

Topic: Restarting Vascular Access & Transplantation Safely

Chair: Dr Ginny Quan

Purpose of session:

To understand how patients have been managed safely whilst surgery has been suspended, share experiences of restarting surgery, and explore standardising practice.

Vascular Access

- Mr Francis Calder (GSST)
- Mr Rajesh Sivaprakasam (Barts)

Transplantation

- **Patient:** Nick Palmer (KCUK)
- **Panel:**
- Lisa Burnapp (NHSBT)
- Dr Sapna Shah (KCH)
- Mr Frank Dor (Imperial)
- Dr Gareth Jones (RFH)

Dr Ginny Quan

Consultant Nephrologist

Epsom and St Helier

Restarting Vascular Access and Transplantation Safely- Some Themes

1. Balancing the risks of stopping and starting
 - Immediate risk of Covid against a long term risk of inaction
2. Collaboration
 - Benefits and Disadvantages of Centralisation
3. Learning from What Has Happened
 - How would we change things in a second wave
 - How will we go forward after Covid

**Mr Francis Calder – Consultant
Surgeon**

**Mr Rajesh Sivaprakasam –
Consultant Surgeon**

Guys and St Thomas'
Bart's Health NHS Trust



DIALYSIS ACCESS 2020

PANDEMIC, PANDEMONIUM, PAN-LONDON

Cass, Calder, Crane, Forman, Gair, Ghambir, Ghazanfar, Hoong, Loukopoulos,
Lindsey, Mistry, Quan, Rankin, Sivaprakasam, Somalanka, Wilson

Feb 2020

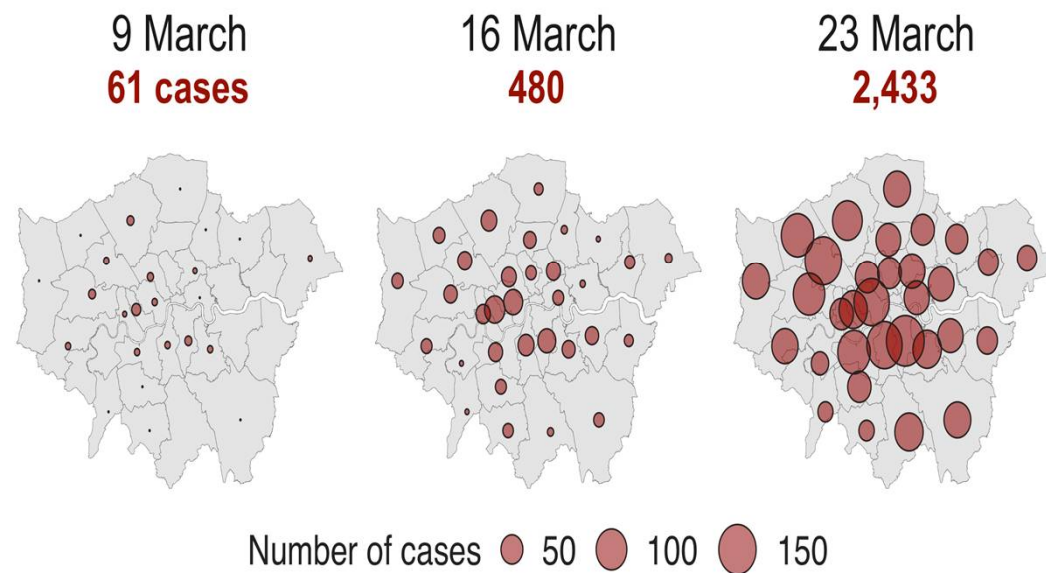


March 2020



March 2020

Confirmed Covid-19 cases, by London borough

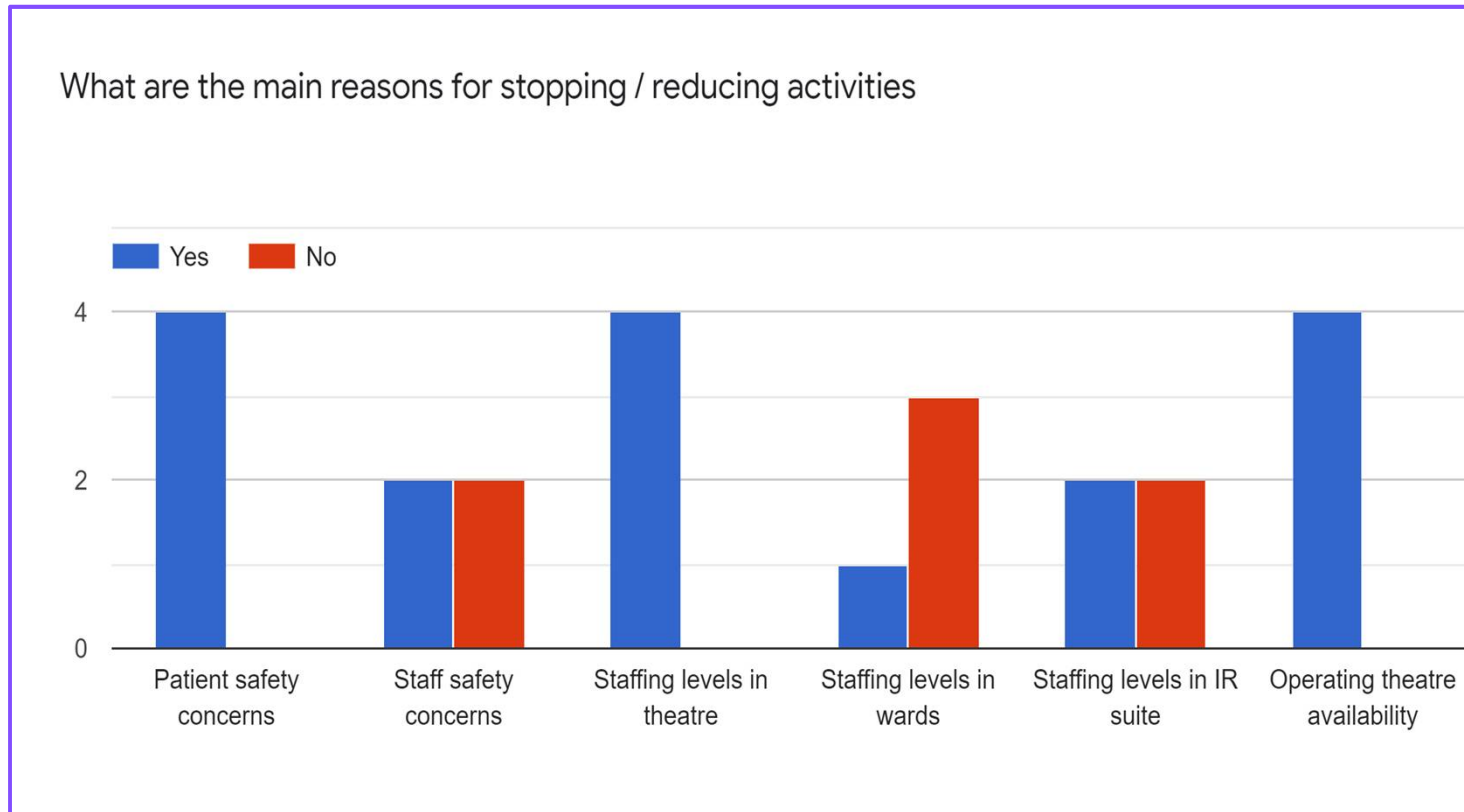


Source: Public Health England. City of London cases are combined with Hackney **BBC**

Lockdown



Dialysis Access “Lockdown”



- Patient safety, Staffing levels, Operating theatre

ref: Pan London Access Survey

Emergency Access



Plastic Surgery



Pan London Renal Access Meet 30th April



Beauty / Brains / Collaboration



and many more

Pan London Dialysis Access Proposal 26th May

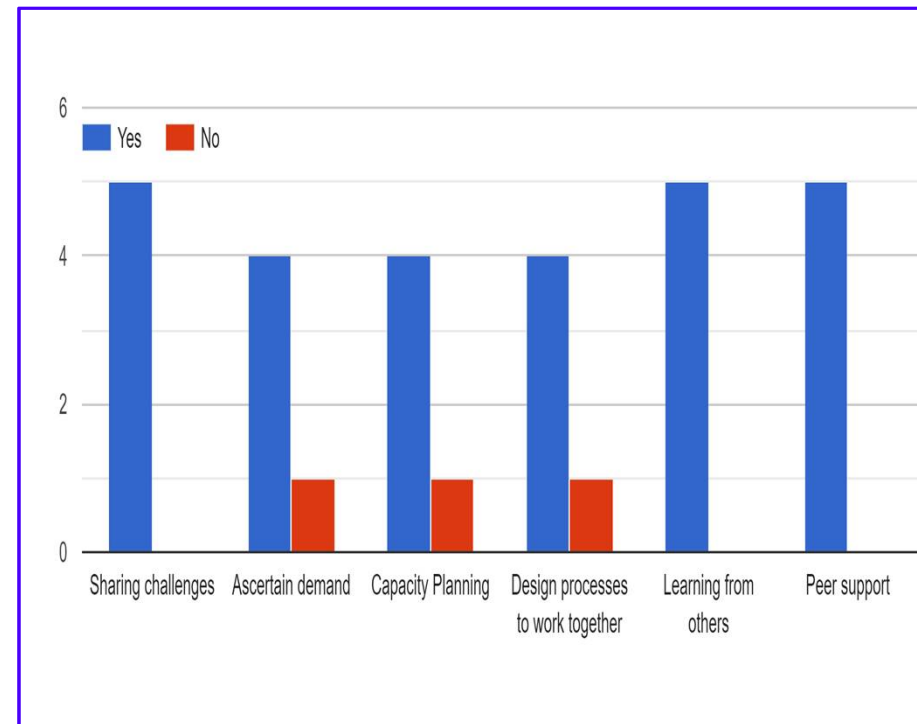
Working together since 1948:
celebrating 70 years of
partnership between the NHS
and independent sector

Supporting
NHS70

NHS Partners Network
NHS CONFEDERATION

Pan London Dialysis Access Group

- Weekly virtual meeting - Patients, clinicians, Leadership team & colleagues
NHS London & Renal Registry
- Recognise & Reflect
- Plan for now and Beyond COVID



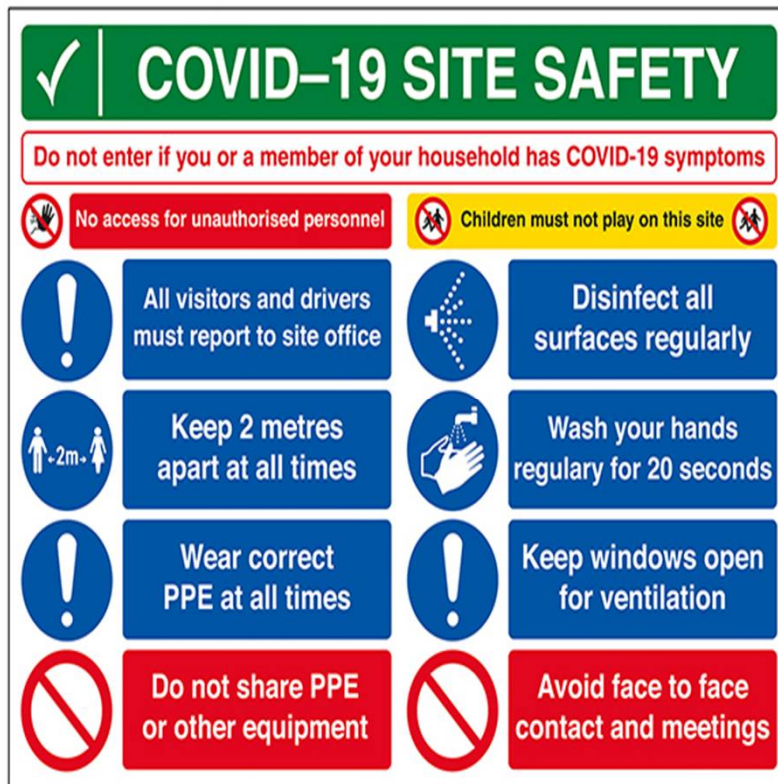
ref: Pan London Access Survey

Start Up Bundle



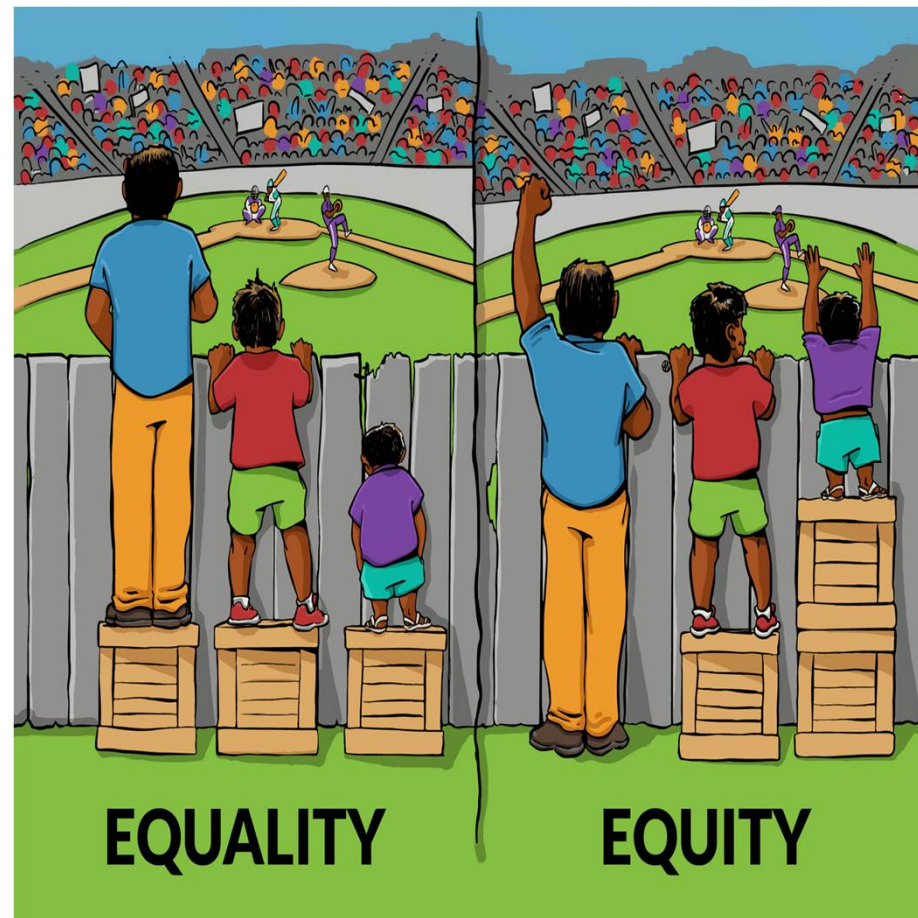
- Patient centred
- Maintain patient-clinical team relationship
- Streamlined pathway

Safety



- Patient selection
- Counselling of Patient & family
- Post-operative Follow-up
- Safe site to perform surgery

Equality / Equity of access



Current caseload

Week Commencing:	15/06/2020	ESTH	SGH	KCH	Guys	Barts	Royal Free	Imperial		TOTAL	
Trust:		Number	Number	Number	Number	Number	Number	Number		Number	AVG.
1	No. of new referrals received this week	6	5	5	6	3	5	5		35	5
2	No. of patients waiting for diagnostic testing as planning for renal access surgery	31	22	3	37	17	22	22		154	22
3	No. of patients waiting to see an access surgeon for assessment	31	33	25	37	39	33	33		231	33
4	No. of patients fully worked up for surgery - total	66	45.5	31	34	51	45.5	45.5		318.5	45.5
4a	No. of patients waiting for Day Case Surgery	67	37	16	29	36	37	37		259	37
4b	No. of patients suitable for Inpatient Surgery - Trust	52	23	18	7	15	23	23		161	23
4c	No. of patients suitable for Inpatient Surgery - IS	9	3.5	5	0	0	3.5	3.5		24.5	3.5
5	No. of access clinics running	1	1.75	3	2	1	1.75	1.75		12.25	1.75
5a	No. of patients seen in those clinics last week	9	12.25	20	17	3	12.25	12.25		85.75	12.25
6	No. of theatre lists running - total	1	2	3	4	3	6.5			19.5	
	* No. of theatre lists running - Trust	1	0	2	0	3	4			10	
	* No. of theatre lists running - IS	0	2	1	4	0	2.5			9.5	
6a	Total No. of procedures carried out last week	3	3	5	2	11				24	
	* No. of procedures carried out last week - TRUST	3	1	4	0	11				19	
	* No. of procedures carried out last week - IS	0	2	1	2	0				5	

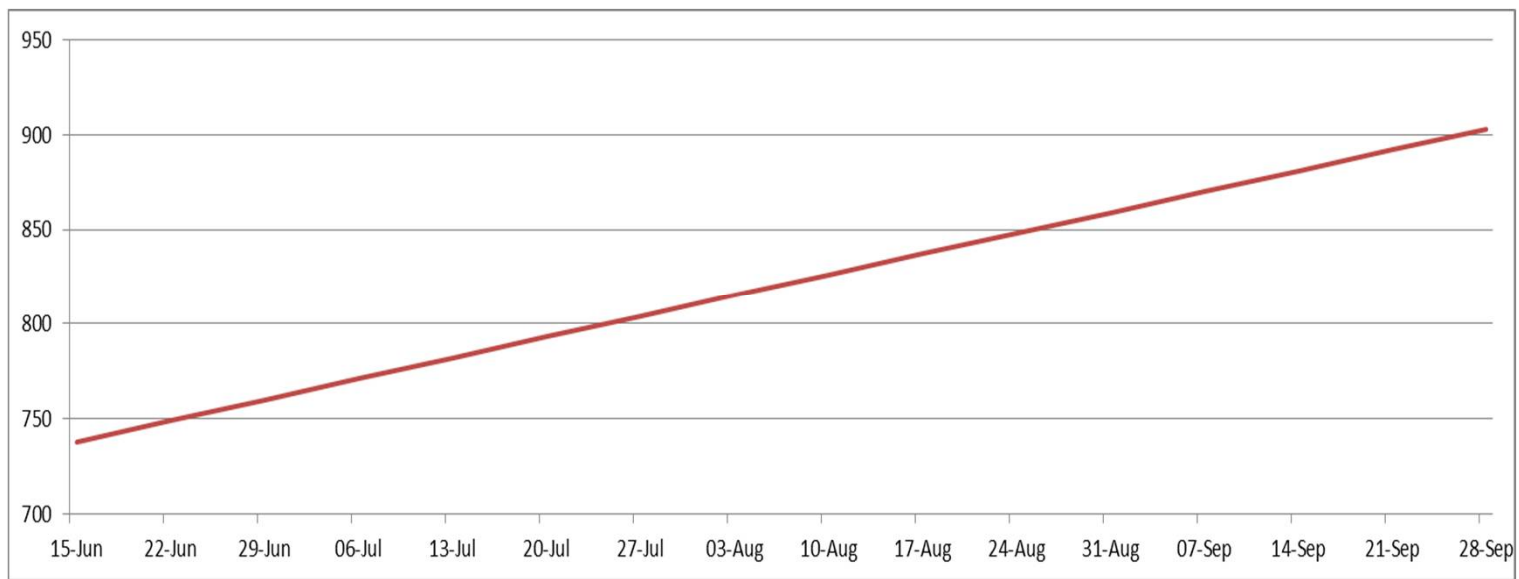
Demand

- Estimated **738** patients from units are on the access referral pathway. 7
- Of those an estimated **318** are fully worked up and ready for surgery.

Wait List Backlog Total	738.5
Work Up Complete	318.5
Awaiting Tests or Surgical Review	385
New Referrals	35

Capacity

- Using the current rate of procedures it would take **13 weeks to clear the backlog** of fully worked up patients and **31 weeks to clear all the currently referred patients.**
- Current net increase in waiting list **11 cases/week**



What have we learned?



Pan London Dialysis Access

Comments:

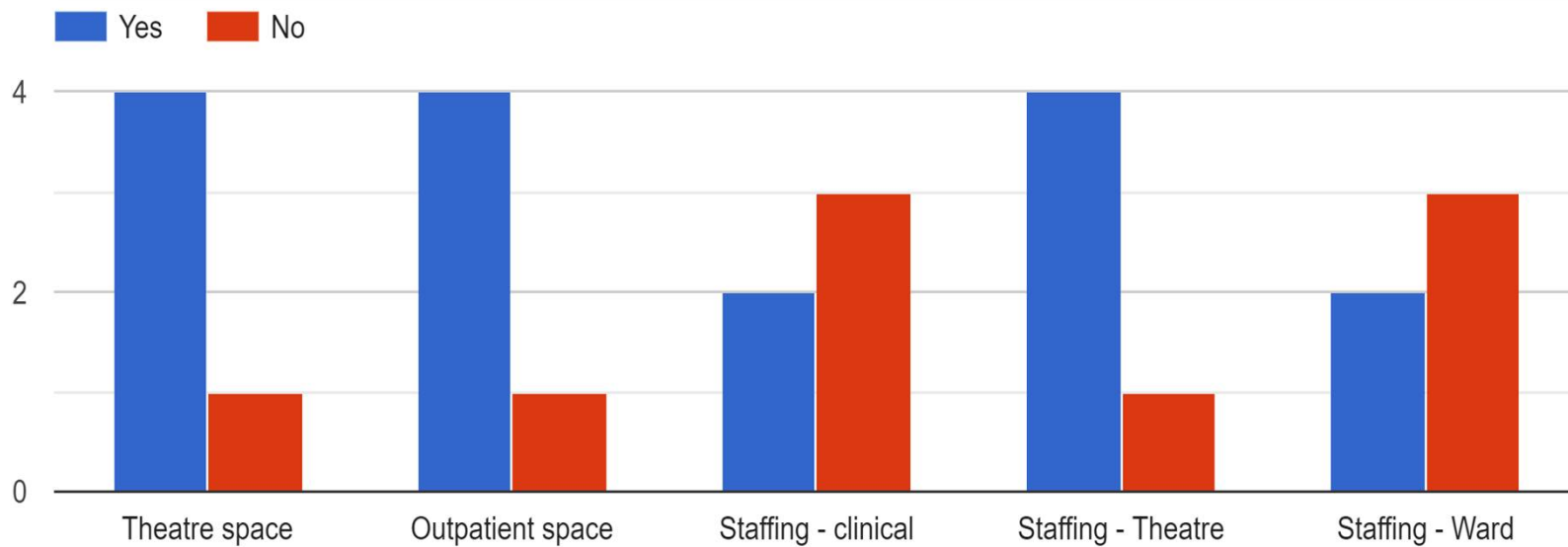
- Unique opportunity
- Important group to learn from others
- Develop shared working
- Peer support
- Need to continue post-COVID (4-5 times / year)

Future collaborations:

- Develop a pan-London dataset (funded)
- Design process to share clinical pathways, experiences (patient & staff) & innovations.
- Identify Quality indicators for access services.
- Produce high quality research and lead advances in access care.
- Share training resources for all staff.

Can we deliver ?

In your opinion, the key areas you need support are..

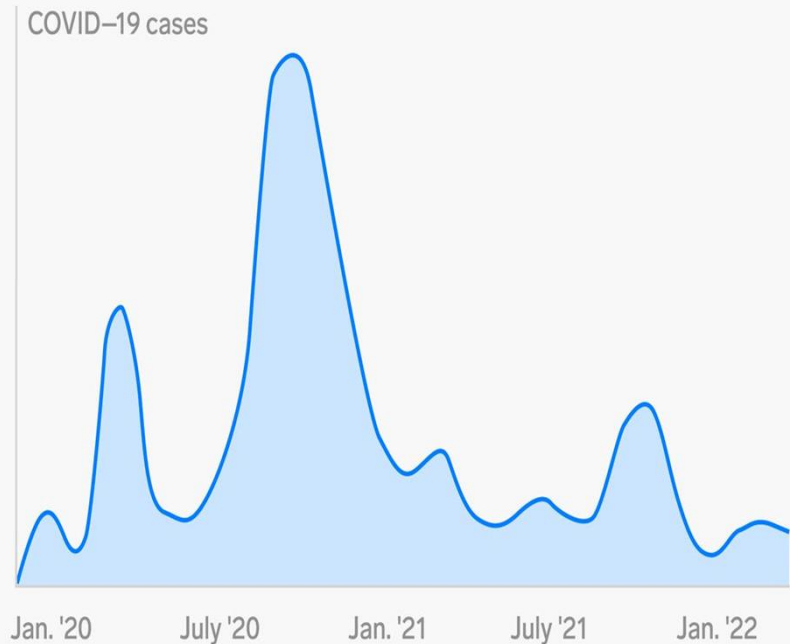


In the time ahead..

- Need clinic and theatre capacity in a safe manner
- Maintain Equality and Equity of care
- Deliver regular updates to all stakeholders

Seasonal Covid ?

Possible coronavirus waves scenario 2: Fall peak



Remain ready for challenges



A vertical bar on the left side of the slide with a gradient from orange at the top to blue at the bottom.

Summary

- COVID has caused significant impact on access services.
- Patient safety has been the priority of all teams
- A shared working approach is developed to deliver access care now and beyond COVID.

Conclusions

- Amazing support from all the patients by supporting their clinical teams
- Resilient, Responsive and adaptable to deliver safe care.
- We thank Stephen, Sec, Rachel, Peter

Panel Discussion

Questions from the audience

Moderator: Dr Darren Parsons (Imperial)

Ms Lisa Burnapp

Clinical Lead Living Donation

NHS Blood and Transplant

A thick blue wavy line that starts on the left, dips down, and then rises towards the right, spanning the width of the slide.

Restarting Transplantation after COVID-19

NHSBT Perspective

Lisa Burnapp

Clinical Lead- Living Donation

Consultant Nurse- Guy's & St.Thomas' NHS
Trust

Kidney Care in London, July 2020

Caring Expert Quality

Donation to Transplantation Pathway



Role of OTDT Directorate

Develop and deliver UK OTDT strategies with key stakeholders

Specialist Nurses in Organ Donation workforce
Commission National Organ Retrieval Service (NORS)

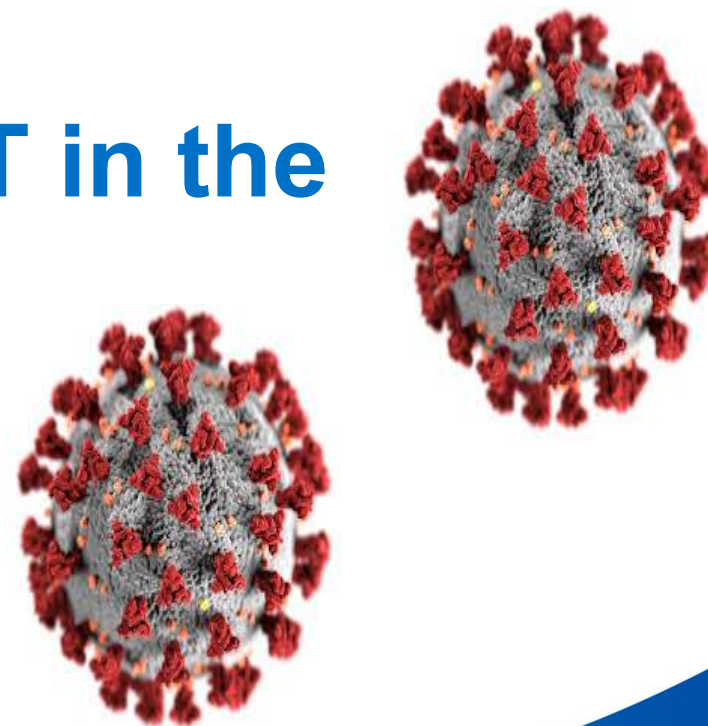
Clinical leadership –donation and transplantation
Clinical Governance (donation to implantation)

UK Transplant and Living Donor Registry
Annual and organ specific reports
COVID-19 Transplant Registry



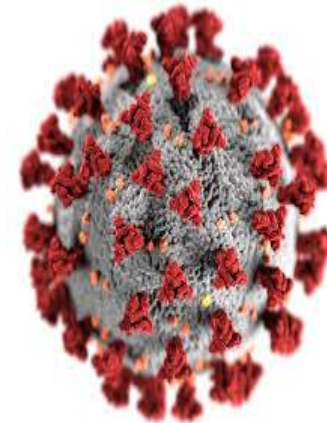
Hub operations & information services
Deceased organ offering schemes
UK Living Kidney Sharing Scheme
Recipient and donor registration
Solid Organ Advisory groups

Role of OTDT- NHSBT in the **COVID-19** era



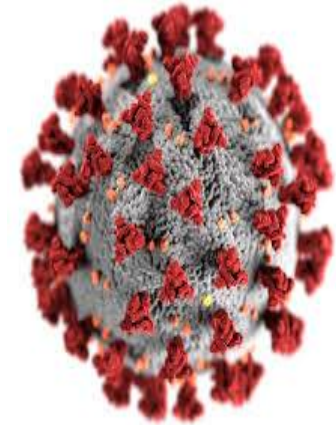
Role of OTDT- NHSBT

- Donors and donated organs (deceased and living)
- Transplant recipients
- Clinical colleagues and multi-disciplinary teams
- Wider donation and transplant community and other agencies



Role of OTDT- NHSBT

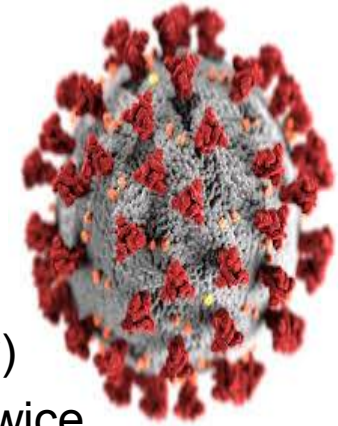
- Donors and donated organs (deceased and living)
 - Donor testing
 - Donor criteria
 - Maintaining NORS
 - Clinical Governance
 - Monitoring and reviewing UK living kidney sharing scheme
 - Living donor survey (in progress)
- Transplant recipients
 - Supported local/regional decision-making
 - Facilitated rapid testing capability in transplant centres
 - Established COVID-19 Transplant Registry
 - On-line information and advice for patients; sought patient views



*<https://www.odt.nhs.uk/deceased-donation/covid-19-advice-for-clinicians/>

Role of OTDT- NHSBT

- Clinical colleagues and multi-disciplinary teams
 - Hear, listen, help approach
 - Joint NHSBT/Commissioner calls/meetings (daily then weekly)
 - NHSBT Clinical Team and Advisory Group Chairs meetings (twice weekly)
 - Facilitated rapid decision-making and policy implementation
 - Dedicated on-line resources*
 - Regular COVID-19 Bulletin; daily reports; transplant centre status
 - Guidance and policies
 - Restarting transplant programmes; NHSBT/BTS consent guidance
 - COVID Transplant Registry and COVID cases map



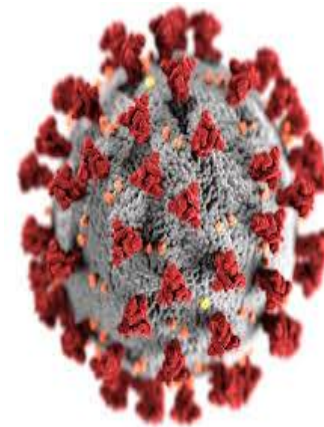
*<https://www.odt.nhs.uk/deceased-donation/covid-19-advice-for-clinicians/>

Role of OTDT- NHSBT

- Wider donation and transplant community and other agencies
 - ‘Better together’ approach- collaboration with key stakeholders
 - Clinical community
 - Departments of Health and Commissioners- all 4 UK countries
 - Transplant recipients, living donors, patient organisations
 - Regulators- Human Tissue Authority
 - Professional Societies and Royal Colleges
 - NICE

To

- Make things work
- Avoid duplication of effort
- Provide consistent messaging



Information and Resources

Blood and Transplant
www.odt.nhs.uk

Organ Donation and Transplantation

Matching world-class performance in organ donation and transplantation

Welcome to the NHS Blood and Transplant Organ Donation and Transplantation clinical website.

This site aims to share knowledge and expertise, in order to ensure the highest standard of care to organ donors and transplant patients.

COVID-19 advice for patients

- [Read our coronavirus advice](#) to transplant patients
- [Frequently asked questions](#) about transplants during coronavirus

COVID-19: Advice for Clinicians

Advice for clinical staff involved in facilitating organ and tissue donation in the UK

[Find out more](#)



English organ donation law has changed

Organ donation in England has moved to an 'opt

Information and Resources

COVID-19: Clinical Advice

The following advice is provided for clinical staff involved in facilitating organ and tissue donation in the UK.

It is general guidance so please always check the latest [Government COVID-19 advice](#) for up to date national guidance as well as any local policies which may be applicable.

Because the situation is changing rapidly, please revisit this site to find the latest version of any guidance.

Clinical enquiries and questions should be directed as appropriate to: [regional organ donation teams](#) or Regional Clinical Leads for Organ Donation, national organ retrieval service leads, or transplant centres.

Quick links

[COVID-19 Bulletin](#)[Transplant centre closures and restrictions](#)[Re-opening of transplant centres](#)[Guidance documents and videos](#)[Reporting incidences of COVID-19](#)[COVID-19 cases map](#)[Daily donor and transplant report](#)

Advice for patients

- [Read our coronavirus advice](#) to transplant patients

Read the latest COVID-19 Bulletin

- [Bulletin 16 PDF 456KB](#)  (published 26 June 2020)

On Reflection?

Work in progress

- * Share learning
- * Contingency planning
- * Continuity of service
- * Equity of access
- * Building resilience

Do the same again?
Do something different?



Discussion



Dr Sapna Shah

Consultant Nephrologist

Kings College Hospital

Issues living with COVID for patients and clinicians from a referring centre perspective

Dr Sapna Shah
Consultant Nephrologist
KCH

Brief

- What happened to the post transplant service at our centre (non-transplant) during the pandemic?
- How did we respond?
- What are our reflections?
- What are the current issues?

COVID 19 timeline



Contingency planning

Outpatient clinics reconfigured

Transplant program stopped

Virtual clinics

Catch-up clinics

Planning and delivering

24/2/20



16/3/20



23/3/20



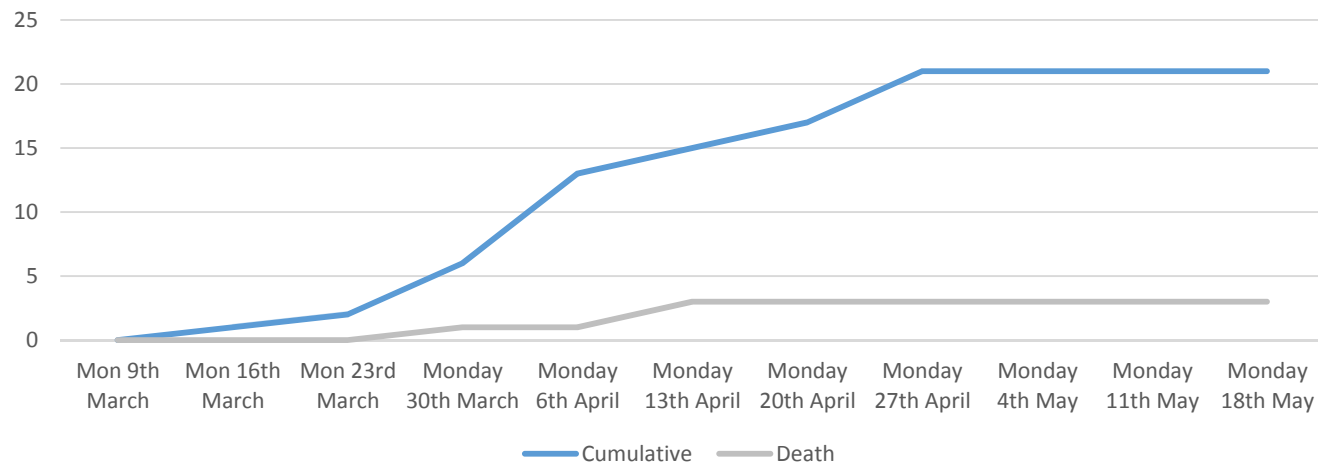
30/3/20



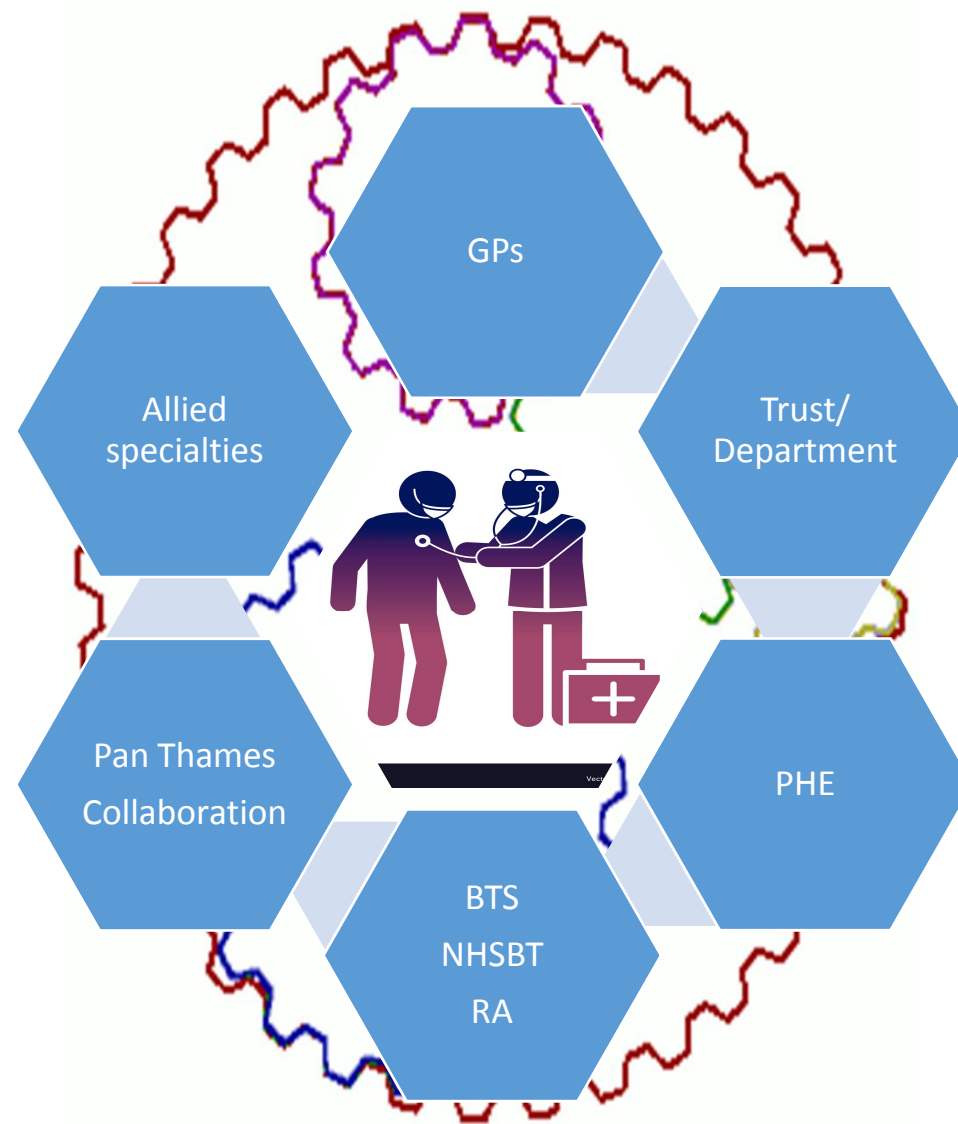
4/5/20

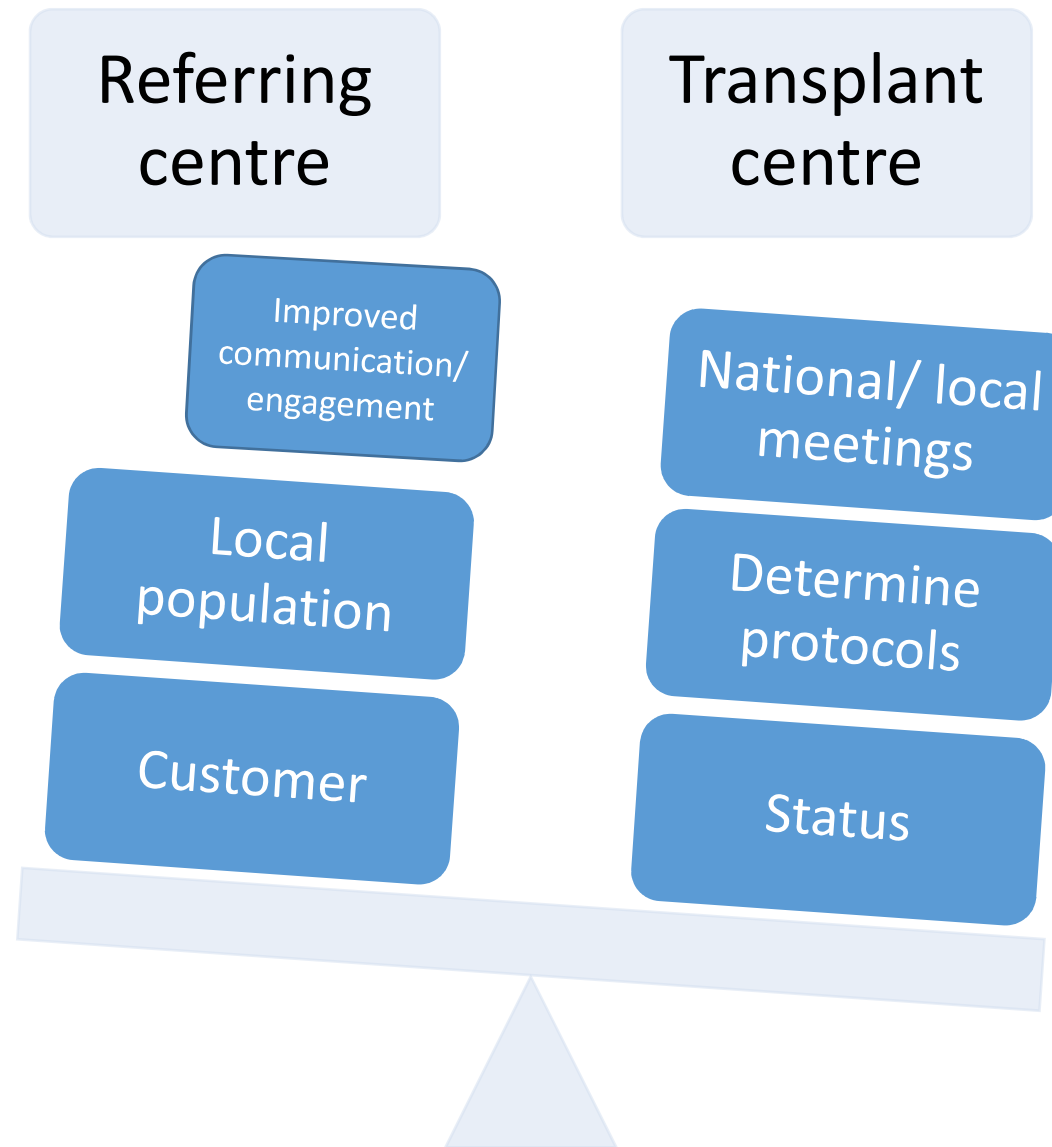


1/7/20



Influences and reflections





Top 4 concerns

- Restarting and delivering transplantation
- Not activating 'complex' patients
- Managing transplant work-up
- Delivering 'routine' clinical care to transplant patients

What next?



Reconfiguration
Video clinics
Homecare
Screening
Admin/
managerial
IT

Permanent
community hubs

GP surgeries

Local renal unit
Sharing of:
Policies/ protocols
Patient
information
Audit
Research
Investigation units

Mr Frank Dor

Consultant Surgeon

Imperial College HealthCare NHS Trust

:

Peri-operative practice and adapting the pathway for COVID-19 for live donor kidney transplantation



Frank JMF Dor @frank_dor

Consultant Transplant Surgeon, Clinical Lead for Transplantation,
Imperial College Renal and Transplant Centre, Hammersmith Hospital, London, UK

Respect our patients and colleagues | Encourage **innovation** in all that we do | Provide the highest quality **care** | Work together for the **achievement** of outstanding results | Take **pride** in our success



Advantages Live Kidney Donation

Elective surgery

Advantages for recipient:

- pre-emptive Tx: prevent dialysis
- alternative programs: ABOi, paired exchange, unspecified
- selected donors -> good quality kidneys
- short cold ischemia -> superior graft function
- "impossible transplants"

Economic advantages

Live Kidney Donation:

- No mortality, No Morbidity
- No harm to the kidney
- No long-term risk
- Good QoL and quick recovery

However:

- "Major" surgery on healthy person
- No direct therapeutic benefit for the donor
- Mortality 1:3000-1:8000
- Morbidity 2.3% (intra-op), 7.3% (post-op) Kortram et al. Transplantation 2016



Balancing recipient benefit & donor risk



Individualised approach !!

Central questions:

1. What is an acceptable risk?
2. How do we minimize the risk?
3. How do we determine the individual risk?
4. How do we communicate the risk to the potential donor?
5. How informed is informed consent?
6. How do we assess whether the potential donor understands the risk?
7. What safety nets do we have in place?

Donor safety and QoL

- **Screening:**
 - Medical: short-term vs long-term
 - Surgical: short-term vs long-term
 - Psychological: short-term vs long-term

-> Absolute vs relative contra-indications to donation
- **Operative Techniques & Training**
- **Long-term follow up**
- **Safety nets**



Perioperative Events and Complications in Minimally Invasive Live Donor Nephrectomy: A Systematic Review and Meta-Analysis

Kirsten Kortram, MD,¹ Jan N.M. Ijzermans, MD, PhD,¹ and Frank J.M.F. Dor, MD, PhD¹

Background. Minimally invasive live donor nephrectomy has become a fully implemented and accepted procedure. Donors have to be well educated about all risks and details during the informed consent process. For this to be successful, more information regarding short-term outcome is necessary. **Methods.** A literature search was performed; all studies discussing short-term complications after minimally invasive live donor nephrectomy were included. Outcomes evaluated were intraoperative and postoperative complications, conversions, operative and warm ischemia times, blood loss, length of hospital stay, pain score, convalescence, quality of life, and costs. **Results.** One hundred ninety articles were included in the systematic review, 41 in the meta-analysis. Conversion rate was 1.1%. Intraoperative complication rate was 2.3%, mainly bleeding (1.5%). Postoperative complications occurred in 7.3% of donors, including infectious complications (2.6%), of which mainly wound infection (1.6%) and bleeding (1.0%). Reported mortality rate was 0.01%. All minimally invasive techniques were comparable with regard to complication or conversion rate. **Conclusions.** The used techniques for minimally invasive live donor nephrectomy are safe and associated with low complication rates and minimal risk of mortality. These data may be helpful to develop a standardized, donor-tailored informed consent procedure for live donor nephrectomy.

(*Transplantation* 2016;00: 00–00)

Conversions, intra- and postoperative complications, reinterventions and mortality after minimally-invasive live donor nephrectomy

1. Conversion (ALL)	1.1%
-emergent (bleeding/organ injury)	0.7%
2. Intraoperative complications (ALL)	2.2%
-bleeding	1.5%
-injury other organs	0.8%
3. Postoperative complications (ALL)	7.0%
-bleeding (ALL)	1.0%
requiring transfusion	0.4%
-injury other organs (ALL)	0.09%
4. Infectious complications (ALL)	2.6%
-wound infections	1.6%
-UTI	0.4%
-pneumonia	0.6%

Conversions, intra- and postoperative complications, reinterventions and mortality after minimally-invasive live donor nephrectomy

1. Cardiopulmonary complications

-pneumothorax	0.1%
---------------	------

2. Thromboembolic complications

0.2%

3. GI complications

-ileus	0.7%
--------	------

-small bowel obstruction	0.2%
--------------------------	------

4. other postoperative complications:

a.fascial defect	0.2%
------------------	------

b.testicular swelling/pain/epididymitis	0.6%
---	------

c.Thigh numbness	0.3%
------------------	------

d.pain	0.8%
--------	------

e.remnant kidney function disorder	0.3%
------------------------------------	------

f.urinary retention	0.5%
---------------------	------

g.drug reaction	0.5%
-----------------	------

h. Other general complications	0.03%
--------------------------------	-------

Conversions, intra- and postoperative complications, reinterventions and mortality after minimally-invasive live donor nephrectomy

1. Mortality

0.01% (3:25116 donors):

lower than reported 1:3000!

2. Surgical Reinterventions

0.6%



Imperial College
Renal & Transplant
Centre

Live Donor Kidney Transplantation and COVID-19

COVID-19 pandemic:

No LD KTx in UK for months: safety, staffing, resource etc

No P&P KTx

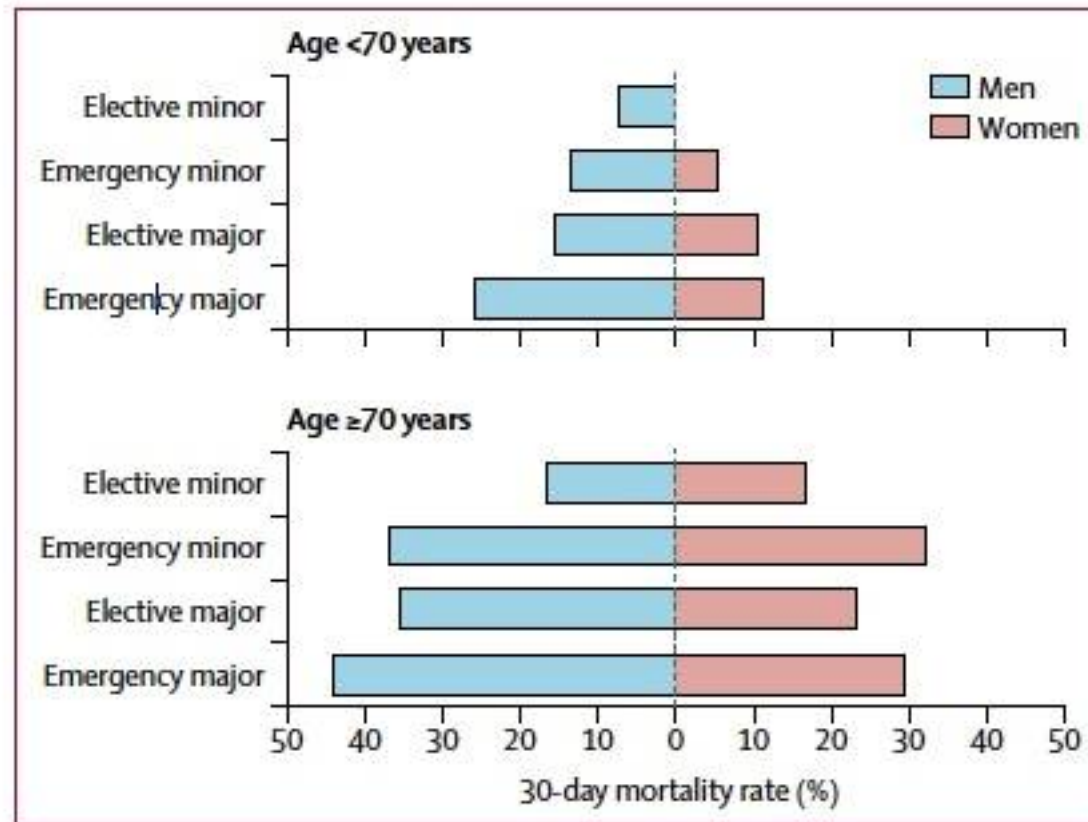
Since June 1st LD KTx re-start happening across UK

London: more challenging than many other regions

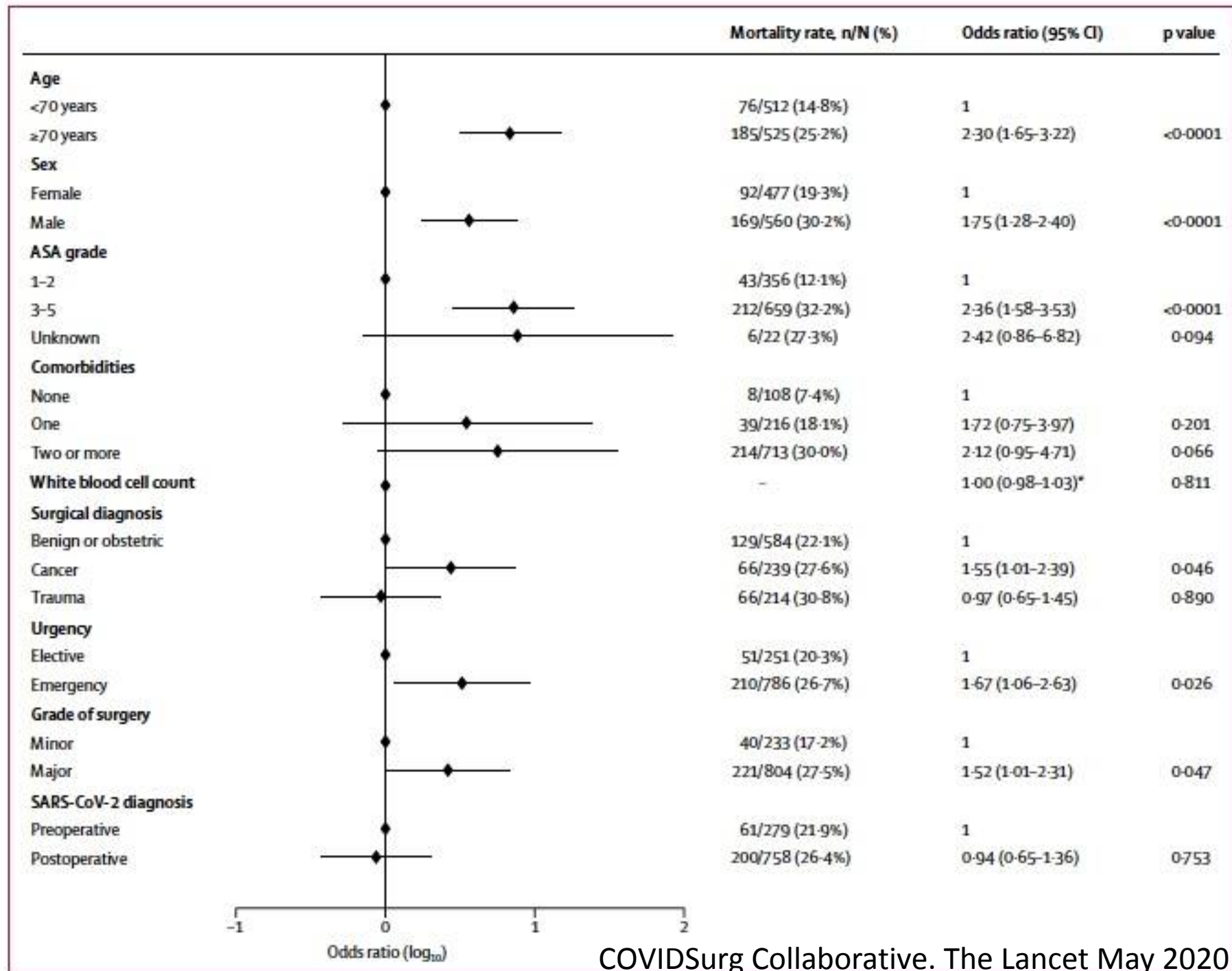
Safety data? Donors and recipients



Live Donor Kidney Transplantation and COVID-19



COVIDSurg Collaborative. The Lancet May 2020





Imperial College
Renal & Transplant
Centre

Live Donor Kidney Transplantation and COVID-19





Live Donor Kidney Transplantation and COVID-19

Green/Gold pathway development (“end-to-end”):

NHSBT / BTS / NICE /RCS

Risk mitigation

Site selection: own hospital / independent sector

- service specifications (SLA) / experience
- infrastructure / OOH arrangements
- meeting/site visit/”chemistry”

Approval all levels/stakeholders

LD MDT: Donor & Recipient selection: avoid additional risk

Sustainability / resilience

LD work up





Live kidney donor and recipient pathway:

Work up (finished) / discuss with LD pair options for LD transplant

Final review + COVID testing + informed consent day -14

Shielding day-14 (including household / postop carers)

Virtual Independent Assessor Interview

Health Questionnaire day -7

Preadmission day -3 + COVID swab

Admission day-1 + COVID swab



Imperial College
Renal & Transplant
Centre

Live Donor Kidney Transplantation and COVID-19



Operations:

Senior team (“heavy”)

Staff working green, staff COVID testing

Adequate PPE

2 theatres in parallel, if possible (otherwise 1 theatre)

Own consultant anaesthetists

Support from own theatre scrub nurses



Post-operative care

Senior multidisciplinary team (“heavy”)

Recipient 1 night ITU

Green ward

ERAS pathways to minimise LoS

Amalgamated protocols incl immunosuppression

Nurse support

Staff testing

Donor and Recipient FU plan

Postop shielding



Key issues I:

- Safety first
- Talk to donors/patients -> willingness, preparedness
- Collaborate:
 - Unit/RFH/pan London Tx
 - collaborative/HTA/KAG/international
- Pathway development
- Avoid COVID-19 infection at all cost:
 - site/staffing/LoS/min. hospital visits
- virtual / telemedicine



Key issues II:

- Proper donor/patient selection based on data
- Appropriate teams, project manager
- site visits / dry run
- instruments / kit
- prepare, prepare, prepare
- appropriate consent for the process
- resilience/sustainability -> LD work up
- prospective data collection



Imperial College
Renal & Transplant
Centre

Live Donor Work up and COVID-19



Thanks for your attention!

Frank.Dor@nhs.net

@frank_dor



Royal College of Surgeons - prioritisation

Patients requiring surgery during the COVID-19 crisis have been classified in the following groups:

Priority level 1a Emergency - operation needed within 24 hours

Priority level 1b Urgent - operation needed within 72 hours

Priority level 2 Surgery that can be deferred for up to 4 weeks

Priority level 3 Surgery that can be delayed for up to 3 months

Priority level 4 Surgery that can be delayed for more than 3 months



Unique considerations for informed consent during the COVID-19 pandemic:

- a. The risk of contracting COVID-19 while in the hospital.
- b. The risk of operation for patients who have tested positive for COVID-19.
- c. Changes in the coordination of care due to the pandemic response and possible scarcity of resources (e.g. ICU bed capacity or ventilator availability).
- d. The importance of advance directives.
- e. Transparency about uncertainties & limited data.
- f. It is imperative that the consent discussion with the patient is conducted by the operating surgeon who has the most in depth knowledge of the patient and their individual circumstances.

Dr Gareth Jones

Consultant Nephrologist

Royal Free Hospital

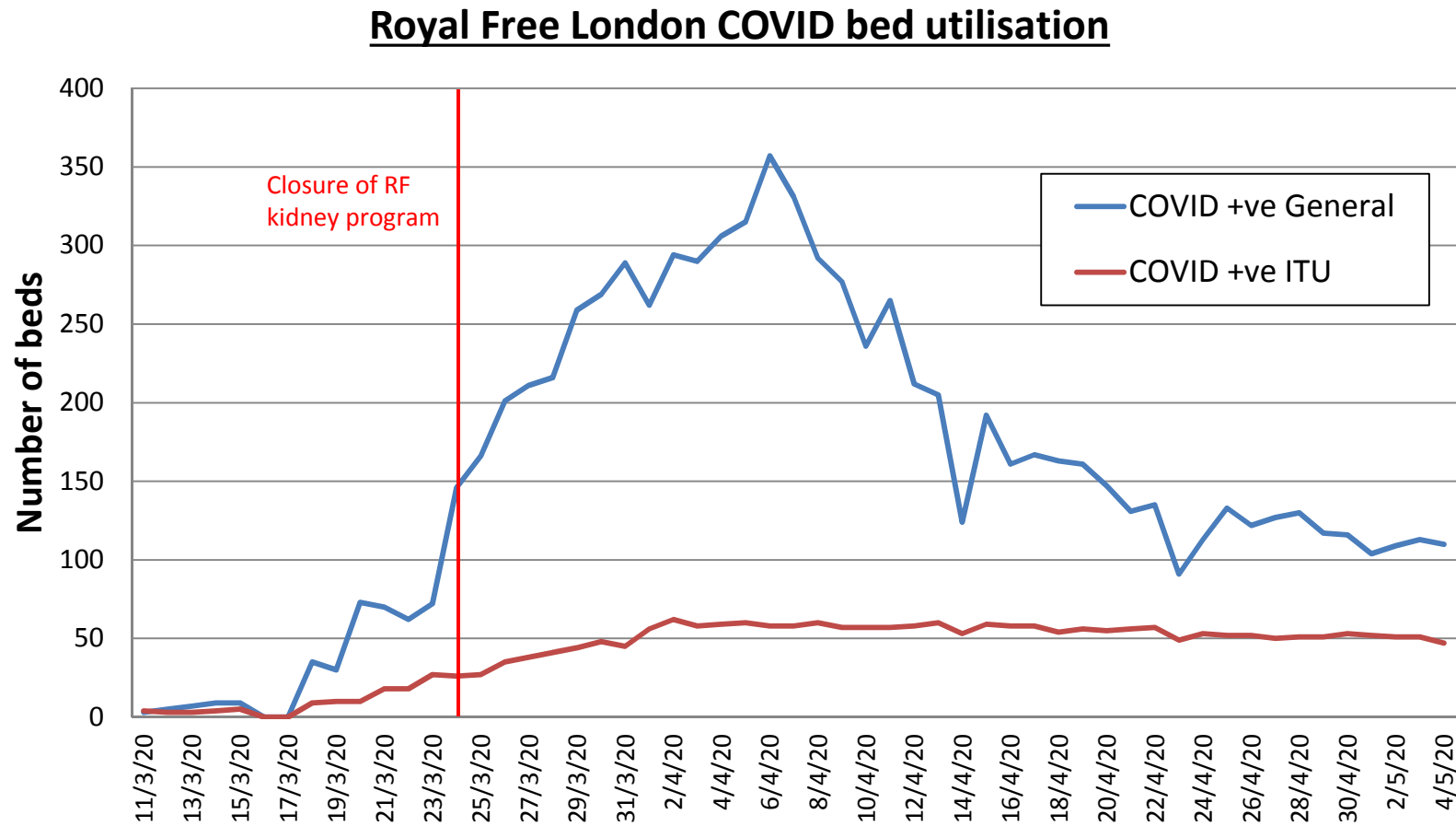
Restarting Kidney transplantation during COVID-19 pandemic

1st July 2020

Gareth Jones

UCL Centre for Nephrology, Royal Free NHS Foundation
Trust,
London, UK

Why did we stop transplanting



How to restart

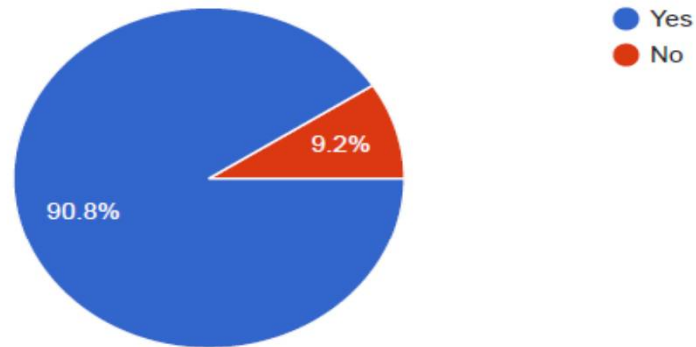
- Justify the risk benefit
- Map out the pathway
 - COVID separated (living donation)
 - COVID risk managed (deceased donation)
- Secure the resources
- Get local agreement
 - Patient
 - Referring clinicians
 - Trust level
 - Commissioning
- Inform everyone

Restarting live donor transplant at IS site

- Ask the patients

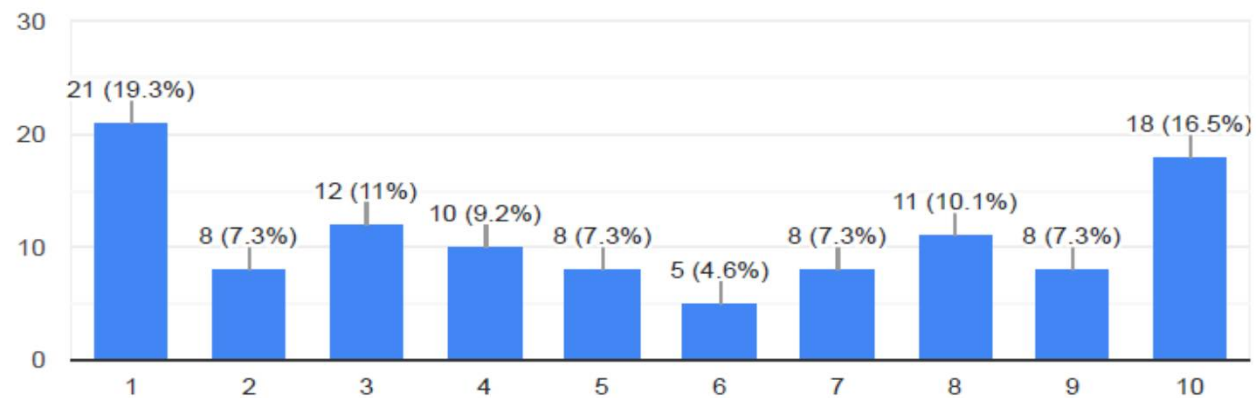
Would you like to see the kidney transplant program restarted?

109 responses



How concerned are you about restarting transplantation during the COVID-19 pandemic? Please let us know a number between 0-10.

109 responses



Restarting live donor transplant at IS site

- Ask the patients
- Find a friendly transformation director and commissioner
- Define the resource requirement
- Identify a site
- Map out the pathway and protocols
- Get permission
 - Clinical
 - Trust
 - Commissioning
 - HTA
- Get an agreement (MoU)
- Agree resource requirement
 - Staff from your own site
 - Out of hours cover (anaesthesia and radiology)

Discharge and follow up

- Try to discharge
- COVID separated outpatients
- COVID risk managed
 - Readmission
 - Diagnostics
 - Pharmacy
- Shielding ?



Nick Palmer

Kidney Patient

Questions to the panel

Audience Questions To The Panel

Moderator: Dr Darren Parsons

Summing up of key messages

Dr Ginny Quan