



**Mater University  
Hospital**

Mater Misericordiae University Hospital  
Annual Report 2022



**Working Together to  
Build on Excellence**



# 1

## Introduction

The Mater Hospital’s priority is to be at the frontier of leading, compassionate, quality care for all our patients and key to this is our people, who go above and beyond for our patients every day.

### Contents

1 Introduction	02
2 Improving Access to Quality Care	14
3 Developing Key Specialist Services	36
4 Building further our Academic, Research and Innovation Programmes	44
5 Developing our People and Culture	52
6 Being Efficient and Sustainable into the Future	58
7 Financial Review and Governance	64
Board of Directors	68
Appendices	70





# Established over 160 years ago, the Mater Misericordiae University Hospital is a leading level 4 Acute teaching hospital with 4,167 staff.

The hospital is the national centre for 17 specialties and supra specialties



It is one of the eight designated cancer centres



It is a major centre for Intensive Care Medicine



It has a distinctive track record in whole system transformation



It has been chosen to be one of the two Major Trauma Centres in Ireland as part of the National Trauma Network



## The Mater is the National Centre for the following specialties and supra specialties

Heart and Lung Transplant

Adult Congenital Heart Disease (ACHD) Service

Pulmonary Hypertension

Heart Surgery

Adult Extracorporeal Membrane Oxygenation (ECMO)

Hyperthermic Intraperitoneal Chemotherapy (HIPEC)

Spinal Injuries

Adult Scoliosis

National Isolation Unit for High Consequences Infectious Diseases (HCID)

Inherited Metabolic Disorders

Rare Diseases

Forensic and Postmortem Imaging

Bone Anchored Hearing Aid

Deep Brain Stimulation

Advanced Heart Failure and Ventricular Assist Device (VAD)

Brachial Plexus Service

Clinical and Laboratory Cardiac Genomics/Genetics

**Providing patients with access to high quality timely care remained a primary focus for the hospital in 2022.**

**100,100+**

patient presentations to Mater Emergency Departments



**25,367**

discharged inpatients



**224,221**

bed days consumed



**250,754**

outpatient attendances



**75,000+**

day case procedures



**79%**

elective patients admitted on day of surgery



**209,900**

completed procedures in Radiology



**171,344**

total number of HSCP attendances



**2,300**

approx. new cancers diagnosed



**56**

HIPEC surgeries



**21**

patients received extracorporeal membrane oxygenation (ECMO) treatment



**18**

lung transplants



**10**

heart transplants



**€54m**

expenditure on medicines





# 2022 began with the launch of our new strategy - 'Leading innovation to transform patient care'. This strategy sets out the hospital's plans and strategic priorities for the next 4 years.

## Our Vision

To build on excellence and enhance our role as an international leader in the provision of complex care and specialist services with a strong academic and translational research agenda, empowering our people to deliver excellence in care to our patients while shaping the medicine of tomorrow.

## Our Mission

To care for the sick with compassion and professionalism at all times, to respect the dignity of human life and to promote excellence, quality and accountability through all our activities.

## Our Values

- Always inclusive, compassionate, respectful, dignified and patient focused
- Demonstrating leadership, accountability, flexibility and professionalism
- Being innovative, collaborative and future focused
- Striving to continually improve and be the best in everything we do
- Mindful and supportive of our colleagues

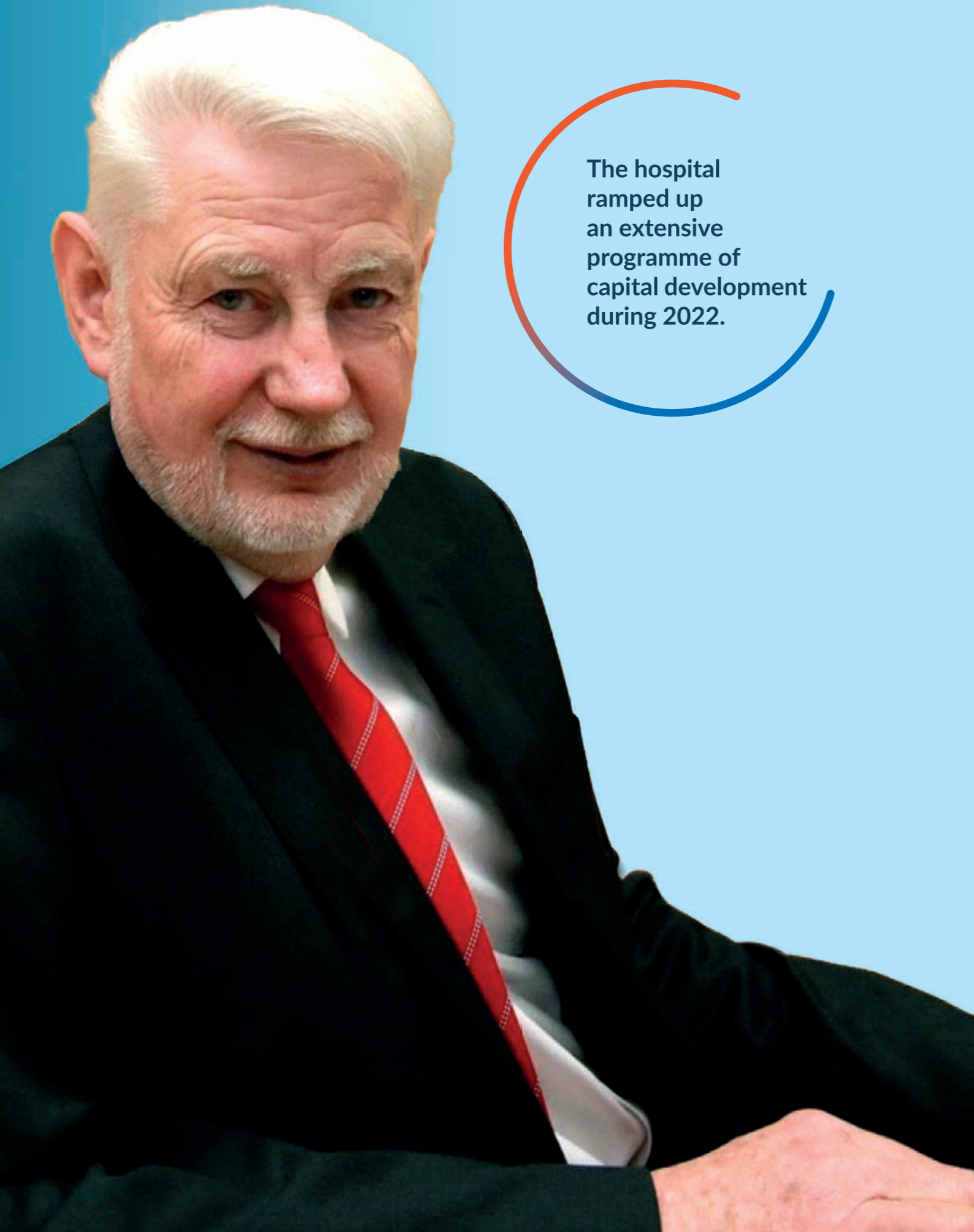
## Our 15 Strategic Initiatives

1. Development of the Rock Wing (RW)
2. Establishment of the Major Trauma Centre (MTC)
3. Establishment of People, Culture and Organisation Development Programmes
4. Hospital Digitisation and an Electronic Health Record (EHR)
5. A Quality and Patient Safety Programme for the Hospital
6. Key Waiting List Initiatives
7. Development of Gene Therapy and Precision Medicine within the Mater Hospital
8. Enhanced Cancer Services within the Mater Hospital
9. A new State-of-the-Art Laboratory within the Mater Hospital
10. Critical Care, Heart Lung Services and Robotic Surgery
11. New Integrated Care Models
12. Establishment of a New Adult Psychiatry Centre within the Mater Hospital
13. Development of the Pillar Centre For Transformative Healthcare
14. Enhancement of training opportunities for undergraduates
15. Sustainability and Corporate Social Responsibility Programmes

## Our Strategic Priorities







The hospital ramped up an extensive programme of capital development during 2022.

## Chairman Review of 2022

**The year in review saw an increasing level of activity which has characterised acute hospital care since the onset of the COVID-19 pandemic. By mid-year the level of COVID-19 infections abated somewhat but residual effects continued to manifest themselves.**

In many cases patients who needed treatment for other conditions delayed attending the hospital with the result that by the time they subsequently presented their conditions were more acute. Moreover, the specialist services provided by the Mater such as Extracorporeal Membrane Oxygenation (ECMO), were in high demand as a national service to support acutely ill COVID-19 patients in addition to normal activity. All this resulted in a significant increase in emergency department and out-patient attendances, with a new record high in 2022 which shows no signs of abating.

Demographic changes such as age are now evidenced in an increased number of patients over 75 with comorbidities seeking care. Additionally, our data has demonstrated the socio-economic impacts on health in the immediate catchment area of the Mater, where younger patients are presenting at the hospital having the same morbidity status as a 70+ year-old presenting elsewhere.

The hospital ramped up an extensive programme of capital development during 2022. This included work on the construction of a new emergency ward block and commencement of the planning and design of a major trauma centre. The hospital is grateful to the HSE and partners in recognising the need to expand and the required investment to achieve this.

I would also like to thank the Mater Foundation for their support which enabled us to improve facilities within the hospital and purchase new equipment; both of which directly improve the care we can provide to our patients.

In conclusion, I wish to record my appreciation and thanks of the work done by my colleagues on the Board, the CEO, Alan Sharp and his senior management team, the clinicians, nurses, and the entire staff of the hospital who work so tirelessly to serve our patients. I also acknowledge the importance of our partnership with colleagues in the HSE, Ireland East Hospital Group and the Department of Health.

**Dr David Begg**  
Chairperson





I am extremely proud of how in 2022 we all worked together to deliver on our commitment to increase access to care, address waiting lists and to transform and innovate.

## CEO Review of 2022

**2022 was a challenging year coming out of COVID-19 and we recognise the extraordinary contribution made by the staff of the Mater Hospital to ensure the maximum level of access to care for our patients was achieved, at a time of great difficulty.**

We commenced our year with the development of an ambitious strategy 'Leading innovation to transform patient care' and I am extremely proud of how in 2022 we all worked together to deliver on our commitment to increase access to care, address waiting lists and to transform and innovate.

2022 saw a notable increase in our activity from 2019 (the last full year of non-COVID-19 impacted operations), significant progress in addressing waiting lists (with an 18% reduction in OPD waiting lists in the 12-month period) and many improvements in the quality of care we provide to our patients, all of which are demonstrated throughout this report.

The Rock-Wing development will have a significant impact on improving the care we can provide to patients and the patient experience, providing spacious single en-suite rooms with natural light and individual patient monitoring facilities. It too, very importantly, delivers extra capacity on completion (additional theatres and extra beds, 800+ beds in the hospital being in operation) which are required just to meet current demand.

In 2022, our efforts were also focused on further development of our organisation and our capabilities to ensure we are prepared for the necessary growth and expansion of the hospital, the development of key speciality services and to ensure we are putting in the necessary 'foundations' to be more efficient and sustainable.

Despite over 600 new recruits commencing work in 2022 recruitment continues to be a significant challenge for the Hospital and it is expected that this level of recruitment will need to continue through the coming years. Inflation also remains a real concern and supply chain difficulties persist across a number of product and service categories. Implementation of an Electronic Health Record system is a key priority for the Hospital and significant work in 2022 was conducted to secure funding and progress this critical initiative which is required to address considerable operational risk and to prepare for the future.

This report highlights the unique culture of our hospital, where our staff and clinicians not only turn up every day to care for our patients but also all work together to continually innovate and transform to address the ongoing challenges we face in healthcare in Ireland and to deliver the best care to our patients.

In closing, I would like to take this opportunity to say thank you to all our staff for the exceptional work they do every day and our community for supporting the Mater in its ongoing growth and development.

**Mr. Alan Sharp**  
Chief Executive



# 2

## Improving Access to Quality Care

We are committed to ensuring high quality care and the experience of the patient is at the centre of everything we do, and essential to this is providing better access to care, integrating more with the community and keeping the patient closer to home.





## Improving Access to Quality Care

Despite significant demand on our services, and our emergency department exceeding 100,000 presentations, the hospital still increased access to many of its services in 2022.



Providing patients with access to high quality, timely care remained a primary focus for the hospital in 2022. This focus was framed within the ongoing COVID-19 requirements for healthcare services.

The Mater is committed to providing services vital to the interests of the patients we serve within our community and our designated catchment area of North Dublin, and also to providing national specialities to patients across Ireland.

In spite of the significant disruption to normal service delivery a higher than average level of activity was maintained in the

hospital throughout 2022. In the year 2019 the highest level of activity to date was recorded by the Hospital. The tables 1 to 5 below show activity increases across all patient admissions and attendances in 2022 when compared to 2019.

The Mater worked with private hospitals under the SafetyNet agreement to provide additional access for time sensitive surgery and the National Treatment Purchase Fund (NTPF) to provide access to assessment or treatment through insourcing or outsourcing activities. In 2022, 1,899 surgical procedures were completed under the SafetyNet agreement and 7,637 NTPF procedures or appointments were completed.





## Improving Access to Quality Care Continued

### Critical Care and Theatre

Critical Care and theatre activity continued to support national programs throughout the COVID-19 pandemic surge, in particular the first 5 months of 2022. In 2022:

- 2,294 patients were admitted to Critical Care (ICU and HDU)
- 111 patients were admitted to Critical Care with COVID-19
- 21 patients received extracorporeal membrane oxygenation (ECMO)
- There were 77 direct ICU to ICU admissions from other hospitals
- There were a total number of 13,522 surgeries (almost returning to pre pandemic levels of 13,777 in 2019)

Mater Critical Care also continued to support colleagues in the Rotunda Hospital treating 19 critically unwell obstetric patients in 2022.

HDU bed capacity remained at 16 beds as per 2021 and ICU beds increased from 18 in 2021 to 20 in 2022. It is worth noting, the opening of the new Rock Wing HDU affords an opportunity to expand the ICU and HDU to further address critical care bed capacity which when fully staffed provides a critical care bed complement of 52 beds (vs 36 beds end 2022).

With nearly 97 advanced respiratory support episodes in 2022, the HDU at the Mater is uniquely operating at a level 3 critical care service on a regular basis.

### Radiology

Overall radiology activity in 2022 continued to recover from COVID-19 impact of the previous two years. 199,521 diagnostic Radiology procedures were completed in 2022 with an additional 10,367 interventional procedures (209,888 procedures in total). Changes in referral patterns have become evident by the ongoing decreased demand for general X-ray imaging with increased demand on other modalities in particular MRI and CT. There was an increase in CT total activity of 25%, from 28,547 in 2019 to 35,594 in 2022.

### Drug Expenditure

The Mater Hospital drug expenditure reached a high of €54m in 2022, a 13% increase on 2021, reflecting patients access to new high cost drugs like Polatuzumab vedotin and Patisiran.

### Laboratory

2022 saw a significant uplift in laboratory activity since 2019. See chart below.

Laboratory	2019	2022	% diff
Blood Science Dept - total sets	2,394,709	2,816,900	17.6%
Transfusion - total requests	41,725	44,828	7.4%
Microbiology - investigations	261,684	360,156	37.6%
Histology - procedures	159,080	186,764	17.4%



In 2022, through the expansion of services and introduction of new ways of working and transformation we made significant progress in improving access to care, quality of care, and in reducing waiting lists.

<p><b>87% ↑</b></p> <p>87% increase in volume of new ENT patient appointments being offered weekly</p>	<p><b>7 days ↓</b></p> <p>Wait for Orthopaedic intervention reduced from more than 3 weeks to within 7 days for fracture patients</p>	<p><b>1,500 ↓</b></p> <p>Removal of approx. 1,500 patients from Rheumatology waiting list</p>
<p><b>26% ↑</b></p> <p>26% uplift in PET/CT scan activity for public patients</p>	<p><b>1,241</b> </p> <p>Patients seen by the Frailty Intervention team - 665 inpatient admissions avoided with patients supported to home or another more suitable location</p>	<p><b>200</b> </p> <p>Approx. 200 patients transitioned from CHI Crumlin paediatrics to Adult Congenital Heart Disease (ACHD) services at the Mater</p>



## Improving Access to Quality Care Continued

### Ears Nose and Throat (ENT)

The ENT multidisciplinary team with the support of Mater Transformation introduced a number of system changes to address long waiting lists for outpatient appointments.

Improvements were made to the booking, triage and referral processes and structured mechanisms like post clinic huddles were put in place to improve clinic communications and improve throughput. Clerical staff were recruited to reduce the administrative burden for non-consultant hospital doctors, improve the theatre booking system, and facilitate multi-disciplinary team meeting processes. Consultants began reviewing waiting lists and identifying patients that could be seen directly by Audiology, Speech and Language Therapy or a GP specialised in ENT rather than waiting to see the consultant in a clinic first. **These changes have resulted in an 87% increase in volume of new ENT patient appointments being offered weekly and a reduction in the average time from referral received to triage from 7.3 days to 2.8 days.**

### New Virtual Fracture Clinic Assessment

A new vFAC (virtual fracture clinic assessment) was established in October 2022, with 400 patients on this pathway (100 per week). **This new clinic has resulted in a reduction of the wait for Orthopaedic intervention from more than 3 weeks to within 7 days for fracture patients.**

### Additional Rheumatology Clinics

Additional rheumatology clinics were introduced in 2022. This has resulted in the reduction of waiting lists (approximately 1,500 patients removed from lists in 2022) and now **no patient is waiting longer than 6 months for an appointment and the majority are seen within 3 months of referral.**

### A Rapid Return for Assessment Service

The Mater Acute Medical Assessment Unit developed a new pathway in 2022 to reduce Emergency waiting times and increase patient service quality. A Rapid Return for Assessment Service was introduced facilitating the ED team to discharge acute unscheduled patients with the knowledge that they would be returning next day for a comprehensive health evaluation and management plan. **A 12-week pilot of this clinic in 2022 facilitated care for 133 patients, saving at least 96 bed-days and this service has continued since then.**

### HIV Prophylaxis Service and Monkeypox Vaccine

Following funding through Slaintecare for a pilot community sexually transmitted illness (STI) clinic, the Infectious Disease department has partnered with HIV Ireland, located on Eccles Street, where the Mater Hospital runs daily sexual health clinics. During 2022, the HIV prophylaxis service (PrEP service) was restructured, with the result that **the substantial waiting list for this service will hopefully be resolved by the end of 2023.** This outreach clinic also meant that the Mater Team could respond to the 2022 increase in the Monkeypox virus internationally, and **1,151 doses of the Monkeypox vaccine to at-risk persons were administered between September and December 2022.**

### Extended Bank Holiday Service - Health and Social Care Profession

Our Health and Social Care Directorate introduced an extended bank holiday service to ensure high priority patients receive timely assessment and intervention over four-day bank holiday weekends. Patients now have access to Occupational Therapy, Dietetics, Speech and Language Therapy and Medical Social Work services and extended Physiotherapy services during these times. **The Mater is the first acute hospital to deliver this service as part of our commitment to provide better access to our patients.**

### Severe Asthma Services

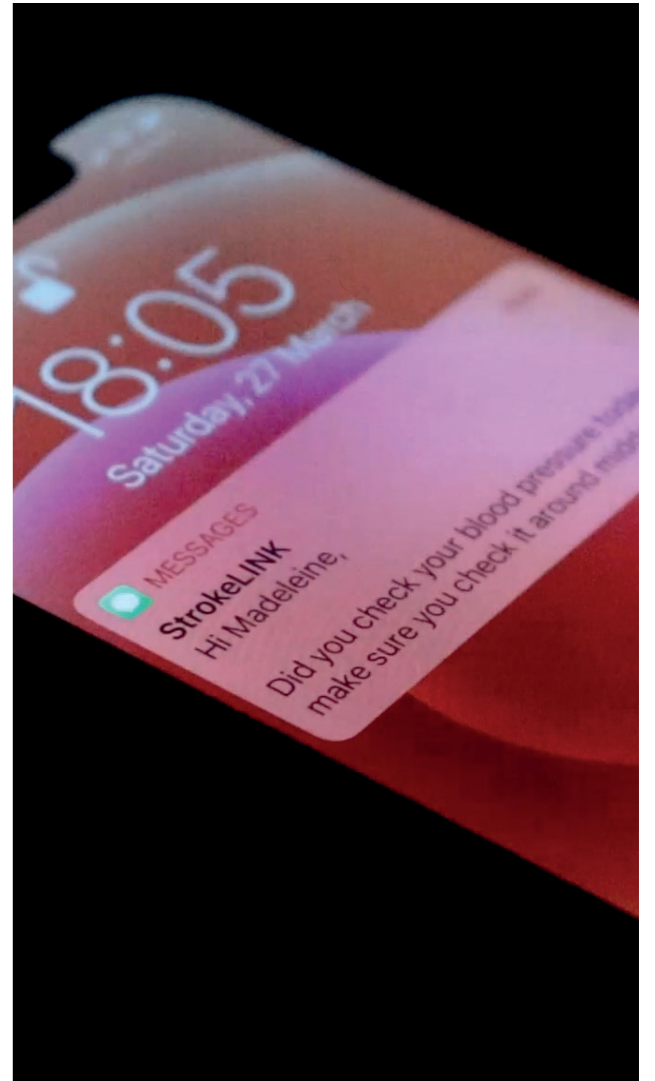
Targeted therapies in the form of biologic agents are now an option for severe asthma. The severe asthma service in the Mater Hospital has been in existence since 2007. In 2018 a new biologic treatment, Anti IL5 therapy, was added to the treatment options. Patients are referred by the Mater team of respiratory consultants and the co-ordination of this service is Clinical Nurse Specialist led. This includes comprehensive patient assessment, co-ordination of the monthly MDT, patient education and support throughout the process. In 2022 a directive from the HSE instructed that from the third dose of Anti IL5 therapy patients should transfer to home self-administration of their Anti IL5 therapies. This concept was positively endorsed by the team here in the Mater and **in 2022 the Mater succeeded in transferring 12 patients to home self-administration for their treatment.**

### StrokeLINK

20% of people who have a stroke go on to have a second stroke - often resulting in disability or fatality. Many of these strokes are preventable through better adherence to lifestyle and medication advice. The StrokeLINK team worked through a co-design process with staff, patients and their families/care partners to develop a new nurse-led service that provides patients with personalised support tools and education to help them feel more confident in managing their recovery after stroke. This novel service is having a remarkable impact on patient experience, influencing self-care behaviours and, ultimately, improving health outcomes and optimising use of healthcare resources.

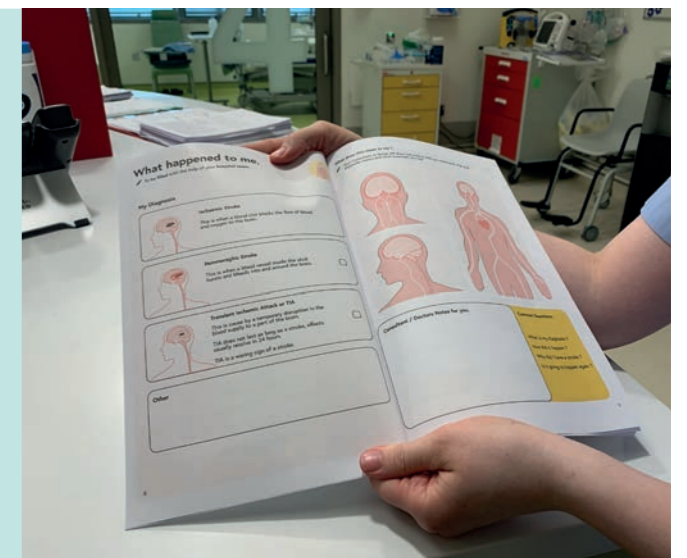
In 2022, the Hospital launched the Mater patient education and empowerment Stroke Book, which was designed in collaboration with the National College of Art and Design. The Mater StrokeLINK Advanced Nurse Practitioner led post-acute care service was also launched, which builds on the multi-award winning StrokeLINK Clinical Nurse Specialist led post-acute care services. Now in 2022, the positive impact this new innovative service is having for our patients can be reported.

- Before StrokeLINK, 1 in every 10 stroke patients re-presented to the acute hospital to deal with emergencies that are now dealt with or averted in the community by StrokeLINK
- 98% of patients rated their discharge related care as excellent compared with 63% before StrokeLINK
- 97% of StrokeLINK patients routinely monitored their own blood pressure compared with 58% before
- 93% of StrokeLINK patients followed advice and made positive changes to lifestyle following their stroke compared with 42% before



**"I had a history of hypertension. When I came home I was given the booklet and I had my BP machine. I was recording my own BP daily and all my questions were answered clearly.**

Stroke patient





## Improving Access to Quality Care Continued

### Transforming how skin conditions are managed across the Healthcare System

The rate of referrals coming into Dermatology is significantly increasing year on year due to increases in skin cancer prevalence and population growth. While system changes made in 2021 had a major impact on waiting lists (successfully reducing Dermatology outpatient waiting lists by 40%), without intervention the waiting list would be back to the 2020 levels within 3 to 4 years. Therefore, there was a clear need to move away from over reliance on hospital specialists and to rethink how skin conditions are managed across the system.

The HSE in 2022 identified a pressing need to “build more skills and competencies in all stakeholders in the management of skin problems especially in primary and community care.” To address this, in 2022 Mater Transformation connected the Dermatologists with the Medical Device Design group at NCAD and together they developed a novel, high-fidelity suite of teaching aids. No other teaching tools currently available

on the market offer this level of fidelity in terms of visual and tactile features. It is anticipated that they will increase confidence and competence in the management of common skin conditions among practising GPs as well as undergraduate and postgraduate trainees.

**By addressing the challenges with Dermatology education, this novel teaching aid will facilitate rapid up-skilling of current and future GPs, which in turn will enable a shift from over reliance on the acute hospital specialists for the management of routine conditions.**



### National Deep Brain Stimulation Service - a first in Ireland

In March 2022 the Mater Hospital, in partnership with Beaumont Hospital, initiated the National Deep Brain Stimulation Service, providing advanced treatment for movement disorders like Parkinson's Disease, essential tremor, and dystonia. This treatment involves implanting brain electrodes in Beaumont Hospital and then activating and programming a battery in the Mater Hospital's Dublin Neurological Institute. The procedure, a first in Ireland, is targeted at patients whose symptoms cannot be effectively managed with medication alone. The first patient has now undergone treatment. **This new service eliminates the need for patients to travel to the UK for similar treatment, enabling patients to receive care closer to home.**

### Outpatient Parenteral Antimicrobial Therapy (OPAT) Service

The Mater's Outpatient Parenteral Antimicrobial service is one of the biggest users of the National OPAT nationwide. **This service enables patients to receive their antibiotic treatment in their own home, instead of having to spend long days and weeks in hospital. In 2022, 192 Mater patients were supported through OPAT, saving 4571 bed days.**

### Musculoskeletal Outreach Triage Clinics (MSK)

The Mater Hospital was among the first MSK triage service nationally to move to outreach triage clinics in 2022. The service includes one clinic in two primary care centres per week (Ballymun and Summerhill) with the clinical specialist physiotherapist supporting community staff by provision of in services and joint assessment in management of patients with musculoskeletal injuries. The service is under Mater Orthopaedic and Rheumatology governance; **180 patients have benefitted from this service since it started in May 2022.**

### Integrated Care Programmes for Chronic Disease

During 2022 the Mater Hospital worked with CHO Dublin North City and County to develop Integrated Care Programmes for Chronic Disease across Cardiology, Respiratory and Diabetes services. This involved new staffing and the introduction of community diagnostic equipment to facilitate **clinics closer to patients' homes** where patients can avail of specialist consultant-led care, incorporating the wider nursing, physiotherapy, dietitian and podiatrist teams.

### European Reference Network for Lung (ERN-Lung)

The National Pulmonary Hypertension Unit (NPHU) is now part of the European Reference Network for Lung (ERN-Lung) following a period of data collection and collaboration with Respiratory specialists nationally through the Irish Thoracic Society (ITS). This is a **virtual network involving specialists across Europe, established to provide expert knowledge to healthcare providers looking after rare diseases like Pulmonary Hypertension (PH).**

### Expansion of Psycho Oncology Service

The Psycho-Oncology Service in the Mater Hospital was initially established in March, 2021. The specialist service focuses on the psychological and mental health care of people affected by cancer and their families and follows an integrated and proactive model. The team includes multi-disciplinary specialists in Nursing, Social Work, Psychology and Psychiatry that offer inpatient, outpatient and group-based interventions.

In 2022, the team further expanded with the recruitment of a Medical Social Worker, Consultant Psychiatrist and a Principal Specialist Psychologist. In 2022, there was a **36% increase in referrals to the service and 30% of those referred required the input of at least two members of the MDT.** Adding to this, the team provided ongoing staff and patient education as well as research and audit activity to further enhance service development and delivery.

### Expansion of the Irish Cancer Society's Women's Health Initiative (WHI)

The Irish Cancer Society's Women's Health Initiative (WHI) provides evidence-based survivorship services for women living with and after cancer. **In 2022 it focused on expanding its support services to women nationally.** It added the remaining 4 gynaecological cancers, ovarian, uterine, vulval and vaginal and a genetic pathway for those impacted by BRCA and Lynch Syndrome to the 'thisisGO.ie' website. A specific clinic for vulva and vaginal patients in the GO Cancer Centre was established. Work in 2022 also focused on the recruitment of patients for two key research studies, The Menopause After Cancer Study (MAC Study) and Sleep After Cancer Study (SAC Study).

### Growth in Mater Connective Tissue Disease-Interstitial Lung Disease Clinic

In 2022, continued growth in capacity was seen in the Connective Tissue Disease-Interstitial Lung Disease Clinic. This is a combined clinic led by Rheumatology and Respiratory medicine where patients with complex CTD-ILD can be seen jointly, **necessitating fewer appointments for patients with complex disease** and facilitating joint decision making. 21 patients attended this clinic in 2022.



## Improving Access to Quality Care Continued

### FIT to SIT

The Frailty Intervention Team developed the “FIT to SIT” initiative in ED and the acute floor led by Occupational Therapy and Physiotherapy with input from Speech and Language Therapy, Nursing and Medical team members. The aim of the team is to reduce harm, and provide early intervention on the Acute Floor, this includes getting people up, walking and sitting out. The initiative received Mater Foundation funding for two specialised seating systems. Many patients seen by Mater FIT are frail and are unable to sit out in a standard ward chair. **This seating is used to enhance the patient journey, reduce hospital acquired deconditioning, and begin rehabilitation and recovery in the early acute stages of the person’s hospital journey.**

### Inclusion Health Service Expansion

The Inclusion Health Service at the Mater aims to integrate and collaborate across the hospital and in the community to provide equitable healthcare access to those in socially marginalised groups. In 2022 the service expanded with the addition of a new Case Manager, funded in collaboration with Merchants Quay Ireland. **In 2022, there were approximately 1,200 Mater inpatient admissions for those considered socially marginalised and the Inclusion Health clinical service consulted on 920 of these inpatient episodes, providing supportive and cohesive care.**

### New PET/CT Scanner and PSMA Imaging

In April 2022 Mater Radiology took over the operational governance of the PET/CT Unit and invested in a state-of-the-art new digital scanner. This scanner is leased one day per week to the Mater Private Hospital. **This change has resulted in an increase in activity of 26% for public patients** with the department remaining budget neutral since this new agreement has been in place.

The installation of the new digital PET/CT scanner also provided the technology to introduce a PET/CT PSMA imaging service. Prostate-specific membrane antigen positron emission tomography (PSMA PET) scan is a procedure used to detect prostate cancer throughout the body using a radioactive diagnostic agent that targets a PSMA protein which is expressed by prostate cancer making it a **more accurate diagnostic tool for this patient cohort.**

### First Seizure Pathway

A First Seizure Pathway for patients attending through the Mater ED was introduced in 2022. Patients presenting to the ED with suspected seizures or encephalopathy will now have an EEG (electroencephalogram) the day of presentation if presenting Monday to Friday. **23 first seizure EEGs were conducted in 2022 saving approximately 2-3 bed days per case.** An additional benefit of this new pathway is that patients now have their EEG when attending Neurology OPD which aids in clinical decision making as it helps stratify risk of seizure recurrence.

### Mater HYPO BOX

In April 2022 the Mater Drug Safety Committee Insulin Subgroup launched the Mater HYPO BOX. The HYPO BOX is an orange ‘First Aid’ type box which will be available on wards and outpatient departments. The HYPO BOX contains all the necessary equipment and supplies to treat hypoglycaemia, providing easy access to prompt and effective treatment of hypoglycaemia in diabetes patients. **By year end a total of 41 clinical sites had implemented the HYPO BOX.**

### National Centre for Inherited Metabolic Disorders (NCIMD) Transfer Program

The NCIMD Transfer/ Transition Program between CHI and Mater was re-established in 2022 which set up a pathway for patients to have their care moved from CHI@Temple Street to MMUH. This involved monthly MDT clinics in Temple Street with teams from CHI and MMUH. The transfer (of patients >18 years old) will be completed by the end of 2023, bringing the number of patients attending NCIMD - MMUH to over 1,200 with the transition pathway then continuing into the future.

### Vasopressor Support

The requirement for vasopressor support for patients following spinal surgery as they transfer from ICU to spinal HDU was identified. €120k funding was approved through the Mater Foundation for the machinery to measure arterial pressures in the Spinal Unit and positive impacts for patients were demonstrated. Nursing staff attended tailored education programmes and policies in line with international guidelines have been implemented. **This project realised best practice pathways for patients who have undergone spinal surgery.**

### Enhancements in Emergency Department

Some key initiatives commenced and were enhanced in the Emergency Department in 2022 which include:

- Weekly “Silver Trauma” clinics
- An ‘Echo in the ED’ clinical service and research project led by Dr Cian McDermott
- New clinical care pathways in ED including an Atrial Fibrillation Care Pathway and a Chest Wall Injury Pathway
- Enhancements to the Materem.org website - providing information for the community and healthcare workers on ED services



**“While healthcare in Ireland faces constant challenges, the Mater Hospital always responds in a proactive way, bringing solutions forward and leading the way in transformation”**

Dr David Begg Chair of the Board



## Improving Access to Quality Care Continued

**In 2022 we continued on our journey to build a new state of the art emergency wing to deliver more capacity to meet current and future demand and made significant investment in new medical equipment.**

### The Rock-Wing

In the early part of the response to COVID-19, the lack of bed capacity, especially intensive care facilities and appropriate single-bed rooms had been identified as an issue facing many acute hospitals in Ireland. The hospital submitted plans for a 98 bedded purpose-built infectious diseases hospital to address the lack of capacity and uncertainty associated with the repeated waves of COVID-19 and ensure the hospital's readiness for potential similar health crisis events in the future.

This purpose-built world-class development will act as a critical public health intervention allowing patients with suspected or confirmed high consequence infectious disease to be managed while reducing risk of transmission to staff and the public. **The additional capacity will enable the Mater to deliver improved care and access to specialist services for the country's sickest patients**, ultimately delivering better outcomes for over 5,000 inpatients a year.



THE ROCK WING ARTISTS IMPRESSION

Following the completion of enabling works, during 2022 the 'Emergency Wing Build Project' continued with the construction of the 9-storey 13,500m2 building allowing capacity for the following:

- Level 6 - 20 Infectious Diseases beds
- Level 5 - 20 Respiratory beds
- Level 4 - 20 COVID-19 pathway beds
- Level 3 - 16 Critical Care beds
- Level 2 - 20 Trauma beds
- Level 1 - New hospital reception at Eccles Street entrance, multifaith and reflective spaces, a cafe, offices and multi-disciplinary team meeting rooms, Consultant and NCHD hubs
- Level 0 - Shelled space for National Isolation Unit

The facility is designed to a high standard to integrate with the existing hospital and Eccles Street landscape. To protect against the spread of infection, all rooms are single en-suite, have natural light, are spacious and have individual patient monitoring facilities. This will help to ensure timely access to care in the appropriate clinical setting, improved staff experience in a modern working environment and will improve our readiness for future surges in COVID-19 or other pandemics and infectious diseases.

As part of the planning into the clinical, operational and people aspects of this building, new ways of working and innovative measures are also being implemented.

The Mater now in 2023, (at time of publishing this report) has formally launched the Rock Wing.

### €3.3 million investment in upgrading and purchasing new medical equipment.

In 2022, over €3.3 million was invested in upgrading and purchasing new medical equipment and in essential hospital projects, thanks to the generosity of The Mater Foundation and its supporters.

Approximately €2.1 million was allocated to upgrading medical equipment, including portable Echo machines, a lifesaving ECMO machine for our ICU, a new Liver Ultrasound, and a new HydroJet Liver Scanner.

An additional €1.05 million was dedicated to a new digital PET/CT scanner.

This new scanner is a critical piece of equipment for detecting and managing cancer. It is also used to diagnose illnesses such as Parkinson's Disease and Dementia. The new scanner is faster, more accurate and allows imaging at a significantly lower dose to both patients and staff. **Having this latest technology means more than 1,000 patients each year will have access to a state-of-the-art PET/CT service.**

[www.materfoundation.ie/donate](http://www.materfoundation.ie/donate)

Where grateful patients, family members and staff can make a difference by supporting the Mater Foundation





## Improving Access to Quality Care Continued

At the Mater we are committed to ensuring quality, patient safety and the patient experience are central to everything we do every day, and embedding a culture of accountability for quality and patient safety right down to each individual in our organisation.

### Platinum Level

National Adult Extracorporeal Life Support (ECLS) service designated a **Platinum Level ELSO Centre of Excellence**

### Hip Award

**Irish Golden Hip award** for the hospital

### 5-star

**EuroSafe Imaging 5-star Premium Rating**

### INAB Accreditation

INAB accreditation for **Cardiac Genomic Service**

### Quality and Patient Safety

**Chief Resident** in Quality and Patient Safety Programme

### 2022 National Patient Survey

**88% of people who were admitted to the hospital said they had a very good overall experience, compared to 82% nationally (National Patient Survey 2022)**

## The Mater received a number of significant achievements and awards in 2022.

### National Adult Extracorporeal Life Support (ECLS) service

The National Adult Extracorporeal Life Support (ECLS) service was designated a Platinum Level ELSO Centre of Excellence in April 2022. This designation is limited to 15% of Worldwide ECMO Centres and is testament to the work and commitment of the Mater ECMO/ICU interdisciplinary team.

### Golden Hip Award

In 2022 the Mater was awarded the Irish Golden Hip Award with the highest proportion of patients achieving the best practice care standards. This was a huge achievement. The hip fracture pathway works across four directorates and five specialities. This pathway enables greater collaboration, understanding and teamwork across all these specialities. The purpose is to maximise the opportunity for surgical fixation within 24-48 hours, or less if physiologically permissible, to enhance patient outcomes. The journey to improve the hip fracture pathway at the Mater Hospital has resulted in improvement across the seven key performance indicators. Patients are partners in this pathway. Their partnership in pressure area management, bone health management, falls prevention and mobilisation are central to achieving a successful outcome for such an injury.

### MMUH VANISH2

MMUH VANISH2 project won the Healthcare Initiative - Patient Safety Award at the 2022 Irish Healthcare Centre Awards. The VANISH2 project is a PAMO, QPS and Nursing quality improvement initiative aiming to improve drug chart prescribing.

### Discharge to Assess Model of Care

Discharge to Assess Model of Care was shortlisted for Health Service Excellence Awards in 2022. Home Care Packages (HCPs) are a vital support for many patients being discharged from hospital. For some, an admission marks a significant change in function and for others it is a progressive increase in dependence which requires formal supports to enable a person to remain at home. The 2022 service built on the 2021 service, in which the Mater Social Work Department facilitated 899 HCP applications, 90% coming from within CHO9. An approximate total of 9770 hours were required at a cost of over €14 million.

### Clinigen European Awards

In 2022, Ms L. Dillon, was awarded the Extra Mile Award for her role in establishing the MMUH FIT pharmacist role.

Additionally Prof. P Ging was awarded the Hospital Pharmacist of the Year Award recognising her work with Heart and Lung transplant patients.

### Thrombosis Ireland VTE Scientific Advancement Award

Ms M O'Connor, Infectious Diseases (ID) Pharmacy Lead and the ID Pharmacy team won the Thrombosis Ireland VTE Scientific Advancement Award 2022 for their work relating to the RAPID randomised clinical trial.

### EuroSafe Imaging 5-star Premium Rating

The Mater was awarded the EuroSafe Imaging 5-star premium rating. This involved a multidisciplinary effort from staff across key disciplines, notably Radiographers, Medical Physicists, and Radiologists. This award is a testament to the department's commitment to promoting a strong radiation safety culture. This culture expands into the excellent care provided by all staff members including Nurses, HCAs, Radiography Assistants, Portering staff, and the exceptional administration team. The Mater Hospital is the first and only centre (currently) in Ireland to receive this 5-star premium rating.





## Improving Access to Quality Care Continued

### Quality and Patient Safety Directorate

The Quality and Patient Safety Directorate support the delivery of patient care that is safe, efficient, timely and equitable.

The Mater has a robust patient safety governance structure underpinned by a number of committees focused on improving patient safety events. These include committees for:

- Falls Prevention
- Delirium
- Drug Safety
- Infection Control
- Deteriorating Patient Improvement
- Sepsis c
- Clinical Audit and Effectiveness
- End of Life Care
- Nutrition
- Procedural Sedation
- Resuscitation
- VTE

### Hospital Patient Safety Indicators

The Mater reports and publishes the Hospital Patient Safety Indicators and these are monitored by senior management of both the hospital and hospital group on a monthly basis as a key component of clinical governance. The hospital's published performance against these indicators are available on the HSE website.

### Nursing and Midwifery Quality Care Metrics Acute Care and Operating Theatre

Throughout 2022 the Mater Nursing Quality department continued implementing the Nursing and Midwifery Quality Care Metrics Acute Care and Operating Theatre and **on average 150 patients' clinical documentation was audited bi-monthly**. Quality Care-Metrics provide nurses with a framework and a measurement tool to engage in continuous quality improvement at the point of care delivery in order to positively influence the care experience for patients, clients and families. Quality Care-Metrics provide an assurance mechanism that captures the contribution and performance of nurses in a way that is transparent and focuses on improvement.

### Infection Control and Protection

In 2022 an ease in intensity and impact of the COVID-19 Pandemic was noted globally but hospitals continued to come under pressure with cases and outbreaks. While the severity of clinical illness was reduced by vaccination and universal testing strategies were appropriately retired, not all patients were protected and spread within the Mater continued to have an impact on hospital and IPC activities. There were 483 cases of healthcare associated COVID-19 and 29 ward outbreaks in 2022.

### Healthcare Associated Infections

The Mater is continually looking to improve its performance in the prevention of Healthcare Associated Infections.

In 2022 the Mater initiated the recruitment of an IV Cannulation, Audit and Training Team (IVCAT). The HSE through the Antimicrobial Resistance and Infection Control (AMRIC) group funded a nursing resource who will be recruited to improve the management of intravenous lines and prevent healthcare associated Staphylococcus aureus (S.aureus) bloodstream infection. This team will commence its service in early 2023.

Hand hygiene compliance is audited regularly, using the World Health Organisation's five moments for hand hygiene, to identify areas of practice that could be improved. **348 clinical areas were audited in 2022 up 16% from 2021 and 4,159 observations were made.**

### Mater Falls Prevention Committee

In 2022 under the stewardship of the Mater Falls Prevention Committee the Mater continued to deliver on a quality improvement plan which included developing an audit tool to monitor compliance with our bedrails policy and implementing a Post Fall Medical Review. Staff, patient and family education remains central to the falls prevention service in the Mater hospital.

**2022 saw an overall decrease in the total number of inpatient falls and no change in the total number of Category 1 falls i.e. falls causing major harm in 2022.** The demographics of patients experiencing a Category 1 fall demonstrates an increase in the under 64 and over 90 age groups, highlighting that the numbers of frail young are increasing and the numbers of the frail elderly population are growing.

### Antimicrobial Stewardship Programme

Antimicrobial stewardship (AMS) is the coordinated approach by the AMS Team at the Mater to promote the judicious and safe use of antimicrobials.

The AMS goal is to enhance patient care and reduce the risk of emergent antimicrobial resistance. The programme consists of regular consultant-led ward rounds in high antibiotic-use wards, education, audit with feedback and compilation of a comprehensive set of prescribing guidelines. Antimicrobial consumption trends are monitored regularly within the Mater. **An AMS team Point Prevalence Audit in October 2022 identified the rate of appropriate antimicrobial prescribing at a re-assuring rate of 95%.**

### The Deteriorating Patient

Commitment 4 of The Patient Safety Strategy 2019-2024 (HSE 2019), under Reducing Common Causes of Harm, is the Recognition and Response to Clinically Deteriorating Patients. The HSE National Deteriorating Patient Recognition and Response Programme was established to ensure the implementation of quality healthcare for the recognition and response to a deteriorating patient. The IEHG is currently collecting and examining baseline data from each hospital site to identify the local structures and processes that are in place to support the deteriorating patient programme. The hospital was audited by IEHG in November 2022 and the final report is awaited, which will include a series of recommendations to support compliance.

### Medication Variances

There was an increase in medication variances reported in 2022, a positive reflection on a safety culture. 1424 total Medication Variances reported by the Mater Staff and 110 Medication Variances reported resulting in patient harm. Reporting incidents / near misses enables the hospital to prevent further errors by, learning from mistakes, focusing on education and training, improving hospital policies, procedures and guidelines, identifying research / audit opportunities and implementing medication safety initiatives.

### Preventing Wrong Route Errors

Two initiatives were introduced in 2022 to build on current Mater practices to prevent wrong route errors.

**NRFit®** are non-leur devices for neuraxial drug administration including intrathecal chemotherapy (ITC). NRFit® devices are incompatible with standard leur connections, reducing the risk of inadvertent intrathecal administration of intravenous drugs and vice versa. NRFit® technology for ITC was introduced in the Mater in July 2022. The use of NRFit® technology for ITC aligns with National Cancer Control Programme guidance. A Policy for Prescribing, Delivery, Storage and Administration of Intrathecal Chemotherapy to Adult Patients was developed to support safer drug administration practice. A register is published detailing staff who are trained and competent in accordance with the policy.

**ENFit** is a global design standard for enteral tube devices aimed at preventing tube device misconnections, e.g. administration of enteral feed / oral liquids via an intravenous line, and has been in use in the Mater. ENFit bottle adaptors were introduced for use with oral controlled drug (MDA) liquids in November 2022.

### National Venous Thrombosis Embolism (VTE) Programme

The hospital has engaged with the national Venous Thrombosis Embolism (VTE) Programme, and developed a hospital specific VTE QI project that commenced in 2019/2020. The aim was to reduce the cases of preventable hospital acquired VTE. The current interventions include staff education in three areas:

- Documentation of VTE risk assessment
- Appropriate prescribing of VTE prophylaxis
- Education of staff

Interventions and outcome are monitored monthly. In 2022, the rates preventable hospital acquired VTE continue to improve.



## Improving Access to Quality Care Continued

### Chief Resident in Quality and Patient Safety

Commencing in early 2022, the Chief Resident programme was established at the Pillar Centre for Transformative Healthcare. This is the first Chief Resident programme of its kind in Ireland. Building on the hospital's departmental morbidity and mortality (M&M) culture and with the help of the new resident in Quality and Patient Safety a hospital wide medical M&M meeting was initiated drawing influence from the American model. This meeting focuses on the learnings from morbidity and mortality events within the Mater, promoting a non-judgemental and just culture while providing a safe platform for medical trainees to express their thoughts and experiences. This meeting crucially focuses on what can be done better and helps to drive quality improvement initiatives.

### RLDatix- DCIQ

RLDatix-DCIQ is a transformative quality and patient safety information technology tool that will help to link all the aspects of quality and patient safety on one platform.

During 2022 the QPS department designed and customised a number of modules within the DCIQ platform to increase insights into quality and patient safety within the organisation. These modules include patient feedback, claims and risk registers. Directorate and Corporate risks are visible to all end users enhancing transparency and cross directorate learning throughout the hospital.

### Framework for Safe Nurse Staffing and Skill Mix

In June 2022 Minister Donnelly visited the hospital to launch the framework for safe nurse staffing and skill mix in Adult Emergency Care Setting in Ireland. In 2022 the framework was rolled to four pilot wards in the hospital - two surgical and two medical wards.



### Mater Hospice Friendly Hospitals Programme

The Hospice friendly Hospitals Programme seeks to ensure that patients who have a life-limiting illness or those who die suddenly, and their families, have a seamless experience of care in hospital, provided by well-coordinated and well-informed staff.

1,256 people attended various levels of training in the Mater related to the provision of care at end of life in 2022. This training consisted of sessions on 'Delivering Bad News' and the day long 'Final Journeys' programme.

The Survey of Bereaved Relatives VOICES MaJam report endorsed the importance of the hospitals' Quality Care Indicator of ensuring more people are cared for at end of life in a single room. **In 2022 90% of inpatients were cared for in a single room at the time of their death.**

The Mater's family friendly facilities, including family rooms and two comfort care suites, contribute to the holistic care and support the hospital provides and have been strongly endorsed by bereaved relatives to enhance the quality of care at end of life.

**In 2022, 23% of people who died in a single room, died in one of the 2 comfort care suites, significantly enhancing the experience of care for both patients and their family members.**

### Open Disclosure

The Mater is committed to providing an environment in which all staff are able and encouraged to recognise and report errors or mistakes and are supported through the open disclosure process to discuss these directly with the patients affected. Where harm occurs the Mater Hospital is committed to learning and improving by reviewing the event guided by the national incident management framework.



### Clinical Audit

Clinical audit is a core component of the Clinical Improvement Journey for the hospital. As a key element of the quality improvement cycle, it measures the effectiveness of healthcare against proven standards of quality and identifies actions required to bring practice in line with these standards to improve the quality of care and health outcomes.

### National Clinical Audit

The Mater is part of wider national initiatives to improve the quality of care delivered and is part of several large scale national clinical audits in the following areas:

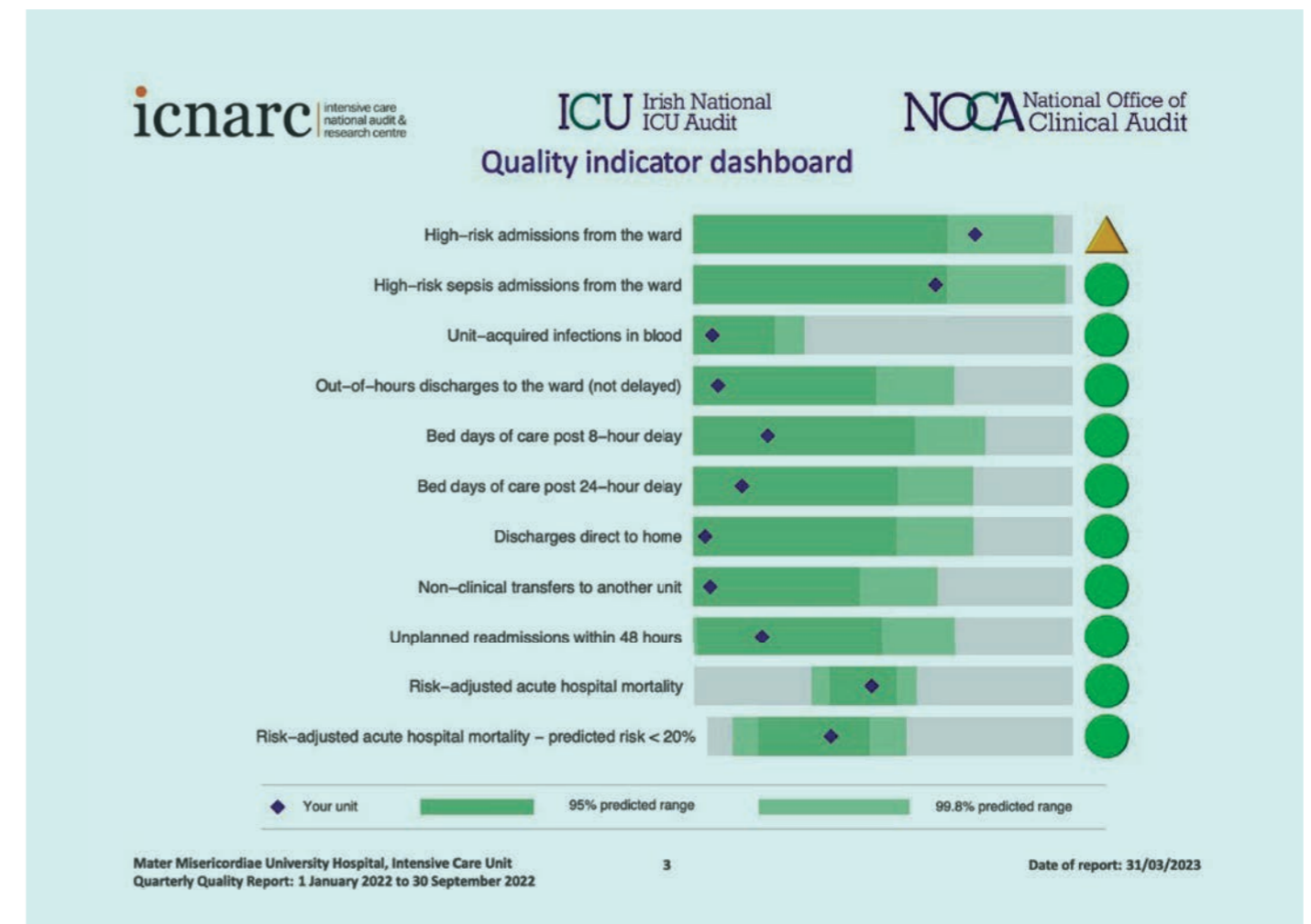
- National ICU Audit
- National Audit of Hospital Mortality
- Irish Heart Attack Audit
- Irish Hip Fracture Database
- National Stroke Register

- Major Trauma Audit (TARN)
- National Quality Improvement Programmes - Endoscopy, Histology and Radiology

### National ICU Audit

The Mater's Department of Critical Care Medicine works with NOCA, the Irish National ICU Audit, and the Intensive Care Audit and Research Centre UK to provide case-mix adjusted data for a suite of critical care metrics comparing our outcomes with those of similar case-mix intensive care and high dependency units.

A summary of these metrics is provided in the quality indicator dashboard below for Q3 2022. The dashboard also reflects the complexity of patients attending the Critical Care services at the Mater in 2022.





## Improving Access to Quality Care Continued

### Internal Clinical Audit

The Mater Quality and Safety Directorate co-ordinates internal audits across the hospital. These clinical audits may take place at any point of the patient journey, before, during or after admission, or where outpatient assessment or treatment is carried out.

In 2022, 105 Internal Clinical Audits were initiated and 62 Clinical Audits were completed. In July 2022 nursing recruited a dedicated clinical audit facilitator to support the Nurse Lead for Quality in developing a nursing audit strategy to ensure the delivery of safe, person centred, timely and evidence-based care across clinical areas.

### Clinical Audit Week 2022

Clinical Audit Week in June 2022 received numerous high-quality submissions of projects spanning all departments in the hospital.

The Mater Champions for Quality Best QI Competition funded two separate best prizes and two runner-up prizes in Clinical Audit and Quality Improvement.

The Best Poster of the competition was selected through public voting.

All Mater staff were invited to vote for the best poster during the showcase. The winner was Ms Megan Redmond who presented the poster on medication reconciliation “Know Check Ask”.



DR ANA CLARKE, CHAIR OF THE CAE COMMITTEE, DR BRIAN MCCULLAGH, QPC CLINICAL DIRECTOR AND DR CIARA KILCOYNE

### Best Clinical Audit Prize

**“An Audit of Renal Ultrasounds Ordered for New Referrals to Nephrology Outpatients”**

Dr Varisha Shahzad, Dr Katherine McDonald and Dr Lynn Redahan

### Clinical Audit Runner-Up

**“What are we doing? Audit of the quality of documentation of patient’s resuscitation status and treatment escalation plans”**

Dr Hannah Smyth, Dr Eoin O’Connor, Dr Michael Feeley, Dr Rebecca Williams, Dr Caitriona Quinn, Dr Anna Boland, Professor Joe Duggan, and Prof Lorraine Kyne

### Best Quality Improvement Prize

**“A remote monitoring project for post lung transplant recipients using a patientMpower digital mobile application”**

Ms Lourdu Anitha Anthonycruze, Ms Sara Winward, Ms Patricia Ging, and Dr Michelle Murray

### Quality Improvement Runner-Up

**“A Re-audit of Insulin Inclusion on Discharge Prescriptions for Inpatients Referred to the Insulin Management Round”**

Dr Ciara Kilcoyne, Dr David Fennell, and Dr Siobhán E McQuaid

## “Our plans to expand, digitise and modernise the hospital in the near future will significantly improve the patient experience”

Alan Sharp CEO

### National Patient Experience Survey 2022

The results of the 2022 National Patient Experience Survey were launched in mid-December 2022. The majority of participants from the Mater reported positive experiences in hospital. **88% of participants said they had ‘good’ or ‘very good’ overall experiences, compared with 82% nationally.** The Mater hospital achieved scores that were above the national average for the ‘admissions’ and ‘examinations, diagnosis and treatment’ stages of care and for ‘overall experience’.

Three areas of good experience were identified. These were areas that were related to participants’ overall experiences and where participants gave significantly above-average ratings. For example:

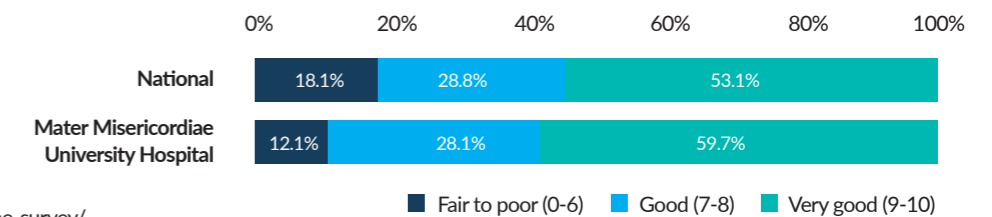
**89% of patients said that they were treated with respect and dignity in the emergency department and in the wider hospital.**

**In addition, 93% of people said they were always given enough privacy when being examined or treated.**

**And 82% of people said that the room or ward they were in was very clean.**

Areas identified as needing improvement include hospital food and information on discharge or transfer. The survey results were used to inform the development of quality improvement plans to include “The Good Discharge Summary”, “Hospital Food” and “Patient Feedback”.

### Overall experience of care National Patient Experience Survey 2022



<https://yourexperience.ie/inpatient/about-the-survey/>

**“Staff pulled out all the stops to ensure all required tests and examinations were completed to ensure I could be discharged on Friday. I was delighted not to have to stay in hospital over the weekend”**

Patient Experience Survey 2022



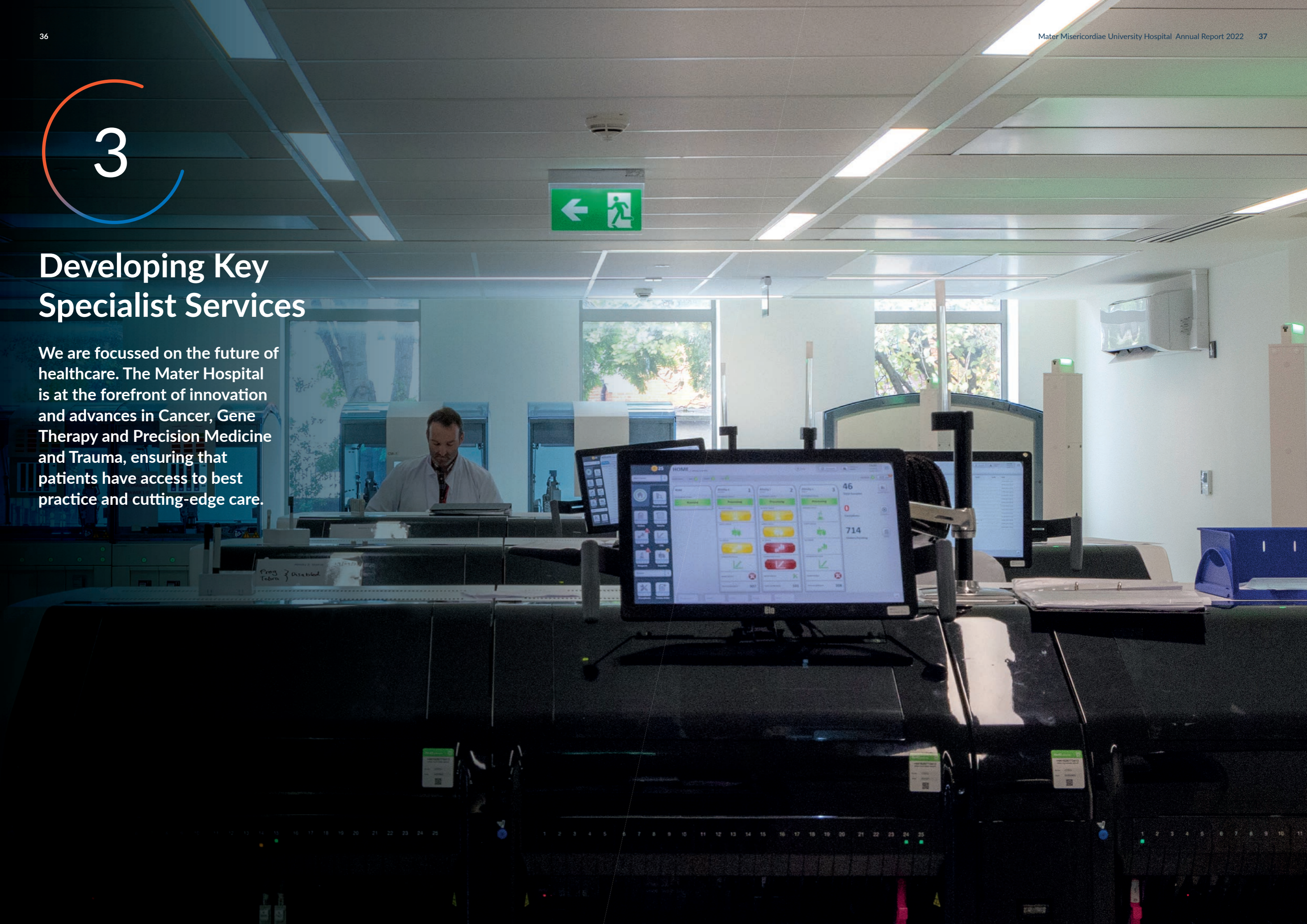
**Supporting our core principles to ensure quality and the patient experience is at the centre of everything we do, to improve access to care, to integrate more with the community and to keep the patient closer to the home; and delivering on our strategic priorities to proactively address waiting lists and to right-size, digitise and modernise the hospital.**



# 3

## Developing Key Specialist Services

We are focussed on the future of healthcare. The Mater Hospital is at the forefront of innovation and advances in Cancer, Gene Therapy and Precision Medicine and Trauma, ensuring that patients have access to best practice and cutting-edge care.





## Developing Key Specialist Services

### Major Trauma Centre

**Developing and investing in key specialist clinical services is a strategic priority for the Mater and will ensure the Mater is prepared for the future and can deliver the healthcare of tomorrow.**

During 2022, the Mater Hospital continued its planning for the organisation to become the Major Trauma Centre (MTC) for the Central Trauma Network (CTN). A key milestone on this journey was the agreement to accept secondary transfers on an incremental basis in 2023.

A series of 13 workshops facilitated by Mater Transformation, together with the Strategic Projects team, helped to map out the ideal future state for the Mater MTC including patient pathways, roles and responsibilities of all personnel and newly designed MTC documentation. Planning for future care was informed by a Trauma Point Prevalence Study completed in June 2022 and was further enhanced by a multi-specialty interdisciplinary **“Roadside to Theatre” Major Trauma Simulation** event in June attended by over 100 participants.

In October, the Interim Phase of the MTC project was launched in the Pillar Room. Following appointment of key posts, a new model of care was developed including standardised pathways of care for trauma patients. These new procedures and protocols are now in use for the care of patients from our existing catchment area. Additional, electronic solutions for flagging Major Trauma patients have been developed in conjunction with the IMS Department, helping both service delivery and future MTC planning.

The new Trauma Service team provides input, advice and support to admitting teams on the management of Major Trauma patients. This team includes many new roles, for example Trauma Resuscitation and Trauma Service Advanced Nurse Practitioners (ANPs), a Trauma Mental Health ANP, Trauma Service Consultants and Trauma Health and Social Care Professional Leads. In addition, a new Trauma Rehabilitation team and service have been established.

The Mater now in 2023, (at time of publishing this report) is accepting secondary transfers and has commenced planning for MTC Phase 2.

### Trauma Education Research and Innovation

Throughout 2022, the development of Major Trauma Centre services at the Mater were supported by a series of training and education sessions.

A dedicated workstream for Trauma Training, Education, Research and Innovation (TERI) has now been established to oversee these activities going forward.



**Demonstrating quality, innovation, and leadership in service delivery; preparing for the future of healthcare delivery.**



### European Trauma Course

In March 2022, supported by IEHG and the National Office for Trauma Services, The Pillar Centre for Transformative Healthcare at the Mater Hospital hosted the European Trauma Course (ETC); an internationally recognised apex-level course for Trauma Care Providers.

This was the first time this course was held in the Republic of Ireland. This was an innovative three-day event providing high quality evidence-based training to healthcare professionals involved in the care of major trauma patients.

More than 30 trauma simulations with debrief sessions were taught by a team of expert faculty. The Mater Hospital welcomed faculty and candidates from across Ireland and the UK to this inaugural event. This has led to the Mater now being recognised as a stand-alone site for ETC.

### New 3D Navigation Tool - ‘Magic Leap’

The spine team at the Mater were delighted to be the first in Ireland to have access to cutting edge mixed reality technology to augment the existing spinal navigation and robotic technology. This technology is currently used as a teaching and planning tool. The CT and MRI images are merged and a 3D model is visually created. Using headsets the users can view the spinal column and associated pathology in 3 dimensions aiding visualisation, teaching and surgical planning. In the future this technology will be integrated into the operating theatre keeping the Mater at the cutting edge of spine surgical care.





## Developing Key Specialist Services Continued

### Cancer Services

Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths worldwide in 2020 nearly one in 6 deaths. The number of people being diagnosed with cancer by 2040 in EU and EFTA countries is estimated to increase by 21% compared to 2020 (WHO 2022). There are also marked differences in the impact population ageing will have on different European countries, which is tied to the differences in the projected speed of demographic change between countries. This ranges from an estimated increase in new cancer cases of 2% in Bulgaria, up to 65% in Ireland (EU SCIENCE HUB 2020).

To meet the rising demand, the Mater is focused on improving and expanding rapid access to cancer care, surgical capacity, medical oncology, radiation oncology, survivorship and palliative care.

Key to the future is embracing innovative new treatments and new ways of working.

#### Lutetium

Mater Radiology introduced a Prostate Cancer Lu177-PSMA Radioligand and Therapy Service in Q4 2022. The Mater are the first centre nationally to provide this new radio-ligand therapy service. The first two patients were treated in December 2022 in the Mater, the first in Ireland. This was a compassionate access programme, led by Prof Martin O'Connell, and the nuclear medicine department.

Metastatic castration-resistant prostate cancer remains fatal despite recent advances. There is growing evidence for the use of this new novel therapy in the earlier stages of prostate cancer, and the Mater hopes to participate in the national programme, once the NCCP approval process is completed.



PROF JOHN MCCAFFREY AND MR GREG NASON

### Advanced Cancer Care

In 2022 the Mater formally launched its Advanced Cancer Service. At the Mater, surgical oncology expertise is offered to patients with established programmes of resection of all sites of extracranial metastatic disease, as well as pushing the boundaries for resecting advanced cancers in every surgical oncology specialty.

Over 30% of the Mater's cancer surgeries are performed with the involvement of consultant surgeons from multiple specialties - which is quantitatively an indication of the complexity of the surgery types occurring in the institution, but also qualitatively a reflection of the unique collaborative culture within the organisation.

Over 20% of cancer surgeries in the Mater are on patients with metastatic disease, which comprises 30% of the national caseload of these patients receiving operations (from NQAIS data). These figures are reflective of the ethos and appetite of the medical and surgical oncologists in the hospital, who endeavour to challenge current clinical dogma and expand management options for patient care.

In the last decade, the Mater has championed and expanded the peritoneal cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (HIPEC) service with great success. Another "national first" will be the imminent introduction of the Hepatic Artery Infusion Pump (HAIP) to administer focal chemotherapy to the liver in those with metastatic cancer.



**Mater Hospital** | Advanced Cancer Care

#### Isatuximab-RVD Clinical Trial

Prof. Peter O'Gorman from the Mater Hospital and Prof. Paul Richardson (Dana Farber Cancer Institute, Boston, USA) are the principal investigators of this multi-centre, single-arm, open-label, Phase II Immunotherapy study in patients with newly diagnosed multiple myeloma eligible for high dose therapy and autologous stem cell transplant.

This is a significant study with a budget of \$3.1M.

The trial initiated in January 2022. The total patient accrual target between Europe and the USA is 100 patients. The total patient accrual so far is 53 patients.

### START

The Mater Hospital will open a new centre for oncology early phase clinical trials. This centre will be a collaborative effort with the US-based START Centre for Cancer Care (San Antonio, Texas) and the Hospital's academic partner UCD, and will be Ireland's first dedicated early-phase clinical research facility.

Plans for the centre are at an advanced stage and it is expected that the Mater will open its 1st Phase 1 trial in START Dublin by the end of 2023 or early 2024. The centre will offer patients in Ireland access to new and emerging cancer drugs and increase treatment options for patients with advanced cancer.

### Robotic Surgery

Building Robotic surgery capability is a priority for the hospital. Robotic surgery significantly shortens recovery time for the patient and facilitates surgeries where access is difficult. The Robotic surgery program continued in 2022 for predominantly oncology surgery cases, a significant achievement when many robotic surgery programs in public sector hospitals in Ireland / UK were unable to staff and maintain robotic surgery programs.



DR AUSTIN DUFFY

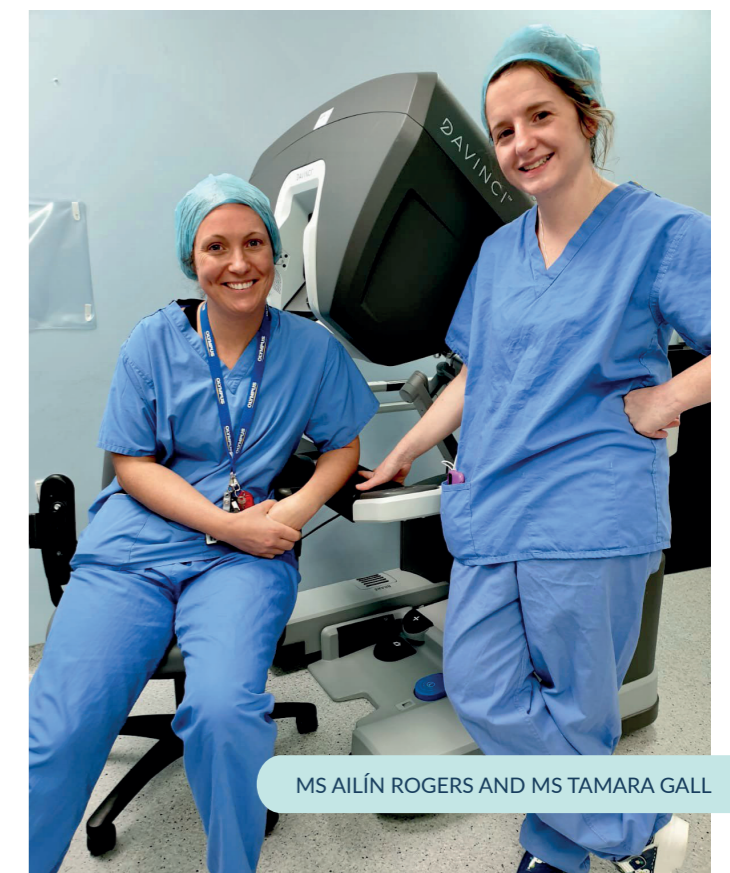
### The Oncology and Haematology Clinical Trials Research Unit

The Oncology and Haematology Clinical Trials Research Unit at The Mater Hospital is part of the UCD Cancer Trials Cluster along with St Vincent's Hospital.

The goal of the UCD Cancer Trial Cluster is to build on and develop further the already well-established Cancer Clinical Trial Units at both hospitals. It is well documented that patients who have access to Clinical Trials have better outcomes and the CTRU aims to widen the portfolio of clinical trials offered to the Cancer patients attending the Mater.

A HRB Grant awarded in 2021 was effective from January 2022 with the funding running for 5 years.

In 2022 there were 12 open recruiting trials and 6 newly opened studies across Lymphoma, Thrombosis, Myeloma, Lung, Prostate, Ovarian, Breast, Colorectal, Melanoma and Renal with a total of 158 patient accruals (131 Translational and 27 Interventional).



MS AILÍN ROGERS AND MS TAMARA GALL



## Developing Key Specialist Services Continued

### Gene Therapy and Precision Medicine

#### Next Generation Sequencing (NGS) Laboratory

The Next Generation Sequencing (NGS) Laboratory began offering INAB-accredited diagnostic genetic testing for Cardiology patients seen in the Mater Hospital in early 2022.

During 2022, the NGS laboratory has expanded the capabilities to provision of the National Cardio genetics service under the Laboratory and Clinical leadership of Prof Peter O’Gorman, Prof Joseph Galvin and Dr James O’Byrne. This is the first national service of its kind and there has already been significant use of this service from hospitals around the country.

The scientific team led by Dr Sinead Howard, Dr Aislinn Cooper and Dr Aidrian Dockery are working persistently to expand the range of genetic tests accessible for other disciplines with patients with inherited disease. These achievements reflect the drive of the Precision Medicine Strategy of the Mater Hospital. **NGS Laboratory tests per year have increased by 800.**

#### European Research Network: ERN GUARD-Heart

In 2022, the Mater Inherited Cardiac Conditions clinic at the Mater Heart House was designated as an ERN site for rare and complex genetic diseases of the heart. ERNs facilitate access to expert diagnosis and treatment across the EU, and the Mater is the first location to be approved as an advanced cardiac centre in this network.

#### First European Society of Human Genetics on Precision Medicine

The first European Society of Human Genetics Course on Precision Medicine: A Focus on Clinical Utility was held between April 25th-27th 2022 by the National Centre of Inherited Metabolic Disorders the Mater with over 400 delegates virtually attending from over 60 countries, including 52 delegates who received a scholarship.

The primary aim of this course was to help train the next generation of clinicians, other healthcare professionals and scientists/academics to be able to translate precision medicine into effective clinical benefit.

The next iteration of the course in 2025 will be a joint initiative between the ESHG, the Canadian College of Medical Genetics (CCMG) society and Human Genetic Society of Australasia (HGSA).

### European Society Human Genetics (ESHG) Course on Precision Medicine receives High Commendation at the Irish Healthcare awards in December 2022 in the Educational Meeting of the Year category



#### MMUH Ophthalmology Viral Vector Service

The Pharmacy and Medication Optimisation (PAMO) Directorate, in liaison with Prof. D. Keegan, Consultant Ophthalmologist, prepared for a MMUH ophthalmology viral vector service. Pharmacy considerations included logistics for gene therapy handling, storage and compounding, staff training, funding and reimbursement and staff resources.

PAMO staff across three services have completed specific training on viral vector handling and in preparation for the introduction of the ophthalmology viral vector treatment, the Pharmacy developed a Policy on Genetically Modified Organism (GMO) Drug Handling, Waste, Spillage and Accidental Exposure. The policy outlines the safety procedures and precautions for handling GMO drugs, dealing with GMO drug waste or spillage, cleaning, decontaminating and disposing of the GMO drug and materials the drug has come into contact with.

The Environmental Protection Agency (EPA) visited the Mater in October, 2022 to review proposed processes for GMO handling and approved the pharmacy developed processes.

#### European Association of Hospital Pharmacists (EAHP) Special Interest Group Recombinant Adeno-Associated Viral Vector (rAAV) Gene Therapy

Ms Grainne Johnston, Aseptic Compounding Service Manager, has been appointed as the Irish representative on the EAHP Special Interest Group for rAAV Gene Therapy.

The group is developing the European policy for supply, handling, preparation, prescribing and administration of rAAV gene therapies. Ms Johnston’s inclusion on the group will support the Mater’s preparation and implementation of gene therapy treatment modalities.

#### Additional Genetic Services in 2022

##### National Centre of Inherited Metabolic Disorders (NCIMD)

In late 2022 the National Centre of Inherited Metabolic Disorders MMUH commenced a number of Precision Genomic Medicine Clinics where patients are considered for a number of recently licenced genotype-specific treatments.

##### National Pulmonary Hypertension Unit (NPHU)

The National Pulmonary Hypertension Unit (NPHU) recognised an unmet need for patients regarding availability of genetic testing for patients with Pulmonary Hypertension (PH).

Following a period of consultation with colleagues in the NGS Lab and the Cardiology Family Screening Services at the Mater, a PH Panel was developed and access to a newly appointed Genetic Counsellor agreed.

This is the first of its kind in Ireland for Pulmonary Hypertension (PH) and it is hoped to fully implement this service going forward into 2023.

**Supporting our strategic priorities to develop key specialist services and capabilities ensuring the hospital can continue to provide leading complex acute care to its patients.**



# 4

## Building further our Academic, Research and Innovation Programmes

“I am delighted to have the opportunity to work in an environment that is so rich in translational research and academia and to work alongside colleagues who focus on ensuring that new and innovative approaches to patient care are researched and applied and that knowledge is shared.”





## Building further our Academic, Research and Innovation Programmes

We are committed to creating an environment that is rich in education, translational research, knowledge transfer, innovation, and strong academic and industry partnerships.

Approx 343 research articles listed	Approx 410 NCHD posts throughout 2022	465 courses hosted by the Pillar Centre for Transformation Health
527 students trained by Mater Lean Academy	36 critical care trained nurses trained (an increase of 50% nurses compared to 2021)	11 nurses receive their Fellow by Examination of the Faculty of Nursing and Midwifery (FFNMRC SI).
Highest number of CPD programmes delivered in nursing in 2022 in comparison to previous years (120 nurses completed CPD programmes)	2 new bespoke programmes developed and academically approved by UCD at level 8/10 ECTs in the area of Infectious Diseases and Acute Stroke Nursing	National Fiberoptic Endoscopic Evaluation of Swallowing (FEES) training course hosted by Mater Speech and Language Therapy

### The Pillar Centre for Transformative Healthcare

In 2022 The Pillar Centre for Transformative Healthcare continued to support and enhance the activities of the DERI Directorate (Directorate for Education, Research and Innovation) as well as the education, research and innovation agenda of the Mater Hospital.

The Pillar Centre in 2022 hosted 465 courses, meetings, conferences and events. These included:

- Irish Association for Simulation Conference (IAS), hosted for the first time at a clinical site
- European Trauma Course
- European Society of Human Genetics Course on Precision Medicine
- UCD Surgical Society's Annual Conference
- National Neuroinflammatory Forum

### Establishing a Clinical Simulation Facility (CSF) in the Mater

Medical Simulation is the modern-day methodology for training healthcare professionals through advanced educational technology. Current evidence shows high-fidelity simulation leads to enhanced teamwork and crisis management skills of healthcare providers as well as improved patient safety.

In 2022 a project scope for the development of a clinical simulation facility was completed with plans finalised to develop the training facility in the two octagonal theatres at the Pillar Centre on level 3 of the Misericordiae Building.



"It was a joy to welcome our faculty to the beauty of the Pillar Centre and they were all deeply impressed with the venue and with the quality of our first hybrid event. So many of our international faculty reported to us that this was the best conference and indeed the best hybrid experience that they had ever experienced. What a wonderful success- thank you for helping us to make this happen! We were so incredibly proud."

VTE 2022  
Prof. Fionnuala Ní Ainle





## Building further our Academic, Research and Innovation Programmes Continued

### Mater Living Lab

In 2022 the Pillar Centre partnered with the HSE Digital Transformation and Open Innovation team to create the Mater Living Lab, a user-centered, open innovation ecosystem/environment, integrating concurrent research and innovation processes within a public-private-people partnership context.

The Living Lab network manages a portfolio of over 50 promising digital technologies, solutions and projects that have the potential for roll out to other hospitals within the health system.

### EU funded Horizon 2022 study

**Microb-AI-ome (Federated artificial intelligence for privacy preserving international stratification of colorectal cancer patients).** The goal of this study is to increase colorectal cancer screening specificity to reduce the false positive rate in order to avoid non-necessary, unpleasant and invasive colonoscopies for patients.

This EU funded Horizon 2022 study is a multicentre collaboration between Bowel Screen Ireland and University College Cork Microbiome Research Centre from Ireland with University of Hamburg (Artificial Intelligence and Cyber Security) and Clinical and Research Institutes in France, Austria and Romania.



The Directorate of Education Research and Innovation (DERI) at the Pillar Centre Mater will manage and administer the grant for the three Irish Clinical Centres (MMUH, SVUH and the Mercy Hospital in Cork) for this study.

### Clinical Research Support Office

The establishment of a Clinical Research Support Office (CRSO) within the Mater is underway. This office, set to operate before the end of 2023, is envisioned to bolster the hospital's research capabilities. Equipped with financial, contractual, data protection, and administrative expertise, the CRSO aims to enhance the clinical research environment for our faculty.

This CSRO will empower our hospital to engage more effectively in clinical research partnerships, particularly in EU studies, UCD collaborations, and CRSI initiatives.

The CRSO's comprehensive support will streamline processes, ensure governance compliance, and enable greater in-house contributions to clinical research efforts, fostering future growth and potential. In 2022 the hospital recruited personnel to bring in the relevant expertise to build the capability of the CRSO.

### The Mater Med Tech Incubator Hub

In 2022 the Pillar Centre allocated space to develop a Medtech Incubator Hub on campus. To date a number of potentially viable commercial ideas have been developed by Mater staff. The Mater Medtech Incubator Hub will allow the hospital to capitalise on staff initiative in developing and retaining IP, in addition to supporting grant applications for medtech innovation developments.

The first team to benefit from the Hub are *The Answers for Cancers* team, Anne-Marie Fay and Michelle Matthews, two oncology research nurses that have run a successful podcast since January 2021 and are now developing a patient app to help answer questions cancer patients might have about their diagnosis and treatment.

### National Isolation Unit Simulation Training Exercise

In June 2022, The Mater Hospital staged a large-scale training exercise involving a highly infectious diseases patient. This involved a transfer by air ambulance from Cork University Hospital to the Mater.

As part of this training event, staff dressed in personal protection equipment appropriate to protect them from a highly infectious disease. This was for training purposes only. The exercise was aimed at ensuring the team at the Mater and colleagues are equipped to deal with patients suspected of having a highly infectious disease. As the Mater is home to the National Isolation Unit, such simulations are an important part of the work to prepare the Mater's dedicated staff should such events occur in the future.



### Magnet4Europe

This initiative aims to reshape the hospitals work environment to improve the mental health and wellbeing of nurses and clinicians, consequently improving patient care and safety. Mental health and wellbeing are among the highest priorities of the public health agenda in the European Union (EU).

Magnet4Europe is the largest research project of its kind, which will run over four years and involves 60 hospitals over five European countries (Ireland, Belgium, England, Germany, and Sweden). Each individual hospital will be twinned with an established Magnet® Hospital in the US. The Mater Hospital has been twinned with Penn Presbyterian Medical Centre in Pennsylvania.

The objective of the study is to implement and evaluate the effectiveness of the Magnet Model® in achieving improved clinical work environments, staff mental health and wellbeing, productivity, patient outcomes and cost effectiveness. This study offers staff the opportunity to get involved to facilitate change and implement strategies that will ultimately improve wellbeing in the healthcare work environment.

**In 2022 the Mater participated in monthly online collaborative learnings with participating hospitals across Europe and USA and three Clinical Nurse Managers attended leadership training on Applying Magnet to your Service Line.**





## Building further our Academic, Research and Innovation Programmes Continued

### Digital Surgery

The Digital Surgery Unit was established at the Mater in July 2019 to facilitate engagement in impactful applied research in surgical technologies in response to global healthcare challenges including cancer care and, as events unfolded, COVID-19.

Key activities of the Unit in 2022 involved surgical device development and testing with industry in the following:

- Smoke evac and insufflation technologies
- Implant for bowel anastomosis
- Tissue device containment for laparoscopic surgery

The Unit was also involved in the trialling of new technologies in theatre:

- Smart personalised insufflation systems (Ev15, Palliare),
- Digital 3D modelling/reconstruction for pre-op planning and intra-op reference (Visible Patient) mixed reality technology (Hololens, Microsoft)
- Smart glasses and remote access solutions (Rods and Cones)
- Handheld surgical robotic devices and modular robotic- assisted surgery system (Handx)

The Unit won a number of awards in 2022, including awards for:

- The Future of Colorectal Cancer Diagnosis and Treatment: Combining Tissue Responsive Probes, AI, and Machine Learning to Transform Medical Care; funded by Enterprise Ireland
- PORSAV - Controlling viral aerosols in COVID-19 and beyond; funded by Horizon 2020
- DALLAS EP - DigitAL coLorectal cAnCer Surgery Engagement Process; funded by the Irish Cancer Society
- CLASSICA - Validating AI in classifying cancer in real-time surgery; funded by Horizon Europe



### Mater Transformation

Mater Transformation continues to lead a significant number of transformation projects across the hospital and community and to deliver Lean Training to staff and others across the healthcare system in Ireland.

In 2022, Mater Transformation engaged in more than 50 improvement interventions and projects (some of which are detailed in section 2 of this report). In addition, across Mater Lean Academy's Process Improvement in Health Systems Programmes:

- 444 White Belts (Fundamentals of Lean) were awarded.**
- 78 Green Belts (Professional Cert) were awarded.**
- 5 Black Belts (Graduate Cert) were awarded.**

**A total of 527 students were trained generating an income of €96,211 for the hospital.**

### Innovation Design Awards

Mater Transformation has been collaborating with the National College of Art and Design since 2016.

In 2022 the two organisations won the Irish Institute of Designers Award for Design Research and Education for the Major Trauma Design Sprint which took place at the Mater in May 2022.

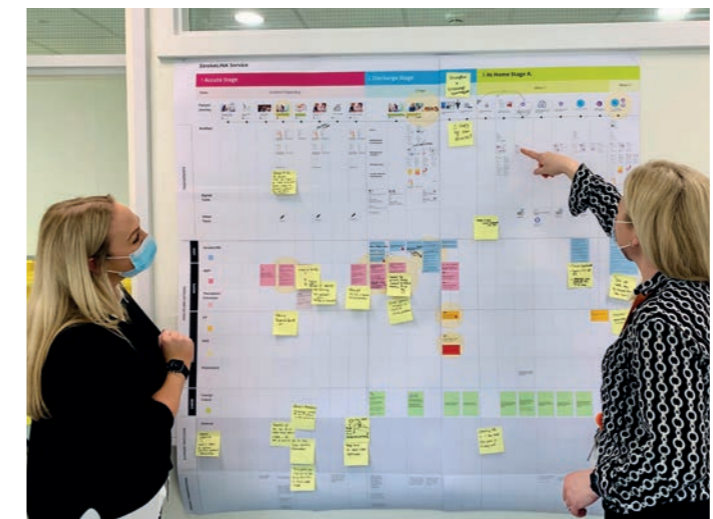
Two nursing submissions were also overall winners of the Spark Bursary, re-design of the CPR trolley and re-design of the nursing assessment document during NCAD Design week.

Additionally, Jincy Jerry ADON in Infection and Prevention and Yvonne Timony ADON Research and Innovation in collaboration with NCAD fashion designer Niamh Lynch won the Spark Design on the Frontline Award for redesigning PPE gowns.

The GN95 personal protective gown makes radical improvements to the interaction, efficiency and comfort challenges arising as a result of increased PPE gown usage.

**“This is so refreshing. No one ever asks us what we think”**

Local GP at a Mater Transformation workshop



**Supporting our strategic priority to build further our Academic, Research and Innovation Programmes and to develop our capabilities in translational research and innovation practices.**





5

## Developing our People and Culture

At the Mater we are committed to providing a supportive, collaborative environment; working together across specialties and teams to deliver excellence.

rapher  
ospital



## Developing our People and Culture

Despite many challenges in 2022, Mater’s exceptional staff continued to provide the maximum level of quality care to our patients and the hospital focused on putting in place additional supports to enable them to do so.

<p>Increased Focus on Staff Health and Wellbeing</p>	<p>Over 600 new recruits commenced work in 2022</p>	<p>New Patient Experience Programme for Staff</p>
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New Learning Management System - 'Mater Learn'





Sr John of the Cross award winner - The Critical Care team “Surging Through the Waves of a Global Pandemic”.



### Gender Pay Gap

The Mater's 2022 Gender Pay Gap report was issued providing a clear roadmap of some elements the Hospital Executive needs to focus on to ensure that the ethos of promoting a diverse and inclusive culture for all colleagues continues to be true. While the hospital's pay scales are governed by HSE pay scales, it is recognised that it is incumbent on the Mater to ensure that both men and women have the access and ability to move up in their careers, should that be what they want to do.

### Developing our Learning and Development Function at the Mater

In 2022 Learning and Development (L&D) efforts at Mater experienced significant growth, characterised by team expansion and an extended array of development programmes available to colleagues.

More than 20 programmes were launched, available in both classroom and e-learning formats, providing colleagues with diverse opportunities for skill enhancement and knowledge acquisition.

One notable addition was the creation of a new Patient Experience programme designed to better support staff in patient-facing roles. This programme equips colleagues with essential tools for clear, effective, and empathetic communication with patients.

Additionally, a comprehensive overhaul of the onboarding training process was undertaken. The corporate induction programme is now delivered through a blended learning approach, ensuring that all new colleagues joining the hospital receive a well-rounded introduction to the hospital.

A new learning management system, 'Mater Learn,' was also introduced in 2022. Engagement levels have been exceptionally encouraging, with various clinical and non-clinical teams actively contributing to module content development in collaboration with the L&D department.

### Mater Performance Achievement

A tailor-made performance achievement program continued to be implemented throughout the hospital, complemented by a range of training resources accessible to hospital managers. This approach underscores the significance of leadership and teamwork while simultaneously promoting ongoing professional development.

### Staff Health and Wellbeing

In 2022 the Mater Hospital welcomed the first Health and Wellbeing specialist to the HR team whose primary focus was the Health and Wellbeing of Mater employees. This resource enabled the hospital to launch new initiatives, organise staff events, and develop Hospital-wide health and wellbeing policies. This has proved hugely successful, with teams reporting that the Hospital has an eye on their Health and Wellbeing whilst their eyes are focused on the Health and Wellbeing of patients.

Additionally, the second 'Normalising Staff Wellness in Critical Care at the Mater Hospital' took place in July of 2022 this was also published in HSE Health Matters in Autumn 2022 and presented at the IEHG conference.

"Nursing News" a quarterly newsletter was also launched for nurses and healthcare assistants in January 2022.

### Recruitment

In 2022 recruitment remained a significant strategic priority for the Hospital, with over 600 new recruits commencing work in 2022 via referrals, direct applications, open days, social media campaigns and two overseas recruitment trips. These overseas campaigns were highly successful with 128 participants taking part in the Mater's adaptation programmes which are in place to support those staff who are new to the Irish Healthcare system.

Attracting suitably qualified staff in the current market remains a challenge for the country as a whole and specifically for a city centre based acute setting.

### Retention

Retention continues to be a concern with the effects of decisions to travel and retire, post-COVID-19, felt. More worryingly were the increasing numbers, especially Nursing colleagues, choosing to relocate to hospitals outside of the Dublin region where not only is the acuity of patients generally lower, but so too is the cost of living with the bonus of the availability of affordable housing. This is something the organisation is keeping a watchful eye on and looking at options to alleviate the issue.

However, it was not all bad news in the area of retention with many promotional posts offered and accepted throughout the year, highlighting the benefit, for both the people and the Hospital, of the continued investment and focus on staff career development and also demonstrating how a career in the Mater can be a career for life.



## Developing our People and Culture Continued

In 2022, the endeavours of the Office of Mission Effectiveness, and all our staff and community showcased a commitment to nurturing an inclusive and diverse atmosphere, firmly rooted in the values of empathy, care and compassion.

The key role of the Office of Mission Effectiveness lies in advancing the fundamental values and principles articulated in the hospital’s Mission Statement realised through the lived experience in the Mater.

### What patients have to say about the Mater’s people:

“Her interaction with every patient was outstanding and efficient. She dealt with every patient as if they were the most important. We still talk about her”.

“It was an unforgettable experience to have met this doctor. I am filled with gratitude for his skill and dedication”.

“I remember coming to the hospital in such pain. This nurse quickly attended to my needs in as efficient manner possible. Thank you!”

“Thank you to the cleaning staff for your hard work and dedication. You are always so friendly and helpful”.

The pictures below demonstrate how our people live through our values and how we work with and support our local community.



Supporting our strategic priority to attract, retain and develop the best people, and developing and building a culture that supports the hospital as it grows and develops into the future.



## 6

## Being Efficient and Sustainable into the Future

Every institution needs to think about sustainability and our impact on the environment. In the Mater Hospital we not only think about sustainability, we incorporate it into the buildings we design right from the get-go. We are constantly looking at ways to reduce our carbon footprint, save energy and contribute positively to the planet.





## Being Efficient and Sustainable into the Future

**We are committed to being operationally efficient and sustainable. In 2022 we worked hard towards this objective, putting in place key foundations for developing a more sustainable hospital into the future.**

The sustainability agenda is a key strategic imperative and in 2022 the hospital initiated a number of key projects in this regard.

### Wastewater Management

The hospital has engaged with a wastewater treatment specialist contractor in order to consider the introduction of a new and emerging technology to treat wastewater and introduce a solution that will provide an environmentally friendly end of life for waste materials.

### Geothermal

A feasibility study has commenced in relation to exploring the benefit of introducing both deep and shallow geothermal technologies to remove the hospital's dependency on fossil fuel technologies. This study will also inform decisions around sustainability plans for the Major Trauma Centre.

### Climate Action Plan and Biodiversity Masterplan

A Climate Action Roadmap has been developed for the hospital in response to the government Climate Action Plan 2021 which will be implemented over the next number of years.

A Biodiversity Masterplan with a local Ecologist has also been developed. The key objective of this plan will be to secure and sustain existing biodiversity on the Mater Hospital Campus and to find creative and inventive means to increase and improve the site for biodiversity into the future.

### Lighting Retrofit Programme

A feasibility study has been developed for the viability of a complete lighting retrofit installation of the Whitty Building to deliver improved energy efficiency and decrease our carbon emission - a reduction of 1.5 Gwhr energy consumption with a further reduction of carbon emissions of 400 tons.

### Electronic Health Record

The Mater was included in an Ireland East Hospital Group Electronic Health Record (EHR) procurement; the specification was published on EU Tenders website. It is hoped to have final specification sent out by end of 2023 followed by implementation. This EHR will replace Patient Centre, the in-house developed clinical system currently in use across the hospital.

### Stock Management Improvements

In 2022 the Mater improved Stock Management Processes in theatres and ICU with the introduction of a standard two bin kanban shelving layout. **This initiative has reduced stock holdings and made the rapid picking of products easier for clinical staff.**



### Scan for Safety Initiative

In 2022 the procurement department went live with a pilot of the Scan for Safety in the cardiac catheterisation laboratory. This system captures product data such as expiry date and serial lot number, by scanning bar codes at the point of use. This enables automation of stock replenishment and provides a high level of product traceability, tracking products and associated costs to patient level. **This provides a significant enhancement in patient safety and the hospital's understanding of costs.** The hospital now plans to roll this system out further across the hospital.

### 'Hospital Food' Improvement Project

The Catering Department undertook a project to redevelop its menu options to provide fresh, wholesome, nutritious food to all of its service users, with the core focus being on providing an excellent patient experience.

This also included the presentation of the meals which was piloted on several wards with extremely positive feedback obtained. This is an ongoing project which will continue to be rolled out and implemented further.



### Innovative ways to improve General Services

All areas within the General Support Services Department were tasked with developing innovative ways to improve services.

One such idea came from the Post Room to use a system called Speedpost which gives a small rebate on every letter sent. **The hospital received a rebate of €116,000 due to this new initiative.**

**In 2022 the hospital was very proud to receive a Highly Commended Award in the category of sustainability project of the year from The Institute of Healthcare Engineering and Estate Management.**



**Supporting our strategic priorities to deliver efficiencies, improve structures, secure funding and to digitise and modernise the hospital; working towards a more sustainable future.**



**2022 was a challenging but successful year for the hospital. We are cognisant however that we need to prepare for the future and ensure we are constantly improving and building on excellence.**

**The Mater is committed to:**

- Launching START
- Preparing for OECl accreditation
- Developing the National Isolation Unit
- Implementing an Electronic Health Record
- Developing further the Mater Genomics and Precision Medicine Service
- Continued phased development of the Major Trauma Centre and Service
- Implementing the Mater's Biodiversity and Climate Action Plans
- Developing plans and securing funding to build more capacity to meet future demand





## MMUH Financial Statements 2022

### Mater Misericordiae University Hospital Statement of Income and Retained Earnings for the financial year ended 31 December 2022

	2022 €'000	2021 €'000
<b>Turnover</b>		
Revenue grants	421,123	377,332
Other income	40,489	38,033
Capital grant amortisation	4,839	4,971
	<b>466,451</b>	<b>420,336</b>
<b>Costs</b>		
Staff costs	(317,105)	(280,833)
Non pay costs	(144,390)	(134,222)
Depreciation	(4,839)	(4,971)
	<b>(466,334)</b>	<b>(420,026)</b>
<b>Operating surplus</b>	<b>117</b>	<b>310</b>
Interest payable and similar charges	(34)	(55)
<b>Surplus on ordinary activities before taxation</b>	<b>83</b>	<b>255</b>
Taxation	-	-
<b>SURPLUS FOR THE FINANCIAL YEAR</b>	<b>83</b>	<b>255</b>
Retained deficit at the beginning of the reporting period	(22,692)	(22,947)
Retained deficit at the end of the reporting period	(22,609)	(22,692)

### Mater Misericordiae University Hospital Balance Sheet as at 31 December 2022

	2022 €'000	2021 €'000
<b>Fixed Assets</b>		
Tangible Assets	79,811	26,834
Financial Assets	-	-
	<b>79,811</b>	<b>26,834</b>
<b>Current Asset</b>		
Debtors and Prepayments	43,070	31,527
Stocks	11,318	11,316
Cash at bank and in hand	38,422	17,070
	<b>92,810</b>	<b>59,913</b>
<b>Creditors: Amounts falling due within one year</b>		
Creditors	(101,295)	(68,855)
Bank loans and overdrafts	(14,123)	(13,749)
	<b>(115,418)</b>	<b>(82,604)</b>
<b>Net current liabilities</b>	<b>(22,608)</b>	<b>(22,691)</b>
<b>Total assets less current liabilities</b>	<b>57,203</b>	<b>4,143</b>
<b>Capital grants</b>	<b>(79,811)</b>	<b>(26,834)</b>
<b>NET LIABILITIES</b>	<b>(22,608)</b>	<b>(22,691)</b>
<b>Financed by:</b>		
<b>Capital and reserves</b>		
Called up share capital presented as equity	1	1
Retained deficit	(22,609)	(22,692)
<b>SHAREHOLDER'S DEFICIT</b>	<b>(22,608)</b>	<b>(22,691)</b>



# Financial Review

The allocation in 2022 from the HSE amounted to €421.1 million (2021: €377.3 million) split as follows: Pay €317.1m (2021: €280.8m), Non Pay €144.4m (2021: €134.2m), Income (€40.48m) (2021: €38.0m), of which Pensions €7.0m (2021 €7.2m). The increase of 13% reflects increase in staff required for new bed capacity and the increased cost of pay and non-pay inflation for the year. Non-pay cost increased by 10.2% reflecting the impact of global inflation on medical supplies, energy and service inflation. Following supplementary allocation from the HSE the hospital achieved a break even position for the year and are reporting a surplus of €0.083m.

2022 was a challenging year for the hospital due to level of demand on all services, inpatient, day case and outpatient. Activity levels across all disciplines were higher than targets set in the 2022 service plan. During 2022 and continuing into 2023, in order to augment our services, urgent time critical surgery was carried out in private hospitals under national Safety Net agreements through the H.S.E. In 2022 there were 2,546 urgent surgeries carried out for Mater Hospital patients across three private hospitals. A further 1,525 patients received urgent Cath Lab procedures, 3,190 patients received surgery under NTPF initiatives and 10,000 Radiology procedures were provided under NTPF initiatives.

In 2022 the Mater Hospital was designated as a site to develop a Major Trauma Centre for the country. Two such sites were identified Cork University Hospital and the Mater Hospital. The main aim of the Mater MTC is to provide the highest level of specialist trauma care to the most severely injured patients on a single hospital site. The New Rock Wing will enable the development of major trauma services at the Mater hospital as one ward is to be dedicated to provision of patient care for the most critically injured trauma patients.

## Review of performance and achievements Results

During 2022 the Hospital discharged 25,367 inpatients (Table 1 opposite page) consuming 224,221 bed days (Table 3 opposite page) and treated 75,055 day cases (Table 2 opposite page). The Emergency Department including Smithfield Rapid Injuries Clinic and the Eye Emergency Department had 100,103 attendances (Table 3 opposite page). The hospital's Outpatient Department recorded 250,754 patient attendances for the year (Table 5 opposite page).

## Operations

During 2022 the hospital continued to face the challenges presented by COVID-19 and many of the innovations and changes made to provision of services in 2021 were necessary during 2022. Staffing levels were challenged due to worldwide shortage of medical and nursing staff and the requirement to recruit additional staff for new capacity. From November, 2022 to February, 2023 the hospital experienced high levels of admissions of patients presenting with respiratory illness. The HSE in recognition put in place a number of Winter Funding streams to help alleviate pressure hospitals. Given the environment described above, the hospital responded well and activity increased across all disciplines in the hospital. This can be seen from Tables 1 to 5.

In spite of the significant disruption to normal service delivery the tables show that a higher than average level of activity was maintained in the hospital throughout 2022. In the year 2019 the highest level of activity to date was recorded by the Hospital. The tables 1 to 5 show activity increases across all patient admissions and attendances in 2022 when compared to 2019.

Table 1. In patient increase of 3% on 2019 activity

Table 2. Day case activity increase of 10% on 2019

Table 4. Emergency department increase of 19% on 2019 attendances

Table 5. OPD increase of 12% on 2019 attendances

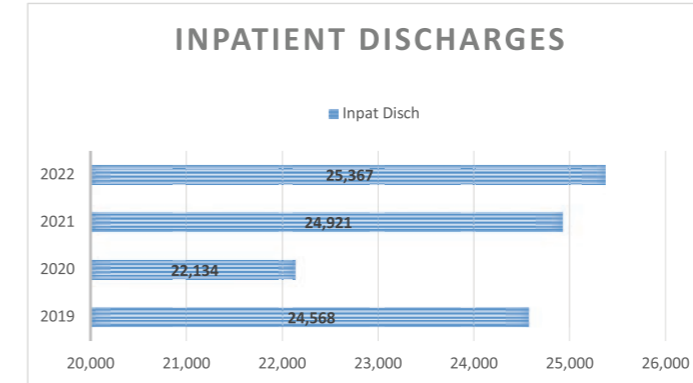


Table 1 Inpatient Discharges

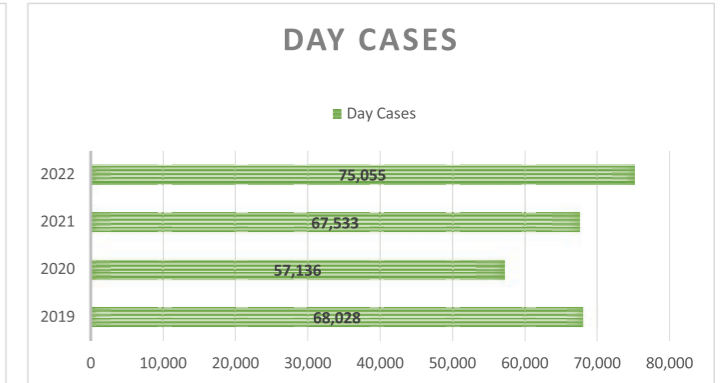


Table 2 Day Cases

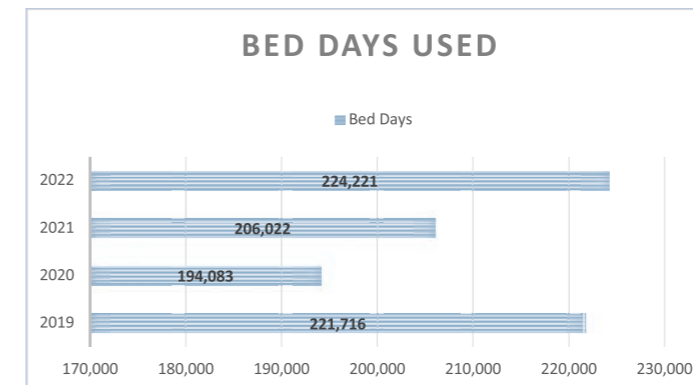


Table 3 Bed Days Used

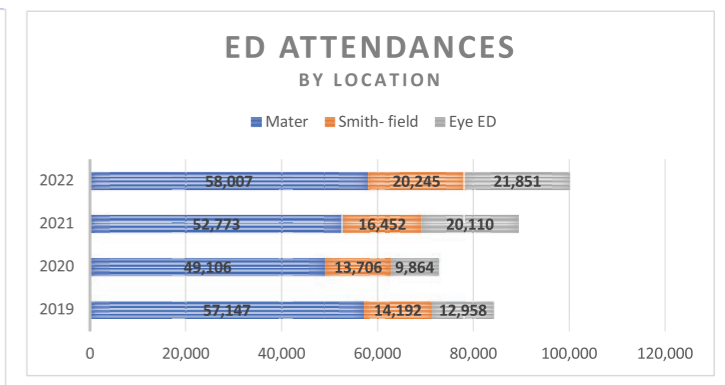


Table 4 ED Attendances

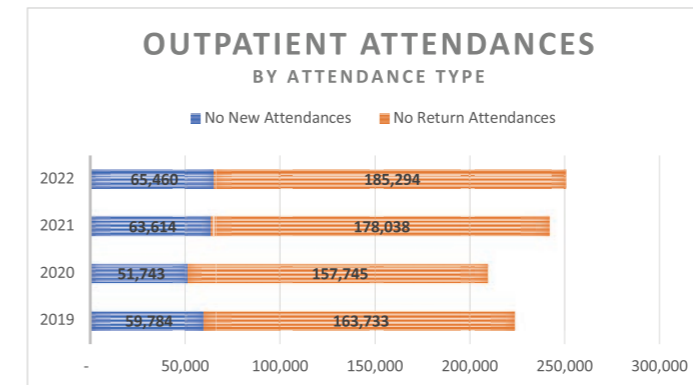


Table 5 Outpatient Attendances



# Board of Directors

**The Mater Misericordiae University Hospital is a voluntary hospital, established in 1861 by the Sisters of Mercy, to care for the sick with compassion and professionalism.**

The Mater Board of Directors is the governing body of the hospital and is responsible for developing and reviewing the hospital's overall mission and strategy. The Board is chaired by Dr David Begg. There are a total of thirteen directors which includes four executive directors. Directors serve an initial term of office of three years and can be appointed for successive terms to serve for up to 9 years. The Board guides the goals and policies of the hospital and is ultimately responsible for overseeing the performance of the hospital by the CEO and management team. The Board's focus is on strategy; oversight and control; corporate governance and growing stakeholder engagement.

There were eight board meetings held in 2022 with an attendance rate of 87%.



**Dr David Begg**  
Chair



**Alan Sharp**  
CEO



**Dr Brian Marsh**  
Executive Member



**Prof Jim Egan**  
Executive Member



**Brid Cosgrove**  
Executive Member



**Suzanne Dempsey**  
Executive Member



**Ellis O'Brien**  
Non-Executive Member



**Dr Mary McMenamin**  
Non-Executive Member



**Rod Ensor**  
Non-Executive Member



**Prof Cecily Kelleher**  
Non-Executive Member



**David O'Kelly**  
Non-Executive Member



**Anne Vaughan**  
Non-Executive Member



**Pat O'Doherty**  
Non-Executive Member



**Dr Mary Carmel Burke**  
Non-Executive Member  
(stepped down January 2022)



**Mary Raftery**  
(In attendance)



**Anna Broderick**  
Company Secretary



## Appendices

### Hospital Patient Safety Indicators -

<https://www.hse.ie/eng/services/list/3/acutehospitals/patientcare/hospital-patient-safety-indicators-reports/>

### Research publications 2022 on Mater Website -

[https://www.mater.ie/healthcare-professionals/the-pillar-centre/2022\\_Pubs\\_Sort\\_Author\\_Final.pdf](https://www.mater.ie/healthcare-professionals/the-pillar-centre/2022_Pubs_Sort_Author_Final.pdf)

## Working in partnership with





Mater Misericordiae University Hospital,  
Eccles St, Dublin 7.

T: 353 (01) 803 2000

w: [www.mater.ie](http://www.mater.ie)