



Ireland East Hospital Group Annual Report 2018

Grúpa Ospidéal
Oirthear na hÉireann



Ireland East
HOSPITAL GROUP



Cover photo l-r: Pictured at the INVITE VTE Research Network launch in September 2018 l-r: Patricia Maguire, Director of the UCD Institute for Discovery; Mary Day IEHG CEO, Heather Humphreys, Minister for Business, Enterprise and Innovation, and Prof Fionnuala Ní Áinle, INVITE Lead & IEHG VTE Service Review Group Chair

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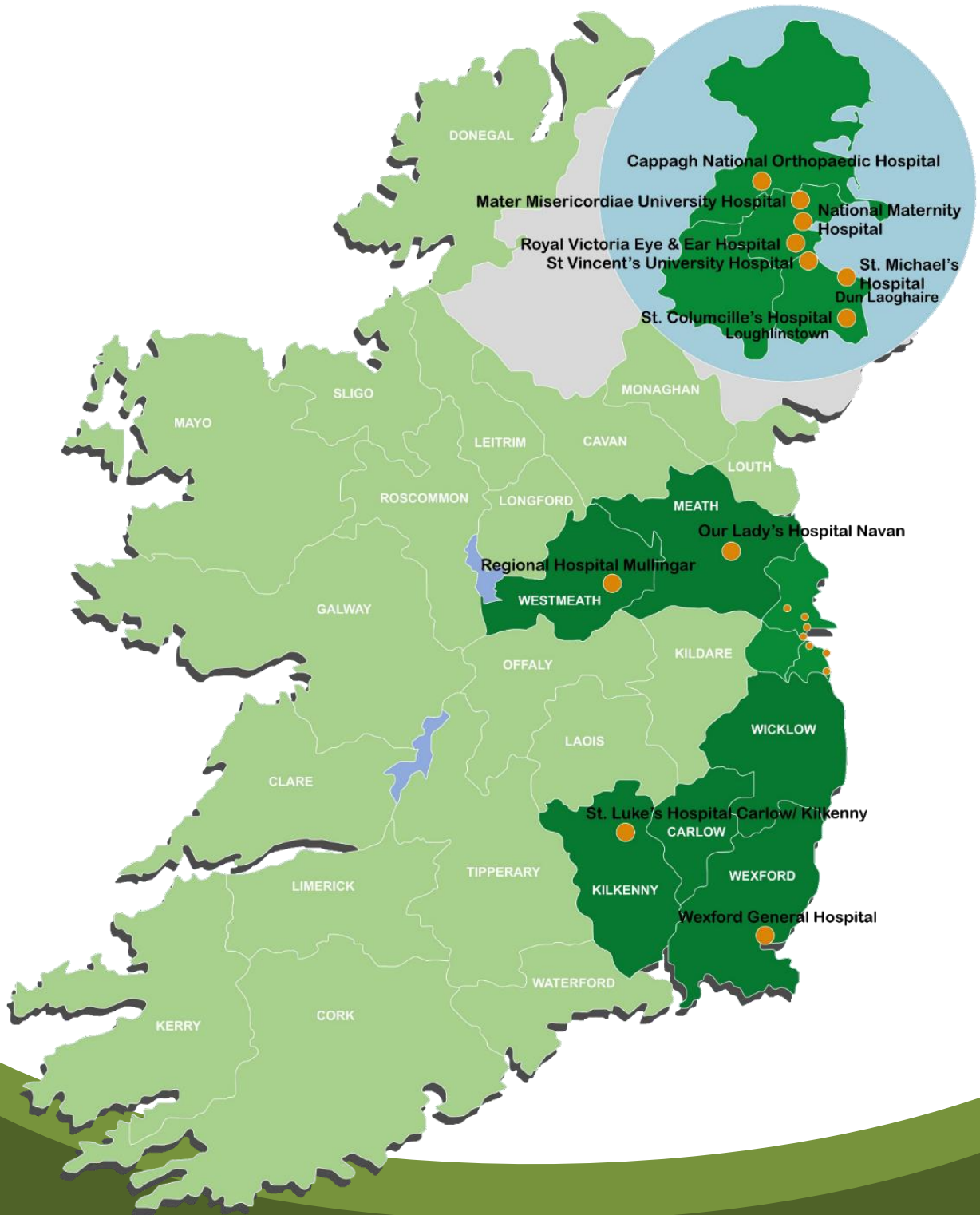
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Facts and figures

Our group at a glance in 2018



Largest of the hospital groups



11 hospitals (6 Voluntary and 5 Statutory)



Working with 4 Community Healthcare Organisation (CHO) partners



1.056 million population served (*Census 2016 projected to 2018*)



Covering counties Dublin, Meath, Westmeath, Carlow, Kilkenny, Wicklow and Wexford



In excess of €1 billion turnover



Strong integration platform with GPs across the Group - first group to introduce Local Integrated Care Committees (LICCs) to improve links between the hospital, community / primary care sectors

Our group in numbers in 2018



133,512 inpatient discharges



195,836 day case discharges



730,138 outpatient appointments



317,480 people seen in our Emergency Departments



13,140 babies delivered



11,773 total employees



1,692 doctors and dentists



4,470 nurses



1,426 allied healthcare professionals



1,426 support staff



1,714 clerical and administration staff



81 management staff

Our group specialisations

Largest number of national specialities, including



- ▶ National Heart/Lung /Liver/Pancreas Transplant Units
- ▶ National Spinal Unit
- ▶ National Isolation Unit for Infectious Diseases
- ▶ National Unit for Cystic Fibrosis
- ▶ National Unit for Pulmonary Hypertension
- ▶ National Unit for Neuroendocrine Tumours
- ▶ National Extra Corporeal Life Support, Cardiothoracic Surgery

National Transplant Centres Surgeries Completed in 2018

- ▶ **56 liver**
- ▶ **18 heart**
- ▶ **27 lung**
- ▶ **5 pancreas**

Our Clinical Academic Directorate for Cancer Care treats more patients than any other Hospital Group in the country



- ▶ Care for over 45% of patients with breast cancer treated in Ireland
- ▶ Approximately 1 in 4 of all prostate cancers treated
- ▶ Over 50% of all breast cancer screening, through BreastCheck on two university hospital sites
- ▶ National centres for sarcoma and neuroendocrine tumours
- ▶ National centre for spinal surgery for advanced treatment of metastatic tumours
- ▶ Only centre providing cytoreductive surgery and heated intraperitoneal chemotherapy

Chairman's Foreword



The Ireland East Hospital Group was established some five years ago bringing together six voluntary and five statutory hospitals with UCD as its academic partner. Its future is uncertain in the context of the implementation of Sláintecare by the Department of Health where the core proposal is the alignment of community, primary and acute hospital care into regional health structures. IEHG does not easily fit into any geographically-aligned regional structure as it serves an area from Wexford to Mullingar. If implemented as planned, IEHG would no longer exist in its current form. I am nonetheless very proud of what has been achieved by the IEHG management team led by Professor Mary Day in bringing together hospitals which rarely interacted with each other and have very different administrative and clinical structures. The leadership provided from the Mater and St. Vincent's has been particularly important in supporting the Model three and two hospitals in IEHG.

Unlike many other public services, health is demand led where salaries (set nationally) are the largest single cost and influenced in recent years by public pay restoration. The cost of pharmaceutical products continues to rise with the introduction of new biologic drugs as well as very high cost medicines for rare and orphan diseases. One reads in the media about healthcare costs being out of control and over-running the budget every year. This is not the case. We knew at the start of 2018 that the budget for health underestimated the cost of delivering the service in that year. This is also not unique to Ireland. We can expect to see a significant demographic change over the next 30 years where the 75+ cohort will grow exponentially as the number of live births falls. This older cohort unsurprisingly places significant demand on healthcare and, in particular, the acute hospital system. We face, as a society, some very difficult choices in the years ahead.

I believe service reconfiguration can play an important role in streamlining health services. With a similar population, Scotland has 32 acute hospitals where, in Ireland, there are 49 such hospitals. Decanting low acuity activity from the hospital system, for example, as well as managing chronic conditions (the diseases of the 21st century) in the community would achieve significant savings. However, there has been a reluctance in the political system to contemplate such changes as local hospitals have a totemic significance and, as such, change cannot be contemplated. However, change is essential given likely future demand.

The evolution of the health service into regional integrated health structures will create new challenges. We must avoid reverting to the health board system which was replaced by the HSE in 2005; Ireland has a population of just under five million so collaboration should be key to the delivery of an effective service; IEHG has played an important role in combining the strengths of the voluntary system with serving the public interest. Whatever the future holds, we have shown over the last five years the potential that exists to deliver safe and effective care to the citizens of Ireland.

Finally, I would like to thank my board colleagues and the leadership team led by Professor Mary Day. Their commitment has been exemplary. For example, during storm Ophelia when practically the entire country was closed the acute hospital system functioned fully thanks to the dedication of our staff, many of whom walked miles from and to work or slept on floors to ensure continuity of service.

Thomas Lynch, Chairman of the Board

CEO Foreword



It is with great pleasure that I present the Ireland East Hospital Group's (IEHG) Annual Report for 2018.

2018 saw IEHG continue to build on what we have achieved since the Group was established in 2015 and on our core ambition of providing the highest standard of healthcare in the most appropriate setting for the people we serve. Throughout 2018, we further strengthened our capability and infrastructure to deliver on our three core Strategic Pillars:

1. Operational Excellence
2. Integrated Healthcare
3. Academic Health Science Centre

Focusing on these three core functions enables us to deliver a transformational programme of change to our population of over one million, which is a critical mass for the delivery of sustainable healthcare.

Operational Excellence

Thanks to the efforts of our Service Improvement team, in 2018 our Lean transformation work continued across service lines in Frailty, Unscheduled/Scheduled Care, Theatre Optimisation and Cancer, to name but a few areas of focus.

Our four Model 3 hospitals (St Luke's General Hospital, Carlow/Kilkenny, Mullingar Regional Hospital, Wexford General Hospital and Our Lady's Hospital, Navan) are now implementing **100% frailty screening for patients over 75**. Mullingar's 2018 HSE Excellence Award for their Frail Older People Rapid Improvement Programme is testament to the profound and positive impact this work is having on care for older patients across our Group. As a further testament to the impact of our Lean transformation journey and our work building a model line for frailty, Anne-Marie Keown, IEHG Director of Service Improvement and Dr. Emer Ahern, Consultant Geriatrician in St Luke's General Hospital, Carlow/Kilkenny, presented in October 2018 at the Lean Healthcare Academic Conference in Stanford, USA.

Patient Experience Time (PET) performance during 2018 demonstrated improvement in all areas and exceeded national targets by higher proportions in each PET metric than in 2017. When compared to other adult hospital groups, IEHG has performed best nationally in the 6-hour and 9-hour PETs. This performance improvement is against a background of increased attendances and admissions.

Academic Health Science Centre

As part of IEHG's ambition of becoming a fully integrated Academic Health Science Centre by 2020, in 2018 our Clinical Academic Directorates (CADs) continued to develop across our two Model 4 teaching hospitals, the Mater Misericordiae University Hospital and St Vincent's University Hospital, with UCD at their core, while also forging important links with our smaller hospitals. In 2018, we established Genomics and Research academic directorates and work commenced in the development of academic directorates for Women's Health and Children, Cardiology, Trauma/Emergency Medicine, Critical Care, and Neuroscience.

Under the leadership of our Chief Academic Officer, Professor Tim Lynch, we have established the AHSC Oversight Group to deliver on an AHSC model of delivering academia, research and innovation within the health delivery system in order to achieve better patient outcomes.

Integration

In 2018, IEHG continued to lead **the integration of care across our Group**, delivering integrated pathways across hospitals, communities and GP practices, while also developing a **population health-based approach** to service delivery in order to best serve our population's needs.

Integrated projects across primary and community services in **community ophthalmology, virtual clinics for heart failure, community management of Hepatitis C, frailty, and winter-preparedness to minimise admissions were all progressed in 2018.**

In 2018 a strategic review of the Hospital Group was completed. This included current configuration, future operational need and how best to align the service with current government policy. The proposal developed focused on the delivery of an integrated healthcare campus that embraces Government policy under Sláintecare by delivering an acute scheduled care facility fully integrated with our Community Services.

The establishment of the IEHG Eye Institute to deliver an integrated model for Ophthalmology, working with our primary and community partners to meet the increased demand for this service, was a key success of 2018.

On 17 July 2019, the Minister for Health, Simon Harris TD, announced that a major national restructuring of health services will now take place. Six new regional health areas are to be created under this plan which will be responsible for the planning and delivery of integrated health and social care services, as recommended under Sláintecare.

Notwithstanding the compelling argument made by the Group for its retention and the extensive list of patient benefits which have been achieved to date, IEHG will no longer exist in its current form and its eleven hospitals will be divided across three regional boundaries (A, B and C). IEHG will engage with the Department of Health, HSE and Sláintecare Implementation Office in the co-design of the new structures over the next 12 months, as per the Minister's announcement. In doing so we will bring to the table our domain knowledge and understanding of the dynamics involved to ensure the efficacy of the structures which emerge.

During the transition period we will work diligently to ensure the very best care continues to be delivered to the more than one million people we serve.

As CEO of the Ireland East Hospital Group, I would like to take this opportunity to say that I am immensely proud of all that we have achieved in the four short years since our Group was established, none of which would have been possible without the dedication and commitment of our staff. I would like to thank each of them for working tirelessly to provide the very best care for all who attend our hospitals and ensuring that the patient remains at the centre of everything we do.

Mary Day, CEO

The Ireland East Hospital Group

The Ireland East Hospital Group

The Ireland East Hospital Group (IEHG) is Ireland's largest hospital group, with UCD as its academic partner. Serving a population of over 1 million, the Group works with four Community Healthcare Organisation (CHOs) partners, employs almost 12,000 staff and has gross expenditure of over €1bn. Comprising 11 hospitals, six voluntary and five statutory, IEHG has a unique profile of local services and focused tertiary and quaternary services.

Our Hospitals

- Mater Misericordiae University Hospital
- St Vincent's University Hospital
- Regional Hospital Mullingar
- St Luke's General Hospital, Carlow/Kilkenny
- Our Lady's Hospital, Navan
- Wexford General Hospital
- St Columcille's Hospital, Loughlinstown
- St Michael's Hospital, Dun Laoghaire
- Cappagh National Orthopaedic Hospital
- National Maternity Hospital
- Royal Victoria Eye & Ear Hospital



Mission & Objectives

The Ireland East Hospital Group, together with our academic partner University College Dublin, aims to be the national leader in healthcare delivery, with a strong international reputation, improving the quality of healthcare and patient outcomes through education, training, research and innovation for the over 1 million people we serve.



Our mission is to deliver improved healthcare outcomes through:

<p>Provision of patient-centred care</p>	<p>Access to world-class education, training, research and innovation through our partnership with UCD leading to the delivery of innovative, evidence-based healthcare</p>	<p>Application of a Lean management system in order to build a strategic and management model for operational excellence and continuous improvement</p>	<p>Developing a health system which delivers an integrated model of healthcare underpinned by a population health approach to patient care</p>
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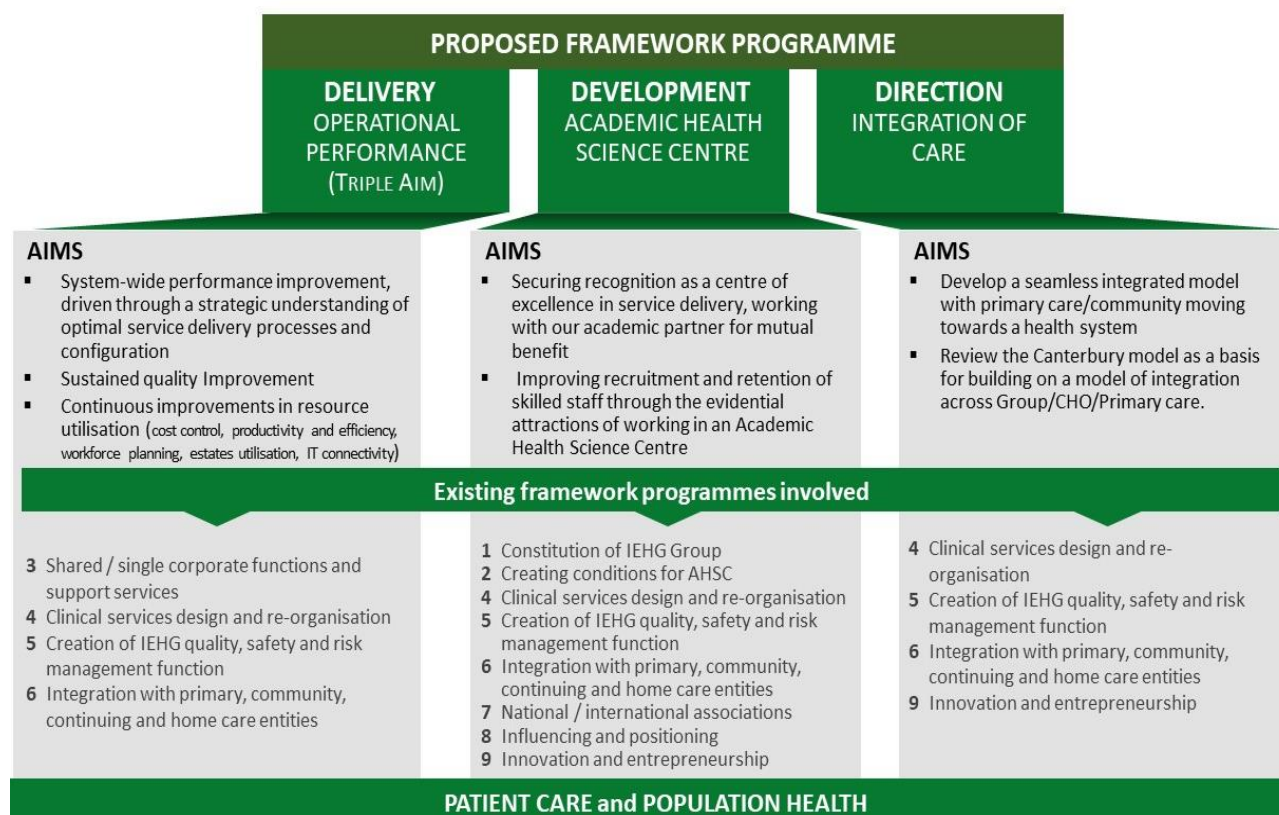
Strategic Development

A review of the status of the 10-point IEHG Strategic Framework Programme 2015 – 2017 undertaken by the Transformation Office for Innovation and Change was presented to the IEHG Executive in December 2017. The report from this review provided a detailed analysis of each of the ten programmes as at the end of 2017.

The output provided the basis for a renewed strategic focus for the Group which realigned the existing programmes into a three-pillar structure to support continuous improvement, quality improvement, and performance improvement.

With a patient-centred approach as paramount, the three key pillars identified in our renewed strategic focus were agreed as follows:

1. **Delivery** - Operational Excellence underpinned by a Lean Management framework
2. **Direction** – Integrated Health System underpinned by a Population Health approach
3. **Development** – Healthcare delivered through an Academic Health Science System model of care where integration of education and research ensures ‘*patient needs come first in driving safety, quality and the coordination of care*’ (Sláintecare, 2017)



1. Operational Excellence – (Delivery) of the Quadruple Aim through Continuous Improvement

- System-wide performance improvement, driven through a strategic understanding of optimal service delivery processes and configuration
- Sustained quality improvement
- Continuous improvements in resource utilisation (e.g. cost control, productivity and efficiency, workforce planning, estates utilisation, IT connectivity)

2. Integration of Care – (Direction)

- Redesigning and reconfiguring care pathways and service delivery to enhance patient experiences and outcomes
- Driving the development of population health management through integration of service delivery with community and primary care partners, enabling earlier and more effective care interventions based on a system-wide understanding of population and patient needs
- Supporting the delivery of services on a community-based, locality model where relevant, ensuring that specialised hospital services can be used to the greatest effectiveness (this is in recognition of the fact that the stand-alone hospital is no longer the preferred delivery model for acute care)

3. An Academic Health Science System – (Development)

- Securing recognition as a centre of excellence in service delivery, working with our academic partner UCD to enable and inform service innovation and improvement, a sustainable reputation for excellence and optimal patient care
- Improving the recruitment and retention of high calibre staff through the evidential attractions of working in an Academic Health Science System
- Attracting and embedding world-class Research and Development, with its associated funding streams and reputational benefits

The delivery of these 3 pillars in the years ahead will enable the Group to achieve the following quadruple aim of healthcare delivery:

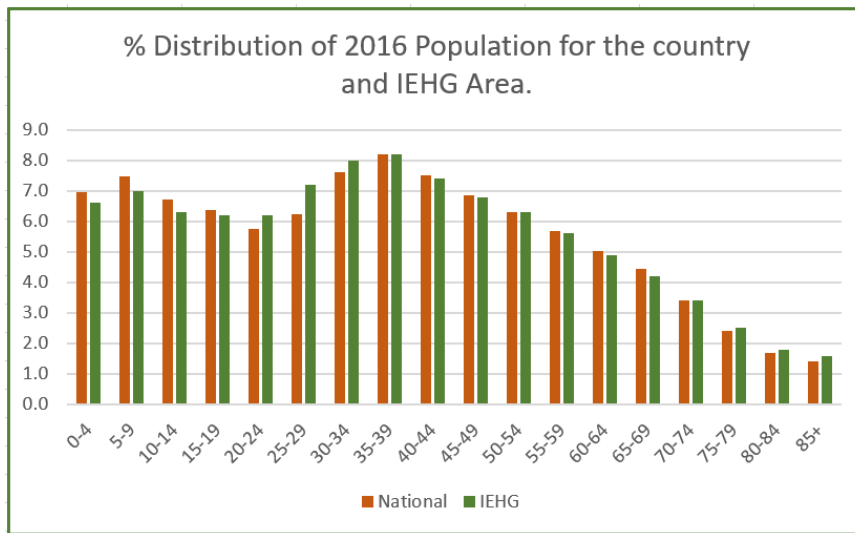
Better care:	Improving the health of populations
Better outcomes:	Improving the individual experience of care
Reducing cost:	Reducing the per capita cost of care
Retaining staff:	Improving the experience of <i>providing</i> care and increasing joy and meaning for the workforce

Population & Demographics

The Ireland East Hospital Group serves a population of over one million people as evidenced by the 2016 census. This constitutes just over one fifth of the national population at the time of the census. It is notable from the figures available that, in certain age brackets, the group serves nearly a quarter of the population, namely in the 20s to 30s and also in the over 80s.

Similar to the wider healthcare system, IEHG struggles to manage the increasing demands for services within a fixed budget allocation while maintaining and improving standards and quality of patient care.

An ageing population, patient/public expectations, the advent of new technologies, increasing chronic illness, potential industrial unrest and limited bed capacity all increase the demands upon our hospitals. These factors, along with an increasing population, result in ongoing challenges to providing timely access for patients requiring both elective and emergency care.

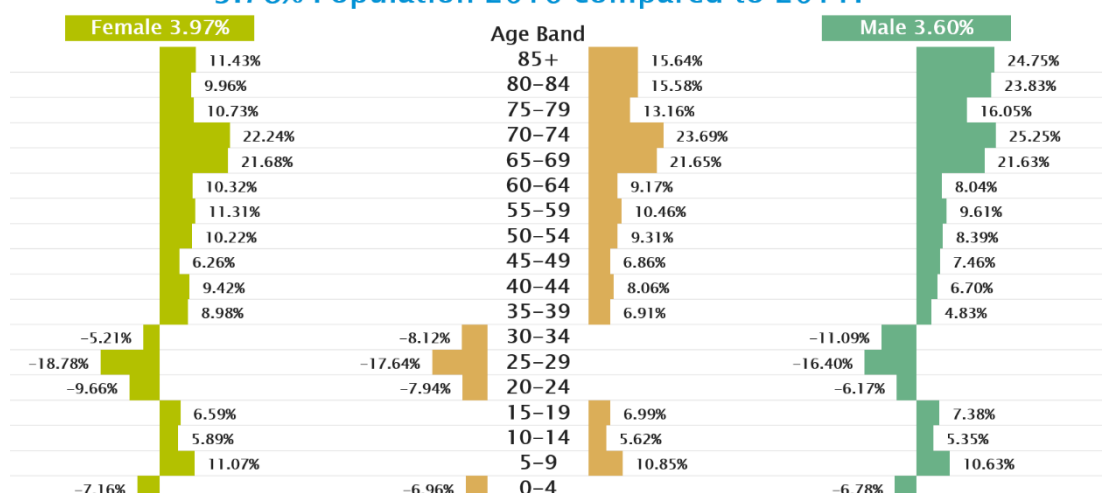


It is evident that in the five years since the 2011 census there has been a 3.8% increase in the population. This is broken down in age and gender as shown in the figure below. There are significant increases in the population numbers over 65 and, as evidenced above, IEHG serves the largest proportion of this segment of the population compared to the other hospital groups.

The over 65s represent 13% of the Group's total population but accounted for **37% of the inpatient discharges in 2017**. This growing demographic represents one of the key determinants in service delivery across the Group.

Ireland Census 2016 Vs 2011

3.78% Population 2016 compared to 2011.



Population Health Management

IEHG continues to engage with the HSE Health Atlas Division to map our IEHG population by area of residence, GP, demographics, age, ethnicity and deprivation indices. This data will guide service delivery and targeted funding in collaboration with our community partners.

In order to improve health outcomes across the population, we plan to introduce a Population Health Management (PHM) initiative to improve health outcomes particularly for those with long term chronic conditions. PHM seeks to improve health outcomes across a population by identifying and monitoring individual patients and targeting cost and clinically effective programmes. The programme brings together clinical, financial and operational data from across the system to provide actionable analytics to improve efficiency and patient care.

Using a Population Health Management Assessment Tool developed by IBM Watson we will be reviewing the readiness of our existing clinical services to deliver more integrated care. The areas under review include governance, clinical pathway and systems, as well as finance and contracting data and analytics. This advanced PHM can provide real-time and predictive insights to clinicians and administrators to allow us to better identify and address gaps in care within our patient population.

Governance & Management

The establishment of Hospital Groups is an integral part of the 'whole system' health reform set out in ***Future Health: A Strategic Framework for Reform of the Health Service 2012 – 2015***, which has reorganised public hospitals into more efficient and accountable hospital groups designed to harness the benefits of increased independence and greater control at local level.

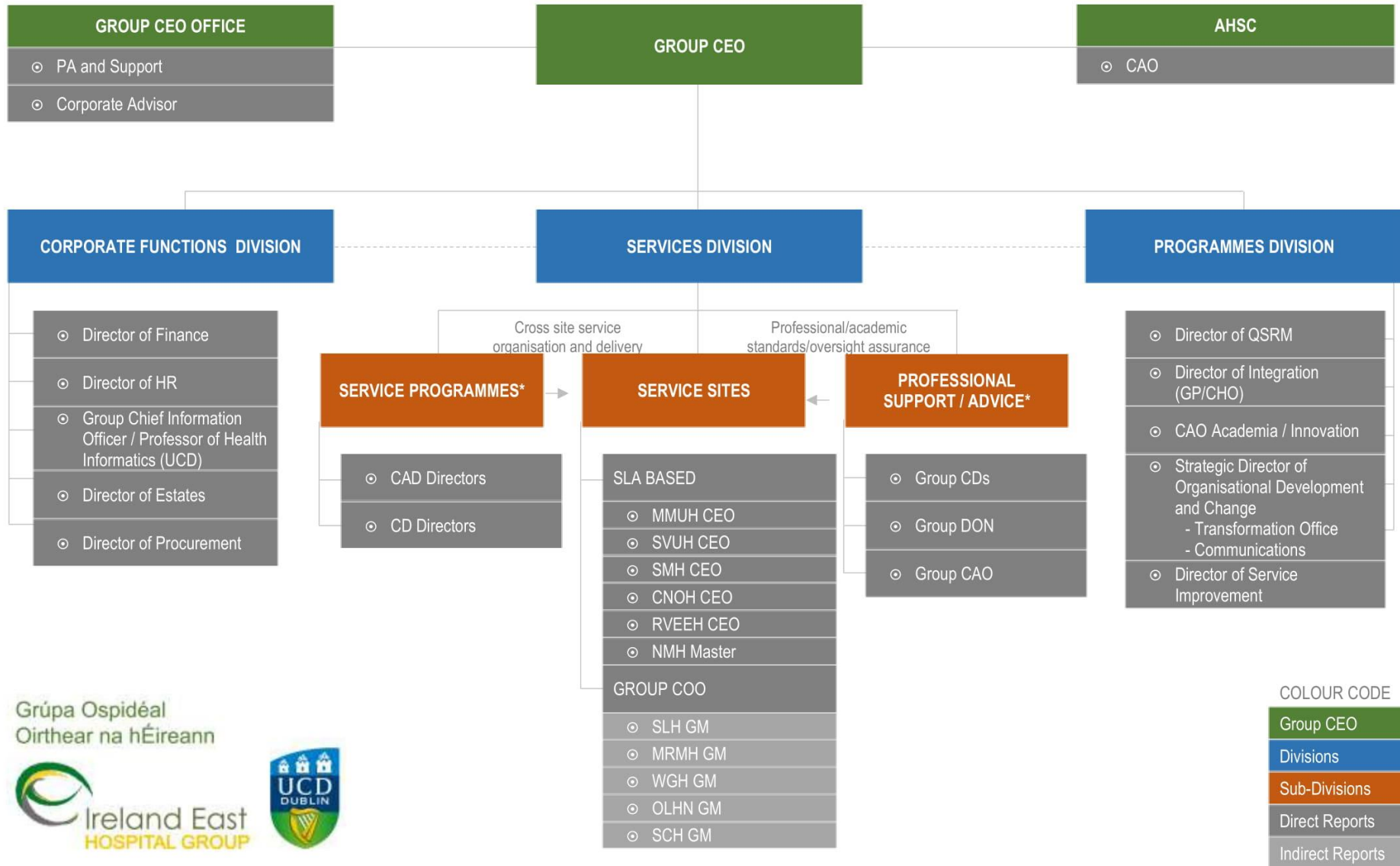
This is being done in a manner that ensures a safe, high quality service for all, maximising and capitalising on the strengths of both larger and smaller hospitals, with better outcomes for patients, thereby ensuring our hospitals provide the most appropriate care in the most appropriate location.

The Ireland East Hospital Group (IEHG), together with the other hospital groups, has been initially established on a non-statutory administrative basis. A Group Board was appointed by the Minister for Health at the end of December 2017. The Board assists and advises in respect of acute hospital services in our group of hospitals, fosters close and effective working arrangements with Community Healthcare Organisations in the Hospital Group area, collaborates with all other Hospital Group Boards and advises and supports the direction of travel towards the establishment of independent Hospital Groups on a statutory basis. The Board has a key function of advising on the development and implementation of effective corporate and clinical governance structures for the Group, along with the quality and safety of systems of care in place for patients, in line with the *National Standards for Safer Better Healthcare*.

IEHG consists of six voluntary hospitals and five statutory hospitals. The six voluntary hospitals are for the purposes of the Health Act 2004 funded by the HSE as five Section 38 agencies (St. Michael's Hospital (SMH), Dun Laoghaire and St. Vincent's University Hospital (SVUH) are part of one legal entity). Two voluntary hospitals, the National Maternity Hospital (NMH) and Royal Victoria Eye and Ear Hospital (RVEEH) are constituted by legislation or charter (where established prior to 1922). The Mater Misericordiae University Hospital (MMUH) and the St. Vincent's Healthcare Group (SVHG) (the legal entity holding SVUH, SMH and its private hospital) are companies incorporated under the Companies Act 2014 and are also registered charities. The five statutory hospitals are St Luke's General Hospital, Carlow/Kilkenny, Wexford General Hospital, Our Lady's Hospital, Navan, Regional Hospital Mullingar and St Columcille's Hospital, Loughlinstown.

The Group Chief Executive has delegated authority to manage hospitals within the Group under the Health Act 2004. In respect of Voluntary Hospitals this authority is operated through the Service Level Arrangement. The Group CEO is accountable for the Group's planning and performance in line with the Performance and Accountability Framework of the HSE. All targets and performance criteria adopted in the plan are reported monthly through this framework.

IEHG EXECUTIVE ORGANISATION STRUCTURE



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COLOUR CODE

Group CEO

Divisions

Sub-Divisions

Direct Reports

Indirect Reports

*Service organisation, planning and delivery co-ordination

IEHG Executive Team



Mary Day
Chief Executive Officer



Ann Donovan
Chief Operations
Officer



Paula Lawler
Strategic Director of
Organisation
Development & Change



Prof. Tim Lynch
Chief Academic
Officer



Prof Risteárd Ó Laoide
Joint
Clinical Director



Mr Kevin O'Malley
Joint
Clinical Director



Declan Lyons
Chief Financial
Officer



Paul Gallagher
Director of Nursing &
Midwifery



Norah Mason
Director of HR



Anne-Marie Keown
Director of Service
Improvement



Séamus Priest
Director of Procurement



Alan Sharp
Director of Estates



Sinéad Brennan
Director of Quality &
Patient Safety



Neil O'Hare
Chief Information Officer

Ireland East Hospital Group Board

Following a Public Appointment Service (PAS) campaign, the Minister for Health, Simon Harris TD, appointed the following persons as members of the Ireland East Hospital Group Board. These appointments were with effect from 29 December 2017 for a three-year term.

Mr Gerard Gray

Mr Gray is currently Chairperson of the NHS East Cheshire Clinical Commissioning Group Governing Body, based in the UK. He is also the Chairman of the Regenda Housing Association in Liverpool. He is a graduate accountant with more than 40 years' experience of International Corporate & Financial Governance in the Private, Public and Charitable sectors.

Ms Elaine Mead

Prof Mead was previously Chief Executive Officer, NHS Highland and is now Executive Director of Improvement, Care and Compassion. Prof Mead works as Faculty for both the Institute of Health Improvement (IHI) and Catalysis, and as Executive Sensei for NHS Improvement, England. She holds the position of Honorary Visiting Professor, University of the Highlands and Islands, was awarded a fellowship by the International Society for Quality in Healthcare (ISQua) and is a current member of QScotland.

Ms Mary Casey

Since 2016, Ms Casey is the Programme Director for MSc Practice Innovation in Healthcare at UCD's School of Nursing, Midwifery & Health Systems. In 2010 as Head of Teaching and Learning and later in 2011, as Associate Dean for Graduate Programmes, she led major reform of the School's taught graduate portfolio that resulted in significant and sustained growth in the School's taught graduate income.

Prof Cecily Kelleher

Professor Kelleher is currently Principal of the College of Health and Agricultural Sciences at University College Dublin, which is the academic partner of the Ireland East Hospital Group. She has many years' experience as a medical practitioner, university academic, public health sciences researcher and public policy advisor and has served previously on a number of public bodies, including Safefood and the Food Safety Authority and has chaired two statutory bodies, the Women's Health Council and the Medical Bureau of Road Safety.

Dr Brian O'Doherty

Dr O'Doherty has been a full-time General Practice partner for thirty years. He spent eight years on the GP advisory board for the Beacon Hospital in Dublin. He has served on the IMO GP sub-committee for the last number of years and is now treasurer of the organisation.

Prof Owen Smith

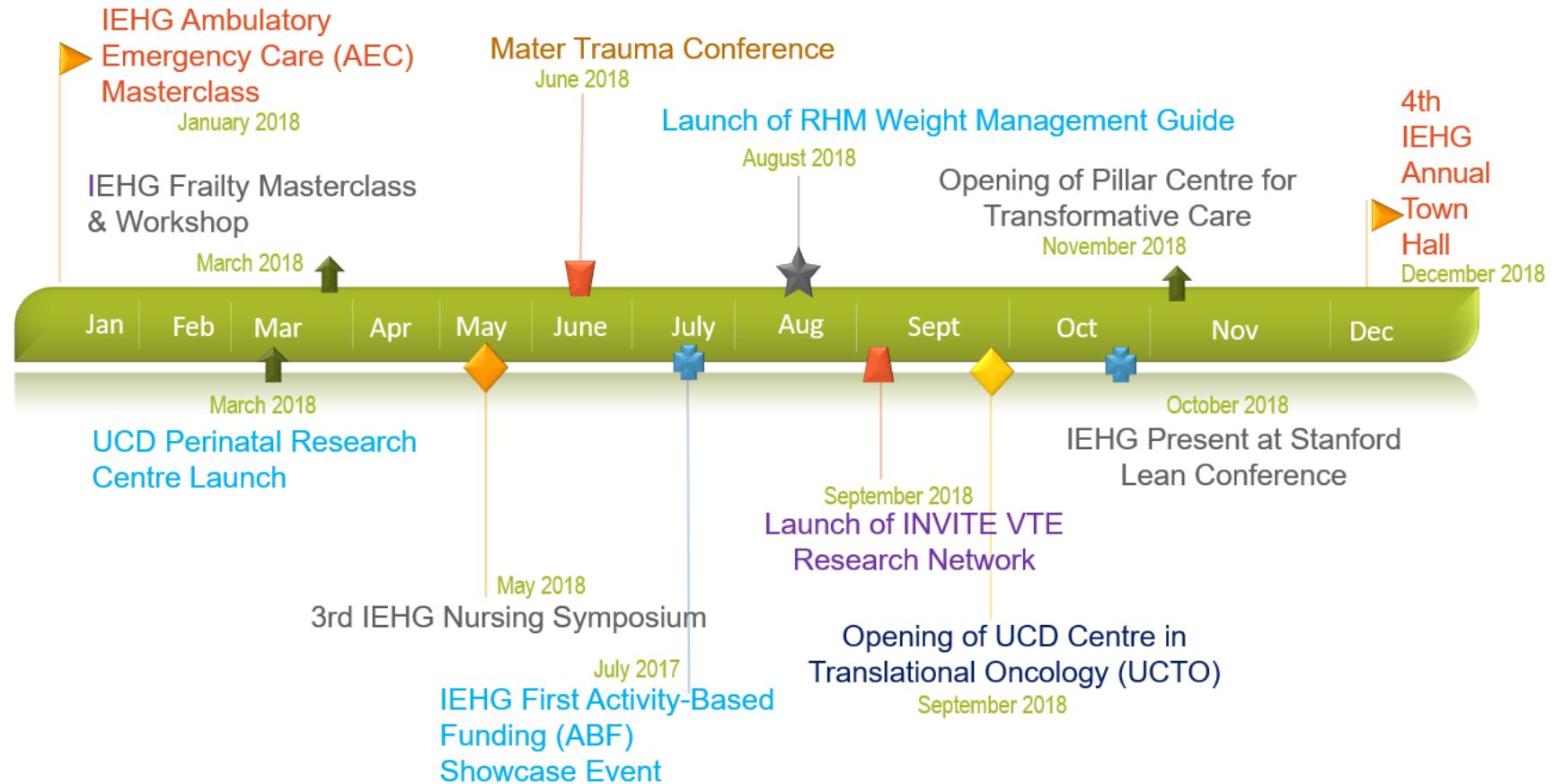
Professor Smith is a Professor of Paediatric and Adolescent Medicine at University College Dublin, Consultant Paediatric Haematologist at Our Lady's Children's Hospital, Crumlin, Dublin and Chief Academic Lead to the Children's Hospital Group. He also holds the title Honorary Regius Professor of Physic (1637) in the School of Medicine, Trinity College Dublin and is an Honorary Fellow of Trinity College Dublin.

Ms Lesley Doherty

Ms Doherty is a former CEO and Registered Nurse. She works part-time as a healthcare consultant, primarily providing executive coaching in the implementation of strategic strategies and

quality improvement. She is the secondary care nursing representative on the Wirral Clinical Commissioning Group (CCG) in the UK.

2018 Key Events at a Glance



Delivering for our Patients
Through an Integrated Health
System

Delivering for our Patients Through an Integrated Health System

Putting the Patient at the Centre of our Services

Integrated care, also known as integrated health and seamless care, is a worldwide trend in health care reforms and new organisational arrangements focusing on more coordinated and integrated forms of care provision. Integrated care puts the person/patient at the centre of the service, not the organisation.

Similar to healthcare systems worldwide, IEHG is on a journey to better manage our population of over 1 million patients. For the past three years we have been leading the integration of care across our hospitals and adjoining CHOs. This is underway both internally through the Service Improvement Team and externally through greater engagement with the Community Healthcare Organisations (CHOs) and General Practitioners (GPs).

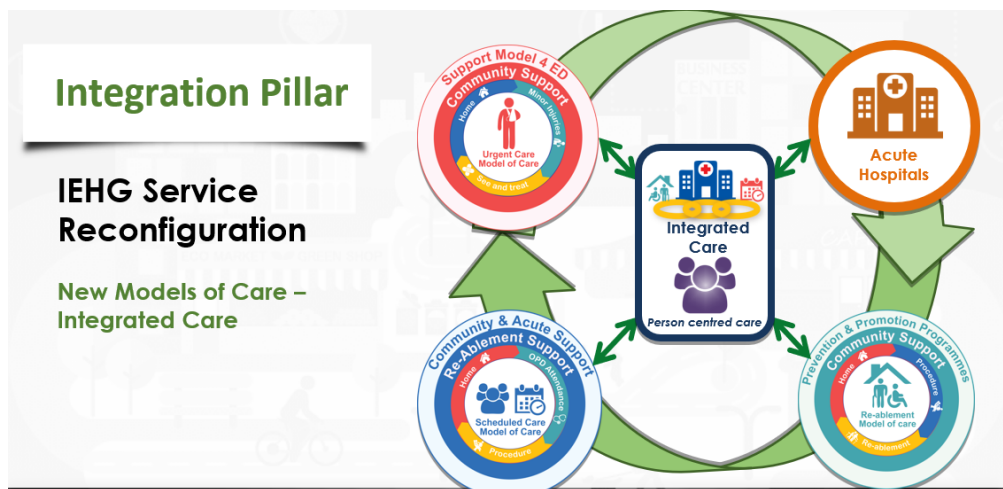
The redesign programme currently underway within the Group will continue in 2019. This programme will result in the realignment of clinical services across the 11 hospitals to ensure appropriate response to the rapidly changing shift in the design and performance of our current systems of care. To succeed, collaboration with a wide range of internal and external partners is a prerequisite, thereby facilitating an integrated approach and response to changes in technology, patient demands and service delivery.

A clinically-led engagement process, which challenges the way services are currently designed and delivered is underway. A number of proactive Service Review and Working Group forums have been established to focus on improving the patient's experience and outcomes of care in agreed specialities. Several initiatives and working group work flows are underway and will continue in 2019. This includes work flows relating to orthopaedics, ophthalmology, critical care, pharmacy services, venous thromboembolism (VTE), weight management, vascular services, diagnostics, neurology, paediatric and neonatal services. The work streams underway capture all activity and look at enhancing high-quality, safe care while exploring potential for service innovation aligned to our value improvement programme.

The work to improve clinical links between Our Lady's Hospital, Navan (OLHN) and the Mater Misericordiae University Hospital (MMUH) and St Columcille's Hospital (SCH) with St Vincent's University Hospital (SVUH) will continue to ensure the provision of appropriate patient services to meet local population needs. Working groups have been established within both of these programmes to ensure patient safety and a high quality of care is delivered in the most appropriate setting in a timely, effective and efficient manner.

During 2018, we restructured our Community Integration Framework and set up regular business meetings between IEHG and our community partners. We are currently developing pathways to develop a range of integrated projects across primary and community services in community ophthalmology, virtual clinics for heart failure, community management of Hepatitis C, frailty initiatives (see below) and a winter preparedness to minimise admissions. These projects, along with the establishment of Local Integrated Care Committees between GPs and acute hospitals in

St Luke's General Hospital Carlow/Kilkenny, Our Lady's Hospital, Navan and St Columcille's are initiatives which we intend to further rollout during 2019.



IEHG has initiated a dedicated Value Stream for Frailty across the Group. All four of the Group's Model 3 hospitals (RHM, SLGH, WGH and OLHN) are now implementing 100% frailty screening and identification for all patients ≥ 75 years. The implementation of this model line for Frailty has produced tangible results for patients. In December 2018, the Frailty Intervention Team in Regional Hospital Mullingar (MFIT), supported and facilitated by the IEHG Service Improvement team, won a HSE Excellence Award for their Frail Older People Rapid Improvement Programme in the Improving the Patient Experience category. They were also winners of the Popular Vote.

The IEHG Service Improvement team hosted a conference in November 2018 entitled 'Shifting the Curve in Frailty - Integrating Services for Older People' which was attended by over 150 delegates from across acute and community services. The event brought together leading experts in the field of frailty and older persons' services and was also an opportunity for IEHG sites actively engaged in the Frailty Value Stream improvement journey to come together to celebrate and share success to date.



Pictured l-r: *Fiona Keogan, IEHG Service Improvement Lead; Prof John Bolton, Oxford Brooks University; David Burnby, Outcome Based Accountability Facilitator, Anne-Marie Keown, IEHG Director of Service Improvement; Tracey Williams, National Lead for Unscheduled Care in Wales*

The **Heart Failure Virtual Clinic** (St Vincent's and St Michael's Hospitals) continues to deliver better care in the community, improved outcomes (reduced referrals to ED/AMAU and OPD), reduced costs and greater satisfaction among GP providers in providing this model of care. With the support of Sláintecare we are anxious to scale up these projects and expand access for patients. Similarly, IEHG has developed a proposal for an integrated care programme for Hepatitis C shared between the community and hospital sectors. We are progressing this initiative to consolidate the benefits already identified in the Eurocare project.

During 2019, IEHG will progress the establishment of an **Ophthalmology/Eye Institute** to meet the increased demand for ophthalmology services. Integration with the community is central to addressing ophthalmology challenges within the Group. Establishing this programme to encompass hospital and community services is aimed at improving the quality of the service and expanding access to address adult and paediatric waiting list challenges. Reorganisation of services to this magnitude will be supported by a focus on key enablers including but not limited to informatics and data, primary / community care, health systems research, innovation and healthcare improvement. Our plans are strategically aligned to Sláintecare goals.

IEHG has also **commissioned a study with UCD** entitled '*Enhancing access to and integration of care – a longitudinal study*' (the GP-Link Study). This research programme is led by the UCD School of Medicine, and the General Practice & Primary Care Research Network. The aim of the network is to enhance patient care, treatment outcomes and therefore population health, by conducting multidisciplinary programmes of research in general practice and primary care to inform future service planning, and their subsequent delivery and evaluation. During 2019 we will undertake a 'demonstration project' (i.e. feasibility study of a complex intervention) to enhance access to / integration of care at participating practices. The demonstrator project will relate to medical readmissions. This study will inform healthcare policy on promoting access to and integration of primary and secondary care.

In 2018, IEHG also developed a **Laboratory Strategy** for 2018 – 2022 which frames the blueprint for integrated lab services for the next five years. In collaborating, MMUH will provide an IEHG Calprotectin Service for the IEHG labs (SVUH, RHM, OLHN, SLHK, WGH, SCH, SMH) and SVUH will provide the IEHG laboratories with an Infliximab service.

IEHG Integrated Patient Services

IEHG Cancer Service

Nature of Service

Ireland faces a significant challenge in providing high quality and cost-effective healthcare that make a difference in patients' lives.

The launch of the IEHG Cancer Care Service came in response to the National Cancer Strategy's (2017) aim of moving to four main surgical and oncology centres and the development of comprehensive cancer centres. IEHG has brought together two nationally designated cancer centres, SVUH and MMUH, into a single cancer function operating across two sites. The Group recognised at an early stage that the diverse nature and significant volumes of cancer patients presenting offered real benefits in terms of service scale and specialisation.

Tumour Groups are already established in gynaecological oncology, head and neck cancer, lung cancer, breast cancer, colorectal cancer and urological cancers.

The purpose of the Tumour Groups is to bring teams working on specific cancer areas across the IEHG hospitals together.

Activity

The IEHG Rapid Access Clinics (RACs) account for approximately 27% of the national volume of patients accessing breast, lung and prostate cancer services.

Integrated Patient services are fully established in gynaecological oncology and head and neck cancer. This includes joint clinical and academic posts across IEHG (MMUH, SVUH, NMH and UCD).

Resource/Investment

- An IEHG Executive Director for Cancer Service has been appointed and is responsible for the delivery of cancer care in both designated cancer centres.
- A Programme Manager has been appointed for the IEHG Cancer Service.
- MMUH and SVUH have a Cancer Service and Clinical Lead at each site; both of whom report to the IEHG Cancer Service Executive Director.

In the four years that the IEHG Management has been in place the Integrated Cancer Care model has been demonstrated to work effectively across a range of cancer conditions and has further potential to deliver very significant patient benefits.

IEHG Eye Care Service

Nature of Service

There has been a major focus on enhancing the treatment provided by the eye care service. This specifically involves the coordinated integration of services across MMUH, RVEEH and SVUH and the community service providers.

It is estimated that there are currently 225,000 people living with low vision and sight loss in Ireland. This is projected to increase to 272,000 by 2020. Within that number, there are approximately 13,000 blind people. This number is expected to increase to 18,000 by 2020.

Consequently, an IEHG Eye Institute specifically involving the integration of ophthalmology services began to be developed in 2018. This model is tasked with delivering high quality care and improving the care and treatment provided to the largest single cohort of eye care patients in the country.

The IEHG Eye Institute is a proactive response to the growing disparity between eye care services needed and the shortage of availability. Patients expect services to be locally accessible and provided in a timely manner.

Activity

The IEHG cataract model has the capacity in place to deliver services to 5000 cataracts patients in 2019.

- In relation to inpatient / day case activity, IEHG accounts for 48% of the National Total (for 12 months from 1-Jan-2017 to 31-Dec-2017)
- IEHG accounts for 35% of the National Inpatient / Day Case Ophthalmology Wait List total at the end of December 2018
- In excess of 16,000 patients are listed on the OPD waiting list
- 35% increase in records - waiting >12 months - Aug 2017 / Aug 2018

Resource/Investment

- An Executive Director for the Eye Institute has been appointed.
- A programme manager role has been advertised to support the Executive Director
- Opening of cataract theatre in RVEEH
- Funding for second theatre in MMUH to support evolution of a 'cataract highway' model that is efficient and will deliver the volume of surgery required
- 2019 will see the launch of community-based ophthalmic services under the aegis of IEHG, Grange Gorman and Loughlinstown

Integration of IEHG eye departments is maximising access and efficiencies for patients to the major eye departments in the country.

In the long term, IEHG plans to expand the service model to include 25 Ophthalmic surgeons providing appointments to replicate the Moorefields model.

IEHG ENT Service

Nature of Service

IEHG ENT clinical pathways are set up in such a way that patients have access to specialist treatments for the treatment of Head and Neck cancer, including maxillofacial and plastic surgery.

This has allowed for the development of pathways and workflows meeting local, regional and national demands for ENT patients.

Activity

In 2018, MMUH sustained and supported the service provision for Head and Neck Surgery in SVUH against the backdrop of a manpower deficit.

- In excess of 8000 patients are on the OPD waiting list, of which less than half are waiting over 12 months
- In excess of 650 patients are on the day case waiting list
- In excess of 650 are on the inpatient waiting list

Resource/Investment

Arrangements have been finalised for a Chair of ENT Surgery across both Model 4 sites (SVUH and MMUH) and UCD

- MMUH and SVUH have collaborated successfully this past year to warrant new joint posts such as a second ENT post to this service and an Otolaryngologist operating across all three sites (MMUH, SVUH and RVEEH).

This model of care and collaborative approach if allowed to develop and evolve will reduce waiting lists and expedite patients' access to care.

IEHG Venous Thromboembolic Disease Service

Nature of Service

VTE is reported to be a leading preventable cause of hospital-associated death and is the leading cause of maternal death in the UK and Ireland. Internationally 1 in 4 people die from causes related to blood clots with 60% of all VTE cases occurring during or following hospitalisation.

Throughout the Group, IEHG has and continues to show it is fully committed to supporting VTE risk reduction strategies.

The IEHG VTE Service was developed through evidence-based practice and was the first hospital Group nationally to determine VTE incidence as a whole and the burden of hospital-acquired VTE events. Within the IEHG catchment area the incidence of VTE can be estimated at 1.44 per 1000 annually. At least 47% of these cases are hospital-acquired. Implementation of VTE risk reduction strategies are urgently required.

Activity

GP engagement pathways are underway in SLHK and OLHN with potential to roll out across the Group.

IEHG VTE protocols are approved and are being rolled out.

The IEHG Service Review Group (with patient representation) focuses on the promotion of evidence-based care pathways for the prevention, diagnosis and treatment of VTE.

Supported by IEHG, the Irish Network for VTE Research, INViTE, was launched by the Minister for Business, Enterprise and Innovation in September 2018.

A HRB grant application regarding an awareness campaign across IEHG for pregnancy thrombosis was successful due to the demonstrable work by the Group.

In 2018 VTE awareness campaigns were held at IEHG Model 3 and 4 hospitals, led by a team of patients and multidisciplinary care providers.

As the first Group to have collated data on VTE incidences a report entitled “Venous Thromboembolism Incidence in the Ireland East Hospital Group: A retrospective twenty-two month observational study” has been successfully submitted and is being considered for publication in the journal BMJ Open.

Resource/Investment

In recognition of the urgent requirement for ongoing and continued investment, a successful application was made to the Consultant Applications Advisory Committee (CAAC) for a dedicated VTE specialist for MMUH and IEHG. Discussions are ongoing regarding a second post.

In 2019, IEHG will host a ‘Stop the Clot’ roadshow for six weeks across the Group and community. The event is aimed at promoting awareness around the education and prevention of blood clots.

The implementation of VTE risk reduction strategies as cited are urgently required. The scale of the Hospital Group will give us the potential to develop protocols for the prevention of VTE which will be of national importance. IEHG are working with the HSE on developing a national roll out of this programme.

IEHG Vascular Surgical Services

Nature of Service

A successful collaborative initiative is in place between MMUH and SVUH with the creation of a unified-on call rota for vascular surgical services. This is essential cover for a critical cohort of patient with ruptured aneurysms and acute limb ischaemia and trauma injuries.

Activity

A joint Department has been created and audit committees are now evolving across both sites.

Opportunities associated with the current approach include the further development of cross-site solutions and the development and implementation of common therapeutic clinical standards and protocols.

Resource/Investment

In addition, SVUH vascular surgeons have access to the €1m hybrid theatre in MMUH. This initiative has set a precedence with joint multidisciplinary teams and audit committees now evolving at both sites.

IEHG Critical Care Services

Nature of Service

Inadequacy of Critical Care resources is a major national issue and has been identified as a key deficit in the recent national Capacity Review by the Department of Health (2017).

The IEHG Critical Care Service collaboration is designed to help address capacity issues, clinical strategy and clinical operations across IEHG for the benefit of regional patients and for many external referrals.

Collaboration and engagement in IEHG assist in developing and strengthening critical care provision and operations and identifying resource requirements to meet the needs of the critically ill patients presenting across the Group.

Member hospitals support and are working collaboratively on audit implementation with the National Critical Care Audit, NOCA and the development of Education and Training collaborations across the network.

Activity

Ongoing activities and patient benefits of the IEHG Critical Care Service include:

- Improved governance and oversight
- Developing an integrated electronic data set across the IEHG hospitals
- A comprehensive workforce planning programme has commenced. IEHG is looking at consultant manpower and the potential to restructure across the Group (with consultant sessional commitments across member hospitals), in addition to a nursing manpower review
- The evolution of an IEHG critical dashboard, part of integration across the Group, which can only better identify pressure on the ICU and hence local resource issues
- Coordination of provision of specialist insight for WGH, SLHK and RHM

2019 will see the introduction of virtual ward rounds for the smaller IEHG hospitals using visual link-ups.

Resource/Investment

IEHG progressed key development posts in 2018, in addition to audit nurse posts across member hospitals.

IEHG Apheresis Service

Nature of Service

Apheresis procedures are performed on patients with rare and often life-threatening haematological renal or neurological disorders and require the management of transplant rejection.

The demand for Apheresis services is increasing due to the evolution of the population mix and the growth in medical and surgical therapies.

IEHG has developed a dedicated and cohesive Therapeutic Apheresis Service model for the Group, with MMUH and SVUH therapeutic apheresis teams working collaboratively. This allows for

significant efficiency in a very important specialised service through the leveraging of resources across two sites.

Activity

Both hospitals are enabled to provide a comprehensive and dedicated service, with provision of cover within and out of hours, at weekends and on bank holidays – a service model that neither site can achieve working in isolation.

The new IEHG joint service puts in place appropriate clinical governance arrangements, despite the limited number of senior clinical decision-makers available to the individual hospitals and the current high demands on their input into other areas.

The increased overall number of procedures performed ensures that all staff are able to gain the necessary experience and expertise in these specialised procedures which benefits IEHG patients as a whole.

Resource/Investment

IEHG have funded a 24/7 service encompassing two CNM 2 posts in SVUH and upgrades of two CNM 2 posts in MMUH.

Opportunities associated with the proposed approach include the further development of cross-site solutions and the development and implementation of common therapeutic clinical standards and protocols.

IEHG Dermatology Service

Nature of Service

IEHG is developing a HUB and spoke model with MMUH/SVUH and its regional centres in Mullingar, Kilkenny and Wexford to develop dermatology outreach services across the population which will include primary care.

This will include joint appointments across the Group, joint phototherapy services delivered on regional sites under the governance of the hub hospitals, and expansion on the service to include the dermatology expertise in primary care under an integrated pathway for dermatology.

This service will create greater efficiencies and savings in drugs, resources and equipment from critical mass with the expansion to a single dermatology service across the Group based on the cancer and ophthalmology model already in place.

Activity

In excess of 7,000 patients are waiting for an OPD appointment.

A review of the dermatology service in the southeast (WGH, SLHK and SVUH) is planned.

Resource/Investment

Three additional Dermatology posts have been advertised which will have sessional commitments in MMUH, RHM and CNOH

We are also progressing a plastic surgeon appointment between MMUH and RMH.

IEHG Neuroscience Service

Nature of Service

A Neuroscience Clinical Academic Directorate is being finalised in 2019. This will provide a major focus on enhancing the care and treatment provided to neurology patients within IEHG.

This Directorate will improve academic care in neurology, psychiatry, dementia, stroke, old age medicine and neurosciences.

Activity

Through a detailed service collaboration programme we will improve the care of our patients by availing of world-class expertise in Multiple Sclerosis, dementia and dystonia at SVUH and stroke, neurodegenerative disease (Parkinson's disease) and headache at MMUH.

IEHG Women's Health & Children Service

Nature of Service

IEHG is also establishing a Women's Health & Children CAD, with a focus on service improvements across the four hospitals in the Group providing maternity services, paediatric care, gynaecology and transition management.

Activity

An Executive Director of the WHC directorate was appointed in December 2018.

Constantly Improving the Quality of
Care we Deliver

Constantly Improving the Quality of Care we Deliver

IEHG Lean Transformation

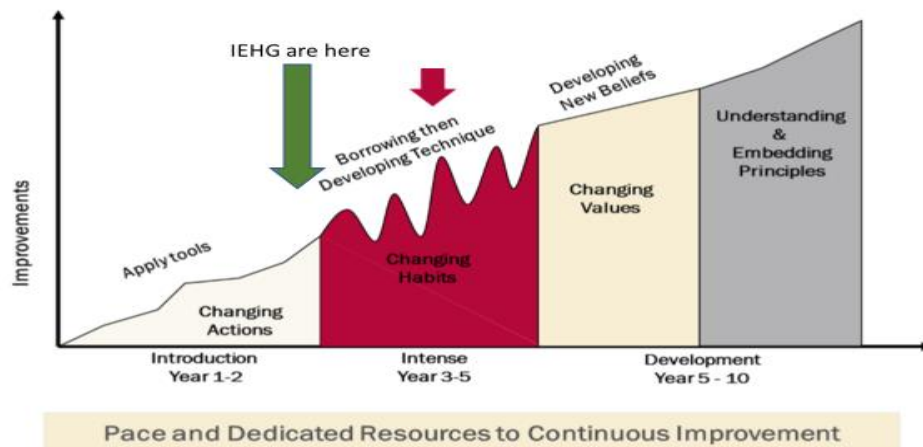
In 2017, IEHG commenced an ambitious Transformation programme which aims to standardise the delivery of healthcare across the Group and ensure that every patient receives **the right care, in the right place, at the right time, every time.**

IEHG has taken a strategic decision to adopt the philosophy and principles of Lean Methodology to improve and manage the change required. To deliver this ambitious vision, IEHG has committed to developing a health system that promotes the positive culture of the Group and daily engages and supports our staff to deliver our strategic goals.

1. Improve patient and staff experience and patient outcomes
2. Enhance the capability of our hospitals to deliver operational excellence
3. Develop and enhance continuous improvement capabilities
4. Optimise patient flow and resource utilisation



The IEHG Lean Transformation Journey



2018 has been a successful year for IEHG staff, patients and community partners in our Transformation of Care journey. The Group approach to improvement through the adoption of a Lean Improvement system has been consolidated as we have worked to build trust and relationships across the healthcare system. This is a fundamental first step to the sustainable cultural shift we are after.

Positive results have been reported across all relevant dimensions of performance.

Patients and Staff Experience

- Sustained improvement in Patient Experience Time (PET) across the IEHG Model 3 hospital sites emergency pathway (2017-2018)
- Improved patient satisfaction rating (88%-100% SCH)
- Over 2000 IEHG frontline staff engaged in Improvement events (2017-2018)

Efficiency

- Reduction in medical average length of stay in all IEHG Model 3 hospitals in 2018
- Pre-operative average length of stay decreased by 24% in St Vincent's University Hospital in 2018

Quality

- IEHG cancer handoffs reduced by 65% (MMUH, SVUH)
- Consultant face-to-face clinical time increased by 125% (Cancer Clinic MMUH, SVUH)
- Nursing returned time to care cancer clinic increased (200%) MMUH/SVUH.
- Reduction in time to deliver drug rounds resulted in a 65% increase in time released back to care (SCH)
- Reduction of 39% in discharges to nursing homes from IEHG Model 3 sites
- Increased discharge destination to home for frail older people by 20%
- 100% of >75yrs attending IEHG Model 3 sites screened for frailty by end of 2018

Value Management/ Return on Investment

- Reduced supplies cost by 26% in SCH
- On time theatre starts improved by 133% (SVUH 2018)

Building Internal Capability and Capacity for Change

Building internal capability and capacity to deliver improvement is critical to the ability of our staff to deliver cultural transformation. IEHG has shown commitment to this through the establishment of an IEHG Lean Transformation Improvement team which sets us apart from other approaches underway elsewhere in the Irish healthcare system.

The Service Improvement Team (SIT) leads the deployment of Lean throughout the Group, not only as a means of ensuring continuous improvement but also as a management system. To expand and embed the transformation, IEHG is supported by a technical partner (TP), IBM Watson Health. While the SIT are the primary agents for change working with hospital frontline staff, the TP brings specialist skills in large scale transformational change and work as mentors (sensei) and coaches.

To date, the IEHG Service Improvement Team have delivered 57 Lean Improvement events, 37 Rapid Improvement Events (RIEs), seven Value Stream Analyses (VSAs), three 2P events and three 6S events.

The Improvement team have been working across the Group with our clinical leaders to develop the leadership and Lean improvement skills needed to deliver more effective models of care delivery and performance improvement. IEHG consultant change champions, registrars and NCHD

staff, along with nursing and Health and Social Care Professionals, have been undertaking Lean training, leading Visioning and Values workshops, Rapid Improvement Events and Value Stream Analyses and co-leading the redesign and improvement of care delivery models across the Group.

Investment in our clinical leadership to deliver continuous improvement is essential to achieving the healthcare transformation required. Clinical engagement is a critical element in delivering transformation of services.

IEHG at Lean Conference in Stanford, USA

In October 2018, IEHG Director of Service Improvement Anne-Marie Keown presented at the Lean Healthcare Academic Conference in Stanford, USA on the Adoption of Lean for Healthcare Transformation in IEHG and the Group's journey so far investing in and supporting front line staff to transform their own services using Lean techniques. Anne-Marie spoke about the tangible and measurable examples of improvement in service seen in every area that has embraced this work to date and the focus of IEHG on large scale transformation, through small but coordinated pieces of improvement work. Anne-Marie was joined at the conference by Dr Emer Ahern, Consultant Geriatrician at St Luke's General Hospital, Carlow-Kilkenny, who presented on Building a Model Line for Frailty. Emer led the Geriatric Emergency Medicine Service (GEMS) in St Luke's, the first hospital in IEHG to screen for Frailty.



Anne-Marie Keown and Dr Emer Ahern at Lean Healthcare Academic Conference in Stanford, USA

Value Stream Improvements

Value Stream Analysis (VSA) events set the priorities for improvement and along with the Rapid Improvement Events (RIEs) which follow are the key enablers of change led by frontline teams. The week-long Rapid Improvement Events which involve key staff are the primary Lean vehicle to drive organisational cultural change. The pace of these events and staff engagement across IEHG and our community partners is what has delivered the results for our staff and patients to date, is driving organisational transformation, and attracting national and international interest.

In 2018, several Value Streams for Improvement were identified across the Group, including:

- **Acute Floor, assessment, admitted care and discharge**
- **Frailty**
- **Patient Flow**
- **Scheduled Care**
- **Gynaecological Oncology Services**

Acute Floor Value Stream Improvement

In 2018, the Acute Floor Value stream was commenced across the Group, with an initial focus on engagement with our Model 3 hospitals: Our Lady's Hospital, Navan (OLHN), Wexford General Hospital (WGH), St Luke's General Hospital, Carlow/Kilkenny (SLGH) and Regional Hospital Mullingar (RMH). A Value Stream Analysis (VSA) focusing on Admission to Discharge, enabling key areas for improvement to be identified, took place in each hospital site in 2018. A key output from the VSA was a plan for improvement for the next 12-18 months, involving a series of Rapid Improvement Events (RIEs).

The Acute Floor improvement work focused on standardising streaming at the front door enabling increased access to senior decision-makers, improving flow at triage, and developing visual management within the Acute Floor setting.

Outcomes achieved:

Our Lady's Hospital, Navan (OLHN)

- Referrals from ED to MAU increased by 72% (Oct - Nov vs. Jan – Sept 2018) (median 120 vs. 68 patients), no increase in escalation beds or admission rate reported, at 60/7 review
- TrolleyGAR figures decreased by 42% (Oct - Dec 2017 vs. 2018)
- Sustained Improvement in PET for >75years since VSA in July 2018, and RIE Oct 2018

Wexford General Hospital (WGH)

- 31% increase in AMAU attendance (newly registered patients)
- 31% increase in AMAU activity had Return On Investment (ROI) of €318,816
- Improvement in AMAU 6hr PET of 21% (AMAU KPI 6hr PET)

St Luke's General Hospital, Carlow/Kilkenny (SLGH)

- Reduced corridor beds
- Reduced boarders overnight in AMAU

Regional Hospital Mullingar (RHM)

- 36% improvement in cancellation rates for CT and US scanning
- 77% improvement in median wait time for CT and US scan
- 30% reduction in duplicate, inappropriate and unnecessary requests
- Frailty – achieved 100% screening of all presentations to ED over 75 years
- An average of 26% were discharged to nursing homes (Jan-June 2018) compared with <8% of admissions in September.

Frailty Value Stream Improvement

In 2017, IEHG, our community partners, patients and other stakeholders came together and committed to an ambitious and innovative journey to develop an integrated Model of Care for Frail Older people. Using Lean methodology and principles, the vision and values for this pathway of care for frail older people were developed along with a collective view of 'What Good Looks Like'. Throughout 2018, IEHG staff, patients and our partners in the community have continued to work together to codesign, develop and deploy the key solutions for the realisation of this new model of care. The model focuses on the need to promote independence, well-being and quality of life for older people. Improved coordination and communication processes are central to the approach. This relies heavily on a partnership approach across the continuum of care that spans the primary, community, acute and residential-aged care sectors.

Current best practice would indicate that older people who are admitted to hospital should have their care needs met as soon as possible, with follow up assessment happening in an ambulatory setting and as close to home as possible. This has formed a significant part of the improvement work undertaken this year.

In 2018, five IEHG hospitals embarked on the development of their integrated frailty pathway, working with the Group improvement methodology and forming a network of practice to support change and improvement: St. Vincent's University Hospital (SVUH), St. Luke's General Hospital, Carlow/Kilkenny (SLGH), Wexford General Hospital (WGH), Regional Hospital Mullingar (RHM) and Our Lady's Hospital, Navan (OLHN). Significant change is already underway. Each site has undertaken a Value Stream Analysis (VSA) which looks end to end at the current pathways of care for frail older people and seeks to understand the experience of care from the perspective of both patients and staff. The VSA was closely followed by a series of weeklong Rapid Improvement Events (RIEs) which staff deliver.

In 2018, the Rapid Improvement Events (RIEs) focused on key areas of the Frailty model line:

- First 72 hours - frailty identification and response mechanism
- Admitted Care - patient cohorting, interdisciplinary working utilising navigational hubs and ward boards to ensure visual management.
- Onward Care – rehabilitation, transitional care, long term care, end of life, etc.
- Integrated Care - working with primary and community partners, social care, voluntary sector, etc.

In order to deliver this new service model, IEHG collaborated with the NHS Acute Frailty Network (AFN) who have to date supported 150 hospitals in making this journey to integrated care of older people living with frailty. SVUH and SLHK have benefitted from this collaboration and have undertaken to standardise the care that older patients experience during an acute care episode. IEHG pilot sites have had an opportunity to learn from other sites and share expertise and experiences. This collaboration offers IEHG access to international communities of practice, research opportunities and the opportunity to join with 150 other hospital sites in developing a community of practice and a shared learning network for frailty.

Outcomes achieved:

IEHG's Service Improvement team have supported the implementation of services at each site with rapid improvement weeks and follow up report-outs to ensure the sustainment and spread of new practice. Innovative processes and new ways of working to address the needs of the frail elderly in IEHG hospitals are already being developed in the areas of:

- a) Frailty screening and identification - 100% of all ED attendances ≥ 75 years in all Model 3s, ie; St. Luke's, Kilkenny, Regional Hospital Mullingar, Wexford General Hospital, and Our Lady's Hospital, Navan. The Mater Misericordiae University Hospital also screens for frailty.
- b) Rapid MDT response to Frailty positive screening (St. Luke's, Kilkenny). Other Model 3 sites are providing a response but do not have dedicated teams so cannot respond to all patients promptly.
- c) Reduction in length of stay for admitted care, through visual management of patient journeys (navigational hubs and ward boards), proactive rehabilitation and early identification of barriers to discharge. 50% of older patients in St. Luke's are now discharged within 5 days, compared with 7 days in 2016.

Patient Flow Value Stream Improvement

Improving the flow of our patients through delivering operational excellence was and remains a key priority for the IEHG improvement team in 2018.

A group wide improvement event - ***Learning to Navigate... Go with the Flow***, focused on hospital-wide patient flow (right care, right place, right time, every time), which is critically important to reducing the risk for patients of sub-optimal care, potential harm, and to reduce the burden on staff. In 2018, IEHG were delighted to welcome Pete Gordon who is passionate about improving patient care and is creator of the **#SAFER patient flow bundle** and a senior manager of the NHS Emergency Care Intensive Support Team.

- ✓ Group hospitals have now mobilised to improve visual management
- ✓ Refined the escalation process between wards and the navigational hub
- ✓ Use Daily Management to problem solve

Throughout 2018 this work improved the daily management of patients across the Group, to ensure the time of our patients was valued and that care delivery was optimised.

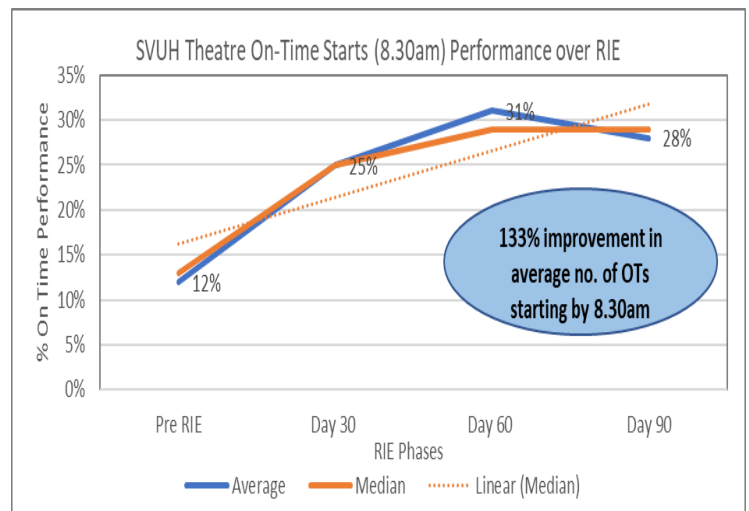
Scheduled Care Value Stream Improvement

In 2018, the IEHG Scheduled Care Value Stream Improvement commenced with an initial focus on **Ophthalmology, Musculoskeletal and Surgical Value Streams**.

- The overarching aim of the Ophthalmology Value Stream is to create a seamless integrated model of care to meet the needs of our patients and a shared vision to adopt, foster and spread good practice between teams and services (IEHG & Community partners). Planning progressed through 2018 ahead of the planned Enterprise Value Stream Analysis (EVSA) of Ophthalmology services in Q1 2019.
- Preparation also commenced for the Musculoskeletal (MSK) Value Stream (Q2 2019) which aims to develop and implement an evidenced-based, best-practice, MSK pathway for the population we serve which focuses on empowering patients to self care and on ensuring clinical interventions are delivered at the right time in the right place.

- Lean service improvement events took place in Surgery in St. Vincent's University Hospital (Day of Surgery Admissions and Day Case Surgery) followed by the Royal Victoria Eye and Ear Hospital (Ophthalmology and ENT Day Case Surgery). SVUH undertook a rapid improvement of their peri-operative service resulting in the redesign of the peri-operative process with 'wastes' minimised, and flow introduced, the integration of the day case/day of surgery admissions units, enhanced visual management and integrated healthcare documentation to support and sustain improvement. While immediate and significant results were evident, SVUH performance at 90 days demonstrated embedding and sustainment (90 Day results illustrated below).

Measure	Before	After	% Improvement
On time starts	12%	28% avg.	↑133%
Start<15 mins	51%	79% avg.	↑55%
200% improvement in 80% OTs starting by 8.45am			
300% improvement in all OTs starting by 8.45am			
Pre-Op AvLos	171 mins	130 mins	↓24%



Gynaecological Oncology Value Stream Improvement

The Ireland East Hospital Group (IEHG) Cancer Clinical Academic Directorate (CaCAD) Strategy is to become a single cancer centre operating across two sites with accreditation as a Comprehensive Cancer Centre by the Organisation of European Cancer Institutes (OECI). The IEHG Gynaecological Oncology Group (IEHG GOG) which is comprised of clinicians from three institutions within IEHG - Mater Misericordiae University Hospital (MMUH), St. Vincent's University Hospital (SVUH) and the National Maternity Hospital (NMH) were one of the first cross-institutional Tumour groups initiated by the CaCAD.

The IEHG GOG identified a number of opportunities and potential areas for improvement within their service, in particular in relation to standardisation of processes and quality of data being gathered across multiple institutions. It was established that improvements were required to:

- ensure timely and accurate capture and use of data (clinical and management) to manage the flow of patient care
- implement a best practice patient pathway including supporting processes to reduce the referral to treatment times and ultimately improve patient outcomes
- reduce rework within processes such as referral, MDT, clinics, diagnostics and scheduling of treatments (Surgical, Chemotherapy, Radiation) to maximise and streamline the Gynaecological Oncology services pathways

- improve staff and patient satisfaction with the service provided

With the support of the institutions' management, clinical and non-clinical teams, the IEHG CaCAD and the IEHG Service Improvement Team (SIT), a Value Stream Analysis (VSA) of the IEHG GOG service was undertaken in July 2018 utilising Lean methodologies and A3 thinking. The VSA allowed the identification of opportunities to streamline, standardise and optimise both the patient journey and quality of care, ultimately improving patient outcomes and enabling the Group to seek ESGO accreditation.

Following the VSA, in order to deliver the necessary improvements a number of focused Rapid Improvement Events (RIEs) took place as follows:

- Data RIE – September 2018
- Triage/MDT RIE – October 2018

The combined expertise and clinical engagement of the interdisciplinary team (Gynaecological Oncologists, Medical and Radiation Oncologists, Diagnostics, Nursing, Data Analytics, IT, Data Management, Administrative and Quality & Patient Safety staff from IEHG, MMUH, SVUH and NMH during the VSA and RIE weeks was fundamental in gaining agreement on the key areas for focus during the initial stages of this improvement journey.

The service improvement programme defined for the IEHG GOG following the VSA in July 2018 is estimated to take approximately 18 months overall to implement. The process has brought the institutions, including clinical and non-clinic staff, together in order to ultimately improve patient outcomes and experience. To date, the programme has been very successful with a significant number of improvements already implemented and a number of additional events planned throughout the remainder of 2019.

Results delivered by end of 2018:

- Proposed consultant delivered Triage clinic with all complete referrals triaged <7 days of receipt
- Design and set up of a Priority Clinic including Radiation Oncology to clinically review and assess New or Active Recurrence patients on same day as MDT discussion
- MDT/Patient pathway coordinator role defined for each cancer centre. Post in place currently at one site, recruitment at second site in progress.

This programme of service improvement using IEHG Lean methodologies and the results achieved have provided a baseline framework which will be used in all cancer specialties and to deliver IEHG strategic goals including OECl and ESGO accreditation. Additional VSAs and RIEs across the IEHG CaCAD are currently being planned for 2019 and out into 2020.

6S Lean Hospital – St Columcille’s

6S is a systematic way of standardising work and improving efficiency by eliminating waste, promoting flow, improving staff morale and most importantly improving safety.



As part of the plan to develop St Columcille’s Hospital (SCH) as the first 6S hospital in IEHG, significant work was undertaken in 2018 in the medical wards and endoscopy. The most recent 6S event resulted in:

- ✓ improved patient satisfaction (88 – 100%)
- ✓ quadrupled 6S audit scores, time released to care arising from 65% reduction in time to perform drug rounds and reduced supplies cost (21%), together with a once off credit arising from medication and supplies returned/distributed to other hospital departments. As 6S capability has developed in SCH, so too has the depth of improvement, delivered in the RIE week and in the sustainment phase, from a skilled team spanning clinical, support, maintenance and supplies departments. SCH has scheduled a programme of 6S events for 2019 to realise their ambition of becoming the first 6S hospital in IEHG and their progress to date will be showcased as the *GEMBA* site (*“go see actual place”*) for the Lean Academic Conference in 2019.

Quality & Patient Safety

Our ambition in 2018 was to continue to build and improve patients' experience of safe, effective and quality care across the Ireland East Hospital Group. Building the infrastructure to support a quality, person-centered system has been our continued focus.

The engagement by staff to achieve this through their involvement and leadership in patient safety initiatives, development of clinical systems and governance to support patient safety, improvement to drive clinical effectiveness and incident management has been strongly evident throughout the year.

Going forward for 2019, one of the objectives for the Group is to develop our Quality Report, a narrative for patients, staff and the public about the quality and standard of services we provide, demonstrating improvements not only within the hospital setting but also those developed through our integration with community and primary care partners.

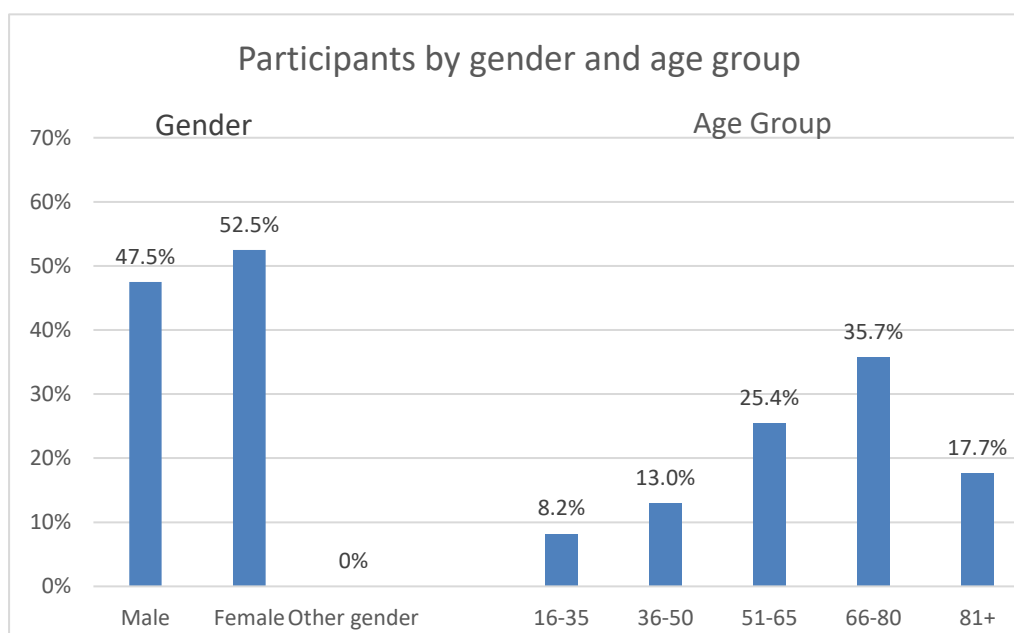
The quality of our services is measured by looking at patient safety, the effectiveness of treatments that patients receive and patient feedback about the care provided.

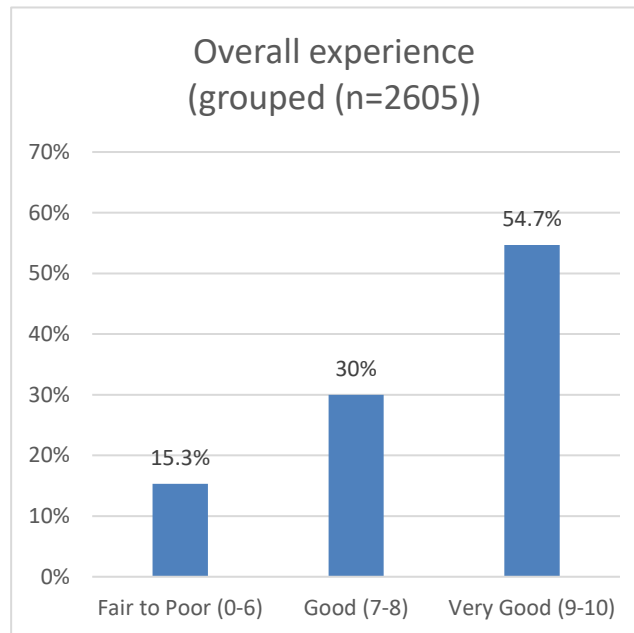
Developing capacity and capability across all domains that support and drive QPS will also be a priority for 2019.

Patient Experience

The second National Patient Experience Survey was undertaken in May 2018 with a response rate of 50% (n=2924). 84.7% of patients within the Ireland East Hospital Group indicated that their overall experience was good to very good. The graphs below provide information on the respondents who took part in the survey and breakdown of their experience.

National Patient Experience Survey - IEHG Report 2018





Overall the areas of good experience identified by respondents included respect and dignity both as an overall experience and in the emergency department. Patients also experienced privacy when discussing their condition/treatment.

Patients identified areas for improvement including someone to talk to about worries and fears, confidence and trust in staff, and availability of information to manage their condition after discharge.

During 2018, hospitals participated in various national and local improvement initiatives to support and improve patients' experiences within their service.

Specific Hospital QPS Improvement Initiatives 2018

National Healthcare Communications Programme

St Luke's General Hospital, Carlow/Kilkenny was one of six pilot sites nationally to participate in the HSE/RCSI National Healthcare Communications Programme Pilot. In October and November 2018, over 90 staff members (both clinical and non-clinical) attended Modules 1 and 2. St Luke's Modules 3 and 4 will be rolled out in 2019.

Memory Technology Resource Room

In September 2018, St Columcille's Hospital, Loughlinstown opened the memory technology resource room, showcasing assistive technology products that play an important role in supporting clients with memory difficulties, including dementia, to live more independently and safely in the community.

Emergency Department (ED) Waiting Room Information Project

St Michael's Hospital introduced a digital display for patient information following an audit that identified patient information needs when awaiting care in ED including: the patient journey through ED, health promotion information, better mental health information and helpline contact details.

Clinical Effectiveness

Clinical effectiveness is a key component of patient safety. The integration of the best evidence in service provision, through clinical effectiveness processes, promotes healthcare that is up to date, effective and consistent. Clinical effectiveness processes include pathways, audit and practice guidance.

During 2018, the Group focused on national audit and quality improvement programmes as a driver to focus of quality within the Group. The IEHG Medical Executive and the IEHG QPS Forum were provided with an information session on National Acute Hospital Mortality (NAMH) which highlights difference in mortality patterns and trends nationally. The Mater Hospital shared their experience and process for monitoring and interrogating the data. NAMH data was introduced to IEHG's Hospital Performance meetings in Q3 and has been positively engaged with by each hospital. During 2018 no outliers were identified in hospitals in the Ireland East Hospital Group.

NOCA Audits

National Office of Clinical Audit (NOCA) facilitates national clinical audits, ie; clinically-led, quality improvement processes that aim to improve patient care and outcomes through the systematic review of care against explicit criteria. NOCA's findings enable us working within the healthcare system to act to improve care where standards are not met. NOCA audits enable the hospitals within the Group to continually improve their standards of care, against national and international standards. By making reliable data available to us who manage and deliver healthcare, clinical audit annual reports as listed below, help us to enhance the services we provide, improve patient outcomes, and achieve change at local and Group level.

Acute Adult Services

- Hip Fracture Database National Report 2017
- Major Trauma Audit National Report 2017
- National Audit of Hospital Mortality Annual Report 2017
- National ICU Audit Report 2017

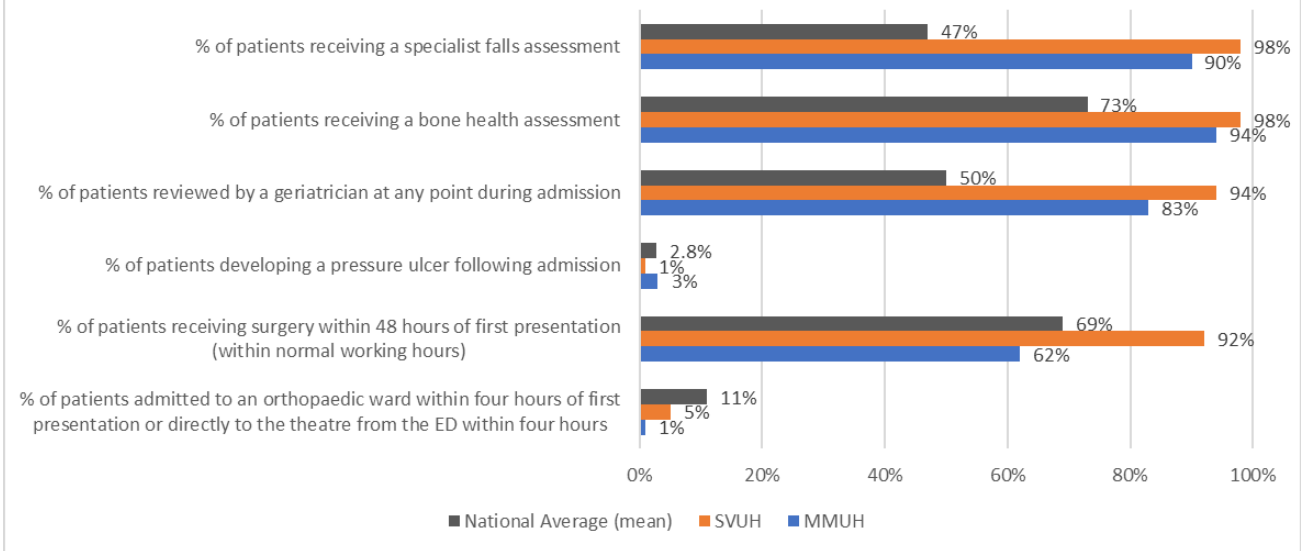
Maternity Services

- Severe Maternal Morbidity in Ireland Annual Report 2016
 - Perinatal Mortality in Ireland Annual Report 2016
- Also:
- Mortality Risk Amongst Very Low Birth Weight Infants in the Republic of Ireland Report 2014-2016
 - Very Low Birth Weight Infants in the Republic of Ireland Annual Report 2016

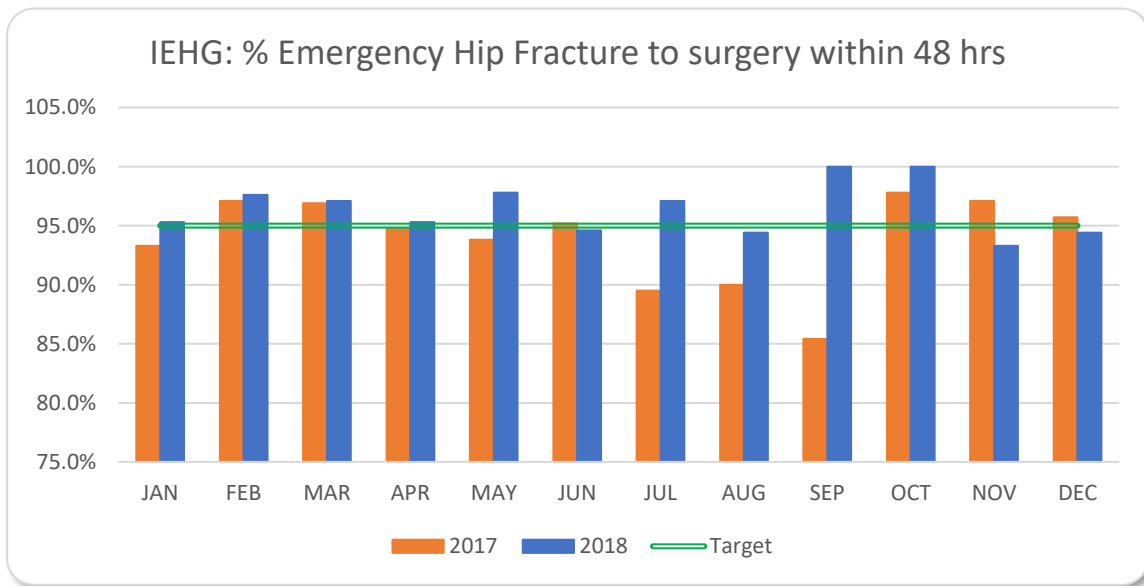
2017 Irish Hip Fracture Database National Report Summary

The 2017 National Hip Fracture Report was published in 2018. Two hospitals within the Group were included in this report, the Mater Misericordiae University Hospital (MMUH) and St Vincent's University Hospital (SVUH) and findings are reported below against the six key performance indicators (KPIs).

Summary 2017 Hip Fracture Report (6 KPIs)



During 2018, both hospitals worked on improving compliance against all six standards with overall improvement in the percentage of patient hip fracture surgery completed within 48hrs.



Sepsis Management

In 2017, the number of patients with sepsis documented increased by 20.6% in IEHG (15.5% nationally) and the sepsis-associated crude hospital mortality rate was 18% in IEHG (18.4% nationally). These figures are not age or co-morbidity adjusted and, therefore, are not comparable with other Groups.

Central to this improvement are the local sepsis committees that meet regularly to oversee implementation of *National Clinical Guideline No. 6 - Sepsis Management* (NCG). The IEHG ADON for Sepsis attends local sepsis committee meetings to provide support, information and updates as relevant.

In 2018, there was continued implementation and work across all hospitals in the Group with the aim of improving sepsis recognition and management through the following:

- Three process audits were carried out as follows:
 - Audit 1: a baseline maternity audit provides a benchmark from which to measure progress in the future
 - Audit 2: was based on surgical patients
 - Audit 3: was based on patients admitted from residential care settings. Of note: there were improvements in recognition and documentation of sepsis and in timely treatment and management of sepsis across the Group.

- Education and support at local hospital level: E-learning, Sepsis Committees
- Progressing national projects: paediatric, GP, public awareness

Patient Safety

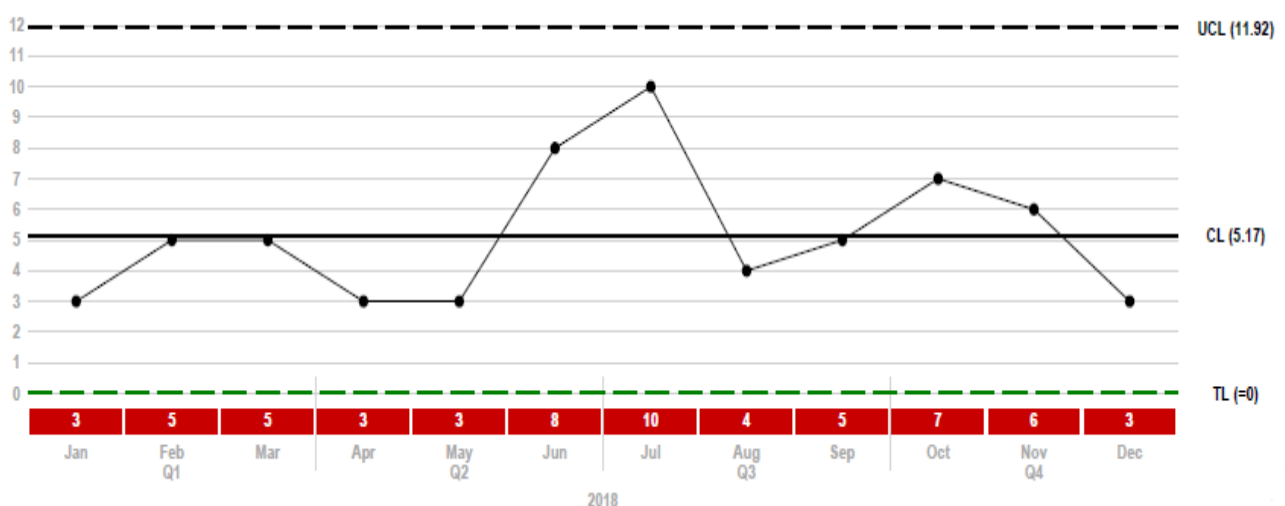
Infection Prevention and Control

The IEHG Healthcare Associated Infections (HCAI) and Antimicrobial Stewardship (AMR) Oversight Committee continue to monitor and review incidents of HCAI, in order to learn and drive improvement to reduce these rates and provide safer care for patients in our hospitals. During the year, national leadership attended this forum to provide guidance and direction in a number of initiatives implemented during 2018. Given the challenges that were experienced regarding CPE, all hospitals implemented the National Patient CPE Communication Programme.

Increased screening of CPE to improve early identification and implementation of appropriate management pathways was supported by a national focus on increasing resources to enable this objective.

Number of new cases of Carbapenemase Producing Enterobacterales (CPE) (Jan 2018 to Dec 2018)

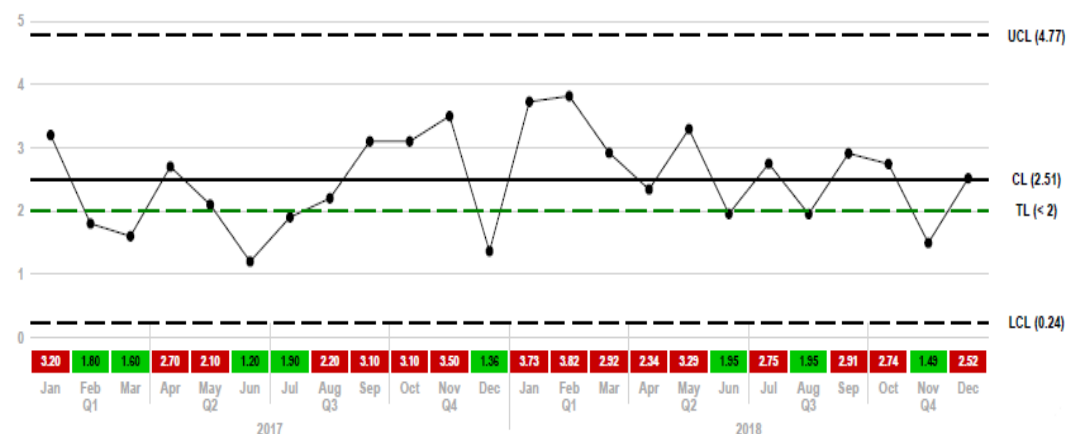
Ireland East Hospital Group



Healthcare Associated Infections (HCAIs) C.difficile and Staphylococcus Aureus

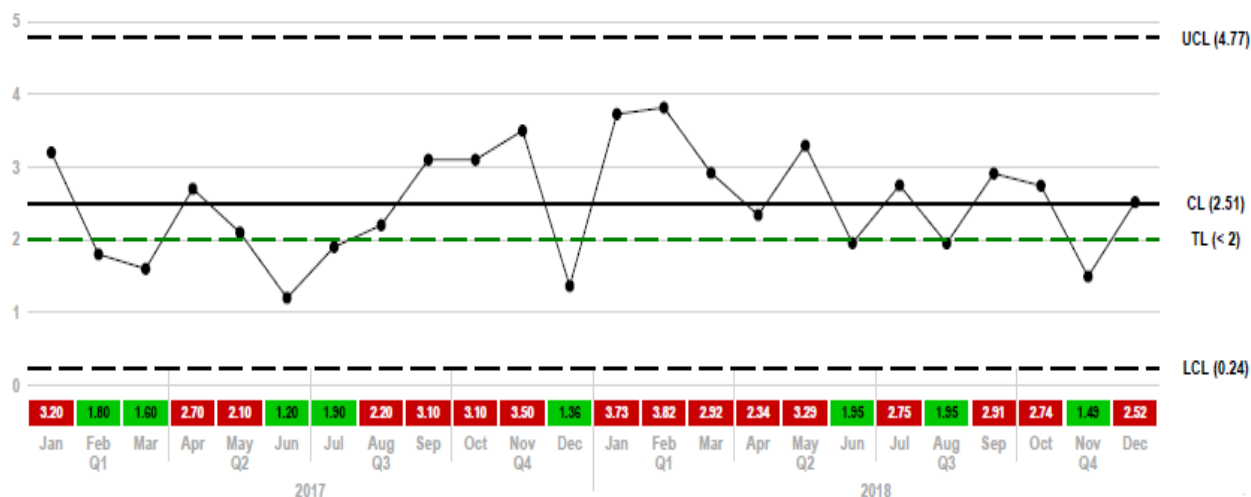
Hospital Acquired new cases of C. difficile infection/10,000 BDU (Jan 2017 to Dec 2018)

Ireland East Hospital Group



Hospital Acquired Staphylococcus aureus bloodstream infection/10,000 BDU (Jan 2017 to Dec 2018)

Ireland East Hospital Group



With the launch of the HSE Procedure on the use of Root Cause Analysis (RCA) for hospital-acquired Staphylococcus aureus blood stream infection (SABSI) and Clostridium difficile Infection (CDI), IEHG will:

- Develop a supporting HCAI proforma that will capture the relevant information and data required for review and reporting purposes.
- Interrogate data from all sources of data, local RCAs, risk registers and HIQA reports to understand trends and common themes.
- Agree Group HCAI Plan for 2019
- Work with hospitals in developing resources and capacity to support compliance with HCAI requirements.

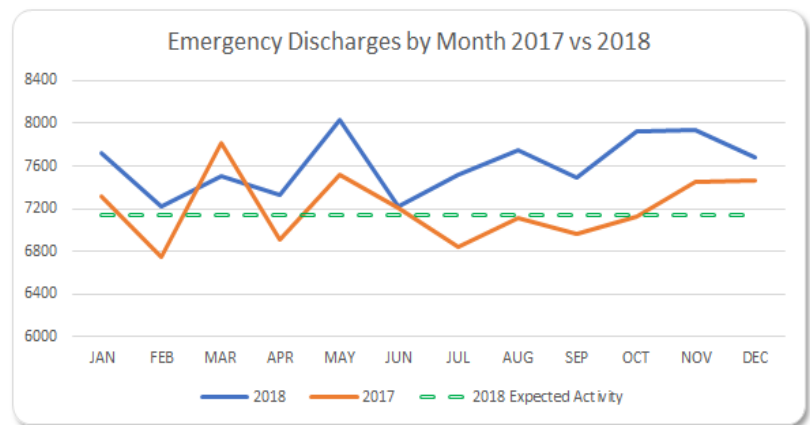
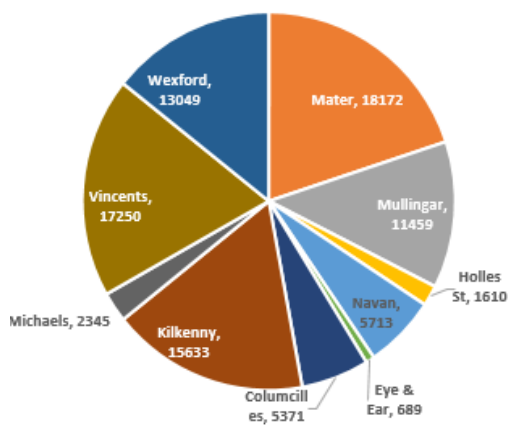
Adding Value as a Group

Adding Value as a Group

Unscheduled Care

Attendances

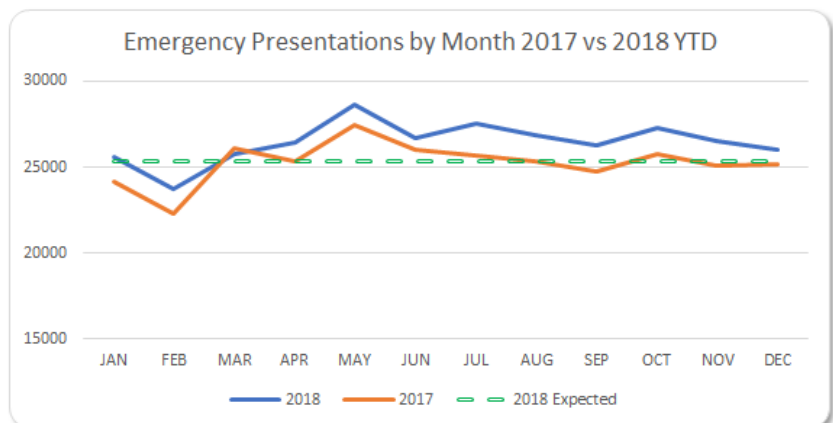
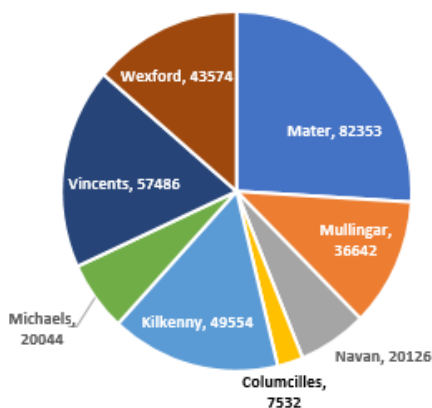
Emergency presentations including attendances to Medical Assessment Units increased during 2018. Total presentations were 304,466, representing a year-on-year increase of 4.7% and is 4.2% above expected target. Seven hospitals recorded increases with the highest being the Mater (8.2%) followed by St Michael's (8.1%) and St Vincent's (7.9%). Increases in other hospitals range between 0.8% and 1.9%. Two hospitals recorded decreases, St Columcille's (-5.6%) and Our Lady's Hospital, Navan (-2.5%).



Source: BIU (MDR Data)

Discharges

Discharges with emergency as a source of admission (including those from Medical Assessment Units) also increased during 2018. Total discharges were 91,299, representing a 5.8% increase year-on-year and 6.6% above expected target. All acute hospitals recorded increases the highest being in Wexford (10%), Kilkenny (9%) and St Vincent's (8%).

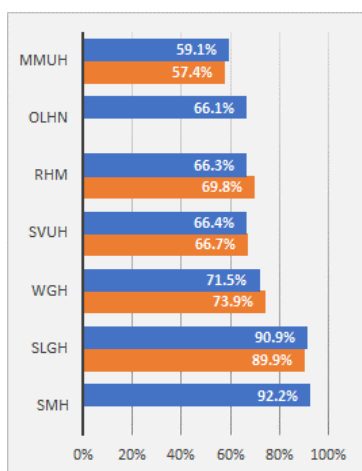


Source: BIU (MDR Data)

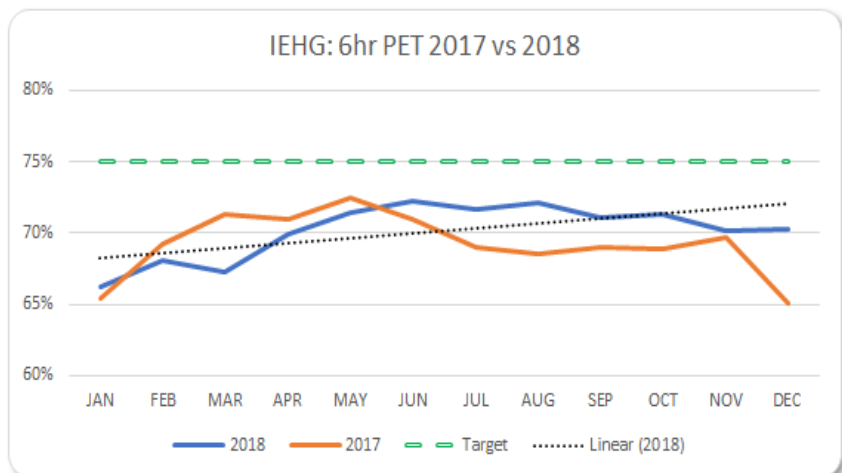
Patient Experience Time (PET)

PET performance during 2018 has shown improvement in all areas and has exceeded national targets by higher proportions in each PET metric than in 2017. When compared to other adult hospital groups, IEHG has performed best nationally in the 6-hour and 9-hour PETs. This performance improvement is against a background of increased attendances and admissions.

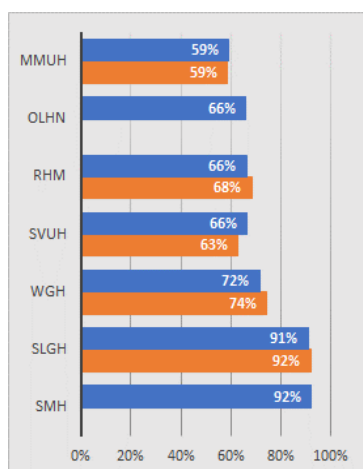
6-hour PET for the full year 2018 was up by 1% on 2017 to 70.2% and is 5.6% above the national rate. Monthly performance has varied throughout the year ranging between 72.2% and 66.2%. The overall performance was stronger than 2017 with a continuous upwards trend for 2018. The target for this metric is 75%.



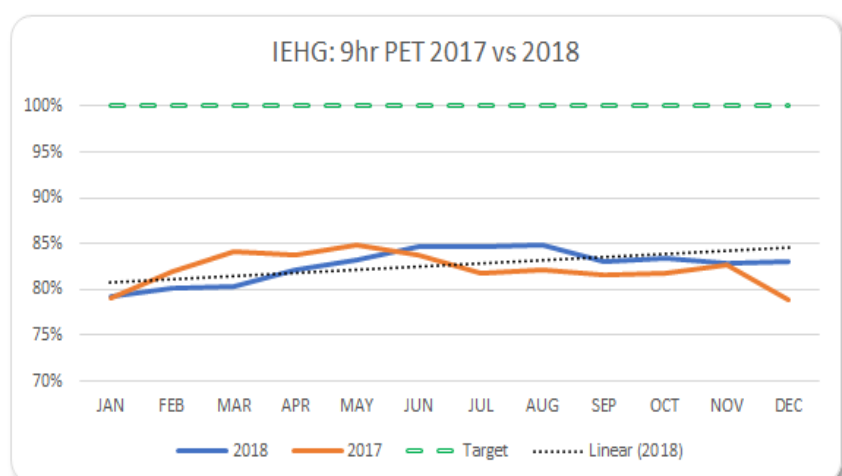
Source: MDR (PET Data)



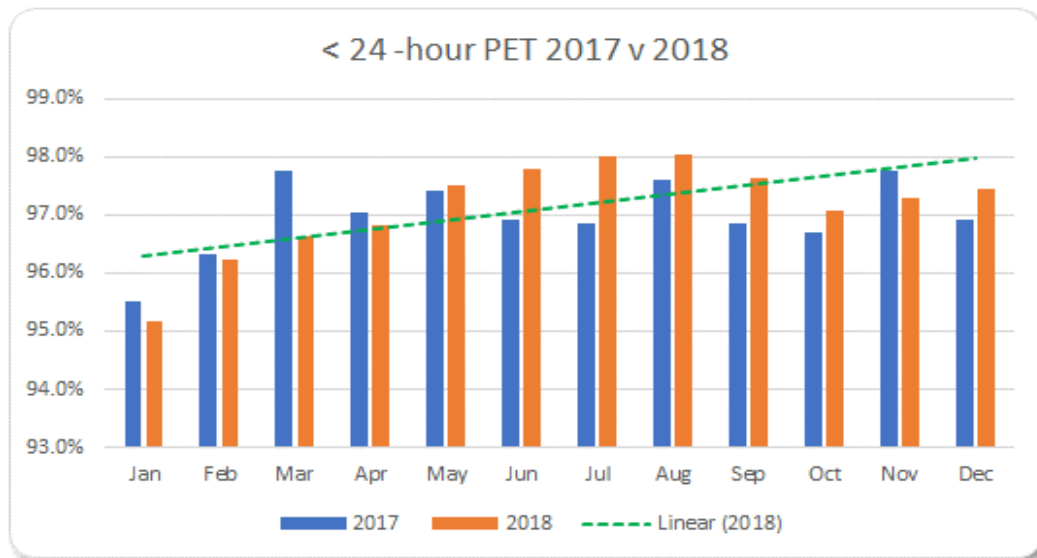
9-hour PET for 2018 was 82.7% up from 82.2% in 2017 and 3.3% higher than the national rate. As with the 6-hour PET, monthly performance has varied throughout the year ranging between 84.9% and 79.3%. There was an overall upward trend for the year reflecting performance improvement. The target for this metric is 100%.



Source: MDR (PET Data)



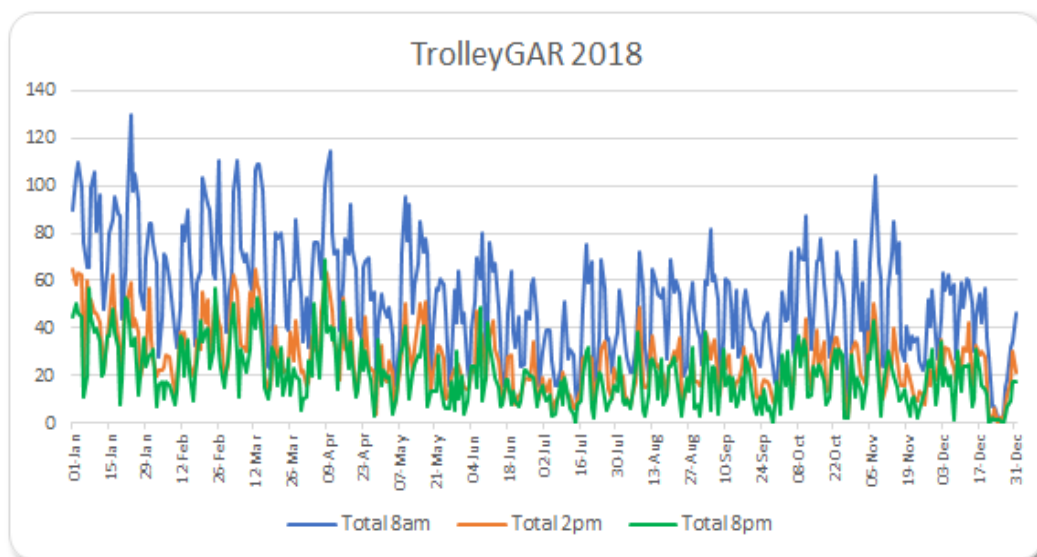
24-hr PET performance has shown improvement as the year progressed, starting out at 95.2% in January and peaking at 98% in August. This is against a background of multiple infection control challenges across the Group, made more complex by inadequate infrastructure on many sites. IEHG performs above the national rate for this metric. Nationally, hospitals are expected to achieve 100% in this metric.



Source: MDR (PET Data)

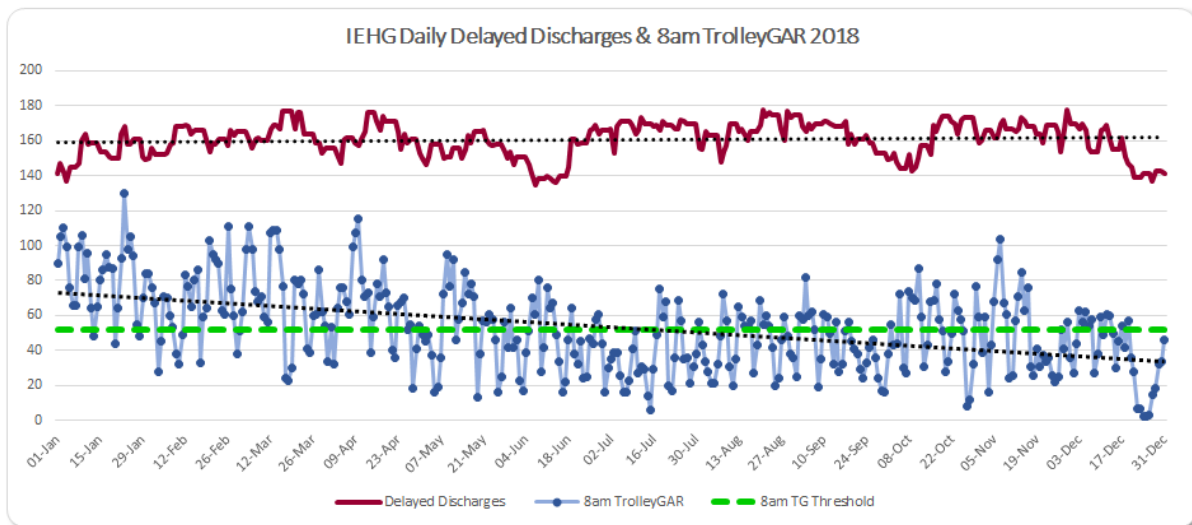
TrolleyGAR

Full year 8am TrolleyGAR numbers in 2018 decreased by 5.1% compared to 2017. Following a very challenging winter period, monthly performance improved consistently throughout the remainder of the year. Similar to 2017, 2pm TrolleyGAR numbers also decreased (by 8%) reflecting continuous improvement in day-to-day operational performance across the Group. Increases in demand for isolation facilities continue to challenge performance with this metric.



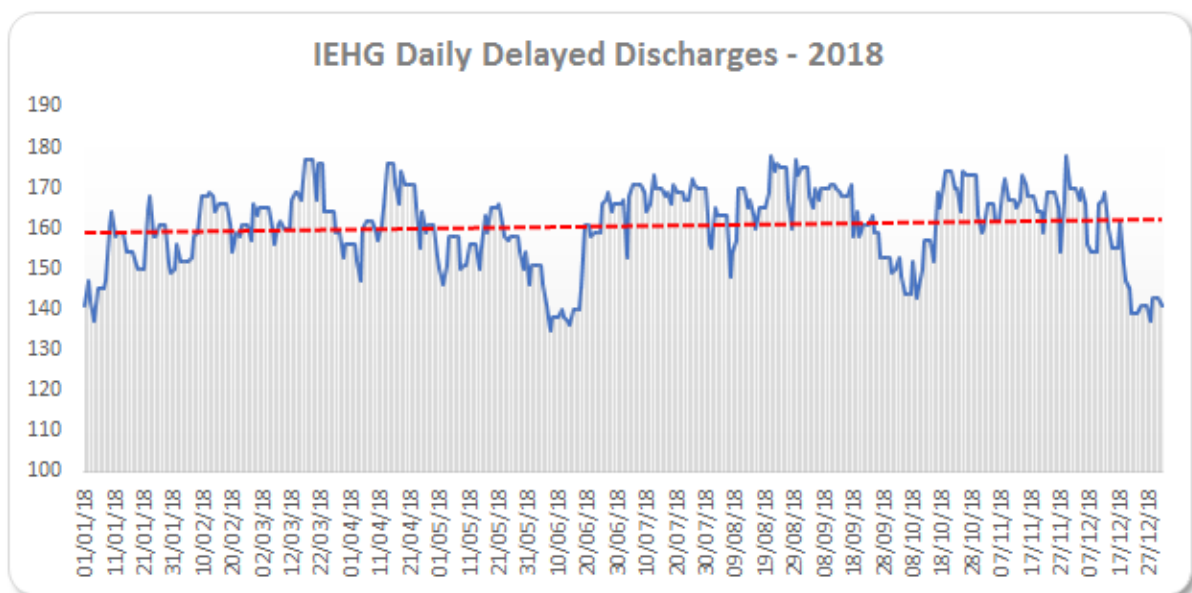
Source: Daily TrolleyGAR Reports

When plotted alongside delayed discharges, it is noted that TrolleyGAR improvement has occurred in the absence of any change in delayed discharge numbers.



Delayed Discharges

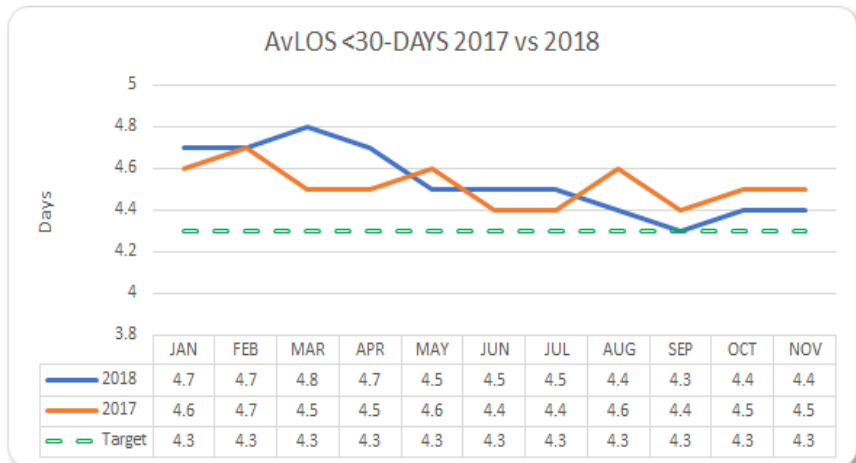
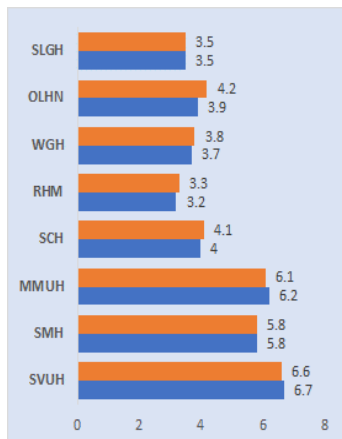
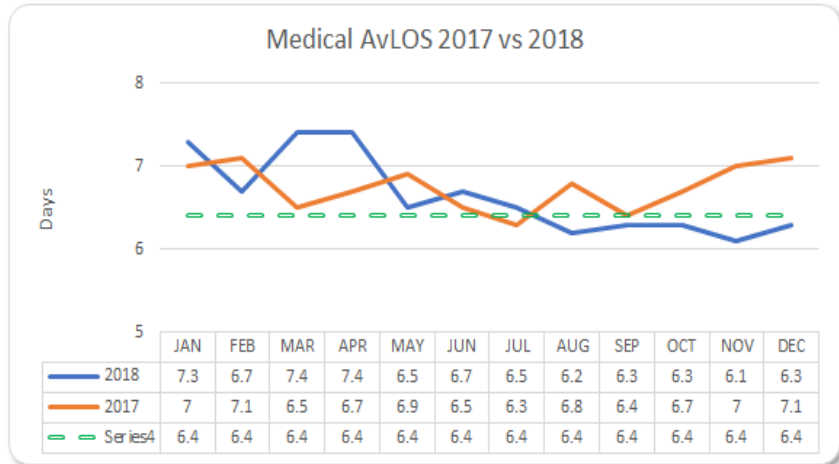
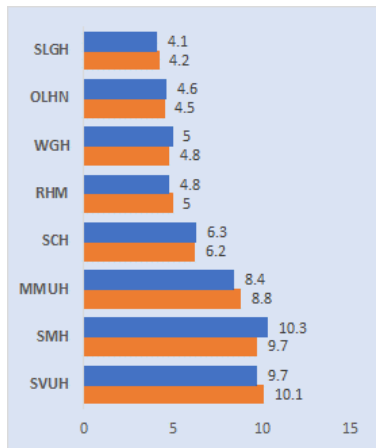
The delayed discharges trend remained flat during 2018. There is no HSE target set for IEHG for delayed discharges, however we have set our own internal target at 116. The 2018 average daily count was 160, the same as 2017. This peaked during the year at 178 in August and November.



Source: HSE Daily Delayed Discharge Reports

Average Length of Stay (AvLOS)

The full year medical AvLOS improved during 2018, dropping by 3% from 6.9 days to 6.7 days. The <30-days AvLOS is up by 2% to 4.6 days from 4.5 days last year. National IEHG targets for these metrics are 6.4 days (medical) and 4.3 days (<30-days) respectively.



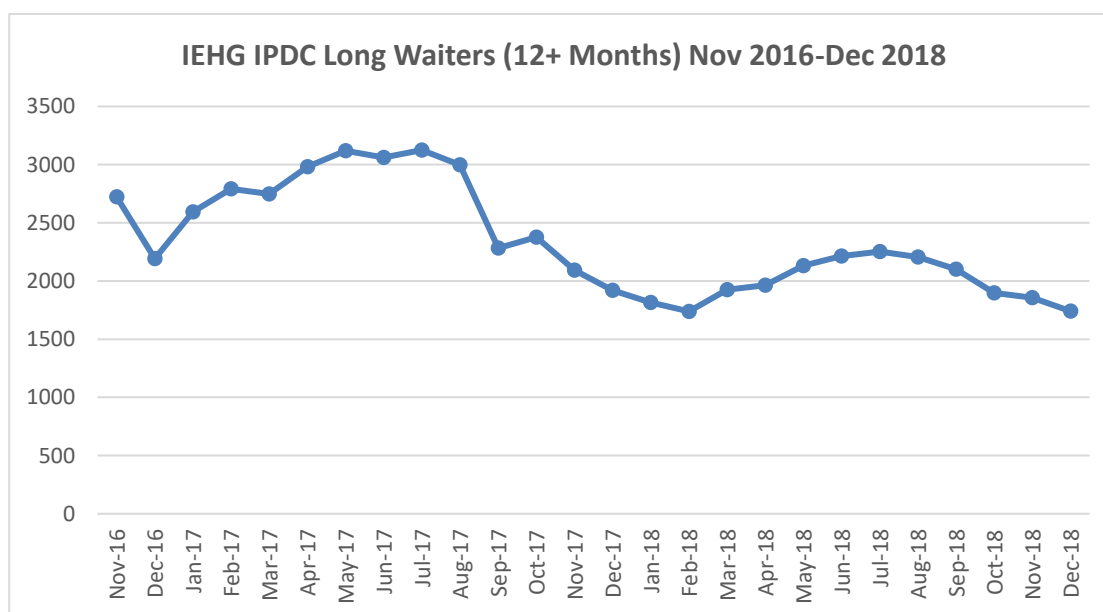
Scheduled Care

Balancing the demand for elective (scheduled) surgery with the increasing presentations of emergency admissions is an ongoing challenge for all hospitals. Hospitals also need to balance admission for urgent/emergency elective cases against those on long term waiting lists.

2018 saw an 8% reduction in the numbers of elective admissions to IEHG hospitals. This reduction was seen in both inpatient and day case activity (-5%). However, the impact on patient waiting lists and waiting times were minimised due to the availability of NTPF funding.

At the end of the year there were a total of 17,314 patients on the IEHG In-Patient Day Case waiting list – the majority of these were waiting for cataract surgery, endoscopy procedures and joint replacements. While the overall numbers waiting at the end of the year was only 3% down at the end of 2018 compared to 2017, this number masks the significant improvements in the number of patients waiting for over a year for surgery in IEHG.

IPDC Trends Long Waiters

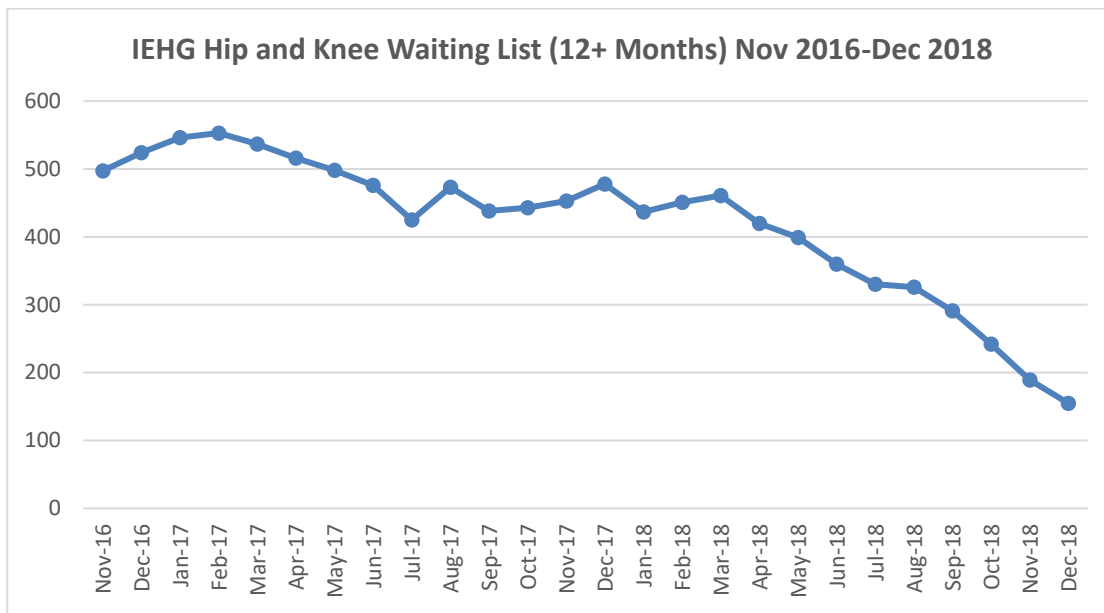


National Treatment Purchase Fund (NTPF)

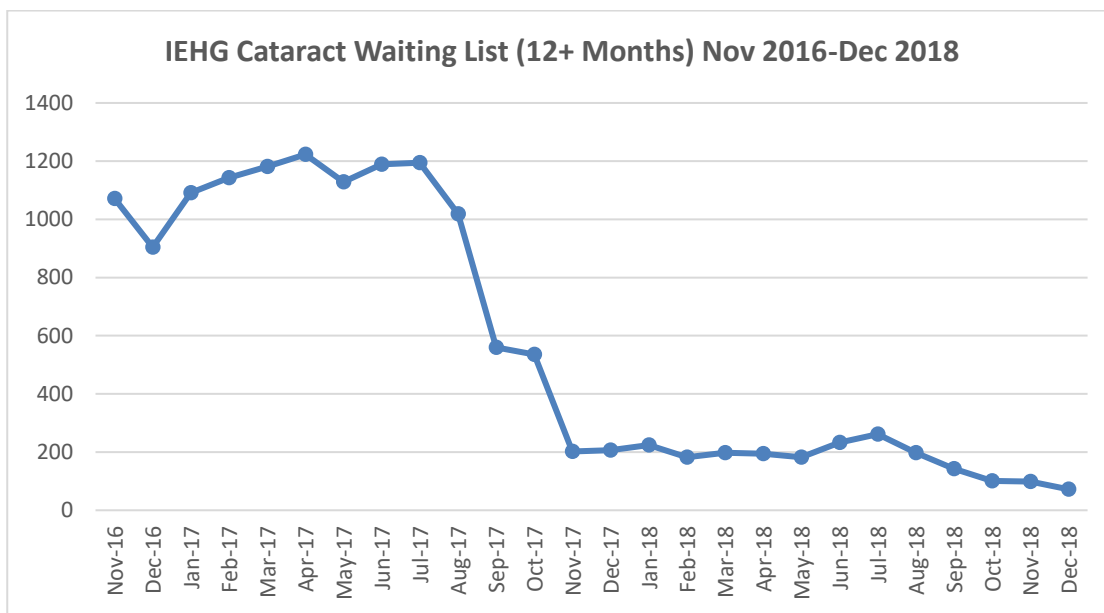
The allocation of €50m to the NTPF in 2018 to support treatment for long waiting patients made a significant impact in waiting lists for surgery in IEHG. Just under 6,000 patients on IEHG waiting lists were funded for treatment by the NTPF; of these, 3,500 were outsourced for treatment in the private sector and 2,528 patients were in-sourced in IEHG hospitals. This insourcing facilitated treatment of long waiting endoscopy patients in St. Michael's and Wexford General Hospital as well as urology and general surgery cases in St. Vincent's.

Patients waiting for prolonged periods for cataract surgery or hip/knee replacements were specifically targeted for treatment under the NTPF. Availing of NTPF funding, both Cappagh

Hospital and the Royal Victoria Eye and Ear Hospital opened available capacity to treat additional patients. This has resulted in a significant reduction in waiting lists for patients in these hospitals.



Those waiting for a hip/knee replacement over six months reduced from 478 to 155 during the year while the number of people waiting over a year for cataract surgery reduced from over 500 to 72 in just over a year.



Scoliosis

€9.3 million was invested in the 2018 HSE Service Plan to support the development of services for paediatric orthopaedics, including scoliosis patients. Both Cappagh and the Mater Hospitals played a major role in the reduction of paediatric and adolescent waiting lists during 2018. Considerable investment has been made in both hospitals to increase surgical capacity.

In 2018, Cappagh National Orthopaedic Hospital finalised recruitment (20.5 staff) to support expansion of scoliosis surgical capacity. 50 scoliosis surgeries were undertaken in 2018, exceeding the target of 39. In addition to this scoliosis work, Cappagh completed 17 other

complex spinal procedures (the target was 12). The table below demonstrates the increase in spinal fusion surgery over the last three years.

Year	Scoliosis Surgeries Cappagh
2016	20
2017	31
2018	50

There has been a significant improvement in the numbers waiting for scoliosis surgery. The list has reduced from 25 patients waiting at the end of December 2017 to 13 at the end of 2018. Of the 13, two patients are waiting over 4 months and this is by patient choice (e.g. exams).

The hospital is working closely with the Children's University Hospital, Temple Street to undertake additional day case orthopaedic surgery for long waiting children.

The Mater Misericordiae University Hospital has successfully managed the transition of the 121 patients on the spinal surgery waiting list from Tallaght Hospital and completed 12 scoliosis cases from June with the appointment of a new surgeon. The waiting list was cleared at the end of the year. The Mater is currently working on a patient pathway in conjunction with Our Lady's Children's Hospital in Crumlin.

Bariatric Surgery

With the appointment of the first dedicated bariatric surgeon in 2017 in St Vincent's University Hospital, significant work was undertaken to accommodate the demand for surgery.

Following a comprehensive clinical and administrative validation of the waiting list, which resulted in the addition of 300 to the bariatric waiting list, agreement was reached with the NTPF to fund surgery for 50 patients. By the end of 2018, a total of 77 bariatric surgeries were undertaken: 60 in St Vincent's University Hospital and 17 in St Michael's Hospital. This is a 126% increase on the number of surgeries undertaken last year. The pre and post-operative follow-up of these patients continues to be undertaken in St. Columcille's Hospital.

Managing Surgical Capacity: Day Case Surgery

One of the key benefits to IEHG has been the opportunity to transfer elective surgical work to avail of theatre capacity across the Group. Over the past two years considerable work has been undertaken to transfer day case waiting lists from the larger Model 4 hospitals to the Model 2 hospitals specifically from St Vincent's University Hospital (SVUH) to St. Columcille's Hospital (SCH) and from the Mater Misericordiae University Hospital (MMUH) to Our Lady's Hospital, Navan (OLHN).

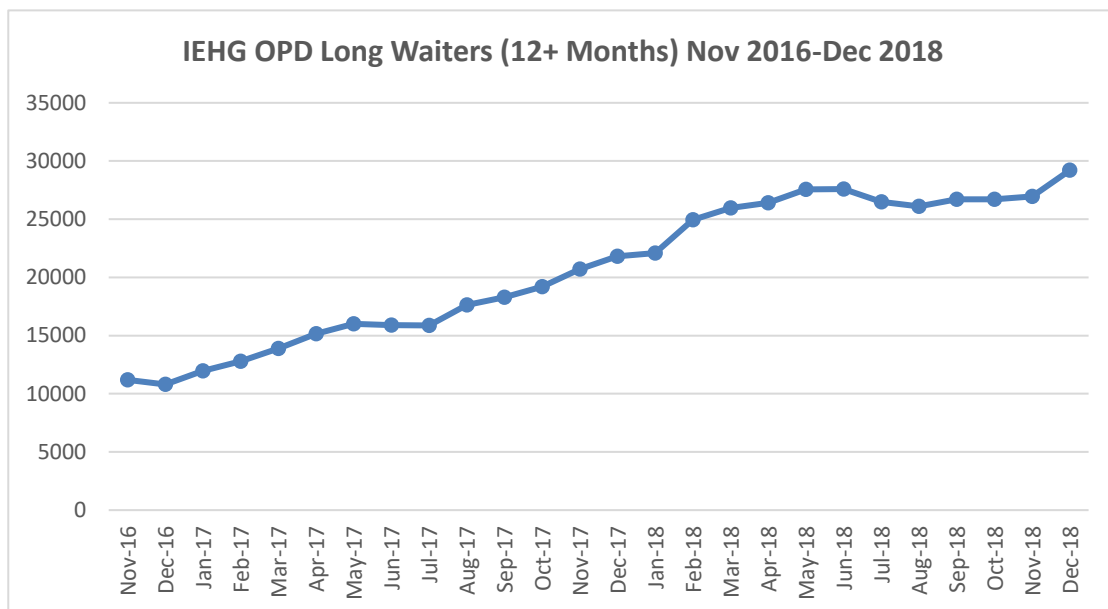
During 2018, a total of 1,137 (pain, urology, plastics, ENT, vascular and general surgery day-case) patients from SVUH were treated in SCH by SVUH surgeons, and 447 (colorectal, gynae, vascular and plastic surgery) cases were carried out in OLHN by MMUH surgeons. This has freed up valuable theatre capacity in the larger centres for more complex inpatient activity and reduced waiting times for patients.

Outpatients

During 2018, IEHG treated over 730,000 outpatients (up 1.8% on 2017). This was delivered across the Group in nearly 50 specialty areas and excluding nurse or allied health-led clinics. Demand for outpatient care continues to increase year on year. At the end of the year there were a total of 98,301 patients waiting for admission to an out-patient clinic. Most of these were/are waiting for ophthalmology, orthopaedics, ENT or dermatology appointments.

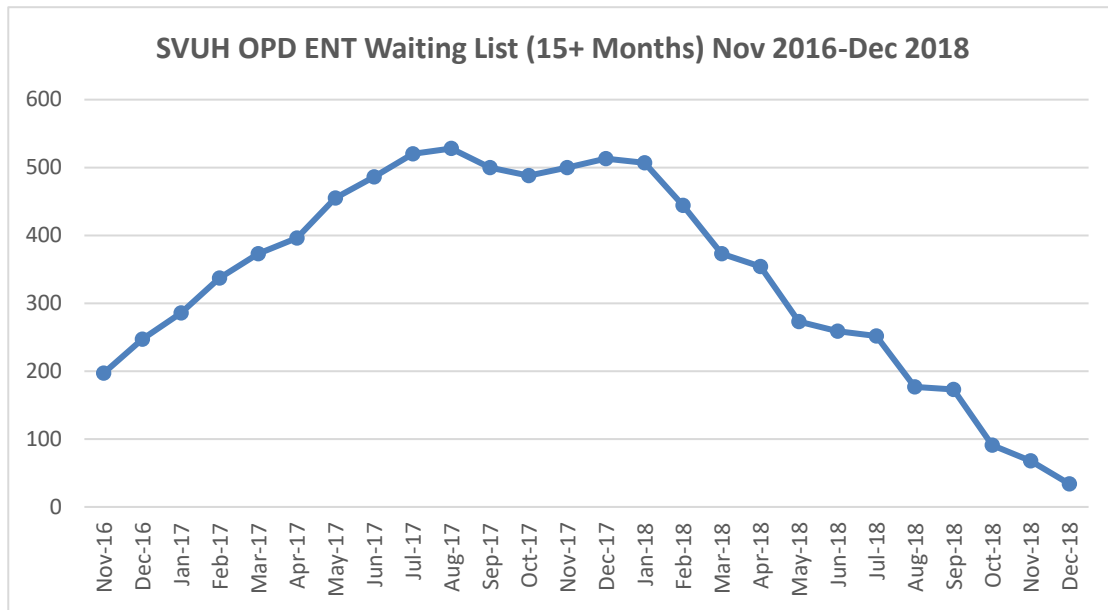
Unfortunately, the improvements/reduction seen in the In Patient/Day Case waiting lists were not replicated for those awaiting an Outpatient appointment. There has been a 10% increase in the total number waiting at the end of the year but more disconcertingly, a 25% increase in those waiting over a year for their initial appointment. One factor attributing to this was the inability to secure NTPF funding to undertake initiatives to reduce OPD lists. This is an issue which will be addressed in 2019.

The longest and largest OPD lists are for ophthalmology, orthopaedics and ENT.



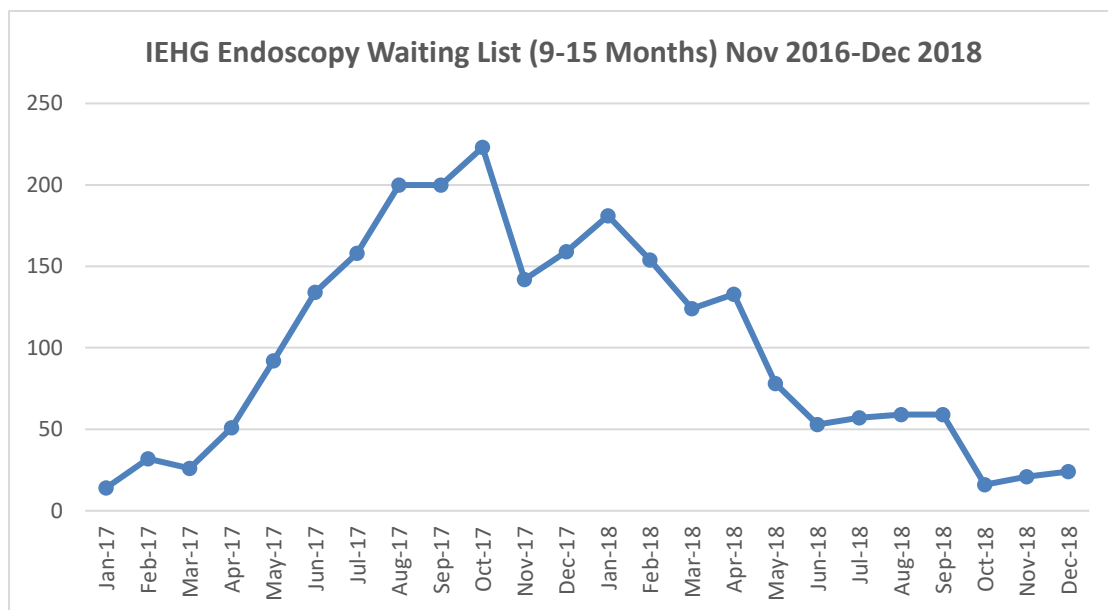
SVUH OPD ENT Waiting List Initiative

There have been a few positive initiatives relating to OPD. In 2018, St Vincent's University Hospital (SVUH) undertook a highly successful focused initiative to address their OPD ENT waiting list. With the input of a locum consultant and availing of clinic capacity in St Michael's Hospital, the number of people waiting over a year for an appointment dropped from 664 to 83 within the year. Waiting times reduced from 12 weeks for an urgent appointment and up to 36 months for a routine appointment to 4 weeks for an urgent appointment and 16 weeks for a routine appointment. As a further extension of this initiative, SVUH are now treating all ENT surgical day cases in St. Columcille's Hospital thus expediting access to surgery.



Endoscopy

2018 was another challenging year for endoscopy services. Sustained increase in referrals has continued as has the demand for complex ERCP and EUS in the major centres. St Columcille's in particular struggled to accommodate primary care referrals which were accommodated in the short term through use of external insourcing arrangements with private sector providers. As in previous years, most hospitals struggle to manage their P2 referrals within the 13-week target time and to manage planned procedures in a timely manner. Endoscopy is the service for which most IEHG patients were referred to the private sector under NTPF funding during 2018. As evidenced below, the NTPF funding helped the Group to manage its P2 breaches through the year.



The opening of the second endoscopy room in St. Luke's General Hospital, Carlow/Kilkenny has provided much welcomed capacity to allow the hospital to manage its P2 referrals. Unfortunately,

we were not able to open the 5th endoscopy room in St Vincent's University Hospital. This is an essential solution to address capacity constraints in South Dublin and to provide much needed additional capacity for the BowelScreen Programme. Availing of this capacity will also negate the need for the NTPF to outsource P2 breaches to the private sector. Discussions will continue in 2019 with HSE Acute Hospital Division and the National BowelScreen programme to open this room in 2019.

The report of the National Endoscopy Quality Improvement Programme is used by the Group as a basis for quality initiatives.

Scheduled Care Challenges 2018

While access to NTPF funding resulted in a significant impact on IEHG waiting lists during 2018, the Group was and remains challenged in providing timely access to treatment in certain specialities and hospitals.

Other challenges within the Group include the lack of a dermatology service in Mullingar. This will be addressed in the medium term with the appointment of three additional consultant dermatology posts working across the Mater and Mullingar Hospitals. While an interim solution was introduced during the year to manage some urgent referrals, there remains a number of patients on the waiting list.

It is important to acknowledge the considerable work undertaken by the scheduled care leads in each of the 11 IEHG hospitals in managing waiting lists particularly in the context of the large number of NTPF referrals which had to be processed and managed throughout the year.

Venous Thromboembolic Disease (VTE)

Venous Thromboembolism (VTE) is a leading preventable cause of hospital-associated death and is the leading cause of direct maternal death in the UK and Ireland.

The IEHG VTE Service Review Group is the first Group-wide VTE initiative ever to be established in Ireland. The group focuses on the promotion of evidence-based care pathways for the prevention, diagnosis and treatment of VTE. A key goal is the development of group-wide guidelines and pathways across IEHG hospitals.

The group has strong patient representation with the founder of Thrombosis Ireland, Anne-Marie O'Neill, as a full member. As a blood clot survivor, she and the Chair of the IEHG VTE Committee, Prof Fionnuala Ní Áinle of MMUH, have spoken twice in the European Parliament to raise VTE awareness. In 2018, Anne-Marie was runner up at the World Thrombosis Day (WTD) Ambassador of the Year Awards.

In 2018, IEHG was the first hospital group nationally to determine VTE incidence and the burden of hospital-acquired VTE events. An IEHG study undertaken confirmed that within the IEHG catchment area the incidence of VTE can be estimated at 1.44 per 1000 annually. At least 47% of these cases are hospital-acquired. As a result of this study, a change management process is underway across the Group. In addition, an IEHG manuscript on VTE incidence was submitted to the peer-reviewed journal *BMJ Open* for publication. A scientific group is also evolving a national NQAIS VTE dashboard, while in the background IEHG superficial vein pathways and IEHG OPD VTE pathways are approved and being rolled out.

In September 2018, with the full support of IEHG, the Irish Network for VTE Research INViTE (INViTEresearch.org) led by Prof Ní Áinle was launched by Minister for Business, Enterprise and Innovation, Heather Humphreys, on the eve of the 4th International VTE Conference at Croke Park. A patient-focused organisation, INViTE aims to research innovative ways of improving the diagnosis, treatment and prevention of VTE. INViTE has now also become a member of 'INVENT', the prestigious International Network of Venous Thromboembolism Clinical Research Networks.



Pictured at the INViTE launch l-r: Patricia Maguire, Director of the UCD Institute for Discovery; Mary Day IEHG CEO, Heather Humphreys, Minister for Business, Enterprise and Innovation, and Prof Fionnuala Ní Áinle, INViTE Lead & IEHG VTE Service Review Group Chair

Trauma Care

Following the publication in February 2018 of the report *A Trauma System for Ireland* and the recommendation that Ireland's trauma services should be reformed and organised into an inclusive trauma network with two Major Trauma Centres in Cork and in Dublin, supported by Major Trauma Units in other parts of the country, the Ireland East Hospital Group will nominate the **Mater Misericordiae University Hospital** to become the Major Trauma Centre in Dublin and **St Vincent's University Hospital** to be a Major Trauma Unit with Specialist Services. The trauma bid is due to be launched by the government in 2019.

The Mater and St Vincent's, located in North and South Dublin, are two of Ireland's largest adult emergency hospitals, treating the sickest, most complex patients in the country. Together they have the largest number of national specialties in Ireland.

They have the most modern emergency, radiology and critical care units in the country and the greatest range of specialties relevant to major trauma care of any of Ireland's hospitals.

These specialist areas are staffed by skilled, dedicated professionals. Many of them have trained in major trauma centres around the world and they maintain those links and continue to build on those experiences.

As part of the Ireland East Hospital Group's ambition to deliver an integrated health system across the spectrum of clinical care, as Dublin's major trauma network these two hospitals will deliver optimum safe outcomes for patients requiring the specialized care needed in significant trauma incidents.

The Mater Hospital Trauma Centre, along with the St Vincent's University Hospital Trauma Unit, will ensure that trauma patients in Ireland are treated in the right place at the right time by the right specialists.



Bed Capacity Review

The IEHG Project Management Office (PMO) was established in November 2017 to review the Group's Estate, and devise a plan to modernise, rationalise, reconfigure and provide capacity for the unmet and growing service demand for IEHG.

The PMO looked at current data, modelled this against CSO projected data, and allowing for specific assumptions on performance were able to estimate the service level demand by clinical activity. The clinical demand was then converted into spatial requirements.

Without changing the way we provide health services, the data indicated that IEHG would require over 1,217 beds by 2031, and a further 1,544 beds by 2046 (total additional 2,761), aligning with the 2018 Health Services Capacity Review. By reconfiguring services; providing new, more efficient patient pathways, it is envisaged that the requirement for additional beds to 2046, for IEHG, will be approximately half of the additional bed need with no reconfiguration.

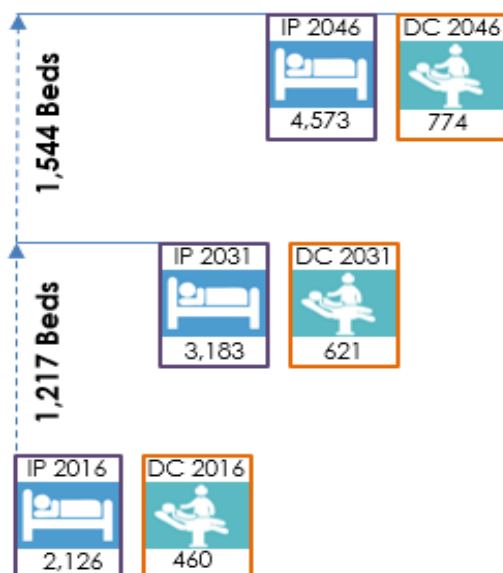


Figure 1: IEHG bed need with no reconfiguration

The data analysed the capacity need of the Group and indicated that we needed two specific developments; a way to deliver high volume, low acuity elective activity without interruption (*Integrated Health Care Campus*) and a new patient pathway that provides post-acute rehabilitation services and step-up community care (*Re-ablement and Rehabilitation Units*). These developments make up the ongoing IEHG Phase 1 Strategic Business Case.

MMUH Energy Performance Contract (EPC)

Supported by IEHG, during 2018 the Mater Misericordiae University Hospital (MMUH) entered into an energy performance contract with Veolia Ireland to reduce the hospital's carbon footprint by approximately 81,000 tonnes, cut imported electricity from the national grid by 77%, and deliver approximately €26 million in guaranteed energy and operational savings. This innovative contract is the first of its kind in Irish healthcare facilities.

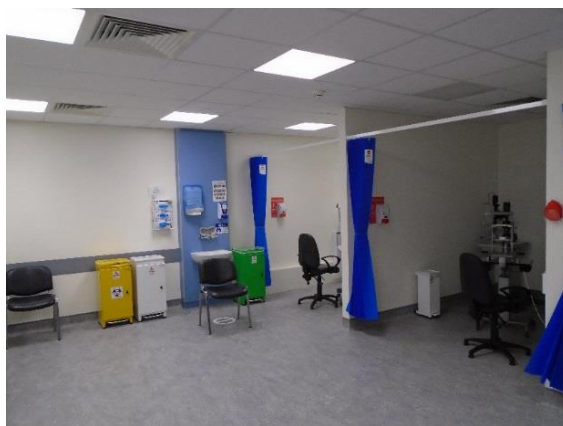


Figure 2: New Ophthalmology examination bays

Works under this contract began during the year. Included in the energy upgrades will be a 2MWe combined heat and power CHP plant which will generate around 15.5 GWh of electricity a year, maximise heat efficiency, and cut annual carbon emissions by 4,000 tonnes per year.

A new campus-wide network will distribute the heating to all the buildings on the site, and to ensure they conserve energy, 1500m² of new double glazed windows will be fitted, along with door replacements to reduce heat loss. As good lighting has been shown to have a positive effect on patient outcomes, the contract will upgrade 3000 lighting fittings with the latest technology and controls. Further energy saving measures will include new pumps and upgraded air conditioning. The energy saving measures will be guaranteed by Veolia who will also provide a comprehensive maintenance service for the duration of the contract.



Figure 3: New Ophthalmology Unit

This contract allows for upgrades to the hospital's infrastructure and for the associated energy savings to be redirected into developing the hospital further. In 2018, this project saw the development of a new Ophthalmology Unit on Level 0, a full refurbishment of CCU and St. Gabriel's Ward, with further plans to refurbish 10 additional ward spaces for 2019.



Figure 4: Window replacement programme

This initiative presents a real opportunity for IEHG to support the roll-out of energy performance contracts to other hospitals within the Group, allowing them to make savings and enabling them to further develop their sites and services, reducing backlog maintenance.

Nursing

In May 2018, Paul Gallagher was appointed Group Chief Director of Nursing & Midwifery, taking over from Ann Donovan who became Chief Operations Officer. A registered psychiatric and general nurse, Paul joined IEHG from St. James's Hospital, where he worked as Director of Nursing since 2006.

Influenza Planning

In preparation for the 2018/2019 Flu Vaccination programme, IEHG established an Influenza Planning Oversight Group, the purpose of which was to provide leadership and support to our 11 hospitals. The HSE set a target of 60% of all staff to receive the vaccination for the 2018/2019 flu season. The following table provides a breakdown of the uptake to December 2018 for IEHG:

Hospital	Numbers of staff eligible	Total staff Vaccinated (Dec. 2018)	% staff Vaccinated (Dec. 2018)	% Staff Vaccinated 2017/2018 flu season
Cappagh National Orthopaedic Hospital	407	222	55%	42%
Mater Misericordiae University Hospital	3,736	2,017	54%	43%
National Maternity Hospital	914	597	65%	53%
Our Lady's Hospital, Navan	593	326	55%	52%
Regional Hospital Mullingar	942	598	63%	33%
Royal Victoria Eye and Ear Hospital	335	157	47%	41%
St Columcille's Hospital Loughlinstown	490	350	71%	55%
St Luke's General Hospital, Kilkenny	1313	718	55%	48%
St Michael's Hospital, Dun Laoghaire	440	237	54%	46%
St Vincent's University Hospital	3,301	,1119	34%	48%
Wexford General Hospital	1050	563	54%	45%
Total	13,521	6904	51%	46%

Candidate ANP Initiative (Department of Health)

The hospital group was successful in being allocated 12 candidate Advanced Nurses Practitioner positions (CANP). This is in addition to the positions that were allocated to IEHG in 2017. The table below provides an overview of the allocated posts for 2017 and 2018:

Hospital	2017 allocation	2018 allocation
Mater Misericordiae University Hospital	3 Older Persons Care 1 Unscheduled Care	2 Older Persons Care 2 Unscheduled Care
St Vincent's University Hospital	2 Older Persons Care 3 Unscheduled Care	1 Older Persons Care
Our Lady's Hospital Harold's Cross incorporating shared service with SVUH	5 Rheumatology	
St Luke's General Hospital, Kilkenny	1 Unscheduled Care	2 Unscheduled Care 1 Respiratory 2 Older Persons Care
Wexford General Hospital	2 Older Persons Care	
Our Lady's Hospital, Navan	2 Rheumatology	
St Columcille's Hospital	1 Older Persons Care	1 Older Persons Care
St. Michael's Hospital	2 Respiratory 1 Unscheduled Care 1 Older Persons Care	1 Older Persons Care

Task Force on Staffing and Skill Mix (Phase 1 and Phase 2)

Phase 1 of this initiative was piloted in four hospitals throughout the country including St. Columcille's Hospital. The hospital received an uplift to the number of staff nurse and HCA positions following extensive data collection that took place during the course of 2017/2018.

Phase 2 of this initiative is being implemented at four sites throughout the country, one of which is the Mater Misericordiae University Hospital. The focus for this phase is on the acute floor (Emergency Department, AMAU, MAU settings) and data was gathered in December. The steering group will convene during Q1, 2019 to discuss the findings.

IEHG Midwifery and Nursing Practice Development Group

The IEHG Midwifery and Nursing Practice Development Group was formed in 2015 with representation from the eleven hospitals in IEHG. The purpose of the group is to facilitate collaborative working between Practice Development teams on each site within IEHG, in order to enhance the delivery of patient care through sharing of evidence-based practice in nursing and midwifery. The group endeavours to facilitate a process of networking and build positive working relationships between members and to provide a forum for discussion and sharing of learning and experiences in practice development.

The group co-ordinated the *3rd Annual IEHG Midwifery and Nursing Symposium* which was held on 10 May 2018 in Kilkenny Castle. The symposium provided an important opportunity to showcase

and recognise the contributions and achievements of our staff in the areas of service improvement in care delivery, innovation and exemplary professional practice. Mary Day, Group CEO, delivered the keynote address. Mary outlined the vision for the Group and where nursing and midwifery can contribute to and enable that vision, and ensure innovation and research is embedded in service delivery.



IEHG Staff Bank

Following the appointment of Elaine Mylotte (ADON - Staff Bank) in October, a scoping exercise began with our 11 hospitals to explore specifications and requirements relating to the establishment of a centrally-managed IEHG staff bank. In addition, standardised reports for Overtime and Agency usage and Overtime and Agency costs commenced.

Advertisement and recruitment for staff for the IEHG Staff Bank is on hold until finalisation of the payroll mechanism which is awaiting clarification by the HSE. A HR specification with details regarding staff bank contracts, payment and management was commenced and awaits approval and will be reviewed in Q1, 2019.

The specifications and requirements for an electronic IEHG Staff Bank Management System took place in collaboration with hospital management teams. Collective themes included the need for a central digital platform for contacting staff and a digital platform for contacting agencies in keeping with the HSE Framework. The recommendations from the *Safe Staffing and Skill Mix Report (2018)* are being considered as part of any electronic solution that will be implemented. An IT specification and requirements document has been drafted and awaits review and approval.

Progression Toward an Integrated
Academic Health Science System

Progression Toward an Integrated Academic Health Science System

Office of the Chief Academic Officer

Ireland's hospital groups were designed with an academic core at their centre to improve patient care by applying academic medicine to clinical care. The office of the IEHG Chief Academic Officer, under Professor Tim Lynch, is the formal channel for cooperation and collaboration between the hospital group and UCD. Its role is to increase communication between UCD and all IEHG's 11 hospitals and to highlight the potential for collaboration that exists. There is a significant amount of clinical academic work going on in UCD and in our hospitals that can benefit from increased cooperation and communication.

A key task of the office of the CAO is to drive the development of an Academic Health Science Centre (AHSC) by 2020. An Academic Health Science Centre is a partnership between a university and healthcare providers focusing on research, clinical services, education and training. AHSCs are intended to ensure that medical research breakthroughs lead to direct clinical benefits for patients. IEHG will create its own model based on the Irish health system in which it operates, the strengths of its 11 hospitals, and where these can link and match with UCD.

This transformation journey to an AHSC using a Clinical Academic Directorate (CAD) structure will pool resources and expertise across our hospitals and increase communication and collaboration with UCD to enable world-class research and innovation in six key areas:

- Cancer
- Genomics
- Research
- Neuroscience
- Women's Health & Children
- Cardiovascular

The development of our Cancer, Genomics and Research CADs in 2018 is highlighted in more detail in this report, while the establishment of our Neuroscience, Women's Health & Children and Cardiovascular CADs is due to take place in 2019.

AHSC Oversight Steering Group

The AHSC Oversight Steering Group was established in June 2018 and meets at the UCD Belfield Campus. The group comprises members from UCD, IEHG, MMUH and SVUH. The committee was created as a forum which considers and advises on the nature, form and functioning of the UCD/IEHG AHSC and monitors and contributes, where appropriate, to its ultimate implementation and realisation. The AHSC is formalised as one of the three pillars of IEHG and will be integral to the development of the other two – Operational Excellence and an Integrated Health System.

The strategic mission of an AHSC is to provide tripartite elements of academia, research and clinical care. A core component of this mission is the delivery of the Clinical Academic Programmes i.e. the Clinical Academic Directorates.

This committee oversees the development of the AHSC, bringing together information and advice from the Clinical Academic Directorate Oversight Group and input from MMUH, SVUH, UCD and other academic clinical services within the group.

Key areas of focus for the committee are:

- To explore, consider and advise on the nature, form and functioning of the envisaged UCD/IEHG AHSC.
- To review and comment/advise on joint university/IEHG initiatives being proposed or advanced within the AHSC framework prior to legal establishment of the alliance
- To monitor and contribute where appropriate to ultimate formation of the AHSC

Areas of focus for the AHSC Oversight Steering Group in 2018

- Developing a Terms of Reference for the group.
- Reviewing international models of best practice for an AHSC
- Development of the Cardiovascular and Neurological Clinical Academic Directorates
- Discussion on membership of an International Advisory Board was discussed.
- Plans put in place for a regular AHSC newsletter
- CAO Prof Tim Lynch met with the CAO of UCL Partners, Imperial College London to discuss Academic Health Science Centres in London
- CAO Prof Lynch updates the committee on discussions with other CAOs within Ireland.

Cancer Clinical Academic Directorate (CaCAD)

The first significant step in the transformation of IEHG into an AHSC was the launch of the Cancer Clinical Academic Directorate (CaCAD) in 2017. The directorate brings together our two nationally designated cancer centres, St Vincent's University Hospital and the Mater Misericordiae University Hospital, into a single cancer function operating across two sites and embeds academic research into the care system. The core areas of focus are:

- I. **Single Cancer Centre/Integrated Care**
- II. **Precision Medicine**
- III. **Research**

CaCAD - Progress to Date / Highlights from 2018

Single Cancer Centre/Integrated Care

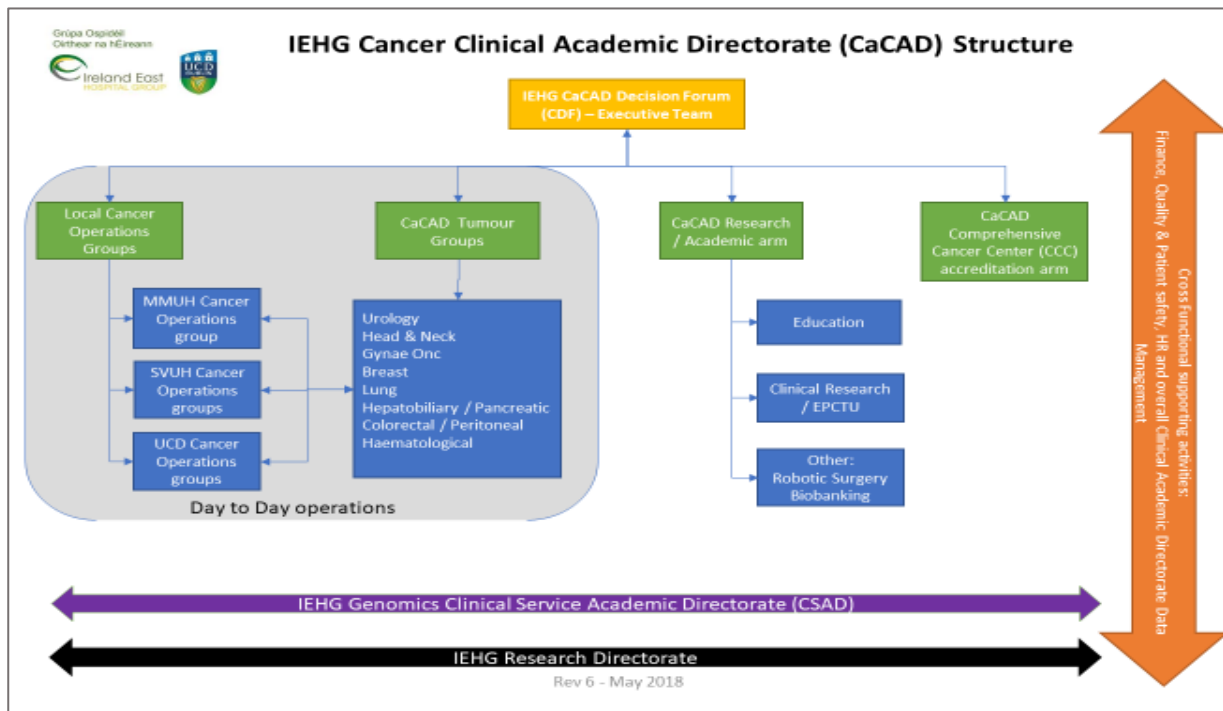
- **Comprehensive Cancer Centre: OECl Accreditation**

The CaCAD has decided, in the interests of improving patient care and patient outcomes, to seek international accreditation for the group's cancer services. The Directorate will apply in Q1 2019 for membership of the Organisation of European Cancer Institutes (OECl) and will apply to its Accreditation and Designation Programme for Comprehensive Cancer Centre accreditation.

- **Cancer CAD Strategy and Organisational Structure**

The IEHG-UCD Academic Health Science Centre will change the way care is organised through its clinical academic directorates. The Executive Director for the CaCAD is responsible for the delivery of cancer care in both designated cancer centres and reports into the Cancer Decision Forum whose composition includes the Hospital Group CEO, the CEOs of the designated cancer centres, the College Principle of the UCD College of Health Sciences, the Dean of the UCD School of Medicine and the hospital cancer leads.

A new directorate structure has been created within the Mater and St Vincent's Hospitals which is responsible for the delivery of cancer care on a day-to-day basis as well as delivering on the CaCAD objectives of service integration, accreditation, data management and research. The clinical lead for Cancer in each hospital reports into the CaCAD Executive Director.



Working with the executive leadership at both cancer centres, the CaCAD has established a number of key management groups which oversee and monitor activity and performance across the group in addition to working towards the strategic goals of the group. These groups act both in a cross-functional and cross-institutional capacity. The groups are as follows:

- **CaCAD Decision Forum (monthly):** This executive forum’s purpose is to deliver strategic guidance and direction, make decisions and ensure oversight, assistance and support is provided to the CaCAD.
- **Cancer Specific Performance Meeting (monthly):** A monthly performance meeting, in place since June 2018, with both designated cancer centres.
- **Local Cancer Operations Groups at MMUH, SVUH and UCD** – This is a local group meeting held at each site to monitor performance, activity and individual institutional issues.

The above structure outlines how the CaCAD integrates the cancer centre, research, education and other academic directorates into one aligned function. The CaCAD attends the quarterly Cancer Review Meeting with the National Cancer Control Programme (NCCP) as a single cancer service.

- **Tumour Groups**

Tumour groups are the first stage in bringing the cancer services together across sites. The purpose of the Tumour Groups is to bring the cross-functional team working on a specific cancer area, across the IEHG hospitals, together to:

- Define a strategy for their cancer service that prioritises patient care, access and outcomes aligned to the CaCAD
- Map the service against international best practice for cancer care (OECD Accreditation Standards)
- Define a day-to-day working structure across the sites
- Review referral pathways within and external to the Ireland East Hospital Group
- Review the training and education requirements for the service

Tumour groups are already established in gynaecological oncology, head and neck cancer, lung cancer, breast cancer, colorectal cancer and urological cancers.

The final step on this process is the integration of the services across sites. This is well advanced in two clinical areas: gynaecological oncology and head and neck cancer. Service integration is when the cancer service begins to operate as a single service and displays the following features:

- Joint MDTs – currently in place for Head & Neck/ENT group and in progress for Gynae Onc
- Integrated posts across sites (both clinical and non-clinical) - the development of new posts with significant sessional commitment in both cancer hospitals, to underpin the integration of the service, has been a priority for the CaCAD. Six consultant posts now meet these criteria in frontline cancer services delivery. Additional posts will follow this priority, with some posts already in progress.
- Standardisation of process/work practices
- Utilisation of resources

Precision Medicine

The formation, in 2018, of the Genomics Clinical Academic Directorate within the Academic Health Science Centre was a key step in the delivery of precision medicine for patients. Clinical services now tailor for patients with an elevated risk due to an inherited component, with clinics running in cancer, cardiology, metabolics, neurology, ophthalmology and rare diseases.

The Genomics Directorate wishes to deliver near term patient benefits through the development of clinical services within the AHSC structure and future patient benefits through a research programme in conjunction with the Research Directorate and external partnerships.

Research

The CaCAD works very closely with the Research Directorate to increase the options for patients in clinical research. Our goal is to double the number of patients having access to clinical trials in the next five years.

Unified Cancer Research

To achieve this ambitious target, we need to unify the cancer research in the Mater Misericordiae University Hospital and St Vincent's University Hospital under the Research Directorate. This unified structure and governance for clinical research will enable the Academic Health Science Centre to leverage the scale of cancer patients treated in our two designated cancer centres.

Early Phase Clinical Trials Unit: Enhanced Treatment Options for Patients

A detailed feasibility study regarding the development of an Early Phase Clinical Trials Unit (EPCTU) was completed in early 2018 and a delegation from the CaCAD visited the Experimental Cancer Medicine Team (ECMT) unit in The Christie, Manchester in mid-2018. Arising from this, and in recognition of the significant deficits in the Irish cancer clinical trial model, the CaCAD will support the Research Directorate in the opening of the country's first EPCTU in 2019. The new unit will address the deficits in the current clinical trial model principally for:

- 1) **Refractory Patients:** The majority of cancer studies in this country involve drugs that are already well down their development path, mainly large phase 3 trials in a front-line setting. There are little to no options for patients with refractory cancer.

- 2) **Placebo:** Current trials are generally randomised and contain a placebo arm, which can be extremely off-putting for patients who are considering enrolling in a research study.

The EPCTU will be delivered through the Research Directorate and will utilise the expertise of the Directorate and the medical oncologists within the Group's two designated cancer centres.

Genomics Clinical Academic Directorate

In 2015, Professor Owen Smith was commissioned by the Health Service Executive (HSE) to lead an advisory group on the development of a National Genetics and Genomics Medicine Network. The Smith Report's¹ recommendations include the development of a hub and spoke construct for the service, with investment in a contemporary solution for clinical and laboratory genetics and genomics for the country. Currently, no suitable entity exists, in Ireland, to provide the requisite clinical and research services and untap the potential of personalised medicine for patients.

Potential Benefits of Genomic Technologies

Genetic tests are already widely used in healthcare. The application in healthcare of information gained from genome research is becoming significantly more diverse. Depending on their purpose, genomic tests can be divided into the following groups:

- I. Diagnostic tests for defining the cause of a rare disease or for identifying high-risk susceptibility for a specific disease.
- II. Research into the molecular mechanisms of diseases e.g. examination of the genetic changes in a malignant tumour as a part of cancer treatment.
- III. Pharmacogenetic tests for the assessment of the suitability of a specific drug for a patient's treatment.
- IV. Predicting susceptibility to common diseases by genetic risk profiling.

This kind of use of genomic data supports personalised healthcare. It predicts risks, prevents diseases and is both customised and participatory. In Finland, approximately 30%² of tests carried out were to diagnose hereditary diseases and to identify high susceptibility to certain diseases.

Fundamental Issues

System Capability and Capacity Issues:

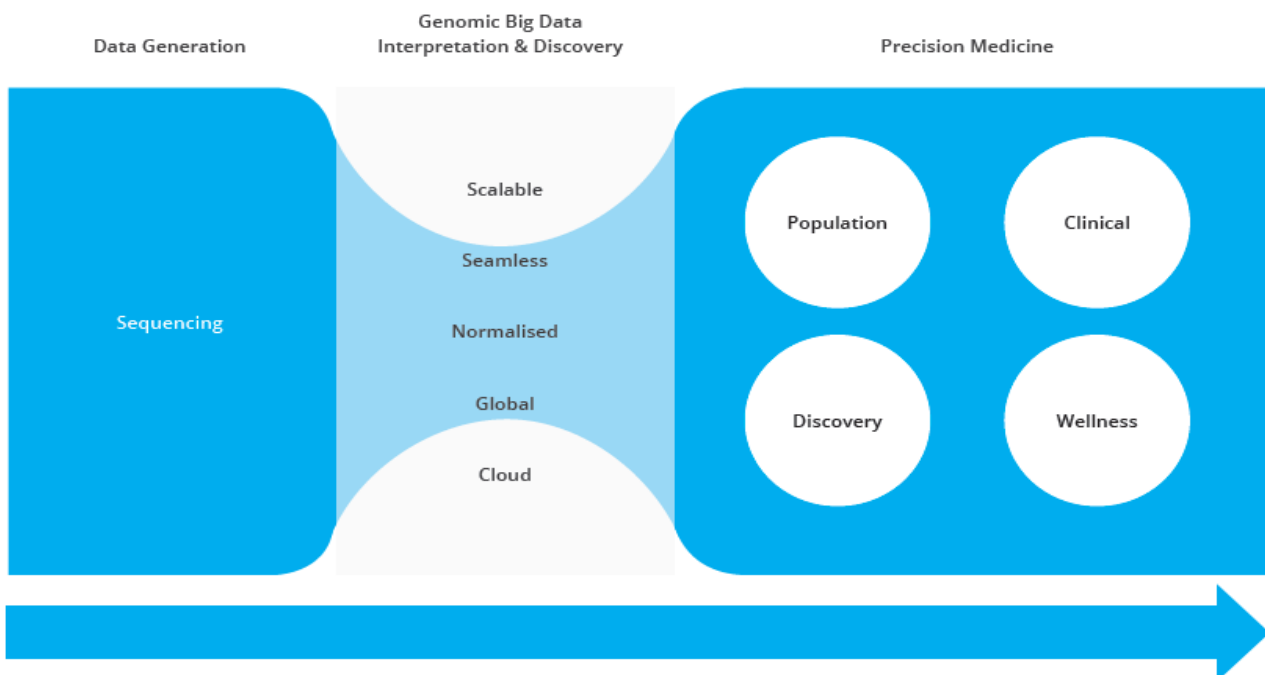
The Smith Report has identified an urgent need to address system capability and capacity mechanism issues to enable the integration of genomics into healthcare. The development of the service must address core underlying issues such as the management of genomic data, including collection, security, quality, sharing, privacy and custodianship. The key areas that need addressing are:

- **Sequencing Provision** – provision of expertise to sequence samples as part of a routine diagnostic pathway.
- **Clinical Interpretation Pipeline** – development of the bioinformatic and interpretation analytical platform to assist the timely interpretation of the WGS/WES/Targeted Panel Sequencing, informing clinical decision-making in relation to genomic diagnoses and subsequent interventions.
- **Data and Informatics Environment** – an integrated platform to support data sharing across institutions for patient care delivery and research.
- **A Networked Genetic Laboratory and Genomic Medicine Service Infrastructure** – consolidated genomic laboratory infrastructure for rare and inherited diseases and cancer operating to a defined service model.

¹ National Genetic & Genomic Medicine Network Strategy Group, Report to the National Director, Acute Hospital Division, October 2015

² Improving Health through the use of Genomic Data: Ministry of Social Affairs and Health, Finland 2015

- **Clinical Service Delivery** – integration of genomics sequencing into clinical decision-making and treatment pathways.
- **Consent** – a standardised consent process that protects patient autonomy.
- **Workforce** – an educated and trained workforce to support the introduction into mainstream medicine and enhance research capabilities
- **Research and Innovation** – leveraging sequencing and bioinformatics expertise to integrate research into the treatment pathway and to develop improved treatment options for patients.



The sheer volume of data generated by NGS is creating a bottleneck, slowing the development of precision medicine.

Genomics Research is Closely Integrated into Healthcare

The presence of a broad set of genetic information for the healthcare community (patients, providers, payers and others) to access for shared decision support is upon us. As both cost and access to testing barriers continue to be removed, we need to support the rapid transition from research into clinical care. A more seamless integration and an informative position on infrastructure, architecture, and security requirements for housing data will ensure that the benefits of genomic technology are rapidly translated into patient benefits. Such an integration will benefit patients and providers as more genetic (clinically significant) variations become known and contribute to a framework that enables scientific breakthrough for the benefit of patient care and healthier living.

The long-term goal is to utilise genomic data to plan healthcare services and target them at the individual (through precision medicine) and at our population (to manage population risk). In addition, we must ensure that healthcare units have the right to access data in order to promote appropriate and cost-effective care.

Priorities

A number of priorities have been identified that will have the greatest benefit on the health of our population. The priority areas are not necessarily discrete and there will be inter-relationships and

inter-dependencies. For example, ethical, social and legal considerations have been identified as an over-arching priority given that these aspects of genomics should be addressed across all areas of action.

These priorities are about:

- embedding ethical, social and legal considerations into all activities;
- establishing governance arrangements to take the lead on genomics;
- building a multi-disciplinary competent genomics health workforce to leverage existing resources and support good clinical and ethical practice;
- growing and applying genomic knowledge that is evidence-based, high quality and safe;
- putting the individual at the centre of health genomics and supporting equity of access;
- making sure that our investment in health genomics is cost-effective and sustainable into the future;
- managing genomic data in a way which realises the benefits of genomics for all, while protecting individuals
 - developing internationally-recognised research in genomics and excellent platforms for precision medicine.

Progress to Date

The structure of the Genomics Directorate was agreed in 2018 with the Executive Director of the Genomics Directorate reporting into the CEO of IEHG for overall delivery and to the CEOs of the Mater and St Vincent's Hospitals for activities on their sites. Prof. Owen Smith has accepted the role of Executive Director and prioritised Data Sharing and a 3rd Party Framework as the two core areas of focus in 2018.

The expertise of UCD in Bioinformatics is central to the delivery of the Genomics Directorate and Prof Brendan Loftus has assumed the role of Bioinformatics, Research and Education Lead. The Hospital Directorate leads in the Mater and St Vincent's Hospitals will be appointed in the first quarter of 2019. The directorate structure within the hospitals is being developed to support the clinical lead, with an operational manager and administration support. The Mater site has already advanced its clinical service delivery with a significant number of services already in existence in the hospital, including cancer, cardiology, metabolics, neurology, ophthalmology and rare diseases.

A cross-institutional Governance and Ethics Group has been formed and approved its terms of reference at its first meeting. The chairs of the Mater and St Vincent's ethics committees have been invited to join the group. The Group has supported the work programme on the development of an agreed data sharing position and a robust 3rd party framework.

Data Sharing

Access to high quality data is fundamental to delivering functioning genetics/ genomics services. A key feature of the evolution of genomics is the integration between clinical services and research. Much of the work in genomics is where the significance of variants is being translated into patient care, often via research. There are, however, challenges to sharing and accessing the patient data required to deliver safe and effective services. The Genomics Directorate has taken a multidisciplinary approach to manage the challenges to data sharing.

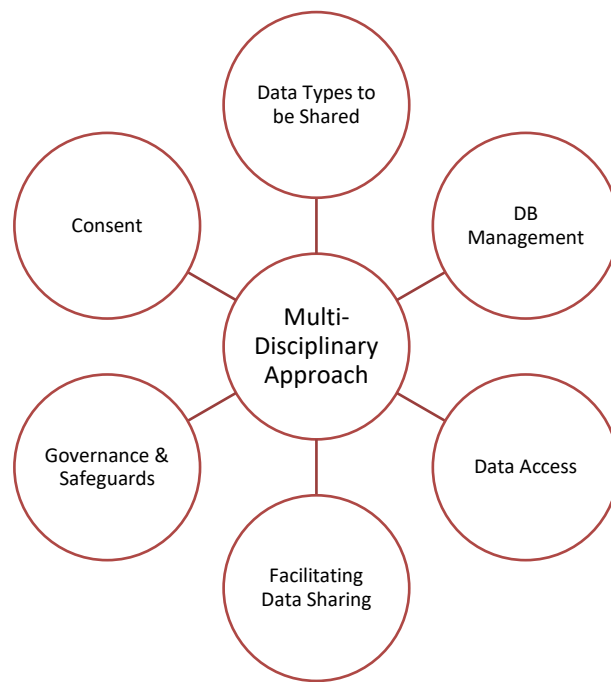


Figure 2 – Genomics Directorate Data Sharing Approach

In 2018 the responsible data sharing programme commenced with a half-day workshop that focused on delivering a common approach to data sharing. Over 40 people attended the event with the following groups/areas represented:

- Clinical – consultants active in this area, geneticists, genetic counsellors and nurses
- Data analytics – bioinformaticians
- IT – CIO, IT Directors
- Laboratory – pathologists, clinical scientists, quality managers
- Regulatory and legal – GDPR experts, Data Protection Office, legal experts
- Research – hospital and university-based research
- Senior Management

The workshop was the first major step in achieving alignment around our objective of achieving responsible data sharing for the directorate. A work programme was developed following on from the workshop and will be rolled out in 2019.

3rd Party Engagement Framework

Internationally, recognition of the need for data sharing and partnerships is well-recognised. The joint report³ from the Public Health Genomics (PHG) Foundation and the Association for Clinical Genetic Science (ACGS), in the UK, makes a number of recommendations. Recommendation No 1 is that the sharing genetic / genomic variants is a necessary part of clinical care and NHS service delivery.

Across the EU, an initiative of 18-member states (not including Ireland) have come together in cooperation on linking genomic health data across borders. The project is to coordinate secure access to data from 1 million genomes linked to health data by 2022. The initiative supports

³ PHG Foundation and ACGS Report: Data sharing to support UK clinical genetics and genomics services – December 2015

shared health policy goals; notably to achieve better health for citizens, future sustainability of health systems and to boost large scale data-driven biomedical and clinical R&D in Europe and will:

- Develop secure infrastructure and tools to enable cross-border exchange of genomic datasets in compliance with GDPR.
- Develop a coordinated data governance framework necessary to facilitate Europe-wide large-scale processing of health and related data in compliance with the applicable data protection legal framework.
- Ensure authorised and secure access to national and regional banks of genetic data while taking appropriate measures to protect privacy of individual data donors

For the IEHG-UCD Genomics Directorate, the output of the Data Sharing Workshop enabled us to progress the development of a 3rd party framework for data sharing. A Strategy Group was formed, representing MMUH, SVUH and UCD, to look at how we were going to share data with third parties. The Group identified three key principles for the 3rd Party Framework:

- I. Genomics is a pillar of healthcare; one where clinical care and research are integrated.
- II. Engagement will be at an institutional level (via the Research and Genomics Directorates).
- III. Delivery of a public good

Clinical Informatics System

Prof Brendan Loftus has agreed to work with cross-institution bioinformaticians to deliver a clinical informatics system design to meet the requirements of the Genomics Directorate across multiple sites. A second objective is to have a bioinformatics process achieve accreditation to an ISO standard. This will assist in differentiating the Genomics Directorate service from other hospital groups. Prof Brendan Loftus is developing a path to accreditation to achieve same.

Next Generation Sequencing and Cancer Care

Academic Health Science Centres integrate academic research into the care system with resulting benefits for patients. This integration of patient care and research is exemplified by the Cancer CAD collaboration with the Genomics Directorate on a Next Generation Sequencing project for Ovarian Cancer.

The research project focused on the development of Next Generation Sequencing and Digital PCR platforms as non-invasive tools to monitor and to predict response to chemotherapy in high-grade serious ovarian cancer.

One of the first patients enrolled on the research project was a 38-year-old lady with a history of stage IV low grade serious ovarian cancer (LGSOC), who developed further disease progression and required another treatment option.

A whole exome sequencing (WES) was carried out on a number of surgical specimens and also from biopsies of her recurrent disease. The group identified a novel targetable BRAF mutation D594G. The team would not have been able to identify this mutation using a panel-based assay

which highlights the benefit of WES and integrated research/clinical collaboration. The bioinformatics pipeline, developed by UCD-based bioinformaticians, meant the turnaround time from sequencing to final target identification was three days, with a multidisciplinary decision on further treatment options reached in less than two weeks.

Research Clinical Academic Directorate

The role of the Research Directorate is to underpin the development of the IEHG Academic Health Science Centre (AHSC) by developing a programme of leading edge Clinical and Translational Research.

Our mission is to improve the health of the nation by ensuring that novel interventions are developed, evaluated and implemented in routine clinical practice. We are achieving this ambitious goal by creating an environment which is supportive of our patients and investigators who are engaged in research.

The Research Directorate expands the UCD Clinical Research Centre (CRC) (which has already demonstrated significant success as a centre operating across multiple institutions and supporting compliant research of the highest impact) by providing oversight and support to all research across the Group. The Research Directorate will utilise the CRC as the vehicle to deliver the Directorate's programme, with the objective of centralising all research in the partner institutions under the one governance structure.

Key Developments in 2018

Since its inception in mid-2018, the Research Directorate has been focused on developing our strategy to support our mission. A strategy has now been developed which focuses on 3 major areas:

- Ensuring Excellence
- Enabling Investigators
- Benefiting Patients

The key strength of the 11 hospitals within the Ireland East Hospital Group (IEHG) is the breadth and width of the clinical care that they provide. The wide range of clinical services drives research in all hospitals, with particularly high concentration in our Model 4 hospitals (Mater Misericordiae University Hospital and St Vincent's University Hospital) and the National Maternity Hospital. In addition, there is specialty-specific research in our specialty hospitals (Cappagh National Orthopaedic Hospital and the Royal Victoria Eye and Ear Hospital), as well as broad research in our general hospitals.

The focus of the Research Directorate is to:

- Enhance the current research programmes in major disease areas like cancer, obesity and cardiovascular.
- Encourage the development of early phase clinical trials to provide more options for patients.
- Ensure all patients in our hospital group, regardless of geography, are provided access to cutting-edge care.

We are committed to ensuring that all research across the Group is conducted to the highest scientific, ethical, regulatory and legal standards. We will realize this ambition by expanding on the systems, processes and programmes which have been established already at the UCD CRC and by providing training opportunities for all research-involved staff across the network.

In addition to developing our overall strategy we have been working closely with our partner hospitals to develop detailed site-specific research plans. We are also developing several important strategic initiatives to further enhance our research capability in areas of importance to our patients. For example, we are developing a centre which will provide Irish cancer patients with access to early-phase clinical trials.

The principal benefit for our partner hospitals will be the ability of all colleagues within our Group to take part in research. We will bring research supports to all corners of our Group within our quality framework; this approach is supportive of our hospitals whose staff want to engage in research, but who may not have the relevant expertise and facilities. We are also providing research training to staff across the network. These initiatives will enable our hospitals to recruit and retain ambitious, research-active healthcare staff.

Academic Health Science Centres (AHSCs) have a crucial role to play in converting new knowledge into a range of innovative products and services for patient benefit. Through their strategic focus on innovation and knowledge translation, AHSCs can ensure that the health system remains accessible and flexible and can rapidly adapt to changing health needs.

The development of our research programme will ensure significant benefits for our patients including:

- Better outcomes for patients
- Improved QALYs (Cancer Trials Ireland, May 2016 Report)
- Avoidance of unnecessary and sometimes costly treatment
- Access to novel treatments
- Medical devices
- Diagnostic tests
- New drug therapies

By developing our research programme, we will deliver improvements in outcomes for our patients, ensuring that IEHG is at the forefront of innovative healthcare delivery.

Opening of the UCD Centre in Translational Oncology (UCTO)

21-22 September 2018 marked the official launch of the UCD Centre in Translational Oncology (UCTO), a collaboration between the university and IEHG's Cancer Clinical Academic Directorate (CaCAD).



The event featured a number of leading international cancer researchers as well as showcasing local Irish research initiatives across a range of cancer types. The keynote speaker was Dr Marc Ladanyi, Attending Pathologist and Chief of the Molecular Diagnostics Service at Memorial Sloan Kettering Cancer Center (MSKCC), New York.

UCD Clinical Research Centre

The UCD Clinical Research Centre (CRC) is an academic-led, multi-site, patient-focused facility for clinical and translational research integrated under a single governance structure within the UCD School of Medicine and supporting patient-focused research throughout the Ireland East Hospital Group. The centre also delivers high-quality education programmes to serve the future staffing needs of the academic and industry sectors both domestically and internationally. Since opening in 2006, the UCD CRC has had a significant impact on the national research landscape. It has created an environment which is supportive of investigators, recognised by regulators and attractive to patients. These efforts have underpinned significant growth in research outputs. The UCD Clinical Research Centre (CRC) supports the objectives of the Ireland East Hospital Group, principally by underpinning the development of a vibrant research endeavour, from campus to hospital to community.

2018 in Numbers

Clinical Research

242	65	5959	132
STUDIES	NEW STUDIES	PATIENTS	CLINICAL TRIALS

Scientific Services

2921	253	76,000	7,470
PATIENT SAMPLES BIOBANKED	GOLIMUMAB ASSAYS	BIOMARKERS ON 100,000 PATIENT SAMPLES	ELISA MARKERS ON 1,900 PATIENT SAMPLES

Quality & Regulatory Affairs

6	3	3	58
DSUR REPORTS	CSR REPORTS	HPRA APPROVALS	UCD CRC SOPS
48		19	
STAFF COMPLETED TRAINING RECORDS		INVESTIGATOR-INITIATED TRIALS	

Education

6	10	76
EDUCATION PROGRAMMES	MODULES	STUDENTS

Health Informatics

Early 2018 saw the appointment of the Group's Chief Information Officer and Professor of Health Informatics (UCD), Neil O'Hare. This appointment shows the importance the Group and the University places on the increasingly important role of Health Informatics and the part it plays within a successful Academic Health Science System. Over the last year, the Informatics function, made up of both central group members and hospital-based teams, have been supporting and rolling out IT solutions, while at the same time developing new proposals and contributing to new initiatives.

Some of the examples include:

- Commencement of roll-out of eRostering Solution in MMUH;
- Activation of an implementation plan for the National Laboratory solution, MedLIS in MMUH;
- Formulation of the ICT Business Case and requirements document related to the move of NMH to the St. Vincent's campus;
- Submission of a range of project proposals for funding to the HSE and DGOU;
- Planning and supporting the implementation of the General Data Protection Regulations (GDPR) in May;
- Strong input and lead roles in the National Electronic Health Record programme from representatives of several hospitals within the Group;
- Appointment of Prof. O'Hare to the HSE's Acute Hospital EHR Project Board and the Health Atlas Ireland Programme Board;
- Progression of Cardio-Vascular Information System implementation in SVUH;

In mid-2018, approval was obtained for the appointment of a Chief Medical Information Officer for the Group. This is another key appointment in the area of Health Informatics with Prof. Conor Shields being appointed to the role.

As an adjunct to the GDPR work, the Group also established an Information Governance Steering Group. This will be an essential construct in how we manage and use sensitive data effectively, efficiently and safely. Prof. O'Hare and Ms Sinéad Brennan (Group Director of Quality and Patient Safety) are co-chairs of this group.

2018 also saw the start of the development of the Group's Digital Plan of Action, initial meetings of the Hospital Group CIOs, and monthly ICT Management meetings for the Group. Work also progressed on moving towards a more self-service data analytics and business intelligence function for managers that will, in time, support the day-to-day running and strategic development of the Group. Focus in 2018 was on the capture of additional data sets into a centralised data repository, however much of the data is currently captured or received from second-hand sources. The aim in 2019 is to move toward more direct data source ingestion and to more user-friendly, interactive and mobile views of this data.

Academically, work commenced on the programme development for an MSc in Health Informatics which it is hoped will see a first intake in 2019. Major grant submissions were made in mid-end 2018. The primary aim of these submissions is to secure PhD students that will have a very strong

connection into the delivery of service for 3-4 years resulting in real and lasting research endeavours in Health Informatics.

Plan for 2019

The priority for 2019 is the completion of the Group's Digital Plan of Action. This will be a deliverables-based plan that is designed to provide an overall direction for the next 3-5 years, identify key activities that the Informatics function will progress, and will be developed in such a way as to be non-static, agile, and publicly accessible.

In addition to this plan, other key developments planned for 2019 include:

- Approval and commence procurement of EDMS (Q1/2)
- On-going development of Group Performance Dashboard, moving to more real-time data
- Commence PAS replacement projects in CNOH and RVEEH (Q1)
- Roll-Out of Discharge Summaries Project (Q1/2)
- Symposium on Digital Pathology (Q1) / Business Case for DP (Q2)
- Implementation of Outpatient Patient Self-Management Solution (Q1-Q3)
- CVIS Business Case for MMUH submitted (Q1)
- Business Case and Procurement of Critical Care System for WGH, RHM and SLK (Q2/3)
- Commencement of MSc Health Informatics (Q3)
- Roll-Out Go-Lives of Ophthalmology EPR (Q1-Q4)
- Establishment of the UCD / IEHG Centre for Health Informatics (Q2/3)
- Infrastructure Review in Model 2/3 Hospitals (Q1-3)

Opening of the Pillar Centre at MMUH

The Pillar Centre for Transformative Healthcare at the Mater Misericordiae University Hospital was opened on 9 November in partnership with UCD. The centre will enhance and improve practical skills training, simulation training and team-based, interdisciplinary learning whilst providing a space where industry can interface with a major acute healthcare provider and the country's largest university to develop innovative solutions to healthcare challenges.

The centre will be a key enabler in the IEHG journey toward becoming an Academic Health Science Centre.

'The Pillar' is located within the 1861 Mater building and contains a Research Laboratory, Genome Sequencing Laboratory, Cadaveric Surgical Technique Training Centre, Knowledge Transfer Office and the country's only Healthcare Lean Academy.

The centre will house the UCD Clinical Research Centre and the Mater's Cancer Trials Research Unit with an early phase clinical trials facility and a robotic training suit.



UCD final year medicine students Catherine Murphy, Daniel Ferry, Marie Dromey and Sean Collins at the Surgery Module bootcamp, October 2018, in the old theatre block of the Mater Misericordiae University Hospital

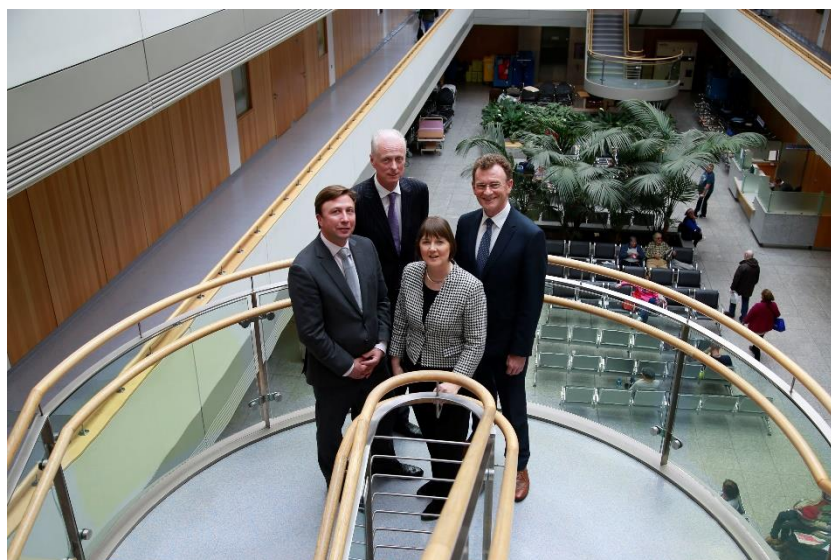
Innovation

NovaUCD

In May 2018, NovaUCD, in partnership with St. Vincent's Healthcare Group (SVHG) and the Mater Misericordiae University Hospital (MMUH), announced the opening of Ireland's first in-hospital Knowledge Transfer (KT) Offices. The KT Offices have been established to develop the commercial potential of the research outputs emerging from both hospitals and to extend the reach of their medical advancements to a greater number of patients worldwide. The KT Offices will protect the resulting intellectual property, assess its commercial potential, and where appropriate licence this IP to life science companies or create new start-up companies to bring the innovations to market.

The KT Offices are led by Dr Ena Walsh, UCD's life sciences knowledge transfer expert, who will provide a wealth of resources and advice to clinicians to enable the market potential of their innovations to be fully realised. Dr Walsh holds clinics the first Wednesday of each month in SVUH and the first Friday of each month in MMUH. A number of interesting inventions that show great promise have already been disclosed during these clinics.

In addition, NovaUCD clinical innovation seminars, entitled 'From Concept to Product', have taken place at SVUH (with NCAD) and at MMUH (with the Pillar Centre for Transformative Healthcare). The aim of the seminars was to discuss clinical innovation and the wider Irish innovation ecosystem with healthcare professionals at both hospitals. A clinical innovation Sprint programme also took place at the Pillar Centre for Transformative Healthcare, MMUH. The Sprint, facilitated by Mary Cronin of UpThinkWorks, was an intense 4-hour innovation immersion session, where clinicians and researchers from UCD and NCAD were introduced to the process of design thinking and business model generation.



Pictured l-r: Gordon Dunne, CEO, The Mater Misericordiae University Hospital; Prof. Michael Keane, Acting CEO, St. Vincent's University Hospital; Dr Ena Walsh, Case Manager, Life Sciences, NovaUCD and Tom Flanagan, Director of Enterprise and Commercialisation, NovaUCD

UCD Health Systems

About Health Systems at UCD

The School of Nursing, Midwifery and Health Systems is one of the largest schools in UCD with an extensive and diverse portfolio of educational and research programmes, and multiple and well-developed links with key stakeholders in clinical practice, health service management, health policy and professional regulation. Established in 2014, the Health Systems team is an expanding, dynamic, inter-disciplinary group of researchers in the School working across a broad range of health and social sciences disciplines.



The Health Systems team has expertise in multi-level systems research and a comprehensive knowledge of research designs and methodologies. The team's research approach is underpinned by rich contextual analysis, interdisciplinary approaches and co-design with healthcare professionals, patients and the public. The Health Systems team is informed by the belief that synthesising evidence from systematic and realist reviews of literature with findings from socio-technical systems analysis of current policy and practice and translating this evidence into knowledge can inform the design of evidence-based, customised interventions that are more likely to be successful and sustainable.



www.nmhs.ucd.ie/research/our-research/health-systems



twitter.com/UCDHealthSystem

On 24 October 2018 the UCD Health Systems Research Group hosted its first research showcase event in the UCD Charles Institute, Belfield, Dublin. The purpose of the Showcase was to present the range of current Health Systems research projects to health services in the Ireland East Hospital Group and beyond, and to offer an opportunity for discussion of future research areas and collaborations.

See below for updates on a selection of on-going projects which are being developed in collaboration with IEHG colleagues.



Photo: UCD Health Systems team

Research Updates

Collective Leadership and Safety Cultures (Co-Lead)

The 'Collective Leadership and Safety Cultures' (Co-Lead) programme is a five-year research project, funded by the Health Research Board and Health Service Executive (HSE), that aims to support quality and safety cultures and positively impact patient care through the development of a new model of collective leadership that is associated with effective team performance in healthcare.

A programme for healthcare teams has been developed through a co-design process involving the research team in UCD, healthcare professionals and patient representatives. The team programme includes a range of components, including foundational elements targeting enhanced team performance and patient safety awareness, and more advanced components targeting specific aspects of team performance, safety culture and collective leadership. Over the past year, Co-Lead has been working with four teams in the Ireland East Hospital Group to test the programme and explore its impact on safety culture, team performance and leadership. The teams include an acute care team, a surgical team, a care of older persons team and a cross-hospital team. These four teams are helping to test the programme to explore what components work best for teams, to what extent, and why.

If the programme proves successful in this phase, it will be tested at scale in the two largest hospitals in IEHG: St. Vincent's University Hospital and the Mater Misericordiae University Hospital. The Co-Lead team are currently finalising the team sessions, which will soon be made available open source on the Co-Lead website for teams to use within their own setting.

The Co-Lead team, along with NHS Improvement, co-hosted an event, *Sharing the Knowledge on Collective Leadership*, in UCD on 4-5 December 2018. This event gathered teams from Ireland, Northern Ireland, Scotland, Wales and England engaged in strategy development, implementation and research of collective leadership in healthcare. Expert keynote speakers included Prof Michael West (Professor of Organisational Psychology at Lancaster University; Senior Fellow, The King's Fund) and Dr Petra Kuenkel (Executive Director, Collective Leadership Institute; Member of the Club of Rome).

To learn more about collective leadership, the Co-Lead research programme and to keep informed about progress and publications, please visit www.ucd.ie/collectiveleadership or on Twitter: @coleadproject

Psychological Safety in Healthcare Teams

Roisin O'Donovan is a PhD candidate working with Prof Eilish McAuliffe (Prof of Health Systems) and Paula Lawler (IEHG Group Director of Human Resources) to design an intervention to improve psychological safety within healthcare teams. Psychological safety has been defined as the shared belief held by team members that they are safe in taking interpersonal risks, such as speaking up and sharing innovative ideas. Fostering psychological safety within healthcare teams is critical to maintaining and encouraging team learning, creativity and team performance. Based on a review of the literature and through working closely with a case study hospital within IEHG, Roisin has adapted measures of psychological safety for use within healthcare teams. She will now use these measures to gain a more in-depth understanding of psychological safety within case study healthcare teams. This work will inform the next stage of this research, where researchers and healthcare professionals will collaborate to develop an intervention to improve psychological safety within healthcare teams.

Promoting Assisted Decision-Making in Acute Care Settings (PADMACS)

Upon commencement of the Assisted Decision-Making Act (2015), healthcare professionals will be required to have appropriate knowledge and skills to support their patients in making healthcare decisions. The PADMACs project aims to co-design an educational resource for healthcare professionals that will support them in understanding and practicing assisted decision-making with older patients in an acute setting. The study is funded by the Health Research Board under an Applied Partnership Scheme. It involves collaboration between UCD Health Systems researchers, the Royal College of Physicians Ireland as well as geriatric multidisciplinary care teams in St Vincent's University Hospital and the Mater Misericordiae University Hospital. Our public and patient representative partners are the Alzheimer's Society of Ireland and Family Carers Ireland. The project team have recently completed a rapid realist review of the international evidence regarding the contexts, mechanisms and resources which foster cultures of supported decision-making in healthcare. A co-design, participatory learning and action method will be adopted for the game development and will involve public and patient representatives, healthcare professionals as well as health system researchers and educators. It is anticipated that the co-design process will commence in June 2019.

The findings from the rapid realist review were presented at the Irish Gerontological Society Conference in September 2018 and the National Patient Safety Conference in October 2018.

Finance

Finance

The IEHG is the largest hospital group with 11 hospitals, 6 Voluntary and 5 Statutory, delivering acute services to over one million people. Our gross budget for 2018 was €1,228.349m.

2018 Financial Results

IEHG net expenditure for 2018 was €1,018.505m against a final allocation of €1,001.541m. This resulted in a deficit of €16.964m or 1.7%, mainly driven by increased activity levels beyond the agreed Service Plan and increased provision for doubtful debts. It proved to be a difficult year where there was insufficient funding received to fund our hospitals in respect of the increased activity and provision for doubtful debt.

DECEMBER 2018 Results	FYB	Spend	Budget	Variance	Variance
Hospital	€m	€m	€m	€m	%
Mater Hospital	283.779	284.837	283.779	1.058	0.4%
St Vincent's	257.648	259.044	257.648	1.396	0.5%
St Michael's	28.227	28.236	28.227	0.009	0.0%
National Maternity	57.738	58.020	57.738	0.282	0.5%
Royal Victoria E&E	28.195	28.365	28.195	0.170	0.6%
Cappagh	36.761	36.634	36.761	-0.127	-0.3%
TOTAL VOLUNTARY	692.348	695.136	692.348	2.788	0.4%
Wexford General	71.805	74.163	71.805	2.358	3.3%
St Luke's Kilkenny	76.063	81.403	76.063	5.340	7.0%
St Columcilles	34.625	35.825	34.625	1.200	3.5%
Mullingar	74.986	76.810	74.986	1.824	2.4%
Our Lady's Navan	47.375	48.816	47.375	1.441	3.0%
IEHG HQ	4.339	6.352	4.339	2.013	46.4%
TOTAL STATUTORY	309.193	323.369	309.193	14.176	4.6%
GRAND TOTAL	1,001.541	1,018.505	1,001.541	16.964	1.7%

Contributing factors to the financial result were:

- The Group experienced growth in Inpatient Discharges of 4.2% above target and 3.4% above prior year with hospitals ranging from 1.9% to 9.6% above 2018 Service Plan and 0.4% to 7.9% above previous year. The national average was 1.5% above target and 1.3% above prior year.
- The Group experienced growth in Day Cases of 2.3% above target and 1.8% above prior year with hospitals ranging from 1.2% to 10% above 2018 Service Plan and 4.9% to 13.3% above prior year. The national average increase was 1.1% above Service Plan and 0.5% below prior year levels.
- Emergency presentations were 4.2% higher than Service Plan and 4.7% higher than the previous year.

- Births were down 5.9% compared to the Service Plan and 5.7% compared to the previous year.
- The ABF Report for 2018 shows that IEHG had earned €27m revenue above the plan. The complexity of patients also shows a marked increase over previous years.
- Private health insurance income showed a significant shortfall against plan targets and there was also a significant increase in the provision for doubtful debt.

Human Resources

Human Resources

The Ireland East Hospital Group workforce totals 11,773 employees (whole time equivalents) at the end of 2018 working across the eleven hospitals in the Group and providing acute hospital services to over 1 million people. Working together as a collective and emerging organisation since 2015, our employees continue to develop and deliver world-class healthcare through the provision of an integrated, patient-focused, consistently high-quality healthcare service that is accessible and sustainable for all patients.

Workforce Plan

Clearly demonstrated by the review of the IEHG Strategic Framework Programme was the need to establish a high-level Working Group dedicated to developing an overall Workforce Plan for the Group. This Group was established during 2018 with an initial focus on medical manpower planning. The urgent requirement for this focus on medical manpower planning was reaffirmed by information provided at the Workforce Seminar provided by the National Doctors Training Programme on 18 January 2018. Some of the areas highlighted by the NDTP included:

- Current chronic shortage of doctors with an over-reliance on international medical graduates, particularly in the Model 2 and 3 hospitals
- Approval being sought for replacement Consultant posts are less for retirements and more for resignations
- There is an increase in doctors employed as Consultants not on the Specialist Register
- 30% of GPs are not on the Specialist Register
- Inability of GPs to retire
- Business aspect of a GP practice not attractive to young GPs

Some of the on-going challenges identified by the NDTP from a survey undertaken with NCHDs during 2018 include: feminisation; family friendly policies; flexible working; supports for the ageing workforce; return to practice; urban versus rural; hospital reconfiguration; patient expectations. These issues may also affect other grades of staff currently working in the health service and work commenced during 2018, through the establishment of a Medical Workforce Planning Group, to put an action plan in place to address current and future recruitment and retention issues.

Leadership and Culture

IEHG has successfully adopted Lean principles and methodology to deliver improvement and change across a number of clinical pathways and services and this has been done through the successful engagement of more than 2,000 employees who have been actively leading and participating in the change. A number of other significant initiatives where staff leadership and involvement have been instrumental in progressing change include: the Collective Leadership Project undertaken in collaboration with our Academic Partner, University College Dublin (UCD); the National Patient Centredness Programme currently being piloted in Regional Hospital Mullingar; and the improvement initiatives brought about by the National Patient Experience Survey.

Through our improvement programme, the leaders and management teams of our hospitals have developed and delivered leadership behaviours that support front line staff to contribute to and

drive improvements in the care provided through a continuous learning culture. This work will continue in 2019 as our leadership capability and capacity are further developed in partnership with UCD and the Smurfit Business School.

Employee Wellbeing and Engagement

In line with government policy on population health and wellbeing, work will continue to progress the implementation of the *IEHG Healthy Ireland Implementation Plan* by supporting each hospital within the Group to plan, organise and structure resources for its successful delivery. The delivery of our *Healthy Ireland* plan will ensure support is provided to both staff and patients and, from a workforce position, ensure improved staff health and wellbeing. The positive benefits of a healthy workforce and healthy workplace are acknowledged and supported by IEHG. Recognising the challenges facing our staff to maintain a healthy work/life balance, our objective through our dedicated *Healthy Ireland* Plan is to create a culture of health and wellbeing by supporting our staff to look after their own health and wellbeing both in the workplace and at home in their community.

Building on the local work undertaken across the Group since 2017 in our hospitals engaged with the *Great Place to Work Institute (GPTW)*, employee engagement improvement plans were further developed during 2018 to develop common initiatives that support team working, enhance communications, demonstrate employee value, maximise employee potential and embrace diversity. In addition, the results from the National Staff Engagement Survey undertaken in 2018 and published in January 2019 will be used to identify improvements that need to be made with particular emphasis on culture, working conditions and employee value and recognition.

European Working Time Directive (EWT) Compliance December 2018

Acute Hospitals and Hospital Groups	% Compliance with a maximum 24-hour shift (EU Commission reporting requirement) - All NCHDs	% Compliance with an average 48 hour working week (EWT) legal requirement - EU Commission reporting requirement) - All NCHDs
St Vincent's University Hospital	100%	65%
St Michael's Hospital	100%	72%
St Columcille's Hospital	100%	100%
Mater Misericordiae University Hospital	99%	70%
Cappagh National Orthopaedic Hospital	100%	100%
MRH Mullingar	90%	84%
Our Lady's Hospital Navan	98%	88%
Royal Victoria Eye and Ear Hospital	100%	97%
National Maternity Hospital	100%	100%
St Luke's General Hospital Kilkenny	100%	93%
Wexford General Hospital	100%	91%
Ireland East Hospital Group	99%	87%
Dublin Midlands Hospital Group	99%	75%
RCSI Hospital Group	98%	78%
South/South West Hospital Group	95%	82%

University of Limerick Hospital Group	93%	81%
Saolta Hospital Group	96%	92%
The Children's Hospital Group	85%	81%
Acute Hospitals Total	95%	82%

Our Hospitals

Our Hospitals – 2018 Highlights

Cappagh National Orthopaedic Hospital



Cappagh National Orthopaedic Hospital is Ireland's major centre for Elective Orthopaedic Surgery. Cappagh has been the pioneer of Orthopaedic Surgery in Ireland and is now the largest dedicated Orthopaedic Hospital in the country. Cappagh Hospital has 159 beds, catering for both public and private patients.

Cappagh Hospital is an independent Voluntary Hospital founded in 1908 under the care of the Sisters of Charity. It was once renowned for its 'Open Air' wards and for its surgical treatment of children with TB from the 1920s.

The hospital provides the full range of Orthopaedic Services including Major Joint Replacement (ankle, hip, knee, foot, shoulder, elbow and wrist), Spinal Surgery including corrective surgery for Scoliosis, a Primary Bone Tumour Service, Paediatric Orthopaedics and the management of Sports Injuries.

In 2012, Cappagh Hospital established its dedicated Rehabilitation Unit, which delivers specialist rehabilitation services to patients following an acute medical episode with the aim of returning them to independent living where possible. The Unit has a total of 52 beds of which 42 are dedicated to people aged 65 years and over with the remaining 10 beds servicing the needs of patients aged under 65 years.

Minister Opens Cappagh Foundation Day - 25 May 2018



Consultants and Staff at Cappagh National Orthopaedic Hospital were joined by visiting Professor Daniel Sucato MD and guest speaker Dr Brandon Ramo, both from Texas Scottish Rite Hospital for Children in Dallas, for the Annual Foundation Meeting on Friday 25 May 2018. The event was opened by Minister for Health, Simon Harris TD. The event was organised by Mr Connor Green, Consultant Orthopaedic Surgeon at Cappagh Hospital and was attended by members of the national and international orthopaedic community including surgeons, anaesthetists and other multidisciplinary practitioners.

The themes for the day were:

- Models of care in Paediatric Orthopaedics
- Surgical Treatment of Paediatric Scoliosis and Implications for the Adult Surgeon
- Rapid Recovery strategies in Paediatric Scoliosis
- Surgical Treatment of SCFE and Implications for Adult Surgeons

Minister Harris, in his address, acknowledged the important role that Cappagh National Orthopaedic Hospital plays in the delivery of orthopaedic services nationally and its vital role in reducing patient waiting times, including paediatric orthopaedic waiting times.

The Hospital exceeded its target for treatment of Scoliosis cases, undertaking 50 paediatric Scoliosis procedures in the year. There were also significant increases across other paediatric services in the year with 13 Limb Lengthening cases completed, in addition to a number of day case procedures from Temple Street.

Patient Waiting List Management

2018 was Cappagh Hospital's busiest year in terms of the number of in-patient and day case treatments undertaken.

The Hospital reduced its waiting times for patients requiring in-patient and day case treatments from 18 months in 2017 to just 9 months at the end of December 2018. All patients waiting over 9 months for either in-patient or day case treatments were either treated by year end or had a date to come in for surgery in the first 6 weeks of 2019.

The Hospital was in a position to reduce its waiting times by opening a fourth theatre for much of the year, having received support from the National Treatment Purchase Fund (NTPF) to fund 583 procedures.

The Hospital also made substantial progress in reducing out-patient waiting times. On 31 December 2018 there were no patients waiting over one year for an appointment. This was facilitated by engaging four external consultants to hold additional clinics in Q4.

The Hospital looks forward to continuing to work with the HSE and NTPF in 2019 to reduce waiting times further in line with Sláintecare recommendations.

Young Hospital Professional of the Year Award 2018

Ms. Sadhbh Ní Cheallaigh, Senior Clinical Pharmacist, won the 'Young Hospital Professional of the Year Award 2018' at the Hospital Professional Awards.

This award recognises rising talent and potential amongst those at the beginning of their careers – those individuals who are already demonstrating that they can make a difference to their profession and the patients they serve.

This award focuses especially on the talent we will all rely on to deliver services for the next two decades and beyond, the young professionals currently delivering and planning services at the sharp end, but whose skills will be vitally important over the coming years.



Mater Misericordiae University Hospital



The Mater Misericordiae University Hospital is a Model 4 teaching hospital based in Dublin's north inner city. The hospital was opened in 1861 by the Sisters of Mercy. In addition to the local services for our catchment area, the Mater Hospital provides a range of frontline and specialist services on a regional and national level.

Our ambition is to be the safest hospital in Ireland, delivering the highest quality care, with the most patient-centred, efficient processes.

We are the national centre for:

- Heart surgery
- Heart and lung transplants
- Extra corporeal life support (ECLS) - a procedure that uses a machine to take over the work of the lungs and sometimes the heart
- Spinal injuries
- Pulmonary hypertension - a rare lung disorder
- Bone anchored hearing aid
- National isolation unit

Our hospital offers:

- Over 600 inpatient beds - more than 150 of these inpatient beds are single rooms en suite
- 85 day beds
- 12 operating theatres

Education, training and research have always been at the core of the Mater Hospital. We are committed to providing excellence in healthcare for all of our patients and in order to achieve this we recognise that we must support our current and future staff to learn, grow and innovate. Our strong academic partnerships allow us to deliver undergraduate and postgraduate education to hundreds of healthcare professionals including nurses, doctors, clinical therapists, radiographers and many more. We also work closely with academic institutions to deliver cutting-edge research that has a direct impact on patient care.

Trauma Care Conference 2018



The main objective of the Mater's Trauma conference on 12 June 2018 was to exchange ideas, experiences and lessons learned about the role of internationally accepted systems and protocols in the field of trauma care.

We were very pleased to be able to run such an important conference. Thank you to our speakers and to our many staff for sharing their time, talent and expertise, all of which will enhance the ongoing delivery of service to our patients in the Mater Hospital.

National Patient Experience Survey 2018

We are extremely happy with the overall results of the 2018 National Patient Experience Survey at MMUH.

We are particularly encouraged to note that the patient satisfaction rating has increased since the 2017 NPES in each stage of care:

- Admissions
- Care on the Ward
- Examination Diagnosis and Treatment
- Discharge/Transfers
- Overall

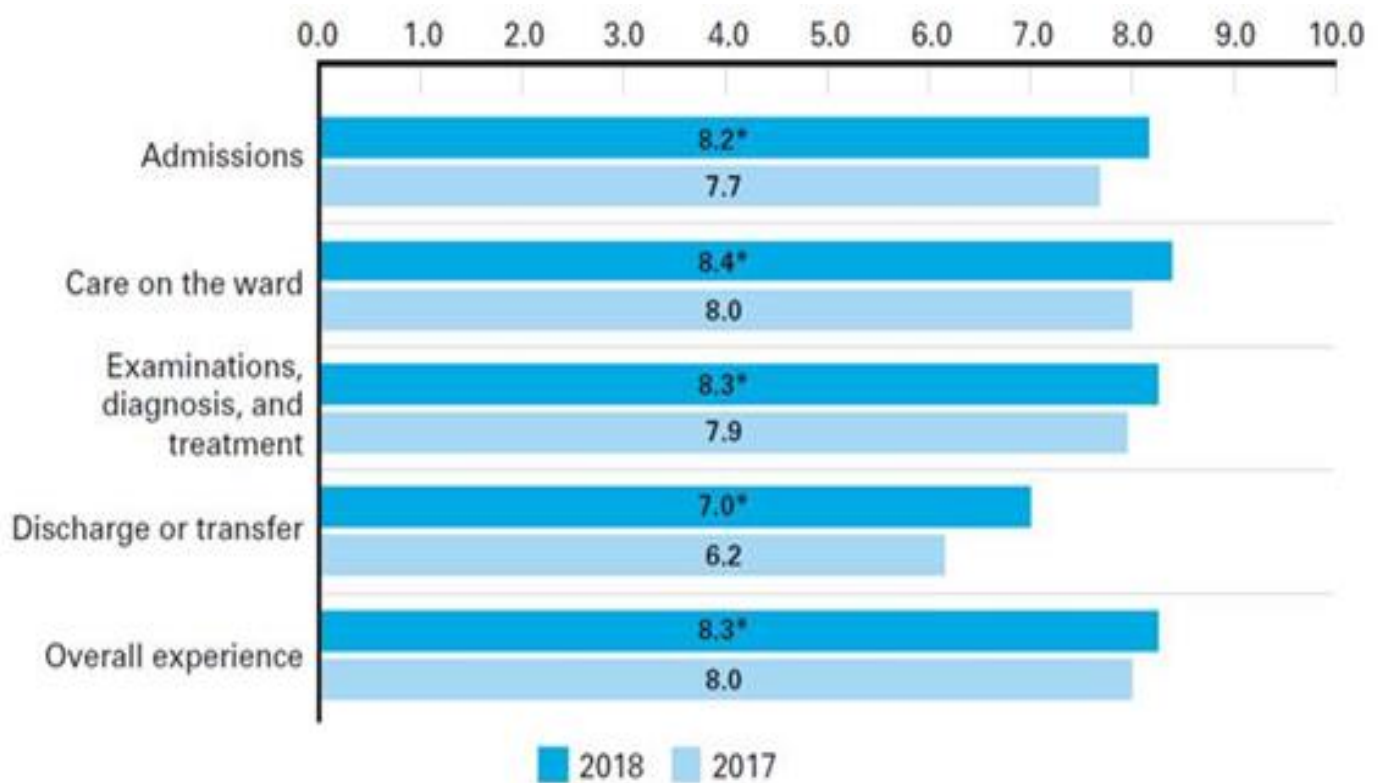
Our patients were very positive about the support they received from staff, with many patients reporting positive experiences of being treated with respect and dignity in the Emergency Department and in the hospital in general. Patients also rated a positive experience on the ward of being offered a choice of food and given enough privacy when being examined or treated. Many of

our patients reported that they have confidence and trust in the Mater Hospital staff. These findings are very reassuring and all credit goes to staff for achieving these results.

This survey has been a very positive experience for the Mater Hospital. It has focused our attention even more on what is important. The patient must be put at the centre of all we do. These results have given us a clear insight into the patients' experiences in our hospital and assists us in understanding what matters to patients.

While many patients surveyed said that they had a very good experience of acute hospital care, it is important also to listen to those patients who identified areas for improvement. We look forward to the implementation of improvements in patient experience over the coming year.

Scores out of 10 are given for each question belonging to a stage of care. A score of 0 indicates a very negative experience and a score of 10 indicates a very positive experience.



* Denotes a statistically significant difference between 2017 and 2018

Official Launch of the Pillar Centre for Transformative Healthcare

The Pillar Centre for Transformative Healthcare in the Mater Misericordiae University Hospital officially launched on 9 November 2018. This new centre will complement existing educational facilities within the Mater Misericordiae University Hospital and UCD by providing a flexible, interdisciplinary educational space, located within the hospital environment. The centre will focus on supporting practical skills training, simulation training and team-based, interdisciplinary learning.

The Pillar Centre for Transformative Healthcare is situated in the old ICU level 3 of the Misericordiae wing and has been completely refurbished for purpose, with the capacity to facilitate up to 400 users over five teaching rooms.



National Maternity Hospital

The National Maternity Hospital on Dublin's Holles Street was established in 1894. It is now one of Europe's largest maternity hospitals with 154 inpatient beds. The hospital provides Maternity, Gynaecology, Neonatology, Fetal Medicine, Anaesthetics, Pathology, Radiology, Maternal Medicine, Perinatal Mental Health, Urogynaecology, a National Neonatal Transfer Service and Community Midwifery Services.



The original focus of the service were the poor people of the districts surrounding Holles Street, however continuous change and growth from humble beginnings means that today over 9,000 babies are born in 'Holles St' each year which means that one in every twelve Irish citizens begins life behind its walls.

The hospital's Neonatal Intensive Care Unit is recognised as a national referral centre for complicated pregnancies, premature babies and sick infants. Its Gynaecology Unit treats over ten thousand outpatients annually. One of the hospital's main sub-specialities is the treatment of Gynaecological cancer; its Colposcopy service is funded by the National Cancer Screening Service. It has one of the largest units in Europe for such a purpose.

The National Maternity Hospital has built a reputation for undergraduate and postgraduate training and holds international courses on the Active Management of Labour each year. The hospital also educates undergraduate and postgraduate midwives. There is also a very extensive professional development programme for midwives and nurses within the hospital. An annual higher diploma programme in Neonatal Nursing Studies is facilitated in conjunction with the two other Dublin maternity hospitals and the Royal College of Surgeons.

Launch of National Maternity Hospital Leadership Programme 2018



The National Maternity Hospital Leadership Programme was launched in the Institute of Leadership with 18 participants in September 2018. This was the result of the RCSI working with the executive management team over a period of a few months. It was a nine-day programme with managers from all across the hospital and services.

A key feature of this programme was focusing on future-proofing the hospital as it plans its engagement and move to St. Vincent's University Hospital campus but there were many other interesting developments to arise from this programme. Our three groups came up with the following:

1. **A Midnight Feast: Improving the Patient Experience:** The 'Snack Pack' was successfully introduced to postnatal women who need food and drinks throughout the night.
2. **The Quest for the Best:** Identified the gaps in retaining and recruiting staff and as a result introduced staff groups discount as an additional NMH staff benefit and upgraded the NMH website to show what we have to offer.
3. **Breaking News:** How to improve the flow of communication in the hospital now and into the future.

Pictured: the participants and Prof. Shane Higgins on the final day of the National Maternity Hospital Leadership Programme

The National Maternity Hospital during Storm Emma...



It really was a busy 48 hours...The National Maternity Hospital delivered 52 babies and An Taoiseach Leo Varadkar came to visit.

Dr Rhona Mahony, Master, spoke to the Ryan Tubridy Show and thanked the hospital's employees for their dedication, saying "some people had walked for two hours to get to work, while others hadn't left the hospital since Tuesday".

The National Maternity Hospital and University College Dublin Joint Research Network for Midwifery and Nursing



On 13 December 2018 the Joint Research Network hosted their first research network conference.

The Joint Research Network was established in 2007 by Mary Brosnan and Professor Michelle Butler to develop a research culture for midwives, student midwives and nurses. The vision and goals of the group were to translate evidence-based midwifery and nursing knowledge into practice.

Since 2007, the group has expanded and evolved to include our Ireland East Hospital Group partners. The conference was a showcase of the collaborative research outputs from the past 11 years. The conference was attended by 78 healthcare professionals from all around the country.

Our Lady's Hospital, Navan



Our Lady's Hospital, Navan (OLHN) serves a local population of 184,135 in County Meath and serves a regional population of 400,000 (Meath, Louth, Cavan, Monaghan) for regional elective Orthopaedic and Rheumatology Services.

Current Services in OLHN:

- Emergency Department
- Endoscopy Unit (1 room)
- 2 General Theatres
- Day Services Units; General Surgery & Medical Infusion and Orthopaedic
- Regional Elective Orthopaedic Unit, 23 inpatient beds, 6 day trolleys, 2 Theatres Orthopaedic
- Pre-assessment
- CSSD / CDU
- Outpatient Department
- ICU/HDU Unit – 4-bedded
- CCU – 6 beds
- MAU – 6 trolleys
- Acute Medical Beds – 3 wards – 58 beds
- Escalation Medical Ward - 11 beds
- Non-Invasive Cardiology Department – ECG, Echo, Holter etc.
- Regional Rheumatology Services
- Radiology Department – including CT / Dexa scanning
- Diabetic Day Centre
- Nurse Specialists – Diabetes, Cardiac Rehabilitation, Heart Failure, Smoking Cessation, Rheumatology, Infection Control, Cardiac Pulmonary Resuscitation, Stroke, Haemovigilance, Pain Management, Bone Bank Co-ordinator, Arthroplasty Nurse, PHN Liaison.
- Advanced Nurse Practitioners - 3 ANPs Minor Injury Ed, 2 Candidate ANPs Rheumatology

Local Integrated Care Committee (LICC)

2018 saw eight meetings of the LICC which, under the chair of Dr Catherine Wann, GP liaison with the Hospital, provided the forum for discussion, debate, information sharing and project formation between the Hospital, GPs and our local community services.

Dr Wann also worked within the Hospital on service improvement sessions, pathways and represented the GP faculty in key meetings between the Hospital, IEHG and community.

The LICC was instrumental in influencing the RIE in relation to ED and MAU streaming in allowing for re-evaluating the referral process for GP access to the MAU, resulting in fewer presentations of appropriate medical presentations to the Emergency Department to the MAU and for direct access protocols to the MAU from GP practices.

Service Improvement Events



2018 saw momentum gathering in relation to the Lean methodology approach to service improvement in OLHN, supported by the service improvement team from IEHG. Building on two Rapid Improvement Events (Reduction of Length of Stay in Medicine and Abdominal pain pathway in ED) a Value Stream Analysis (VSA) on unscheduled care was carried out in July 2018.



In line with the IEHG strategy and vision for continuous improvement, we reviewed and redesigned the end-to-end pathway for unscheduled care in OLHN. Using A3 thinking, we assessed our current state and using a collective leadership ground-up approach modelled our future state.

Two RIEs followed in Frailty and ED/MAU streaming in November 2018. It is important to note that, in conjunction with the Lean approach, we were also involved in integrating results from our National Patient Experience Survey, Great Place to Work survey and the Collective Leadership project in conjunction with UCD. This integrated approach allowed us, through engagement with all grades of staff in the service improvement work, to include and prioritise many issues raised from the service user and staff to facilitate a person-centered approach to improvement, adding value and finding solutions based on respect and trust.

Through these two RIEs, we saw a rapid sustained improvement in our Trolleygar 8am numbers, achievement of gold standard triage times (<15 mins) in ED, as well as a 60% increase in streaming and direct access of medical patients to the MAU, and a sustained improvement in our Patient Experience Times in ED for all presentations, but significantly for those persons over 75 years accessing our service. The introduction of a Frailty Intervention Team (FIT) and the introduction of a comprehensive geriatric assessment in ED have been pivotal in achieving this improvement. I would like to thank the service improvement team in IEHG for their invaluable commitment but especially the staff from all grades whose ideas, insights and engagement in Lean service improvement have transformed our approach to care here in Navan.



Day Surgery: Integration of Navan and Mater Misericordiae Hospitals

2018 continued to see the development of an integrated approach to theatre use in OLHN to manage day services waiting lists from the Mater Hospital. In 2018, six specialties and nine surgeons carried out theatre sessions in OLHN, complementing the work of Navan-based surgeons in providing the best quality service to patients. In 2018, 450 patients were treated from the Mater Hospital, an increase of 15% from 2017.

Regional Hospital Mullingar



Regional Hospital Mullingar is a Model 3 Statutory Hospital and provides a wide range of health services for people in Westmeath and Longford and specialised services for a broader Midlands population of 291,000 including Laois, Offaly, North Meath, Kildare and Roscommon. The hospital provides the following acute services:

- ▶ Accident and Emergency
- ▶ General Medicine (Including Regional Stroke Thrombolysis)
- ▶ General Surgery
- ▶ Obstetrics and Gynaecology
- ▶ Paediatrics / Special Care Baby Unit
- ▶ Critical Care

The hospital also provides comprehensive medical and surgical investigation, diagnosis and treatment for adults and children, comprehensive maternity service for women and their partners, Diagnostic Radiological and Pathology services as well as Physiotherapy, Occupational Therapy, Speech and Language Therapy, Nutrition and Dietetics, Cardiac Diagnostic and Rehabilitation Services, Pulmonary Function Laboratory and Respiratory Services.

The hospital and community have several integrated care models within the region including:

- ▶ Hospital outpatient services located in St Joseph's, Longford
- ▶ Ophthalmology and Radiology services in St. Joseph's, Longford
- ▶ Radiology and Ophthalmology services in Clonbrusk Primary Care in Athlone
- ▶ SATU (24-hour Sexual Assault Treatment Unit)
- ▶ MIDOC services are also located in the hospital

The hospital is also involved in a joint GP Hospital Liaison Committee and an extremely effective Hospital and Community Local Placement forum. This joint forum is an efficient and effective discharge planning forum and results in minimal bed days lost and high performance in delayed discharge statistics for the hospital.

Launch of Weight Management Guide



Regional Hospital Mullingar launched the country's first Weight Management Guide in August 2018.

The booklet was developed by the hospitals Dietitian and Physiotherapy Departments. The guide, which is free to both healthcare professionals and patients, gives practical advice to managing weight. The guide takes a universal approach to helping patients manage their weight. It is not a weight loss, diet or exercise workout guide, but rather a guide to living a healthy lifestyle on a day-to-day basis and managing weight by

following simple yet effective guidelines outlined in this easy-to-use booklet.

The guide aims to provide evidence-based information in an easy read and visually attractive format and is a compilation of existing information from renowned sources to create a guide that not only focuses on diet and exercise, but incorporates other equally important components that contribute to weight management, such as mood and sleep. Research for the booklet was conducted over a year with information included from organisations like Safe Food and Croi, as well as guidance from medical experts including Professor Donal O'Shea, HSE Clinical Lead for Obesity.

The booklet is available to any patient who requests help managing their weight, free of charge via the Ireland East Hospital Group's website. The guide also helps healthcare professionals when advising and treating patients.

Prof Donal O'Shea describes the booklet as 'a step by step guide to help individuals achieve and maintain a healthier weight. It covers all the areas that need to be addressed across healthy eating, physical activity, motivation and self-monitoring. It is clearly written with superb illustrations. It has had input from all the relevant disciplines...I am delighted to be associated with it in my capacity as HSE Lead for Obesity.'

The aim of this initiative was to make a holistic, evidence-based, weight management guide available to all of Ireland's population. We have been able to raise awareness of its availability with assistance from the Ireland East Hospital Group and Healthy Ireland. It is now available to all. Regional Hospital Mullingar acknowledge the tremendous efforts of Noeleen Bourke, Senior Physiotherapist and Anne Marie Keogh, Senior Dietitian, and their teams.

We hope this booklet will be used and shared by everyone as we all strive to be a healthier nation and achieve our Healthy Ireland goals.

TEAM INCLUSIVE: Enabling a more person-centred culture in Mullingar



As part of its commitment to care, compassion, trust and learning, in 2018 Regional Hospital Mullingar availed of an opportunity to introduce a practice development programme to enable cultures of person-centredness for service users and staff within our hospital.

Pictured left: Team Inclusive – Mullingar Person Centred Team

This is the first time a bespoke programme has taken place in an acute hospital. The programme is delivered by facilitators from the Quality Improvement Division (HSE) in partnership with Queen Margaret University, Edinburgh. It is sponsored by the National HR Division and supported by IEHG. It involves developing work-based facilitators to lead culture change and develop person-centred practice in their own services as part of their current role. The programme offers a sustainable, accredited programme that builds capacity by embedding cultures of person-centredness within services systematically and incrementally.

Eleven participants, from many departments across the hospital, make up Team Inclusive. Participants are developing their knowledge and skills as facilitators of person-centred culture and practice. They learn about person-centred approaches, tools and processes that can be used within their own departments and are in the process of implementing three culture change groups across the hospital.

Team Inclusive has three initial ambitions – that in 12 months' time:

- ▶ We will have created a feeling of inclusion and belonging within our individual teams.
- ▶ There will be evidence in Regional Hospital Mullingar that all staff, as well as people who use our services and their families, are involved in shared decision making
- ▶ There will be a colourful, vibrant, relaxing place of ownership where staff can interact and socialise with others.

This programme will run until October 2019 and will have several new on-site facilitators developed and up to 220 staff engaged in the programme. In addition, the evaluation of the programme will provide rich data and information about the development of person-centred cultures in the hospital setting and outcomes pertaining to service users, families and staff. The intention would be for both the processes and outcomes of the programme to be transferrable to other contexts.

Mullingar Frailty Intervention Team (MFIT)

Regional Population Projections 2016-2031 predicts that the number of people aged 65 years and over will almost double across the state by 2031. It is predicted that the number of people over the age of 65 years in the Midland Region will increase from 38,000 in 2016 to 62,000 in 2031, an increase of 63%. There were **7,044 people over the age of 75 years** in Longford/Westmeath in 2017.

The Mullingar Frailty Intervention Service was the focus of learning in 2018. The team attended a Frailty Masterclass, researched models of Frailty in association with IEHG, the National Integrated Care Program for Older Persons and the Frailty Network. The team also engaged in shared learning with the Frailty Team in St Luke's Hospital, Kilkenny and completed a 90-day Rapid Improvement Project facilitated and supported by the Ireland East Hospital Group Service Improvement Team.

Regional Hospital Mullingar (RHM) and Midland Louth Meath CHO (MLM CHO) are committed to substantially improving quality and efficiency of care for older people in Longford/Westmeath. The integrated focus is to support older persons within their own home, through admission avoidance or early supported discharge.

In June 2018, RHM established a Mullingar Frailty Intervention Team (MFIT) in the ED, with the support of MLM CHO. A 90-day test period supported by two Consultant Geriatricians was completed. The MFIT team included a Senior Physiotherapist, Senior Occupational Therapist, Senior Dietician, Senior Speech and Language Therapist, Senior Pharmacist, Clinical Nurse Managers, a Data analyst, Community Senior Physiotherapist, PHN and PHN Liaison.

Patients aged over 75 presenting to the Emergency Department are assessed for Frailty at Triage. The MFIT Team member then completes a Comprehensive Geriatric Assessment (CGA) with each patient. Patients are asked where they would like their care to take place if they were deemed medically well. They resoundingly answer that they would like to go home. The focus of MFIT has therefore been to assist patients in getting home as soon as possible. This has been done by asking the following questions:

- **'Why Not Home?'**
- **'Why Not Today?'**

A '*Get Up, Get Dressed, Get Moving*' campaign was also launched on one of the Medical Wards. Community staff are also made aware of the frail patient's impending discharge home so that they can make necessary provisions to do an early home assessment when the patient goes home. The result of these interventions was:

- Discharges home increased by 22%
- Discharges to nursing homes reduced by 39%
- Discharges to convalescence reduced by 50%
- Discharges in the first 2 days increased by 19%, by day 3 increased by 15% and by day 7 increased by 22%.

As a result of the changes MFIT have made to our frail older patients' experience when they arrive in ED, the team were awarded the Health Service Excellence Award in the category '**Improving**

Patient Experience'. The Team were also awarded the '**Popular Vote**' which is testament to the dedication of the MFIT team and the MFIT Programme.

A Business case has been submitted for funding to enable Regional Hospital Mullingar, together with our Community Partners MLMCHO, to establish a dedicated MFIT so all Frail older Patients can avail of this service.



MFIT Team Representatives receiving their Health Service Excellence Award

Royal Victoria Eye and Ear Hospital



The Royal Victoria Eye and Ear Hospital is a public teaching hospital in Dublin 2. It was founded in 1897 and is the National Referral Centre for both Eye & Ear and Nose & Throat disorders. It is a public voluntary hospital, known affectionately by generations of Dubliners as the “Eye and Ear”. The hospital treats over 14,000 inpatients and day cases, and approximately 80,000 outpatients, including attendances in the Emergency Department. It houses the National Ophthalmic Pathology Laboratory and Registry of Ireland.

Hospital departments include:

- Accident & Emergency
- Anaesthetics
- Audiology
- Ear, Nose & Throat Outpatients
- Eye Outpatient
- Haemovigilance
- Medical Social Worker
- Nutrition and Dietetics
- Ophthalmology
- Outpatients
- Orthoptics
- Otolaryngology ENT-HN
- Pathology
- Pharmacy
- Photographic
- Physiotherapy
- Radiology
- Speech and Language
- Theatre & Recovery

Cataract Waiting List Initiative

In July 2017, the Royal Victoria Eye and Ear Hospital (RVEEH) opened the country's first purpose-built cataract unit. The unit was opened by the Minister for Health Simon Harris, the CEO of the Ireland East Hospital Group, Prof Mary Day, and the President of the Royal Victoria Eye and Ear Hospital Council, Patrick Dowling.

The unit was opened to address the significant waiting list for cataract procedures in the country. At the time of launch the waiting list for a cataract procedure at the hospital was approximately 24 months. Following the launch, an agreement was reached with the National Treatment Purchase Fund (NTPF), with the support of IEHG, to fund 2,000 cataract procedures for the longest waiters, in 2018.

The support from the NTPF, combined with the new unit, enabled the team at the Royal Victoria Eye and Ear Hospital to approximately double the number of cataract procedures delivered by the hospital in 2018 to just over 4,000 procedures. More importantly for our patients, waiting times dropped significantly. As of January 2019, there is no patient waiting 9 months for a cataract procedure, with the majority of patients being treated in the 3-6 month timeframe.



Virtual Glaucoma Clinic



Glaucoma is a major cause of blindness worldwide and accounts for about 8% of patients on the blind register in the Republic of Ireland (NCBI, 2011). There is a prevalence of 2% of the population over the age of 40, rising with each decade to 3.5% in those over 80. It is estimated that 3% of people over 50 in Ireland has glaucoma (ICO 2019). Glaucoma in those over 50 in Ireland is expected to increase in prevalence by 33% by 2021 (CSO 2018). For every patient diagnosed with glaucoma there is also a large number of ‘glaucoma suspects’ – patients at risk of glaucoma due to elevated eye pressure or suspicious looking optic nerves who have not yet developed visual loss but are at a significant lifetime risk of this and need ongoing monitoring.

The Virtual Clinic in Glaucoma is a concept which was developed in the NHS to enable a more efficient use of staff resources in the management of patients with stable glaucoma. The Clinic has two elements: the Glaucoma Assessment Clinic, which is managed by suitably trained nursing staff. In this clinic, the nurses use an Electronic Medical Record (MediSIGHT) to record the patient’s clinical information, making it a paperless clinic. Additionally, the nursing staff perform eye examinations and a pressure check, optic nerve photography and visual fields testing. The second element of the clinic is the Virtual Review clinic. This clinic is performed remotely by a Consultant specialising in Glaucoma. This allows the consultant to take direct responsibility for the care of a large number of patients by reviewing a large number of patient records and making a decision within a short period of time. Stable patients are sent a prescription and follow-up appointment date, and unstable or progression patients are promptly identified and brought back for a visit with a medical team member.

The aim of the Virtual Care Clinic is to utilise resources more efficiently, with trained ophthalmic nurses using their skills at the time of the patient visit and maximising the number of patients coming directly under consultant care for decision-making purposes. This in turn will generate greater capacity in consultant clinics where patients are currently waiting an average length that exceeds national targets. In the first 6 months of the service, from November 2018 to May 2019, 540 patients attended the service. Work is ongoing to increase capacity by 50%.

- NCBI (2011) The economic impact of vision impairment and blindness in the Republic of Ireland
- Central Statistics Office (2018)
- Irish College of Ophthalmologists (2019) <https://www.eyedoctors.ie/press-release/February-17-2019/Early-Detection-Key-in-Prevention-of-Glaucoma-Related-Sight-Loss/92.html>

Nurse-led Keratoconus Clinic

The Royal Victoria Eye and Ear Hospital (RVEEH) pioneered the first nurse-led CXL service in Ireland in January 2016. CXL aims to stop keratoconus from progressing through a surgical procedure by removing the corneal epithelium and injecting the cornea with Riboflavin, a form of vitamin B2, then exposing the eye to ultraviolet light for four minutes. The procedure takes 20-30 minutes.

The nurse-led CXL service was brought about by the collaboration of ophthalmologists and ophthalmic nurses in RVEEH who are open to innovation in ophthalmic services. The service, as it is the first of its kind in Ireland, has gone through a meticulous process.

To improve patient care for keratoconus patients and reduce patient waiting times for OPD appointments, the Cornea team set up the Nurse-Led Keratoconus Clinic in October 2018. The aim of the nurse-led service is for early diagnosis and timely access to CXL treatment. With early diagnosis of keratoconus and timely access to CXL treatment, the need for corneal transplantation can be eliminated resulting in significant cost savings to the health service and better quality of life for patients.

The nurse-led services (keratoconus and CXL) are treating patients referred to the service from all over the country. The nurse-led CXL service has been running efficiently since January 2016. It shows that nurse-led services can run efficiently with proper training programmes, policies and procedures, and support for the nurse who is taking on the expanded role. It is vital to have Consultant physicians who support the nurse in expanding his/her role to be able for the nurse-led service to run efficiently.

St Columcille's Hospital, Loughlinstown



St Columcille's Hospital (SCH) Loughlinstown is a Model 2 hospital. It has 109 Inpatient Beds, 3 Medical Observation Beds, 8 Day Beds, 9 treatment spaces in the MAU (Medical Assessment Unit) and 6 in the IU (Injuries Unit).

Located on the border of Wicklow, it has worked with St. Vincent's University Hospital and St Michael's Hospital as part of the acute hospital network in South East

Dublin for many years. It has a national speciality in obesity management and is a referral centre for bariatric surgery. In addition to general medicine and care of the elderly services, it also has orthopaedic rehabilitation and stroke rehabilitation services.

It employs over 400 staff. It is linked with UCD for medicine and nursing training.

Minister Harris Opens Memory Technology Resource Room



The HSE Memory Technology Resource Room at St. Columcille's Hospital was opened by Mr. Simon Harris, Minister for Health, on Friday 21 September 2018.

The HSE Memory Technology Resource Room is set up to allow people with memory difficulties, dementia, their families and friends to become acquainted with a range of products to make independent living easier.

The resource room shows what equipment and technology is available and gives the opportunity to see and try out different devices and strategies to promote independence, safety and quality of life.

It allows the patient/family to make sure that the devices or strategies work for the patient. Access to the memory technology resource room is free of charge.

Pictured l-r: Ms. Joyce Jones, Senior OT, St. Columcille's Hospital, Mr. Simon Harris, Minister for Health, and Ms. Niamh Van den Burgh, OT Manager, St. Columcille's Hospital

Weight Management Service Awarded Prestigious Accreditation



EASO Collaborating Centre for Obesity Management

In May 2018 the Weight Management Service based in St Columcille's Hospital received accreditation from the European Association for the Study of Obesity (EASO) as the first adult Collaborating Centre for Obesity Management (COM) in Ireland. The accreditation recognises excellence in care delivery in specialist obesity centres, distinguishing the service in St Columcille's as one of the leading obesity management centres in Europe. On receiving the award, Dr Jean O'Connell, Consultant Endocrinologist and COM-Lead said, "We are absolutely delighted as a team to have been successful in our application to become a COM and look forward to working with EASO to contribute to the growing evidence base for high quality, patient-centred care in obesity management".

The WMS is the only public tertiary referral centre in the Ireland East Hospital Group (IEHG) for the management of severe obesity, accepting referrals for adults with a body mass index $>40\text{kg/m}^2$. The service provides a comprehensive programme of care, delivered by a multidisciplinary team of Registered Dietitians, Chartered Physiotherapists, Clinical Psychologists, Endocrinologists, Bariatric Surgeons, registered nurses and support and administrative staff. With a strong emphasis on evidence-based practice, pathways of care include outpatient-based structured behavioural interventions, incorporating nutrition and physical activity, supervised inpatient weight management programmes, and bariatric surgical interventions. Additional support options for patients throughout their programme of care include a healthcare professional facilitated Cookery Club, Exercise Club and Mindfulness Group. Speaking about the award, Dr Cathy Breen, Senior Dietitian with the service, commented that "the staff actively advocate for reducing stigma and bias in obesity care and are among the founding members of the Association for the Study of Obesity on the island of Ireland (ASOI). All of this wider work was considered as part of our application to become a COM".

The WMS holds an annual study day for healthcare professionals, which has covered various topics including improving communication skills when discussing weight, assessment and outcome measures in obesity treatment, and achieving the best outcomes with bariatric surgery. Prof Donal O'Shea, Consultant Endocrinologist and founder of the WMS, commented "we feel we have a duty as a team to share the expertise we've developed over our eighteen years of clinical practice. Offering education to other healthcare professionals is a key way to disseminate that and we're delighted that EASO recognises that as part of their COM criteria".

Speaking about the award, Linda O'Leary, Hospital Manager in St Columcille's said "I've always been very impressed by the strong focus the WMS places on clinical audit and research. The team have developed service-specific Key Performance Indicators as part of an annual audit cycle and really strive to deliver care to the highest standards. We are very proud as a hospital to support the ongoing development of the service. Accreditation as the first adult COM in Ireland is timely and a fantastic recognition of an excellent service."

St. Columcille's Celebrates Over 500 Years Combined Experience

A ceremony took place at St. Columcille's Hospital in Loughlinstown in April 2018, to acknowledge those people with long service of 30 years or more working in healthcare in the HSE. It was the first such ceremony at St. Columcille's and was incorporated as part of the 'Great Place to Work' initiative, to show appreciation to those dedicated and committed staff members who have delivered such sterling service over the decades.

There were 17 recipients who were presented with certificates by Prof. Donal O'Shea. The awards were presented to people working in a whole range of disciplines including nursing, household, clerical, catering, speech & language, and others in the hospital environment.



Pictured: Nuala Fitzpatrick, Yvonne Murphy, Deirdre Fitzgerald, Matt Reilly, Martin Doyle, Ann Marie Rigney, Paul Sheridan, Theresa Keane, Mick Heapes, David Owens, Anne Harpur, Joey Curran, Mary Henry and Mary O'Hagan

St Luke's General Hospital Carlow-Kilkenny



St. Luke's General Hospital Carlow-Kilkenny is the Acute General Hospital for counties Carlow and Kilkenny. The population of Kilkenny/Carlow Community Care area is 155,993 (Census 2016) which represents an overall increase of 4% since the 2011 census when the population was 150,031. Due to its location in the heart of the South East, St. Luke's General Hospital (in addition to the counties of Carlow and Kilkenny) also provides services to its bordering counties: Tipperary North and South, Waterford, Wexford, Kildare and Laois. In addition to the acute services that are provided on site at St. Luke's, outreach services are also provided in Kilcreene, Carlow, Thomastown and Castlecomer.

Specialties at St Luke's General Hospital Carlow-Kilkenny:

- General Medicine//Cardiology, Endocrinology, Gastro Enterology, Respiratory
- Geriatric Medicine
- Gynaecology
- Obstetrics
- Neurology
- ED – Emergency Medicine
- General Surgery
- Palliative Medicine
- Paediatrics
- Radiology
- Rheumatology (Visiting OPD Clinic with Dr. Oliver Fitzgerald, SVUH)
- Anaesthetics
- Consultant-Led and Nurse-Led Outpatient Clinics

Service Improvements at St Luke's



A number of service improvement initiatives were progressed in St Luke's General Hospital in 2018.

In April 2018, the hospital carried out a Value Stream Analysis on the Acute Floor (Emergency Department, Acute Medical Assessment Unit and Surgical Assessment Unit) in conjunction with the IEHG's Service Improvement Team and Simpler. A multidisciplinary team from across the hospital, along with staff from the community, ambulance service and IEHG, spent a week exploring the acute floor concept and how it would work in St Luke's. The VSA culminated in a report-out at the end of the week where the findings and proposals of the team were presented.

The next phase of this work took place in June when two service improvement teams worked on different aspects of patient flow through 2P events – the streaming processes on the acute floor and cohorting of Medical patients in Medical 2.

In addition, other service improvement work progressed. In relation to the GEMS service, in 2018 alone:

- 5,141 people over the age of 75 presented to St Luke's
- 43% of these were deemed positive for frailty
- 66% had Comprehensive Geriatric Assessments carried out (61% were done at the point of admission, eg, Acute Medical Assessment Unit or Emergency Department)
- 17% of those identified were treated and discharged from AMAU/ED
- Of those people who received a GGA, 91% were found to be at risk of polypharmacy, 26% at risk of malnutrition and 29% at risk of delirium
- 69% came from home and 63% were discharged home
- Only 4% went to Long Term Care.

Dr Emer Ahern, Consultant Geriatrician, was one of the main speakers at the Lean Healthcare Academic Conference in Stanford in October 2018 where she presented on *Building a Model Line for Frailty*. Dr Ahern leads the Geriatric Emergency Medicine Service (GEMS) in St Luke's, which was the first hospital in the Ireland East Hospital Group to screen for Frailty.

St Luke's Paediatricians Research Programme for Teenagers with Coeliac Disease

Paediatricians at St Luke's have teamed up with the Institute of Technology Carlow to lead a novel research programme that will combine health science and technology to help teenagers diagnosed with Coeliac disease to learn about and manage their condition independently. The project is funded by the Erasmus+ Programme of the European Union in which an international team of health and technical experts and students share innovative practices and experiences.

Dr Alfonso Herrera, Consultant Paediatrician and one of the project partners, said that just one-in-three teenagers with Coeliac disease comply with a gluten-free diet, putting them at risk of developing long-term health problems.

Central to the research project is the development of a mobile system which is led by gameCORE, the Institute's ICT research centre, directed by Dr Daire O'Broin, that will allow teenagers monitor their own gluten intake and self-manage their condition.

The project is the first of its kind to use a mobile system in Coeliac disease to monitor and educate the end user.

Institute of Technology Carlow will collaborate in the two-year research project with five partners from Ireland (St. Luke's General Hospital Carlow-Kilkenny), the Netherlands (Hogeschool van Amsterdam), Austria (FH Vorarlberg University of Applied Sciences) and Spain (IHP and the University of Seville). Together, they will combine diverse skills in design, software development, nutrition, health science, user experience, game development and visual communication.



Dr Asif and Dr Herrera from St Luke's with their research colleagues from Carlow IT

Registered Advanced Midwife and Integrated Community Midwifery Service



The impetus for the introduction of the Registered Advanced Midwife and Integrated Community Midwifery services in St Luke's General Hospital Carlow-Kilkenny Maternity services commenced in November 2016 and was driven by customer need, evidence-based practice developments and the requirement of an established clinical governance framework for midwifery practice. Visionary future planning to meet the criteria of the maternity strategy was also a driving force.

The RAMP MC Service provides care to an agreed caseload of women and babies in keeping with the maternity strategy. The RAMP caseload addresses three aspects 1. Midwifery-led care (Midwife is the lead professional), 2. Vaginal Birth after Caesarean Section clinics to reduce C/S rates and 3. Continuity of care where the Midwife is a constant in vulnerable women's pregnancy and birth journey.

The RAMP MC has established, manages and leads an integrated hospital/community

Midwifery-led service which commenced on 22 October 2018 in SLGH Maternity Service and has a team of six midwives. The RAMP MC leads and manages a team of midwives to provide the RAMP MC Service to a criteria-selected group of women, offering care antenatally in outpatients, inpatients and in clinics, through antenatal education, labour care and postnatal care, in both hospital and community settings. This service provides normal risk women with suitable care pathways for their needs i.e. supported Midwifery pathways. 241 women used the Integrated Community Midwifery Service in 2018 with 1338 episodes of care. 83 women used the postnatal DOMINO/Early Transfer Home Service in 2018 since it commenced on 22 October with 220 episodes of care being completed in the community. On completion of assessing the 2018 data, it was noted that the LSCS rate for the women attending the RAMP/ICMS services was 27% and that other KPIs outlined to assess the service have been well met.

Pictured: Catherine Dunne, Midwife, and Clare Kennedy, RAMP, heading off on the first ever home visit of the Integrated Community Midwifery Scheme from St Luke's.

St Michael's Hospital, Dun Laoghaire



St. Michael's Hospital is an acute general hospital providing a range of specialised clinical services to the people of South Dublin and Wicklow.

We are an academic teaching hospital- part of the St. Vincent's Healthcare Group – and share resources and expertise with St Vincent's University Hospital, Elm Park, Dublin.

Our Pelvic Floor Centre is Ireland's first truly multidisciplinary clinic for the assessment and management of pelvic floor dysfunction. Our internationally trained sub-specialist colorectal surgeons and urogynecologists work as a team, supported by specialist physiotherapists and clinical nurse specialists.

Our specialised Heart Failure programme seeks to improve quality of life for patients with heart failure in the East Coast Area, through provision of expert multidisciplinary advice, education and support. The team includes consultant cardiologists, clinical nurse specialists, psychotherapist, physiotherapist and dieticians. We are also the regional training centre for Pulmonary Rehabilitation Care.

The Department of Nursing is dedicated to the provision of high-quality, patient-focused care and a nursing degree programme in association with University College Dublin (UCD) is now being delivered, preceded by Diploma (RCSI) and Certificate courses for student nurses.

List of Services:

We offer 130 inpatient beds incorporating 7-day, 5-day and day care facilities and an 8am – 8pm Emergency Department.

Our facilities include pathological and radiological services and we provide care for both medical and surgical patients, as well as outpatient clinics and services including cardiac rehabilitation, diabetes treatment, heart failure treatment, and pulmonary rehabilitation.

Medication Safety Seminar Award



A joint partnership between the Diabetes Department and the Pharmacy Department led to a 2nd prize award at the Medication Safety Seminar which was held in St. Vincent's Hospital on 18 January 2018. This is a conference which focuses on safety in the area of medications.

Sarah Molony and Ann Fitzpatrick collaborated to devise a safety poster in relation to insulin, which is a high alert medication. Medication variances and near misses in relation to insulin therapy were reviewed. The causation of these variances and near misses were determined. Additionally, education sessions were held on the wards with nursing staff. Specific attention is needed with Sound Alike Look Alike drugs (SALADS) and insulin therapies.

This was a quality improvement initiative and it is hoped that it will increase the knowledge base of insulin therapy around the hospital. It has also formed the basis of the need for ongoing education in relation to insulin within the hospital. It is hoped that a future audit on the safety of insulin prescribing and administration will be undertaken by the Diabetes Department and the Pharmacy Department to determine if prescribing practices are in line with international best practice guidelines.

Healthy Ireland Couch to 5k Initiative

The HI Committee introduced a Couch-to-5K running initiative in 2018. We recruited over ten staff members and set the goal to run from Couch to 5K in 8 weeks. We accomplished our 8-week challenge and completed our first group Parkrun in Cabinteely, where everyone finished with a smile on their face and a sense of pride in one another. The fun and banter before and after the training were just one of the many perks of the Couch-to-5K. It has been a real pleasure to be involved and gives us great enjoyment to see the whole group progress from "Zero to Hero" with our running. Many in the group have gone on to complete 5km and 5-mile runs and most recently one member has completed a Triathlon.



Pictured: St Michael's first group of Couch to 5k runners I-r: Aishling O'Keeffe, Kathy Healy, Maria Keenehan, Máire Murray, Brigid Conlon, Lukasz Bartuzi, Avril Conway, Fionnuala Sheahan, Caroline Rowan, Nicola Jackson and Dervilla Goulding

First Coeliac Workshop

The Dietetic & Nutrition Department at St Michael's organised the hospital's first coeliac workshop on 1 May 2018. The purpose of the workshop was to provide patients with coeliac disease (CD) with a platform to discuss their condition openly and share tips and practical solutions that help living with CD.

At the end of the workshop each patient was provided with all the resources from the day and some food samples to take home with them. The patients were also provided with evaluation forms at the end of the workshop. Feedback was very positive, patients reported that it helped them to digest all the information previously provided; they felt it gave more clarity and understanding about the condition.

Some patients in the group who were asymptomatic said it was good to know that they were not the only ones who did not get symptoms. It also helped them realise the importance of a strict gluten-free diet to prevent co-morbidities. The other feedback suggested providing more food samples and recipes and to have a resource pack made up instead of picking printed resources off a table. The workshop for us was a great success. It provided patients with all the information they would receive in an outpatient appointment but also provided time for interaction and lifestyle tips and choices from other patients living with CD. All six-month review patients will now be provided with the opportunity to attend these workshops. This will allow for allocation of time to patients with conditions such as Irritable Bowel Syndrome/Altered bowel habits/Irritable bowel disease who were previously on a lengthy waiting list.

St Vincent's University Hospital

St. Vincent's University Hospital (SVUH) is one of the world's leading academic teaching hospitals providing front line, acute, chronic and emergency care across over 40 different medical specialities – in the country's only integrated multi-hospital campus.

We are recognised worldwide for setting standards of excellence in clinical diagnosis and treatment, education and research, and a pioneering, multi-disciplinary approach to patient care.

We are the only public hospital in Ireland with international accreditation.

Our Emergency Department (ED) is the major referral centre for the region for patients with strokes and major trauma. We are home to a number of national centres including the National Centre for Cystic Fibrosis, National Cancer Control Programme (NCCP), National Liver Transplant Programme and the recently established National Pancreas Transplant Programme.

Teaching, education and research are central to everything we do. We are at the international forefront of innovative, translational healthcare 'Bench to Bedside' research with our partners in University College Dublin. Our Education and Research laboratories complement the work of SVUH clinicians in the diagnosis and treatment of disease areas with over 15 postgraduate students working at any given time.

St. Vincent's University Hospital is part of the St. Vincent's Healthcare Group (SVHG) which also includes St. Vincent's Private Hospital, Elm Park, Dublin 4 and St Michael's Hospital, Dun Laoghaire, Co. Dublin.



St Vincent's University Hospital Achieves Gold Standard for Endoscopy Services with JAG Re-accreditation



On 25 April 2018, the Endoscopy Unit at St. Vincent's University Hospital were successful in achieving their JAG (Joint Advisory Group) Accreditation Assessment. JAG accreditation is a formal recognition that our Endoscopy Service had demonstrated that it was competent to deliver against the criteria set out in the JAG standards.

The JAG Accreditation Scheme was established in the UK in 2005 to focus on standards around Endoscopy and identify areas for improvement. To achieve JAG Accreditation, an Endoscopy Service must provide clear evidence that they have met all of the JAG standards.

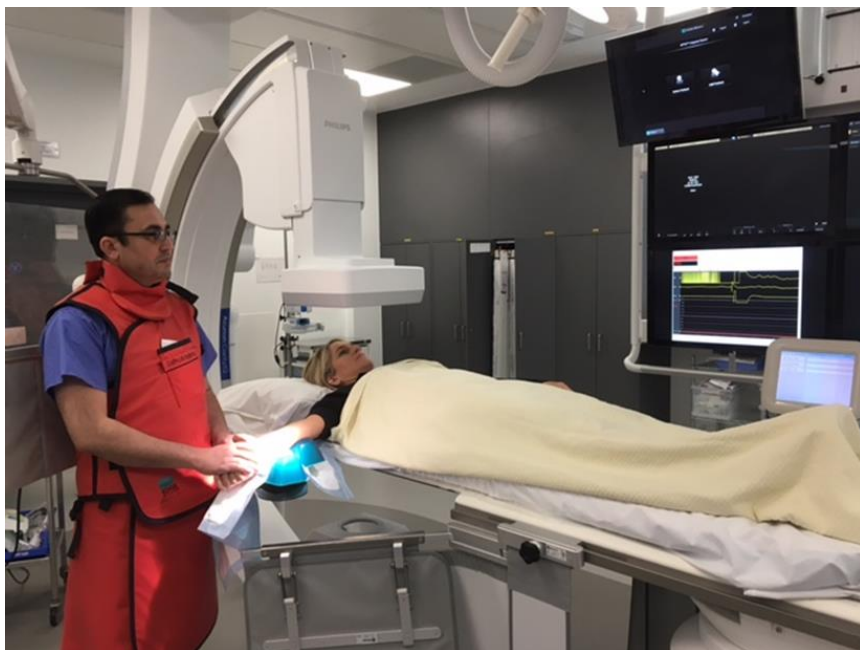
JAG accreditation aims to: increase patient confidence in services, provides a knowledge base of best practices, ensures continuous improvement in processes and patient outcomes and improves the management and efficiency of services.

Expectations of endoscopy have increased greatly since the standards were first introduced. Operational pressures within Endoscopy Services and challenges to provide a high-quality environment for patients continue to grow.

The Endoscopy Unit in SVUH are proud to be one of only two Units to currently hold JAG Accreditation in the public sector in Ireland. Our service provides the following procedures: Bowel Screening, Colonoscopy, OGD, Sigmoidoscopy, Endoscopic Ultrasound, ERCP, Bronchoscopy and Endobronchial Ultrasound.

Pictured above l-r: Ms. Holly Murphy CNM1, Ms. Pravitha Uppamuchikkal, CNM2, Ms. Carla Flanagan CNM 3 and Prof. Mulcahy, Clinical Lead, Gastroenterology

Opening of New Cath Labs at St. Vincent's University Hospital



Two new next generation Philips Azurion Cath Labs approved in 2016 were commissioned and completed in 2018. Funding was approved in 2015 from HSE Estates in conjunction with SVUH to replace the existing Cath Lab and funds from SVUH equipment funding was utilised to build the second Lab. The Cath Lab build and installation was completed with no downtime in the existing Lab and work continued throughout the project which is a credit to the Cath Lab team.

These new Cath Labs were planned to work in conjunction with the new four-bedded recovery ward and spacious reception area (replacing one lab).

With the new Cath Lab Suite open and operational, all procedures can be carried out in either Cath Lab, as facilities are mirrored in both Labs which will lead to improvements in clinical care by providing faster access to interventions. There is also a patient pathway direct from the Emergency Department in SVUH where patients can be fast-tracked directly through to the Cath Lab (and therefore with no need to admit patients through a Cardiology in-patient bed, thus reducing the burden on the Bed Management Department). This allows for more efficient utilisation of beds for patients in the Emergency Department and within the Chest Pain Evaluation Unit that have been identified for admission/intervention.

The operational use of the two new Cath Labs has led to a dramatic change in our hospital's patient flow as we can now manage elective patients that can come directly from their homes to our Cath Labs where they can be admitted, have a procedure performed and be discharged home on the same day directly from the Cath Lab.

The new equipment provides higher resolution imaging, helping the Cardiologists to diagnose and treat patients in the most effective manner. The benefits for patients are threefold; exposure to reduced radiation levels, faster treatment times and a more comfortable experience overall in a bright, welcoming environment.

Pictured above: Dr. Shah Khalid Mubarak, Radiology Department and patient

Robotics Programme Update from SVUH

In 2017, St. Vincent's University Hospital took delivery of its first surgical robot, the Da Vinci XI. The provision of robotic surgery in SVUH has marked a significant leap forward in terms of the provision of 21st century surgical care for our patients. We are now a high-volume unit, on par with international standards. The use of the Da Vinci XI allows for minimally invasive surgeries with less morbidity compared to open surgery. This in turn allows for greater outcomes for our patients including a much-improved patient experience.

The surgical robotic programme at SVUH operates on a pan specialty basis covering treatment areas including; urology, cardiothoracics, ENT, general surgery, gynaecology and HPB. This is unique for an Irish public hospital. The surgical robotics programme is working 5 days per week.

From an operational management perspective, there continues to be a very strong and clear focus on patient safety, governance and training pathways at consultant level.

Overall, the success and growth of the robotic surgical programme at SVUH has led to many positive outcomes for the hospital and particularly for our patients with reduced length of stay being documented as one of the most successful outcomes of the introduction of the programme since 2017.



Pictured above: Mr. Barry McGuire, Consultant Urologist

Wexford General Hospital



Wexford General Hospital is an Acute General Hospital providing services to the community of Co. Wexford and also to the adjoining counties of Waterford, Kilkenny, Carlow and particularly maternity services to Wicklow. WGH is a 280 bedded hospital providing Inpatient, Outpatient, Day Care,

Outreach and Emergency Services. The population of Co. Wexford is 149,605 (Census 2016) an increase of 3% since Census 2011. Due to its geographical location on the coast in the South East corner of Ireland, the population of Wexford increases significantly in summer months.

Clinical services are managed under three speciality groupings in line with the Clinical Programmes and National Recommendations:

- Women's and Children's Governance Group
- Medical and Emergency Medicine Governance Group
- Peri-Operative Governance Group

All specialty committees and governance groups are linked into the Quality & Safety Executive Committee.

Current Inpatient Services provided:

General Surgery – Radiology - General Medicine - Cardiac Diagnostics – Anaesthetics - Pharmacy
Gynaecology – Laboratory – Obstetrics - Health & Social Care Professionals – Paediatrics –
Radiology - Special Care Baby Unit - Intensive Care Unit - Coronary Care Unit

Current Day Care Services provided:

Acute Medical Assessment Unit - Emergency Department - Day Surgery Unit - Day Hospital for the Elderly - Dental Surgery – Endoscopy - Cardiac Diagnostics - Radiology

Current Outpatient Services provided:

General Medicine – Cardiology - General Surgery - Endocrinology/Diabetes Medicine
Respiratory Medicine – Paediatrics - Colposcopy Service - Hysteroscopy Service
Urodynamics - Ph Studies - Early Pregnancy Assessment Unit – Dietetics – Radiology
Physiotherapy - COPD Outreach - Cardiac Rehabilitation - Chest Pain Assessment
Pre-Admission Assessment for General & Gynae Surgery

Outreach Services for University Hospital Waterford

ENT – Orthopaedics – Dermatology – Oncology - Palliative Care

Launch of WexFIT



2018 saw the launch of WexFIT, the Wexford General Hospital Frailty Intervention Team. This team aims to streamline care of the frail older adult and ensure these clients are receiving the right care in the right place at the right time. The team is headed by Aine Teevan, Senior Physiotherapist and Marie Whelan, Senior Occupational Therapist and enjoys the support of C-ANP older persons, dietetics, speech and language therapy and of course, our colleagues in ED. We have worked closely with the IEHG Service Improvement Team through a Rapid Improvement Event journey and have effected change in multiple areas namely:

- 100% of >75 years ED admissions now screened for Frailty
- HSCP common referral form successfully rolled out ensuring improved therapeutic responsiveness to need
- Improved compliance with Acute Frailty Network Principles
- Fundamentals of Frailty programme rolled out across Co. Wexford delivering education package to staff from WGH and CHO5
- Staff survey revealed significant knowledge gains and heightened awareness across WGH in terms of recognising Frailty
- 59% of service hours presentations now receive a CGA
- CGA now delivered within 1.2 hours

Wexford COPD Support Group Launch



The Wexford COPD Peer Support and Exercise Group was successfully launched on Friday 30 November 2018, with over 120 people in attendance at the Open Day. The group, which is for people with Chronic Obstructive Pulmonary Disease (COPD), is backed by COPD Support Ireland, Sports Active Wexford and HSE/South East Community Healthcare (inclusive of grant from National Lottery funding).

Attendees at the Open Day were afforded the opportunity to hear about the vision for the Wexford group, learn more about their condition, the benefits of exercise, self-management of their

condition and the peer and social supports available to them. In addition to educational talks and an exercise class, Wexford-based Senior Respiratory Physiotherapists Olga Riley and Sara Leacy, and CNS Emer Sarsfield, were on hand for informal questions and answers.

The event was compared by Kate O'Connor (Self- Management Support Co-ordinator) and other speakers included Michael Sheehan (Wexford County Councillor), Elaine Bruce (Committee Member), Michael Drohan (COPD Support Ireland), Luke Cleere (Kilkenny COPD Support Group), Bryan Mullett and Triona Shalloe (Sports Active Wexford).

This newly established exercise and education group has attracted a large turnout since its launch and is successfully running every Friday 2pm – 3pm in Clonard Community Centre, Wexford. Lanie Bruce, Committee Member, Wexford COPD Support Group said, "This group is a much-needed outlet for people living with breathlessness in Co. Wexford. We look forward to welcoming new members, to provide support and encouragement to each other and to enable people to reach their full potential."

Happy Heart Gold Award for Wexford Catering Staff

Catering staff from Wexford General Hospital were successful in achieving the Happy Heart Gold Award following an audit by the Irish Heart Foundation in August 2018.

This Gold Award standard was achieved through the combined efforts of catering staff, led by Bernie Sheridan, Dining Room Supervisor, Gretta O'Brien, Senior Chef and supported by Ann Marie Roche, Catering Manager. The Department has a strong focus on serving healthy choices to staff and taking care of any special diets. The food provided is not only nutritious but prepared with fresh quality produce and is very tasty for the staff and customers served. The Department is continuously looking for new ways to improve the service provided by keeping up to date with new healthy food trends, feedback from customers and staff and changing and adapting menus accordingly on a regular basis.

There is a very enthusiastic team here at Wexford General Hospital who will continue to provide the Gold Award Standard of food to which the staff and customers have now become accustomed.



