



Deonú agus Trasphlandú Orgán Éireann
Organ Donation Transplant Ireland

Organ Donation Transplant Ireland

2024

ANNUAL REPORT

Organ Donation Transplant Ireland (ODTI) has been delegated the regulatory functions assigned to the Health Service Executive (HSE) in Statutory Instrument (SI) 325 (2012), European Union (Quality and Safety of Human Organs Intended for Transplantation) Regulations 2012.

This annual report has been produced in compliance with part 5, SI 325 (2012):

25 (1) The HSE shall—

- (a) keep a record of the activities of procurement organisations and transplantation centres, including aggregated numbers of living and deceased donors, and the types and quantities of organs procured and transplanted, or otherwise disposed of in accordance with European Union and national provisions on the protection of personal data and statistical confidentiality,
 - (b) draw up and make publicly accessible an annual report on activities referred to in subparagraph (a), and
 - (c) establish and maintain an updated record of procurement organisations and transplantation centres.
- (2) The HSE shall, upon the request of the Commission or another Member State, provide information on the record of procurement organisations and transplantation centres.

Contents

Director's Statement	5
Organ Donation and Transplant Executive Summary 2020 - 2024	8
Total Organ Donations and Transplants 2017 - 2024	9
Cause of Death	11
Deceased Donation	11
Donor Gender	12
Transplantation	12
National Kidney Transplant Service, Beaumont Hospital	14
National Liver Transplant Service, St Vincent's University Hospital	19
National Pancreas Transplant Service, St. Vincent's University Hospital	23
National Heart and Lung Transplant Service, Mater Misericordiae University Hospital	26
Quality and Safety	32
National Organ Procurement Service (NOPS)	33
NOPS Quality	34
Acknowledgements	35
Bibliography	37

Tables

Table 1	Donation activity per Regional Health Area 2020 - 2024	7
Table 2	Organ Donation and Transplant Executive Summary 2020 - 2024	8

Figures

Figure 1	Total Organ Donations and Transplants 2017 - 2024	9
Figure 2	Donated Organs Utilised Abroad 2020 - 2024	9
Figure 3	Number of DCD/DBD Donations 2016 - 2024	10
Figure 4	Transplants from DCD Donors in Ireland 2016 - 2024	10
Figure 5	Transplants Abroad from DCD Donors 2017 - 2024	10
Figure 6	Donor Cause of Death 2024	11
Figure 7	Donor Age 2024	11
Figure 8	Deceased Donation Gender 2024	12
Figure 9	Organ Specific Activity 2024	12
Figure 10	Conversion rates: Deceased Donor to Transplant 2024 (n=84)	13
Figure 11	Kidney Transplants 2019 - 2024	16
Figure 12	Kidney Transplant Waiting List 2019 - 2024	16
Figure 13	EU (CTS) Adult First Deceased-Donor Kidney Patient Survival 1994 - 2023	17
Figure 14	EU (CTS) Adult First Deceased-Donor Kidney Allograft Survival 1994 - 2023	17
Figure 15	EU (CTS) Adult First Living-Donor Kidney Patient Survival 2007 - 2023	18
Figure 16	Liver Transplants 2019 - 2024	21
Figure 17	Liver Transplant Waiting List 2019 - 2024	21
Figure 18	Long-Term Patient Survival After First Elective Adult Liver Only Transplants From DBD Donors, 1 January 2010 - 31 December 2023	22
Figure 19	Long Term Graft Survival After First Elective Adult Liver Only Transplants From DBD Donors, 1 January 2009 - 31 December 2023	22
Figure 20	Pancreas Transplants 2019 - 2024	25
Figure 21	Pancreas Transplant Waiting List 2019 - 2024	25
Figure 22	Heart Transplants 2019 - 2024	28
Figure 23	Heart Transplant Waiting List 2019 - 2024	28
Figure 24	Lung Transplants 2019 - 2024	29
Figure 25	Lung Transplant Waiting List 2019 - 2024	29
Figure 26	Paediatric Kidney Transplant in Ireland (<19yrs at time of transplant) 2019 - 2024	30
Figure 27	Irish Paediatric Patient Transplants performed in the UK 2019 - 2024	30
Figure 28	Irish Paediatric Waiting List UK end of December 2024	31
Figure 29	Quality and Safety Review	34

Director's Statement

Organ donation saves lives

The summary of Ireland's 2024 organ donation and transplant data that follows is, of course, a high-level overview of individual experiences of loss, bereavement and of individual lives being saved. Such a presentation cannot capture the gratitude we owe to donors and their families, nor the responsibility we owe to those on waiting lists to meet their needs. These are the motivations that underpin this collation of information, and that direct how we should analyse and interpret it.

Ireland is in overall terms fairly static, as regards transplantation activity, with 84 organ donors in the year compared to a five year average of 79. Within the individual organ transplant centers there are no extraordinary changes, and activity per head of population is broadly unremarkable by international standards. A significant trend within the dataset, though, is the growth of donation after circulatory death (DCD) as a route to organ procurement. This has been the mechanism of donation in almost a quarter of donations in the last two years. This trend is consistent with international norms and likely to continue.

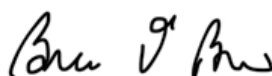
A change that probably should be appreciated more is that in recent decades, preventative and interventional changes have saved many lives. Road accidents have declined dramatically in the last three decades, and neurological care has improved so that outcomes from these and other head injuries are far better. This is an enormous benefit to society. It has led to a decline in brain death as a clinical outcome, leading to fewer organ donors via that diagnostic category. The fact that our totals appear static is somewhat misleading - the growth of DCD has compensated for a decline in neuro trauma, giving a similar

total. This, however, alters the demographics of the donor population.

Across developed countries, donors are becoming older, the criteria for acceptance of organs are being loosened, and advances in pharmacology and medical care are allowing acceptable outcomes for recipients. It is notable that in the current report, three of the donors are over 70 years old. While this may surprise some readers, that people essentially at the end of natural life can offer organs to save the lives of others, it is increasingly a realistic possibility.

The average donor age in Ireland is in the 40s. This is quite out of keeping with most peer countries and, especially, with the leading nations by activity levels. In order to see higher levels of transplantation, we will need to offer the option of donation more frequently at the time of death in elderly patients. This needs to be the focus of the next few years if we are to meet the needs of the hundreds of patients awaiting organs. It will require a change in medical culture and innovation in the preservation and handling of the relevant tissue. The courage to take these steps is something we owe to the patients and families of the future who wish to give this most precious gift. To the donors and families of 2024, we offer our deepest gratitude.

Yours sincerely,



Dr Brian O'Brien,
FCARCSI, M MED Sc, FJFICMI, FCICM (ANZ)
Clinical Director, ODTI

Hospital Groups

SOUTH WEST RHA

- Bantry General Hospital
- Cork University Hospital
- Mallow General Hospital
- Mercy University Hospital
- South Infirmary Victoria University Hospital
- University Hospital Kerry

DUBLIN NORTH EAST RHA

- Beaumont Hospital
- **National Renal Transplant Centre**
- Cavan General Hospital
- Connolly Hospital Blanchardstown
- Louth County Hospital,
- Mater Misericordiae University Hospital
- **National Heart and Lung Transplant Centre**
- Monaghan General Hospital
- Our Lady of Lourdes Hospital Drogheda,
- Our Lady's Hospital Navan
- Rotunda Hospital.

DUBLIN AND MIDLANDS RHA

- The Coombe Hospital
- Regional Hospital Mullingar
- Midlands Regional Hospital Portlaoise
- Midlands Regional Hospital Tullamore
- Naas General Hospital
- St James's Hospital
- Tallaght University Hospital.

MID WEST RHA

- Ennis General Hospital
- Nenagh General Hospital
- St John's Hospital Limerick
- University Hospital Limerick

WEST NORTH WEST RHA

- Letterkenny University Hospital
- Mayo University Hospital
- Portlinculla University Hospital
- Roscommon University Hospital
- Sligo University Hospital
- University Hospital Galway.

DUBLIN SOUTH EAST RHA

- National Maternity Hospital
- South Tipperary General Hospital
- St Columcille's Hospital
- St Luke's Hospital Kilkenny
- St Michael's Hospital Dun Laoghaire
- St Vincent's University Hospital
- **National Liver and Pancreas Transplant Centre**
- University Hospital Waterford
- Wexford General Hospital.

CHILDREN'S HEALTH IRELAND

- Children's Health Ireland at Crumlin
- Children's Health Ireland at Temple Street
- Children's Health Ireland at Tallaght
- Children's Health Ireland at Connolly

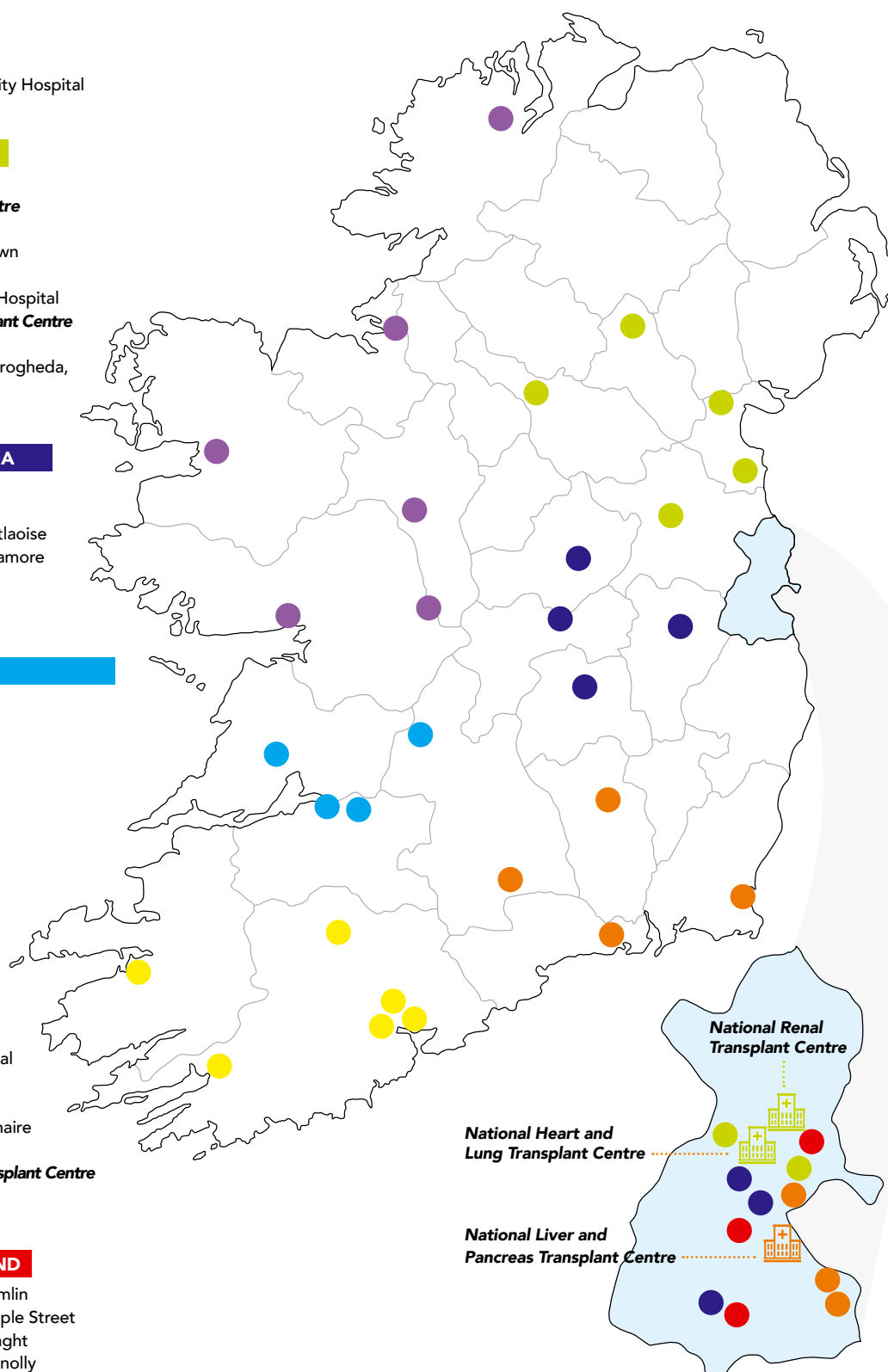


Table 1: Donation activity per Regional Health Area 2020 – 2024

Hospitals were re-grouped into Regional Health Areas (RHAs) in 2024. This table groups hospitals according to RHAs, including for the years in which they were grouped differently.

South West RHA					
Year	2020	2021	2022	2023	2024
Total	11	19	11	19	17

Includes Bantry General Hospital, Cork University Hospital, Mallow General Hospital, Mercy University Hospital, South Infirmary Victoria University Hospital, and University Hospital Kerry

Dublin North East RHA					
Year	2020	2021	2022	2023	2024
Total	16	22	26	30	36

Includes Beaumont Hospital, Cavan General Hospital, Connolly Hospital Blanchardstown, Louth County Hospital, Mater Misericordiae University Hospital, Monaghan General Hospital, Our Lady of Lourdes Hospital Drogheda, Our Lady's Hospital Navan, and Rotunda Hospital.

Dublin and Midlands RHA					
Year	2020	2021	2022	2023	2024
Total	9	9	9	15	9

Includes The Coombe Hospital, Regional Hospital Mullingar, Midlands Regional Hospital Portlaoise, Midlands Regional Hospital Tullamore, Naas General Hospital, St James's Hospital, and Tallaght University Hospital.

Mid West RHA					
Year	2020	2021	2022	2023	2024
Total	6	4	4	6	5

Includes Ennis General Hospital, Nenagh General Hospital, St John's Hospital Limerick, and University Hospital Limerick.

West North West RHA					
Year	2020	2021	2022	2023	2024
Total	9	7	13	12	7

Includes Letterkenny University Hospital, Mayo University Hospital, Portlincula University Hospital, Roscommon University Hospital, Sligo University Hospital, and University Hospital Galway.

Dublin South East RHA					
Year	2020	2021	2022	2023	2024
Total	11	3	18	9	7

Includes National Maternity Hospital, South Tipperary General Hospital, St Columcille's Hospital, St Luke's Hospital Kilkenny, St Michael's Hospital Dun Laoghaire, St Vincent's University Hospital, University Hospital Waterford, and Wexford General Hospital.

Children's Health Ireland					
Year	2020	2021	2022	2023	2024
Total	1	1	5	3	3

Includes Children's Health Ireland Temple Street, CHI Crumlin, CHI Connolly, CHI Tallaght.

Private Hospitals					
Year	2020	2021	2022	2023	2024
Total	0	0	0	1	0

National Yearly Totals					
Year	2020	2021	2022	2023	2024
Total	63	65	86	95	84

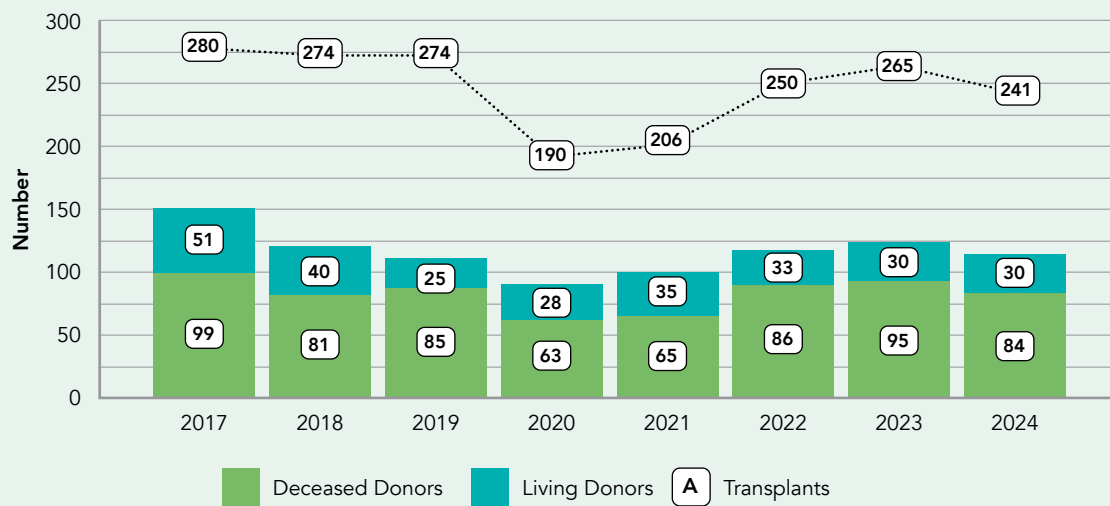
Organ Donation and Transplant Executive Summary 2020 - 2024

Table 2: Organ Donation and Transplant Executive Summary 2020 - 2024

		2020	2021	2022	2023	2024	5 year total	5 year average
Donations		63	65	86	95	84	393	79
Transplants from Deceased Donations	Kidney	95	104	130	159	145	633	127
	Liver	37	35	51	46	40	209	42
	Lungs	16	20	18	19	13	86	17
	Heart	9	10	10	5	9	43	9
	Pancreas	5	2	8	6	4	25	5
Total		162	171	217	235	211	996	199
Living Kidney Transplants		28	35	33	30	30	156	31
UK Paired Kidney Exchange/* 2 desensitise in UK		1	2	8	2	9	22	4
Living and Deceased Kidney Transplants		123	139	163	189	175	789	158
Total Organ Transplants (Not including UK paired exchange/desensitised)		190	206	250	265	241	1152	230

Total Organ Donations and Transplants 2017 - 2024

Figure 1: Total Organ Donations and Transplants 2017 - 2024



Not including UK paired exchange or desensitised patients.

Figure 2: Donated Organs Utilised Abroad 2020 - 2024

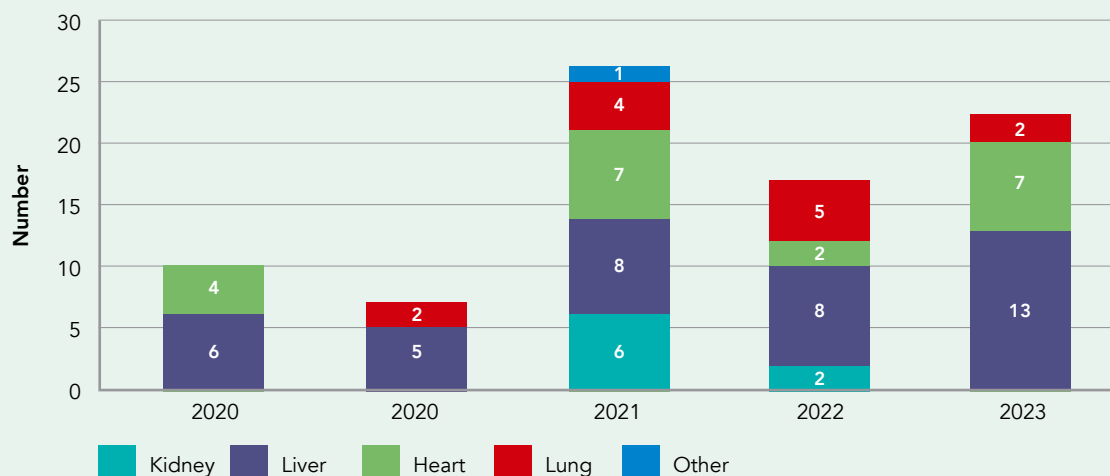


Figure 3: Number of DCD/DBD Donations 2016-2024

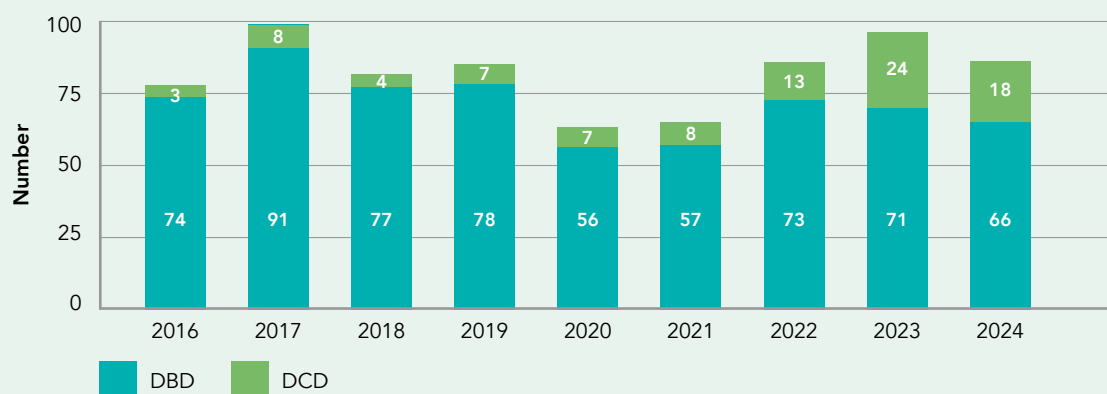
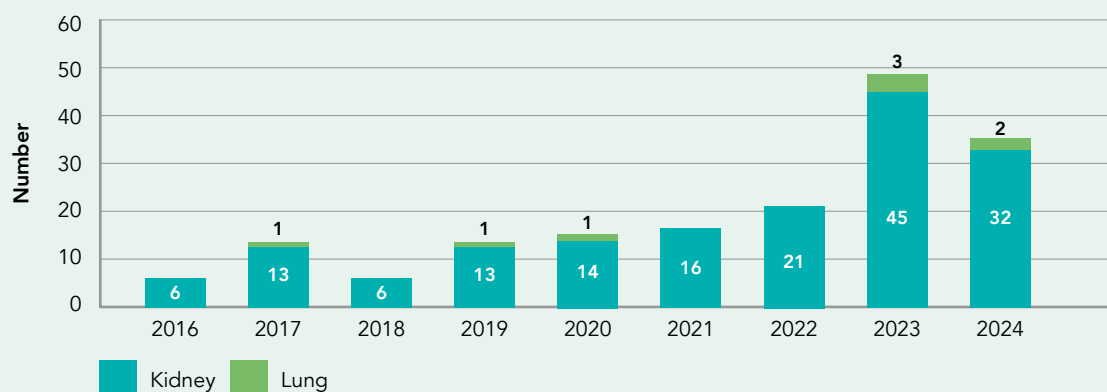
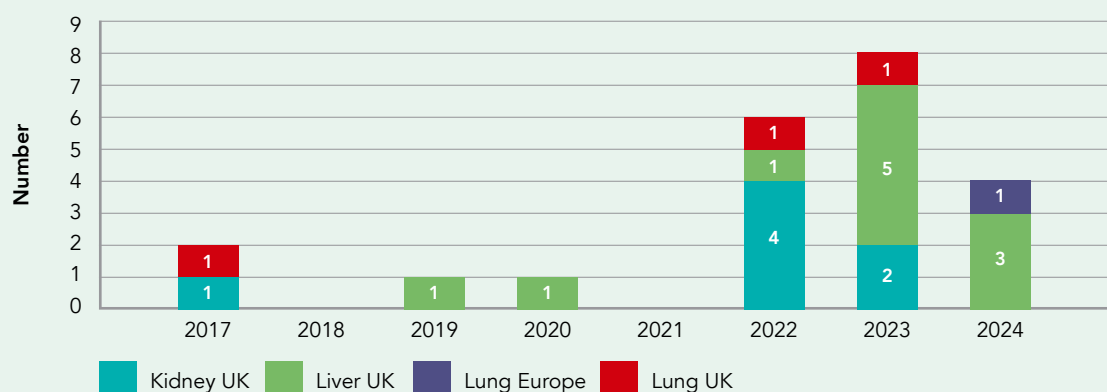


Figure 4: Number of Transplants from DCD Donors in Ireland 2016-2024



Enbloc Kidneys 2022 counted as 1

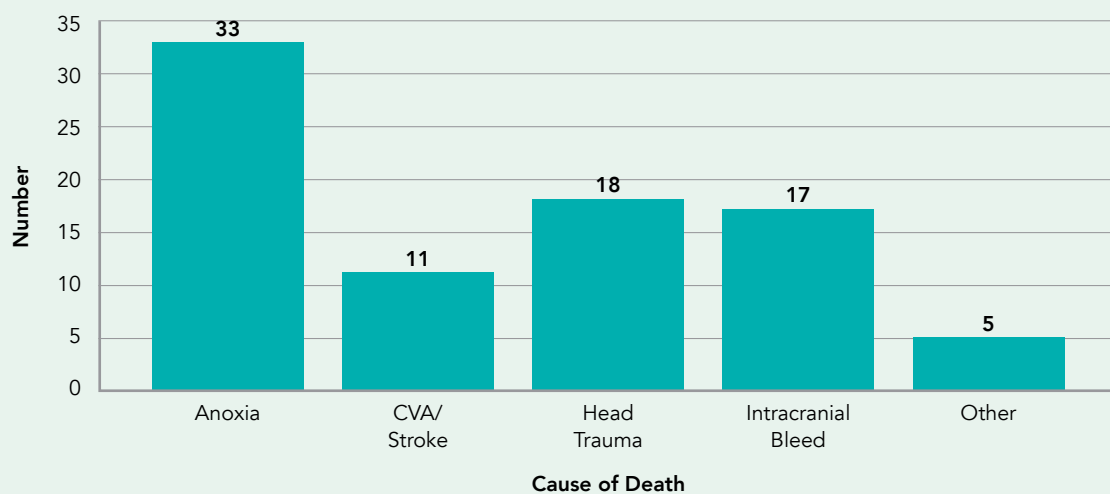
Figure 5: Transplants Abroad from DCD Donors 2017-2024



Enbloc Kidneys 2017 counted as 1

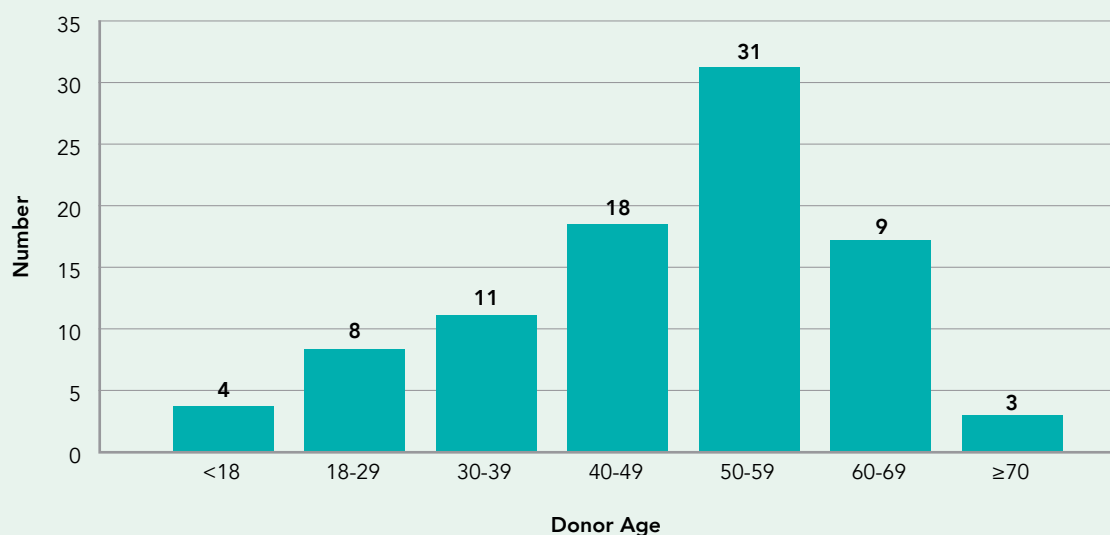
Cause of Death

Figure 6: Donor Cause of Death 2024



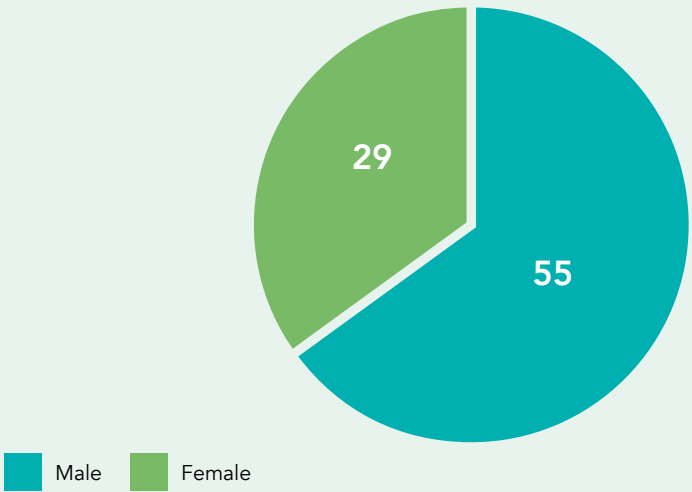
Deceased Donation

Figure 7: Donor Age 2024



Donor Gender

Figure 8: Deceased Donation Gender 2024



Transplantation

Organ Specific Activity 2024

Figure 9: Organ Specific Activity 2024

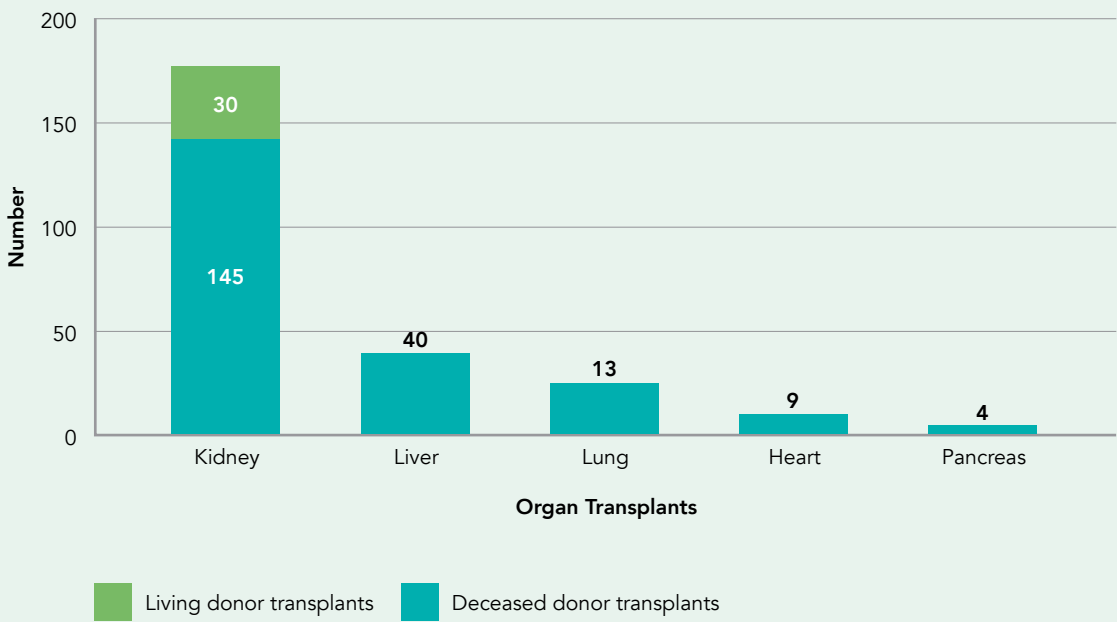
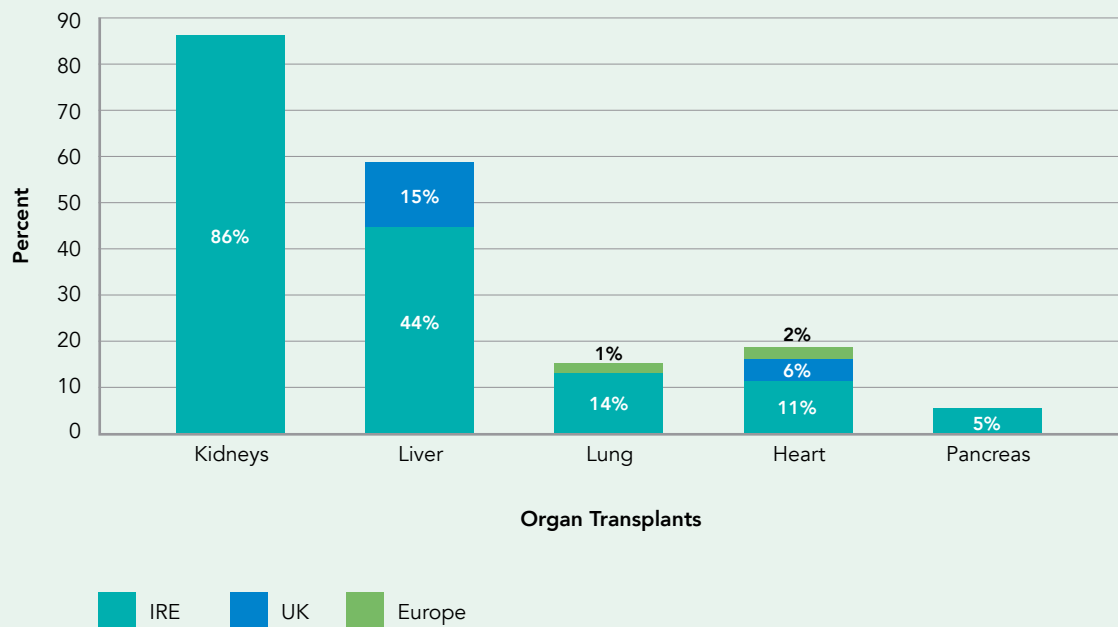


Figure 10: Conversion rates: Deceased Donor to Transplant 2024 (n=84)



National Kidney Transplant Service, Beaumont Hospital

2024 continued to be a busy year for the National Kidney Transplant Service at Beaumont Hospital. By the end of the year, 175 kidney transplants had been performed, 30 of these from living donors. Of the 145 transplants from deceased donors, 34 were from donors after cardiac death, which represents our second highest utilisation of these donors to date. It is worth noting again, as we did in last year's report, that significant changes have occurred in both donor and recipient characteristics over the years since 2011, when we achieved our highest number of kidney transplants, 192. In that year, only 4 of these transplants were from deceased after cardiac death donors, whereas in 2024 these donors represent almost 23% of our deceased donor activity. In 2024, 15% of all deceased donor activity was from donors aged 60 years and older. Many kidney donor offers are from older patients who may have co-morbid illness and are generally more complex, so called "extended criteria" donors. While our outcomes for patients receiving such kidneys remains excellent, and this evolution in organ utilisation is undoubtedly necessary, it is associated with a more complicated postoperative course and increased length of stay. We are seeing increased medical co-morbidity and frailty in patients on the transplant pool list, as well as complex social issues, ultimately leading to longer hospital stays after transplant. Our length of stay increased by 16% compared to 2023. In 2024, 32 (18%) of our recipients were aged 65 years or older, another ongoing trend. We are seeing greater use of the intensive care department, higher rates of delayed graft function and readmission. This in turn leads to greater demands on our vital support services, such as interventional radiology, intensivists, dialysis, the H&I department general and specialist laboratories, including specialist renal pathology. As a result, we have resourced a new clinic to actively and pre-emptively manage patients approved to the waiting list pool, to ensure their optimal fitness for transplant.

At the end of 2024, there were 2,783 people alive with a functioning kidney transplant, an increase of 2% from 2023. 96% of these transplants were performed at Beaumont Hospital. The number of patients on the kidney transplant waiting pool continues to rise. By the end of 2024, it had

increased by 4.5%, from 2023, to a total of 559. In 2024, 226 new patients were added to the pool an increase of 14% from previous year. As always the global shortage of organs, relative to the number waiting for a transplant, remains an ever present challenge. Continued investment in the transplant service infrastructure to facilitate the recognition and utilisation of marginal donors by dedicated staff in intensive care units around the country, under the auspices of Organ Donation and Transplant Ireland (ODTI) is required to increase our deceased donor numbers. The Irish Potential Donor Audit (NOCA) aims to identify opportunities for improvement in this area.

However, perhaps our greatest resource we have to increase our numbers of transplants is the awareness of living donor transplantation. We continue to see increasing numbers of potential kidney recipients actively seeking living donors, understanding that recipients with an identified donor spend approximately 60% less waiting time on dialysis and the waiting list pool prior to transplant. Currently, with just over 2,580 people dialysis dependent, a waiting list which has increased by almost 10% in over 5 years coupled with the changing donor and recipient characteristics mentioned previously, living donation where and when possible is the optimum solution. We are committed to increasing our numbers of living donor transplants, and encourage all potential recipients, their families' friends and medical teams, to consider living donor transplantation as a first line option

In 2024, we performed 30 living donor transplants, similar to the average for the past 6 years. 5 further donor/recipient pairs are scheduled for surgery in early 2025. Other initiatives introduced to enhance the living donor programme include the development of the donor blood group incompatible service which requires intensive specialist staff and resources. Robotic assisted technology as a surgical technique for suitable donors has also been introduced, enhancing the minimally invasive surgical approaches that we have used for living donors since 2011. It is important to note that increasing living donor transplantation will require an increase in intensive care capacity.

Currently, with just over 2,580 people dialysis dependent, a waiting list which has increased by almost 10% in over 5 years coupled with the changing donor and recipient characteristics mentioned previously, living donation where and when possible is the optimum solution.

For potential recipients whose identified living donor is not a match for them, living donation is not out ruled as we continue a very successful collaboration with the United Kingdom Living Kidney Sharing Scheme (UKLKSS). There were 9 successful “paired kidney exchange” living donor transplants in 2024, our highest number to date, and 14 donor-recipient pairs are currently enrolled in the scheme.

Potential recipients with high level of pre-formed antibodies, so called “highly sensitised”, require intensified immunosuppression to prevent transplant rejection, and will often struggle to find a matched kidney resulting in very long waiting times on the waiting list pool. Through enormous work by our Immunology service, H&I laboratory, specialist clinical personnel and the development of a specialist clinic specific for this group, the NKTS in 2024, transplanted 16 very highly sensitised recipients (PGen 10 ≥ 95%). Continued progress in transplanting this complex group of patients has resulted in the ongoing reduction in the overall median waiting pool time.

We begin anew in 2025, conscious of our duty to maintain and build upon the remarkable work and achievements of all the surgeons, physicians, immunologists, intensivists, radiologists, transplant coordinator's, nurses, HCAs, laboratory staff and all the other ancillary support staff who have contributed to the ongoing growth and development of the kidney transplant unit at Beaumont Hospital since 1964, and who continue to make up the transplant team.

We do this having, in 2024, proudly crossed some significant milestones in Irish kidney transplantation: the 6,000th transplant performed by the NKTS and first person to have celebrated

over 50 years with a successful kidney transplant. This extraordinary achievement could not have been realised without the on-going dedication and work of all members of the transplant team, staff of Intensive Care Units throughout the country under the auspices of the ODTI and all the staff in Beaumont Hospital who continue to support us.

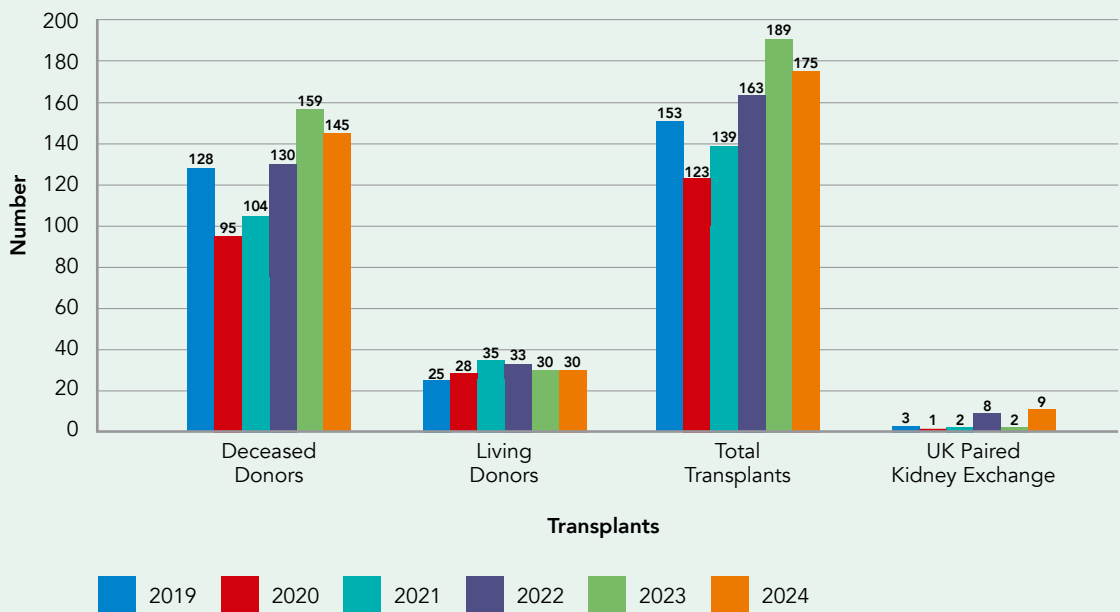
We would especially like to acknowledge the forbearance of the patients that depend on this transplant program and the bravery of all living donors.

Finally, and most important of all, we wish to recognise the extraordinary generosity of all kidney donors and their families, to whom so many owe their lives and without whom, the NKTS would not exist.

Mr. Gordon Smyth
Surgical Director of Transplantation
NKTS

Kidney Transplants 2019 - 2024

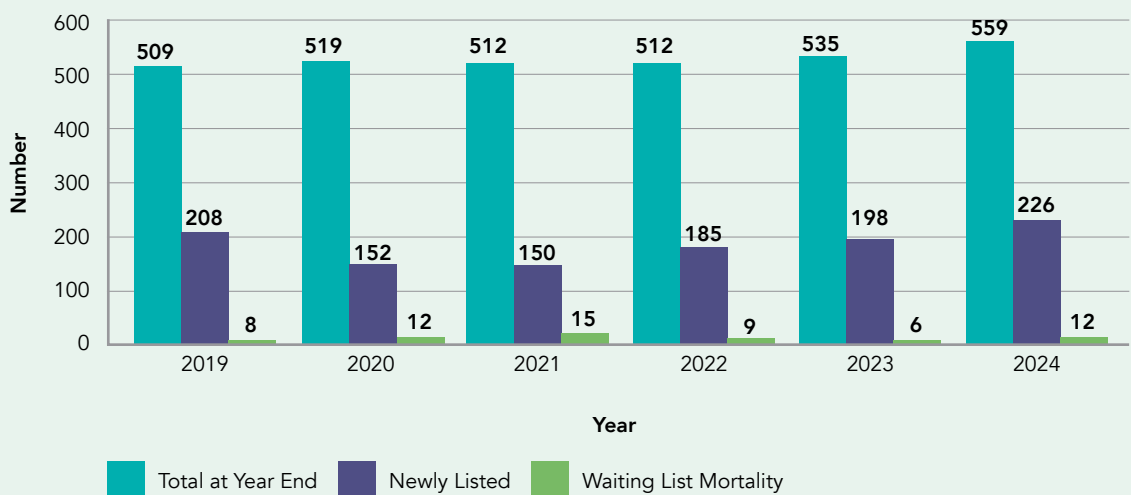
Figure 11: Kidney Transplants 2019-2024



Source: National Kidney Transplant Service Beaumont Hospital

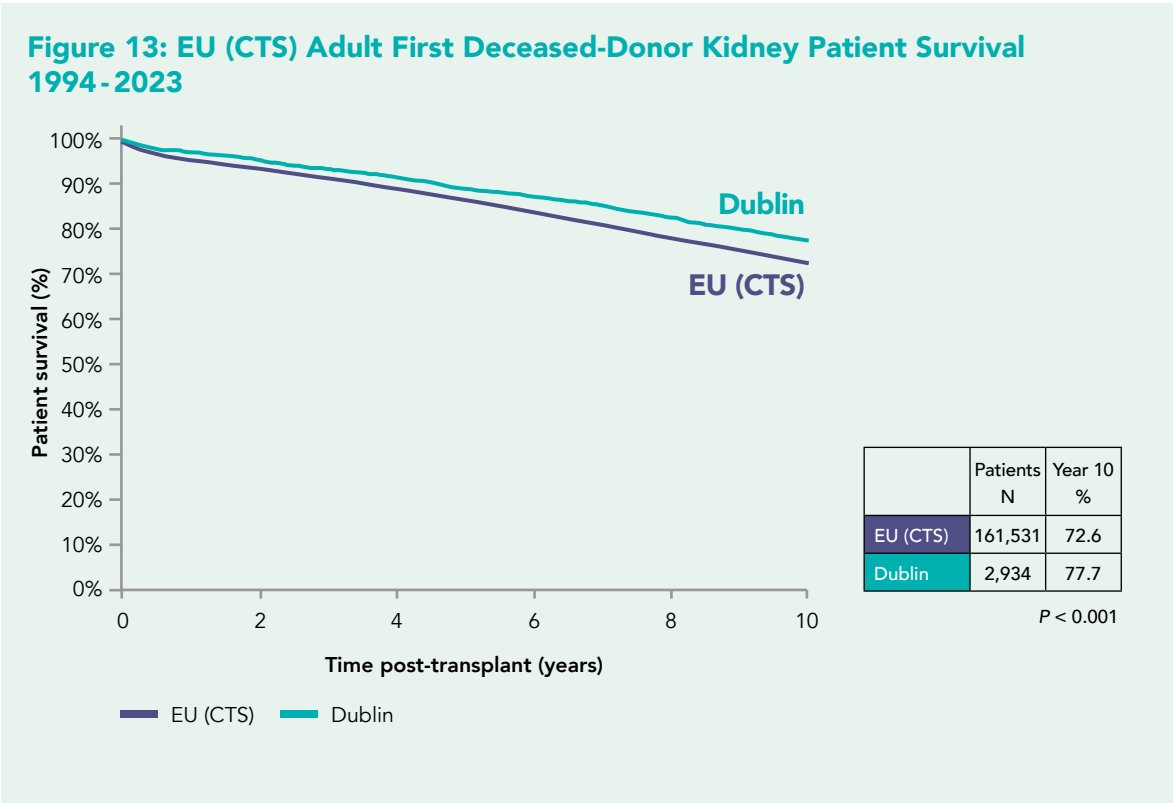
Kidney Transplant Waiting List 2019 - 2024

Figure 12: Kidney Transplant Waiting List 2019-2024



Source: National Kidney Transplant Service Beaumont Hospital

First Adult Kidney Only Transplant 1994 - 2023



Survival Post Kidney Allograft Transplant 1994 - 2023

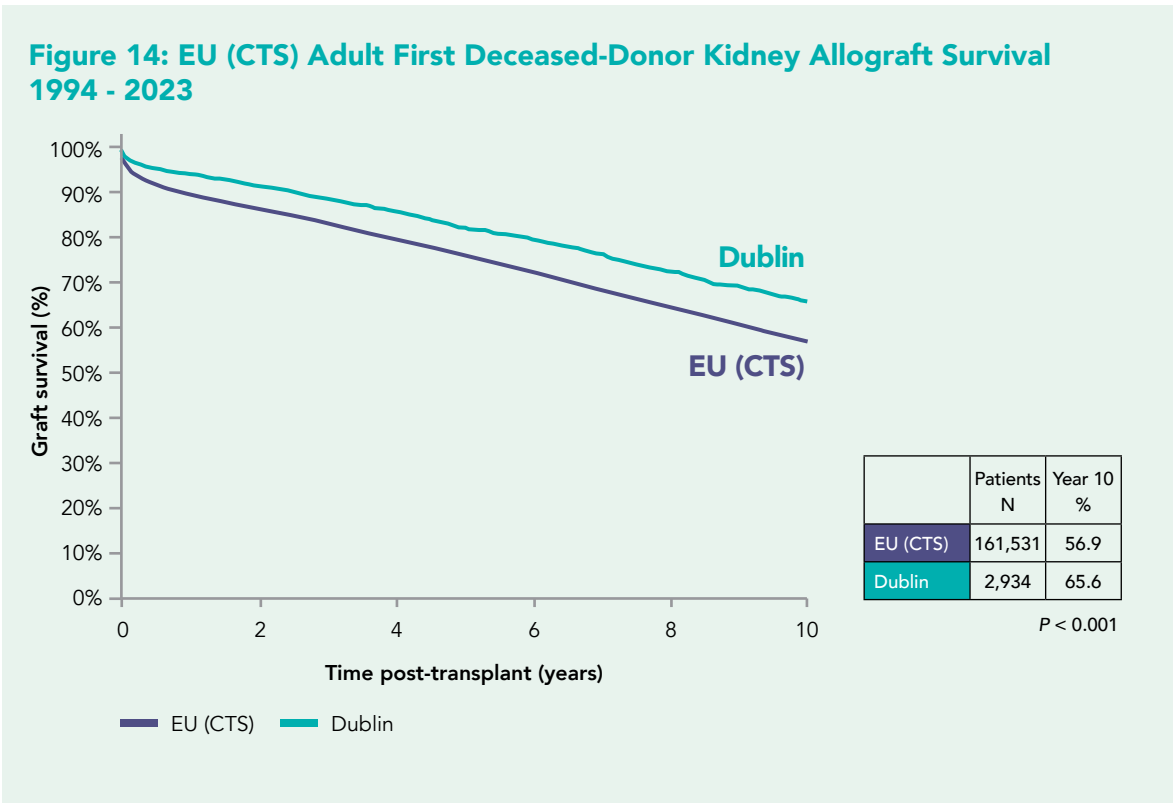
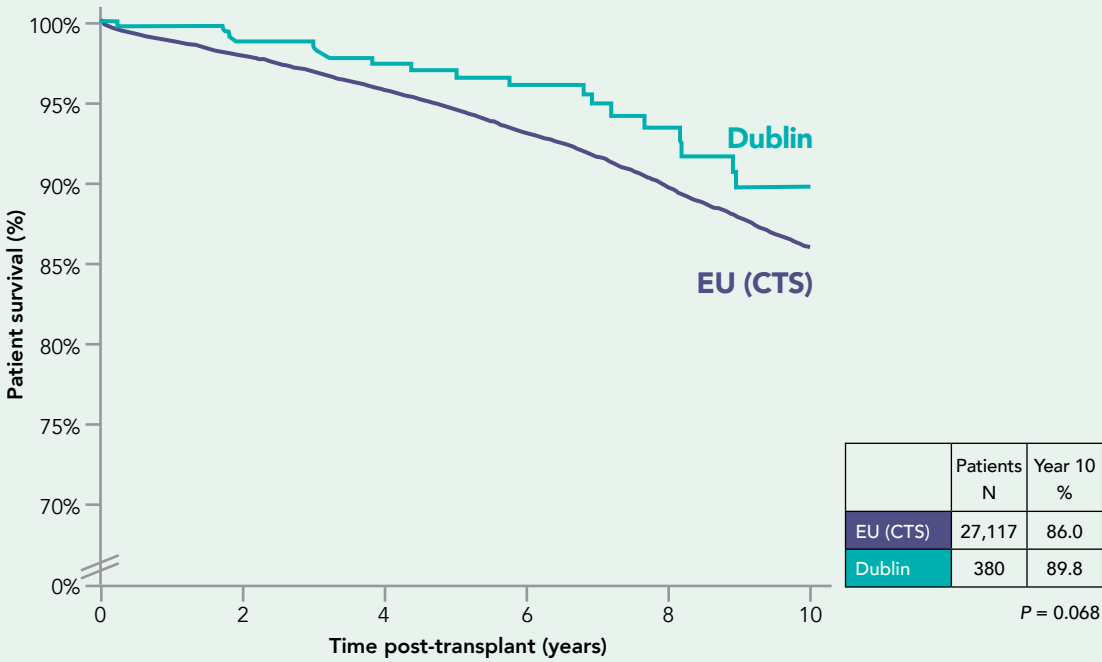


Figure 15: EU (CTS) Adult First Living-Donor Kidney Patient Survival 2007-2023



National Liver Transplant Service, St Vincent's University Hospital

The National Liver Transplant Programme began in January 1993, and was officially opened in October 1993 by Mr Brendan Howlin, the then Minister for Health and Children. Over the years, St Vincent's University Hospital has successfully performed 1,404 Liver Transplants. In 2024 we performed 40 Liver transplants.

In November 2024, our Hepatology and Transplant Team organised a free National Liver Transplant Referrers education day. They welcomed consultants, doctors in training, nurses and allied health professionals who care for patients with end stage liver disease and who require Liver Transplant. This educational day agenda covered everything from long-term outcomes of liver transplant, to the view from the Cork Liver Transplant Clinic to a mock liver transplant multidisciplinary Team meeting (MDT). This day was very well attended and received great feedback. We hope that it increases the volumes of patients referred to SVUH to be considered for Liver Transplant. This educational day proved to be such a success that it is planned to be held on an annual basis.

The National Liver Transplant Centre in SVUH serves patients from all over Ireland. Led by a multidisciplinary team of healthcare professionals specialising in liver disease and liver surgery including transplantation. Our comprehensive approach has led to an increased rate of referral for consideration for liver transplantation. Our success rates align with the best achieved in UK and European centres.

In addition to the transplant programme, we also have a dedicated Fellowship Programme established in 2012 by Mr Emir Hoti, Director of the National Liver Transplant Programme. So far, it has been completed by 24 surgical fellows from 12 international countries. The programme offers the opportunity to participate in all aspects of adult liver/pancreas procurement and transplantation. It holds the distinction of being the first fellowship programme in Europe accredited by the International Hepato-Pancreato Biliary Association (IHPBA) and it is also accredited by the Transplant Division of the European Union of Medical Specialists (UEMs).

For our patients, we have a dedicated transplant ward; St Brigids. This ward provides comprehensive care for both pre & post-transplant patients throughout their journey. St Brigids ward offers modern infrastructure, including single occupancy ensuite rooms with hepa-filtration for our immunocompromised transplant patients. It also houses a High-Dependency unit, ensuring the highest quality in critical care to our post-transplant patients. Our highly qualified staff in St Brigid's ward develop enduring relationships with our patients, supporting them through every step of their transplant experience.

SVUH's Liver Transplant Programme is supported by a dedicated team of Hepatology Consultants, Transplant Surgeons, Transplant Anaesthetists and Transplant Coordinators. Our Transplant Coordinators play a vital role in guiding patients and their families through transplant assessment process, offering essential support and detailed education. They act as the patients' dedicated point of contact throughout their entire transplant journey, ensuring a personalised and seamless experience.

As the de facto National Liver Cancer Centre, SVUH provides comprehensive treatment for hepatocellular carcinoma (HCC) and cholangiocarcinoma (CCA). Our range of treatments includes interventional radiology procedures such as radio frequency ablation (RFA), transarterial chemoembolization (TACE) and radioembolization as well as other oncological therapies and access to clinical trials. These treatment options are all employed and serve as a bridge to transplantation for patients with HCC and CCA.

SVUH is the only European Centre with an established transplant programme for Cholangiocarcinoma, following the Mayo protocol. Our Liver Transplant Programme provides transplant options for other livers cancers, including metastatic liver disease for Neuroendocrine Tumours (NETs) or for hepatic epithelioid hemangioendothelioma.

Furthermore, our Liver Transplant Programme at SVUH collaborates closely with other transplant centres, enabling successful multi-organ

The National Liver Transplant Centre in SVUH serves patients from all over Ireland. Led by a multidisciplinary team of healthcare professionals specialising in liver disease and liver surgery including transplantation.

transplants such as liver/lung and heart/liver combinations. We recognise the importance of interdisciplinary collaboration in complex cases, and as part of this commitment, our unit is actively collaborating with the transplant unit at Beaumont Hospital to develop a comprehensive protocol for patients requiring both liver and kidney transplants. This collaborative effort aims to optimise patients' outcomes and ensure seamless coordination of care for individuals with multiple organ needs.

Looking towards the future, the SVUH Liver Transplant Programme has a strategic vision for expansion in collaboration with the Health Service Executive (HSE), Organ Donation and Transplant Ireland (ODTI) & National Cancer Control Programme (NCCP). Our plan is to strategically grow the programme over the next 5- 10 years, which will require significant investment in both clinical services and infrastructure.

To support this expansion, we envision the establishment of a dedicated unit at SVUH, for organ transplantation. This unit will provide essential additional capacity in areas such as theatres, ICU and St Brigids High-Dependency Unit (HDU). Simultaneously, we plan to advance a Donation after Circulatory Death (DCD) Programme that incorporates machine perfusion, which would be diligently tracked in a purpose-built transplant database.

In terms of clinical expansion, investment in critical team positions for Transplant will enable increased organ retrieval, including the implementation of the DCD programme and the introduction normothermic machine perfusion as a novel technology for organ preservation.

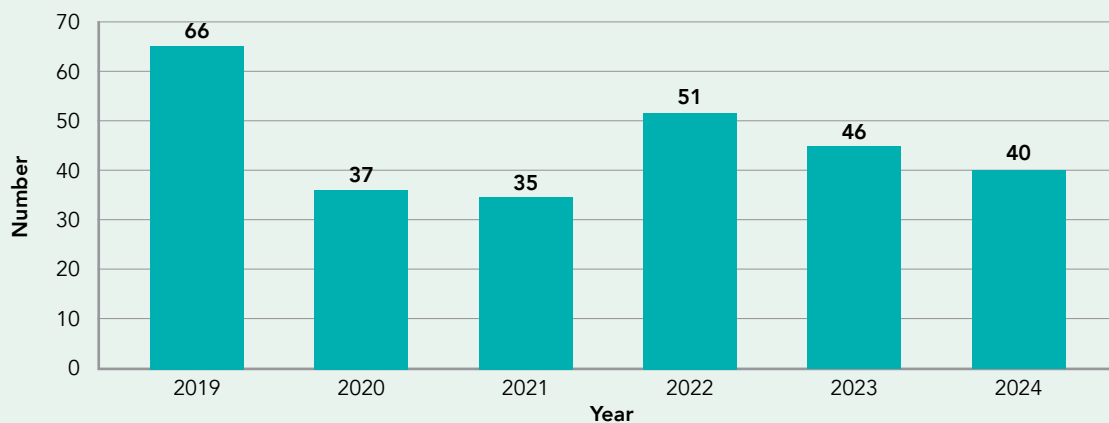
Expanding our outreach clinics across Ireland will also broaden the pool of eligible transplant patients, ensuring that more individuals have access to life-saving treatments.

By fulfilling these crucial requirements and embracing our strategic vision for expansion, the SVUH Liver Transplant Programme will be able to provide treatment to a larger volume of patients and maximise the utilisation of organ offers.

Professor Emir Hoti
Director of the National Liver Transplant Programme

Liver Transplants 2019 - 2024

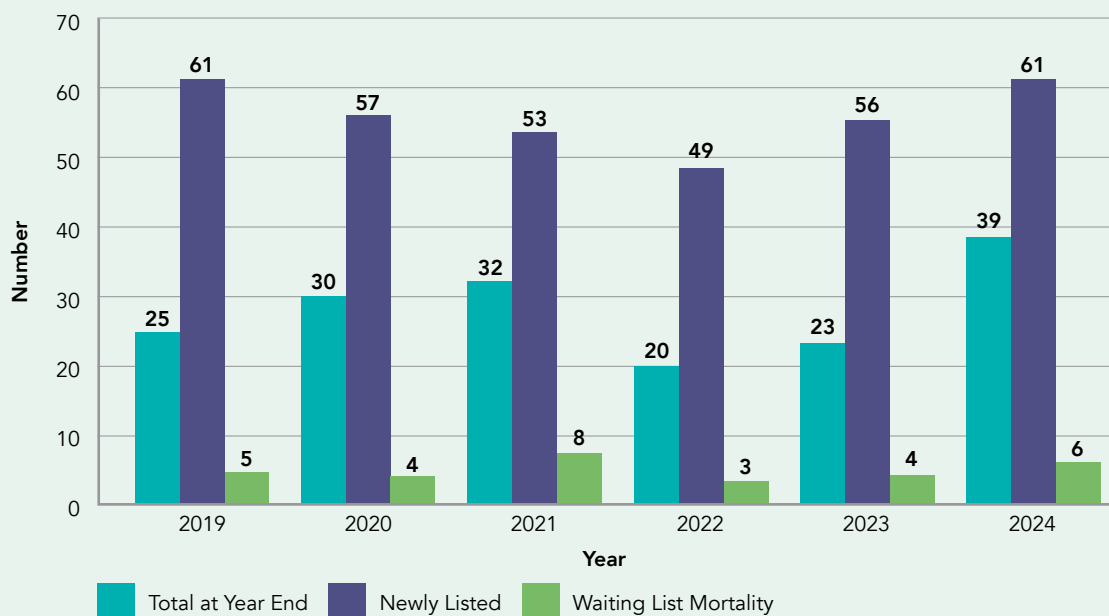
Figure 16: Liver Transplants 2019 - 2024



Source: National Liver Transplant Centre, St Vincent's University Hospital

Liver Transplant Waiting List 2019 - 2024

Figure 17: Liver Transplant Waiting List 2019 - 2024



Source: National Liver Transplant Centre, St Vincent's University Hospital

Survival Post Liver Transplant

Figure 18: Long-Term Patient Survival After First Elective Adult Liver Only Transplants from DBD Donors, 1 January 2010 - 31 December 2023

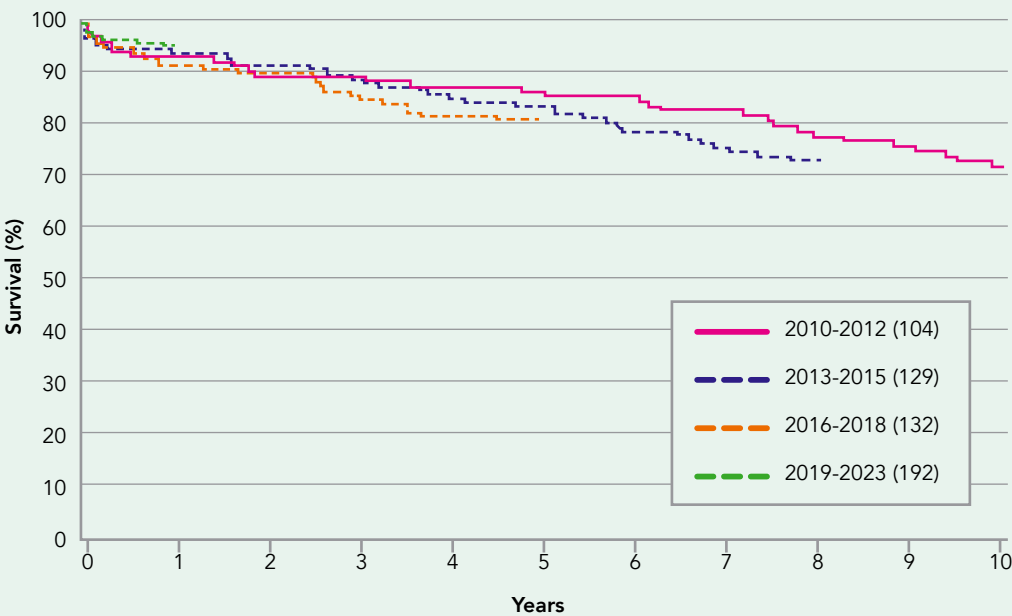
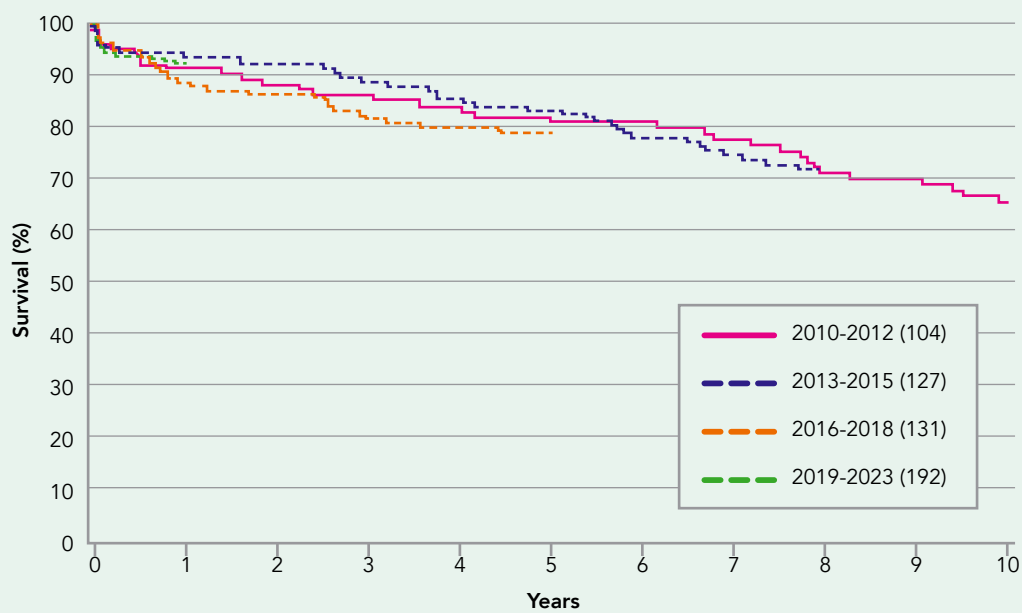


Figure 19: Long Term Graft Survival After First Elective Adult Liver Only Transplants from DBD Donors, 1 January 2009 - 31 December 2023



National Pancreas Transplant Service, St Vincent's University Hospital

Pancreas Transplantation initially commenced in Beaumont Hospital, Dublin in 1992 with a total of 147 pancreas transplants performed over 22 years with majority of these transplants being simultaneous pancreas and kidney transplants (SPK) but a small number were pancreas after kidney (PAK) or pancreas transplants alone (PTA).

The National Pancreas Transplant Programme was then established in St Vincent's University Hospital (SVUH) in 2016. The surgical teams from Beaumont Hospital and SVUH work closely together, in SVUH, to carry out the SPK transplants. Since the programme was established in SVUH, 35 simultaneous pancreas and kidney transplants and 3 Pancreas after kidney transplants have been performed.

Pancreas transplantation is a highly specialised procedure that was first performed in the USA in 1966 with the objective of replacing the need for insulin therapy in people with Type 1 Diabetes Mellitus (T1DM). Over the years there has been huge strides in innovative surgery in this field leading to simultaneous pancreas-kidney (SPK) transplantation in combination with the development of new immunosuppressive therapy. This therapy is now widely accepted as an optimal therapeutic option for highly selected patients with type 1 diabetes mellitus (T1DM) and end-stage renal disease.

The National Pancreas Transplant Programme in SVUH has clear guidelines on how to refer a patient for discussion. It starts with the completion of the National Referral form for Pancreas/Simultaneous Pancreas Kidney Transplant, completed by the potential recipient's local nephrology or endocrinology team. The referring team must also ensure that all required relevant test results are included.

SVUH provides a Consultant led Pancreas Transplant Service for those patients with Type 1 Diabetes. Mr Tom Gallagher, Ms Fiona Hand, Dr John Holian and Dr Aisling O'Riordan are the Consultant leads. Patients who require a simultaneous pancreas and kidney transplant are cared for in SVUH by a multi-disciplinary team which combines the expertise of the surgical team and nephrologists in SVUH with the renal transplant team from Beaumont Hospital.

Once this National Pancreas referral is received in SVUH, it will be triaged by the dedicated transplant coordinators and an out-patient appointment will be sent out to the patient accompanied by a schedule for some additional tests. Following this appointment and once the additional tests are completed, the patient is discussed at the pancreas transplant multidisciplinary Team meeting (MDT). The outcome of this meeting will be communicated to both the patient and the referring Consultant.

If a decision is made that the patient is suitable for a pancreas transplant, they will then be officially added to the waiting list. All patients being listed for transplant attend a patient information and consent day with their family members or support person, facilitated by both Transplant Coordinators & Surgeons. This contributes to the formal and informal educational opportunities provided to this client group, in order that they gain a clear understanding of pancreas and kidney transplant, including the potential risks and benefits and the role they need to play to support their care and empower their decision making. A procedure specific consent form is used to document their decisions in consultation with the transplant team.

The Transplant coordinators guide the patients at every step of their transplant journey, through assessment, whilst on the waiting list for a suitable organ (in conjunction with their referring hospital), transplantation and post-operative follow up.

To date more than 100 patients have been referred for consideration for pancreas and kidney transplant. Almost two-thirds of these have been presented and listed for simultaneous pancreas and kidney transplant with the remainder being considered for kidney transplant alone or pancreas after kidney transplant. The main cohort of patients are under 50 years of age and have been referred from all over Ireland.

While on the waiting list patients are managed in their local referral unit with an annual review in SVUH. However, patients are contacted on a regular basis by phone to maintain an up to date record of their condition and complications and the transplant team liaises closely with the referring team.

The Transplant coordinators guide the patients at every step of their transplant journey, through assessment, whilst on the waiting list for a suitable organ (in conjunction with their referring hospital), transplantation and post-operative follow up.

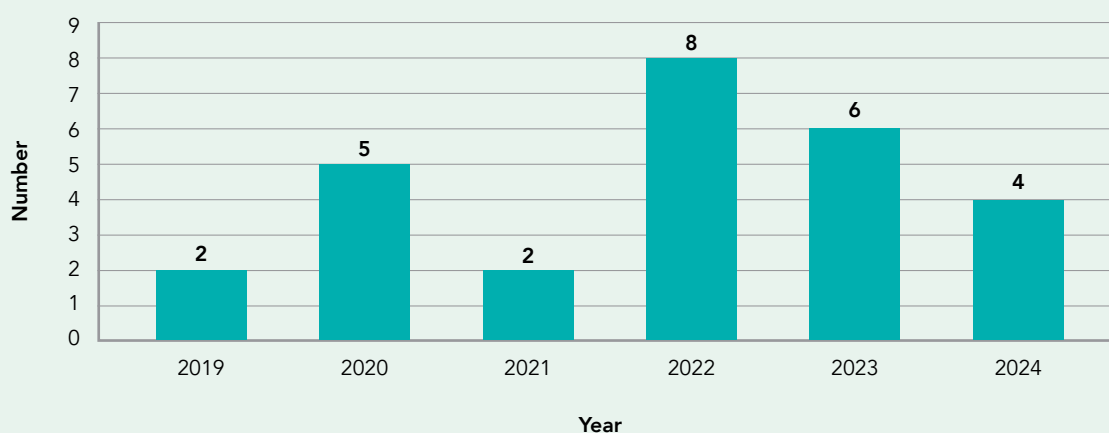
Our National Pancreas Transplant Programme is building on our inaugural study day in October 2023 when they hosted the 1st National Simultaneous Pancreas & Kidney Study Day which saw an exceptional team of experts, clinicians, coordinators and patients come together to enable an understanding of the benefits of a holistic approach to SPK. The inspiring words of the Director on the day demonstrated its importance, "In medicine, collaboration is not just a choice; it's the cornerstone of ground breaking advancements. Today, we've witnessed the power of unity in knowledge, minds working harmoniously toward a common goal. Let this event be a testament to the impact of shared expertise. Congratulations to all involved for creating a legacy of collaboration that transforms lives."

We strive to build awareness of Pancreas Transplant through highlighting it with regular in-hospital information stands and SVUH social media platforms. We remain forever grateful to the continued selfless generosity of donors and donor families.

Mr Tom Gallagher
Director of the National Pancreas Transplant Programme

Pancreas Transplants 2019 - 2024

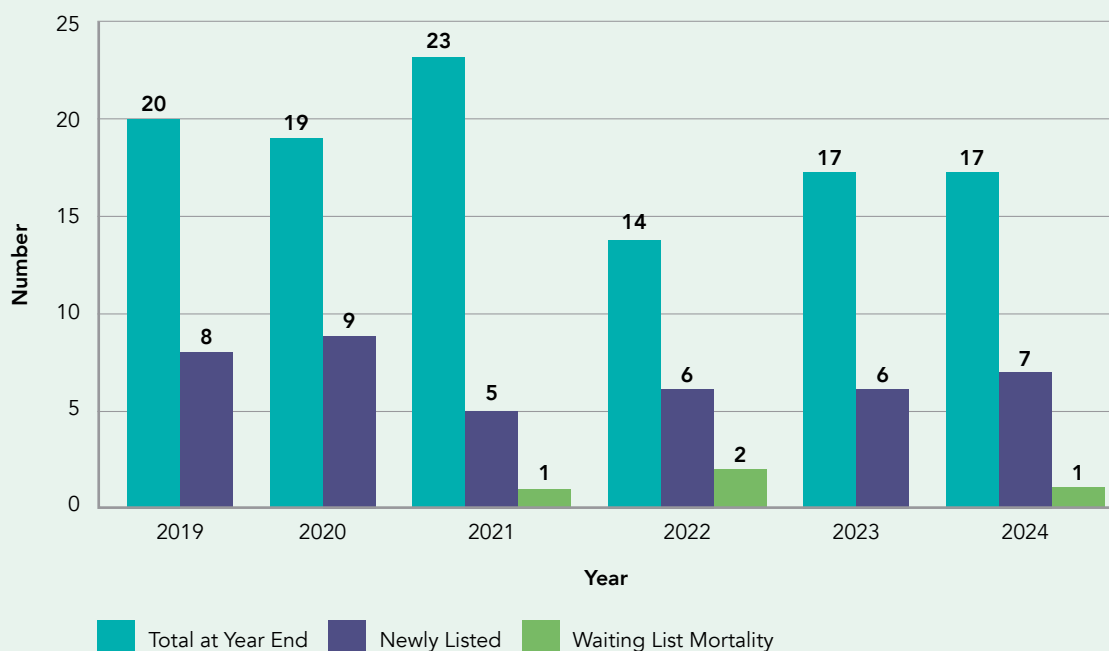
Figure 20: Pancreas Transplants 2019 - 2024



Source: National Pancreas Transplant Centre, St Vincent's University Hospital

Pancreas Transplant Waiting List 2019 - 2024

Figure 21: Pancreas Transplant Waiting List 2019 - 2024



Source: National Pancreas Transplant Centre, St Vincent's University Hospital

National Heart and Lung Transplant Service, Mater Misericordiae University Hospital

It has been reported internationally that transplant activity had increased globally by 9% in 2023. This is in part due to the increase in deceased and living donation. There has also been an increase in donation after circulatory determination of death. As a transplant group we have endeavoured to build on the progress of recent years. Last year in Ireland there were 263 organ transplant performed thanks to the generosity of 84 deceased and 30 living donors.

In 2024, we assessed 74 patients for Advanced Heart Failure (AHF) therapies and 14 of these patients were listed for heart transplantation. Four patients underwent heart replacement therapy with implantation of a durable Left Ventricular Assist Device (LVAD). Among those listed for transplant, 9 were transplanted, 2 remain on the active list, and 2 were delisted. The median time on the active heart transplant waiting list in 2024 was 101 days.

To enhance data collection and analysis, and to support efforts in increasing the utilization of transplantation in Ireland, we have formally established an Advanced Heart Failure Registry, with approval from the Institutional Review Board (IRB). Additionally, we have formed a collaborative working group with our colleagues in the United Kingdom to address the issue of late referrals for AHF therapies, with the goal of improving patient outcomes.

We are pleased to announce the appointment of Consultant Cardiologists specializing in heart failure in Limerick and Cork, which has notably increased referral numbers from these regions. A new consultant was appointed to Galway in February, and other hospitals, such as Waterford Regional Hospital and St Vincent's, have appointed cardiologists with expertise in heart failure. These developments will contribute significantly to the establishment of an integrated 'spoke and hub' network for Advanced Heart Failure across Ireland. We are actively working with our regional colleagues to increase awareness and referrals for AHF therapies.

In 2024, we assessed 34 patients for end stage respiratory failure. Of these, 23 patients were

listed for lung transplantation. Among those listed for transplant, 13 were transplanted (3 single and 10 double), 24 remain on the active list, and 3 patients died while awaiting transplant. The median time on the active lung transplant waiting list in 2024 was 120 days.

Generous Mater Foundation donations and Spark funding is allowing us to redesign and update our tools for relaying patient information. This will be used for patients who may need a referral for lung transplant in the future, those currently being assessed and patients post-transplant. The website and booklet will be an invaluable resource for patients and their families. This project will be invaluable in helping everyone involved understand the journey that lies ahead.

Our lung transplant physicians are piloting inter hospital MDTs for patients who are presenting with advanced lung failure that may be candidates for lung transplant. It allows referring physicians and nurses at referring sites the opportunity to discuss their sick patients with the transplant team and fosters better collaboration and sharing of communication to ensure timely referral of the candidates ensuring them an opportunity to be evaluated for lung transplant earlier.

Our patients with Cystic Fibrosis (CF) post lung transplant require both lung transplant and multidisciplinary CF care. This specific cohort of patients has a 33% reduced risk of death or re-transplant when they are cared for in a lung transplant programme that is an accredited CF centre. This is felt to be due to the CF expert MDT management of CF related comorbidities. Our weekly CF MDT is attended by our CF/ Lung Transplant consultants, post lung transplant nurses, CF/Transplant psychologist, CF/Transplant dietitian, CF/Transplant physiotherapist. We strive to ensure that this complex group of patients receive the level of care outlined in ECFS guidelines.

We have also instituted a virtual Cystic Fibrosis MDT with referring centres to discussed patients with CF pre transplant and timing of lung transplant referral. We have also found that this helps to navigate modifiable barriers in this era

To enhance data collection and analysis, and to support efforts in increasing the utilization of transplantation in Ireland, we have formally established an Advanced Heart Failure Registry, with approval from the Institutional Review Board (IRB).

of older referrals on CFTR modulators. The virtual MDT is also used for patients with CF post lung transplant with shared model of care i.e. CF care in Cork and Lung transplant care in MMUH to integrate management, tests etc.

Education is ongoing at both a local and nationally level for medical and nursing colleagues. It is imperative that current medical trainees are updated on who to refer for assessment, contraindications, optimising comorbidities and the optimal timing of referral. It is valuable for our nursing colleagues who are involved in many of the chronic disease clinics to understand the minimum information that is needed to triage a referral.

We have implemented remote monitoring of lung transplant recipients for our newly transplanted patients or patients who require close follow up. An application, PatientMPower is installed on

their smart phone and they are given a spirometer, weighing scales and pulse oximeter which are linked to their mobile device via Bluetooth. This data is checked daily by our CNS who monitors the patients inputs and contacts them if there are any concerns. This is a Slainte care funded project to allow patients to remain at home and be carefully monitored and so improves patient quality of life by reducing visits. It allows us to identify changes in lung function which could signal early rejection or infection, thus facilitating earlier treatment.

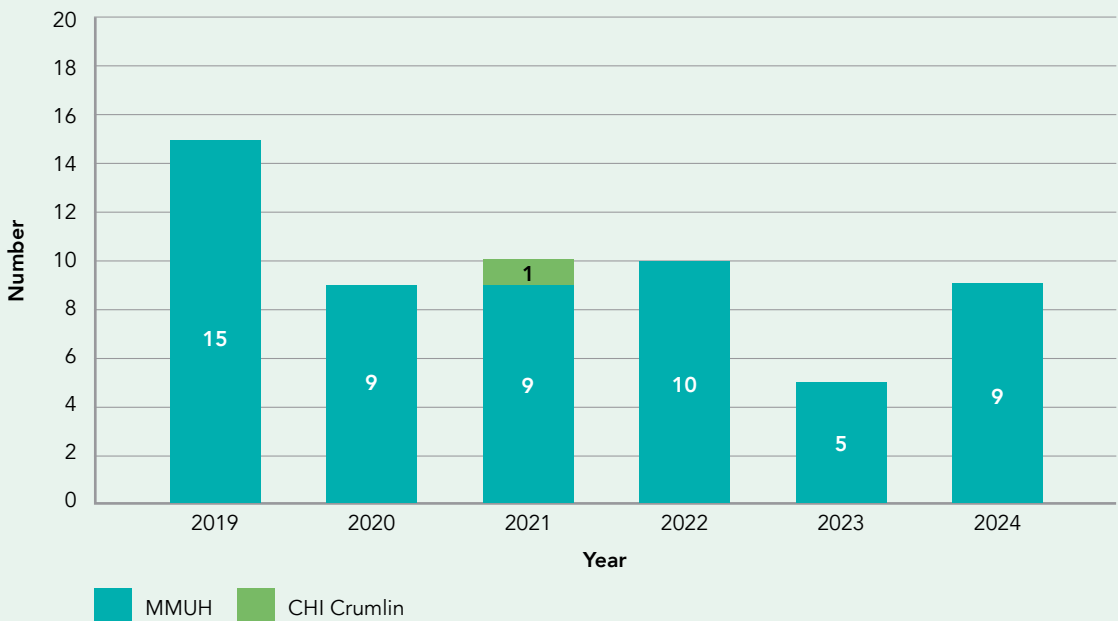
This year we have received funding for a fulltime transplant database manager. We hope to advertise and have the staff in place shortly. This will allow us to accurately record and report on patient referrals, wait times and outcomes.

On behalf of the transplant team within the Mater Hospital I would like to extend my sincere appreciation to all of the donor families. We would not have a transplant program without your generosity. Our recipients are very grateful that you chose to consider giving the Gift of Life. I would also like to acknowledge the hard work of the donor hospitals medical and nursing staff. Their identification and management of potential donors is crucial.

Ms. Aisling Kinsella MD FRCSI (C-Th)
Responsible Person for Heart
and Lung Transplantation
Consultant Cardiothoracic &
Transplant Surgeon
Mater Misericordiae University Hospital

Heart Transplants 2019 - 2024

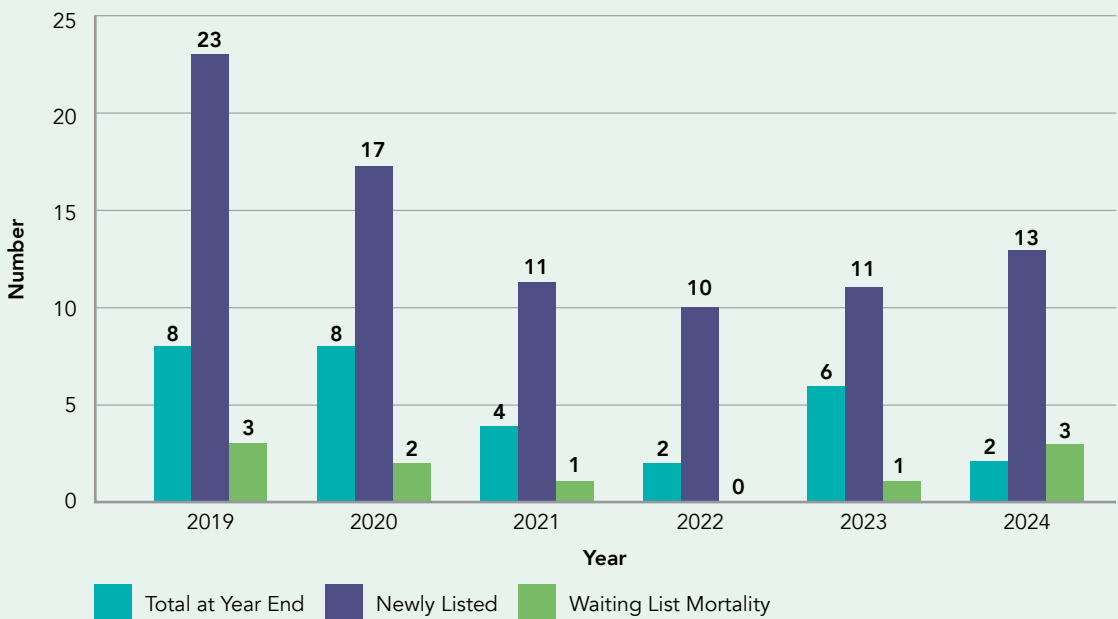
Figure 22: Heart Transplants 2019 - 2024



Source: National Heart and Lung Centre, Mater Misericordiae University Hospital

Heart Transplant Waiting List 2019 - 2024

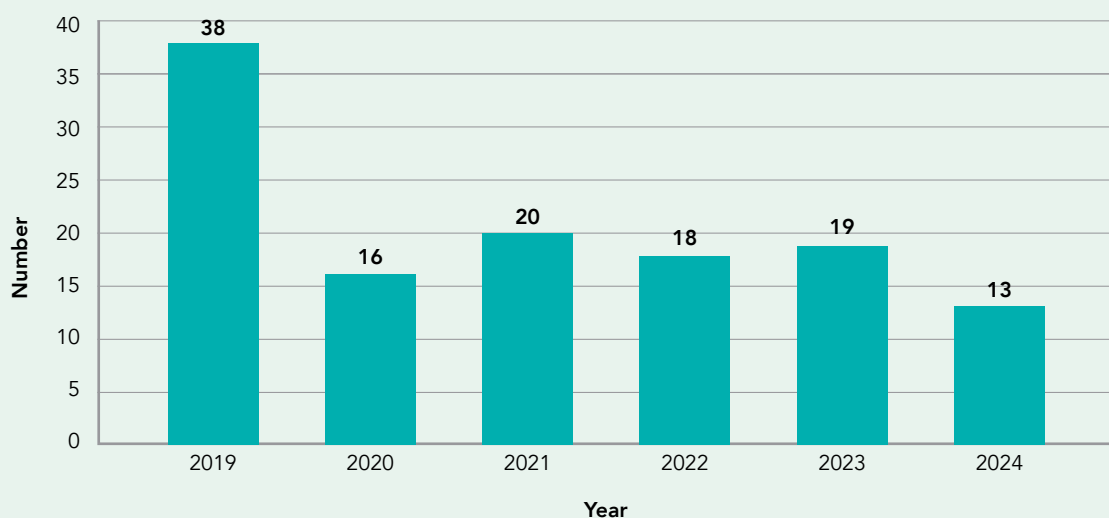
Figure 23: Heart Transplant Waiting List 2019 - 2024



Source: National Heart and Lung Centre, Mater Misericordiae University Hospital

Lung Transplants 2019 - 2024

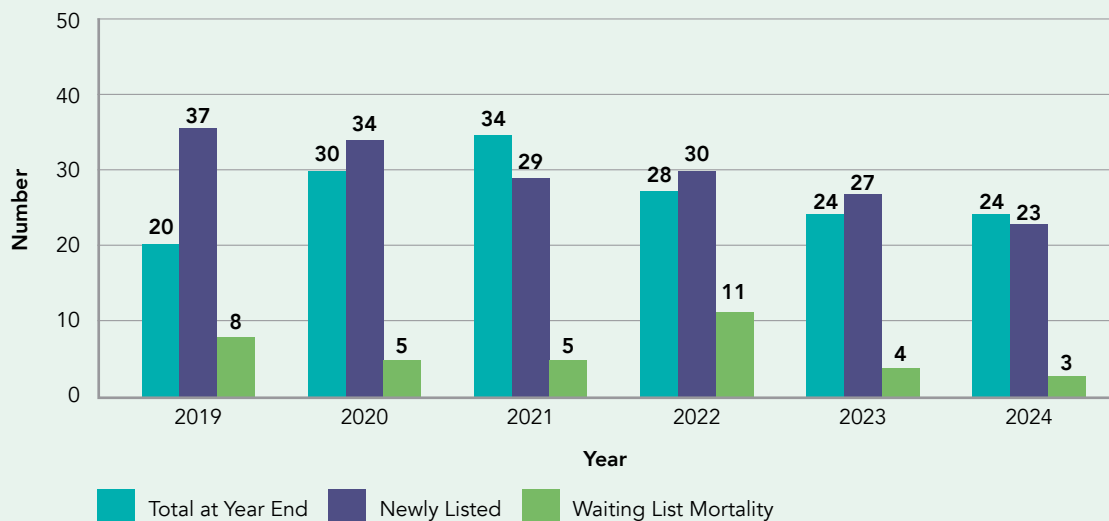
Figure 24: Lung Transplants 2019 - 2024



Source: National Heart and Lung Centre, Mater Misericordiae University Hospital

Lung Transplant Waiting List 2019 - 2024

Figure 25: Lung Transplant Waiting List 2019 - 2024

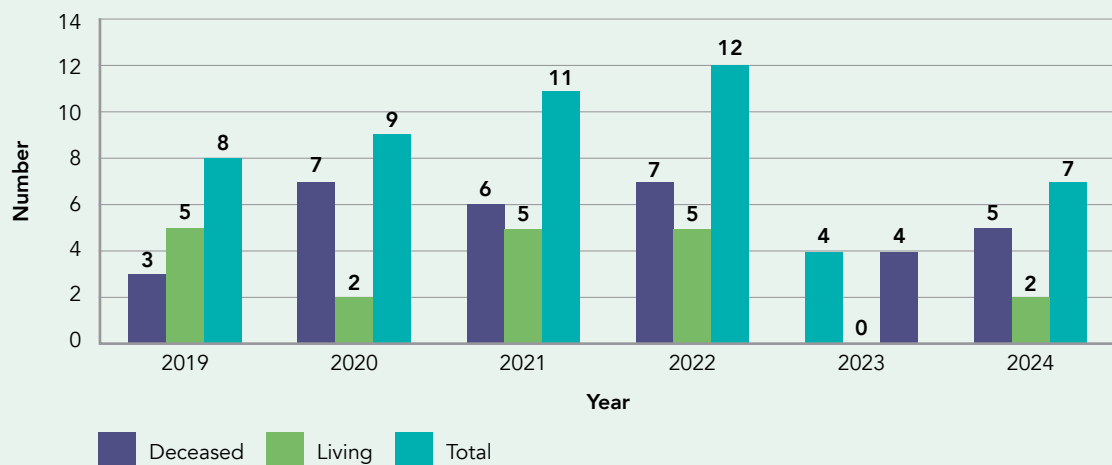


Source: National Heart and Lung Centre, Mater Misericordiae University Hospital

Paediatric Transplant Activity

Paediatric Kidney Transplant 2019 - 2024

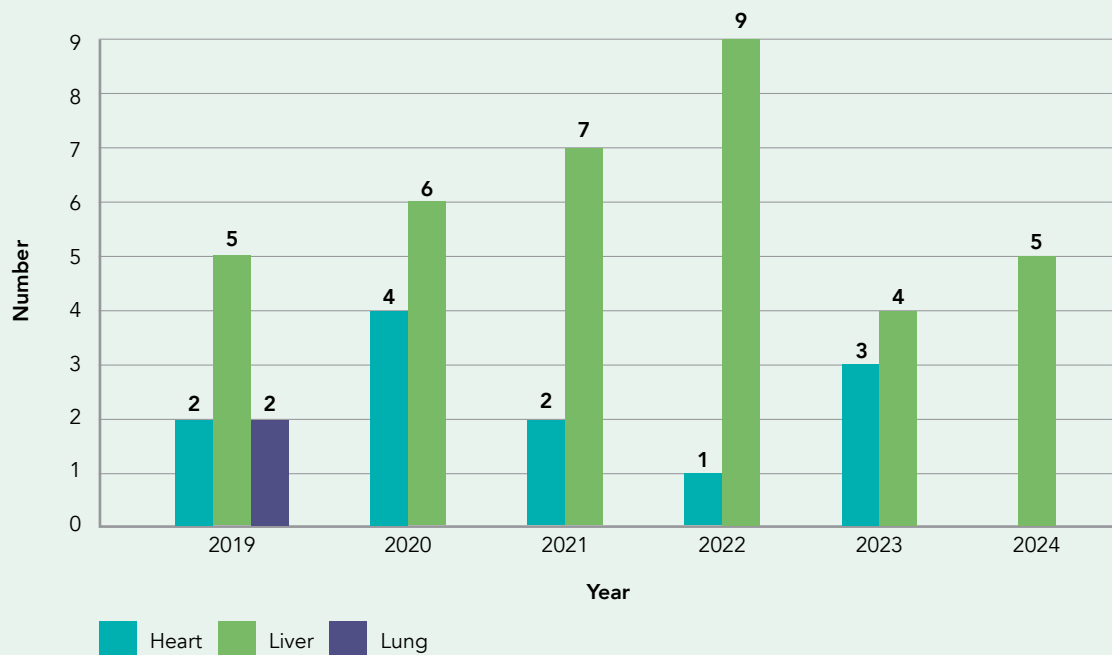
Figure 26: Paediatric Kidney Transplant in Ireland (<19yrs at time of transplant) 2019-2024



Source: National Kidney Transplant Centre, Beaumont Hospital

Irish Paediatric Transplants performed in the UK

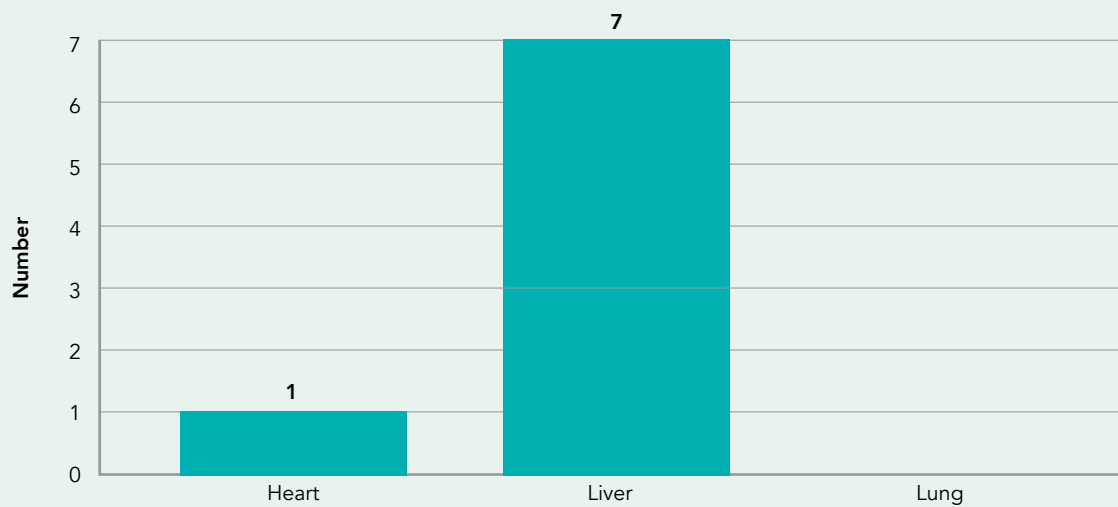
Figure 27: Irish Paediatric Patient Transplants performed in the UK 2019-2024



Source: CHI Crumlin, HSE Cystic Fibrosis Centres

Irish Paediatric waiting List UK End of December 2024

Figure 28: Irish Paediatric Waiting List UK end of December 2024



Source: CHI Crumlin, HSE Cystic Fibrosis Centres

Quality and Safety

ODTI

The ODTI Quality Management function enjoyed a successful and productive year in 2024 under the guidance of Claire Dalton, Quality and Biovigilance Manager for ODTI, and Paul Hendrick, Director of Quality, continuing the rollout of the ODTI Quality Strategy. The following is a summary of the high objectives achieved in 2024 for the ODTI:

- Further develop ODTI QMS, including introduction of electronic document management system
- Establishment of National Quality Improvement Forum for Donation and Pre-retrieval activity with the major organ donation stakeholders.
- Establishment of a Guideline Development Function
- Establishment of the National Biovigilance working group
- Development of the specification and support the implementation of Transplant Centre Management Software (TCMS) in the Beaumont Transplant Centre
- Lean Six Sigma Green Belt Qualification for the Quality and System Administration Teams.
- Support further developments in the Electronic Offering System
- Qualification of National Organ Donation Opt Out Register (OOR)
- Lead participation in the SANTE SOHO SARE second pilot across Europe
- Development of operational protocol and Memorandum of Understanding with the HPRA as joint National Competent Authorities for Organ Donation.

The objectives for the ODTI Quality Management Function for 2025 are as follows:

- Further develop ODTI QMS
- Continued Development of the National Biovigilance System and Associated Working Group
- Continued Development of ODTI Guidelines
- Support Implementation of National Opt Out Register
- Support Implementation of Transplant Centre Management Software (TCMS) in BMT Transplant Centre
- Support the commencement of TCMS projects at the MMUH and SVUH
- Support further developments in the EOS including Donor Family Services module
- Support identified programs and initiatives for Donation / Transplantation
- Participation in the SANTE SOHO Vigilance Expert Sub Group
- Contribute to SANTE SOHO CD-P-TO and other European forum

National Organ Procurement Service

The team at the National Organ Procurement Service (NOPS) is responsible for ensuring the safe procurement of organs for transplantation in Ireland. The 24/7/365 on-call service (1800 100 016) is available for potential donor referrals, clinical guidance, and support for healthcare professionals nationwide.

This year marked the first full calendar year of using the new Electronic Offering System (EOS), which has greatly enhanced the safety and transparency of the organ donation process. EOS provides a real-time clinical record that is fully auditable and transparent, supporting the integrity of every donation and ensuring safe, well-informed decision-making. Looking ahead, we aim to expand electronic recording beyond the offering system, extending its use in family services and retrospective information, a key step in our continuous quality improvement efforts.

Continuous professional development remains central to the team's ethos. In 2024, we delivered educational sessions to universities, schools, companies, and hospital staff, receiving overwhelmingly positive feedback, with additional sessions already scheduled for 2025. Several NOPS team members also participated in internationally recognised training programmes, including the Transplant Procurement Management (TPM) course in Spain and the Normothermic Regional Perfusion (NRP) masterclass at the University of Edinburgh. With the increasing Donation after Circulatory Death (DCD) activity in Ireland, these upskilling opportunities are essential to maintaining international best practice.

In addition to clinical education, the NOPS team plays an active role in national and international working groups. The team contribute to initiatives concerning the Human Tissue Act, national donation education, and broader policy development. Collaboration with our colleagues in NHS Blood and Transplant (UK) and with partners in Eurotransplant, ensures coordinated cross-border collaboration and alignment with international standards in donation and transplantation.

The NOPS team are committed to improving the family experience through clear communication, emotional support, and follow-up services, including access to counselling where appropriate. A member of the team is always available to speak with family members who may wish to connect after donation.

We are deeply grateful to the donating hospitals for their continued support. Despite conflicting demands on healthcare resources, staff across ICU and theatre departments consistently go above and beyond to facilitate donation, making it possible for donor wishes to be fulfilled.

Above all, we wish to acknowledge the donors and their families, whose decision to give at a time of immense personal loss is the foundation of every transplant. Their altruism brings hope, healing, and new life to others. We are inspired by their generosity and honoured to support their legacy.

NOPS Team

National Organ Procurement Services (NOPS) Quality

Quality is a fundamental pillar of National Organ Procurement Service mission to provide safe and effective organ donation and transplant services. We are committed to ensuring the highest standards of quality and safety throughout our processes. A dedicated team of professionals works to ensure that every step of the process meets or exceeds the regulatory requirements. We strive for continuous improvement and facilitate training programs to enhance our capabilities and deliver the best possible outcomes.

Continuous Improvement

We have worked to optimise communications and collaboration with hospitals, transplant centres, and other stakeholders. As we look ahead, we remain dedicated to pursuing ongoing improvement in all aspects of our work to better serve those in need of life-saving organ transplants.

NOPS Quality Department continuous improvement plan is to move the manual quality management

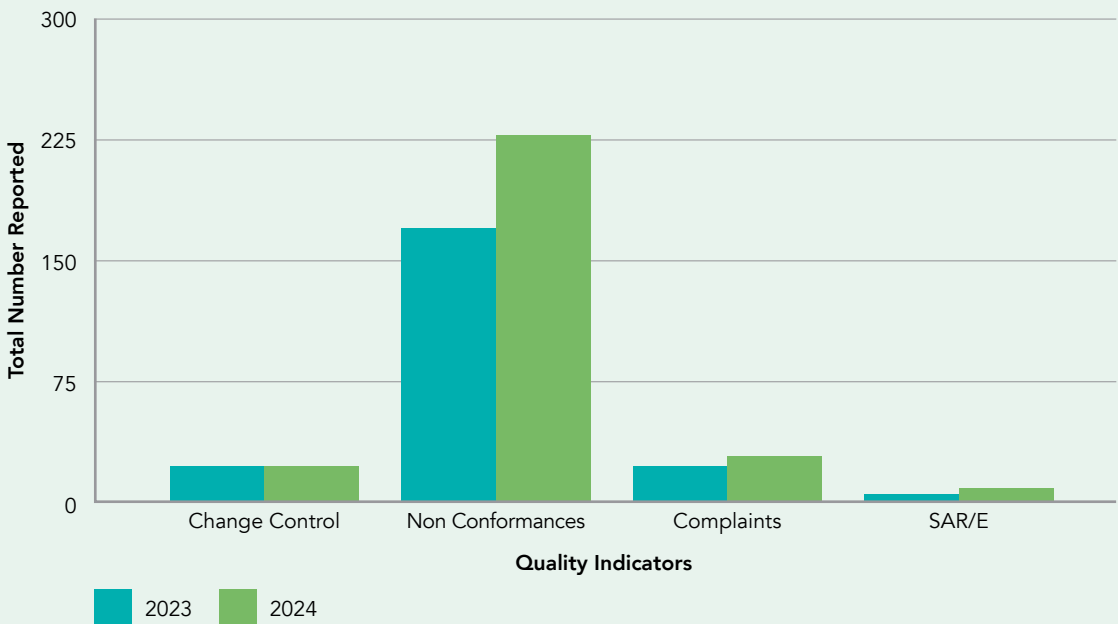
system in relation to non-conformances, complaints, change controls, internal audits and retrospective information processes to the Q Pulse system. In the interest of efficiency, the team will adopt the principles of Lean Six Sigma methodology to all quality and clinical process changes.

NOPS Quality Review

NOPS quality reviews are conducted by the NOPS quality management team. These are an essential part of ensuring that NOPS provide high-quality services that support the critical mission of saving and improving lives through organ donation and transplantation.

The quality review examines trends associated with non-conformances, change control requests, retrospective information and complaints received. The goal of the review is to identify areas for improvement and to promote best practices in organ donation.

Figure 29: Quality and Safety Review



Source: Organ Donation Transplant Ireland QMS

SAR/E: Serious Adverse Reaction/Event

Acknowledgements

Acknowledgment is necessary to the continued support of the ODTI team, inclusive of National Organ Procurement Service (NOPS), Organ Donor Nurse Managers (ODNM), Clinical Leads in Organ Donation (CLOD) and administrative support staff who work collectively to ensure the smooth delivery of the service.

National Organ Donation and Transplant Advisory Group (NODTAG)

NODTAG is the clinical advisory group to the ODTI which provides governance, recommendations and sets direction for the office. NODTAG comprises the following members.

Mr Barry O'Dwyer (January – May)

Principal Officer
Department of Health

Dr Brian O'Brien

Director Organ Donation Transplant Ireland
(Chair)

Dr Alan Gaffney

Clinical Lead in Organ Donation,
Beaumont Hospital,
RCSI Hospital Group

Ms Martina Goggin

Patient and Public Interest Representative

Mr Paul Hendrick

Director of Quality, ODTI

Professor Emir Hoti

Consultant Hepatobiliary Liver Transplant Surgeon
National Liver Transplant Centre
St Vincent's University Hospital

Ms Aisling Kinsella

Consultant Cardiothoracic Surgeon
National Heart and Lung Transplant Centre
Mater Misericordiae University Hospital

Professor Mary Keogan

Consultant Immunologist
Director National Histopathology Immunogenetics
Service for Solid Organ Transplant
Beaumont Hospital

Mr Robert Kidd

Assistant National Director
HSE Acute Operations

Mr Gordon Smyth

Consultant Renal Transplant Surgeon
National Renal Transplant Centre
Beaumont Hospital

Professor Ross Mc Nicholas

Consultant Gastroenterologist,
St Vincent's University Hospital

Dr Catherine Motherway

Consultant Intensivist
Former President Intensive Care
Society of Ireland.

Dr James O'Rourke

Consultant Intensivist
Beaumont Hospital

Dr Carol Traynor

Consultant Nephrologist,
Clinical Director Nephrology, Urology,
Transplant Directorate Beaumont Hospital

Mr John Walsh

Chief Operations Officer
ODTI

NATIONAL ORGAN PROCUREMENT SERVICE

Prof Lars Nölke, Responsible Person NOPS

Emma Corrigan, Donor Coordinator

Lynn Martin, Donor Coordinator

Jean O'Reilly, Donor Coordinator

Brenda Poole, Donor Coordinator

Eimear Shields, Donor Coordinator

Eimear Dempsey, Donor Coordinator

Jennifer Whelan, Donor Coordinator

Jennifer Hally, Donor Coordinator

IN TRAINING;

Sara Metello, Donor Coordinator

Aisling Vickers, Donor Coordinator

Louise Pedreschi, Donor Coordinator

CLINICAL LEADS IN ORGAN DONATION

Dr Emer Curran, Saolta Hospital Group

Dr Ian Conrick-Martin, Ireland East Hospital Group

Dr Alan Gaffney, RCSI Hospital Group

Prof Ignacio Martin-Loeches, Dublin/Midlands Hospital Group

Dr Jonathon Roddy, University of Limerick Hospital

Dr Adrian Murphy, South/South West Hospital Group

ORGAN DONATION NURSE MANAGERS

Bernadette Nohilly, University of Limerick Hospital Group

Breda Doyle, South/South West Hospital Group

Gillian Shanahan, Saolta University Hospital Group

Karen Healy, RCSI Hospital Group

Nicola Phillips, Dublin/Midlands Hospital Group

Orla Cradock, Ireland East Hospital Group

QUALITY TEAMS

Paul Hendrick, Director of Quality, ODTI

Claire Dalton, Quality and Biovigilance Manager, ODTI

Edel Ward, NOPS Quality Manager

Leah Campbell, Transplant Centre Quality Manager, SVUH

Sinead Cronnolly, Transplant Centre Quality Manager, Beaumont

Davina Shaw, Transplant Centre Quality Manager, MMUH

ODTI / NOPS OPERATIONS AND ADMINISTRATION SUPPORT

Dr Brian O'Brien, Director

John Walsh, Chief Operations Officer

Kathleen Tyrrell, Senior Administrator

Tara Maguire, Administration Business Lead

Dara Kelly, System Administration Manager

Edel Brennan, System Administration Manager

Loveth Nwanze, Data and Quality Administrator

MEDICAL CLINICAL ON CALL

Professor Jim Egan (January- October)

Dr James O'Rourke

Dr Brian O'Brien

Dr Catherine Motherway

Bibliography

- The Human Tissue (Transplantation, Post-Mortem, Anatomical Examination and Public Display) Act 2024
- S.I No: 158 of 2006, European Communities (Quality and Safety of Human Tissues and Cells) Regulations 2006.
- S.I. No: 598 of 2007, European Communities (Human Tissues and Cells Traceability Requirements, Notification of Serious Adverse Reactions and Events and Certain Technical Requirements) Regulations 2007.
- S.I. No: 325 of 2012, European Union (Quality and Safety of Human Organs Intended For Transplantation)
- Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells.
- Commission Directive 2006/12/EC of 8 February 2006 implementing Directive 2004/23/EC of the European Community and of the Parliament as regards certain technical requirements for the donation, procurement and testing of human tissues and cells.
- Commission Directive 2006/86/EC of 24 October 2006 implementing Directive 2004/23/EC of the European Community and of the Parliament as regards traceability requirements, notification of serious adverse reactions and events and certain technical requirements for the coding, processing, preservation, storage and distribution of human tissues and cells.
- Commission Directive 2010/53/EC of 7 July 2010 of the European Parliament and the Council of the European Union on standards of quality and safety of human organs intended for transplantation.
- ODTI, A Framework for Quality and Safety of Human Organs Intended for Transplantation (2014).

Notes

Organ Donation Transplant Ireland

Ground Floor, Bridgewater House, Bridgewater Business Centre,
Conyngham Road, Islandbridge, Dublin 8 D08 T9NH

Email: odti@hse.ie • **Website:** hse.ie/organdonation

ODTI-RPT-001/24 Annual Report, Rev 1