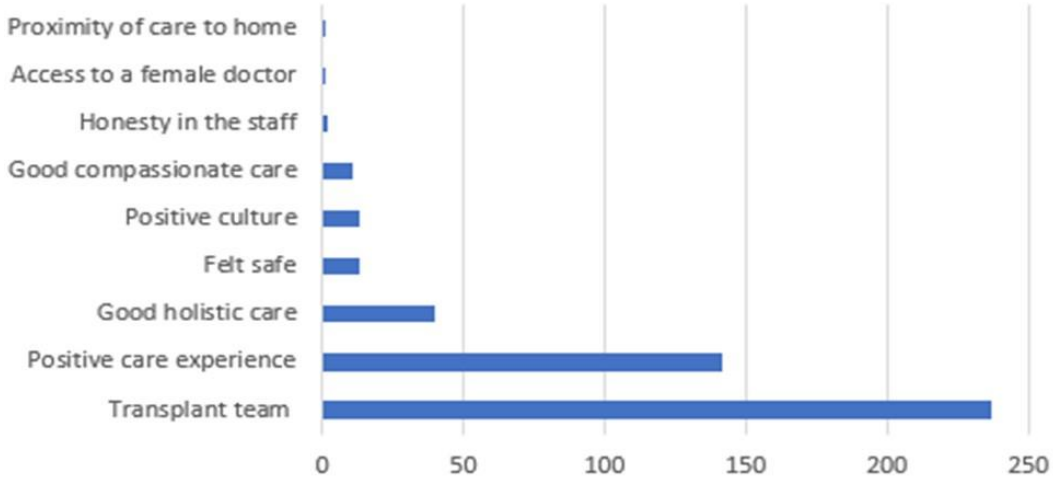


17 consultant Nephrologists are expected to retire in the next 3 years

3 units are predicted to have >25% WTE consultant retirements

What about patients ?

CT patient survey - what people liked best about their care



Conclusions

- Variation in centre practise workforce models
  - >4 fold variation in demand per workforce unit across professional groups
  - 2 fold variation in output per workforce unit across professional groups
- Can not consider one workforce group on its own
- Single template will be difficult
- Get the denominator right (population, tx population, waiting list, activity)
- You can plan/model for long term follow up
- Patient centred care – named consultant/nurse/pharmacist
- Tomorrows transplant unit
  - How is care going to be delivered ?
  - Who is going to train the work force ?

ISOU Workforce Template Symposium – Retrieval Team Perspective

Marius Berman

Consultant Cardiothoracic & Transplant Surgeon

Surgical Director Transplantation and MCS - Royal Papworth Hospital,
Chair, Retrieval Advisory Group, NHS Blood and Transplant
National Speciality Advisor - Heart Transplantation, NHSE

No conflict of interest… besides wanting to increase UK CT transplantation

Organ Retrieval = Cinderella

National Organ Retrieval Service (NORS)

4/5 Team members
Lead, signed off surgeon
Assistant surgeon
Scrub Nurse
Transplant Practitioner
+ Organ Perfusion and Preservation

Pre-2014 NORS

Each recipient centre sent its own retrieval team

If heart, lungs, liver, kidney and pancreas accepted, we had 5 teams in theatre, and 5 sets of transport (planes too)

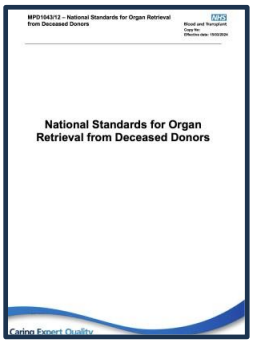
No quality standard for retrieval

No governance - no means to assess and learn from misadventures

No quality control, no agreed protocols, very expensive, no process management, poor coordination

- NORS
  - Is an independent 24/7 service, based in UK transplant units, with staff employed by UK NHS Trusts
  - Performs commissioned organ retrieval from DBD and DCD donors
  - Certain retrievals - DCD heart, abdominal NRP, pediatric CT require specialist teams NORS teams
  - Each centre has a NORS Clinical Lead which is a part-time funded surgical post
  - The NORS lead has responsibility to ensure that team members are adequately trained to perform their duties
  - NORS Lead collaborates with senior perioperative staff to ensure perioperative team are also appropriately trained
  - Employing NHS Trust has responsibility to ensure compliant rotas and suitable working conditions

– Perioperative Training is supported by online modules (general, scrub and preservation competencies)
– Surgical Training is supported by the Masterclass, clinically by apprenticeship with NORS centre
– Quality Standard
– 'It's all fine when it's fine' – Governance and Quality help when it's not.


National Standards for Organ Retrieval from Deceased Donors


Abdominal Normothermic Regional Perfusion (ANRP)

Protocol and related documents:

- UK Protocol for Normothermic Regional Perfusion (PDF 581KB)
- Framework for new centres to start ANRP (PDF 592KB)
- ANRP structure, training and competency (PDF 231KB)
- ANRP passport - FRM6725 (PDF 205KB)
- ANRP Debriefs - summary of key learning identified (DOCX 500KB)
- Principles for retrieving outside normal donor coverage or at the request of another centre using ANRP (PDF 194KB)

DCD hearts

Protocol and related documents:

- UK National Protocol for retrieval of DCD Heart and Lungs (PDF 2MB)
- Papworth Training Manuals - OCS v3 and Cell Saver (PDF 2MB)
- DCD Heart Clinical Review Forum – summary of key learning identified (PDF 493KB)
- DCD Heart Passport FRM6356 (PDF 866KB)

Part 1 – Virtual (Theory) Masterclass

NHS Blood and Transplant

Welcome Delegates, Sponsors and Faculty to our UK NHSBT Organ Retrieval Service Virtual Retrieval Masterclass 24/25!

Approved for 18 CPD hours by RCSEd (6 CPD points per day)
Course Directors:
Ian Currie - National Clinical Lead for Organ Retrieval, NHSBT
Marius Berman - Associate National Clinical Lead for Organ Retrieval, NHSBT

Tuesday 12th November 2024. DAY 1. Morning
Session 1. The Process of Organ Donation **Chairs: Isabel Quiroga & Hassiba Smail**
Welcome
Role of NHSBT in Organ Donation, Retrieval and Transplantation
NORS; Training and Competence
Physiology of brainstem death, BSD testing and checking the BSD form. DCD donation process; neurological and circulatory criteria.
Refreshment break
Session 2. Key Roles in NORS **Chairs: Aimen Amer & Fiona Hunt**
Role of the Specialist Nurse in Organ Donation
Role of the Perioperative Practitioner
Role of the Surgeon; *Abdominal and Cardiothoracic*
Lunch
Tuesday 12th November 2024. DAY 1. Afternoon:
Session 3. Organ Preservation, Risk Management **Chairs: Ahmed Sherif & Prashant Mohite**
Principles of organ preservation; *Abdominal and Cardiothoracic*
Organ Retrieval; Doing it Right
Governance & incident reporting: how to improve
Refreshment break
Chairs: Shahid Farid & Hassiba Smail
Case presentations on donor selection, focussing on malignancy/ transmissible disease
Close day 1

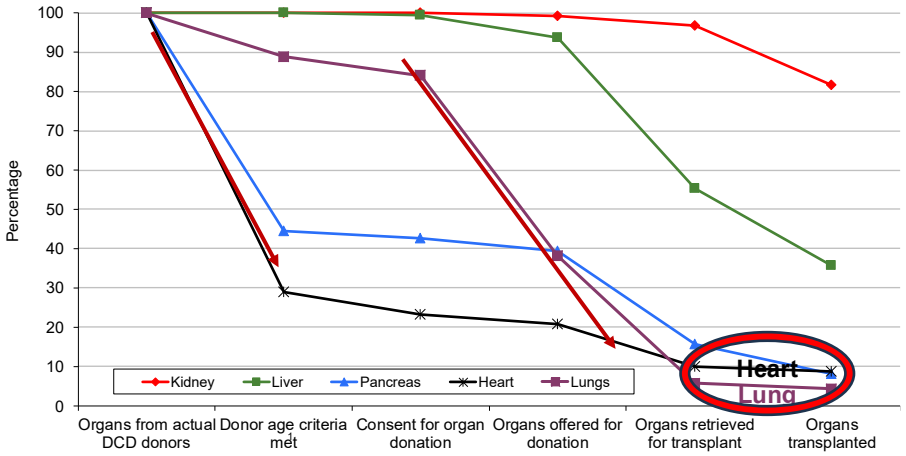
NHSBT Retrieval Masterclass – Tuesday 12th to T
Wednesday 13th November 2024. DAY 2. Morning
Session 4. Retrieval; AB **Chairs: Elijah Ablorsu & Pradeep Kaul**
Feedback from Day 1; Audience Input
Liver
Pancreas and Vascular Conduits
Kidney
Refreshment break
Session 5. Retrieval; CT Chairs; **Elijah Ablorsu & Pradeep Kaul**
Heart
Heart for Valves
Lungs
QUOD and INOAR; practical aspects
Organ inspection, photography, packaging and forms.
Lunch
Wednesday 13th November 2024. DAY 2. Afternoon
Session 6. Retrieval Surgery Chairs: **Marius Berman & Ian Currie**

Session 7. Perfusion Technologies **Chairs: Shahid Farid & Hassiba Smail**
Feedback from Day 2; audience input.
Abdominal Normothermic Regional Perfusion (NRP)
Team approach to DCD heart retrieval and transplantation
DCD lung retrieval with NRP
DCD Heart/lung/NRP; Key Issues; Key messages
TransMedics - Liver
Lunch; SCORE 11:35 – 11:55; Sarah Beale
Thursday 14th November 2024. DAY 3. Afternoon
Session 8. Thoraco-Abdominal NRP **Chairs: Andrew Butler and Stephen Large**
Overview of technique & Heart
Lung
Abdominal Organs
Is the brain perfused in TANRP?
TANRP in the UK
Session 9. Perfusion Technologies in Use **Chairs: Ian Currie and Marius Berman**

Part 2 Masterclass – Hands on

Organ utilisation

1 April 2023 – 31 March 2024



Transplanted:

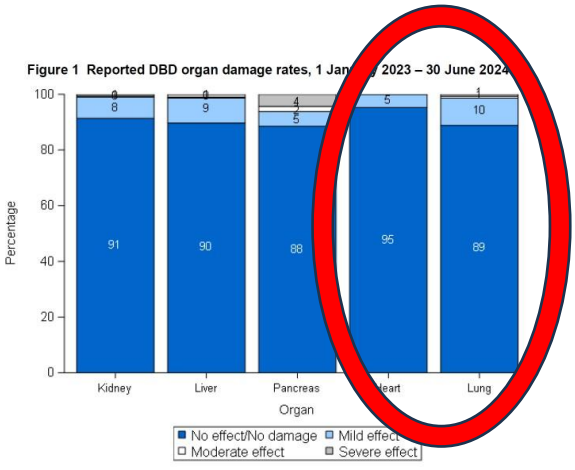
% of all organs meeting age criteria[1]

[1] Hearts – age < 50, weight > 50kg and cause of death not myocardial infarction

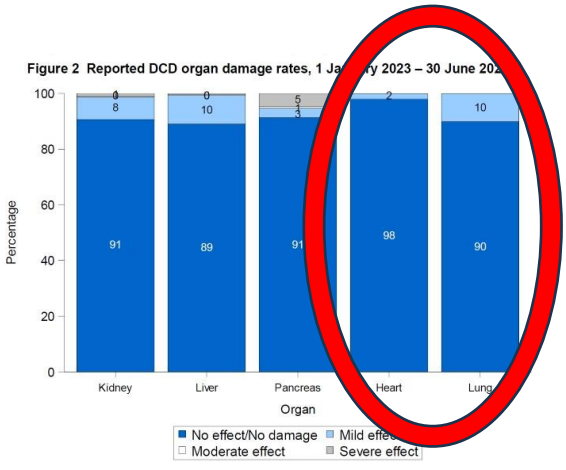
NHS BLOOD AND TRANSPLANT

RETRIEVAL ADVISORY GROUP

REPORTED ORGAN DAMAGE RATES, 1 JANUARY 2023 – 30 JUNE 2024
SUMMARY



DBD



DCD

Trust NORS Lead Signed Off + Mandatory Retrieval Training + QUOD + HTA


RCS

NHS Blood and Transplant

Organ Retrieval Certification

This is to certify that

has successfully completed all components of the competency programme and has achieved full registration for

Abdominal Organ Retrieval

Awarded on behalf of NHSBT by
Mr Ian Currie BSc PhD MBChB(Hons) MD FRCS(Gen) FRCPE
UK Clinical Lead for Organ Retrieval

Mr Marius Berman MD FRCS (CTh)
Associate UK Clinical Lead for Organ Retrieval

Date:


RCS

NHS Blood and Transplant

Organ Retrieval Certification

This is to certify that

XXXXXXXXXXX

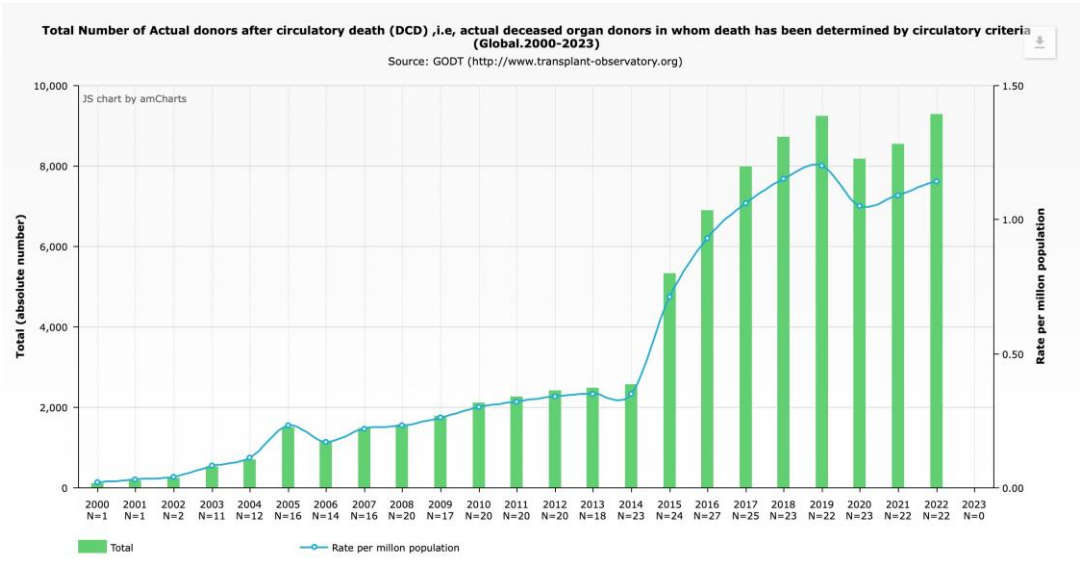
has successfully completed all components of the competency programme and has achieved full registration for

Cardiothoracic Organ Retrieval

Awarded on behalf of NHSBT by
Mr Ian Currie BSc PhD MBChB(Hons) MD FRCS(Gen) FRCPE
UK Clinical Lead for Organ Retrieval

Mr Marius Berman MD FRCS (CTh)
Associate UK Clinical Lead for Organ Retrieval

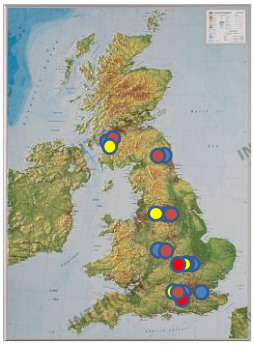
Date:



Set – up Cardiothoracic National Organ Retrieval Service Standard and DCD Heart

Retrieval Teams

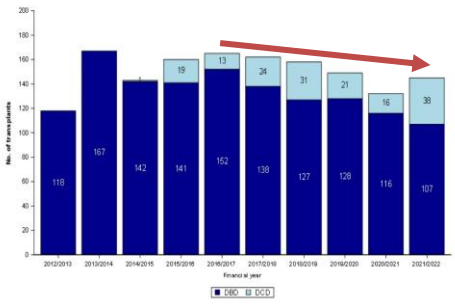
- Heart Transplant Centre
- National DBD Heart CT Retrieval Team
- 9/20
  National DCD Heart Retrieval Team X 3
- 5/21
  National DCD Hybrid Team
  (Surgeons Centre A + Scrub and OPP Centre B)
  Reduce National DCD teams to 2
- 3/22
  New National DCD Heart Retrieval Team



Steady heart transplant : (26% DCD)

Blood and Tra

Figure 5.1 Number of adult heart transplants in the UK, by financial year and donor type, 1 April 2012 to 31 March 2022

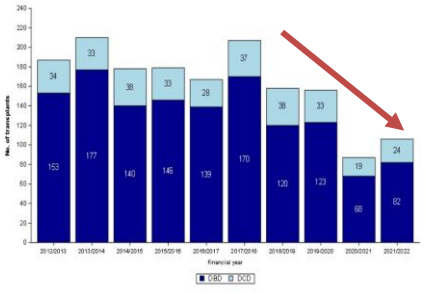


Source: Annual Report on Cardiothoracic Organ Transplantation 2021/2022, NHS Blood and Transplant

Decline lung transplant : since 2019 : 77 % decline

NHS Blood and Transplant

Figure 11.1 Number of adult lung transplants in the UK, by financial year and donor type, 1 April 2012 to 31 March 2022



Source: Annual Report on Cardiothoracic Organ Transplantation 2021/2022, NHS Blood and Transplant

Challenges for UK Cardiothoracic Retrieval Surgeons

- DCD UK – one of the world highest donation rate
- Increase in aNRP – large benefit for livers
- Despite dedicated training, monthly debriefs– results are not guaranteed. Nor repetitive
- DCD Cardiothoracic – Very complex and highly skillful
- Despite the training, CT consultants choose not to be involved in organ retrieval
- Decline of skilled workforce – only 7-9 surgeons retrieving DCD hearts in UK
- Job plans don't recognize these skills in organ retrieval

Unique situation UK where complex retrieval procedures are performed based on mutual procurement by only 50% of the teams

Empty handed avoidable donor runs….Coronary disease

For all UK deceased donors 1 February 2024– 31 January 2025, where heart was offered but not retrieved that were attended by a CT team (note this will include non-proceeding donors):

CAD recorded as non-use reason for heart	DBD N (%)	DCD N (%)	Total N (%)
No	106 (74%)	45 (66%)	**151 (71%)**
Yes	38 (26%)	23 (34%)	**61 (29%)**
Total	**144**	**68**	**212**

>30% of the runs are abandoned due to palpable coronary disease
= huge waste in resources and teams/human resilience!!!!!

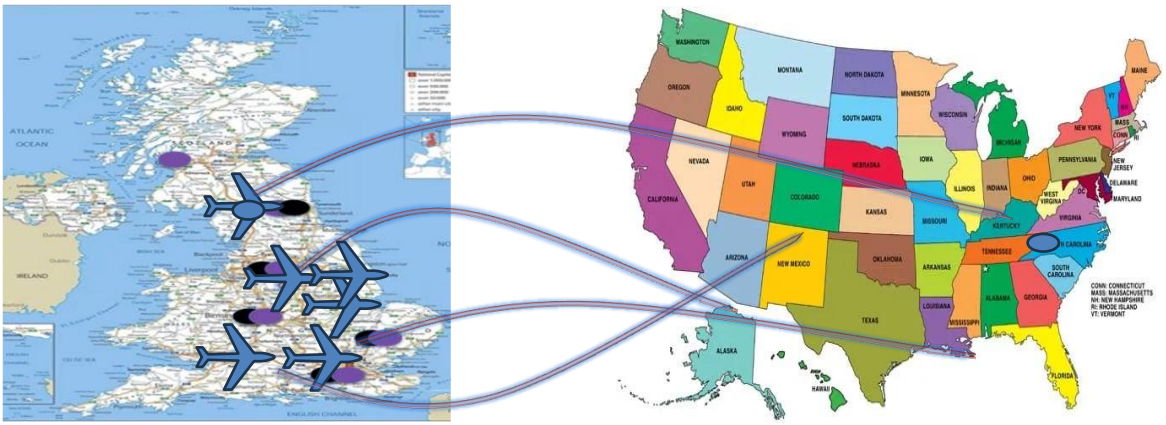
A Tale of 2 cities
ISHLT 2022

What 3 projects do you want to deliver over the next year

1. Implement 10 degree fridge
2. Introduce EVLP
3. Start using TANRP organs

City	Time to first 10 degree fridge case (Days)	Time to approval of EVLP (Days)	TANRP (Days)
Cambridge	405	930	Ongoing
LA	64	94	150

Stop the Exodus



10 experienced transplant surgeons
Including 4 centre directors

Solutions….

- SCORE – planned arrival time, Local NORS Collaborative…
- Job plans – focusing into retrieval component
- CT consultants recognizing that organ retrieval became more complex
- DCD Heart business case approved 4/2025
- Model similar to abdominal consultant involvement
- More support into career development – National training scheme
- Donor Computer tomography workstream - NHSBT
- NHSE Transformation Program
- Link Organ Retrieval to Outcomes (reduce PGD)
  > Easier Access to Machine Perfusion Technologies

And/Or,

Each team doing their own complex (DCD) retrieval for themselves – enhance commitment, resilience, sustainability and eliminating the distrust factor

Or,

Third party organ procurement

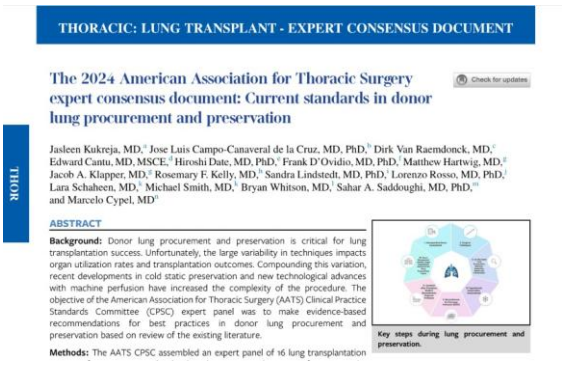
Third-party organ recovery has potential to be transformative

- AATS expert consensus document:

Expanding lung transplant access and volume could be achieved by delegating procurements to other qualified teams

- Statement 34:

Third party procurement services may be an alternative option to increase organ acceptance and recovery rates at centers where the procurement services may not be readily available.


THORACIC: LUNG TRANSPLANT - EXPERT CONSENSUS DOCUMENT

The 2024 American Association for Thoracic Surgery expert consensus document: Current standards in donor lung procurement and preservation

Jasleen Kukreja, MD,[a] Jose Luis Campo-Canaveral de la Cruz, MD, PhD,[b] Dirk Van Raemdonck, MD,[c] Edward Cantu, MD, MSCE,[d] Hiroshi Date, MD, PhD,[e] Frank D'Ovidio, MD, PhD,[f] Matthew Hartwig, MD,[g] Jacob A. Klapper, MD,[g] Rosemary F. Kelly, MD,[h] Sandra Lindstedt, MD, PhD,[i] Lorenzo Rosso, MD, PhD,[j] Lara Schaheen, MD,[k] Michael Smith, MD,[l] Bryan Whitson, MD,[l] Sahar A. Saddoughi, MD, PhD,[m] and Marcelo Cypel, MD[n]

ABSTRACT

Background: Donor lung procurement and preservation is critical for lung transplantation success. Unfortunately, the large variability in techniques impacts organ utilization rates and transplantation outcomes. Compounding this variation, recent developments in cold static preservation and new technological advances with machine perfusion have increased the complexity of the procedure. The objective of the American Association for Thoracic Surgery (AATS) Clinical Practice Standards Committee (CPSC) expert panel was to make evidence-based recommendations for best practices in donor lung procurement and preservation based on review of the existing literature.

Methods: The AATS CPSC assembled an expert panel of 16 lung transplantation

Key steps during lung procurement and preservation.

Ref: Kukreja, J et al. The 2024 American Association for Thoracic Surgery expert consensus document: Current standards in donor lung procurement and preservation. J Thorac Cardiovasc Surg 2025;169:484-504

Downside of third-party retrievals

- Research and development are not a primary focus

- Nursing and DCP training? Job satisfaction and career progression?

Consider hybrid service? UK NORS teams contributing to a national specialized retrieval service?
> aiming for sustainability, training, fair compensation, career satisfaction and allowing research.
> synergism with ARCs and Donor Centers Optimization

Thank you

Marius.berman@nhs,net

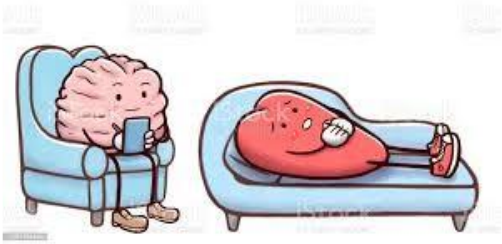
Manchester University NHS Foundation Trust

Transplant Psychologist Perspective:

National Transplant Workforce Template:

A national template should be developed to define the skill mix for an effective and resilient transplant workforce that is fit for current and future demands

Dr Zoey G. Malpus *DClinPsych, C.Psychol, AFBPsS*
Consultant Clinical Psychologist
Cardiothoracic Transplant Unit
Wythenshawe Hospital
Manchester, UK



Normal Psychology of Transplant:

"Life changing and Traumatic"

- Patient feedback - transplant is a highly traumatic process, all stages of pathway
- ICU delirium, ventilation, intensive rehab, medication and side effects
- Unrealistic expectations, finding a "new normal", body image changes, living with donor lungs, survivor guilt
- Post-traumatic growth
- Scaffolding to build the life you want to live

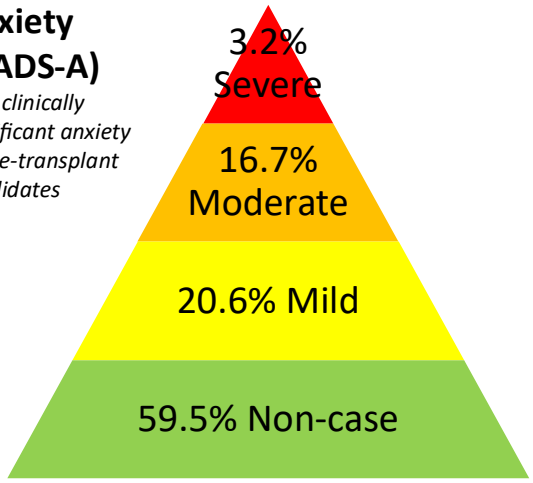
"So much to get your head round and so many dreams… memories… flashbacks that you have to live with and make sense of"

"Transplant is a devastating and deeply traumatic thing to happen and I and my husband both suffered PTSD (and still do to an extent)"

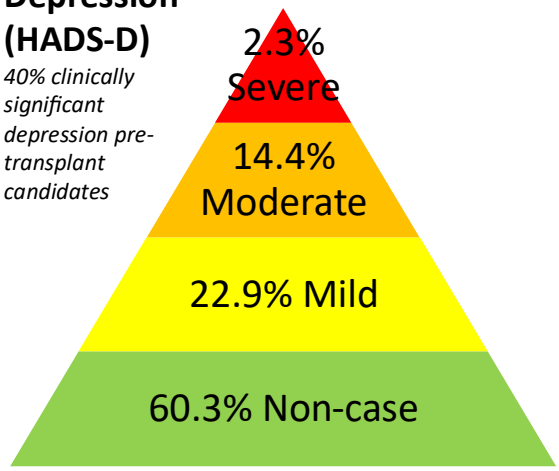
"the sessions were an essential part of my initial recovery and coming to terms with ***my lifequake"***

Pre-Transplant: *55% clinically significant, anxiety, depression or both*

Anxiety (HADS-A)
40% clinically significant anxiety in pre-transplant candidates

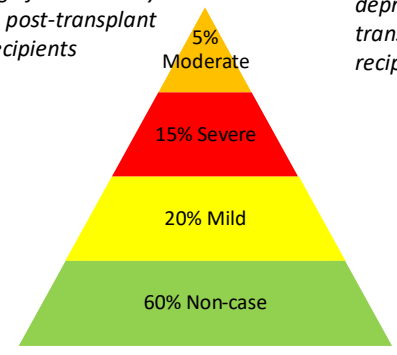


Depression (HADS-D)
40% clinically significant depression pre-transplant candidates

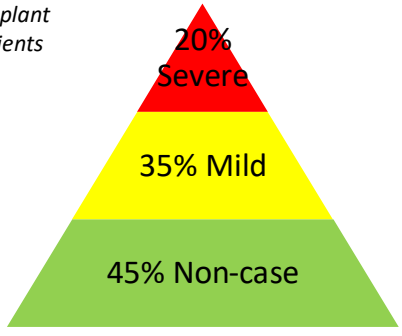


Post-Transplant Anxiety, Depression & PTSD

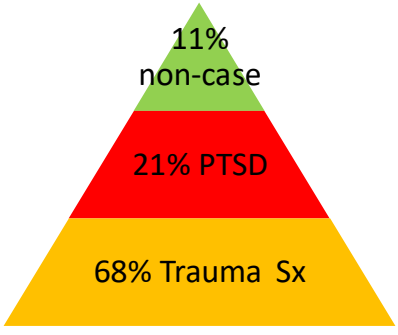
Anxiety (HADS-A)
Still 40% clinically significant anxiety in post-transplant recipients



Depression (HADS-D)
Increased to 55% clinically significant depression post-transplant recipients



Post-Traumatic Symptoms (IOES)
89% transplant recipients report PTSx



What do patients report helps?

Normalising Psychological Reactions to Transplant

"I was made to feel that my experiences were quite normal and to be expected which I found very reassuring."

Importance of Listening

"I was given the time I needed to talk through what I was experiencing."

Timing and Availability when Needed

"Every patient will be different, with vary levels of need. The key issue is to have access at the time when there is specific need."

Importance of Peer Support

"Transplant patients have so many things to adjust to and, more often than not, they tend to find understanding from fellow patients."

"Meeting the psychologist was a turning point for me. Never had I met anyone trained in all that we as heart transplant patients face. For the first time I felt understood, and that my feelings and emotions were validated"

"I honestly believe that I would have had a totally different and far more traumatic experience without her"

What do patients advise we should do to improve?

Better access to psychology

"I believe weekly visits to patients in hospital is vital'

"It would assist to meet with a psychologist on a more regular basis."

"More availability - especially group situations."

Better information about the psychological impact of transplant

"More information about the psychological/emotional effects of transplant explained before transplant. I was expecting physical side - effects but the psychological side of it came as a huge shock."

Better preparation for ICU delirium

"Warning what I would be like when I came round after my op hallucinations where terrible"

"I would have liked support/advice to cope with the hallucinations caused by medication while I was in a coma post -transplant. I was unprepared for this. This should have been given pre transplant"

" Regular routine appointments from day one at all clinic appointments."

"Too little information beforehand about how transplant can affect you"

"I think more intervention before would be good to prepare for the unknown, maybe this could be a big part of the assessment beforehand"

Further patient advice on how we can improve

Routine screening for PTSD/mood and timely referral to Psychology

"Automatically & routinely bring up questions about PTSD/ mood at each medical review so that timely referral intervention can be made & emotional adjustment to Tx is supported throughout."

"Quite a while after leaving hospital I suffered from PTSD"

Better access to peer support

"I think meeting transplant patients before transplant and getting first - hand experience would be a good tool, as we are all so different."

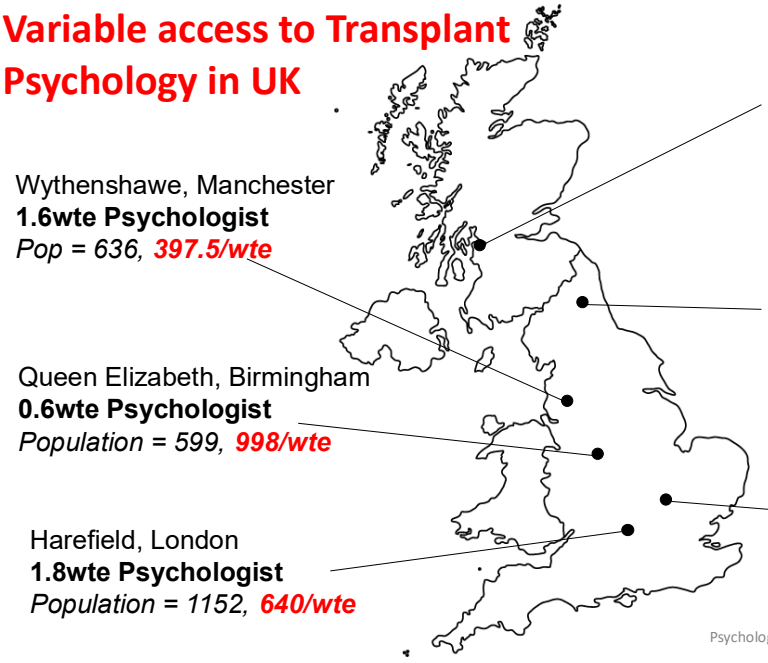
"The transplant cafés were very helpful in helping me and me being able to help others"

Better support for Families

"As a patient I could see my family were struggling with their emotions post-surgery, I feel psychological help should extend to close family members too"

"I think the closest family members need help to cope with the process"

Variable access to Transplant Psychology in UK



Golden Jubilee, Glasgow
1.1wte Psychologist
Population = 277, **252/wte**

Wythenshawe, Manchester
1.6wte Psychologist
Pop = 636, ***397.5/wte***

Freeman, Newcastle
1.0wte Psychologist
Population = 1105, ***1105/wte***

Queen Elizabeth, Birmingham
0.6wte Psychologist
Population = 599, ***998/wte***

Papworth, Cambridge
0.6wte Psychologist
Population = 1117, ***1862/wte***

Harefield, London
1.8wte Psychologist
Population = 1152, ***640/wte***

Psychological Association for Cardiothoracic Transplant (PACT) UK

Importance of Transplant-specific Psychological Care

"Best part was her explaining the medical side of why I was feeling certain ways as she knew all about transplants and the medications which helped me understand what I felt was normal for us and acknowledged how hard it was."

Negative – "I was pointed to self-referral services in my local region, which have no training in medical trauma, or the issues relating to our situation".

"There can be a danger that psychologists not aware of the high rates of post-transplant complications ….. may gaslight transplant recipients into feeling that they have 'anxiety'/'paranoia'/'hypochondria' for voicing concerns which are understandably valid."

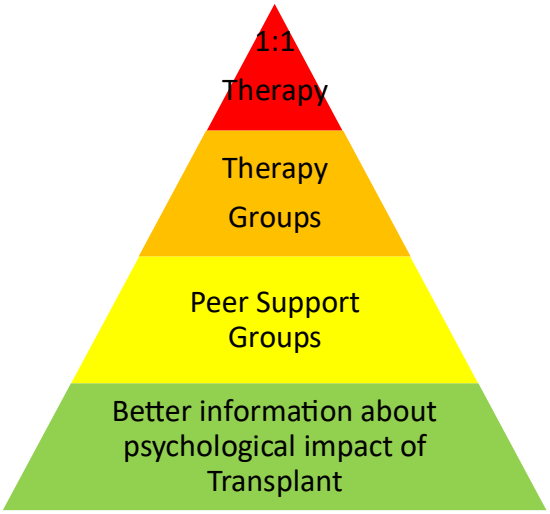
Equitable access to Prehab and Transplant Psychology

Psychology "provides the scaffolding to build the life you want to live"

Offer a range of psychological interventions, according to need and stage of transplant journey

- Prehab (optimising readiness for transplant)
- Post-transplant, peer support, therapy groups and individual sessions

"Every patient will be different, with varying levels of need"



Transplant Psychologist Recommendations (1)

- Standardised psychological screening (anxiety, depression, trauma), to identify need at each stage
- Equitable access to prehab & post-transplant, matching to level of need and stage of journey
- Support for families, particularly related donors
- Staffing ratios should be 350 patients / 1wte psychologist (British Renal Society guidelines 2020)
- Co-production, patient voice is **CRUCIAL** to design and delivery of transplant psychology

Transplant Psychologist Recommendations (2)

- Develop national virtual psychological network
  - Monthly support groups open to patients from anywhere in the UK
  - Specific therapy groups depending upon need e.g. anxiety management for breathlessness, fatigue & depression, trauma-focused therapy
- Related donors need their own dedicated psychology input
- Importance of training next generation, offering placements for trainee clinical psychologists, for later recruitment
- Research collaboration, share our learning….

PPV Key to Understanding Psychological Impact

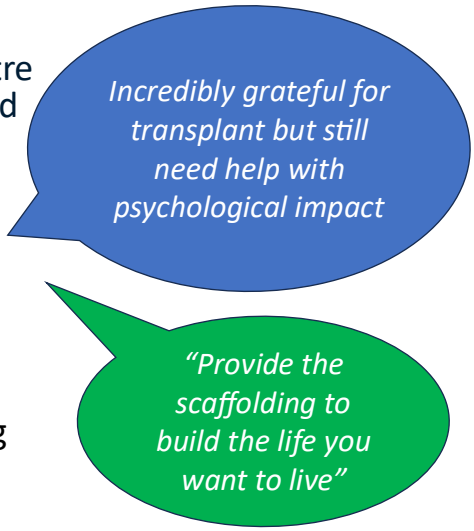
Patient-centred approach:

The OUG emphasizes placing patients at the centre of the service, ensuring their voices are heard and their needs are met throughout the transplant process.

Patient feedback:

Transplant services should actively seek and act upon patient feedback, including from less heard voices.

Collaboration with Cardiothoracic Transplant Patient Group & PPV roles is CRUCIAL to planning National Transplant Workforce Template



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Nursing across the teams

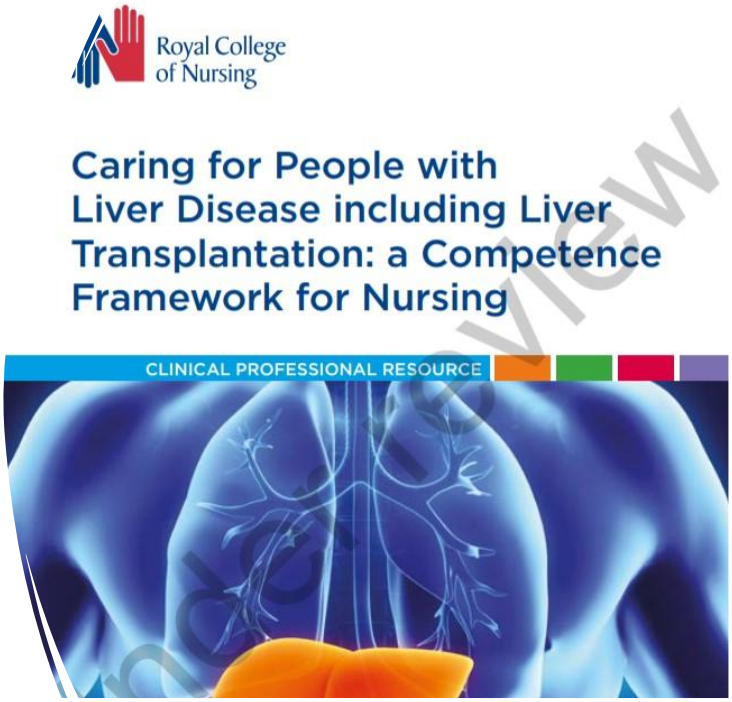
Mike Holwill

Lead Nurse, Liver Transplant & Hepatology, St James's Hospital


ICU
Ward
Transplant


GL OB
LO C A L

- National competency
- Networking
- Developing best practice



Report of the Organ Utilisation Group

Peter J Friend
Royal College of Surgeons of England
University of Oxford

Report of the Organ Utilisation Group: Recommendation 6

A National Transplant Workforce Template must be developed to provide definitions of the skill mix for an effective, safe and resilient transplant workforce that is fit for current and future demands

Perspective from Royal College of Surgeons (Eng)

- Recruitment to surgical specialty
- Training of transplant surgeons
- Retention of skilled surgeons
- Quality assurance
- Balanced job plans
- Sustainable on-call rotas
- Engagement with innovation
- Evolution of nationally-planned service

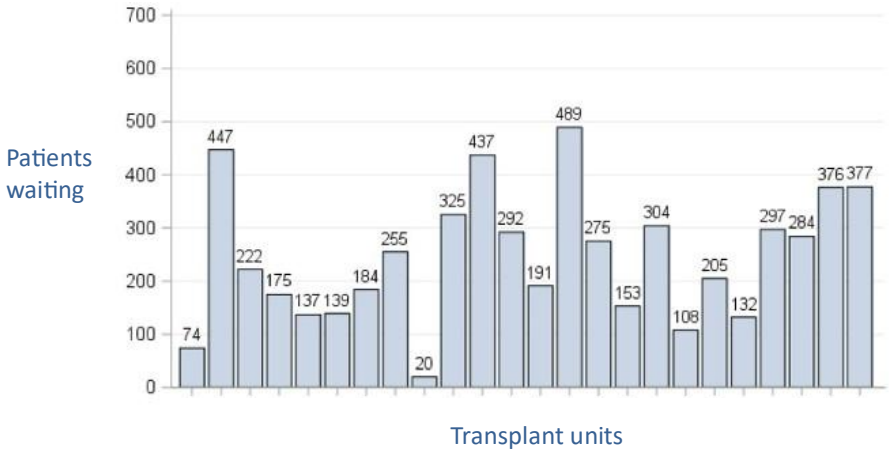
Transplant surgery – the challenges

- Transplantation becoming busier & more complex
- Units vary in size, scope and resources
- Sustainability an increasing issue
  - No longer a specialty driven by passionate pioneers
- Balance – elective vs on-call
- Avoidance of conflicting professional commitments
  - Elective sessions after on-call (e.g.)
- Definition of required infrastructure 'Minimum viable product'
  - Rotas; multi-disciplinary team; operating theatre access etc.
  - Support services available (e.g. physio, psychology, dietician)
- Particular issues in cardiothoracic units
  - Part-time responsibility (esp. low volume units)
  - Availability of alternatives (e.g. full-time non-Tx; emigration)

One size does not fit all

Transplant units vary: wide variation in waiting lists

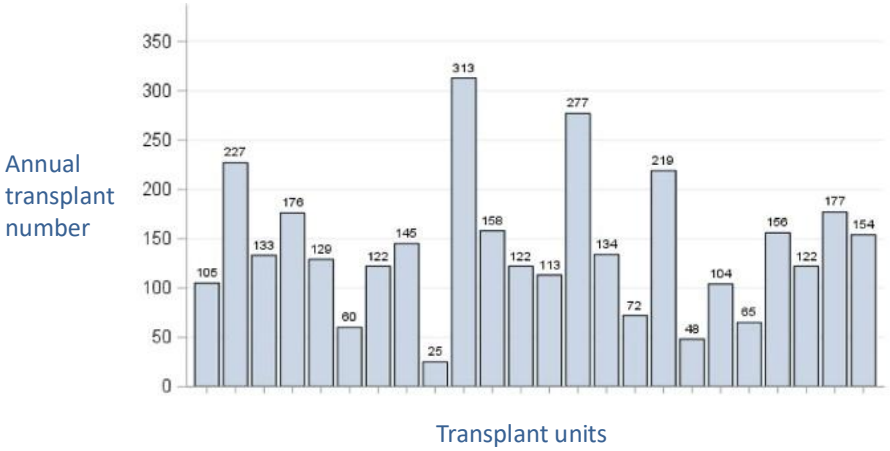
UK kidney transplant centres



NHSBT data

…and kidney transplant activity

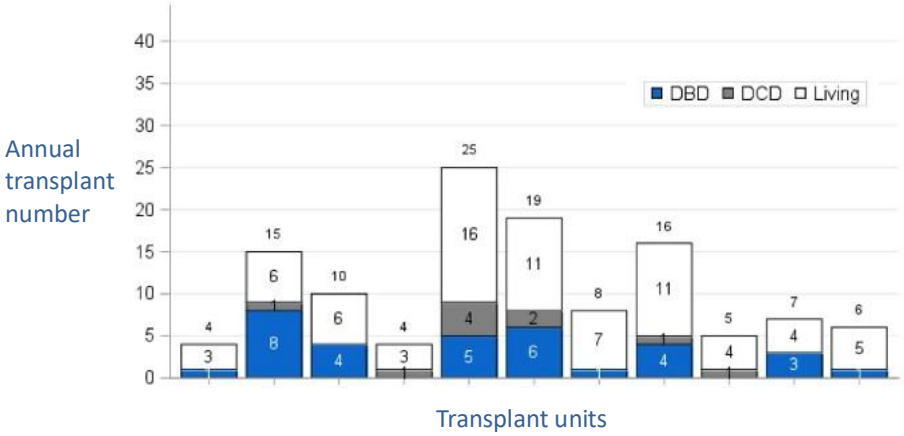
UK kidney transplant volumes by centre



NHSBT data

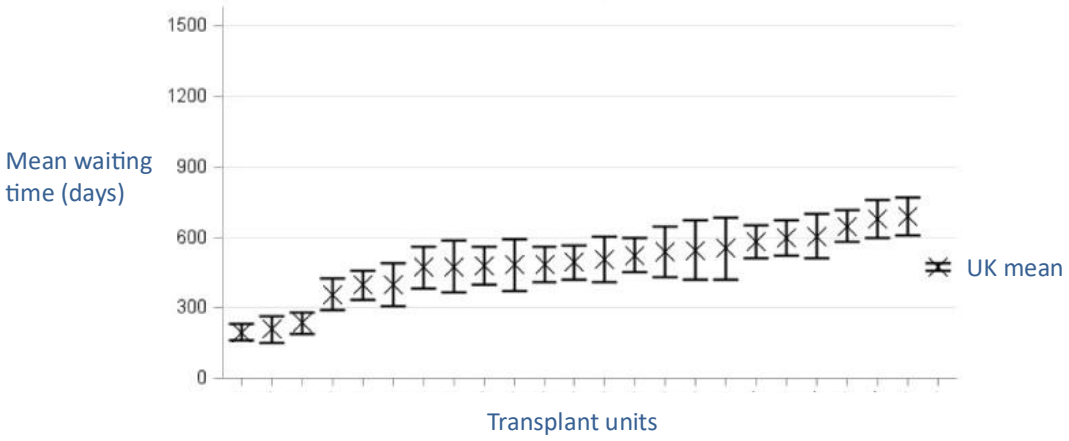
Particular challenge in low-volume services

Paediatric kidney transplantation



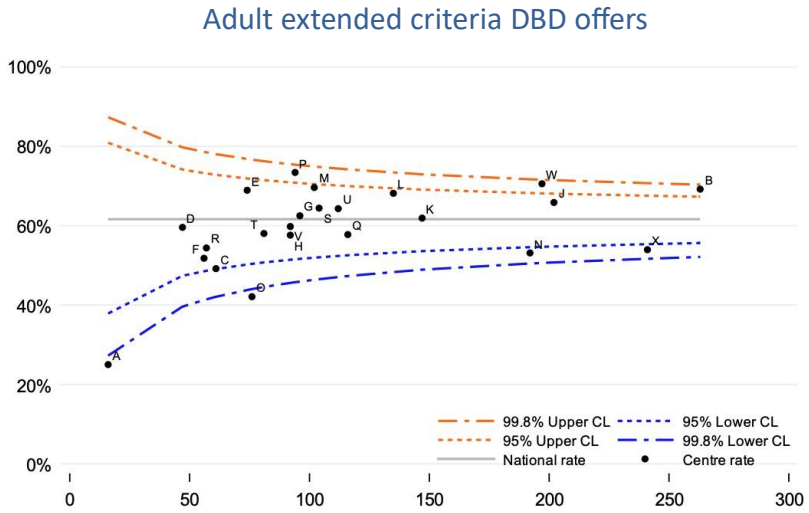
NHSBT data

Wide range of waiting times: inequity of access



NHSBT data

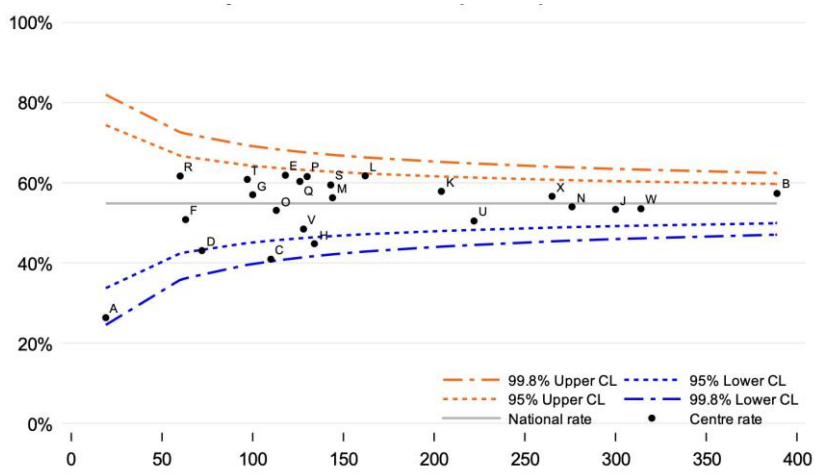
Wide variation in decline rates: higher-risk organ offers



NHSBT data

Wide variation even in standard criteria offers

Adult standard criteria DBD offers

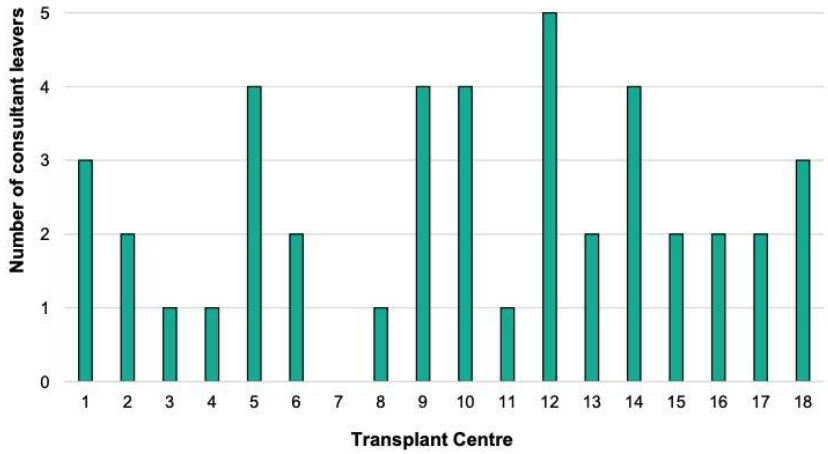


NHSBT data

Recruitment to surgical specialty

- Early exposure to transplantation
  - Medical school
  - Core training/early in HST
- Availability of transplant training
  - Within deaneries
  - Out-of-programme
- Specialist on-call in final 2 years
  - Complete emergency general surgery requirements
- Post-CCT Fellowships for more specialised skills
  - Liver
  - Multivisceral
  - Cardiothoracic
  - Pancreas
  - Organ retrieval
  - Laparoscopic/robotic
  - Advanced vascular access

Retention of surgeons: consultants leaving units in the past 5 years: liver & cardiothoracic centres



Source: NHSBT Workforce Survey by Transplant Centre Directors February 2022

Retention - consultant job planning

- Transplantation is largely consultant-delivered
- Balance of elective & emergency commitments
  - Sustainable on-call rota (in relation to volume)
  - Reimbursement for out-of-hours work
- Transplant-only vs. Transplant + other specialty
  - HPB; Vascular access; Endocrine; General surgery
  - Non-transplant cardiac/thoracic surgery
- Avoidance of conflicting elective/on-call commitments
- SPA activity
  - Engagement with teaching, research, national roles
- Job plan progression with advancing years
  - Exploit experience, avoid early retirements

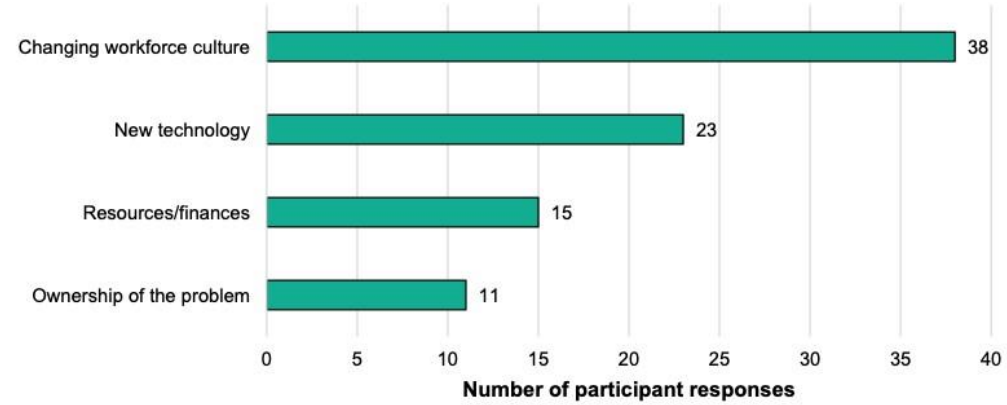
Innovation, adoption, service development

- New service evaluation
  - Normothermic regional perfusion (NRP)
  - Assessment and Repair Centres (ARCs)
- New technology
  - Organ perfusion
- Novel technology appraisal
- Quality assurance
- Reimbursement

Audit and quality

- National transplant audit is effective - NHSBT outcomes surveillance works well
  - Unit performance (vs. individual)
  - CUSUM analysis – detects adverse trends
- Advisory Groups
  - Facilitate clinician engagement, standard setting
- National commissioning controls expansion
- Peer review process potentially valuable

What change would positively impact organ utilisation?



Source: NHSBT, National Organ Utilisation Conference 2022

Conclusions: surgical workforce planning

- Expanding scale of national transplant services
- Sustainable surgical workforce plan needed with career progression
- Out-of-hours activities to be anticipated as normal
- Technological changes to be incorporated in staffing plans
- Integrated multi-disciplinary teams & access to dedicated resources improve morale
- Specialist training & consultant job-planning required to anticipate future evolution

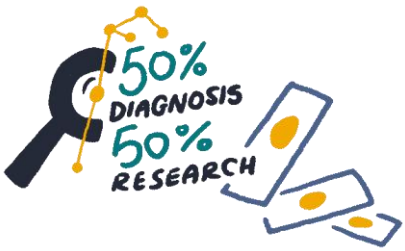
Histopathology Workforce for Organ Transplantation

Implementation Steering Group for Organ Utilisation (ISOU)
Symposium on Transplant Workforce Template
London 7th May 2025

Imperial College London - Clinical Reader in Kidney Pathology

North West London Pathology - Consultant Kidney and Transplant Kidney Pathologist

Royal College of Pathologists - Speciality Advisor for Kidney and Transplant



Banff Foundation for Transplant Pathology - Program Director

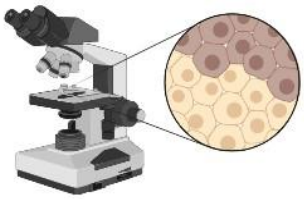
Renal Pathology Society - 1st Year councillor (president in 2029)

Histopathology = Cellular Pathology = Anatomic Pathology

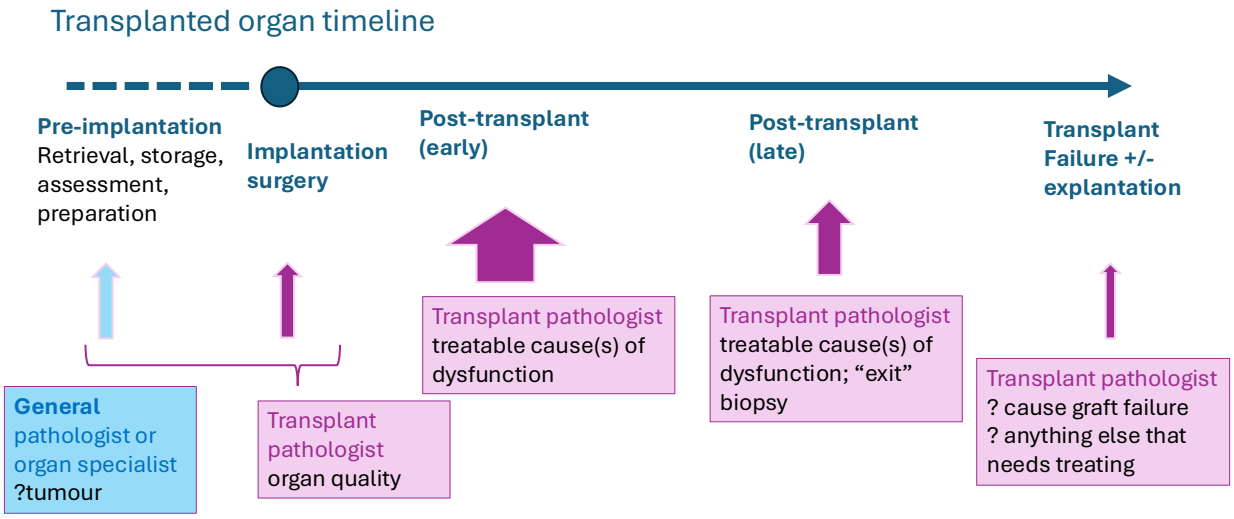
= *diagnosis and study of diseases of the tissues*

Patient biopsies/resections are preserved by chemical fixation as closely as possibly to their *in vivo* state

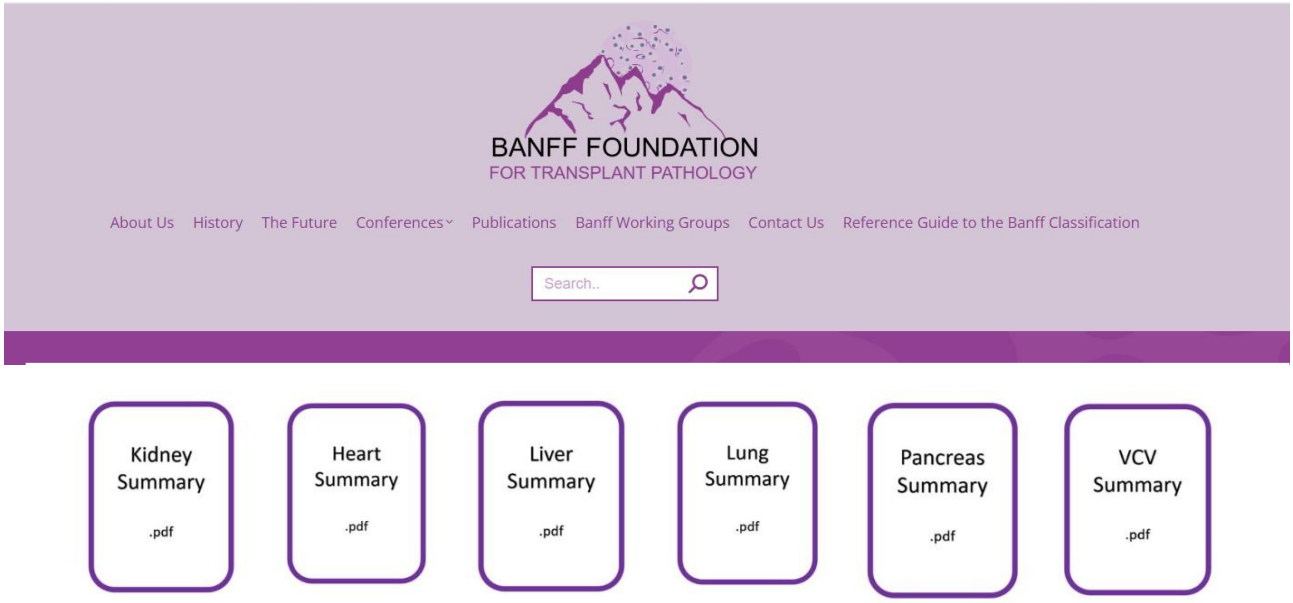
Then thinly cut to let light through and stained for contrast for examination under a microscope *by a pathologist*



We make the diagnoses that help reach a decision on what treatment/intervention the patients need next



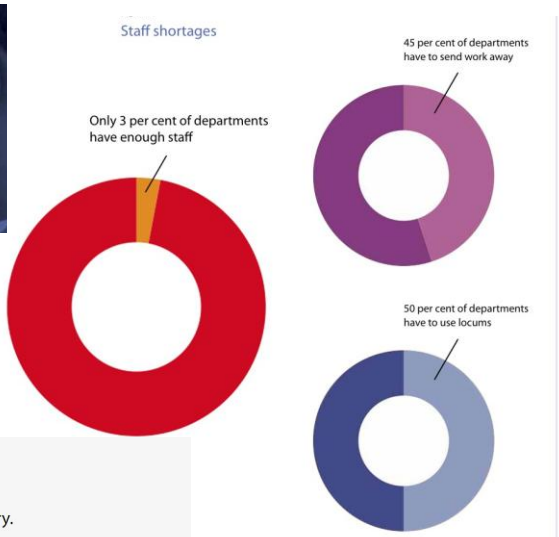
Histopathologist Input



Consensus International Classification – *variable local implementation*

What is the state of Histopathology Workforce?

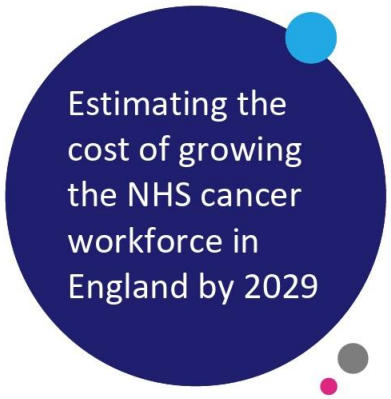
2018



Key findings

Our survey found that there were serious shortages affecting departments across the country.

- Only 3% of histopathology departments said they had enough staff to meet clinical demand, and this demand continues to grow.
- The cost of outsourcing services and using locum doctors is an estimated £27 million a year across the UK.
- There is an approaching retirement crisis as a quarter of all histopathologists are aged 55 or over and there are insufficient trainee doctors in post to fill the gaps in the workforce.



October 2020

Together we will beat cancer

CANCER RESEARCH UK

Table 1: Summary of the estimated growth of cancer specialists and additional number required to reach 45 per cent growth

Cancer profession	Estimated number of FTE staff in 2019	Expected growth by 2029 (based on current trends)		Estimated additional growth required to meet 45 per cent growth (above expected growth)		Total (expected and additional) increase in FTE staff needed to reach 45 per cent growth
		Percentage growth	Estimated FTE staff increase	Additional percentage growth	Additional FTE staff required	
Clinical and medical oncology	1,185	40%	477	5%	57	534
Gastroenterology	1,290	48%	623	0%	0	623
Histopathology	1,228	-2%	-27	47%	580	553
Clinical radiology	3,087	33%	1,004	12%	384	1,388
Diagnostic radiography	14,997	28%	4,158	17%	2,591	6,749
Therapeutic radiography	2,844	24%	672	21%	609	1,281
Specialist cancer nurses	4,135	28%	1,149	17%	710	1,859
Total	**28,766**	-	**8,056**	-	**4,931**	**41,753**

Source: RAND Europe modelling using NHS ESR data and other data.

What is the state of Histopathology Workforce?

1. Gather and report on intelligence

Gather, analyse and report on the data we can in relation to current and future trends for workforce and workload.

Develop specialty-specific and region-specific workforce publications highlighting the issues and challenges facing pathology, backed by robust data and insights.

What about Kidney/Transplant Pathology more specifically?

- Currently developing a ***kidney*** (including transplant kidney) specific workforce survey with UKKA and RCPath

- Very specialised
  - Specific knowledge in Immunology (most pathology is tumours)
  - Access to high quality local training and practice variable
- Small specialty = more challenging
  - Less resilience, less flexibility, less popular

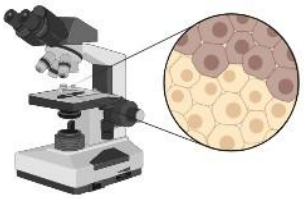
- On-call commitments

Solutions

- Data: Estimate transplant (organ specific) Histopathology consultant posts PAs needed to match transplant activity (local/regional)
  - Estimate/measure biopsy practice
  - RCPath guidance

- Train more/fund more *general* consultant posts in Histopathology
- Protected posts: Create/fund *dedicated* posts for Transplant pathology
- Digital Pathology
- Machine learning

Digital Pathology



- Enables remote working and cross-site cover
- "UK Digital Kidney (and/or Transplant) Network": network of hospitals serviced by distributed workforce

UK *Kidney Pathology* Digital Reporting Network

☑

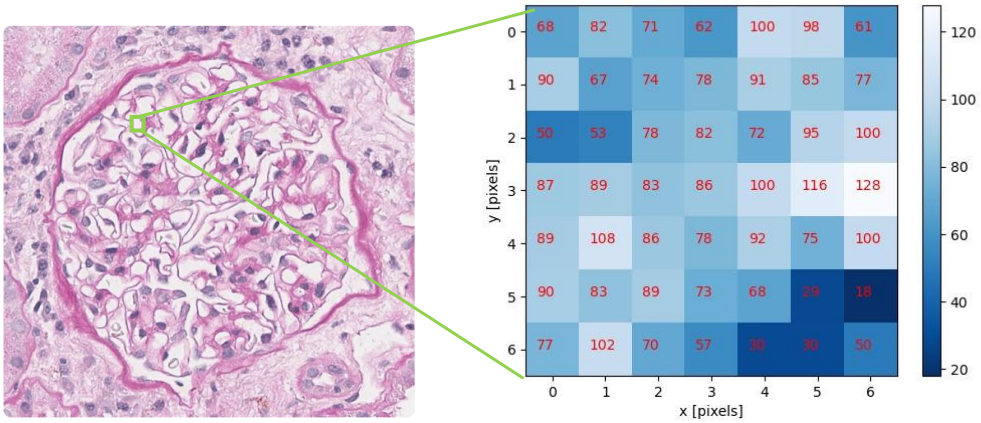
- Flexible working
- Better opportunities for training/education
- Easier recruitment
- Exchange of best practice across centres
- Rapid and equitable adoption of new tools (e.g. ML tools)

☒

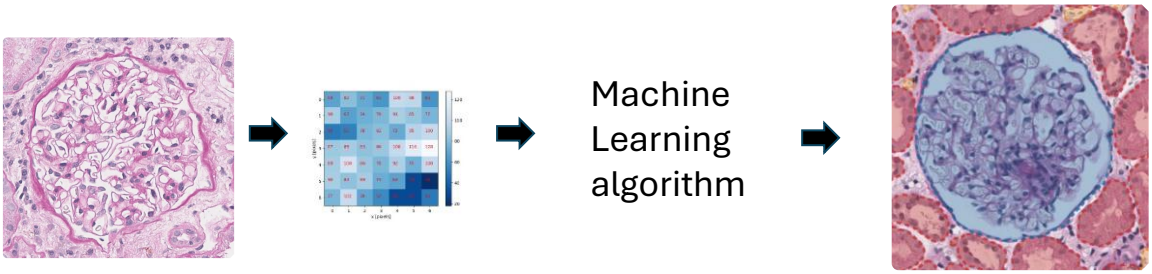
- Hardware cost, networking & storage costs
- Pathologist resistance to working with other clinical teams
- Pathologist resistance to reporting other lab's slides
- Manager resistance to cost of digital network set up
- Manager resistance to loss of control

The By-Product of Digital Pathology: Data

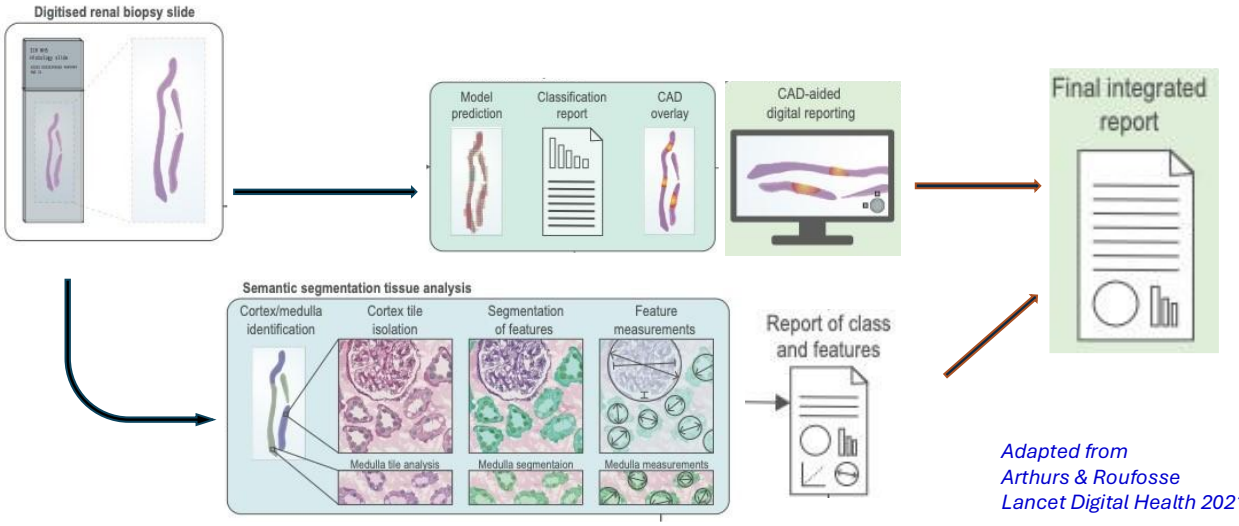
images are a bunch of numbers = data that a machine can analyse



Machine Learning on Histopathology Data



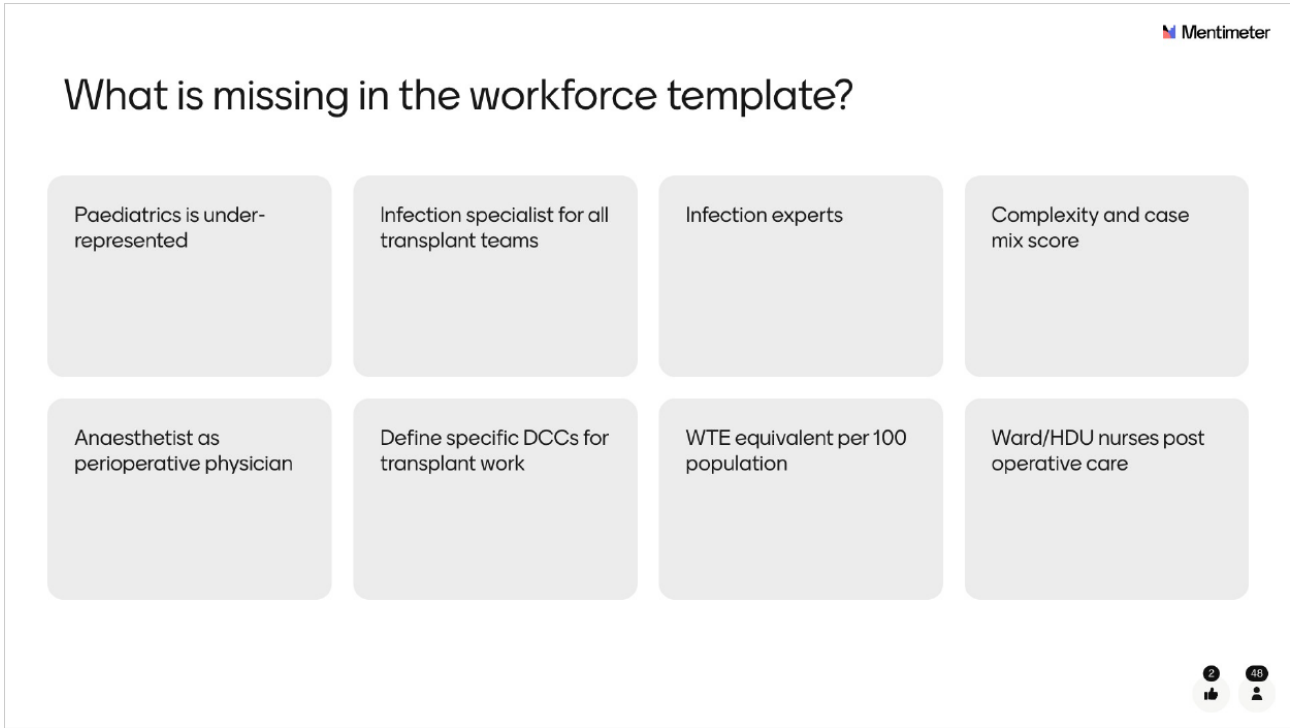
- Segment structures, derive metrics
- Classify disease
- Write reports
- Etc.



Adapted from
Arthurs & Roufosse
Lancet Digital Health 2021

Annex E - Online Survey Responses

Delegates at the event were asked to provide responses to set questions via an online survey tool, Menti. The Artificial Intelligence option within Menti was used to summarise the responses where appropriate.



Mentimeter

What is missing in the workforce template?

More emphasis on children and young people	Succession capacity	Need to ask the workforce	On call
Anaesthetic and critical care input	Trainees	Underestimated the levels of staff required to safely run the service	Intensity Organ type

2 48

Mentimeter

What is missing in the workforce template?

Support for more holistic care	More detail Consideration of all units and different working models Different sizes	Time for MDT	OOH/ weekend Tx pharmacist support
Play specialists Multi speciality input	Minimum staffing should be defined by centres - cannot be prescribed nationally	Supervision	Paeds?

2 48

Mentimeter

What is missing in the workforce template?

Diagnostic radiology	ICU	Consider more than the transplant episode. Include training/succession planning	Workforce input/output prediction and planning
Peripheral specialities that we refer in to regularly (dermatology, microbiology, bone health etc)	Integrated services?	Anaesthetic assessments	Transplant Infection

2 48

Mentimeter

What is missing in the workforce template?

Microbiology	Training	Virology	Transplant specialist anaesthetist
Reflection of patient population in WTEs	Eye donation/pathway co-ordination	The context of the job roles, outcomes and delivery to patients as the purpose of the template	Weekend and out of hours Histopathology for acute kidney transplant dysfunction (we often need to work until 7pm and/or come in on weekends)

2 48

Mentimeter

What is missing in the workforce template?

Retrieval to sustain machine perfusion and new developments	Protective nurse name for transplant nursing on ward	Imaging	Long term post transplant specialist nurses
Organ usage accountability	Ward & surgical junior doctors - not just middle grades	Basis for determining WTEs need to be understood	Training

2 48

Mentimeter

What is missing in the workforce template?

Social workers underrepresented here	Donation - consideration and collaboration	Perfusionists	Physiotherapy missing
Specifics around unit variation in activity, risk taking and high intensity work. Devolution of care plans. Intesivist numbers.	H and I	For what size of centre is this for? Is it per 100 patients etc. does 24/7 mean on site or can it be on call?	Physio/OT/rehab

2 48

Mentimeter

What is missing in the workforce template?

With increasing use of digital pathology pathologists can be off site for urgents but not all dept have digital pathology yet	National standard for nurses on the wards per transplant patients - protective staffing levels similar to ITU nurses	Population and person focus	Welfare support
Public health input	Virology	Devolution of care	Radiologists

2 48

Mentimeter

What is missing in the workforce template?

Intensivist numbers	Pain management-nurse specialist/anaesthetics	IT support	Education support for paeds
How were proposed numbers developed?	Opportunities for broader collaboration on transplantation training across clinical pathways	Longer term support needs	Support for referring units

2 48

Mentimeter

What is missing in the workforce template?

Youth worker	Phlebotomy	Acivity/intensity modeling	Access to urology
Admin support	Too focussed on short term care	Differentiate on call Transplant Co-ordinator and specialist transplant nurse	Safe minimum staffing numbers so workforce sustainable to manage illness and staff leaving

2 48

Mentimeter

What is missing in the workforce template?

Admin support	Pre transplant preparation ie involvement of non Tx centre staff	Futility with Trust agenda	Research time
Needs outcomes approach rather than numbers.	Expert for transitioning from paeds to adults	Histopathology tech: most dept are not open 24/7. Changing to this would require a lot of resource - better to centralise this. Many dept can stay open evenings, early morning and Saturday .	Transition pathways

2 48

Mentimeter

What is missing in the workforce template?

Histopathology consultant - not just tech	Local business cases often provide funding for MPT members, where local situation defines best skilled person to provide that care.	Collaborative and collegiate MDT style working between teams	Where did the 1:5 transplant surgeon on-call calculation come from?
Admin support	Local donor coordinators	Out of hour off site not possible for Histo tech they need to be on site	Email and admin time for responding to patients

2 48

Mentimeter

What is missing in the workforce template?

Need for psychology	Early engagement with trainees to ensure future workforce are identified & supported	Histopathology provision	Future proofing /retention of staff
Would like clarity on number of patients to wte posts	Disconnect from trust management	National service specification which includes workforce component	

2 48

Mentimeter

What are the key aspects that you would like to underline?

Living well psychosocial networks - essential and already adding value in renal	Future proofing national transplantation in a modern NHS	National histopathology service out of hours	Good patient care takes time and communication
Define coordinator role	Clinical trials to underpin excellence	Why does a paediatric unit need less consultants than an adult unit?	Safe staffing levels that trusts MUST fund to provide transplant

3 41

Mentimeter

What are the key aspects that you would like to underline?

Diversity of roles represented	Wider psychosocial care needs	Transplant infection is not mentioned and infection is one of the main causes of morbidity and mortality in transplant	Specific post transplant specialist nurses
Plan your workforce- don't let it arrive (or leave) by accident	Mental health/psychosocial support	Local donor coordinator	24/7 histopathology support is essential

3 41

Mentimeter

What are the key aspects that you would like to underline?

National standard set as a specialist team-recognition	Surgeons - focused career pathways	Out of hours national histopathology agreements	On-call rotas have to be sustainable - for future generations not the current one!
Not to forget the eye donation pathway	Recipient co-ordinator	Peri operative pain management	Transplant infection mentioned in lung only - why?

3 41

Mentimeter

What are the key aspects that you would like to underline?

Inspiring and forming future transplant professionals	Equity of psychosocial support	Safe staffing levels	Greater focus on specific needs for paed transplant
Expansion of multi disciplinary clinics or opportunities to see different clinicians on same day	Delivery for a population vs a provider lens. Resilience of workforce.	All are important. Minimum staffing levels must be specified for ALL staff groups	Recognition of the complexity of the job plan

3 41

Mentimeter

What are the key aspects that you would like to underline?

Histopathology staffing not resilient at local level. We need to consider innovative ways to make use existing staff and make it attractive to new staff. E.g. digital networks and machine learning

Tx research to support future service models

Limited working hours of some support service ie. Play specialists

Skill mix review will be different in every centre. So MPT staffing will be subject to huge variation across the country. Core skills per MPT are defined but enhanced /extended roles can be interchang

Diabetic specialist nurse mentioned in Pancreas and Islet transplants - often patients on steroids need support with blood sugar management particularly immediately post transplant

Dedicated time

NHS Trusts see Transplant as a small problem

In trust prioritisation

3 41

Mentimeter

What are the key aspects that you would like to underline?

Many hospitals are shifting towards (third party) tele radiology services out of hours. Provision of peri-operative transplant ultrasound needs consideration. How crucial? Interventional radiology?

3 41

Mentimeter

What are the barriers?

Trusts diverting funding to support A&E	Funding!	Block contracts	Lack of board level accountability for transplant services
Trust engagement	Trust buy in	Finance	Funding

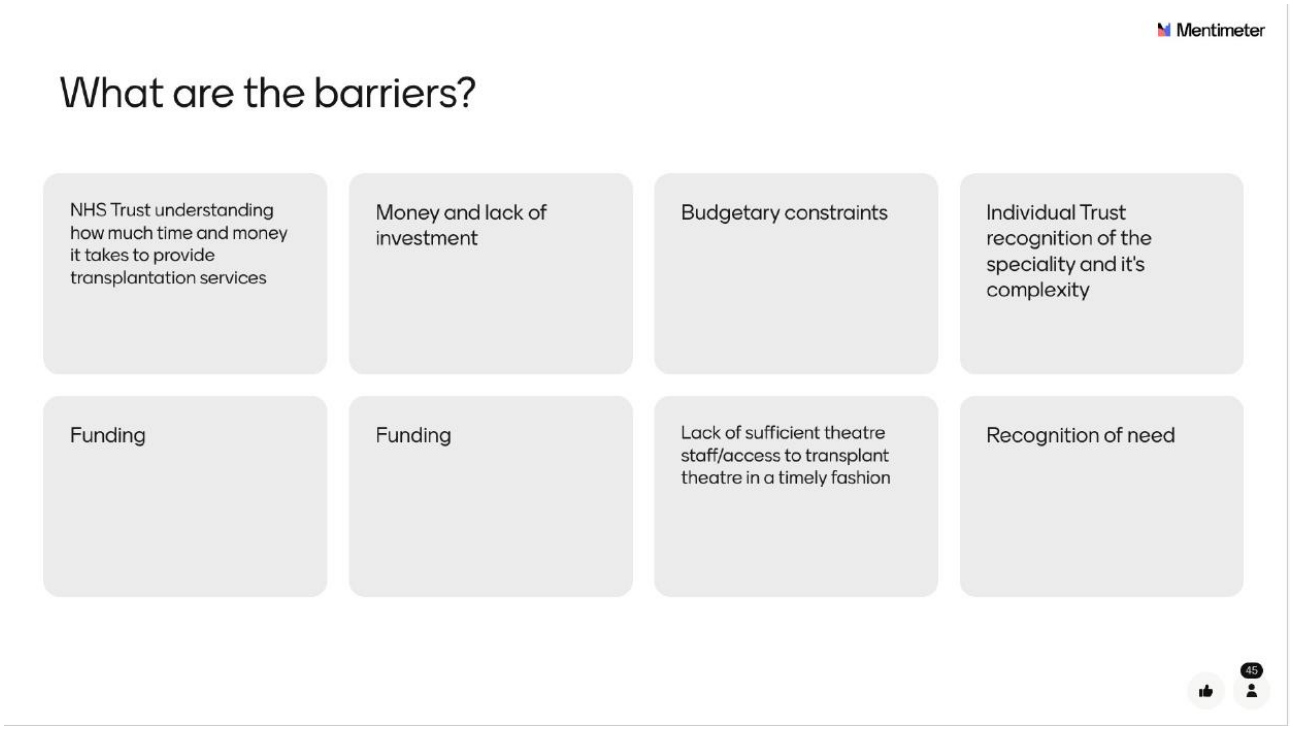
45

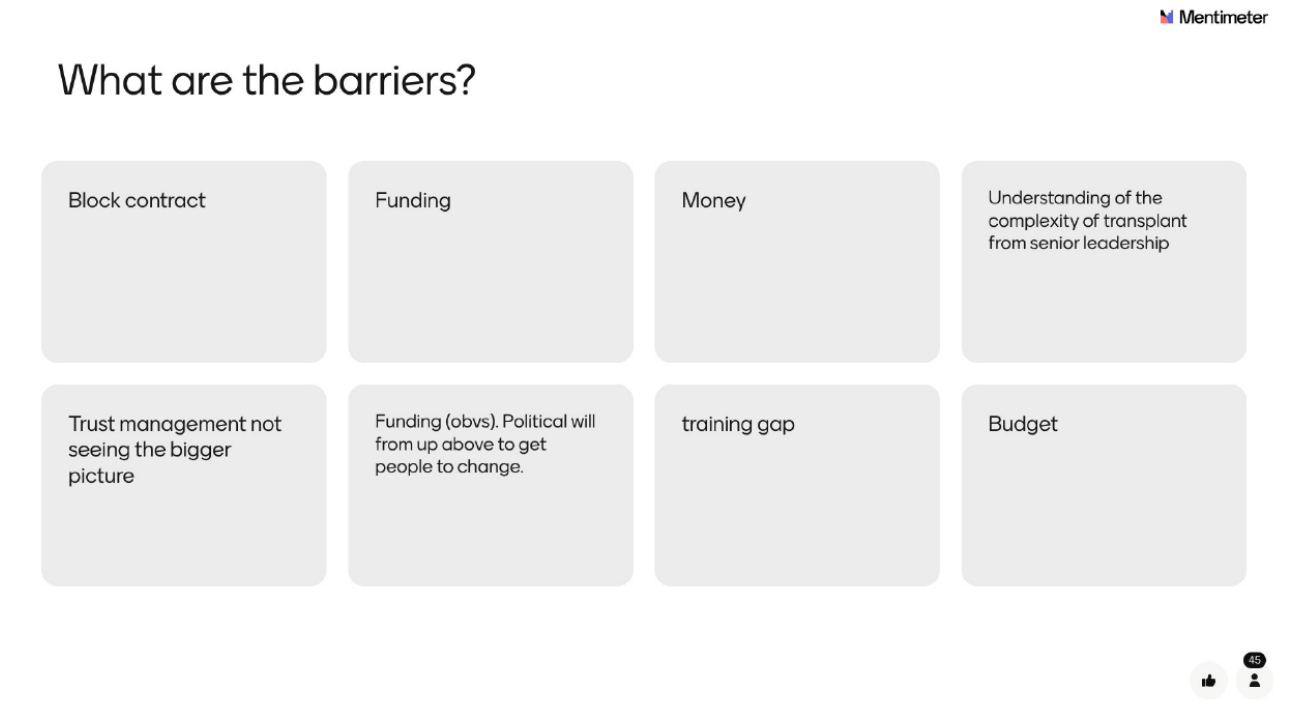
Mentimeter

What are the barriers?

Consultant job plans don't recognise transplant work	NHS finances	Funding and infrastructure	Funding Staff may not like change
Donor hospital engagement	Trusts trying to save money	Lack of trust recognition	Making the roles attractive to a finite workforce

45


Mentimeter
What are the barriers?
NHS Trust understanding how much time and money it takes to provide transplantation services
Money and lack of investment
Budgetary constraints
Individual Trust recognition of the speciality and it's complexity
Funding
Funding
Lack of sufficient theatre staff/access to transplant theatre in a timely fashion
Recognition of need
45


Mentimeter
What are the barriers?
Block contract
Funding
Money
Understanding of the complexity of transplant from senior leadership
Trust management not seeing the bigger picture
Funding (obvs). Political will from up above to get people to change.
training gap
Budget
45

Mentimeter

What are the barriers?

Poor representation at board level	Funding	No funding included in tariff for psychological care	Making transplant surgery attractive to current trainees
Logistics	Trusts working in different ways with different priorities	Lack of clear funding	Siloed approach

45

Mentimeter

What are the barriers?

The staffing levels are far to small, annual leave and sickness have not been taken into account in covering a 24hr service.	Money/ funding	Funding	Financial
Training. Clarity of roles. Resilience.	Different operational models in Trusts and across regions	Not seen as a trust priority	Training the future surgeons

45

Mentimeter

What are the barriers?

Lack of sexiness in transplant	Trained staff memebrs	Staffing/funding	Cultural issues at Trust level
Regulations	Proactive volume based planning and preemptive workforce planning	Difficult to meet on call requirements with small number of clinicians.....residents not interested	Unpredictable nature of donor activity

45

Mentimeter

What are the barriers?

Gender gap - why no women??	Funding Staff may not like change	Lack of understanding of the input provided by the team	Recruitment, needing to inspire gen Z to work in transplant
Overly arduous work patterns	Spport for regular post transplant complications are a lottery- how does this get integrated? Has patient need been analysed to look at where the focus should be?	Multiple agencies involved in delivering change	Funding differences across the UK, across specialities

45

Mentimeter

What are the barriers?

Realistic work plans	Trust competition for resources	Investment at local level in transplantation	No expansion of transplant workforce to meet demands - budgetary issues (not able to spend transplant income within own service)
Lack of inclusion of 50% of the population - women.	Geographical inequality	Attributing outcome data to individual surgeons and not centres	Complex commissioning models - and uncertainty (esp medicines)

45

Mentimeter

What are the barriers?

Money and difficulty in changing longstanding practices	Silo working/no national JDs	Everything happening in Tx centres	Having professional standards will go some way to reduce unit variation
Dealing with day to day challenges for acute NHS trusts	Meeting patients where theyre at- social and economic issues	My mangers don't care about transplant it's a thingy part of their brief	Email - time consuming

45

Mentimeter

Workshop - The current transplant workforce

Nominated person (per table) to feedback

1

Mentimeter

What works well within the workforce at the moment?

Good level of collaboration across many departments, teams & specialties.	UK wide community, to which people feel like they belong - this transcends all 4 nations	Individual clinicians and (mostly) team commitment with lots of goodwill	Commitment by team members
Focus on successful outcome	That transplant workforce as a speciality. Ty is needs to continue and be built on	Transplant teams have real SME	MDT approach and joined up thinking

15

Mentimeter

What works well within the workforce at the moment?

Highly motivated & hard working professionals, united by a passion for patient care	Good will eg adjusting working hours, flexibility, cross covering	multii disciplinary working	They are passionate and able to provide multi-disciplinary care to make people's lives better
Good in unit- cohesion and enthusiasm of individuals for transplant. Including support services such as pharmacy	Increased collaboration between units, especially since and due to COVID-19 pandemic	Good will and flexibility shown by workforce	Workforce able to 'connect the dots' between donors and recipients as a result of their knowledge base/experience

15

Mentimeter

What works well within the workforce at the moment?

shared goal with a specific role to play	For radiology: Small community of people, who know each other, and can give mutual support and concentrate support.	A common goal	Shared national learning in paediatrics
longevity of relationship with patients with this form of treatment service	MDTs - understanding of importance of different roles	Advisory groups work well to develop national standards & report to the centre.	Solution focused even in the middle of the night

15

Mentimeter

What works well within the workforce at the moment?

Solution oriented Agile teams	Collaboration - e.g. Pan London collaborative	long established collaborative relationships across professional groups. picking up the phone	Small teams, that work well together. There is an opportunity to learn from other centres.
Deliver for population not insurers!	In general , transplantation is prioritised within trusts which helps improve the chance that they're able to draw on resources to recruit and provide care that is needed.	Transplant teams are willing to support patients and engage with their patients to find solutions for patients. Doctors seek views and ask you how you feel. Ability to listen and try to help patients.	Relationship within the team and relationship between the patient and the team as a whole

15

Mentimeter

What works well within the workforce at the moment?

Deliver innovation (M perfusion)	highly dedicated staff going the extra mile for patients	Team that works well together performs well	Nurses work as a team and know patients and engage with them.
Electronic communication with patients for non urgent needs- being able to communicate with the transplant team	ICU consultants know exactly how to reach a SNOD when they have a potential donor	Some initial information given to patients is good and patients mostly feel supported.	transplant family

15

Mentimeter

What works well within the workforce at the moment?

Surgeons. Multidisciplinary team - feeling valued as an important part of the team. Collaboration. Dedication. Making most of resources we have. Community spirit.	UK medical training - sought after	NHSBT side of the process works very well (SNODs etc)	Close relationship built with patient groups- invested in patient and graft outcome- fostered by lifelong follow-up
Commitment and loyalty to the service/profession	Working in silos, challenging to attract trainees	MRI support for patients is very good	Dedication/professional pride

15

Mentimeter

What works well within the workforce at the moment?

High functioning and motivated multi-disciplinary transplantation teams	Improvement mindset	MDT working/teamwork	Agility of teams to change and innovate to provide better outcomes.
Willingness from teams to go above and beyond	Flexibility	Good models for co-ordinators (where Band 6 not on on-call rota) create resilience in staffing arrangements and helps provide more robust service to manage workload.	Commitment to training -barriers time/workforce/trainee time

15

Mentimeter

What works well within the workforce at the moment?

flexibility and willing to d what it takes to 'get the patient through'

Admin support to organise patient appointments and refer on

When service matters to the trust - reputation/finance (buy in)

- committed workforce - good team work - patient centered - a known go to person - able to aapt framework for local needs - centres of excellence - closely knit community but also welcoming of new th

Recognition of transplant as a speciality within nursing workforce.

Communication and collaboration between centres - to improve the patient experience but also the experience for transplant centres

Succession planning

Good will

15

Mentimeter

What works well within the workforce at the moment?

Collaborations

15

Mentimeter

What are the aspects that require attention?

National forums/audit like BTS activity	Differential pay (unseen activity on call)	Career pathway for RTCs	People need to be less risk averse (unit accountability for outcomes rather than individuals so it is a unit based decision)
Lack of continuity, disrupted / disjointed therapeutic relationships	Career progression for medical staff	Recognition of transplantation as a speciality within different groups (nursing, pharmacy etc)	Disconnect between surgeons and physicians in CT, and also in liver - needs to be more joined up to inform decision-making.

15

Mentimeter

What are the aspects that require attention?

Workforce flux - proactive workforce planning	Need national recognition of a speciality for nursing, with a nationally accredited course.	Job plans for H and I consultants	The ability to learn from/collaborate from other transplant centres.
Consistent availability of key MDT members (smaller centres especially)	Does NORS need to be consultant surgeon led? Could it be technician led?	Lack of join up between physicians and surgeons has led to less willingness to transplant / retention (tensions/cultural challenges)	We are no longer an experimental/pioneering specialty - we need to embrace that transplant should be set up as a standard of care, with the attendant resources to support increased numbers of transpla

15

Mentimeter

What are the aspects that require attention?

Resources per head of population- discrepancy in services	Requirement for better credentials for structured training in liver and cardiothoracic transplantation	Transplant community must decide which aspects to prioritise	Sufficiency of service
lack of access to related specialties related to transplant	Appropriate remuneration for OOH working	Regional disparity in post-transplant follow-up care.	Workforce models including level of night working considered unsustainable/undesirable - leads to attrition amongst surgeons as well as safety issues.

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Mentimeter

What are the aspects that require attention?

Remotivation of the younger members of the workforce	Understanding everybody's workload and commitments	Complex individual care needs.	transplant specialist roles are being eroded and expertise is being diluted with people being pulled onto other areas
Changing expectations and generations. Retirement crisis. Managing increased workload. Inability to keep up with expectations and new extra work from guidance	Sustainability in services and machine perfusion	psychological service provision	We should have smaller numbers of surgical centres, with efficient transplantation through the waiting list & referral back to a spoke centre. We have to reduce geographical inequality of access.

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Mentimeter

What are the aspects that require attention?

recognition of everyone's needs (patients)

Overnight model sub-optimal - lack of back up. Means more risky cases less likely to be treated. Decision-making sometimes questionable.

How is the future workforce attracted to transplant?

Trust accountability- if a transplant service is taken on by a trust they also must be able to support that- trust board level accountability

Lack of understanding at all levels around commissioning and funding. Money is allocated to hospitals and the funds don't go to who needs them.

Information given to transplantation patients is not complete. Need a standardised approach, which is nationally collated and managed, which transplant teams can use and tailor

Coordinated care for the whole transplant journey (dermatology, diabetic, bone health etc. Currently too many geographical inequalities.

Portfolio careers

15

Mentimeter

What are the aspects that require attention?

lack of future planning for staff shortages / vacancies / high attrition

Need to offer more training opportunities aligned with workforce planning

access to pre-hab

Transparency Around cost and commissioning

Inequalities across sectors of

Copacity: population growth

Enhance the pipeline for interest in transplantation in trainees

Recruitment not happening despite trying

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Mentimeter

What are the aspects that require attention?

unsafe staffing levels	Need to make it visible and recognised as a sub-speciality across all disciplines, with fellowships, training etc as standard as part of rotation.	Retention of staff	Recruitment / succession planning
Tertiary services or transplant being able to support secondary and primary care services to keep the patient pathway safe and seamless	Not look at WTE- look at flexible job plans to allow a proportion dedicated to transplant- builds in more continuity/flexibility of service.	Improved alignment of care across different workforces along the care pathway	Investment in transition

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Mentimeter

What are the aspects that require attention?

people spread thinly, no time for service improvement and innovation	Need for more multi-disciplinary/coordinated decision making re offer/acceptance/declines	Regional variation	Tradition between stated/patient journey
- inconsistency in skill and type of workforce - pre transplant workforce should be recognised - nursing gets siloed - barrier towards digital tech adoption - staff not diverse	Incentivise transplantation activity for Trusts	Not about head count.	Variation in service organisation, local manager's decision rather than sharing of best practice/what works best

15

Mentimeter

What are the aspects that require attention?

Standardisation	Ring fenced JD for surgeons	Improve workforce capacity for post-transplant care for patients and 24/7 access	Large volume vs small volume centres, can you job plan the same?
Staff retention	Niche expertise so ensuring the future of the specialism and technical skill is kept up in real time but also going forward-training and creating jobs	Too much focus on headline people not support staff.	Whole pathway commissioning and block contracts

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Mentimeter

What are the aspects that require attention?

Improved standardised workforce model and capacity aligned to patient cohort.	Ring fenced R and D time	more of a work life balance	Brain-stem testing variable meaning that some organs are being lost. Regulatory changes a factor in this.
Funding for nursing education	Patient management poorer as a result of more junior workforce.	Training recuitment retention. It's not sexy anymore!	WTE not based on number of patients

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Mentimeter

What are the aspects that require attention?

- work life balance, rewards - not an attractive workplace - notnot all roles integrated within the pathway - importance and recognition of social and psychology

Ability to prioritise transplant

More consent for organ donation needed and more living donation

workforce close to end of resilience. High performing centres looking very resilient but are very close to being 'brittle'

Consider minimum number of transplants required to be a centre

We need to maintain research & innovation as a strength of UK transplant, this is what keeps people interested for the long term

Is it better to have fewer centres carrying out surgery to increase volumes to attract and retain expertise but then have a hub and spoke approach to the wraparound/pre/post transplant care

Standardised model of expertise that should be on each transplant team, specific to each organ type (eg psychology; social care; 24/7 surgical cover and nursing etc etc)

15

Mentimeter

What are the aspects that require attention?

Hard to come up with a 'one size fits all', as differs by organ (and centre). Would need to be done by organ group to be more meaningful.

Good template but toothless

Proper reference cost exercise for transplant

Link workforce template to service specification

Link work force template to peer review cycle.

Need the right number of people (transplant team as a whole) for the population you are treating. Define the population you are treating. Infrastructure improvement.

Tool kit for transplant transformation program.

15

Mentimeter

Workshop - What should the modern workforce in transplantation look like?

Nominated person (per table) to feedback

1

Mentimeter

What is the process beyond today in terms of taking the workforce template forward?

Survey the individual workforces as to what they want	need to understand the need rather than remodel what currently exist - co-production of template with patients and clinicians	gap analysis about what we have and what we need	5 transplant surgeons is not a sustainable service for any unit. Need to define a minimum safe staffing model that complies with employment law. ? Merge centres
Template is a good starting point. A GAP analysis is needed to take this further	buy in and support from commissioners to 'underwrite' any suggested / agreed templates	step model of psychological care	Service specification mandated to population requirement and workforce linked to delivery of transplantation service and finances

14

Mentimeter

What is the process beyond today in terms of taking the workforce template forward?

- Apply what works for donation into transplant. Can we apply the SNOD model to recipient coordinators?
- Template - considering quantifying need by per head of population (by organ). Would provide a guide for local consideration.
- How can we build progression into the Recipient Coordinator role?
- In terms of consultation, need broad group alongside dedicated working groups by organ with representation from different centres (to bring different perspectives to bare).
- Start with the patient need- work out what you need to meet that need first (demographic differences).
- Local Transplant population has to be linked to workforce template
- Template is good Define the minimum viable product how that is achieved must be flexible to regions
- Consult the nursing workforce (donation and transplant)

14

Mentimeter

What is the process beyond today in terms of taking the workforce template forward?

- The minimum numbers need a lot more work.
- - identified roles are good. Need a denominator for case mix, complexity and size of programme and regional operating model
- Consult anaesthetists
- Shared services eg psychology virtual for patients Histopathology Business continuity plan ensuring resilience
- Contingency plan
- Needs to take into account post transplant long term transplant patient care as it's beyond 1 year that money is saved
- Donor Transplant Coordinators under one umbrella seen to be a successful model (due to level of standardisation, training and competencies).
- Understanding of numbers, data, current practice around the transplant and non-transplant units

14

Mentimeter

What is the process beyond today in terms of taking the workforce template forward?

Needs collaborative national & professional body endorsement to make anything achievable.	Corneal transplantation needs to be focussed in smaller number of larger centres, with a national waiting list & allocation	Road test the spefication	stakeholder engagement, workforce survey, making Trusts aware this being undertaken
Need to bust myths with Trusts about costs and additional costs of these models	Detailed survey with the lead surgeon and lead nephrologist from every paediatric renal until to get complete transparency of the workforce in each	Establishing an alignment of a role WTE to a denominator such as number of patients on a waiting list.	drill down on the qualitative responses already received form CT ICE (patients and staff voice)

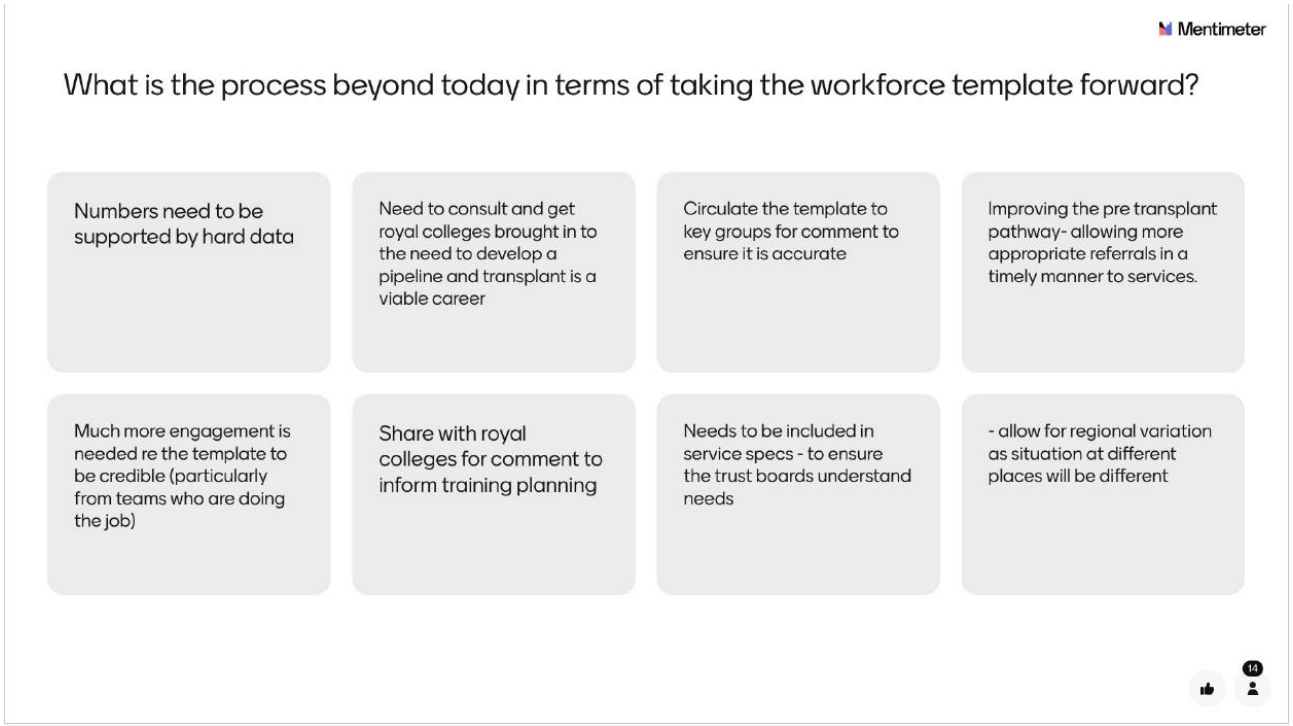
14

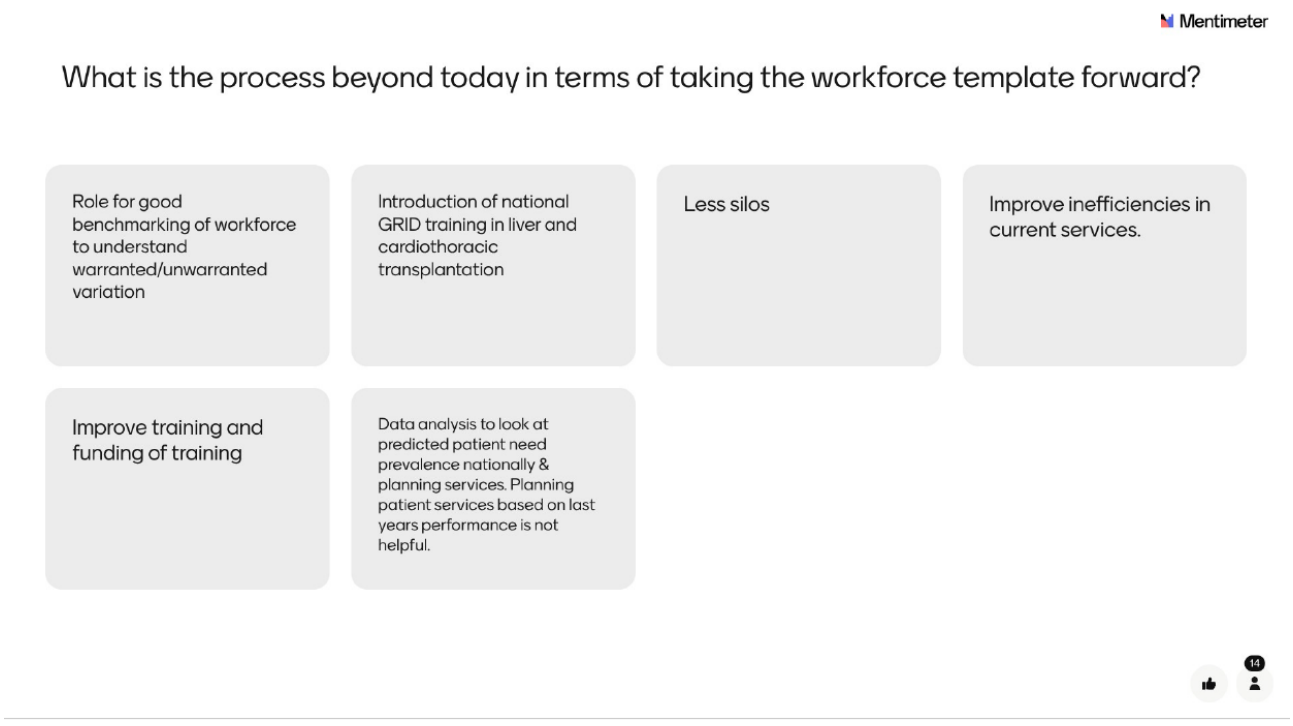
Mentimeter

What is the process beyond today in terms of taking the workforce template forward?

Engagement by Trusts that transplant derived income is spent within transplant speciality.	Template could be useful to influencing internal business cases for investment.	Engage with each professional group to help provide the answers	- provide the role matrix to regions for them to adapt to local/regional situations - collaborate with regional teams - adapt what was done for dialysis workforce
Engagement of patient groups.	Specification looking at work-life balance of transplantation professionals and agreed denominator (population, transplantation patients and proportion of time spent in transplantation)	The modern workforce is gender balanced, we need to focus on transplant surgical training being more favourable for women.	Template would need embedded as a regular tool to inform workforce planning within trusts

14


Mentimeter
What is the process beyond today in terms of taking the workforce template forward?
Numbers need to be supported by hard data
Need to consult and get royal colleges brought in to the need to develop a pipeline and transplant is a viable career
Circulate the template to key groups for comment to ensure it is accurate
Improving the pre transplant pathway- allowing more appropriate referrals in a timely manner to services.
Much more engagement is needed re the template to be credible (particularly from teams who are doing the job)
Share with royal colleges for comment to inform training planning
Needs to be included in service specs - to ensure the trust boards understand needs
- allow for regional variation as situation at different places will be different
14


Mentimeter
What is the process beyond today in terms of taking the workforce template forward?
Role for good benchmarking of workforce to understand warranted/unwarranted variation
Introduction of national GRID training in liver and cardiothoracic transplantation
Less silos
Improve inefficiencies in current services.
Improve training and funding of training
Data analysis to look at predicted patient need prevalence nationally & planning services. Planning patient services based on last years performance is not helpful.
14

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Executive engagement.	- Funding - Trust engagement. Feeling valued	Different ways of working e.g digitisation that are attractive to younger generations and retain people who would otherwise retire	Earlier exposure in medical training
don't be so prescriptive	Funding	Moving beyond silos and working across tx centres	Chat gpt

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Financial remuneration, staffing, rotas	- more understanding of the nuances involved in transplantation by senior management	NHSBT take over commissioning of transplantation	define resilience for each group of professionals!
Service plan for exception, contingency planning	Better succession planning at trust level	maximise digital resources	Consultant job planning with progression (flex to change over career span)

16

Mentimeter

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16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Job planning	National workforce planning vs local	Incentivisation-'incentives for teams or groups within a team	- provide networking opportunities for staff
Forward planning given long lead times	keep offering trainee placements to think about upskilling the next generation	Consider reconfiguration of transplantation services	Think creatively about roles and responsibilities of each team member and how they might be redistributed

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Patients should be involved and help empower transplantation teams to raise issues with trusts for resources	- whete possible, smooth the activity spikes - succession planning	Encourage cross centre collaboration within regions	define the WTE minimum for each professional group and ,mandate it
Need recognition of the workforce inc TOIL for on call work/anti social hours etc	Reaching out to candidates in early careers	Developing roles across maturation of career. Diversify, upskill, create new roles	Incorporate in service specs

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Funding needs to reach the service	Asking senior trainees what they want	Cross regional support training and competency	Focus on innovations (NRP/machine perfusion/ARCs) that support SCORE/day time transplants.
Get better map of current workforce.	Develop working environments with attractive job plans/working practices for future generations.	- enable opportunities for innovation, continuous improvement, appraisal management	Understand more why people leave the profession/country (e.g. moving to another country)

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Peer review to include workforce resilience.	No financial incentives in transplant surgery- and yet overnight/weekend working is expected	Look at funding models and perverse incentives	Succession planning (in surgery); peer review.
Have a national funding approach for training and growing the future workforce	Retaining experienced staff.	Nationally accredited training programme	Incentivise people to stay on for specialised roles where they will get training pathway to profession and then autonomy

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

Allowing clinicians to focus on the clinical work (e.g. adequate admin support)	Look at volumes of activity by centre - are they sustainable, should activity be consolidated.	- encourage intellectual curiosity	Need to be more open-minded about who is needed to perform elements of the pathway - specialist nurses and technicians can perform many of the functions with appropriate training.
Linking training to requirements. - in service training	Optimise IT solutions to support the workload (digital offering)	Upskilling technicians and specialist nurses provides progression opportunities	Increase the profile and respect for the transplant service in the Trust

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

- raise transplantation up the Trust's profile
- Change the workload to daytime hours. Boundary around off time
- Introducing extended sabbaticals
- - continuous feedback and management support
- Attraction strategy for transplantation.
- Load balancing between centres
- Digital solutions
- Mutual aid collaboratives and formal arrangements

16

Mentimeter

How can we overcome the barriers to a resilient workforce in the near future?

- Reduce burnout
- Progression opportunities improves retention of expertise and upskilling specialist nurses in elements of the pathway is cheaper than relying on drs
- Recognised training pathways for transplant nurses (mirror medical model)
- Existing workforce have the knowledge/expertise to enable training.
- Some universities are approved for scientist training and others are not - this has created a bottle neck. Focus should be on on service training

16

Mentimeter

How can we modernise training for transplantation across all disciplines?

make it more sexy	LTFT training	Closer work with medical schools to think about this earlier on in career journeys	Accredited training modules/experiences for consultants - throughout careers, not just pre CCT
Address gender disparities	Increased exposure to transplant across the country (smaller regions)	Nationally accredited course for nurses focussed on transplantation	Fellowships post CCT dedicated, funded, with standardised format e.g. for transplant pathology

15

Mentimeter

How can we modernise training for transplantation across all disciplines?

Tx needs to feature in the curriculum	Career path/progression for nursing & AHPs - training roles to build resilience	Working conditions at completion of training (retention)	Establishment of national curriculum for transplant specialists.
introductions to patient enagagement - it need sot be on all staff's radars	Use of digital resources developed 'once for all' alongside 'on the job' training.	Core competencies/training across all disciplines e.g psychological screening, common side effects, rehab requirements etc	More exposure to transplantation in medical schools and in medic training

15

Mentimeter

How can we modernise training for transplantation across all disciplines?

- Standardise and improve training of recipient coordinators (similar to SNODs)
- Maximise secondment opportunities.
- exposing trainees to transplant experinece earlier in their training
- More junior training opportunities to get people interested/exposed.
- Flag the impatience of transplant at early stages of training - emphasise the joy of team working
- Do more to empower and enable gender equality in transplant surgical workforce
- Integrate subspecialties such as machine perfusion into training (not just medical/surgical)
- Early identification for GRID and run through training with competitive and controlled access of transplantation training

15

Mentimeter

How can we modernise training for transplantation across all disciplines?

- Inclusive core training across curriculums - docs, nurse and AHP
- 😕
- Define required numbers for competency
- Definition of core training/curriculum e.g. for coordinators and also organ specific, to help standardise
- If demand, consider targeted qualifications aligned to core training/modules
- Role models - showcase them ... including the women!
- Make transplant sexy for trainees.
- Secondments between centres

15

Mentimeter

How can we modernise training for transplantation across all disciplines?

- Recognising the skillset-specific curriculum as a minimum for each skillset in a team for transplant skills Having networks across the country for each discipline to share
- Development national curriculum that can be delivered remotely. Digital skills.
- Offer easier inter deanery transfer/training opportunities. Else offer regionalised training opportunities.
- More sub-speciality recognition across all workforce
- Role models
- National virtual teaching for transplant specialties
- Extend post cct fellowship model to rest of team like coordinators.
- National training days in person

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Mentimeter

How can we modernise training for transplantation across all disciplines?

- Develop bespoke transplant training programs.
- spoke placements - staff spending time early in their careers with transplant professionals to spark their interest
- Link training to innovation agenda.
- Proctoring
- National networks for different transplant specialisms, to provide peer support and shared learning
- Find ways to make it aspirational including through role modelling and proactive 'marketing'
- Mandating transplant skills as part of training
- Utilisation of previous gained skills (e.g . ITU nurses)

15

Mentimeter

How can we modernise training for transplantation across all disciplines?

- Non- mandatory funded international fellowships
- Need to offer opportunities for research
- more digitial solutions to make training more accessible
- Improving the sharing of practice between centres
- Strengthen communications to attract people in/raise awareness
- Examine surgical cultures within units & how supportive they are for trainees.
- Use of MDT simulation
- Offer some training to all disciplines.

15

Mentimeter

How can we modernise training for transplantation across all disciplines?

- Multi organ transplant training
- Recognising extended roles and how they can support transplant including continuity of care and the training of junior medics/surgeons (DCP, SCP, ANP)
- Differential pay for transplantation services to attract trainees
- eLearning for health resources for 'new to transplant' e.g new physio or nurse
- Hold events that include allied specialities and increase understanding and awareness of transplantation issues. This will build a sense of belonging and peer support and excitement for the speciality
- Be more creative about learning opportunities tailored to job roles
- Transplantation to become a specialty of its own
- Understanding why people do t take this up or why they go

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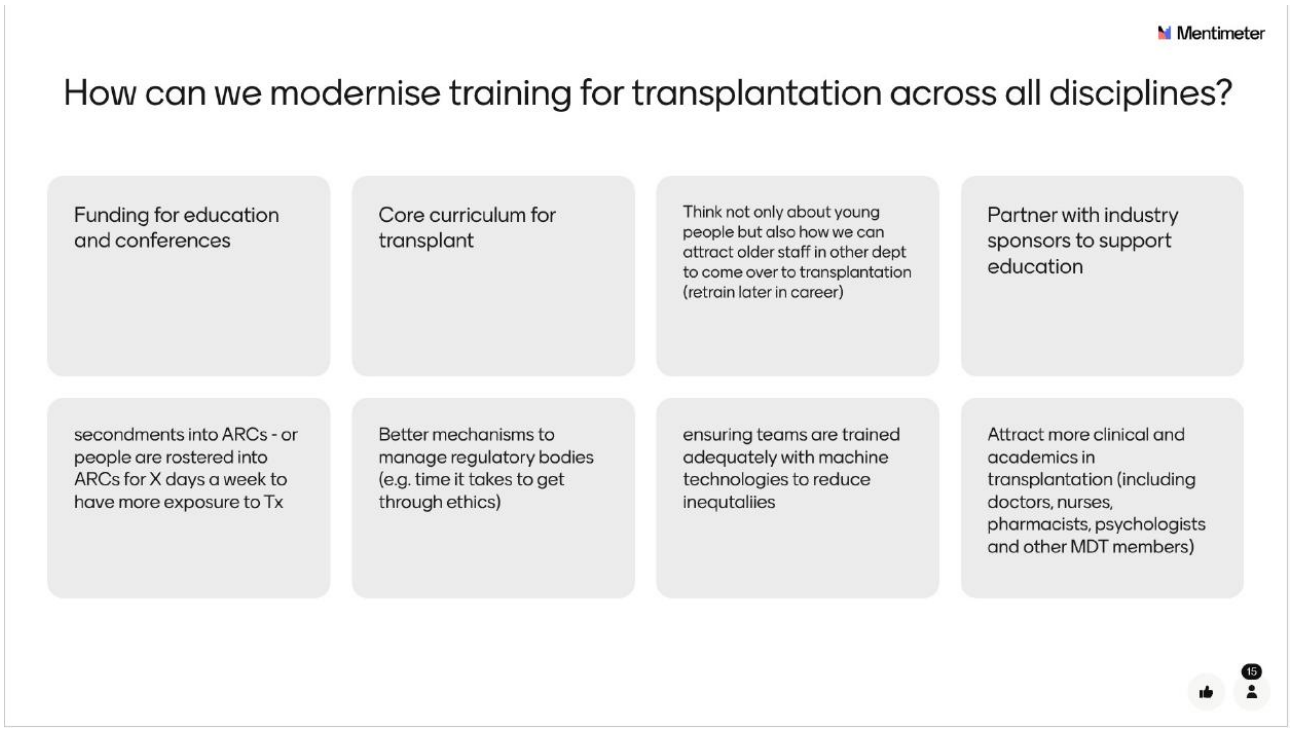
Mentimeter
How can we modernise training for transplantation across all disciplines?
Funding for education and conferences
Core curriculum for transplant
Think not only about young people but also how we can attract older staff in other dept to come over to transplantation (retrain later in career)
Partner with industry sponsors to support education
secondments into ARCs - or people are rostered into ARCs for X days a week to have more exposure to Tx
Better mechanisms to manage regulatory bodies (e.g. time it takes to get through ethics)
ensuring teams are trained adequately with machine technologies to reduce inequtaliies
Attract more clinical and academics in transplantation (including doctors, nurses, pharmacists, psychologists and other MDT members)
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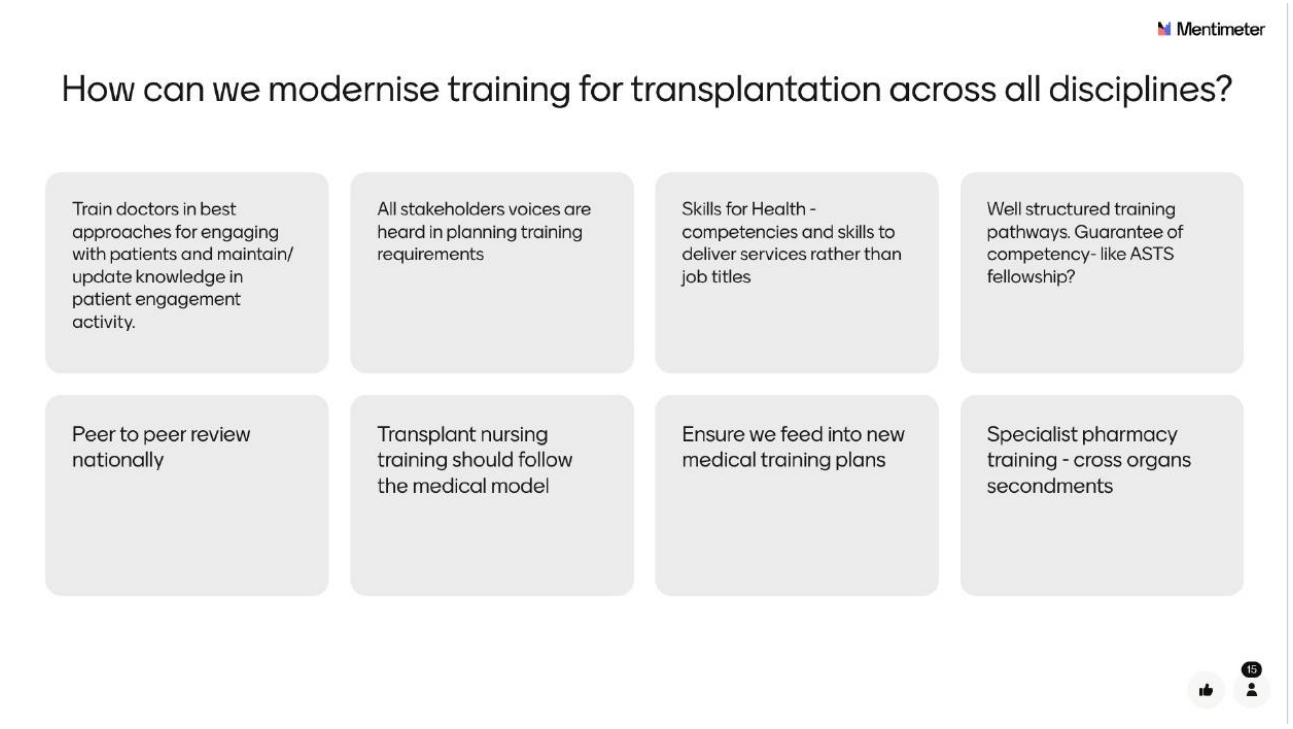
Mentimeter
How can we modernise training for transplantation across all disciplines?
Train doctors in best approaches for engaging with patients and maintain/ update knowledge in patient engagement activity.
All stakeholders voices are heard in planning training requirements
Skills for Health - competencies and skills to deliver services rather than job titles
Well structured training pathways. Guarantee of competency- like ASTS fellowship?
Peer to peer review nationally
Transplant nursing training should follow the medical model
Ensure we feed into new medical training plans
Specialist pharmacy training - cross organs secondments
15

Annex F – Further Reading

Further information that informed the discussions at the OUG that led to their Recommendations and during the ISOU Workforce Symposium is available at:

- NHSBT Annual Activity Report - Annual Activity Report - ODT Clinical - NHS Blood and Transplant
- Report of the Organ Utilisation Group (OUG), Honouring the gift of donation: utilising organs for transplant - Honouring the gift of donation: utilising organs for transplant - GOV.UK
- ODT website Policies and Guidance - Policies and guidance - ODT Clinical - NHS Blood and Transplant