



OLLSCOIL NA  
GAILLIMHÉ  
UNIVERSITY  
OF GALWAY

# Cancer Centre Network

## Annual Report

### 2021



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# Introduction



**Professor Michael J. Kerin**  
Director of Cancer MCAN Saolta  
University Health Care Group

It is a pleasure to present this Annual Cancer Centre Report on behalf of all those who deliver cancer care across the Saolta Group. The Cancer Programme for the Saolta University Health Care Group provides a regional service of complex, high volume multidisciplinary care to cancer patients via the dedicated Cancer Centre at Galway University Hospitals.

It involves multidisciplinary teams and the development of personalised treatment plans for all cancer patients. Clinical Care is delivered across the network with surgery and radiotherapy in the cancer centre and a collaborative programme of Medical and Haematology Oncology delivered at Letterkenny, Mayo, Portlinculla and Sligo University Hospitals. The Cancer Managed Clinical & Academic Network (MCAN) was established as part of the Integrated Governance Programme for Saolta to deliver a transformative model of Cancer Care. This will align clinical and executive governance for Cancer Services across the Saolta Group.

The primary aim of the Saolta Group Cancer Programme is to provide evidence-based cancer care that is effective, safe, of high quality and patient-centred, supported by national standards and clinical guidelines. At the heart of our Cancer Programme is a team of specialists delivering high quality diagnostics and therapeutic care in a multidisciplinary environment supported by an active clinical trials and research programme. The Saolta Cancer MCAN has an academic component to ensure the delivery of high-quality clinical care in an environment of research, education, training and innovation.

This report highlights the enormous high volume, complex, workload delivered by our dedicated multidisciplinary teams at the Cancer Centre at UHG and across the Saolta University Health Care Group Hospitals. I wish to acknowledge the dedication and commitment of all our professionals across the Saolta Group for the huge contribution they make to the Cancer Programme on an ongoing basis.

The Saolta University Health Care Group requires

the development of new facilities to address the infrastructural deficits in cancer services, not only in the Cancer Centre at UHG but also in our regional hospitals. The need to develop a cancer centre and regional infrastructure that is fit for purpose across the Saolta Group is of the utmost importance. We will establish the necessary business intelligence to compliment this new infrastructural vision.

In 2021 the Saolta Cancer network applied for and gained OECl membership. Our vision now is to move towards OECl accreditation of the Saolta cancer network across the region, with UHG as the cancer centre hub. The OECl Accreditation and Designation programme is designed to enable a complete quality system for cancer diagnosis, care, education and research by using OECl standards, indicators and peer review. Our priority for 2022 is to appoint an OECl Coordinator and collate baseline metrics required to apply for OECl Accreditation and Designation.

Finally, I wish to thank all who contributed to this report especially our Cancer MCAN Team and all those who contributed across the Saolta Group Hospitals and beyond.

I look forward to progressing our key priorities in 2022 in order to achieve our main objectives

Thank you.

A handwritten signature in black ink, appearing to read 'Michael J. Kerin', written in a cursive style.

**Professor Michael J. Kerin**



**Mr Tony Canavan**

Chief Executive Officer  
Saolta University Health Care Group

The Saolta Cancer Centre Annual Report 2021 provides a comprehensive and insightful look back at the achievements and challenges faced by our cancer services across the region over the year. I would like to congratulate everyone involved in the provision of these vital care pathways during what was another difficult year.

While the cyber-attack in May 2021 along with the ongoing impact of COVID-19 threw up significant obstacles, the immense work of Saolta Staff in the delivery of cancer care across our region continued. The activity levels referenced in this report show the dedication and patient focus they sustained and I want to commend them for their hard work.

Cancer care continued to be delivered, often with the support of our private partners, and I must express my sincere thanks to our private hospital

partners, the Galway Clinic and the Bon Secours for creating capacity to facilitate some cancer surgery and inpatient bed capacity during this time.

Over the past year, the Saolta Managed Clinical and Academic Network (MCAN) for cancer, led by Prof Michael Kerin, has become embedded as an integral structure which is advancing cancer care delivery for the people of the West and North West of Ireland.

Work on the Radiation Oncology Unit continued throughout 2021 and it is envisaged that it will be ready for commissioning towards the end of 2022. This new state of the art facility will greatly enhance patient experience and the way we deliver Radiation Oncology at UHG for the people of our region. I see this at the beginning of a journey in the development of all cancer facilities across our region in the years ahead.





**Dr Pat Nash**

Chief Clinical Director  
Saolta University Health Care Group

As the Saolta Group Chief Clinical Director, I am delighted to contribute to the 2021 Cancer Centre Annual Report for the network, which builds on previous years.

Under the Directorship of Prof Michael Kerin, the Saolta Cancer Managed Clinical and Academic Network (MCAN), continued to strengthen the governance of cancer delivery across the region. This new governance structure has the potential to strengthen clinical governance and further develop academic linkages between the Saolta University Health Care Group and the University of Galway.

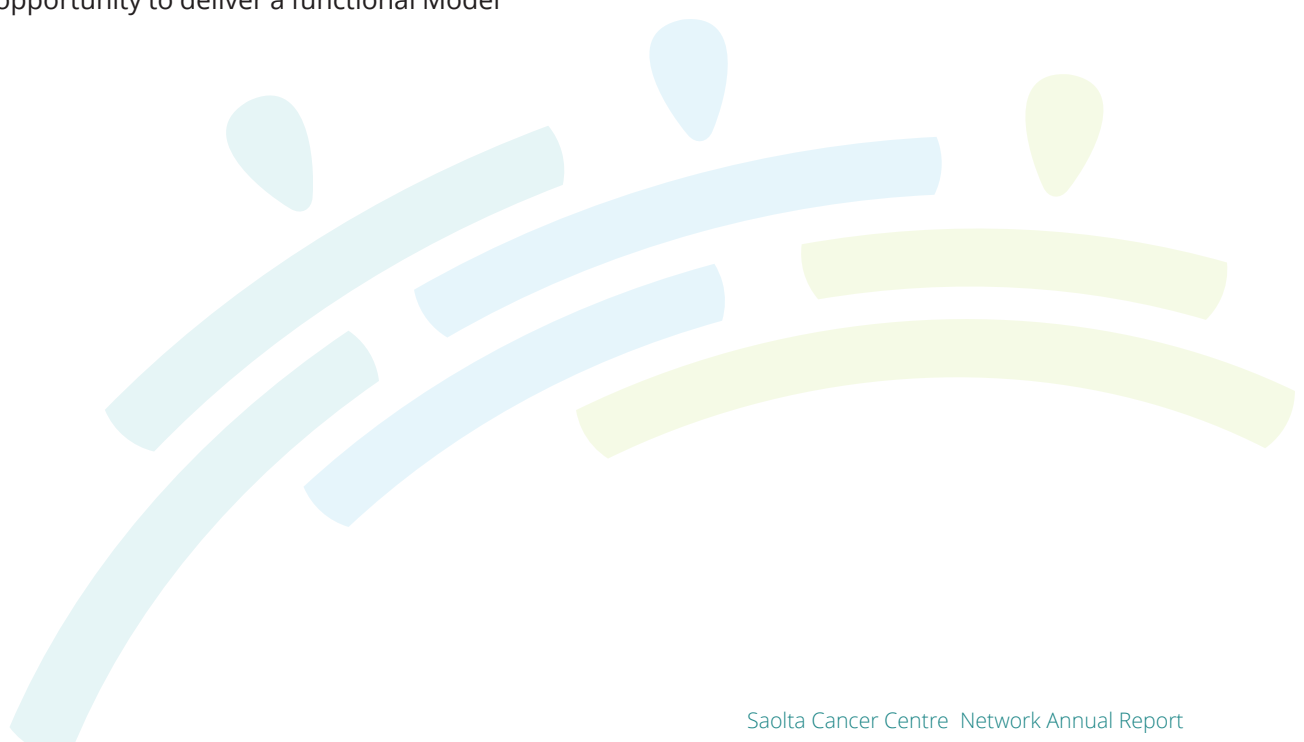
This year, one of the key achievements of the Saolta Cancer Programme was membership of the Organisation of European Cancer Institute (OEI). The Saolta Cancer programme was awarded OEI Membership as a cancer network, which significantly differs from previous applicants where cancer centre membership only was approved. The OEI accreditation process will allow us to use European quality standards to measure clinical and research excellence across our region.

Another major achievement for the Saolta Group was the inclusion of cancer infrastructure in the National Development Plan 2021 – 2030, which creates an opportunity to deliver a functional Model

4 hospital at UHG, strategically, positioning UHG to meet the future demands of all patients from all specialties, non-cancer as well as cancer.

In 2021, the delivery of cancer services was again severely hampered by COVID 19 and the HSE Cyber-attack, but despite this, staff showed great resilience and delivered an extensive programme of cancer care across the Saolta Group as detailed in this report.

On behalf of the Saolta Group Management Team, I would like to express my gratitude to all the multi-disciplinary cancer teams who work tirelessly to deliver cancer care across our network on an ongoing basis and I would especially like to thank Professor Michael Kerin for his support and continued vision and commitment to enhance cancer care delivery for our population.





OLLSCOIL NA GAILLIMHE  
UNIVERSITY OF GALWAY

## Professor Ciarán Ó hÓgartaigh

President  
University of Galway

As President of The University of Galway, it is my pleasure to endorse this report.

The role of our academic medical centre in the delivery of high-quality clinical care in an environment of research, education, training and innovation is highlighted in this report, which also catalogues the high volume of clinical care allied to the University's research and education mission.

This year continued to challenge our institutions, delivering healthcare, higher education and advancing research within the confines of pandemic restrictions, high pressure environments, and the trials of meeting family and work commitments and wellbeing. Once again, we rose to this challenge, delivering online lectures, virtual conferences, simulated teaching sessions, and continuing to remain research active.

In November 2021 it was a pleasure to join with An Taoiseach Micheál Martin TD in dedicating a facility in the Lambe Institute to the late Dr Anna O'Coinne, co-founder and honorary president of the National Breast Cancer Research Institute, a charity which has supported cancer research at University of Galway for over 25 years.

I welcome the commitment in the National Development Plan 2021-30 to developing a Cancer Centre for the West and Northwest of Ireland. The next few years offer exciting opportunities for our University, working with the Saolta Cancer MCAN, to deliver this Cancer Centre which will be underpinned by research and education. The University of Galway can be an active partner in improving outcomes from cancer, with long term health, economic, and societal impacts for our region.

# Saolta Network at a glance



**323 Beds Model 3**

Sligo University Hospital including Our Lady's Hospital Manorhamilton



**343 Beds Model 3**

Letterkenny University Hospital



**331 Beds Model 3**

Mayo University Hospital



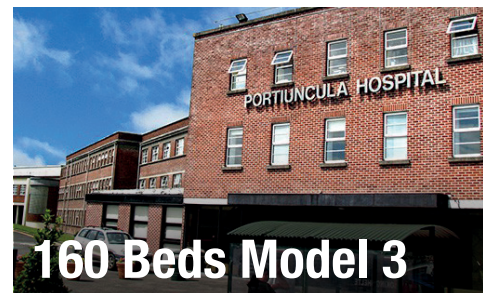
**63 Beds Model 2**

Roscommon University Hospital



**639 Beds Model 4**

University Hospital Galway



**160 Beds Model 3**

Portiuncula University Hospital



**73 Beds Model 3**

Merlin Park University Hospital

**1,932  
In-patient beds**



# 1

SECTION 1

## *Clinical Care Services*

# Breast Cancer



**Mr Ray McLaughlin**

Consultant Breast Surgeon & Lead Clinician  
Symptomatic Breast Unit, University Hospital Galway

In 2021, the number of review patients seen in the centres continued to be curtailed as social distancing continued. However, despite this, 11,608 patients were seen at the Symptomatic Breast clinics across the Saolta University Health Care Group and 567 new breast cancers were diagnosed. Additionally 251 women were diagnosed with breast cancer by the BreastCheck Programme.

There were 2,516 patient discussions at the Symptomatic Breast multidisciplinary meetings (MDMs) in 2021, an increase of approximately 19% on 2020. The MDM ensures patients are diagnosed, staged and have a personalised treatment plan agreed. The ongoing expertise from radiology, pathology, radiation oncology, medical

oncology, surgery and nursing ensures a successful multidisciplinary approach and better outcomes for patients.

In Letterkenny, the breast service continued to see new patients throughout 2021 whilst many review appointments were deferred. Again, diagnoses of breast cancer surpassed 2019 and 2020 levels. In 2021, attendances at Breast clinics in LUH increased by close to 7% on 2020 figures. The effects of the HSE cyberattack in May 2021 added to an already challenged service all across the Saolta region.

## Symptomatic Breast Outpatient Clinic Attendance data UHG (Data Source: SBU)

Outpatient Clinic Statistics 2021	UHG	LUH	Total
New patients	4,851	2,035	6,886
Review patients	3,639	1,083	4,722
Total No. of patients seen	8,490	3,118	11,608

## Symptomatic Breast Service Cancer diagnoses UHG (Data Source: SBU)

Performance Parameter	2020	2021
No. of new patients diagnosed with breast cancer UHG	362	443
No. of new patients diagnosed with breast cancer LUH	103	124
Total Breast Cancer Diagnoses	465	567

## Symptomatic Breast Cancer Surgical Interventions (Data source: SBU)

Surgical Intervention	LUH 2020	LUH 2021	UHG 2020	UHG 2021	Saolta 2020	Saolta 2021
Wide Local Excision	55	78	197	187	244	265
Excision of Margins	3	10	25	31	25	41
Mastectomy	24	16	62	83	77	99
Sentinel Node Biopsy	54	76	197	188	226	264
Axillary Clearance	16	20	53	64	69	84
Breast Reconstruction Procedures (Immediate)	4	12	16	32	20	44
Breast Reconstruction Procedures (Delayed)	0	0	1	1	1	1
<b>Total</b>	<b>156</b>	<b>212</b>	<b>551</b>	<b>586</b>	<b>662</b>	<b>798</b>

## Number of Breast MDM Discussions

Breast MDM Discussions per year	2020	2021
Number MDM discussions	2110	2516
Number of Patients Discussed at MDM	1327	1534

## Key Achievements 2021

1. The diagnoses and treatment of 567 breast cancers in the symptomatic service, a 22% increase on 2020. An additional 251 diagnoses were made in BreastCheck. Therefore 818 cases of breast cancer were diagnosed across the Saolta region in 2021.
2. Maintaining a robust multidisciplinary team meeting with a 19% increase in discussions despite the cyber attack.
3. Continuing to provide a quality service despite the ongoing challenges associated with the COVID-19 pandemic and the cyber-attack in May 2021.

## Key Priorities 2022

1. To address the waiting lists created during the pandemic and cyber-attack at both UHG and LUH.
2. Continue to ensure the Breast programme provides the highest quality patient centred care and provides personalised treatment plans for all breast cancer patients.
3. Appoint a breast ANP to support Waiting lists initiatives and future family history clinics.
4. Increase capacity to meet national KPI's: diagnostics/ non-triple assessment clinics.

# Breast Screening Programme



**Dr Aileen Larke**

Clinical Director & Lead Consultant Radiologist  
Symptomatic Breast Unit Breastcheck West



**Mr Karl Sweeney** Lead Surgeon  
**Dr Catherine Glynn** Radiologist  
**Dr Michael Click** Radiologist  
**Ms Jennifer Kelly** Unit Manager  
**Ms Joan Raftery** RSM

Breastcheck –The National Breast screening programme plays a central role in diagnosis and management of breast cancer in Ireland, providing free mammograms to women aged 50-69 every two years. BreastCheck, a national population based screening programme lies within the Health & Wellbeing Directorate.

Breast cancer remains the most commonly diagnosed cancer in women in Ireland with over 2,700 women diagnosed each year. Survival has improved as a result of screening, symptomatic detection and improved treatment options. By providing regular mammograms, BreastCheck works to reduce mortality by detecting breast cancer at the earliest stage, when a woman has more treatment options available and her chosen treatment is likely to be less extensive and more successful.

The BreastCheck Western Unit opened in Galway in December 2007 to deliver a high quality screening service to almost 80,000 women in the large geographical catchment area in the West and North West of Ireland. This includes counties Galway, Mayo, Sligo, Donegal, Roscommon, Leitrim, Clare and Tipperary North Riding. Eligible women are invited to attend either the BreastCheck Screening Unit in University Hospital Galway or one of the BreastCheck mobile units across the region, for mammographic screening on a two-year call and recall programme.

# Breast Screening Programme



From left to right: Ms J. Raftery, RSM, Mr K. Sweeney, Lead Consultant Surgeon, Ms. Kelly Unit Manager & Dr. A. Larke, Clinical Director

Performance Parameter	Western 2020
Number of women screened	24,910
Number of women re-called for assessment	1,581
Re-call rate	6.35%
Number of women diagnosed with cancer	251

In 2021, 39,140 women were invited for a screening mammogram and 24,910 attended; 1,581 women had an abnormal mammogram and were recalled to a triple assessment clinic. In 2021, 251 women were diagnosed with breast cancer. This cancer detection rate is similar to other national and international breast screening services.

BreastCheck commenced the first stage of age expansion rollout in 2015 and completed age range extension to 69 years of age at the end of 2020, increasing the eligible population size from 80,000 to approximately 120,000.

## Key Achievements 2021

1. BreastCheck embarked on a large-scale advertising campaign to maximise appointment uptake, in tandem with its new text message appointment system.
2. Focused communications on prevention and early detection, whilst informing women that appointments are delayed by up to a year due to COVID-19.
3. Maintained services following the cyber-attack.
4. Screening participation exceeded expected levels by 22.6% (based on revised targets)
5. Increased capacity to 80% of pre-COVID capacity

## Key Priorities 2022

1. Recruitment of clinical staff to enable the increase in capacity and access to screening
2. Continue to implement a new client and radiology information management system.

# Colorectal Cancer



**Mr Mark Regan**  
 Consultant Surgeon & Lead Clinician  
 Saolta University Health Care Group

The Colorectal Cancer Programme at UHG and its associated services across the Saolta University Health Care Group aims to provide an effective, safe, high quality and patient centred regional cancer service to the Saolta population. This programme provides high quality care to all its patients, with all colorectal cancer patients being discussed at the Joint Upper & Lower Gastrointestinal (GI) Multidisciplinary Meeting (MDM), held on a weekly basis.

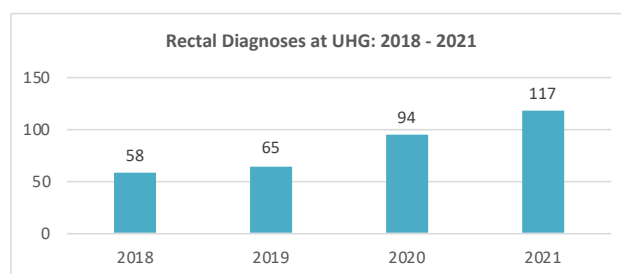
In 2021, fifty multisite MDMs occurred with 1,722 patient discussions and personalised treatment plans decided for each individual cancer patient. Patients have their diagnoses confirmed and their treatment planned by the multidisciplinary team at this meeting with all the relevant professional expertise available

Referrals from the Bowel Screening programme are discussed at the Joint GI Multidisciplinary Meeting and surgical procedures are undertaken by our surgical team. Complex surgery is delivered at the Cancer Centre by an expert consultant surgical team with a full range of laparoscopic and open surgeries provided as appropriate.

The Colorectal Programme is supported by a Clinical Nurse Specialist (CNS) who assists and supports patients through the treatment pathway. We wish to thank Olivia Dunleavy and Claire Ryan for their sterling work and support given to patients during their cancer journey. Mary Quigley and Aisling Dunne run the stoma care therapy service; this is a vital and growing component of the colorectal programme at University Hospital Galway providing guidance and support to patients at a very difficult time of their lives

The University Hospital Galway (UHG) & Letterkenny University Hospital (LUH) Rectal Cancer Programme is required to deliver care in line with a national suite of Key Performance Indicators (KPI's) under the National Cancer Control Programme (NCCP).

NCCP Rectal Cancer KPI Returns 2021	UHG
Newly diagnosed rectal cancer patients referred to the cancer centre	<b>117</b>
Newly Diagnosed Primary rectal cancer patients who had a primary radical surgical procedure (incl. APR)	<b>42</b>
<b>Total BowelScreen Patients with newly diagnosed primary rectal cancer who underwent radical surgery (incl. APR)</b>	<b>3</b>



## Colorectal Stoma Care University Hospital Galway (UHG)

**Mary Quigley** Stoma Care CNS

**Aisling Dunne** Stoma Care CNS

The stoma care therapy service, a critical component of the colorectal service, continued to provide an extensive programme of support to all colorectal patients in 2021 including mentoring and after care.

- This programme is multifaceted and includes:
- Pre Assessment Clinics
- Pre Op Counselling
- Creating new stomas
- Reversal of stomas
- Inpatient & Outpatient Reviews
- PEG consultations
- Enterocutaenous fistulae
- Telephone Triage/support

This year saw an increase in our virtual outpatients but we have learned to adapt our service and strived to work closely with public health nurses and GP practices in order to keep patients out of hospital throughout the pandemic. Due to COVID-19, there

was a decline in presentations and surgical activity, however there was an increase in pre-assessments and phone consultations.

Colorectal/Stoma Care Activity 2021	UHG
Pre-assessment clinic activity (not including phone pre-assessments)	16
Pre - op siting/counselling (no stoma created)	67
New Stoma created (60% oncology related)	175
Reversal of stoma	17
Inpatients review (established stoma with problems, e.g. Chemo/Radiotherapy related)	135
Outpatient activity (Nurse Led Clinic)	224
Intracutaneous fistulae/wound	5
Telephone triage/support counselling	Average 10+ per day

## Portiuncula University Hospital (PUH)

**Mr Eddie Myers** Consultant Surgeon

**Mr Joseph Garvin** Consultant Surgeon

**Ms Aine Kennedy** Clinical Nurse Specialist (CNS) Colorectal/Stoma Care

The surgical service at PUH comprises of:

- 2 Surgical outpatients' clinics per week
- 3 endoscopy lists per week
- 2 operating elective lists per week
- Operating lists in UHG.

In 2021, there were 60 new cases of colorectal cancer diagnosed in Portiuncula University Hospital (20 rectal cancers and 40 colon cancers). As per NCCP guidelines, all patients are discussed at the Joint Upper & Lower GI Multidisciplinary Meeting (MDM), which is a multisite event. This weekly MDM provides a structured and co-ordinated approach to the delivery of cancer care within the Saolta Group. Once the treatment plan has been established, surgery may be performed either in PUH or in UHG.

In Portiuncula, this service is supported by Áine Kennedy, Colorectal and Stoma CNS. This role facilitates the management and support of colorectal cancer patients as they follow the pathway through referral, diagnosis, treatment and follow up in addition to coordinating the colorectal MDM.

Once again, in 2021, the care and management of ostomates was reduced due to redeployment during the COVID-19 pandemic. This programme includes:

- Siting pre-operatively, providing education, and counselling
- Post-operative education, review during any admission in Portiuncula or as an outpatient.
- Telephone service providing support to ostomates and other health care professionals



# Bowel Screen Programme



**Dr Eoin Slattery**

Consultant Gastroenterologist & Lead Clinician  
Saolta University Health Care Group

The primary goal of BowelScreen is to reduce mortality from colorectal cancer in men and women aged 55 - 74 in Ireland. The Saolta University Health Care Group has been screening BowelScreen clients since May 2013 and continues to contribute to the provision of Bowel cancer screening for

the population of the West of Ireland. Four of the Saolta Group hospitals are BowelScreen centres: University Hospital Galway (UHG), Letterkenny University Hospital (LUH), Sligo University Hospital (SUH) & Roscommon University Hospital (RUH).

## Galway University Hospital (GUH), BowelScreen Programme

### Galway University Hospital BowelScreen End of Year Activity Report 2020 2021

BowelScreen Activity	2020	2021
Number of index and surveillance BowelScreen colonoscopies performed	250	331
Number of repeat procedures performed	23	12
Total number of BowelScreen procedures performed	273	343
Number of CTC performed following referral from this unit	3	3
Number of patients referred for EMR	N/A	4
Number of patients with pathology referred for discussion at the BowelScreen MDM	197	256

EMR Data not captured in 2020

## Letterkenny University Hospital (LUH), BowelScreen Programme

LUH has been a referral centre for BowelScreen, the National Colorectal Cancer Screening programme since 2014. The service provides bowel screening for men and women aged 60 – 69 in most of Co. Donegal (south Donegal is covered by BowelScreen in SUH).

Dr Chris Steele, Consultant Gastroenterologist, is the clinical lead for the programme in LUH. The BowelScreen service in LUH is facilitated by the Registered Advanced Nurse Practitioner (RANP) in Gastroenterology, Deirdre Diver. We welcomed Dr Daniella Crosnoi, Consultant Gastroenterologist and Clinical Nurse Specialist in BowelScreen, Grainne Boyle, to our team in 2021. In 2021, the LUH BowelScreen programme detected seven cancer.

All BowelScreen patients are pre-assessed by the RANP / CNS and if deemed suitable attend for

colonoscopy to LUH. During 2021 a total of 140 clients had a screening colonoscopy following a positive FIT test, and 47 a surveillance follow up colonoscopy. 14 clients required follow up colonoscopy with 6 clients requiring EMR's. 7 clients had cancers detected. The continuing care pathway for these clients includes referral to the surgical and/ or wider MDT at UHG.

2021 presented many challenges to our health service including the ongoing COVID-19 pandemic and the Cyber-attack, which resulted in many cancellations for our endoscopy service.

The success of bowel screening at LUH is attributed to the huge dedication and commitment of the endoscopy and wider MDT team. The Endoscopy Unit at LUH continues to demonstrate its commitment to maintain and develop a quality endoscopy service.

### Letterkenny University Hospital BowelScreen End of Year Activity Report 2020 2021

BowelScreen Activity	2020	2021
Number of index and surveillance BowelScreen colonoscopies performed	157	187
Number of repeat procedures performed	11	14
Total number of BowelScreen procedures performed	168	201
Number of CTC performed following referral from this unit	4	7
Number of patients referred for EMR	5	6
Number of patients with pathology referred for discussion at the BowelScreen MDM	140	163
Numbers of cancers confirmed	4	7



LUH BowelScreen From Left to Right:  
Mary Rutland S/N,  
Kathleen O'Donnell HCA,  
Deirdre Diver RANP Gastroenterology/BowelScreen  
and Grainne Boyle CNS BowelScreen.

# Roscommon University Hospital (RUH), BowelScreen Programme

RUH commenced screening in March 2014 as part of the National BowelScreen Programme. The programme is currently aimed at those aged 60-69 years.

All BowelScreen patients are pre-assessed by the BowelScreen CNM2, and if deemed suitable, attend for colonoscopy at RUH. BowelScreen colonoscopies are performed by Mr Mohammed Eldin (Clinical Lead and Consultant Surgeon), Mr Tapas Chatterjee (Associate Specialist, Endoscopy) and Dr Diarmuid Manning (Consultant Gastroenterologist).

The screening patients attending RUH are supported through their journey not only by those directly involved in the BowelScreen Programme but also by a wide team of dedicated staff in the Endoscopy Unit and wider members of the Multi-Disciplinary Team.

Although we have faced many challenges over the past number of years, the staff in RUH have and

continue to provide a service that is patient centred and of the highest standard. We continue to review and audit our service, aiming to meet all the Key Performance Indicators (KPIs) as set out by the National Screening Service.

In 2021, the RUH BowelScreen programme detected five cancers.

258 BowelScreen procedures were carried out in RUH during the period from January 1st to December 31st 2021. Index colonoscopies performed were 139, surveillance colonoscopies performed were 95 and repeat procedures, i.e. colonoscopy or sigmoidoscopy were 24. Out of the total number, 5 Bowel Cancers were detected, a number of patients were referred onwards for management of non-cancer diagnosis. Also, patients requiring EMR of complex polyps were referred to Dr Eoin Slattery in UHG.

## Roscommon University Hospital BowelScreen End of Year Activity Report 2020 2021

BowelScreen Activity	2020	2021
Number of index and surveillance BowelScreen colonoscopies performed	175	234
Number of repeat procedures performed	24	24
Total number of BowelScreen procedures performed	199	258
Number of CTC performed following referral from this unit	2	2
Number of patients referred for EMR	1	1
Number of patients with pathology referred for discussion at the BowelScreen MDM	143	184
Numbers of cancers confirmed	3	5

Each patient diagnosed with a bowel cancer is met by our Colorectal CNS, Olive Cummins, who ensures that the patient receives an efficient diagnostic work up and a seamless transfer of care to our colleagues in UHG/PUH for further management.

RUH promotes Bowel Cancer Awareness Month in April through a number of initiatives. This is a fantastic opportunity to highlight the importance of participating in the National BowelScreen Programme as well as raising awareness of the signs and symptoms of Bowel Cancer.

BowelScreen are piloting a patient experience survey for clients who complete a FIT home test and attend for colonoscopy. The pilot is a quality improvement initiative to measure patient experience throughout the patient journey from FIT to colonoscopy with BowelScreen. The pilot will commence in RUH in May 2022 and will run until year-end.

## Sligo University Hospital (SUH), BowelScreen Programme

SUH first commenced screening in May 2013, as part of the BowelScreen programme.

Clinical lead for the past 10 years has been Dr Kevin Walsh, Consultant Gastroenterologist.

In 2021, we welcomed both Dr Aisling Murphy, Consultant Gastroenterologist and Emma Davitt Clinical Nurse Manager 2 (CNM2) in BowelScreen/ Pre-assessment to the service.

The BowelScreen service in SUH is facilitated by Mary Cassidy Registered Advance Nurse Practitioner (RANP) BowelScreen/ Gastroenterology.

Over the past decade despite many challenges, SUH continues to lead out on quality initiatives and meet the Key performance Indicators (KPI's) as set by the National Screening Service. This is a reflection of the hard work and dedication of the Endoscopy team and the wider multi-disciplinary team in providing care to our patients accessing the endoscopy service.

### Sligo University Hospital BowelScreen End of Year Activity Report 2021

BowelScreen Activity	2021
Number of index and surveillance BowelScreen colonoscopies performed	229
Number of repeat procedures performed	4
Total number of BowelScreen procedures performed	233
Number of CTC performed following referral from this unit	3
Number of patients referred for EMR	4
Number of patients with pathology referred for discussion at the BowelScreen MDM	187
Numbers of cancers confirmed	8

\*Prior to the arrival of Dr Aisling Murphy in December 2021, patients requiring EMR of complex polyps were referred to Professor Eoin Slattery in University Hospital Galway (UHG).

# Endocrine Cancer



**Dr Marcia Bell**

Consultant Endocrinologist & Lead Clinician  
Saolta University Health Care Group

The Endocrinology Programme at University Hospital Galway (UHG) provides a complete diagnostic, treatment and follow-up service for patients with thyroid cancer and other endocrinology cancers such as functioning endocrine tumours and adrenal cancers.

The Endocrine Multidisciplinary Cancer Programme provides integrated care to patients with thyroid and endocrinal cancer as well as contributing to the National Cancer Control Neuroendocrine Tumour Programme. The endocrine programme at UHG continues to grow year on year and aims to provide the highest standard of care and expertise to patients with thyroid and endocrine cancer across the Saolta Group. Dr Marcia Bell leads the Programme at UHG with a team of endocrinologists and endocrine surgeons, supported by a team of experts from radiology, chemical pathology, medical and radiation oncology.

The primary purpose of the MDM is to ensure best practice and to standardise patient care. Care pathways for each individual patient are decided at the multidisciplinary meeting. The Centre of Excellence for Neuroendocrine Tumours (NETs) operates on a multi-centre platform between St Vincent's University Hospital in Dublin, Mercy University Hospital, Cork in the south and UHG in the

west. This enhances the services for Saolta Health Care Group patients diagnosed with neuroendocrine cancer by providing increased exposure to new treatments and approaches, inclusion in drug and other trials, as well as other benefits.

Although thyroid cancer is rare, it is the most common endocrine malignancy, with an increase in incidence reported. The disease is more common in women than men, at a ratio of 2 to 1. Most thyroid cancers can be treated very successfully with surgery, hormone therapy, radioactive iodine (RAI), radiotherapy and chemotherapy or a combination. The decision to use radioiodine treatment after surgery is made based on the size of the cancer and the risk of a recurrence.

Survival for some cancers has greatly improved in recent years including thyroid cancer where five – ten year survival is now over 90%. The increased number of survivors underscores the importance of addressing survivor health in Ireland.

The cancer Endocrine Programme takes place in the Centre for Diabetes Endocrinology and Metabolism (CDEM) at UHG. As the tertiary referral centre in the West of Ireland, we manage a significant volume and complexity of patients requiring specialist endocrinology cancer input.

## Endocrine MDM discussions 2021

Endocrine MDM	2021
MDM discussions	491

## Endocrine Cancer Inpatients 2021 (HIPE Data)

Diagnosis	Admissions
Benign disease	96
In Situ	0
Primary	87
Secondary	19
<b>Total</b>	<b>202</b>

HIPE data based on admissions under endocrine service

# Endocrine Cancer (Contd.)

## Endocrine Cancer Surgical Interventions 2021 (HIPE Data)

Surgery	Number
Thyroidectomy	73
Parathyroidectomy	37
Adrenalectomy	4
Total	114

### Key Achievements 2021

1. The diagnoses and treatment of endocrine cancers throughout this challenging period.
2. Maintaining a robust multidisciplinary team meeting.
3. Continuing to provide a quality service despite the ongoing challenges associated with the COVID-19 pandemic and the cyber-attack in May 2021.

### Key Priorities 2022

To enable the Cancer Endocrine Programme at UHG to expand capacity and significantly contribute to better patient care in the years ahead, a key priority continues to be the appointment of an Endocrinologist with a specialist interest in Cancer Care. This will contribute to the future sustainability of the service and most importantly to:

1. Enhance patient care, safety, and outcomes.
2. Provide faster diagnosis, follow-up and management of endocrine malignancy.
3. Enhance patient communication
4. Develop of quality initiatives through audit with a specific focus on efficiencies and better delivery of care.
5. Innovate through development of systems processes in cancer endocrinology.

# Gynaecological Cancer



**Mr Michael O'Leary**

Consultant Gynaecology Surgeon & Lead Clinician  
Saolta University Health Care Group

University Hospital Galway (UHG) is a designated National Cancer Control Programme (NCCP) referral centre for gynaecological oncology. Services provided include surgery, medical oncology, radiotherapy, and a multidisciplinary team of radiologists, pathologists, nurse specialists, psychologists, dieticians, physiotherapists and research nurses.

Within the geography of the Saolta Group in 2021 there were 259 gynaecological cancers diagnosed, however historic referral pathways dictates that a number of women were referred for treatment outside of the Saolta group.

- LUH referred 72 patients to St James Hospital in Dublin
- SUH referred 12 patients to the Mater Hospital in Dublin
- At UHG in 2021, there were 175 New or Recurrent Gynaecological Cancers diagnosed
- 118 women with Gynaecology cancers were diagnosed and managed through the Galway service
- 99 Surgeries took place for Gynaecology cancers diagnosed in 2021, however 112 surgeries for gynaecological cancers actually took place in 2021 (includes 2020 diagnoses etc), averaging at approximately nine surgeries per month.

## The 175 patients ranged in age from 24 years to 95 years with a breakdown as follows:

16-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	+80
2	2	7	4	6	11	14	24	27	24	26	15	13

## Type of Gynaecological Cancer diagnosed 2021:

Type	Cervical	Endometrial	Ovarian	Vulval	Uterine	Primary Peritoneal	Unknown Primary	Other	Total
Number	33	58	51	13	6	5	4	*5	<b>175</b>

\*Incl. 3 Breast Cancer with metastatic disease to the ovaries, 1 Lymphoma and 1 Leiomyosarcoma.

## Type of Tumour diagnosed 2021:

Primary	Secondary	Metastatic	Recurrence
129	7	11	28

## Surgery Type 2021

Of the 99 surgeries/procedures that took place for patients diagnosed in 2021, see breakdown:

Surgery/Procedure	Number	
Cytoreductive Surgery	7	
Debulking Surgery	5	1 Laparoscopic
TAH and BSO	18	4 Laparoscopic
Lap TAH, BSO and Sentinel Lymph Node Biopsy	22	6 open
Lap Assisted Vaginal Hysterectomy and BSO	3	
TAH, BSO, Omentectomy, Appendicectomy and Lymph Node Biopsy/Dissection (SLNB and PLND)	28	1 laparoscopic
Radical Hysterectomy, BSO and SNLB	2	
Radical Anterior Vulvectomy and SNLB	1	
Posterior Vulvectomy	1	
Lap to Open BSO	1	
Laparotomy of Left Tube and Ovary and Omentectomy	1	
RSO and Omentectomy	1	
Lap LSO and Omental Biopsy	1	
Lap Lymph Node Excision	1	
Wide Local Excision of the Vulva and Sentinel Lymph Node Biopsy	6	
EUA and Cervical Biopsy	1	

## Number of Surgeries per Cancer Type

Year	Endometrial	Ovarian	Vulval	Cervix	Total Surgeries
2019	42	52	1	6	101
2020	37	55	13	15	120
2021	44	52	8	8	112

Table 2: Gynaecological Oncology Service Surgical Activity \*\*\*doesn't include benign surgical cases nor adjunct therapy patients\*\*\*

## Management and Treatment

Of the 175 patients diagnosed with a gynaecological cancer in 2021, 98.8% were discussed at the Gynaecology MDT. (260 patients were discussed in total for 2021 including benign cases and patients diagnosed with a Gynae cancer in 2020)

98.8% (173) of Gynae Onc patients diagnosed in 2021 had an initial MDT discussion, 33.7% (59) had a second MDT discussion, 4.6% (7) had a third MDT discussion and 0.6% (1) had a 4th MDT discussion

## Key Achievements 2021

- In 2021 UHG was successful in securing additional funding from the National Cancer Control Programme (NCCP) for a third Consultant in Gynaecological Oncology.
- Approval for a second Clinical Nurse Specialist for the Gynaecological Oncology team was also approved.

## Key Priorities 2022

- Improving the capacity for timely access to theatre for women with gynaecological oncology condition.
- Introduce a Nurse led survivorship service for women who have had Gynaecological oncology conditions.



# Head and Neck Cancer



**Ms Orla Young**

Consultant Otolaryngologist, Head & Neck Surgeon  
Lead Clinician

University Hospital Galway, as the Level 4 Hospital and Cancer Centre is the tertiary referral centre for Head and Neck cancer for the West of Ireland and beyond. General Practitioners and other Saolta Group Hospitals refer patients to the Head & Neck department at UHG for diagnosis and treatment.

It is well recognised that dentists too play an important role in the prevention and early detection of mouth, head and neck cancer. They see many patients on a regular basis for routine dental check-ups, where the oral cavity is fully examined and may lead to the early detection of mouth cancer and therefore better outcomes for patients.

The Otolaryngology, Head and Neck Department (ENT) and the Department of Maxillofacial Surgery provide the Head and Neck cancer programme at UHG. The ENT Department consists of five consultant surgeons, Professor Ivan Keogh, Mr John Lang, Ms Orla Young Mr Thava Subramanian & Mr Philip Stoney and a team that includes 2 SpRs, 4 registrars, two SHOs and 2 interns. Outpatient clinics are held on a daily basis at UHG, once a week in MUH and once fortnightly in RUH. The Maxillofacial department consists of two consultants Mr Patrick McCann and Mr Tom Barry and a team of registrars. Maxillofacial outpatients' clinics are held at UHG and PUH.

In 2021, the Head and Neck Oncology Multidisciplinary Team was extremely busy with 984 patient discussions taking place over the 12-month period. The specialist team is comprised of Consultant Surgeons, Medical Oncologists, Radiation Oncologists, Radiologists, Pathologists, Clinical Nurse Specialist, Speech and Language Therapist and an MDM Co-ordinator.

The Clinical Nurse Specialist, Ms Carol Brennan is a critical link between Surgical Oncology Services in

ENT, Maxillofacial Departments and the Radiation and Medical Oncology Services. Carol provides support, information and advice to the HANO patients from investigation stages to diagnosis, through treatment and long term follow up.

Karen Malherbe, our Senior Speech & Language Therapist, provides assessment and management of swallowing and voice and speech difficulties that may arise for head and neck oncology patients. Karen follows the patient from initial diagnosis and surgery through to radiotherapy treatment by providing support to patients who may experience swallowing difficulties during their treatment. Speech and Language support is provided to both inpatients and outpatients at UHG.

Trans Oral Laser Microsurgery (TLM) continues to be our treatment of choice for cases of early glottic carcinomas. Using CO2 laser, early laryngeal cancers can be excised trans-orally under general anaesthetic. This provides an excellent alternative treatment option for patients to the standard 6 week External Beam Radiation Therapy (EBT). Currently, UHG is one of the highest volume TLM centres in the country with on average 18 – 20 patients being treated annually.

The National Cancer Control Programme (NCCP) has recognised the UHG Head and Neck Oncology Programme for its multidisciplinary strength, with the presence of specialist surgeons from both ENT & Maxillofacial Departments and Plastic surgeons for major reconstructive surgery.

The presence of onsite radiation oncology & medical oncology, along with a dedicated clinical nurse specialist, Speech and Language Therapy support and Palliative Care services means that patients attending the Head and Neck Oncology Programme at UHG have direct access locally to world-class care.

## Key Achievements 2021

- Strengthening of the MDM with the continuing use of the NCIS module

## Key Priorities 2022

- Continue to strengthen the MDM with NCIS
- Improve data collection methods for Head and Neck Cancers

# Haematology Oncology



**Dr Amjad Hayat**

National Clinical Lead NCCP

Consultant Haematologist

Lead Clinician

Licensed Responsible Person (RP) of the Blood and Tissue Establishment – GUH

The extensive Haematology Clinical Programme within the Saolta University Healthcare Group diagnoses and delivers specialist care to patients across the West of Ireland with general and malignant haematological conditions, including leukaemia, lymphoma and myeloma.

**The multicomponent Haematology clinical oncology programme includes:** the combined HPRA licensed Blood, Tissue and GMP Establishment: based in Galway University Hospitals which includes a Stem Cell Treatment Program.

**Day Services:** Patients with blood cancers are managed in all of the Saolta Hospital Group Haematology / Oncology Ambulatory day units. Treatment is delivered under the care of onsite Haematology consultants, teams of specialist-trained nurses, advanced nurse practitioners, specialist registrars, medical and pharmaceutical staff. Consultant led outpatient clinics are ongoing at regional centres.

**Inpatient Services:** Patients requiring intensive haematological, chemotherapy and anti-cancer treatments are managed primarily in University Hospital Galway (UHG) with supportive care provided at regional centres at Letterkenny University Hospital and Sligo University Hospital.

Consultative Haematology service for patients in UHG and other hospital services including medical oncology, paediatrics, obs & gynae services and

through involvement in transfusion medicine, haemostasis & thrombosis across all hospital sites.

Haematologists oversee and direct laboratory services and provide essential interpretation of blood films, bone marrows and complex diagnostic tests for haematological malignancies.

The Health Products Regulatory Authority (HPRA) licenses the Galway Blood, Tissue and GMP Establishment (GBTE) in UHG. It is the only licensed hospital based Blood Establishment outside of the Irish Blood Transfusion Service (IBTS) in the Republic of Ireland and it is one of very few Tissue Establishments. It is also the only hospital-based site in Ireland to have achieved a GMP manufacturing license, which it uses for the production of Autologous and Allogenic Serum Eye Drops for patients on a national level. It is also uniquely licensed for Bone Marrow and Lipo aspirate procurement. The GBTE complies with strict EU Blood, Tissue and GMP regulatory laws and is inspected for adherence to these laws at regular intervals. The Establishment has a robust combined and integrated Quality Management System and the staff are all cross-trained in order to provide essential on-call and diverse services.

Haematologists have a strong track record of involvement in high quality clinical trials, which have led to continuous improvement in malignant haematological outcomes.

## Saolta Haematology Clinical Programme

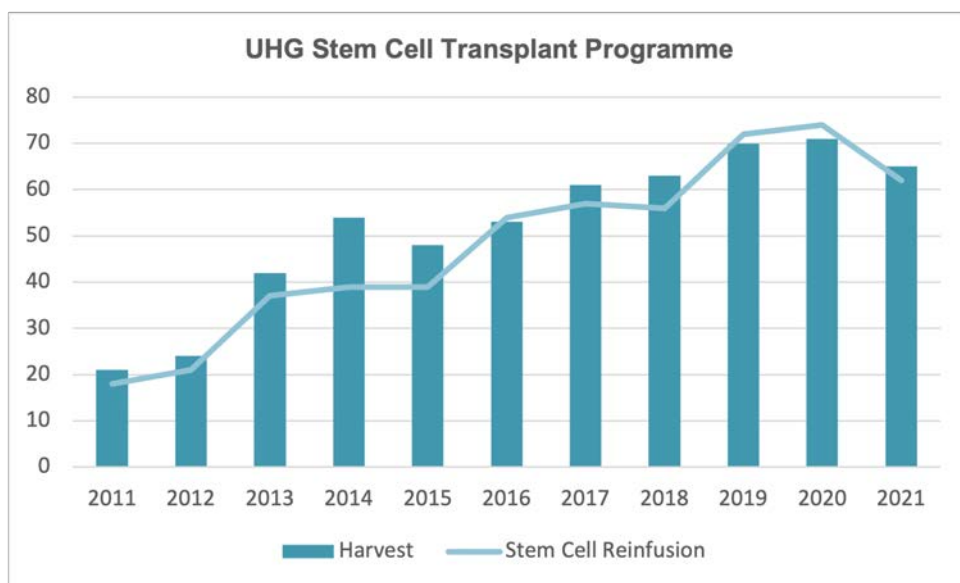
Hospital	Stem Cell Transplant Programme	Inpatient services	Day Ambulatory Treatment	Outpatient Services
UHG	Yes	Yes	Yes	Yes
LUH	-	Yes	Yes	Yes
MUH	-	-	Yes	Yes
PUH	-	-	Yes	Yes
SUH	-	Yes	Yes	Yes

The Saolta Haematology Clinical Programme is active in the five Saolta Group Hospitals outlined above. UHG provides haematology inpatient services for patients across Galway and Mayo with day and outpatient services available in Galway, Portiuncula and Mayo University Hospitals. Letterkenny & Sligo University Hospitals offer both inpatient, day and outpatient clinics. Six Consultant Haematologists are based in UHG and two Consultant Haematologists at both Sligo and Letterkenny University Hospitals lead the clinical Haematology Services with the support of medical teams, advanced nurse practitioners, clinical nurse specialists, health & social care professionals and specialist pharmacists. Two Consultant Haematologists in UHG cover MUH, PUH and Roscommon University Hospital providing clinical, laboratory and transfusion

advice to the clinicians and laboratories in these hospitals. Multidisciplinary care is provided across the Saolta Group through the MDM Programme. Haematologists from Sligo and Letterkenny link to tumour site-specific multidisciplinary meetings at UHG on an ongoing basis to discuss individual patient cases and plan treatment pathways.

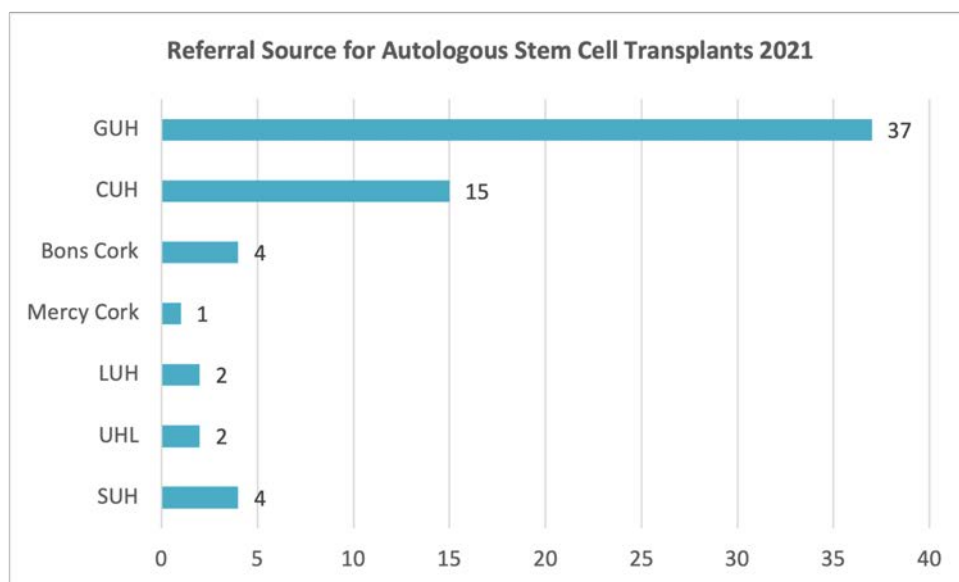
UHG has been the primary specialist centre for Autologous Stem Cell Transplantation for people with haematological malignancies from the West of Ireland since 1993 and more recently, the South of Ireland since 2013.

The programme involves the peripheral harvesting, processing, storage and reinfusion of stem cells for the treatment of many cancers including myeloma and lymphoma.



In 2021, the programme accepted referrals from Saolta Group Hospitals and from the South / South West Hospital Group. Staff adhered to Covid-19 guidelines in order to ensure patient care continued. The UHG Stem Cell Transplant Programme involves

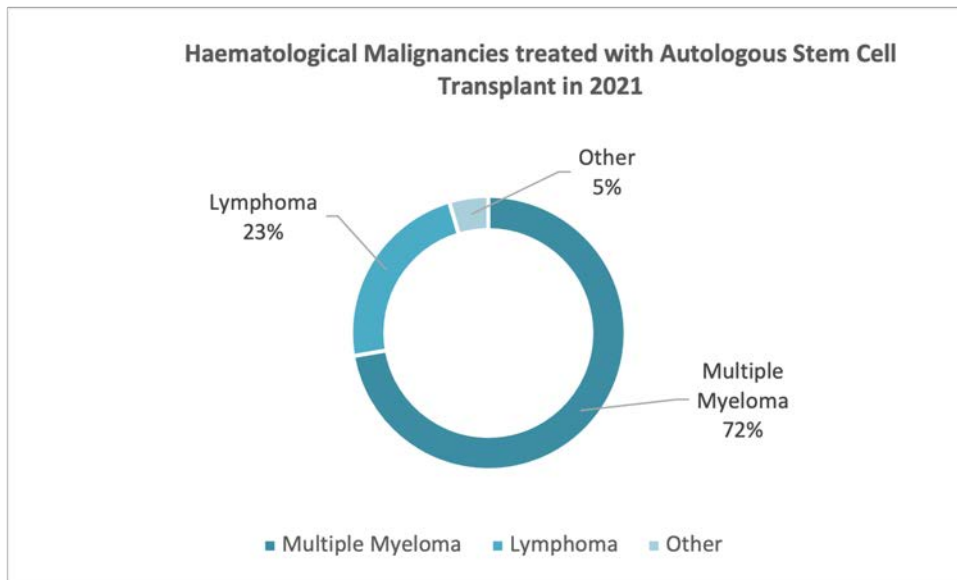
a team of experienced Consultant Haematologists working with a diverse expert multidisciplinary team including clinical nurse specialists, specialist registrars, biomedical scientists, specially trained nursing team & pharmacists.



The Stem Cell Transplant Programme in UHG, treating multiple myeloma, lymphoma and other cancers has grown exponentially at +338% in the years from 2011 – 2020.

In 2021, 72% of transplants were for the treatment of Multiple Myeloma, 23% for Lymphoma and a small percentage of patients with other conditions received autologous stem cell transplants.

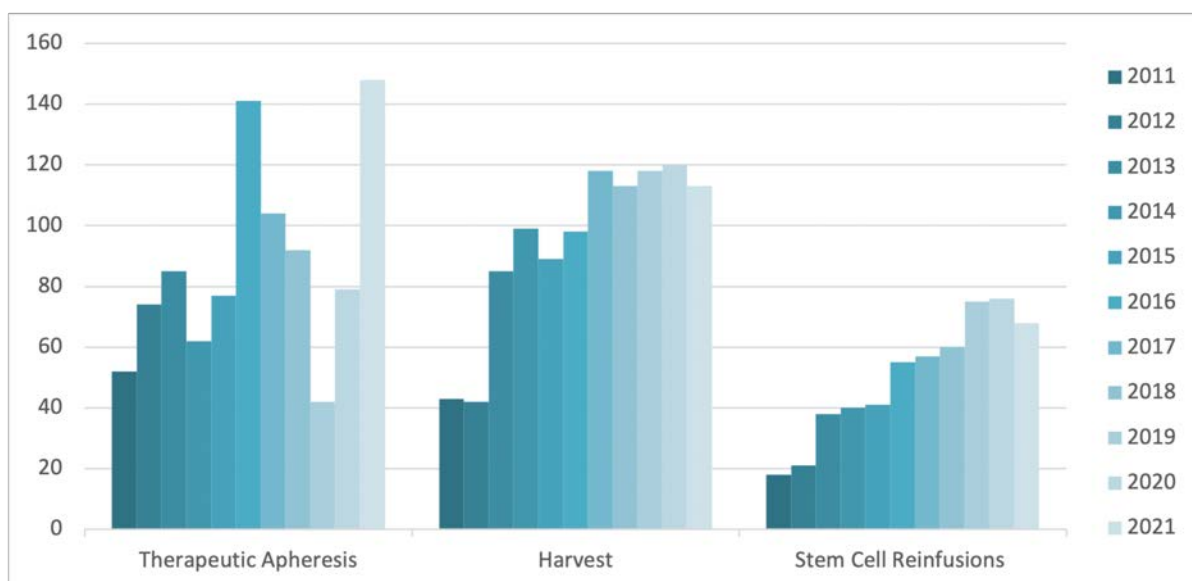
In the last five years 2017-2021, 330 patients have received an autologous stem cell transplant through the programme in UHG.



All stages of autologous stem cell transplantation take place on the UHG site with apheresis and the clinical care of patients during transplant occurring in the newly built 25 bed Claddagh ward. This specialist ward of 25 individual positive ventilation rooms ensures high quality care and improved

patient safety, reducing infection risk during this and other intensive haematology treatments. The processing and storage of stem cells occurs in the fully licensed and regulated GBTE Laboratory on site.

### Apheresis/Transplant Workload 2011-2021



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Therapeutic Apheresis	52	74	85	62	77	141	104	92	42	79	148 (15 pts)
Harvest	43	42	85	99	89	98	118	113	118	120	113 (65 pts)
Stem Cell Reinfusions	18	21	38	40	41	55	57	60	75	76	68 (62 pts)

## Haematology Outpatient Activity UHG 2021

As well as attendance in person, video and telephone consultations continued throughout 2021. Despite the continuing restrictions imposed due to the

pandemic, Haematology outpatient activity at UHG in 2021 continued to rise.

## Saolta Group Haematology Outpatient New and Review Attendance 2019-2021

Year	2019	2020	2021
University Hospital Galway New	719	590	838
University Hospital Galway Review	3175	3604	4324
<b>University Hospital Galway Total</b>	<b>3894</b>	<b>4194</b>	<b>5162</b>
Mayo University Hospital New	22	7	4
Mayo University Hospital Review	637	654	496
<b>Mayo University Hospital Total</b>	<b>659</b>	<b>661</b>	<b>500</b>
Sligo University Hospital New	292	306	227
Sligo University Hospital Review	1418	1757	2227
<b>Sligo University Hospital Total</b>	<b>1748</b>	<b>2063</b>	<b>2454</b>
Letterkenny University Hospital New	248	232	190
Letterkenny University Hospital Review	1965	1521	1557
<b>Letterkenny University Hospital Total</b>	<b>2213</b>	<b>1753</b>	<b>1747</b>
Saolta Hospitals Group New	1281	1135	1259
Saolta Hospitals Group Review	7195	7536	8604
<b>Saolta Hospitals Group Total</b>	<b>8476</b>	<b>8671</b>	<b>9863</b>

## National Cancer Control Programme (NCCP) KPIs for Systemic Anti-Cancer Therapy

Each of the Saolta Hospitals delivering systemic anti-cancer therapies across the Group submit KPI reports on a monthly basis to the National Cancer Control Programme (NCCP). The SACT KPI provides a target of access to treatment in the day ward setting of up to 15 working days from date of referral (Haematology & Medical Oncology).

In 2021, the overall Group performance averaged 84% with UHG's average over the year being 66%. The key deficit at UHG is capacity, requiring intensive

local management on a daily basis while awaiting the proposed new Ambulatory Care Centre. It is well recognised that the need to improve the infrastructure and facilities required to provide systemic anti-cancer therapy is well overdue. As the numbers of patients being treated and the complexity of regimens increases, we look forward to working with the NCCP to look at innovative ways in the delivery of care into the future.

### Key Achievements 2021

- Maintaining a busy service providing ambulatory care service, inpatient care and outpatients clinics throughout the pandemic and during the HSE cyber-attack.

### Key Priorities 2022

- Implement NCCP Guidance on the management of acute capacity challenges in Systemic Anti-Cancer Therapy in Ambulatory Day Units by maximising capacity.
- Review procedures undertaken in Day Wards and prioritise parenteral SACT.
- Maximise working hours and extend working day.
- Explore the option to provide low risk treatments off site.
- To provide a Haematology clinic in Portiuncula University hospital

# Lung Cancer & Thoracic Surgery



**Dr David Breen**

Consultant Respiratory Physician  
Lead Clinician, Interventional Pulmonologist



**Mr Alan Soo**

Consultant Thoracic Surgeon  
Thoracic Surgery Lead

## Rapid Access Lung Clinic (RALC) History

Despite advances in cancer care, including lung cancer and preventative medicine, over the last two decades, the incidence of lung cancer in Ireland remains stubbornly high and the five-year survival rate is significantly lower than that of other common cancers.

Lung cancer is the third most common cancer in Ireland accounting for an annual average incidence of 2,671 new cases per year from 2018 – 2020. The annual average incidence was 1,457 in men and 1,214 in females. The number of lung cancer cases is also increasing with an annual projected rise from 1,356 in 2015 to 3,713 cases (+131%) for males, and from 1,130 in 2015 to 2,313 (+105%) for females, by 2045. This would amount to an increase to 5,450 cases (+119%) for both sexes combined.

Lung cancer is the leading cause of cancer-related mortality in Ireland causing one in five of all cancer related deaths and accounted for 1,083 deaths annually from 2018 – 2020. The 5-year overall survival for lung cancer has increased from 10% in 2003 to 24% in 2018. Lung cancer claims more lives annually than breast cancer, colon cancer, and prostate cancer combined. The five-year survival rate is 17.9%.

The median age group at the time of lung cancer diagnosis is 70-74. This population frequently

has multiple competing co-morbidities and poor performance status. In addition, there remains a disproportionately high number of cases from the lower socioeconomic background. Combine this with the fact that the majority of cases are diagnosed at a late stage, it is not difficult to see why lung cancer statistics remain stark.

The key to improving survival is early detection and that is what the Rapid Access Lung Clinic aims to support. There have been major advances in the management of lung cancer over the last two decades. This includes significant efforts in addressing the primary cause for the disease, smoking cessation advances and improvements in both invasive and non-invasive diagnostic methods.

## Rapid Access Lung Clinic (RALC) History

The National Cancer Control Programme (NCCP) was set up to re-organise the way cancer care is delivered so that our cancer survival rates would compare more favourably with the best in Europe and the rest of the world. Rapid Access Lung Clinics were set up as part of the NCCP in order for patients to be diagnosed quickly and start treatment as soon as possible once cancer has been confirmed.

The RALC opened in Galway in 2010. The clinic coordinates the rapid assessment of patients referred from their primary care facilities.

## Meet our Team

**Dr David Breen**, Consultant Respiratory Physician & Interventional Pulmonologist, leads the RAL programme at UHG. Dr Breen qualified from Trinity College Dublin and after completing his respiratory and general internal medicine training in Ireland, he was awarded a European Respiratory Society/ European Lung Foundation Fellowship to study Interventional Pulmonology in Marseille, France. He obtained expertise in interventional bronchoscopy and medical thoracoscopy training whilst in France. In addition, he spent periods training in Brescia, Italy for pleural ultrasound and in the Netherlands. Dr Breen was appointed to the Radcliffe NHS Trust, Oxford, UK, as a Respiratory Consultant and Lead for Lung cancer services in 2009. There he was appointed as the Clinical Director of the Interventional Bronchoscopy service. He has worked in Galway University Hospitals for the last ten years and is the Clinical Lead of the lung cancer service in the Saolta Group and the chair of the NCCP Lung Leads Group. Respiratory SpRs and a specialised nursing team in the rapid access clinic support him.

**Nurse Imelda Fleming** is an advanced nurse practitioner within the service and has the responsibility of managing a pulmonary nodule service and a survivorship programme which provides ongoing surveillance and support for patients where needed. Imelda also represents the lung ANPs on the NCCP Lung Leads group.

**Janet Cline** is the CNS and acting CNM for the Service. Janet has spent over 13 years working as a lung cancer nurse in Ireland. Her wealth of experience is evident in the support she provides to this vulnerable patient group. Janet is a designated key worker for patients going through their cancer diagnosis journey.

Together with staff nurse **Jacinta Murphy**, this team of nurses bring a wealth of experience and skills to the service. Jacinta has worked in the RALC for 8 years. She attends the RALC and the Joint Thoracic clinic. She completed the smoking cessation course in 2020 and has enjoyed adding this skill to her practice.

**Nainsi Corcoran** is the Lung Cancer MDM coordinator. She enables the efficient running of the MDM and her assistance to the service is invaluable.

**Cora Hallinan** has officially taken up her post as the Rapid Access Lung Clinic Coordinator. Cora manages this clinic with a focus on the maintenance of the NCCP KPI's. The addition of the clinic coordinator role has had a very beneficial impact on the service. Cora also organises all virtual and follow up appointments from this clinic.

**Claire Kelly**, CNS joined the service in 2021. Claire organises the Joint Thoracic Clinic attendances and is a key- worker for patients attending this clinic. She also organises patient follow up following their discussion at Lung MDM.



## FACTS



2,693 new cases per year (2017-2019)



Ranking 3rd among most common cancers



1 in 35 chance of females being diagnosed with lung cancer before 75



1 in 28 chance of males being diagnosed with lung cancer before 75



Most common treatment regimes: radiotherapy, chemotherapy, surgery



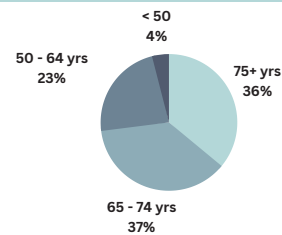
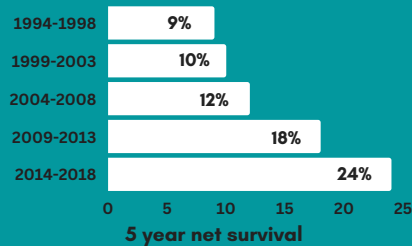
1,894 lung cancer deaths per year (2017-2019)



Ranking 1st among most common invasive cancer deaths



Makes up 20.5% of all cancer deaths



Age breakdown at diagnosis

### RISK FACTORS



Tobacco smoking



Passive smoking



Ionizing radiation



Occupational chemicals



Beta-carotene supplements in current smokers



History of tuberculosis



Family history of lung cancer



Air pollution

### USEFUL WEBSITES



[www.quit.ie](http://www.quit.ie)  
[www.cancer.ie](http://www.cancer.ie)  
[www.mariekeating.ie](http://www.mariekeating.ie)  
[www.ncri.ie](http://www.ncri.ie)

From National Cancer Registry

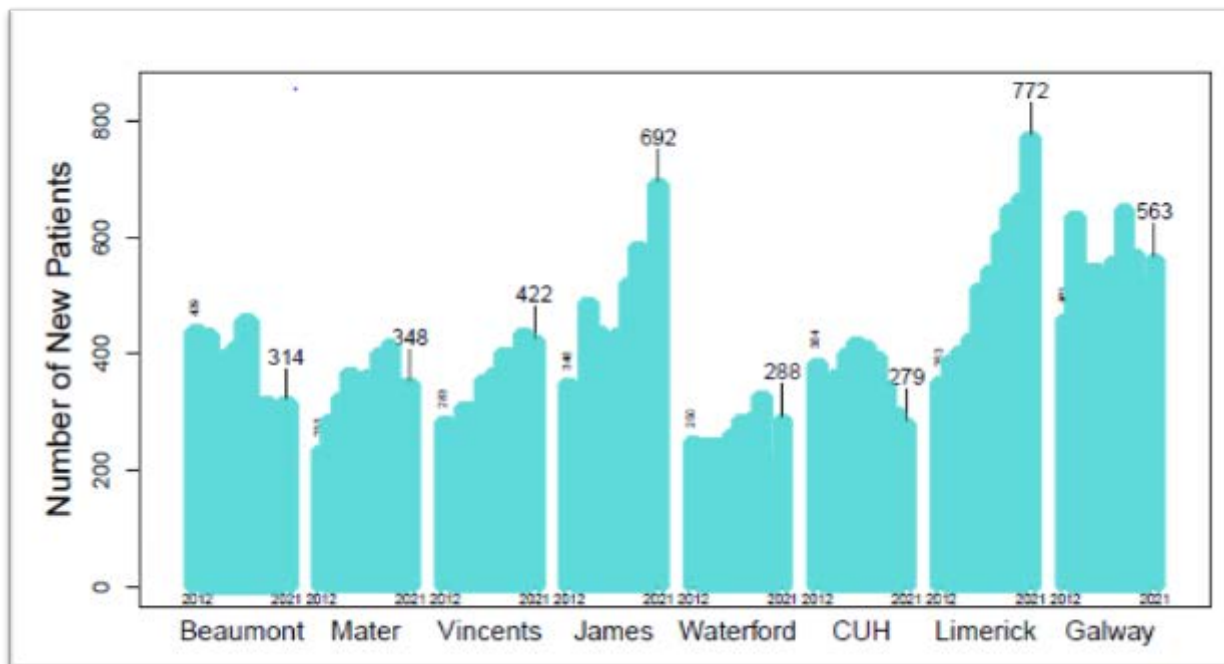
## GUH RALC:

In patients with (presumed) lung cancer, timely access to specialist services, that ensures rapid assessment and diagnostics by a specialist team and onward referral for appropriate treatments, has long been identified as the key for improving outcomes.

The RALC works under the principles and KPIs set out by the NCCP. The primary objective is to review patients within 10 days of receipt of the referral. At their initial clinic, one of the RAL nurses meets each patient. This first meeting is often a difficult time for the patient. The RAL nurses act as a

support for the patient during this time. Following nursing assessment, each patient will undergo a consultation with Dr Breen and a follow up plan is made. It is imperative that the patient is at the centre of every decision made and that they are kept up to date with their individual care plan.

## Rapid Access Lung Clinics comparisons



As demonstrated in the above table the number of referrals sent to the RALC are increasing every year. This is reducing the number of inpatient diagnosis of lung cancer. Keeping patients out of hospital is important for reducing patient anxiety.

Despite the challenges faced by the clinic during 2021 such as Covid-19 and the malware attack on the HSE, the RALC has continued to see over 90% of patients within ten days of receipt of referral letter. The service achieved a full KPI of 100% in August of 2021.

Patients who are smokers at the time of their clinic appointment will be advised to quit and have a discussion with a member of our nursing team on the how best to do this. They will be referred to the community smoking cessation clinic for ongoing advice and support. For patients who go on to have a cancer diagnosis this part of the process is key. Smoking cessation is associated with treatments that are more effective and a better prognosis for the patient. For patients with early stage disease, quitting will reduce post-operative complications. For patients with advanced disease, quitting smoking is linked to decreased dyspnoea and fatigue. Reducing the severity of symptoms is a key component of treating advanced disease. For patients who do not have a cancer diagnosis the referral is still highly important. The HSE has set out a plan to make Ireland smoke free by 2025. It is the responsibility of each health care worker to ask and advise patients on their tobacco use.

The Rapid Access Lung team make a huge effort to ensure that all of their patients are asked about their smoking status and that they are offered advice and support regarding cessation.

### Diagnostic procedures:

The RALC relies on Unit 8 Merlin Park Hospital for their diagnostic activity. Unit 8 staff are skilled endoscopy nurses who assist the consultants in their procedures. Following their diagnostic procedures, the patients are discussed at the Lung Cancer MDM.

This year the service was delighted to officially introduce radical EBUS procedures and fluoroscopies to the RAL service. These procedures are new and GUH's RAL service is proud to be the first in Ireland to provide this service for investigations of peripheral lesions endoscopically.

# Unit 8 Merlin Park Statistics 2021

## Biopsies performed by Dr Breen at Unit 8, 2021

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
<b>Bronchoscopies</b>	10	17	25	23	9	28	21	21	35	33	23	21	<b>266</b>
<b>Endobronchial Ultrasound</b>	17	19	38	31	20	23	18	31	31	28	29	29	<b>314</b>

### Multi-Disciplinary Team Meetings (MDM)

The Lung Cancer MDM is held in UHG on Mondays and joined via video link by Sligo, Mayo & Portlincula University Hospitals. A panel of experts from specialities of Respiratory Medicine, Thoracic surgery, Medical Oncology, Radiation oncology, Radiology and Pathology discuss patients from across the Saolta Group. Dr Breen is the MDM lead and together with Nainsi, they ensure that patients are discussed at the appropriate time.

It is at this meeting that data is obtained for cancer diagnosis. Here cases are discussed individually and an outcome will be recommended based on the expert opinions of the Team.

### Joint Thoracic Clinic

After their MDM discussion, patients are brought in for a follow up appointment in the Joint Thoracic Clinic. This is a unique clinic in that patients have access to multiple specialist consultants at one visit. The clinic is arranged so that patients can attend Dr. Breen for the results of the Lung MDM and directly afterwards be seen by Medical Oncologist, Dr Silvie Blazkova, Radiation Oncologist, Dr Nazir Ibrahim/ Dr Claudia Sanjines or Cardiothoracic Surgeon, Mr. Alan Soo. Patients are referred to these specialities as required and on a patient-by-patient basis. The Joint Thoracic Clinic is the only one of its kind in Ireland. The clinic is entirely patient focused and avoids multiple hospital visits.

### Challenges

Covid-19 continued to have an impact on all services within the HSE in 2021.

The HSE malware attack also impacted greatly on the service. Despite these difficulties, the Rapid Access Service still maintained its KPI's in 2021.

As the Rapid Access Lung service continues to grow, the projected increase in caseload will put major pressure on RAL facilities. In order to future proof the service and to allow growth, the Rapid Access service will require additional clinical space and increased diagnostic capacity.

### The Future

There is continued effort amongst the RAL stakeholders to introduce navigational bronchoscopies, which is expected to commence early 2022. The introduction of navigational bronchoscopies will be of huge benefit to the service overall.

The appointment of a second Cardiothoracic Surgeon planned also for 2022, will greatly improve the Service and the process to recruit a second lung cancer consultant is in progress.

The Rapid Access Lung Service intend to recruit a Patient Pathway Navigator which it is envisaged will be of great support in this developing service.

It is anticipated that nodule surveillance software will be introduced in the near future, this specific software will be custom built for monitoring pulmonary nodules and will greatly assist the service in the scheduling of follow up patient scans.

The RALC is looking forward to the future. Our overall aim is to provide continued service improvements and therefore the best possible service to patients with suspected lung cancer.

# Thoracic Surgical Programme



The Department of Cardiothoracic Surgery at UHG is the only dedicated thoracic surgery centre in the Saolta University Healthcare Group and is one of four NCCP designated thoracic surgery centres nationally. The department aims to provide evidence based surgical treatments for thoracic diseases to the highest standard. The unit performs regular audits and research to ensure that all patients receive the best possible treatment whilst under the care of the dedicated cardiothoracic surgical team.

Patients under the care of the cardiothoracic team at UHG are treated by a multidisciplinary team of health professionals including consultant surgeons, specialist nurses, respiratory physiologists and physiotherapists. Our lead Cardio-thoracic surgeon Mr Alan Soo is supported by a team of Clinical nurse managers Marie Cloonan, Niamh McDermott, Michelle Wren, Pat McConnell and Lisa Owens. Laoise Barrett is the cardio-thoracic programme support worker.

The Cardiothoracic surgery team work closely with the Department of Respiratory Medicine and the oncology department caring for patients from all hospitals within the Saolta University Healthcare Group.

In UHG, the cardiothoracic surgery department provides all aspects of thoracic surgery.

## A team of specialist surgeons treat the following diseases:

- Lung cancer
- Benign diseases and tumours of the lung
- Chest reconstruction after major trauma or surgery
- Pectus surgery for chest wall deformity
- Lung volume reduction surgery for emphysema
- Mediastinal tumours and diseases (including the surgical treatment of myasthenia gravis)
- Mesothelioma
  - Pleural diseases (including pneumothorax, infections and pleural effusions)
  - Chest wall tumours
  - Sympathectomy for hyperhidrosis (excessive sweating)
  - Plication for diaphragm paralysis

## Patient Treatment Pathway

The care pathway starts with referral largely from the Joint Thoracic Clinic following the weekly lung multidisciplinary meeting. The department also accepts direct referrals from physicians and GPs.

All patients undergoing thoracic surgery for suspected lung cancer are enrolled in the ERAS programme (Enhanced Recovery After Surgery).

The **Thoracic ERAS programme in UHG** includes the following:-

- **Pre assessment.** All referred patients undergo a pre assessment to assess suitability for surgery. Here, patients get a further opportunity to discuss their surgical treatment with the medical team. Potential complications are identified and counter measures instituted and discharge planning performed.
- **Pre-habilitation.** The pre-habilitation programme is carried out by a team of dedicated thoracic physiotherapists based in Merlin Park Hospital. Here, the patients undergo detailed fitness assessments. Following that, a personalised exercise programme is developed for each patient prior to surgery.
- **Post op pain management.** This is performed in conjunction with the Pain service at UHG. Patients are supplied with a pre-operative prescription for pain relief which is taken for two days pre-surgery to reduce pain related complications both peri and post-operatively
- **Admission.** Patients are admitted the evening prior to or the morning of surgery (DOSA- Day of Surgery Admission) and go to the PACU (Post Anaesthesia Care Unit) for a night following surgery. This is for close monitoring of vital signs, analgesia and chest drainage.
- **Carbohydrate loading** pre-operatively
- **Digital monitored chest drain** (Medala Thopaz® suction unit) is used post operatively in keeping with international best practice.

The department runs a minimally invasive programme for both lung resection and resection of mediastinal tumours (i.e. VATS lobectomy and thymectomy). These techniques allow the team to perform surgery on patients who previously may have been turned down for surgery and also allow for swifter recovery and shorter inpatient stays.

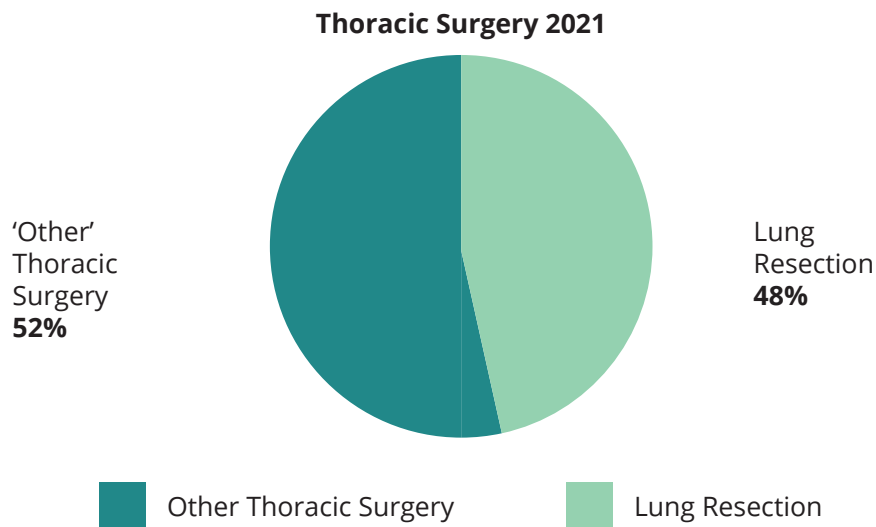
## Departmental Audits

Audits are regularly conducted as part of the ongoing quality improvement and learning process within the department of cardiothoracic surgery.

A sample of recent audits carried out in the department includes;

- Video-Assisted Thoracic Surgery (VATS) thymectomy versus median sternotomy
- Emyema-decortication
- Video-Assisted Thoracic Surgery (VATS) for stage 1 lung cancer

## Thoracic Surgical Activity 2021



## UHG Cardiothoracic Surgical Unit 2021 Activity

Procedure	Activity
<b>Total Number of Thoracic Procedures</b>	<b>222</b>
<b>Total Number of Lung Resections</b>	<b>107</b>
Other Thoracic	115
Procedure Type	
Lobectomy	82
Pneumonectomy	4
Sleeve Resection	0
Segmentectomy	1
Wedge Resection	21
Chest Wall Biopsy/Resection/Reconstruction	3
Mediastinal Biopsy/Excision of mediastinal mass	28
Pericardial biopsy/pericardial cyst excision	1
Bullectomy/Blebectomy/Pleurectomy/Pleurodesis	28
Decortication	3
Bronchoscopy	2
Pleural/Lung Biopsy	17
Thyroidectomy	0
Rib Fixation	2
Thymectomy	3
Pectus Repair	2
Other	25
<b>Grand Total</b>	<b>222</b>

# Oesophageal-Gastric Cancer



**Prof Chris Collins**  
Consultant Surgeon  
Lead Clinician

The Upper GI Surgical Programme in UHG, one of the 4 NCCP designated centres for Oesophago-Gastric Cancers, remained active in 2021. Prof. Chris Collins, Prof. Oliver McAnena, and Mr. Paul Carroll deliver the service.

Although surgical services were dramatically impacted during the Covid-19 pandemic our cohort of patients were safeguarded as much as possible. The Upper GI programme treated patients with minimal delay despite the continuing impact of the virus on all hospital services. We thank our Intensive Care Team who worked tirelessly to provide care to all during this difficult period

The Minimally Invasive Upper GI Resection programme headed up by Mr. Carroll, continued in earnest with the introduction of Thoracoscopic/laparoscopic Oesophagectomy and Laparoscopic Total Gastrectomy. This has demonstrated reductions in morbidity, shorter lengths of stay, and better quality of life for patients, a benefit for the patient and the hospital.

The incidence of advanced cancers with increased interventions required for late diagnosis cancers has been acknowledged. Management of late diagnosis include stent placements, intestinal bypasses and alternate feeding access procedures.

Our gratitude, as always must be extended to our CNS, Ms. Aoife Quinn. The CNS supports the patients coming through UHG with a diagnosis of upper GI Cancer. From coordination of urgent transfers, to ensuring timely investigations are organised, to reviewing patients on the wards, Ms. Quinn is an integral and indispensable component of the Upper GI team. She provides the point of contact for our patients and provides advocacy to them throughout their journeys. The Upper GI team are seeking to expand our CNS team to manage the increasing workload.

## Key Strategic Priorities for the Upper GI Programme in the next 5 years

### Establishment of an Early Upper GI Mucosal Neoplasia Programme

In mid-2020, the Endoscopic Ultrasound service was established in UHG with the procurement of the necessary equipment. In conjunction with Dr Farman Muhammad, these patient assessments can now be provided formally on the UHG campus. The Endoscopic Submucosal Dissection (ESD) programme continued in 2021. These techniques (allowing for wider endoscopic dissection of early oesophageal and gastric cancers), in conjunction with radio-frequency ablation (RFA), and EMR techniques with Dr Eoin Slattery, Consultant Gastroenterologist has allowed for the treatment of premalignant Barrett's oesophagus and early cancers. This will help prevent people from requiring complex major surgery. This programme needs dedicated theatre access to be fully functional and requires executive support.

### Theatre Access/Capacity

With advanced laparoscopic/thoracoscopic procedures, a dedicated hybrid laparoscopic/endoscopic equipped theatre is desirable to advance the Upper and Lower GI Programmes.

### Recruitment/Robotic Surgery/ERAS

The establishment of a Robotic arm for the Upper GI programme is a key priority that will augment surgical technical capability and improve the Minimally Invasive programme. There will be a need for a further surgeon to be brought on board to assist in the expansion of the programme over the next number of years.

Finally, integral to improving outcomes is the need to develop and enhance recovery after surgery (ERAS). Establishment of an ERAS Nurse with prehabilitative and rehabilitative support from dietetics and physiotherapy will improve survivorship in our patient cohort. The Upper GI programme is examining outcomes through a quality improvement initiative through the introduction of Minimally Invasive surgeries. A preoperative clinic where patients are seen by dieticians and physiotherapists is required to help drive improvements.

## UHG Upper G.I. NCCP KPIs (Data Source: KPI Returns 2021)

Parameter	Jan - June	July – Dec	Full Year
New Diagnosis Patients	60	67	127
Newly diagnosed patients with radical surgery as their first treatment	3	9	12
<b>GI Surgery 2021</b>			
<b>*Total number of Upper GI surgeries</b>	<b>19</b>	<b>22</b>	<b>41</b>
Direct to surgery T1/T2	3	9	12
Neo adjuvant	16	13	29

\*includes oesophageal, og junctions and gastric surgery for curative intent only

The KPI returns for Oesophago-gastric cancers are specific in their scope. Although many cancers of this nature are diagnosed at a later stage, the returns require the cancer centre be completed for those surgeries with curative intent only. This is a

poor reflection of the overall workload undertaken by the GI surgeons whose surgical interventions to improve a patients quality of life, if palliative, is substantial.

# Skin Cancer



**Mr Niall McInerney**

Saolta Group National Skin Cancer Lead  
Galway University Hospitals

The annual average incidence of melanoma and non-melanoma skin cancers between 2018 and 2020 was 12,688. Non-melanoma skin cancer (NMSC) is the most common cancer in Ireland. It is projected that by 2045, the incidence of NMSC will double. Melanoma is expected to follow suit, with the prevalence rate increasing significantly. (Source: National Cancer Registry Ireland).

In University Hospital Galway (UHG) and Roscommon University Hospital (RUH), 2,778 skin cancers were diagnosed in 2021. Basal cell carcinoma was the most common skin cancer diagnosed (53%), followed by squamous cell carcinoma (34%). Melanoma accounted for 13% of skin cancers diagnosed in 2021. The number of skin cancers detected increased by 10% on 2020.

## Skin Cancer Data 2021 (Data Source: Pathology)

	Basal Cell Carcinoma	Squamous Cell Carcinoma in situ	Squamous Cell Carcinoma	Melanoma in-situ	Invasive melanoma	Total Skin Cancer
<b>2019</b>	1621	208	812	193	168	<b>3002</b>
<b>2020</b>	1284	182	684	173	195	<b>2518</b>
<b>2021</b>	1488	221	717	174	178	<b>2778</b>

In RUH, a skin cancer surveillance clinic takes place monthly which monitors high risk patients in order to detect skin cancer recurrence or new lesions as early as possible. Urgent see and treat clinics are run twice weekly. A dedicated skin triage clinic and skin cancer surveillance clinic is run in UHG by a dermatologist. Also, in UHG, there is a plastics procedure unit where suspicious lesions can be excised. 1,661 cases went through the unit in 2021 (Source: CNM2 in the PSP department).

In University Hospital Galway the appointment of a clinical nurse specialist has been pivotal in the care of skin cancer patients. Her role includes following up patients with skin cancer in both the dermatology and plastics remit. She organises the Multidisciplinary Team Meeting for the entire Saolta Group. She acts as a support for the patients and works alongside the teams to assist with patient care.

COVID-19 continued to impact skin cancer into 2021, however to a lesser degree than in 2020.

The skin cancer Multidisciplinary Team Meeting plays a significant role in assessing the most suitable treatment options for skin cancer cases. A large team contributes to this meeting including plastic surgeons, dermatology consultants, radiologists, histologists and the skin cancer clinical nurse specialist. In 2021, 717 discussions took place (Source: MDM programme in UHG). This meeting includes all hospitals within the Saolta Group as well as many referrals from Limerick University Hospital.



# Urological Cancer



**Ms Catherine Dowling**  
Lead Clinician  
Urological Cancer Lead  
Consultant Urological Surgeon



**Mr Paddy O'Malley**  
Lead Clinician  
Rapid Access Prostate Clinic  
Consultant Urological Surgeon

The Saolta Urological Cancer Programme is one of the busiest urology programmes in the country providing an extensive programme of cancer care to the population of the West/North West for prostate, bladder, renal, testicular and penile cancers. The urology cancer programme has a multidisciplinary approach that meets fortnightly with video-conferencing linkages to LUH & SUH that enables clinical experts to discuss urological cancer cases for the region. Our dedicated Prostate MDM to support the programme continued throughout 2021.

The demand for Urology services continues to grow in Ireland, and this is certainly the experience across our Saolta Hospital Group.

- Saolta has an older population, 15.4% are over 65 years, compared to 13.4% nationally.
- An older population has a direct correlation with increasing demand on Urology services. OPD activity continues to rise year on year by 3.35%, with a 20% conversion rate for Inpatient day case procedures.
- In addition, more specifically, an increasing demand on our Prostate, Kidney and Bladder cancer programmes, alongside Cancer Survivorship.

## **Rapid Access Prostate Assessment Clinic (RAPAC)**

The Rapid Access Prostate Assessment Clinic was established at UHG in 2009 and since then men with suspected prostate cancer are referred by GPs across the Saolta University Health Care Group and are seen within 20 working days of receipt of referral. The programme has grown exponentially since opening and it now stands as the busiest

RAPAC service in the country. In 2021, the RAPAC remained challenged with an ever-increasing demand while the need to maintain social distancing and prioritise patient and staff safety during the pandemic continued.

The number of review patients in our clinics continues to rise. The rapid access service takes place in our 'One Stop Shop' prostate assessment clinics each week where patients are assessed and/or have a biopsy performed. Cases are referred for discussion at MDM where an individual treatment plan is agreed.

Patients diagnosed with prostate cancer may be treated with any one of the following interventions; sometimes a combination of treatments may be required. Prostate cancer surveillance and treatment options may include active surveillance, watchful waiting, robotic assisted radical prostatectomy, external beam radiation therapy, brachytherapy, HDR brachytherapy, androgen deprivation therapy and chemotherapy. Patients receive a treatment plan tailored to treat their prostate cancer. Donegal patients are referred for external beam radiotherapy to Altnagelvin under a national Service Level Agreement but have seed brachytherapy at UHG.

Mr Garrett Durkan is the consultant surgeon who runs the RAPAC in Limerick along with his nursing team Sheila Kiely ANP & Mary Cremin CNS.

Our key objective for 2022 is to improve on 2020 and 2021s KPI for access to RAPAC clinics.

## UHG Rapid Access Prostate OPD Attendance 2019-2021

	2019	2020	2021
<b>New Patients</b>	934	638	804
<b>New (virtual)</b>	-	60	9
<b>Review Patients</b>	4547	3556	4317
<b>Review (Virtual)</b>	-	2770	1746
<b>Nurse Led</b>	42	83	154
<b>Nurse Led (virtual)</b>	94	28	26
<b>Totals</b>	<b>5,617</b>	<b>7,135</b>	<b>7,056</b>

## Rapid Access Prostate Surgical Activity 2020 & 2021

	2020	2021
Total number of new primary diagnoses	223	268
Total number of Prostate Surgeries	149	143

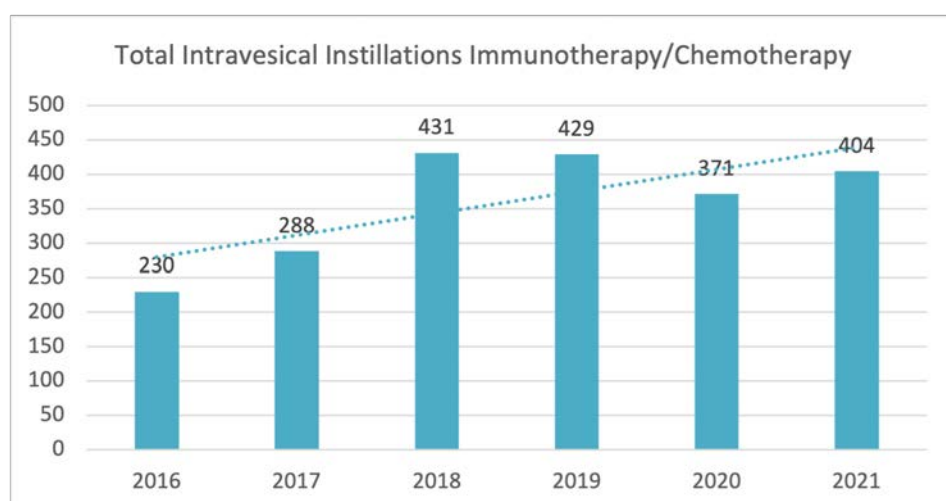
## UHG Bladder Cancer Surveillance: Flexi cysto day case activity

In 2021, there were 920 outpatient/day case flexible cystoscopy procedures in the urology unit. Robert McConkey provides an ANP led bladder cancer intravesical chemotherapy, immunotherapy, and surveillance cystoscopy service, and removal of ureteric stents.

Of these, 342 cystoscopies were bladder cancer surveillance and 120 were ureteric stent removals.

The outpatient/day case cystoscopy service has recently been restored to pre-pandemic service levels, operating 5 days a week with increased capacity. Overall, bladder cancer instillations in 2021 are approaching 2019 (pre-pandemic) levels with a continued increase in immunotherapy instillations recorded.

	2016	2017	2018	2019	2020	2021
<b>Immunotherapy Instillations</b>	173	203	329	358	336	384
<b>Chemotherapy Instillations</b>	57	85	102	71	35	20
<b>Total</b>	230	288	431	429	371	404



## Nursing Programme Rapid Access Prostate Service

Rachael Dalton, Candidate advanced nurse practitioner (cANP) and Muriel Moloney, Clinical nurse manager within the Rapid access prostate assessment clinic coordinate the rapid access prostate assessment and biopsy clinics at University Hospital Galway. Our dedicated nursing team supports this clinic. We aim to provide men and their families with care, advice and education both prior to and following treatments for prostate cancer.

The nursing team provide men and their families with support following a prostate cancer diagnosis. This support begins when patients receive their results at their clinic appointment. The specialist nursing team meets with the patient and their family following their consultation with the medical team. At this point, we introduce ourselves as one of the patient's main points of contact. We provide our patients with appropriate literature from the Irish cancer society, information on their local cancer support groups & contact details for our dedicated prostate cancer nurse support telephone line. The nursing team assist in coordinating staging investigations and subsequent patient follow up in clinic to optimise efficiency within the unit.

Importantly, we communicate with patients and their families to appropriately assess patients' needs and provide relevant support. The candidate advanced nurse practitioner acts as a key worker and a liaison between the patient and other members of the multidisciplinary team throughout the patient's care continuum.

Nurse led survivorship and physiotherapy clinics, active surveillance and post prostatectomy PSA surveillance clinics continued in 2021. Due to the Covid-19 pandemic, most of the aforementioned clinics moved to a virtual platform. In this way, we continued to closely monitor our prostate cancer patients for cancer recurrence and appropriately treat and support those men following treatment for prostate cancer.

The nurse led survivorship and physiotherapy clinic runs once a week on a Wednesday. The aim of this clinic is to support men in their recovery with

both physiotherapy and nursing assessment of symptoms.

Both virtual and physical reviews were facilitated. Nurse led clinics continue to move patients away from the busy RAPAC clinics to a supported nurse led service. In doing this, we aim to create more space for complex cases and new referrals within the RAPAC service.

Virtual pre surgery education classes commenced in 2021 and this continues to date. Patients who are waitlisted for surgery are sent an invitation to attend a pre surgery education class. This class runs twice a month. Within this class men are provided with further details as to what to expect prior to, during, and following their hospital stay. At this class, men are introduced to urinary catheter care and pelvic floor exercises. An animation of the robotic radical prostatectomy procedure is also presented. Men have an opportunity to ask questions following the presentation and they are once again provided with the cANP contact phone number and email. This presentation is open to all men who are listed for surgery including those men attending the RAPAC in Limerick.

The prostate cancer information and support group continued in 2021. The prostate cancer support and information series class is coordinated by Cancer Care West and the cANP and is delivered via a virtual platform. The aim of the session is to support men with a diagnosis of prostate cancer by facilitating specialised presentations on various topics related to the disease and its management. Facilitating these classes virtually contributed to the growth of the programme, seeing an increase in participants from Mayo, Sligo and Donegal. In 2021, the series facilitated presentations from Mr Cormac Small, Consultant Radiation Oncologist, Mr Paddy O'Malley, Consultant Urologist and Ms Ger O'Boyle ANP Radiation Oncology.

Feedback from patients who attended the prostate cancer information and support group was largely positive: Examples such as:

“Concise presentations with no waffle”

“Everything was explained simply and to the point”

“Provided food for thought and a positive approach. Very understanding of issues and feelings”

To provide further support for our prostate cancer patients, Rachael Dalton candidate advanced nurse practitioner was invited by the EAUN to train as a facilitator for the androgen deprivation programme. The aim of this programme is to provide men with education and information on how to manage side effects related to their treatment. Education classes following this training will commence in 2022.

Rachael was invited to join the urology clinic leads group at the NCCP in 2021. This will provide opportunity to become involved in guideline development for our prostate cancer patients in the future.

Rachael’s role as adjunct lecturer continued in 2021. This close link with the University of Galway facilitated many teaching and moderation opportunities over the year. In late 2021, the Journal and Research club

was established. This group, spearheaded by Mr Robert McConkey ANP, aims to provide a protected space for the Nursing Team to improve their research and audit skills. To establish this group an academic partnership with the University of Galway was created.

2021 continued to be a testing year for all staff and patients as we worked through the Covid-19 pandemic. Within urology day services we tried tirelessly to ensure our patients did not feel alone in what was a very isolating and lonely year. Our clerical, nursing and medical team rallied together to the best of their ability, in difficult circumstances to minimise this. This year did provide great learning; we changed many of our processes and patient support events, many of which will continue in this new format going forward.

Our long serving clinical nurse manager, Muriel Moloney, who coordinated and managed the rapid access prostate clinic since its establishment in 2009 retired in April of this year. We wish her the best of luck in her retirement.



# Laboratory Department



**Prof Margaret Murray**  
Clinical Director Laboratory Directorate

The Laboratory Directorate is pivotal in the provision of cancer care throughout the group. The National Cancer Strategy 2017-2026 highlighted cancer prevention as a key stone. Departments within the Directorate provide diagnostic tests to the National Screening Programmes e.g. BreastCheck and the BowelScreen Programme. Apart from its role in the Screening Programmes other departments also provide diagnostic tests for cancer prevention, screening, monitoring, diagnosis, treatment planning, treatment delivery and the development of minimal residual disease monitoring. The diagnosis of cancer is often made in the departments of histopathology throughout the Group but the other departments within the laboratories throughout the Group contribute crucially also to the prevention, diagnosis, monitoring and assessment of treatment outcomes.

The high volume departments of Clinical Biochemistry, Haematology and Immunology in GUH processed near 14 million (FBC counted per test) tests and LUH processed near 4.35 million tests (FBCs counted per profile); accounting for approximately one quarter and one tenth respectively of these were associated with some aspect of the cancer care program. In MUH in 2021, 145,930 tests (9,514 samples) were received by the Biochemistry and Haematology Departments respectively from MUH Oncology Department, equating to approx. 3% and 2.5% of the Biochemistry and Haematology activity respectively.

The **Haematology department** in GUH and LUH, through its special haematology service, processed 522 and 223 bone marrow samples respectively (of which 126 of 223 provided positive diagnosis of lymphoma/leukaemia), affirming this service as a key diagnostic test for the diagnosis of Haematological cancers. SUH also provides a bone marrow analytical service. Through the immuno-haematology service, GUH processed 618 samples. GUH processed 399 tests to assess the adequacy of stem cell collections to support high dose chemotherapy. PUH Haematology supports therapeutics for patients on chemotherapy and this includes pre chemotherapy neutrophil counts.

## UHG Haematology Cancer related testing

(Reference Table 1 and 2)

- Number of Flows from immuno-haematology: Acute panels (219), Lymph panels (338) and CSF flow (61): **Total is 618**. This includes diagnostic and monitoring sample analysis. We are unable to distinguish diagnostic samples from our stats. Lymph panels include lymphoma, leukaemia and lymph nodes.
- Number of CD34 Counts: 399. This includes multiple counts on some patients, so therefore the number of patients is less
- Number of Bone Marrows: 522.

The **Blood Transfusion** Departments across all Saolta Laboratories offer a Blood and Blood product clinical service that supports in the disease management of Saolta Cancer Patients. The Blood, Tissue and GMP Establishment (GBTE) at UHG continues to be licensed by the Health Products Regulatory Authority (HPRA) and thus complies with a variety of mandatory EU Blood, Tissue and GMP EU Directives. Some of the licences are unique to the Hospitals in the Republic of Ireland. The Blood Establishment also continues to be ISO15189 Accredited and the GMP facility continues to successfully manufacture medicinal products.

The Tissue license allows GBTE to perform Stem Cell harvests, processing, storage and follow on reinfusion that forms part of the treatment of many haematology patients. In 2021, 65 Harvests and 62 Reinfusions were performed. This workload and the number of patients catered for in this service is exponentially increasing year in year out.

The PUH Blood Transfusion Department operates a joint care link with Crumlin Children's Hospital from where CMV irradiated blood is received for Paediatric Oncology Patients.

The **Clinical Biochemistry** speciality across the Saolta Group processes tumour marker tests, a key component of the diagnosis and monitoring of cancers. An indication of the demand for this service sees a 2021 demand of 211,277 tests respectively across GUH, LUH and MUH Laboratories as outlined in Table 3. SUH, RUH and PUH (TPSA) perform similar tumour marker tests in-house and/or refer externally to other Saolta Laboratories as applicable, and are included due to the considerable administrative efforts locally associated with same. PUH Clinical Biochemistry Department receives and reports on U&E's and Creatinine samples from the Oncology Day Ward daily.

Specialist Clinical Biochemistry testing is facilitated across all Saolta Laboratories and Table 4 demonstrates the 2021 demand in GUH and LUH Clinical Biochemistry for same.

The **Immunology Department** in GUH performed 44,159 and LUH laboratory performed 17,310 [61,469 based on Table 5 below] for the diagnosis of Myeloma and the immunodeficiency which can occur either from treatment or as a result of many malignancies, particularly haematological.

**Clinical Microbiology** through its diagnostic service, Clinical Advisory service and through their roles in infection control and antimicrobial stewardship are an integral part of cancer care throughout the Group.

A significant proportion of GUH Microbiology specimen types are accounted for by GUH Haematology/Oncology cancer care patients. Many of these specimen types are particularly non-automated in relation to processing, and particularly labour-intensive from receipt to reporting. Below is a

comprehensive breakdown capturing GUH and LUH Microbiology 'Haematology and Oncology' hospital attending patients (see Table 6 to 8 inclusive); GUH and Virology 'Haematology' attending patients only (see Table 9) and LUH Virology 'Haematology and Oncology' attending patients (Table 10) respectively. In PUH, tests for blood stream infections including MRSA, MSSA, VRE and Gram Negative Microbiomes are being done in-house.

The delivery of laboratory cancer care mirrors the clinical service in the multidisciplinary nature of the care delivered to cancer patients throughout their journey. This is also reflected in the diagnostic service the laboratory provides for the trials carried out by the Clinical Research Clinical Trials Programme and National Blood Cancer Network.

The clinical advisory service provided by all the laboratory based clinicians in the Group both directly to clinicians and patients, but also by their participation at MDTs, is a key component of the Laboratory Diagnostic Service allowing for integrated care throughout the Group. The increasing requirement for personalised treatment planning and the requirement for minimal residual disease detection is recognised by the increase in requests for molecular, immunocytochemistry and immunocytometry based tests; clinical infection control advice and antimicrobial stewardship, and developmental needs to further develop and enhance these areas are being discussed.

All the laboratories in the Saolta Group contribute to the delivery of Laboratory Cancer Care.

## Haematology Cancer related testing - 2021

**Table 1: GUH Haematology Internal Tests**

Test	Marrow	Viscosity	Acute Panel -Flow	Lymph Panel- Flow	CSF -Flow
<b>Year 2021</b>	522	238	219	338	61
Test	Stem ( Harvest & Peripheral Blood)	Lupus	Thrombophilia Screen	Factor Assays	Morphology
<b>Year 2021</b>	399	866	623	50 approx.	1947

**Table 2: GUH Haematology External Referrals**

Test	BCR - ABL	CAL-R	Jak-2	Fish –Lymphoma/CLL	Fish Myeloma
<b>2021</b>	186	40	214	24	102
	MRD CLL	B Marrow Cytogenetics	Myeloid Gene Scan	HTA*	
<b>2021</b>	28	222	40	248	

\* Refers to Haematology Tests Away (e.g. AML and ALL MRD).

## Clinical Biochemistry Tumour markers analysis- 2021

**Table 3: In-house Testing**

Test	2021		
Tests\Site	GUH	LUH	MUH
LDH	44,827	21,254	-
PSA	46,543	18,573	26,130
CEA	8,836	3,676	-
CA125	8,375	3,437	-
CA199	8,836	1,701	-
hCG	6,543	2,369	-
AFP	4,818	1,039	-
CA153	3,694	626	-
<b>Sub Total</b>	<b>132,472</b>	<b>52,675</b>	<b>26,130</b>
<b>Saolta Group Total</b>	<b>211,277</b>		

\*TPSA in LUH & MUH \* note CEA CA125 CA19.9 ca 15.3 are referred to GUH from MUH

**Table 4: Biochemistry External Referrals**

Test	2021	
Tests\Site	GUH	LUH
Thyroglobulin	521	60
Plasma metanephrines	268	144
Chromogranin A & B	156	48
Urinary metanephrines	83	27
Urinary 5-HIAA	90	15
Thiopurine methyltransferase activity	86	0
Deoxyripyridinoline dehydrogenase mutation analysis	161	0
Inhibin B	30	7
<b>TOTAL</b>	<b>1395</b>	<b>301</b>

## Immunology Cancer related testing – 2021

**Table 5: Immunology Cancer related testing**

Test	2021	
	GUH	LUH
<b>Test\Site</b>	GUH	LUH
<b>Immunoglobulins</b>	16,278	10,279
<b>Serum electrophoresis</b>	16,257	4,234
<b>Serum immunofixation</b>	2,759	1,528
<b>Urine electrophoresis and immunofixation</b>	1,216	670
<b>Serum free light chain estimation</b>	7,220	Referred to GUH (1595)
<b>Beta 2 microglobulin</b>	429	419
<b>Sub Total</b>	44,159	17,130
<b>Saolta Group Total</b>	<b>61,289</b>	

## Microbiology\Virology Cancer related testing – 2021

**Table 6: Microbiology Cancer related testing by specimen**

GUH Microbiology Haem\Oncology Sample # and % Total				
Site	GUH		LUH	
Specimen type	Total 2021	Haem/ Onco 2021	Total 2021	Haem/ Onco 2021
Total Specimens	177549	<b>7211 [4.1%]</b>	98478	4447 (4.5%)
Blood Cultures	13484	<b>1195 [8.9%]</b>	10974	833 (8%)
CSF	635	<b>103 [16.2%]</b>	917	64 (7%)
Drain Fluid	398	<b>12 [3.0%]</b>	252	44 (17.5%)
Sputum	3409	<b>130 [3.8%]</b>	135	38 (28%)
BALs	1759	<b>17 [1.0%]</b>	1550	23 (1.5%)
Cdiff	3607	<b>193 [5.4%]</b>	1494	124 (8%)
CPE screen	21997	<b>1786 [8.1%]</b>	6880	798 (11.5%)
VRE screen	10614	<b>1321 [12.4%]</b>	608	9 (1.5%)
MRSA screen	20625	<b>1005 [4.9%]</b>	7764	122 (1.6%)
Urine Culture	62802	<b>1079 [1.7%]</b>	34068	471 (1.4%)

\***Bold** font highlights the high intensity samples in GUH Microbiology



**Table 7: GUH Microbiology Cancer related testing – Blood Cultures**

GUH Microbiology Blood Culture Stats		
Specimen type	Total 2021	Haem/ Onco 2021
Blood Cultures	13484	1195
Positive BCs	1269	120
<b>% positive</b>	<b>9.4%</b>	<b>10.1%</b>

**Table 8: GUH Microbiology Cancer related testing – CPE & VRE**

GUH CPE & VRE by ward for Haem & Onco Consultants only		
Year	2021	
Ward \ Bacteria	CPE	VRE
Claddagh	1064	1134
Corrib	17	6
Haem	7	7
ICU / HDU	24	21
Josephs	460	282

**Table 9: GUH Virology Cancer related testing**

Haematology Viral Screen includes the following Test Profile which accounts for the majority of test numbers:

- AHBS
- Anti-HBC
- Hepatitis B Surface Antigen
- Hepatitis C
- CMV
- VZV
- EBV

Year	Specimen No.	% of Total Specimen No	Test Numbers	% of Total Test No
<b>2021</b>	2769	1.86	7410	2.24

**Table 10: LUH Virology Cancer related testing**

Virology Specimen type	Total 2021	Haem/Onco2021	%Total
Sars Cov-2 (Hospital only)	34704	1432	4
Hepatitis Screen	1911	234	12
HIV	3458	193	5.6
AHB	739	14	1.9
Virology Specimen type	Total 2021	Haem/Onco2021	%Total
CMV	880	236	27
VZV	681	3	0.4
EBV	832	226	27

**GUH Microbiology and Virology data caveat:** Data contained above does not take account of cancer care activity relating to patients in the community, nor cancer care activity relating to patients in MUH or other Saolta sites who may refer work to GUH for

which GUH would not have separate cancer care identifiers to relate the work to a location, e.g. MUH send all their hospitals virology samples to GUH, but GUH do not have cancer care identifiers linked to Saolta site location for same samples.

## Key Achievements 2021

### GUH Haematology

#### *Enhanced Flow Cytometry Service*

An enhanced software package, Infinicyte was introduced in the FlowCytometry Laboratory in 2020. This test provides useful information to the Haematology Medical staff in the management of patients' with Leukaemia and Lymphoma. It makes it easier to compare a patient's result with previous results for that patient throughout the various stages of their disease and Infinicyte software has replaced the Becton Dickinson Deva software originally in use.

#### *SARS-CoV-2 Sequencing*

Development and pilot of a process for sequencing of SARS-CoV-2 to support understanding of pathways of dissemination of SARS-CoV-2 in patients including oncology patients. This subsequently was the basis for GUH appointment to participate in a national programme on SARS-CoV-2 sequencing in 2022

## Key Priorities 2022

### GUH Haematology

#### *Minimal Residual Disease Service for Multiple Myeloma patients*

The Flowcytometry Laboratory has just completed the first phase verification of Minimal Residual Disease Testing Service for Multiple Myeloma patients. This is due to be accredited by the Irish National Accreditation Board by year-end.

#### *GUH Microbiology*

Transitioned return to core microbiology and virology service delivery and improvement from COVID-19-related activity, in a timely and safe manner.

## Department of Anatomic Pathology



**Dr Anne Marie Quinn**

Head of Department of DAP, GUH

### Overview Of Service

Saolta histopathology and cytology diagnostic services are provided by five anatomical pathology departments within the region, namely UHG, SUH, PUH, MUH and LUH. Each department strives to reduce cancer morbidity and mortality with accurate diagnoses in a timely manner.

University Hospital Galway houses the largest of these and now employs 19 histopathologists (4 in temporary positions) in addition to sessions provided by 2 consultant histopathologists based at Portiuncula University Hospital, with a combined WTE of 16.7 pathologists. The GUH department of anatomic pathology (DAP) is also responsible for the delivery of surgical pathology for Roscommon University Hospital. The subspecialty areas covered by the service provide an interesting range of histology and cytology and include gastrointestinal, urology, dermatopathology, gynaecological pathology, cardiothoracic, head and neck and endocrine pathology. A significant proportion of

pathologist resource is delivered to the review of material for multidisciplinary team meetings across these subspecialty areas. Cancer services are supported by provision of pathology for the National Screening Services for breast, cervical and colorectal carcinoma. The department provides autopsy, immunofluorescence and tissue molecular diagnostics and facilitates referral opinions on a specialty basis. In addition, a specialist perinatal pathology service is onsite. There is an ongoing participation in the RCPI Faculty of Pathology's National Quality Improvement Programme. Non-consultant hospital doctor training is provided in conjunction with the RCPI accredited training programme.

### Activity

Data relating to GUH has been obtained from the departmental laboratory information system and from the DAP Molecular Laboratory. (Acknowledgements: Jennifer Ruane and Dr Allan O'Keeffe).

### Division of Anatomic Pathology Workload at GUH 2020 & 2021 (Data source: Pathology GUH LIS)

P Code		Cases		Specimens	
		2020	2021	2020	2021
<b>Procedure codes</b>		<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
<b>P01</b>	Small biopsy	5770	7184	11799	13801
<b>P02</b>	GI biopsy	9543	10901	20745	23636
<b>P03</b>	Non biopsy Cancer resection	2025	2043	4667	5228
<b>P04</b>	Non biopsy Non Cancer resection	13421	15175	17562	19949
<b>P05</b>	CSF	151	133	151	135
<b>P06</b>	Non Gynae Cytology FNA	688	822	1314	1498
<b>P07</b>	Non Gynae Cytology Exfoliative	1242	1531	1516	1897
<b>P10</b>	Autopsy Coroner	315	389	315	389
<b>P11</b>	Autopsy Other	29	30	29	30
<b>Total</b>	<b>All procedures</b>	<b>33184</b>	<b>38208</b>	<b>58098</b>	<b>66563</b>

### Malignancy Case Detail

(Data source: Pathology GUH LIS)

	2020	2021
<b>Total malignant cases</b>	<b>6416</b>	<b>7315</b>
<b>Surgical</b>	5784	6647
<b>Cytology</b>	336	348
<b>Referral</b>	296	320

### Cases referred to the Division of Anatomic Pathology for testing/review/opinion/MDM discussion

(Data source: Pathology GUH LIS)

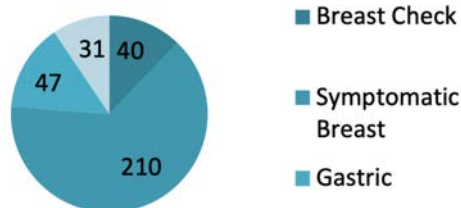
	2020	2021
<b>Cases referred</b>	570	783

### Cases reviewed for discussion at MDM

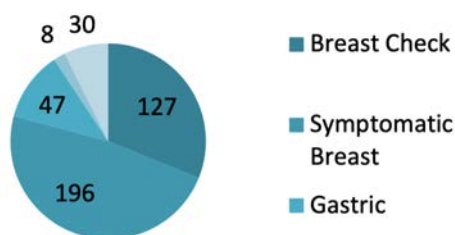
(Data source: Pathology GUH LIS)

	2020	2021
<b>Total cases reviewed/discussed</b>	4904	5003
<b>Surgical cases</b>	4334	4393
<b>Non Gynae cytology cases</b>	420	440
<b>Referred cases</b>	232	289

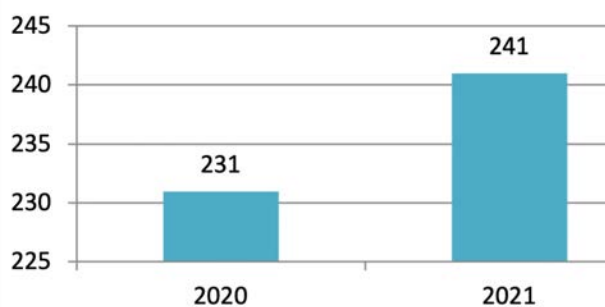
### 2020 HER-2 ISH



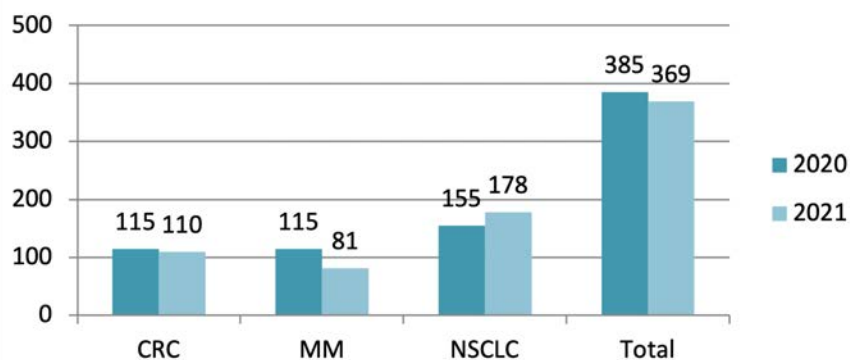
### 2021 HER-2 ISH



### PD-L1 Requests



### Cancer biomarker molecular tests



## Precision Medicine Service



**Prof Sean Hynes**

Chair Saolta Precision Medicine Working Group

2021 saw numbers of cancer cases referred for HER2 in situ hybridisation studies increase by 24% from 328 in 2020 to 408 with the resumption of BreastCheck screening services and referral of gynaecological cancers.

Surprisingly, the number of cancer specimens undergoing somatic mutation testing did not increase from 2020. Similarly, the number of cancers referred for PD-L1 immunohistochemistry testing only marginally increased. This likely reflects the prioritisation of cancer specimen sampling during the Covid19 pandemic.

GUH has testing capabilities for PDL1 biomarkers in cervix, triple negative breast cancer and non-small cell lung cancer available. This has been supported by the NCCP through scientific personnel resources. Head & neck, urothelial and upper GI indications for PDL1 testing are currently being progressed. Mutation analysis of PIK3CA is also being finalised at present.

### Key Achievements 2021

- The DAP receives histopathology tissue specimens and cytology specimens locally and serves as a Regional Referral Centre within the Saolta University Healthcare Group. Surgical histopathology specimens accounted for 33,800 individual cases in 2021 compared to 29,819 cases received in 2020 and 36,433 cases in 2019. Despite the reduction in caseload during 2021 because of Covid-19 and the Cyber Attack the block number just dropped by 3.6% when compared to 2019, reflecting the complexity of the specimens and attention required by medical and scientific staff.
- The department continues to promote the involvement of medical scientists in specimen dissection. In September 2021, 2 scientists commenced a gynaecological histodissection course and two are now due to finish the Skin histodissection course.
- The term precision medicine incorporates both molecular testing and biomarker testing for other modalities such as immunotherapy. PD-L1 immunohistochemistry (clone SP142) for breast cancer was established within the DAP in 2021, following on from the institution of standard of care testing for non-small cell lung cancer.

### Key Priorities 2022

- The addition of Next Generation Sequencing to the testing repertoire available to Saolta patients is of critical importance. The Molecular Service employs single gene technology tests to record mutations in melanoma, colorectal, lung and breast cancers as well as FISH testing for gene fusions and D-DISH scoring for gene amplifications. In some instances immunohistochemistry is used in a screening role e.g. HER2 for breast/gastric cancer and ALK for lung cancer. The range and diversity of molecular alterations that can potentially be treated or yield information of prognostic value is constantly increasing, for example NTRK fusions, and to that end the service plans to introduce onsite Next Generation Sequencing. Plans are in place to expand the DAP molecular unit as a regional molecular service provider.
- PD-L1 immunohistochemistry (clone 22c3) testing for head and neck carcinoma is currently being validated for clinical use at DAP. The numbers tested will likely increase on a regional Saolta basis. Expansion of PD-L1 testing into upper GI cancers is also identified as a priority in 2022.
- Temporary consultant posts will be advertised with the aim of recruiting to permanent positions based on support from the NCCP and BreastCheck.



**Dr Gerry O'Dowd**  
 Consultant Pathologist  
 Laboratory Directorate and Cancer MCAN aCD

## Histopathology LUH Overall Workload 2021

P Code	Procedure codes	Cases	Specimens	Blocks
P01	Small biopsy	3359	4460	5988
P02	GI biopsy	3294	8102	8169
P03	Non biopsy Cancer resection	189	481	3368
P04	Non biopsy Non Cancer resection	2117	2493	6173
P05	Non Gynae Cytology CSF	22	23	2
P06	Non Gynae Cytology FNA	43	65	18
P07	Non Gynae Cytology Exfoliative	329	405	76
P10	Autopsy Coroner	158	158	2135
P11	Autopsy Other	1	1	20
<b>Total</b>	All procedures	9512	16388	25949

## Pathology Cases Details 2021 (Data source: Pathology LUH)

Malignancy Cases		Cases Discussed at MDM	
Surgical	2220	Surgical cases	878
Non Gynae Cytology	71	Non Gynae cytology cases	10
<b>Total Malignant Cases</b>	<b>2291</b>	<b>Total no. discussed/reviewed</b>	<b>888</b>
<b>Cases referred to the Division of Anatomic Pathology for testing/review/opinion/MDM discussion</b>		<b>888</b>	

\*Definition of malignant used in this report: any case with a diagnosis that appears on the NCRI dataset

## Intra-Departmental Consultation

Histology (P01-P04)	8.61%	(771 cases)
Non Gynae Cytology FNA (P06)	41.86%	(18 cases)
Non Gynae Cytology Exfoliative (P07)	7.29%	(24 cases)
Inter-institutional Consultation	1.96%	(184 cases)
Cases received for review	0.02%	(2 cases)
Cases referred for opinion	0.20%	(19 cases)

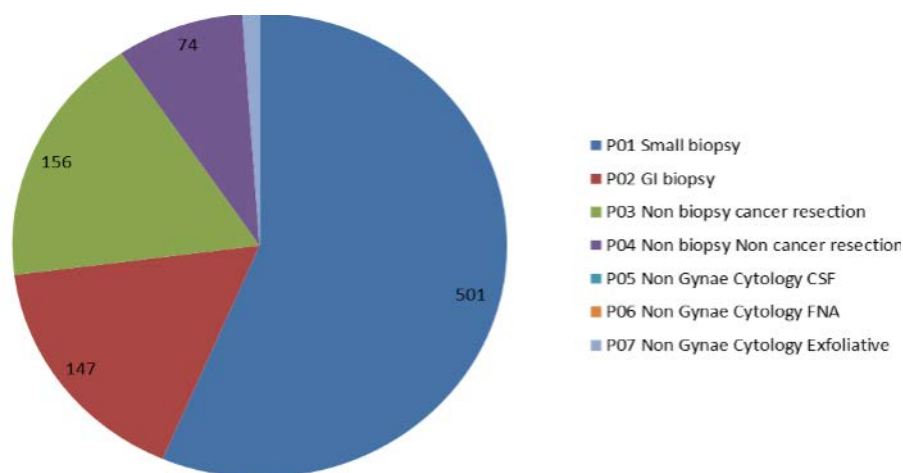
## LUH Histopathology Cancer related testing 2021

P Code	No. of Cancer Related Tests
Major Cancer Resections	189
Breast Core Biopsies	432
Prostate needle core biopsies	65
Bone Marrow Trepines	219
Lung needle biopsies	65
Lymph node needle biopsies	33
Soft tissue needle biopsy	47
Liver needle biopsy	75
Bladder biopsies	43
Immuno stains (Inc. Controls)	3205
Special stains (exc. Controls)	450
<b>Total</b>	<b>4823</b>

## LUH MDM cases discussed by procedural code 2021

P Code	No. of Cases
P01 Small biopsy	501
P02 GI biopsy	147
P03 Non biopsy cancer resection	156
P04 Non biopsy Non cancer resection	74
P05 Non Gynae Cytology CSF	0
P06 Non Gynae Cytology FNA	0
P07 Non Gynae Cytology Exfoliative	10
<b>Total</b>	<b>888</b>

## LUH MDM cases discussed by procedural code 2021

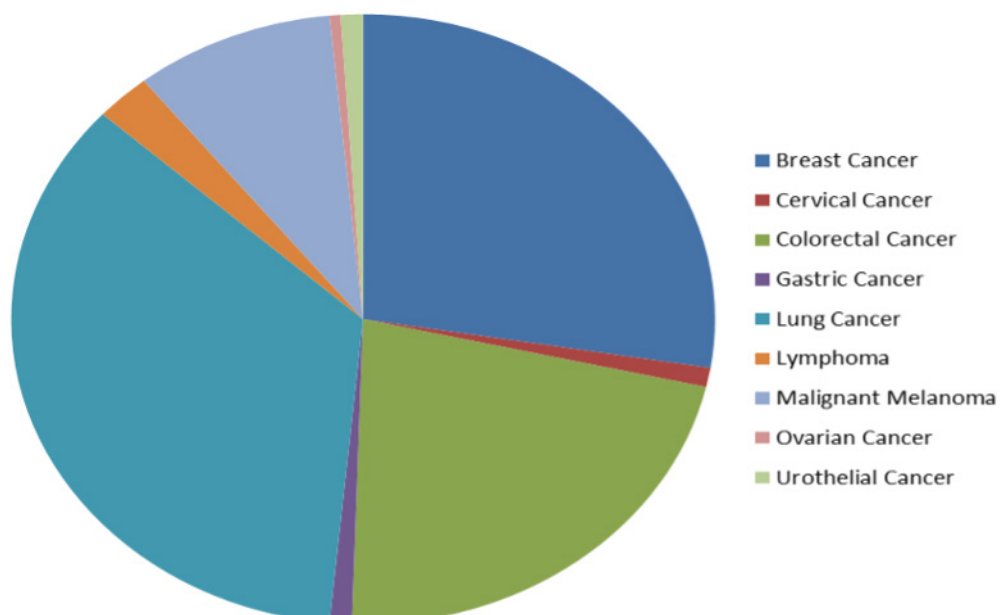


## Molecular Service

### LUH Molecular Referrals 2021

Specimen Type/Mutation Test	2021 Total\Test	Cancer Diagnosis	2021 Total\Cancer
FISH	24	Breast Cancer	
Oncotype DX	28	Breast Cancer	54
PD-L1	2	Breast Cancer	
PD-L1	2	Cervical Cancer	2
KRAS	14	Colorectal Cancer	
MSI	11	Colorectal Cancer	43
MLH1 Methylation	2	Colorectal Cancer	
NRAS	16	Colorectal Cancer	
DDISH	2	Gastric Cancer	2
ALK	14	Lung Cancer	
PD-L1	26	Lung Cancer	69
ROS-1	13	Lung Cancer	
EGFR	16	Lung Cancer	
C-MYC	5	Lymphoma	5
BRAF	18	Malignant Melanoma	18
BRCA	1	Ovarian Cancer	1
PD-L1	2	Urothelial Cancer	2

### LUH Molecular Referrals 2021





# Medical Oncology

**Professor Paul Donnellan**  
 Consultant Medical Oncologist  
*UHG & MUH*  
 Lead Clinician in  
 Medical Oncology,  
*Saolta Health Care Group*



There is an extensive Medical Oncology Programme delivering cancer care across the Saolta University Health Care Group. Medical Oncology specialises in the drug treatment of cancer utilising rationally designed biological therapies, oral targeted agents and increasingly more immunotherapy agents. These drugs are relatively less toxic and effective but they are expensive and place major demands on the healthcare system. The NCCP continue to develop chemotherapy regimen protocols and these are integrated into the medical oncology services across the Saolta Group on an ongoing basis to support safe, evidence-based and cost-effective cancer treatment for all cancer patients.

The Medical Oncology programme consists of an inpatient, outpatient and day ward service at University Hospital Galway with satellite day wards and clinics at Portiuncula University Hospital and Mayo University Hospital. Sligo University Hospital and Letterkenny University Hospital have Day Ward, Inpatient and outpatient facilities.

The Medical Oncology consultants across the Saolta Group provide care for those patients undergoing systemic anti-cancer therapy, five located at UHG with sessions in both Mayo University Hospital and Portiuncula University Hospital. There are two medical oncologists located at Sligo University Hospital and a further two at Letterkenny University Hospital. The Medical Oncology Units at Galway, Sligo and Letterkenny have inpatient wards and clinical trial staff in addition to the outpatient and day ward oncology services. The Medical Oncology Programme across the Saolta Group is supported by

a team of Advanced Nurse Practitioners and Clinical Nurse Specialists who provide expert nursing care to cancer patients over the duration of their treatment and beyond.

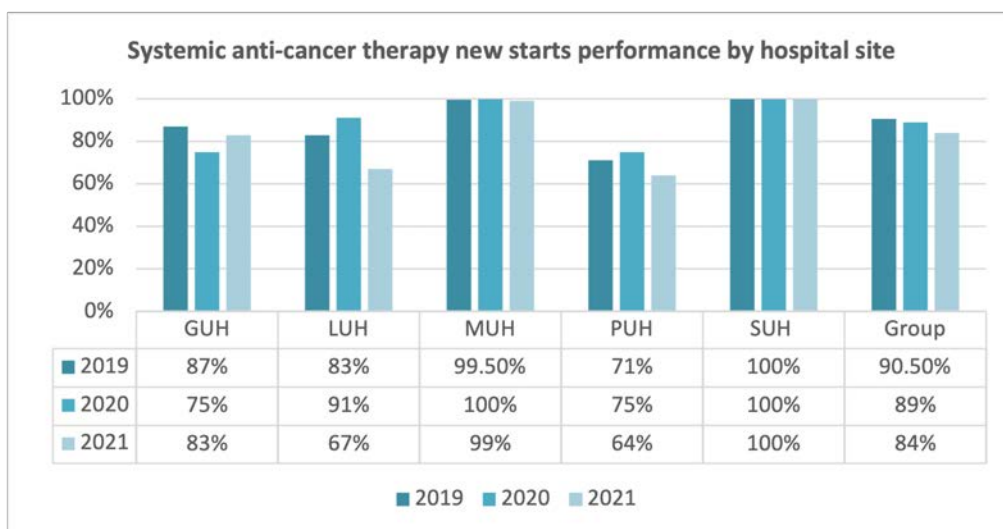
In 2021, the challenges COVID-19 continued to present were particularly evident, requiring the medical oncology inpatient service to be moved from UHG to the Galway clinic from January to April.

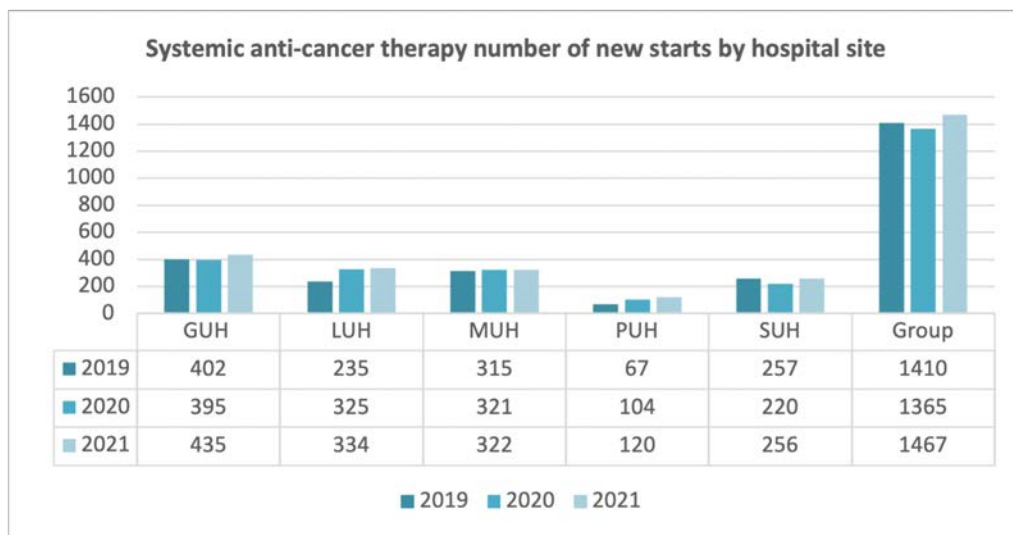
As systemic anti-cancer regimens develop, it is evident that the model of care will need to be addressed. Oncology day ward activity is increasing year on year with infrastructure deficits becoming more evident. Ways in which patients can be treated closer to their homes in safe innovative ways, will have to be explored.

## National Cancer Control Programme KPIs for Medical Oncology

Each of the Saolta Hospitals delivering the systemic anti-cancer therapies programme across the Group submit KPI reports on a monthly basis to the National Cancer Control Programme (NCCP). This KPI oversees access to treatment in the day ward setting within 15 working days from date of referral for first treatment only. As the KPI measures first chemotherapy only this does not reflect the increasing numbers of patients requiring anti-cancer therapies over long periods of time or the complexity of these treatments.

The tables overleaf illustrate the KPI performance for New Systemic Anti-Cancer (SACT) starts for Saolta Group Hospitals.





#### Saolta Group Medical Oncology Outpatient New and Review Attendance 2019-2021

	2019	2020	2021
University Hospital Galway New	850	708	958
University Hospital Galway Review	5657	3752	5360
<b>University Hospital Galway Total</b>	<b>6507</b>	<b>4460</b>	<b>6318</b>
Mayo University Hospital New	139	129	119
Mayo University Hospital Review	1616	1756	1241
<b>Mayo University Hospital Total</b>	<b>1755</b>	<b>1885</b>	<b>1360</b>
Portiuncula University Hospital New	39	54	92
Portiuncula University Hospital Review	814	483	971
<b>Portiuncula University Hospital Total</b>	<b>853</b>	<b>537</b>	<b>1063</b>
Sligo University Hospital New	230	190	237
Sligo University Hospital Review	1787	1378	1020
<b>Sligo University Hospital Total</b>	<b>2017</b>	<b>1568</b>	<b>1257</b>
Letterkenny University Hospital New	347	314	318
Letterkenny University Hospital Review	1223	1242	1436
<b>Letterkenny University Hospital Total</b>	<b>1570</b>	<b>1556</b>	<b>1754</b>
Saolta Hospitals Group New	1605	1395	1724
Saolta Hospitals Group Review	11097	8611	10028
<b>Saolta Hospitals Group Total</b>	<b>12702</b>	<b>10006</b>	<b>11752</b>

## Key Achievements 2021

- The continued rollout of NCIS prescribing. Many regimens are now routinely prescribed on NCIS.
- Despite the challenges, including the May 2021 cyber-attack, the key performance indicators for the commencement of systemic anti-cancer therapies remain consistent with a rise in the number of patients receiving their first dose.
- The appointment of a fifth medical oncologist for UHG supported by the NCCP.

## Key Priorities 2022

- To assess the state of readiness of other hospitals in the group to roll-out NCIS prescribing.
- Identify ways in which the Haematology Oncology Day wards can improve KPIs through innovative ways of delivering supportive and simpler treatments in alternative locations across the network. This will create capacity to allow the hospital day wards to deliver regimens that are more complex in a safe timely manner.
- Engage with the NCCP to develop the National Systemic Anti-Cancer Therapy model of care.

# Letterkenny University Hospital

## Oncology and Haematology Nursing in Letterkenny University Hospital



**Janice Richmond**  
ANP Medical Oncology

As with the passing of every year, in 2021 we continued to experience ongoing improvements, challenges and changes. The innovative adjustments to oncology/haematology care in Letterkenny University Hospital (LUH) that was required in 2020 due to the advancing pandemic continued in 2021. During this year, some staff retired or moved to other roles and we wish them well for their future.

It was an exciting year as new posts were developed and services expanded. Congratulations to Caroline Clancy who was successful at candidate ANP Oncology interview and commenced training for this. The Acute Haematology/Oncology CNS service commenced (part-time) and we congratulate and welcome Geraldine Mullan into this long-awaited post. Additional Oncology CNS staff were appointed in 2021 to include CNS Shay Lar Uddin, CNS Caroline Nee & CNS Mary Grace Alegarme and we appreciate the addition of these posts. Furthermore, CNS Mary McCollum was appointed to the Lung cancer CNS role.

As with Oncology, the increase in activity and intensity through 2021 is clearly visible within Haematology. There was a significant increase in the number of patients attending the inpatients, outpatients and day ward settings, CNS Claire Dunnion joined the team, and we congratulate her on this post. CNS Adrian O Dálaigh also commenced the Higher Diploma in Advanced Practice (to include Medicinal Prescribing) and hopes to take up an ANP Haematology role on completion of his studies. These new roles will allow for the further development of research activities, patient support services and new oral anti-cancer medication clinics going forward.

The ANP Oncology and CNM Mary Grace Kelly continued their work on developing and piloting

the safety and efficacy of an integrated care model for the management of patients receiving oral anti-cancer agents by an ANP. Phase one of this 2-phase research study focused on developing a new model of care and this work continued in 2021 and the pilot (phase 2) should commence early in 2022.

The inpatient ward continues to be full to capacity consistently, with the existing 11 beds proving inadequate for the inpatient care requirements. The Day Unit remained busy and efforts to maintain social distancing continued. Pre-education of patients prior to commencing systemic anti-cancer therapy is supported and augmented by Teraze Toby at the Daffodil Centre (both in person and online pre-education was offered to provide flexibility).

The Northwest Cancer Centre in Altnagelvin Hospital, Derry continued to provide radiotherapy treatment to a cohort of Donegal/Republic of Ireland patients, this includes palliative and radical site-specific radiotherapy treatment for breast, prostate, lung, colorectal cancer and myeloma.

The St Luke's Radiation Oncology Network and the Radiation Oncology Department, Galway University Hospitals provide other site specific radical treatment and specialist treatments including SRS, SABR, Brachytherapy, Radio-Iodine treatment and Radium 223. The Oncology Liaison CNS Noreen Rodgers liaises with patients referred to the various radiotherapy centres for treatment.

In 2021, LACES (Life and Cancer – Enhancing Survivorship) patient education workshop commenced in LUH. This initiative was jointly created by the National Cancer Control Programme (NCCP) and the Irish Cancer Society. The Daffodil Centre in LUH was part of the national pilot programme and online workshops commenced in June 2021. The workshop is for adult patients who

have finished their active cancer treatment and are beginning their long-term follow up and the focus is on health and well-being, enhancing the use of community supports and survivorship programmes. The LACES programme also complements the 'Moving on Initiative', which was a personalised self-management programme to improve physical and psychological health of cancer survivors, which was completed and published in 2020 (supported by a research grant from the Irish Cancer Society). The

aim was that the 'Moving on Initiative' would become part of standardised cancer care for individuals to enrol onto once they have completed their active cancer treatment. A part-time programme coordinator commenced work in 2021. This is an exciting initiative as despite the global pandemic, cyber-attack, increasing workload and ongoing challenges in the HSE, it is important to keep striving to improve patient care.



**C Dunion**  
Clinical Nurse Specialist



**G Mullan**  
Clinical Nurse Specialist



**M McCollum**  
Clinical Nurse Specialist



CNS' SL Luddin, MG Alegarme, C Nee

## Mayo University Hospital

The Oncology/Haematology service at MUH continued to be very busy throughout 2021 with the continuing challenges of COVID-19. The following outlines the activities and changes to service during the year.

In total 3585 patient day ward attendances were recorded by HIPE for the administration of SACT and supportive therapies. The total combined number of haematology and oncology outpatients was 1836. These reviews were a combination of attendances and virtual appointments which were done via phone consult to reduce hospital attendance. 698 inpatient reviews took place by the CNS liaison nurse. On average between 5-10 inpatients in MUH weekly were under active oncology or haematology management. 39 of these were new referrals to the service from inpatients.

During the pandemic, many of the outpatient reviews and follow-ups were done via phone and or video consult as a "virtual review" to avoid hospital visits but still ensure the patients had the appropriate follow up. Guidelines from the NCCP were again vital in structuring and operating this process. The department in MUH received excellent support from the community and GP practices who provided phlebotomy services that would normally require hospital attendance.

The NCCP time to treatment KPI, which is the number of patients referred who commence treatment within 15 working days of referral, has a 95% target. MUH achieved above this level in 2021. In total for the NCCP's new treatment starts KPI, there were 322 patients, 320 of whom commenced within 15

days. Many more patients commenced from cycle 1 onwards. Blood products, bisphosphonates and other supportive regimens are also given on the day ward. There is ongoing over demand for the one CT scanner in MUH therefore obtaining scans in a timely manner can be problematic. MUH General Manager and the radiology department are advancing the business case for a second CT scanner.

The KPI for breast cancer patients receiving adjuvant treatment post-surgery are returned to GUH and sent from the group to the NCCP. 17 patients commenced adjuvant treatment for breast cancer. Many other patients received neo-adjuvant treatment. The recommendation by the NCCP of patient pre-assessment via phone consult on the day before treatment continues successfully.

The nurse led oral SACT clinic set up in 2019, in response to an identified service need due to the increased number of oral SACTs and growing pressure in the day ward for spaces and treatment slots continued. This clinic takes place every two weeks and is co-ordinated by the Oncology CNS and ANP. The cohort of patients attending thus far includes those with diagnoses of prostate, colorectal, renal and hepatocellular cancer.

In June 2021 Miriam Dyer joined the Oncology Haematology department as our dedicated dietician. She had 107 reviews in the first six months of her new role. Cathy Cogan was appointed in a new permanent staff nurse position in the day ward.

## Key Achievements 2021

- Two nurses are now qualified in radiology requesting, the Advanced Nurse practitioner and a CNS requested 285 radiology procedures in 2021. There was an increase in demand for nurses' drug prescribing (two practicing within the department).
- Anne Campbell was appointed to the post of Acute Oncology/Haematology CNS this post was created in conjunction with NCCP with the aim of supporting Oncology/Haematology patients through prompt telephone triage and assessment, utilising the UK ONS telephone triage system.
- The introduction of this nurse-led service meant that cancer patients avoided attending acute hospital ED and day wards during the COVID-19 pandemic. Patients are triaged, assessed, managed and referred on or discharged home in a timely manner within an agreed pathway. As the UKONS assessment tool is being used nationally for this post, auditing of information gathered will be more streamlined and accessible.

## Key Priorities 2022

- A further two of our Clinical Nurse specialists will undertake the radiology-requesting course which will be of immense benefit to the service. Approval for a Haematology CNS has been gained to be appointed in 2022.



Pictured from left to right Emer Murphy SN, Yvonne Ruane SN, Anne Hussey SN, Deirdre Allen CNM2, Mary Hannigan ANP, Madeline Gallagher CNS, Anne Campbell CNS, Bernie Kelly Haematology CNS and Sharon O'Malley Pharmacist

## Sligo University Hospital

The Haematology / Oncology Service at Sligo University Hospital (SUH) reports a very active year in 2021.

Our Haematology / Oncology day ward treated a record number of patients, and our 16 bedded inpatient unit reflects a high level of activity.

Two Consultant Medical Oncologists lead the Haematology / Oncology service at SUH: Dr Michael Martin and Dr Ala Yousef, and two Consultant Haematologists: Dr Andrew Hodgson and Dr Aine Burke. Two Advanced Nurse Practitioners support the Consultants: Anne Mullen (Oncology), and Geraldine Walpole (Haematology). The nursing team also includes Clinical Nurse Specialists, an Acute Oncology Nurse, Clinical Nurse Managers and Research Nurses. There are also highly experienced nurses working on the day ward and on the inpatient unit. Cancer Services at SUH has eight nurse prescribers and one (nurse) x-ray prescriber. Specialist pharmacists from the aseptic unit also support the Systemic Anti-Cancer Therapies programme.

The Haematology / Oncology MDM's link with various disciplines in UHG including Breast, Respiratory, Gastrointestinal, Genitourinary, and Haematology. These MDM's continue to grow in numbers, and we are proud to report that we are delivering on our KPIs, and continue to have no waiting lists for systemic anti-cancer therapy (SACT). Our KPIs for new start chemotherapy remain consistently at 100%.

Building links with our community partners continues. We work closely with the Sligo Cancer Support Centre, who offer our patients a counselling service and weekly Bio Energy therapies (inpatient unit). In conjunction with the Sligo Support Group, we have also set up a Myeloma Support Group. Our local charity SHOUT continues to grow, providing ongoing support for patients and families.

## Portiuncula University Hospital

Portiuncula University Hospital has a well-established nurse - led Oncology Unit.

It is a satellite service of Galway University Hospitals and is part of the Saolta University Health Care Group. The service has been in existence since 2001. Treatment and assessment in the oncology day ward is provided by a nursing team. Each member of the nursing team is highly skilled in the area of oncology, all having a Higher Diploma in Oncology Nursing, and exercise expert clinical competence in all areas related to cancer care. Two medical oncologists (Dr Silvie Blazkova and Prof Maccon Keane) liaise closely with the oncology nursing staff. The department is supported by a full time medical secretary.

Medical oncology clinics are held on a weekly basis. The oncology day ward consists of six treatment bays with recliner couches for the patients. Patients attending for chemotherapy receive a comprehensive education programme prior to starting their treatment regimen. This ensures that everyone is fully informed about their disease and their drug treatment schedule prior to commencing treatment.

The number of cancer cases has been increasing by about 3% a year since 1994 with 24,000 new cases of invasive cancer each year in Ireland.

The Covid-19 pandemic has added even greater pressure on resources this year. There is an

ever increasing demand to evaluate not only the effectiveness of services but the service efficiency.

As an exclusively nurse led unit we are highly motivated to practice in line with the most up to date research. We undertake 3 monthly journal clubs, attend regular conferences and are regularly involved in audits and research. Caitriona Duggan is the Registered Advanced Nurse Practitioner in Oncology. The role of ANP oncology covers both inpatients and outpatient clinics. Caitriona also reviews patients in the Oncology department with various medical issues secondary to their treatment regimen and disease. This enables the treatment to be given on a timely basis and avoids GP and emergency department visits. Caitriona also looks after a caseload of patients receiving Oral anti-cancer therapy.

Two new staff members joined our team this year – Dolores Browne Oncology staff nurse and Cora Shaughnessy staff nurse. Cora is planning on doing her HDip in Oncology in 2022. Eilis O Leary became our Acute Oncology Service CNS; this job was funded by the NCCP and was an initiative that came about due to the pandemic. This service supports the unplanned complications of patients with cancer.

# Multidisciplinary Team Meetings

**Ms Cathy Walsh & Ms Aideen Mulkerrins**  
MDM Co-ordinators



The primary purpose of the multidisciplinary meeting (MDM) is to ensure best practice and to standardise patient care. MDMs aim to ascertain or confirm a patient’s diagnosis, establish the clinical and pathological stage of their disease and by prompt, effective multi-disciplinary decision, make and recommend a suitable clinical pathway of treatment and care for each individual patient.

Multidisciplinary team meetings are considered the hallmark of high quality patient centred care, providing personalised treatment plans for all cancer patients. The National Cancer Strategy 2017 - 2026 that outlines the direction and focus for cancer services in Ireland in the coming years drives multidisciplinary working.

Membership of each MDM can vary, but it usually consists of Radiologists, Pathologists, Surgeons, Medical Oncologists, Radiation Oncologists, Clinical Nurse Specialists and Advanced Nurse Practitioners.

## The Saolta Healthcare Group:

The Multidisciplinary Programme within the Saolta Cancer Centre continues to be a high volume programme and is considered one of the busiest in the country. An extensive schedule of meetings are

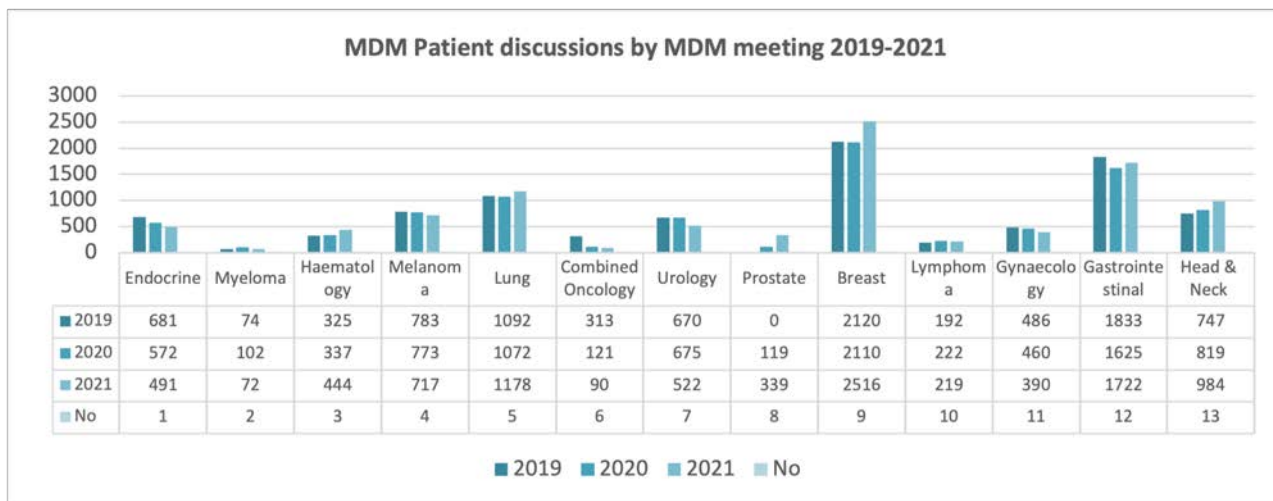
held on a regular basis covering 13 clinical specialities. UHG piloted The National Cancer Information System, initially within the Head and Neck MDM, and this has been successfully implemented with lymphoma, gynaecology, myeloma and haematology MDMs going live in 2021.

The Saolta Group Cancer Programme is hosted at UHG but has multisite video link connectivity to LUH, MUH, PUH, RUH & SUH and other hospitals nationally as appropriate. Due to the need for social distancing early in 2021 the MDMs continued to be held via a virtual platform ensuring all members of the team could participate in a safe co-ordinated manner.

The team would like to take this opportunity to welcome Aideen Mulkerrins to the post of MDM Coordinator. Aideen joined the team in 2021.

As can be seen from the table below the MDM programme continued at a consistently high level despite the continued challenges of the pandemic and the added challenge of the cyber-attack in May 2021.

There were 9,684 MDM discussions in 2021.



## Key Achievements 2021

- Continuing to maintain a consistently high number of MDM discussions across all tumour sites, despite the ongoing challenges of COVID-19 and the HSE cyber-attack.
- The successful implementation of the NCIS MDM module across a further four MDMs.

## Key Priorities 2022

- Continue the implementation of NCIS MDM module to other MDM's.
- Build resilience around the MDM programme to ensure all cancer patients have an MDM discussion.
- Review & update all MDM SOPs for each tumour site



# Nursing Oncology



**Olive Gallagher**

Director of Nursing, Saolta Cancer MCAN

The Saolta cancer nursing team engage with patients throughout their entire cancer pathway from time of diagnosis, surgery, radiation, Systemic anti-cancer therapy, through to survivorship and end of life care. The nursing team are dynamic, creative and skilled advocates for the patient within the multidisciplinary team. This committed nursing team ensures that high-quality and safe patient care is afforded to every patient across the Saolta group, which includes inpatient, outpatient and ambulatory cancer care services.

Nursing services demonstrated their resilience and ability to respond to the challenges within the healthcare arena in 2021 particularly in response to the COVID-19 pandemic and the cyber-attack. As a profession, we continued to thrive and develop with the appointment of key nursing roles as part of our service development through the continued support of the NCCP.

2021 saw the progression of additional cancer nursing posts from staff nurses to promotional grades, including CNS's and ANP's.

These included:

- Acute Oncology CNS posts across each hospital site with SACT services
- Funding to progress a CNM3 SACT outreach for GUH, a pivotal role in scoping out the NCCP SACT Model of Care.
- NMPDU funding to progress CNM3 OEI Co-ordinator
- CNS prostate GUH
- ANP Haematology GUH
- ANP Medical Oncology LUH
- CNS Haematology MUH

The Cancer MCAN also commenced a training needs analysis of nurses caring for cancer patients across the Saolta group, this work will inform the training requirements of staff to support the delivery of skilled person centred care to cancer patients and is aligned with the OEI Standards. Undertaking this training needs analysis was possible through the support of the NMPDU.

In 2022, we plan to continue to develop and strengthen our cancer nursing skills, develop a cancer nursing research group and promote and develop the OEI accreditation and designation process.

# Palliative Medicine



**Dr Dympna Waldron**  
Consultant Palliative Medicine  
Lead Clinician

## Galway University Hospitals

Palliative care service providers continue to face challenges as advances in modern healthcare have led to new patterns of living with complex multimorbidity and complex needs.

Appropriate Integration of Specialist Palliative Care can decrease the reliance on the acute hospital sector; improve patient experience and satisfaction; improve patient quality of life and ensure improved continuity of care throughout the patient journey. Recent U.S. studies have demonstrated that palliative and cancer services working together had increased survival rates, improved outcomes and quality of life while reducing costs (Temel et al., 2010; Greer et al., 2012; Temel et al., 2017).

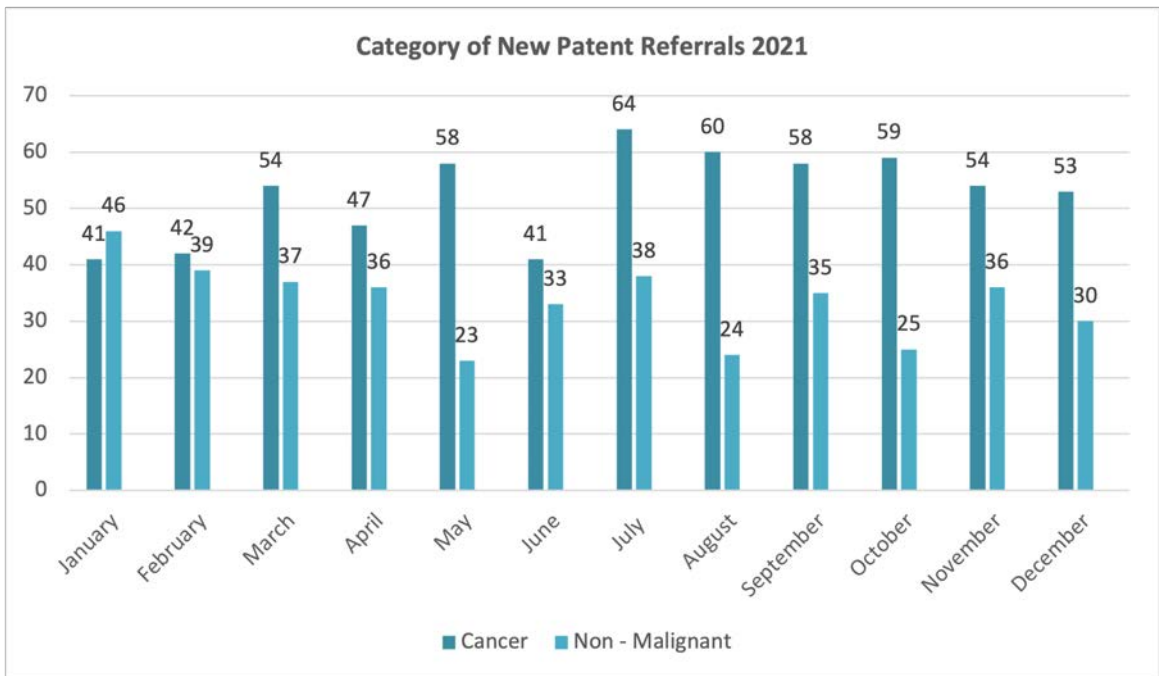
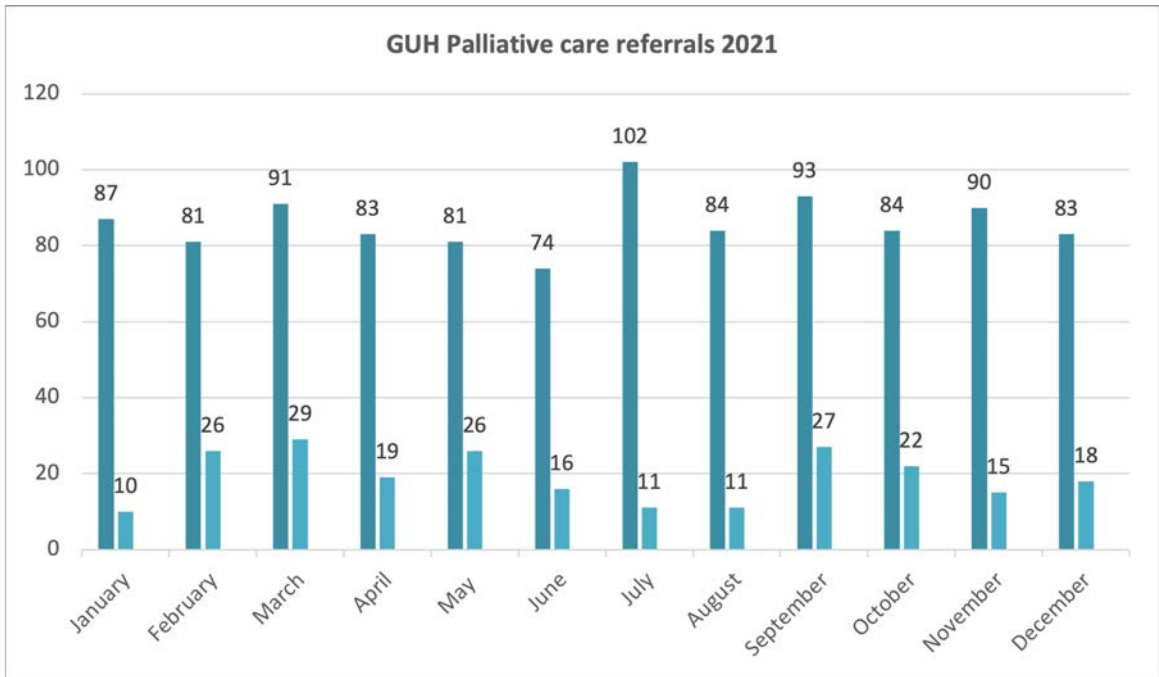
During the ongoing COVID-19 pandemic we continued to deliver a 24/7 liaison palliative care service to over 1,200 patients referred to our UHG service. In response to the pandemic, we re-structured our clinical team to provide dual site cover to Oncology patients in the Galway Clinic and continued seamless clinical cover to all other medical, surgical and paediatric patients in UHG. During this time, we developed and delivered targeted educational initiatives for medical and nursing staff in UHG and MPUH. We ensured regular staff support and debriefing to protect against burnout. We ran an Intern education workshop on end of life care and communication skills and remained actively involved in hospital educational initiatives.

## Activity 2021

Palliative Medicine referrals 2021			
	GUH	RUH	PUH
New Referrals	1033	97	258
Re-referrals	230	18	22
<b>Total Referrals</b>	<b>1263</b>	<b>115</b>	<b>280</b>
New Malignant Diagnosis	631 (61%)	55	97
New non malignant	402	42	183

The total number of referrals to the GUH Palliative Care Service in 2021 was made up of 1,033 new referrals

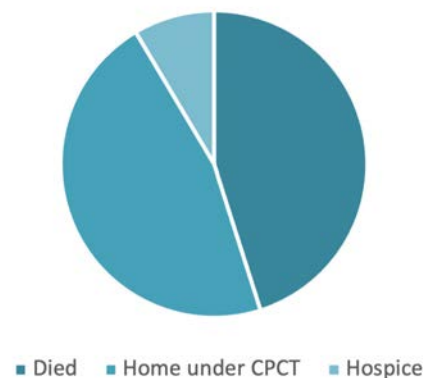
and 230 re-referrals. Of the new patient referrals 61% (631) had an underlying diagnosis of malignancy.



## GUH Patient outcomes

Of the total number of referrals, 454 patients died during their hospital admission, 467 patients were discharged home for follow up by the Community Palliative Care Service (CPCT) and 86 patients were discharged to a Hospice.

## Palliative Care Outcomes GUH 2021



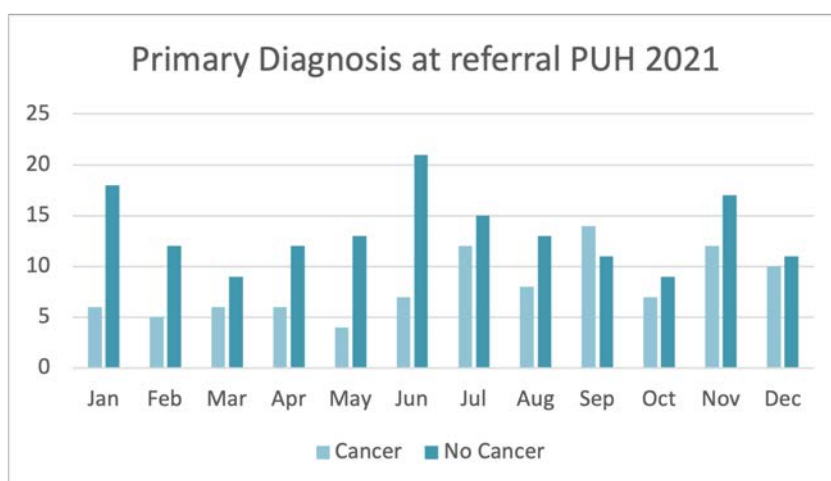
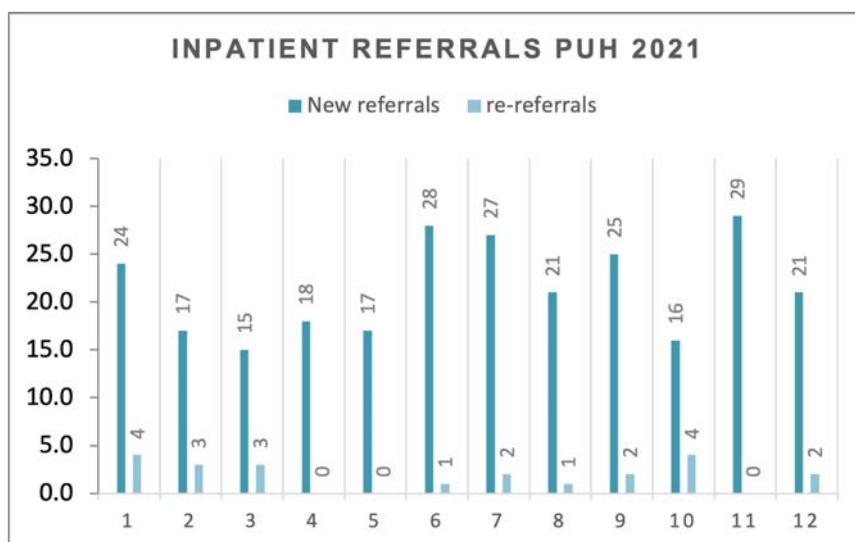
## Portiuncula University Hospital

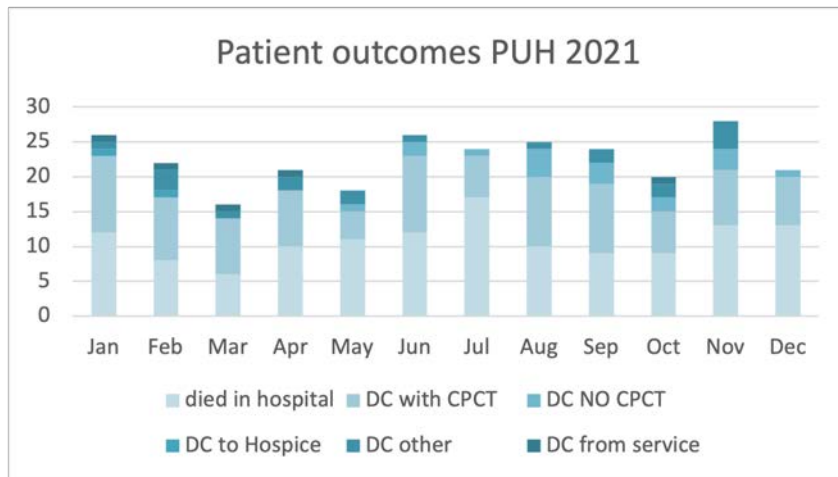
The palliative care service in Portiuncula is a hospital liaison service, providing assessment and support for patients with advanced life limiting illness. In 2021, the service was supported by Dr Sharon Beatty, Dr Kathleen Cronin, Helen Ely CNS and Barbara Flynn CNS.

In 2021 there were 280 referrals to the specialist palliative care service, 258 patients were new to the service, 22 patients were previously known to palliative services. 97 patients referred to the service had cancer. 46.4% of all referrals died in hospital and 35% were discharged to community palliative care services for ongoing care. Two patients were transferred to inpatient palliative care units and the remainder of the patients were discharged without

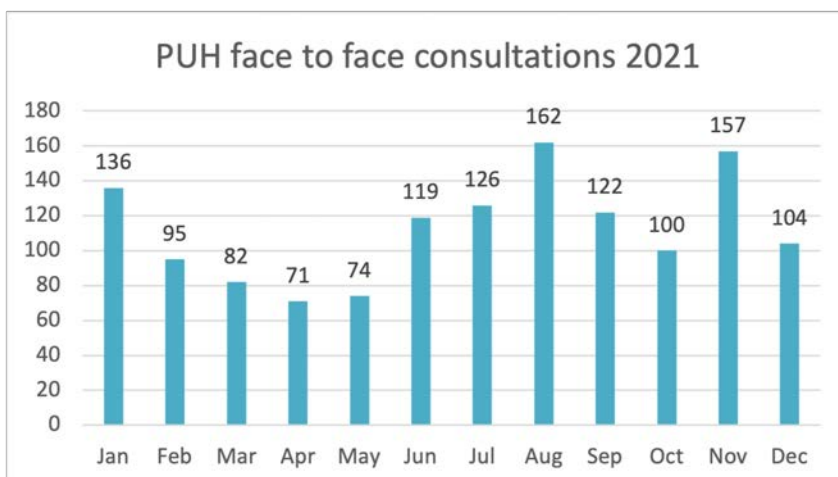
community palliative care input or discharged from service as an inpatient. We completed 1,348 in-person clinical assessments during 2021.

During the COVID-19 pandemic, we adapted to increasing service demands and changes in service provision. We supported PUH staff in the provision of end of life care planning, participated in hospital hub board meetings for inpatients and developed and delivered targeted teaching sessions for medical and nursing staff. We developed and circulated a bereavement pack for bereaved families during COVID-19 including pieces from chaplaincy, palliative care and hospital staff.





2021 PUH outcomes	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
<b>Died in Hospital</b>	12	8	6	10	11	12	17	10	9	9	13	13
<b>DC with CPCT</b>	11	9	8	8	4	11	6	10	10	6	8	7
<b>DC no CPCT</b>	0	0	0	0	1	2	1	4	3	2	3	1
<b>DC to Hospice</b>	1	1	0	0	0	0	0	0	0	0	0	0
<b>DC Other</b>	1	3	1	2	2	1	0	1	2	2	4	0
<b>DC from Service</b>	1	1	1	1	0	0	0	0	0	1	0	0



# Roscommon University Hospital (RUH)

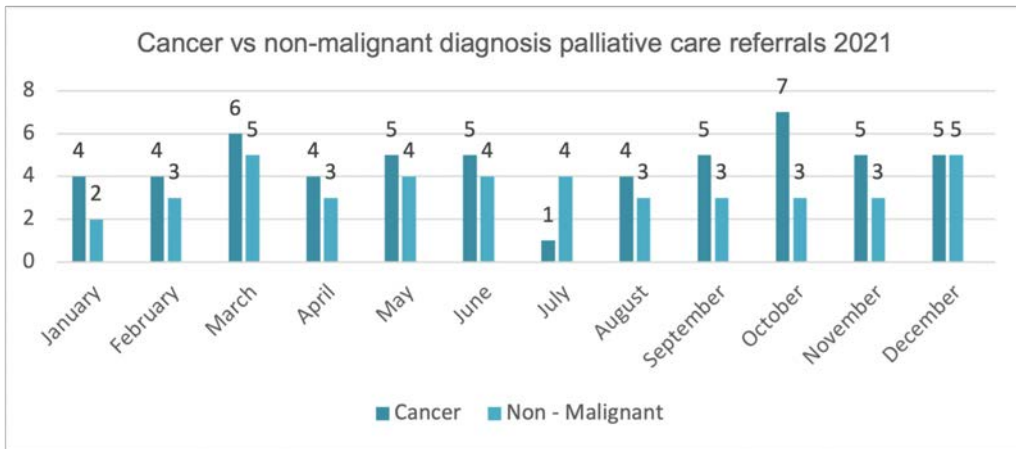
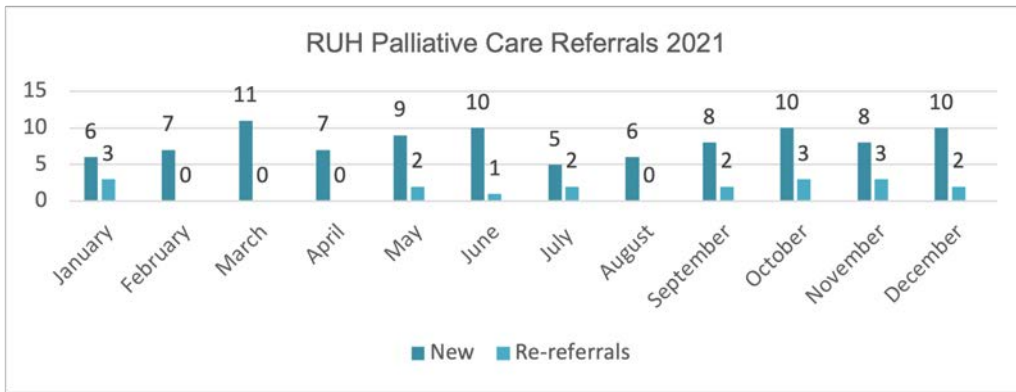
The RUH Palliative Care Service continues to strive to deliver optimum symptom management and enhanced quality of life for patients in a setting close to home. Our CNS Geraldine Keane delivers the service with medical support provided by Dr

Eileen Mannion and Professor Dympna Waldron. The 'turning of the sod' for the eight bedded Roscommon Palliative Care Unit took place on 10 January 2020. The build has now been completed with a planned opening date in early 2022.

## Referrals to RUH Palliative Care Service 2021

The total number of referrals to the RUH Palliative Care Service in 2021 was 115. The number of new referrals for 2021 was 97, and 18 were re-referrals.

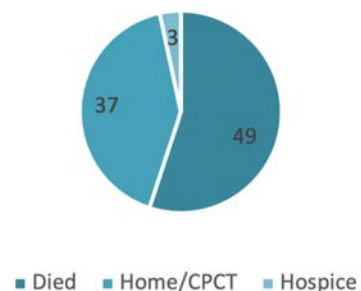
Of the new patient referrals 55 had an underlying diagnosis of malignancy.



## RUH Patient Outcomes

Of the total number of referrals, 49 patients died during their hospital admission, 37 patients were discharged home for follow up by the Community Palliative Care Service (CPCT) and 3 patients were discharged to a Hospice.

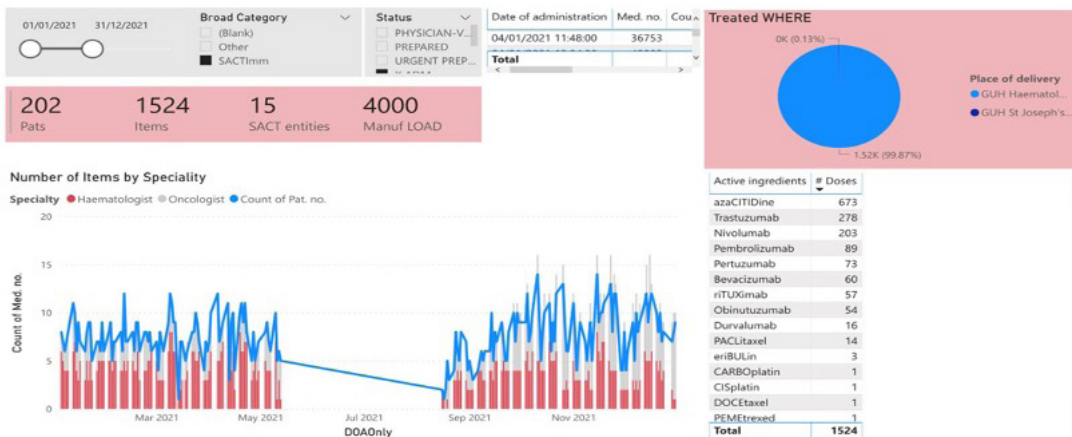
Palliative Care outcomes RUH 2021



# Pharmacy Oncology

## eHealth initiative (NCIS)

- University Hospital Galway became the first hospital in Ireland to go-live with both National Cancer Information System (NCIS) i.e. the MDM and treatment arms. The first patient was treated on November 19, 2019. By the end of 2020, several therapies were routinely administered through NCIS. As far as MDM is concerned, the head and neck specialty led the way locally and nationally. They were swiftly followed by gynaecology, haematology, lymphoma and myeloma in 2021. UHG staff contributed to the national project in project management, and as members of the national implementation and user-group teams.
- Challenges: COVID-19 and the cyber-attack hence the activity gap in addition to staffing gaps.
- Learnings: Business continuity was important. NCIS proved far more resilient than our legacy software. Our objective now is to have transaction level data backed up on an NCIS dedicated network drive. Additionally, as part of a national pilot we look forward to sharing NCIS treatment summaries on our digital health hospital record.
- Strengths: GUH persisted with and grew NCIS while other hospitals placed the project on hold during the cyber-attack and for some time afterward. We remain the only hospital at this time in the country that is sharing patient treatment recommendations on the national NCIS platform.
- MDM: 5 out of the 12 MDMs are live on NCIS (head and neck, lymphoma and gynaecology)



# Pharmacy Functions

The pharmacy supports cancer patients in UHG with five distinct but complementary services:

**A technical compounding** (aseptic preparation). All medicines are aseptically prepared onsite to a prescriptive order in our Pharmacy Aseptic Services Unit (PASU) assuring the microbiological integrity of the final preparation. The oncology nurse is therefore protected from any unnecessary drug manipulation at ward level. The technical service currently prepares approximately 1,600 items per month, making it one of the busiest pharmacy aseptic units in the country.

**A clinical service**, 'near patient' service. It is similar to that provided by clinical pharmacists to other specialities in the hospital. This service is currently involved in improving chemotherapy/SACT protocols to meet the needs of the ambulatory care nurse led service and in supporting prescribers in making effective and timely decisions in the prescriptive orders.

**A clinical trials service**, cancer chemotherapy or SACT being a major component of their work. Their role involves the management of clinical trials medicines, their receipt, safe storage, rigorous legal and investigational documentation and the supply of trial medicines, either to the technical service for preparation or in the case of oral cancer medicines direct dispensing and supply to the patient.

**A further dispensing service** for oral and compounding service for intravenous medicines that are supplied on a 'compassionate basis' (typically after a phase III trial has finished but before full availability as a licensed medicine has been achieved); or available licensed medicines waiting for HSE funding approval (High Tech scheme) whereby the cost if obtained from a community pharmacy would be prohibitive to the patient (typically €5,000 to €7,000 per month). The more **traditional supply** of other medicines, and pharmaceuticals required by the cancer wards and ambulatory day care.





# Radiation Oncology



**Dr Cormac Small**

Consultant Radiation Oncologist  
Lead Clinician

2021 continued to be a challenging year in the radiotherapy department with the ongoing COVID-19 pandemic. Thanks to the hard work and dedication of the staff, we were able to maintain our full range of services apart from Deep Inspiration Breath Holding, due to extra risks associated with the technique.

There was a Cyber Attack on the HSE in 2021 which affected all public hospitals throughout Ireland. The radiotherapy department has been using Electronic Medical Records since its inception in 2005, this coupled with the complete reliance on IT infrastructure to enable the Linear Accelerator (LINACs) to function meant that the cyberattack caused a major disruption to the department. All patients' treatment except those on the stand alone superficial unit, were interrupted for several weeks during this period. We implemented a task force to identify all our patients, their treatment status, the radiation received etc. We risk stratified all patients and sent a significant number of patients out to the private sector to replan and continue treatment. This was a huge amount of work, with significant clinical risk in the replanning of patients' treatment without access to their previous treatment plans. During this time we liaised daily with our hospital IT department as well as with the NCCP and other radiation oncology departments throughout the country,

There continued to be progress in the building of the new Radiation Oncology Department, however as with everything, this was impacted by COVID-19. We continued with procurement process for the

equipping of the new centre. Elekta won the tender process for the installation of 4 new Versa HD Linear Accelerators. These machines will allow the development and expansion of the radiotherapy service on offer to the Saolta group. Other successful tenders included Varian for the HDR brachytherapy machine, Siemens for the CT scanner and Philips for the MRI scanner. The MRI scanner will be the first dedicated radiotherapy MRI scanner in the country.

In spite of the difficulties the department continued to develop and advance its services.

A Surface Guided patient positioning system (VisionRT) was installed on all the LINACS and CT. This allowed the re-instatement of the DIBH technique without the associated aerosol generation risks. It is envisioned that this will allow us to discontinue the use of tattoos for patients when we move to the new phase.

With funding from the NCCP we also purchased auto contouring software (Mirada). This AI based contouring tool will reduce the time consuming manual input required for normal tissue contouring required for radiotherapy planning.

In 2021 we also replaced our end of life superficial unit with the unit from the Phase 2 tender. This will be moved to the new department when we exit our current area. This machine is designed for the treatment of superficial skin cancers.

Radiotherapy Activity	2021
New referrals to Radiation Oncology (GUH, SUH & MUH)	1018
New Virtual Clinics (GUH, SUH & MUH)	637
Review Clinics (UHG, SGH & MGH)	2151
Review Virtual Clinics (UHG, SGH & MGH)	2408
Registered Advanced Nurse practitioner Virtual follow-up telephone clinic for prostate and erectile dysfunction patients	2031
RANP Erectile Dysfunction Clinic- new referrals	153
RANP Pre-Assessment Virtual Clinic	100
Patients treated with EBRT (External Beam Radiation Therapy)	1613
Patients treated - Orthovoltage	54
Total Number of Orthovoltage Treatments	610
Patients treated - Brachytherapy Prostate Seeds	35
HDR-Brachytherapy	27
Ultrasound Biopsy (Requires Anaesthetics)	28
<b>Number of Fractions Treated on LINACS - EBRT</b>	<b>17851</b>

## Patients treated – Brachytherapy Gynae

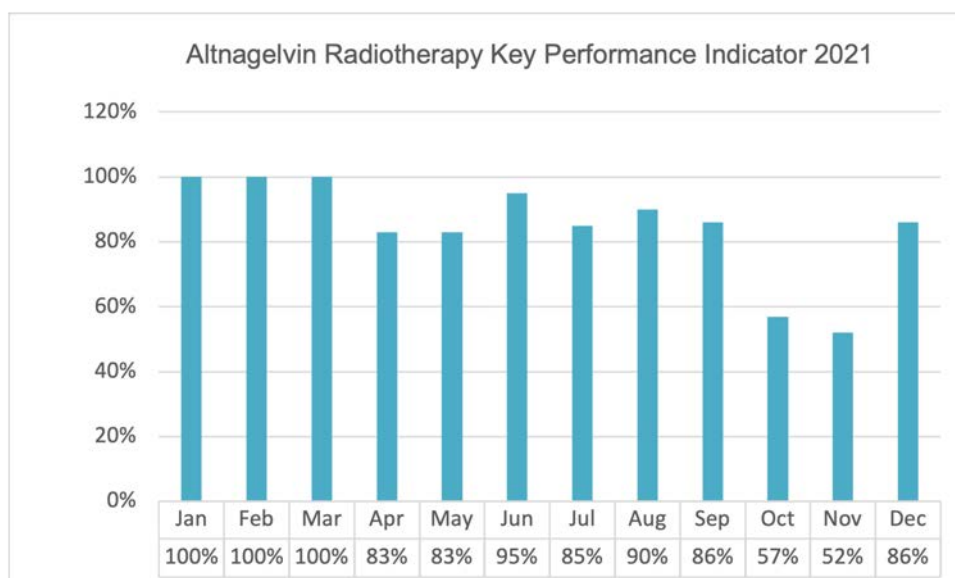
Radiotherapy Activity	2021	
	Patients	Activities
HDR Intravaginal (15312-00 No Anaesthetic Requirement)	22	61
HDR Intravaginal & Intrauterine (15320-00 Anaesthetic Required)	17	48
	<b>39</b>	<b>109</b>

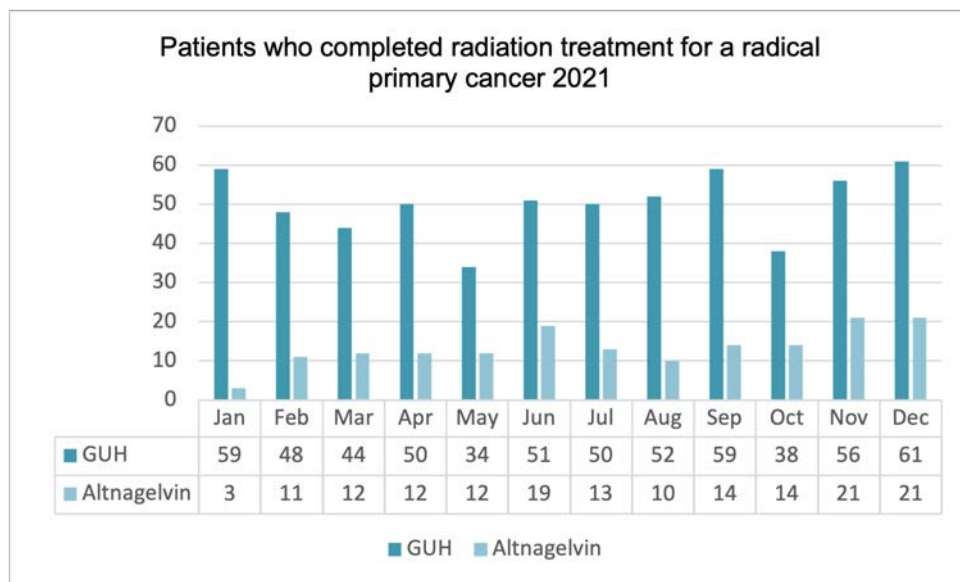
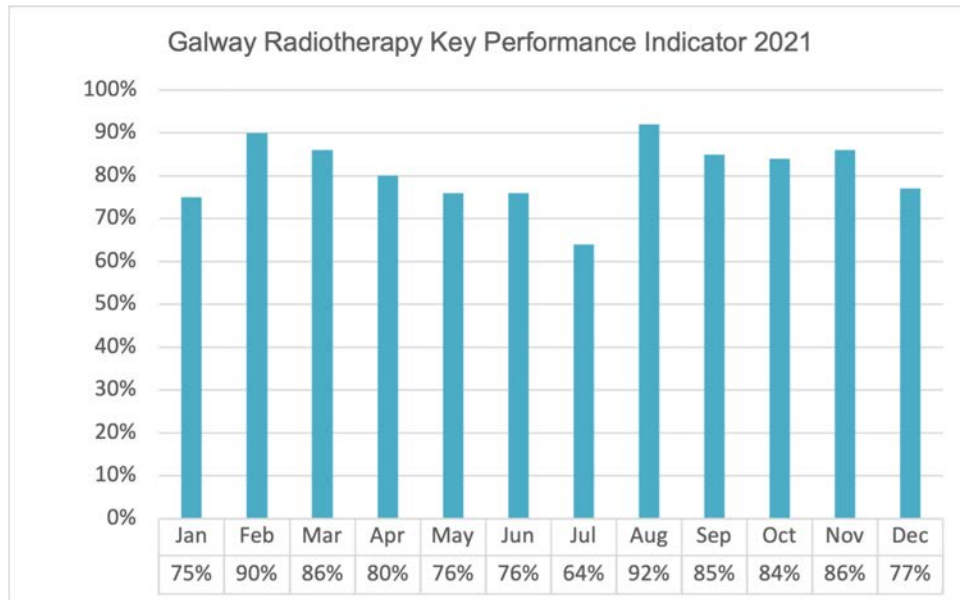
\* RANP phone follow up consultant clinics not counted in Review Clinics, on average 1000 pts reviewed in 2021.

\*\*2021 Patients treated with EBRT – patients commencing treatment on multiple areas on the same date are counted as one patient start as per NCCP guidance.

\*\*\*A cohort of patients had brachytherapy and EBRT as their treatment plan

\*\* SUH virtual clinic was run by RANP and Consultant, on average 30 patients were reviewed monthly.





## Key Achievements 2021

- The continuity of treatment of patients safely despite the cyber-attack.
- The continued progression of the National Radiation Oncology build.

## Key Priorities 2022

- Continue to progress the National Radiation Oncology project and begin the recruitment process to ensure seamless transition to new facility on completion.
- Continue to strengthen and enhance cross border partnerships with Altnagelvin.

# Radiology



**Dr Declan Sheppard**  
Radiology Clinical Director

## Key Service Developments And Achievements 2021

2021 was yet another challenging period for Radiology, GUH. Overall Radiology GUH activity continues its inexorable rise, total patients seen in 2021 was 107,327 compared to 97,640 in 2020, an increase in patient throughput by 10% since 2020. Our challenge will be to increase capacity to match

demand and reduce waiting times for our patients across the Hospital Group. Matching capacity to demand will continue to be a key focus in 2022, in particular for MRI, CT, Ultrasound, Intervention Radiology and Breast services.

## Key Challenges

Increase capacity to match demand and reduce waiting times for patients. Matching capacity to demand will continue to be a key focus in 2022, in particular for MRI, CT, Ultrasound, Intervention and Breast Services

- Working alongside COVID-19 and the continual impact of restrictions will further impact on our capacity to deliver Radiology Services across the Saolta University Health Care Group
- Unprecedented absenteeism due to COVID-19

- close contacts/positive covid results
- Increased inpatient/outpatient waiting lists
- Increased on call/inpatient services
- Cyber-attack in May 2021 and the impact on delivering radiology services
- Radiology Staffing levels across all disciplines remain stretched
- Continue to explore option to outsource activity to deal with service demands
- Increase access to Radiology services to GPs across the Saolta Group

## Galway University Hospitals - Radiology Activity Comparison 2020 – 2021

Galway University Hospitals	2020	2021	% Increase
Total Examinations	120,961	127,787	5.60%
Total Patients	97,640	107,327	10.00%

## Radiology Procedures 2021

Procedure Type	Patient number	Examination number
Breast	9756	14470
CT	17500	20211
Gen	56676	71028
GI	852	852
Inv	2438	2502
MRI	2089	2723
NM	1686	3177
Theatre	2474	2525
US	8256	10299
MRI2	5600	5746
<b>Total</b>	<b>107,327</b>	<b>127,787</b>

## PET Scans performed in Galway Clinic

Procedure Type	Examination number
PET Scans	576

## Overview of MRI

MRI 1 scanner closed on 31st August 2021 until 14th December 2021 to facilitate the installation of the new MRI 1. During this time, MRI 2 took over as the primary MRI Service for GUH.

Since December 2021, MRI Scanner (MRI 1) GUH is now up and running which will reduce inpatient/out-patient waiting list and provide for a much higher complexity of scan type.

The 2nd MRI (MRI 2 Alliance) scanner in GUH is running concurrently which will further assist in reducing wait times and increase throughput for our patients particularly inpatients/outpatients.

In addition, we continue to use the option to outsource MRI activity to Merlin Park Imaging Centre along with MRI 2 on a regular basis.

While this has been successful in reducing the long waiting times for MRI over the past few years, the existing MRI units (HSE and outsourcing) are now at absolute capacity. Additional and replacement MRI units are required across the group.



MRI 1 - New Machine installed December 2021

## Ultrasound

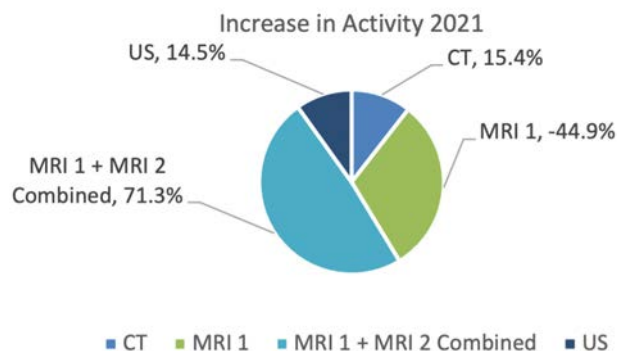
Ultrasound activity has increased by 14.5% since 2020. Ever increasing demand for ultrasound, especially from primary care has increased workload and waiting times. In GUH regular evening lists have successfully reduced the numbers waiting. Further reductions across the group, however, will require additional sonographers and equipment.

## Overview of CT activity

CT activity has increased by 15.4% in UHG since 2020. CT in particular is a priority as increasing workload on a background of staffing shortages and inadequate and ageing equipment. The need for additional and replacement equipment i.e. (CT 1) is an absolute priority as this machine is nearing end of life.

The Cardiothoracic Service will be strengthened with two additional Consultant Appointments approved. Plans will be progressed to use approved limited access to Cardiology Research CT Scanner, 60% cardiovascular research and 40% GUH in Q2 2022.

We continue to outsource CT scan to the Bon Secours Hospital, and Merlin Park Imaging Centre and we continue with evening and weekend CT initiatives funded by NTPF and NCCP (Oncology Patients) where possible to further reduce our outpatient waiting lists.



## Interventional Room 8 Radiology - Galway University Hospitals

Room 8 was upgraded in November 2021. In addition the use of MPUH for elective out-patient IR has been very successful and it is proposed to expand this service further to free up additional inpatient capacity in UHG. The C arm purchased December 2021 is pending installation early 2022. This will progress development and expansion of IR Services in Merlin Park.



## Radiographer Staffing

Radiographic and sonographic staffing shortages continue to restrict our ability to meet the ever increasing demand for radiological services. The focus on priority posts to fill in 2022 are Clinical Specialists in MRI and CT. Cath Lab, CT Research, Mammography, Theatres.

Postgraduate training on going in 2020/ 2021

- CT
- MRI
- Ultrasound
- MSK Ultrasound
- Interventional Radiography
- Radiation Protection

## Innovation & Training

In 2021 Steve McNulty, Clinical Specialist Radiographer (Radiation Safety Officer) as part of the multi-disciplinary team with Medical Physics,

created an on line Radiation Protection training in 2021 for all GUH staff.

## Radiographer International Conference



CIRSE Cardiovascular & Interventional Radiological Society of Europe

Cases in Interventional Radiology in 2021 streamed to the Conference (see photo attached)

## Nursing Staffing Training 2020/2021

Continual education for nursing staff in Intraventional Radiology, Course in UCD.

The ever increasing demand for radiology services requires an expansion of the services on all sites across the group. Having maximised existing equipment usage we will be promoting the need for additional HSE resources as the most cost effective long term solution to delivering a high quality timely service, addressing and integrating both acute hospital and primary care needs.

Continued work on the roll out of the managed clinical and academic networks, a single group RIS/PACs and order coms system will allow for integration of radiology services across the group.

Matching capacity and need will see improvements for primary care, the acute hospitals, the clinical services and ultimately and most importantly our patients.

## Key Achievements 2021

- On line Radiation Protection training in 2021 for all GUH staff.
- MRI Scanner (MRI 1) GUH is now up and running which is reducing inpatient and out-patient waiting lists and providing for a much higher complexity of scan type.
- An increase in patient throughput by 10% since 2020.

## Key Priorities 2022

- CT1 Scanner replacement
- Reduction in outsourcing/insourcing costs
- Radiology Department Accommodation Space
- Development of Merlin Park Outpatient Imaging Department (US, PET, IR, CT)
- Mammography Training
- IT/PACS Support
- Mediweb Replacement
- IR On Call Service Planning
- PET CT Business Case
- Development of Paediatric Radiology Services





# 2

SECTION 2

## *Health & Social Care Professionals*

## Clinical Nutrition & Dietetic Service to Haematology Oncology and Radiotherapy

Patients with cancer are among the most malnourished of all patient groups, with up to 80% receiving multimodal therapy experiencing unintentional weight loss. Unintentional weight loss and muscle protein depletion can effect tolerance to cancer treatments, treatment outcomes and quality of life. Oncology Dietetics aims to maintain and improve the nutritional status of patients undergoing anticancer treatment.

Oncology Nutrition Interventions include dietary counselling to overcome the nutrition impact symptoms of disease and treatment including anorexia, mucositis, xerostomia, nausea, vomiting and altered bowel habit. Oral, enteral and parenteral nutrition support are also provided to patients to

preserve lean mass and optimize nutritional status during treatment. Nutritional Screening is carried out on the inpatient wards, which captures cancer patients at risk of malnutrition on admission.

The Radiotherapy Dietitian continues to provide priority service to Head and Neck Cancer and Oesophageal patients in the Outpatient setting. The aim of regular input with these patients is to prevent malnutrition and admission for feeding and to reduce delays or re-planning of treatment.

In 2021, there were 223 new referrals to the radiotherapy dietician a 28% increase on 2020. 184 new patients were seen with 897 reviews, again a 20% increase on 2020.

### Key Achievements 2021

The Clinical Nutrition and Dietetic Service continued to provide quality care to patients, despite the COVID-19 pandemic including:

- Ongoing multidisciplinary working to optimise delivery of patient care; Dietitian outpatient clinics were increased to twice weekly due to higher demands of head and neck cancer patients, and to allow for nutritional assessment and development of a nutrition care plan for lung cancer patients identified as at risk of malnutrition.
- Dietetic telephone review clinics were commenced to correspond with consultant telephone review clinics.

### Key Priorities 2022

- We aim to develop a pre-treatment leaflet for all Head and Neck Cancer patients, which will be given at patients initial CT SIM appointment. This will provide dietary advice for patients to follow prior to starting radiotherapy in the absence of a Dietitian review.

# Occupational Therapy



**Ciara Breen**  
Interim Occupational  
Therapy Manager  
in charge III



**Elaine Feely**  
Senior Occupational  
Therapist in Radiotherapy  
& Radiation Oncology

Elaine Feely, Senior Occupational Therapist in Radiotherapy and Radiation Oncology supports patients under the overall umbrella of Oncology in a single-handed and challenging role. Due to the competing demands of the role, Elaine focuses most of her time on inpatient care, but does offer a degree of outpatient input.

Occupational Therapy interventions in the inpatient setting often focus on maximising the person's independence, maintaining their quality of life and assisting in discharge planning using a person-centred approach.

## Interventions may include:

- Assessment of activities of daily living, evaluating the impact of cognitive, motor and or sensory limitations experienced by the person with cancer.
- Assessment of seating needs to promote and maintain independence in posture/mobility.
- Assessment of splinting needs to prevent deformity and control pain.
- Assessment of a person's equipment needs to promote independence, maximise quality of life and facilitate home discharge and liaison with community (PCCC) services regarding provision and follow up.
- Interventions and rehabilitation to maximise functional performance in everyday activities/occupations.
- Provision of specialist advice in adapting occupations/activities of daily living to assist patients to cope with their illness e.g. relaxation technique, anxiety management, fatigue management, breathlessness management and maximising patient and family coping skills to facilitate a home discharge.

## Outpatient interventions may include:

- Advice and guidance about home adaptation or equipment requirements
- Off-road driving assessment and onward referral and liaison with on-road providers
- Splinting and management of hand function or other functional issues as a result of peripheral nerve injury or damage
- Supporting the person with cancer to achieve their functional goals in the areas of work, self-care or leisure
- Anxiety and stress management
- Fatigue management and energy conservation
- Assessment and intervention to address cognitive sequelae post cancer treatment.

## Service & Professional Development in 2021

- Occupational Therapy pathway for Cancer patients presenting with metastatic spinal cord compression is at implementation stage with inputs from OTs across multiple areas of the hospital.
- We are continuing to enhance our links with the Occupational Therapy services in Galway Hospice and in Primary, Community and Continuing Care in order to provide a streamlined pathway, and to optimise referral processes among services.

# Health Promotion Service

**Pamela Normoyle**

Health Ireland Lead, Galway & Roscommon University Hospitals

## Summary of 2021 Health and Wellbeing Activity

Actions	Outcomes
3.0 Health Literacy	<ul style="list-style-type: none"> <li>Guiding tool established using the European Clear Communication index.</li> <li>All written communication leaflets are NALA approved.</li> </ul>
3.2 Implement Self Care Programmes	<ul style="list-style-type: none"> <li>Implementation of Healthcare Behaviour Change model "Making Every Contact Count".</li> <li>Type 1 and Type 2 Diabetes Adult Education sessions.</li> <li>COPD clinics in line with National framework.</li> <li>Referral to cardiac rehabilitation programmes for all cardiac risk patients.</li> <li>Prostate cancer information evenings- survivorship programme.</li> </ul>
3.3 Patient Advocate Liaison Service	<ul style="list-style-type: none"> <li>Provision of general information to patients and families.</li> <li>National Patient Experience Survey</li> <li>Supporting butterfly scheme, with the aim to improve patient experience of clients with dementia in acute hospital settings.</li> <li>Supporting roll out of #hellomynameis campaign.</li> </ul>
4.2 Tobacco	<ul style="list-style-type: none"> <li>Recruit new smoking cessation officer for GUHs.</li> <li>Links with National Tobacco Office around key deliverables in 2021.</li> <li>Free NRT offered to HSE staff to support Quit attempts.</li> <li>Introduction and promotion of CHO West Smoking Cessation Service. Complimentary online, text and phone support from dedicated Health Promotion staff.</li> </ul>
4.3.3 Nutritional Standards	<ul style="list-style-type: none"> <li>Patient menus reviewed in line with National policy on food and nutritional care in hospitals.</li> <li>New patient menus established and implemented on both sites.</li> </ul>
4.3.4 Calorie Posting	<ul style="list-style-type: none"> <li>HSE calorie posting policy implemented in GUH</li> <li>Breakfast and snack items implemented in Merlin Park. Awaiting implementation of lunch items.</li> </ul>
4.3.4 Vending	<ul style="list-style-type: none"> <li>HSE Healthy Vending policy implemented on both sites</li> </ul>
4.3.5. Nutrition Assessment	<ul style="list-style-type: none"> <li>Nutrition Screen tool implemented in GUHs.</li> <li>Protected mealtimes established</li> <li>Red Tray initiative continues</li> </ul>
4.4 Active travel	<ul style="list-style-type: none"> <li>HSE Steps to Health (5 week walking challenge)</li> <li>Continued promotion of active travel options, including <a href="http://www.hospitalwalks.com">www.hospitalwalks.com</a></li> <li>Staff survey on Active travel options completed in association with the NTA.</li> <li>Healthy Ireland committee at GUHs in the process of implementing Key deliverables identified in travel survey.</li> <li>Funding received from the NTA to support development of additional bike shelters in UHG and MPUH.</li> </ul>
4.9 Positive Mental Health	<ul style="list-style-type: none"> <li>Promote awareness of supports available &amp; information on positive mental health, stress, addiction and other mental health issues for staff.</li> <li>Digital communication monitors installed in staff canteens in UHG and MPUH, which facilitate the delivery of Health and Wellbeing information to HSE staff.</li> <li>A cohort of staff in GUHs have completed training in mindfulness &amp; stress management.</li> <li>HSE Webinar "Mind Your Wellbeing" provided by Health Promotion and Improvement staff.</li> <li>Virtual choir events promoted as part of National HSE Health and Wellbeing events.</li> </ul>

# Physiotherapy



**Catherine O'Sullivan**

Physiotherapist Manager in Charge III UHG

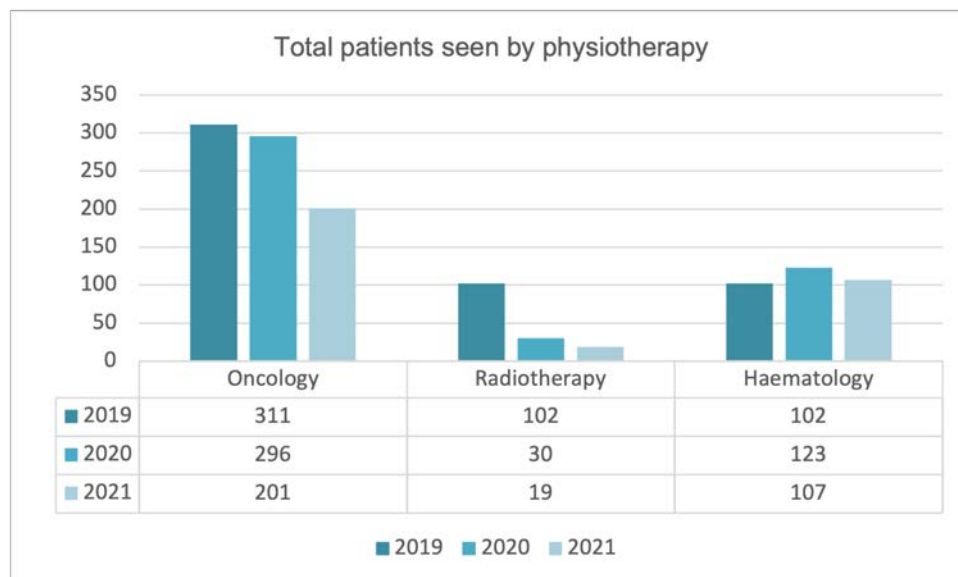
Cancer survivorship begins at the time of diagnosis, continues until end of life, and is referred to as 'living with and beyond cancer'. Physiotherapy plays a key role in the holistic management of patients throughout the cancer journey. The primary goal of rehabilitation is to assist the patient in achieving maximum physical and psychological functioning within the limits imposed by disease or treatment. There is widespread evidence to show the benefits of taking part in moderate levels of exercise throughout a cancer diagnosis and treatment.

In UHG, we provide a cancer rehabilitation service to patients at both ward based level and gym rehabilitation as appropriate. Cancer rehabilitation should be integrated throughout the oncology care continuum and delivered by trained rehabilitation professionals who have it within their scope of practice to diagnose and treat patients' physical, psychological and cognitive impairments. The purpose of rehabilitation is to maintain or restore function, reduce symptom burden, maximise independence and improve quality of life in this medically complex population. Cancer rehabilitation addresses the musculoskeletal, cardiopulmonary and functional impairments expected with cancer, cancer treatment, survivorship, advanced disease and end of life.

We participate in weekly multidisciplinary team meetings with the focus on patient centred goal setting. This is integral in ensuring the safe and timely discharge of patients from the acute setting and aiding patient flow in a busy oncology service.

2021 continued to be a challenging year due to the COVID-19 pandemic. It necessitated the continued reorganisation of outpatient appointments including virtual delivery of service and the reorganisation of inpatient service delivery to limit footfall onto wards. This had a particular impact on the delivery of physiotherapy and the capturing of activity to Radiotherapy patients. The reduced numbers of oncology patients seen in 2021 is directly related to the temporary transfer of oncology service to the Galway Clinic from Jan- Apr 2021.

The physiotherapy service is normally provided by 2.0 WTE Senior staff and 0.5 WTE staff grade. However, the Senior Radiotherapy Post was vacant for most of 2021 due to staff turnover and staff leave resulting in a reduced service. This situation should be resolved early in 2022, allowing us to focus on enhancing our outpatient service again.



## Lymphoedema

Lymphoedema is a recognised side effect of cancer treatments including, surgery, chemotherapy, radiation therapy and endocrine therapies, which can adversely impact the lymphatic system. A chronic, progressive condition, it becomes more complex when left untreated. Lymphoedema can cause swelling, pain, skin changes, cellulitis and reduced function that can be very distressing and adversely affect quality of life. The exact incidence of lymphoedema is unknown in Ireland. It is estimated that more than 1 in 5 women who survive breast cancer will develop arm lymphoedema.

Physiotherapy interventions for lymphoedema consists of exercise, skincare advice, complete decongestive therapy and garment prescription.

The lymphoedema service was curtailed in 2021 both by the COVID-19 pandemic and by the staffing deficits in the department with the resultant loss of lymphoedema skills. We plan to address this in 2022.

## Prostate

Increasing cancer survivorship demands urological expertise in rehabilitation of incontinence and sexual dysfunction, and management of radiation co-morbidities such as haematuria and voiding dysfunction. Prostate Cancer UK Best Practice Pathway Support pathway 2018 reported that 68% of men reported urinary incontinence. This has a major negative effect on quality of life in terms of mental, physical health and social interactions. Often, it can be associated with long-term conditions like skin irritation and skin breakdown, urinary tract infection, falls, and increased hospital stays. 67% of men reported fatigue.

The Prostatectomy Service started in 2011 due to increasing demand for Physiotherapy access for patients who have had radical prostatectomy surgery. Urinary incontinence and erectile dysfunction are two major complications from prostate surgery, treatment for which is mainly comprised of pelvic floor exercises and medication. Physiotherapists with training in continence rehabilitation are best placed to provide training and re-education of the pelvic floor. The prostatectomy service provides opportunity for information, education and treatment once a week at a Joint Nurse/Physio Clinic. Here the Prostate Survivorship CNS and Physiotherapist jointly provide weekly post-op reviews to patients from Galway, Mayo, Roscommon and Sligo. This clinic runs once a week for two hours on a Wednesday afternoon. We hope to introduce a dedicated service with enhanced follow-up in 2022.

## Future needs

The most significant gap in our physiotherapy service at present is in relation to Cancer Rehabilitation & Survivorship services. Cancer Rehabilitation addresses the musculoskeletal, cardiopulmonary and functional impairments expected with cancer, cancer treatment, survivorship, advanced disease and end of life. As per the National Cancer Strategy (2017-2026), there is a significant lack of Cancer Survivorship programmes in Ireland currently with an objective being to develop and implement survivorship care.

We currently do not provide a service to the oncology day ward patients. These patients generally have less disease burden than our inpatient cohort and there is a significant opportunity for us to address the many survivorship issues that they may have. We could provide a cancer survivorship needs assessment for these patients and educational sessions in the day ward for patients to attend as required.

## Colorectal

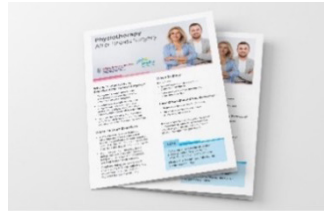
Physiotherapy provides a limited service to colorectal surgery patients, primarily at the peri-operative and immediate post-operative phase. In 2019 physiotherapy were involved in developing a multidisciplinary team (MDT) led enhanced recovery after surgery (ERAS) programme for patients admitted to UHG for elective colorectal surgery. COVID-19 had a continued impact on the operation of the ERAS programme in 2021. Internationally, ERAS is the standard minimum care provided to patients following colorectal surgery. Patients who follow an ERAS program have been shown to have reduced post-operative complications and shorter lengths of stay. With the initial plan to integrate an ERAS program with the traditional post-operative pathway for Ms Hogan's patients, the long-term goal is to expand across all colorectal and GI surgery across UHG.

## Breast Cancer

Physiotherapy provides a service to patients during their breast cancer journey. As an inpatient, the focus is primarily on post-operative shoulder exercises and lymphoedema risk reduction. Outpatient treatment is directed towards musculoskeletal dysfunction, scar tightness and shoulder rehabilitation.

## Equal access to Physiotherapy post Breast Surgery

This project was completed as part of the QI in Action programme in GUH. Following patient feedback highlighting a lack of physiotherapy we decided to undertake a quality improvement project, as part of the QI in Action programme. Gaps in service were identified through data collection from June-Sept 2019. The intervention consisted of the creation of a new leaflet and video with up to date evidence based advice. This ensured that both day case and overnight breast patients could access physiotherapy in a more innovative form. The video has been made available on the Saolta YouTube channel and can be accessed on [www.bit.ly/2TcIGNY](http://www.bit.ly/2TcIGNY)



## Haematology

Haematology services in Galway have seen significant increases in patient numbers including a 3 fold increase in stem cell transplant patients in the past 5 years. There are approx. 100-120 patients yearly now receiving their transplant who would benefit from pre and post- transplant multi-disciplinary team input with physiotherapy playing a huge role in supporting these patients' recovery. This involves assessing patients' functional level pre transplant, prescribing them an appropriate exercise programme tailored to their needs with subsequent follow up 6-12 weeks post-transplant. The dependency level of patients on the haematology ward is continually increasing. This is largely due to the significant advances in treatments meaning patients are now getting treatment well into their 80s and 90s. Physiotherapy is vital for these more frail patients to ensure that they get back to their pre-treatment functional levels.

# Oncology Social Work

**Rachel Macken** Senior Radiation Oncology Social Worker  
**Maire Lardner** Medical Social Worker, Medical Oncology  
**Patricia Luby** Medical Social Worker, Medical Oncology

Attending for oncology treatment is challenging for patients and their caregivers. Oncology Social work seek to support those affected by cancer in managing the physical, emotional, spiritual and practical hurdles they may encounter after a diagnosis. Our oncology Social work team specialise in caring for cancer patients and connect them to the resources they need to help them navigate the health and social care system and remove barriers to their care. Oncology social workers provide psychosocial assessments and therapeutic support to patients and their families related to illness adjustment, coping mechanisms and advocacy recommending resources to meet the patients' comprehensive needs.

There can be a lot of uncertainty and distress for a person when a diagnosis of cancer is presented. It evokes various elements of coping mechanisms that may not have previously been consciously used. Sometimes the physical, emotional and social distress of a diagnosis can be overwhelming and patients may benefit from exploring that distress with a medical social worker to help elicit those coping strategies that are sometimes forgotten. Research has shown that those who are able to adapt or manage effective coping strategies demonstrate

lower levels of depression and anxiety in their treatment (Huberty, 2014; Gaston-Johansson et al, 2013; National Cancer Institute,2012).

Societal restrictions due to the pandemic affected the formal and informal means of support oncology patients previously received. Casual conversations within waiting areas and treatment rooms was diminished and the peer support that provided was lost. Family and support persons were unable to attend or had to wait in a car outside of the hospital or treatment environment further isolating the journey of cancer treatment. The existing social isolation of a cancer diagnosis was further compounded by real societal isolation for the protection of the overall public. Within our team, we endeavour to support oncology patients on practical and emotional issues related to their treatment and care from the time of their diagnosis and along their treatment journey. The COVID-19 pandemic has greatly impinged on the lives of our patients over the past two years necessitating multiple changes on their part over and above the trauma of diagnosis. Inpatient referral rates over three years demonstrate a year on year increase in demand for social work support and intervention.

Year/ Speciality	Oncology	Haematology	Radiotherapy	Total
2019	242	105	75	422
2020	280	111	88	479
2021	344	141	102	587

The National Cancer Control Programme approved an additional social work post in 2021 for Psycho-oncology care. Psycho-oncology care has been a mainstay and focus of all oncology social work intervention since its inception as a service and the enhancement of psycho-oncology teams nationally is a welcome step forward. This post is currently being processed within Galway University Hospitals and it is hoped it will be in place in 2022.

Notwithstanding the challenging environment of the past few years, it has been of vital importance to engage and sustain ongoing education and training within our team. Continuing professional development is at the forefront of best practice. Throughout and 2021 oncology social workers were involved in and attended the following:

- RCSI Training on health and well-being
- Irish Cancer Society- Life and Cancer course
- Family Therapy workshops
- Assisted decision-making (capacity) ACT training

and information.

- Dignity at work training
- Continued learning and in-house Journal Club presentations within the medical social work department
- Safeguarding vulnerable adult training
- Trauma and loss training

Whilst the oncology social work team may be small in number, our commitment to supportive and meaningful intervention to our patients and their families is substantial and we are always seeking new and innovative ways to engage and offer compassionate and empathetic care. We look forward to further developing our team and service into 2022 and the years ahead.



# Speech and Language Therapy

**Geraldine Keenan** Speech & Language Therapy Manager  
**Karen Malherbe** Senior Speech and Language Therapist  
**Sandra Brandon** Senior Speech and Language Therapist

## Ear, Nose, Throat, and Maxillo Facial Service Overview: 2021

Speech and Language therapy involvement in both Ear, Nose and Throat (ENT) and Oral Maxillo Facial services (OMFS) is a well-documented requirement of a best practice service. This is the mark we strive to achieve as a centre of excellence at Galway University Hospitals.

In ENT, dysphonia and dysphagia are very common complaints reported in Outpatient clinics, requiring further assessment and management by SLT to assist with diagnosis. In head and neck cancer patients, again difficulties with voice and swallow can exist before, during, and after surgery and during post-operative recovery. Thus the comprehensive service needs to be available for inpatient and outpatient referrals. Clinically, this includes managing anatomical changes to the oral, pharyngeal and laryngeal areas, as well as managing physiological or functional changes. It also includes emotional and psychological support through what can be a difficult and frightening cancer trajectory affecting areas of daily life, which are often taken for granted. Speech Therapy attends weekly ward rounds for a more direct review of patients after surgery and consultants' plans and prognoses are discussed.

In OMFS, the current inpatient and fledgling outpatient service tends to be more oncology based: best practice guidelines from international professional bodies recommend the input of an SLT for speech, voice and swallow before, during, and after surgery and post-operative recovery. It is also worth noting that structural changes to oral cavity and facial features can be a life-long challenge for the patient, with resulting influence on SLT service provision. The ward rounds with OMFS remains a service goal. This will provide for a more direct review of patients after surgery and/or consultants' plans and prognoses.

SLT will also look to re-attend the weekly Head and Neck Oncology MDM where treatment plans for patients from most corners of the west of Ireland are presented and discussed for evidence based treatment decisions, with ENT, Oral Maxillofacial Surgery, Radiation and Medical Oncology as well as Radiology and Pathology consultants.

Dysphagia is perhaps the most researched area to reflect on for service provision: it leads to nutritional deficiency, weight loss, and prolonged unnatural feeding and has a major potential risk for aspiration. This has a significant negative impact on the patient's entire quality of life (Ihara et al., 2018).

Currently, the ENT / OMFS SLT service is a specialised service established to improve communication and feeding, eating, drinking and swallowing (FEDS) outcomes for patients under the consultants relevant to this speciality. There is also a strong clinical link with Radiation Oncology SLT from whom this service was only recently separated. Input may include prevention, early detection and management of communication and/or FEDS disorders that may arise following either a diagnosis of cancer and/or secondary to chemo radiotherapy (CRT) treatment. Pathways to refine service provision for inpatients and outpatients with and without an oncology diagnosis are ongoing.

Survivorship programmes in Ireland currently with an objective being to develop and implement survivorship care.

We currently do not provide a service to the oncology day ward patients. These patients generally have less disease burden than our inpatient cohort and there is a significant opportunity for us to address the many survivorship issues that they may have. We could provide a cancer survivorship needs assessment for these patients and educational sessions in the day ward for patients to attend as required.

### Service activity Levels

#### OMFS Inpatient Referrals

All	2017	2018	2019	2020	2021	Total
	28	29	32	30	35	154

#### ENT Inpatient Referrals

All	2017	2018	2019	2020	2021	Total
	35	19	36	25	28	143

Each patient referred to SLT will receive an average of 5 contacts from SLT. Therefore, total SLT contacts during period 2017-2021 is 1,485 contacts (297 x5 ).

## Service achievements in 2021

### Service:

- Continued phone support to patients post laryngectomy. This included troubleshooting problems and triaging if ENT review is required.

### Education:

- Virtual education on tracheostomy and laryngectomy care provided to nursing, MDT and SLTs based in both hospital and community care settings.
- The COVID-19 pandemic had an impact on Laryngectomy training days but phone support continued.

## Service quality Improvements Priorities:

### ENT inpatients:

Speech and Language therapist involvement in pre-op counselling with consultant and CNS to assist with support for speech, voice and swallow changes post op.

Best practice (ASHA, 2021; RCSLT 2019) indicates that all patients should receive a pre-operative speech, voice and swallow evaluation of swallowing prior to commencing treatment. This is essential to provide a baseline of swallow function, to guide treatment of dysphagia by providing an objective picture of the patient's anatomy and physiology, to assist with planning for expectations and goal setting post-surgery.

More consistent SLT involvement required.

### ENT outpatients:

Development of dedicated SLT available to ENTs to jointly assess for speech or voice. Currently, a review on request system is in place. This is not ideal for either the patient, SLT or ENT as the SLT may not be available, there may be a time delay and often another appointment is rescheduled with SLT at a later date. This has a time and financial cost both for the ENT, SLT but also for the patient. In addition, given the wide geographical region of Saolta care, patients are often travelling long distances to attend. A one stop joint SLT and ENT clinic would remediate the problem resulting in timely and effective care; However, this cannot be achieved without the addition of 1 WTE senior SLT post.

A dedicated additional SLT for ENT outpatient services would improve outcomes for patients

presenting with chronic dysphonia (voice problems/ hoarseness) and dysphagia (swallowing difficulties). This service would allow patients with chronic dysphagia to access immediate SLT information and initial diagnostic therapy exercises / techniques improving wait times for ENT services, PCCC services and patient outcomes. In terms of dysphagia, a dedicated OPD SLT would support Primary Care SLT management of complex cases through the provision of routine review clinics. In time, these clinics may evolve to include Fiberoptic endoscopic evaluation of swallowing (FEES) assessments, which is a gold standard instrumental assessment of swallow function.

### OMFS inpatients:

Speech and Language therapist involvement for pre-op counselling with consultant to assist with support for speech, voice and swallow changes post op.

Best practice (ASHA, 2021; RCSLT 2019) indicates that all patients should receive a pre-operative speech, voice and swallow evaluation prior to commencing treatment. This is essential to provide a baseline of swallow function, to guide treatment of dysphagia by providing an objective picture of the patient's anatomy and physiology, to assist with planning for expectations and goal setting post-surgery.

Again more consistent SLT availability required.

### OMFS outpatients:

Development of a dedicated SLT to support Oral Maxillo Facial Services for review and ongoing input for swallow functions and oral morbidities, which are likely to deteriorate, especially post Chemo Radiotherapy with incomplete recovery at 3 months post treatment (Ihara et al., 2018; Malandraki & Hutechson, 2018). Radiation Oncology SLT service provision has been extended until 6 weeks, this evidence indicates that this specialised SLT service should be providing longer periods of monitoring/ intervention as required. It should be noted this is not to replace vital PCCC SLT services, but as additional or specialist support for high risk / complex cases.

An additional improvement would be investment in specialised training to upskill additional staff in other instrumental assessments e.g. Fibreoptic Endoscopic Evaluation of Swallowing, Endoscopic Evaluation of Larynx.

Consideration could be given to a proposed dedicated SLT survivorship post to bridge gaps in service provision. This dedicated post would greatly assist in surveillance, prevention and detection of chronic dysphagia, provide interventions for long term and late effects on speech, voice and swallow function and coordinate services between Rad Onc SLT specialists, ENT and OMFS SLTs and primary care SLTs

# Radiation/Oncology Service Overview 2021

## Service Overview

**Dysphagia** is a very common complaint of head and neck cancer patients and can exist before, during, and after chemo radiotherapy. It leads to nutritional deficiency, weight loss, and prolonged unnatural feeding and has a major potential risk for aspiration. This has a significant negative impact on the patient's entire quality of life.

The Radiation Oncology SLT service is a specialised service established to improve communication and feeding, eating, drinking and swallowing (FEDS) outcomes for patients undergoing chemo

radiotherapy treatment. This is achieved through prevention, early detection and management of communication and/or FEDS disorders that may arise following either a diagnosis of cancer and/or secondary to chemo radiotherapy (CRT) treatment. An inpatient service is provided to patients with a diagnosis of cancer. However, the outpatient service is restricted to patients with a diagnosis of Head and Neck Cancer.

## Service Activity Levels

The following is a breakdown of referrals to SLT in Radiotherapy in the period 2017-2021:

Radiotherapy Outpatient referrals	2017	2018	2019	2020	2021	Total
	93	113	114	91	93	504

Radiotherapy Inpatient referrals	2017	2018	2019	2020	2021	Total
	40	51	45	35	35	171

Each patient routinely receives a mean of 5 sessions during radiotherapy input which equates to 2,520 outpatient appointments 855 inpatient contacts.

Total SLT activity levels from 01/01/2017 until 31/12/2021= 3,375 SLT contacts.

## Service achievements in 2021

### MDT working

- Emerging MDT working through attending weekly MDT inpatient Radiotherapy meetings.
- Attendance at weekly MDM is indicated but staffing during 2021 did not permit this

### Education:

Patient education delivered consistently at start of Radiotherapy treatment:

- Regarding the role of SLT in Radiotherapy care
- Impact of radiotherapy on speech, voice and swallow.
- Commence prophylactic swallow exercises
- Educate regarding red flags i.e. when SLT review is

indicated.

- Overall aim to promote patient education and autonomy in their care during Radiotherapy.
- Staff education sessions delivered to Physicians, Nursing and Radiation Therapy Staff:
- Regarding the role of SLT in Radiotherapy care
- Impact of radiotherapy on speech, voice and swallow.
- Overall aim of promoting interdisciplinary communication with the overall goal of promoting holistic patient care.

### Service:

- High level of SLT contact in the absence of a dedicated SLT post in Radiotherapy.

## Service Quality Improvements Priorities:

### Earlier input to patients

i.e. At Pre-Treatment phase of CRT treatment. Aim is to educate patients re: (i) side effects of chemoradiation on their FEDS and communication (ii) prophylactic swallow exercises to prevent chronic dysphagia (Messing et al., 2017). Current staffing resources mean that this does not routinely occur.

### More consistent service provision

i.e. high risk patients should be seen weekly. Currently, they are seen fortnightly/ every 3 weeks.

### Longer follow up post completion of CRT

i.e. 6 week follow up period. This was extended from 2 week follow up period. Patients can now access specialised SLT monitoring and intervention for a critical period post completion of CRT. However, this change in service provision has required at least one additional contact per patient i.e. additional 90 contacts per year.

National and international **Cancer research:** Current staffing minimises SLTs ability to participate in important Cancer research.

### Access to instrumental assessment

at baseline (prior to commencing CRT): Best practice (ASHA, 2021; Arrese & Hutcheson, 2018) indicates that all patients should receive an instrumental objective evaluation of swallowing prior to commencing chemo radiation. This is essential to provide a baseline of swallow function, to guide treatment of dysphagia by providing an objective picture of the patient's anatomy and physiology, to support decision making regarding the need for prophylactic tube feeding. Currently, patients are not receiving this assessment unless identified as very high risk of dysphagia or aspiration. In addition, funding is required for specialised training to up skill additional staff in other instrumental assessments e.g. Fibreoptic Endoscopic Evaluation of Swallowing.

### Outreach post dedicated to SLT Radiation oncology:

Swallow functions and oral morbidities deteriorate significantly following CRT with incomplete recovery at 3 months post treatment (Ihara et al., 2018; Malandraki & Hutcheson, 2018). Whilst our current service provision has been extended until 6 weeks, this evidence indicates that this specialised SLT service should be providing longer periods of monitoring/intervention as required. To provide this level of service provision, there is need for an additional 1.0 WTE Speech and Language Therapist.

### Survivorships SLT Radiation/Oncology:

Chronic dysphagia may not present until months or even years post chemoradiotherapy (Hutcheson et al., 2012). Currently, SLT services within Primary Care cannot meet the need to monitor these patients. This is secondary to absence of specialised SLT training in the area of Radiation/Oncology and in some counties an absence of SLT service for patients with dysphagia.

A quality improvement for the service would be to progress a dedicated SLT survivorship post to bridge this significant gap in service provision. This dedicated post would greatly assist in surveillance, prevention and detection of chronic dysphagia, provide interventions for long term and late effects on speech, voice and swallow function and coordinate services between Rad Onc SLT specialists and primary care SLTs.

The dedicated SLT survivorship post will be linked with the Radiation/Oncologists at GUH to provide monitoring over a 5 year period in line with the National Cancer Control Programme.

# 3

SECTION 3

## *Cancer Support Groups*



# Cancer Care West



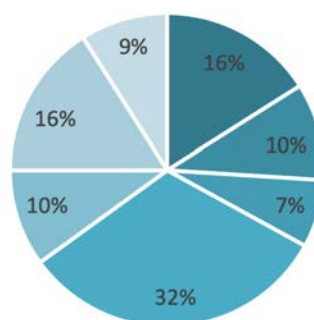
Cancer Care West is a registered charity, dedicated to supporting cancer patients and their families in the west and northwest of Ireland. The Charity's principal aim is to enhance cancer patient care and wellbeing and to provide support to cancer patients during and after their treatment. This is achieved through the provision of residential accommodation at Inis Aoibhinn, the Cancer Care West lodge on the grounds of University Hospital Galway, psychological and support services located in our cancer support centres in Galway city and Letterkenny, Co Donegal, in-hospital patient psycho-oncology counselling and also through our Patient & Family Support Programme. In 2021, Cancer Care West provided support to over 2,300 people. Cancer Care West's vision is that no one will go through cancer alone.

## Inis Aoibhinn Residence

Located at University Hospital Galway, Inis Aoibhinn has 33 twin bedded en-suite rooms where each patient can stay with a family member or friend, for the duration of their Radiotherapy treatment, usually 5-7 weeks. Radiotherapy treatment is given each day from Monday to Friday, and patients stay at Inis Aoibhinn during the week and return home each weekend. Morning and evening meals are provided complementary throughout each residents stay in addition to emotional and practical supports from our Inis Aoibhinn nursing and support staff team. In 2021, Inis Aoibhinn accommodated 300 cancer patients and provided over 6,750 bed nights to patients and family members.

In 2021 life in the lodge continued to be quite a bit different from pre-pandemic days with all social areas including the communal dining room and sitting rooms closed. However, thanks to the hard work and commitment of our staff, no COVID-19 breakouts occurred at the residence and patients were cared for in safe and comfortable

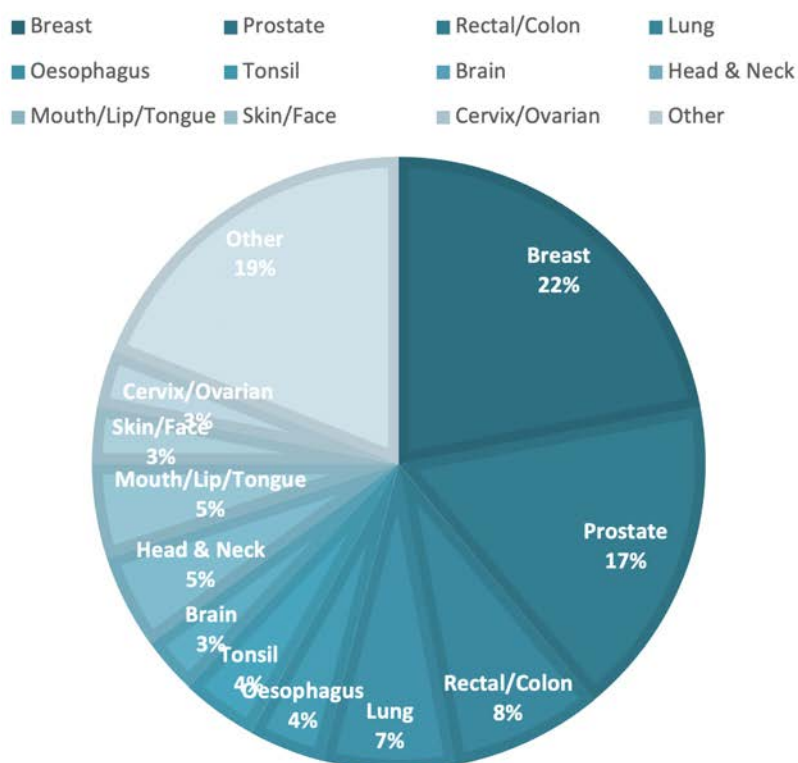
Breakdown by county



- Donegal
- Galway
- Leitrim
- Mayo
- Roscommon
- Sligo
- Others

surroundings. The residential service was suspended for one week in May when Inis Aoibhinn was closed following a Cyber Attack on the HSE computer systems. While the attack did not directly affect the Cancer Care West systems, it caused the suspension of radiotherapy services so our patients were not in residence during this time. Following on from this closure we worked with our Saolta colleagues in the radiotherapy department to get patients back on track and to prevent further delays for new patients, working longer days and keeping the lodge open at weekends to facilitate this catch-up.

## BREAKDOWN BY DIAGNOSIS



## Cancer Care West Support Centres: Galway and Donegal

During this our second year of working in a pandemic to provide psychosocial community support to cancer patients and their families, we once again had to regretfully close our doors, both in Donegal and Galway, and move exclusively to remote working for the first few months of the year. This was again a very challenging time but with the advent of the vaccine programme, our staff recommenced face-to-face services and our blended service then continued for the rest of the year.

In 2021, our support centre in Galway provided 6,800 sessions to 1,200 people affected by cancer. This total includes 2,387 in-person visits to the centre with 4,413 sessions provided remotely. Clearly, our remote services are providing a huge benefit to cancer patients as during the year we provided 1,847 on-line psychology sessions and 1,139 oncology nursing support calls as well as remote physio, yoga, benefits advice and a list of classes and support groups.

Our Letterkenny Support Centre commenced 2021 similar to that of 2020. Initially only in a position to offer a remote service due to government Covid-19 restrictions, things improved quickly with the Psycho-Oncology and Lymphoedema services both returning on a face-to-face basis mid-February.

Throughout the year, the Centre provided support to 237 clients of which 152 were first time users and the Centre was accessed in person/remotely almost 1,200 times by cancer patients and their loved ones.

In total our two centres, in Galway and Donegal supported 1,345 people affected by cancer involving more than 8,000 interactions by Cancer Care West cancer support specialists. Also notable is the increase in outreach we have achieved using online services. In total, we broadcast six live and interactive webinars over the year on a range of cancer related topics, we made four pre-recorded interviews with oncology specialists available on social media and we saw a considerable improvement in our social media engagement statistics achieving 62,000 Tweet impressions and 2.4million Facebook impressions.

Our Support Centre team also continued to offer Psycho-Oncology support services to Galway University Hospitals and the Galway Clinic ensuring that cancer patients and their staff working at the hospital have access to a Cancer Care West clinical psychologist experienced in supporting people with cancer on a daily basis. During 2021, 574 psychological consultations were provided to 281 cancer patients by the Charity's Psycho-oncologists.

Number of Client Visits	Number of clients	Remote sessions	Face to Face sessions	In Hospital Visits
8,574	1,345	4,871	3,703	574

## Patient And Family Support Programme

Families who have family members undergoing long-term cancer treatment at University Hospital Galway (UHG) often struggle to fund accommodation (apartment / B & B) in Galway while accompanying them during their treatment. Since 2013, Cancer Care West has offered support to these families through our Patient and Family Support Programme and during 2021, we supported 11 such families through this fund.

### Key Achievements 20/21

#### COVID-19 and Remote Working

As with all organisations, the focus of Cancer Care West in 2020/2021 was the development and implementation of all protocols and procedures with regards to the prevention of COVID-19 outbreaks in our facilities. Significant work was undertaken to implement the HSE guidelines augmented by our own actions and as a result there were no COVID-19 outbreaks associated with our premises or services. With the closure of our face-to-face services, our three core services of oncology information and advice, psychological counselling, rehab and survivorship courses were redesigned so they could be delivered remotely. Our staff were trained up in the new technology and our IT support systems upgraded to cope with the demand. As a result, the majority of our services continued to be available throughout the two years providing vital support to a very vulnerable cohort. While we would never want to replace our personal services, many of the new remote offerings will be maintained providing support to people remotely located or otherwise unable to travel to our centres.

#### Children United in Bereavement Support

One of the main highlights of the year was the development of the Children United in Bereavement Support (CUBS) programme, an 8-week online intervention for children aged 7 to 12 whose parent has died from cancer. The programme is focused on helping children navigate the bereavement experience so that they may foster adaptation from their grief, build an evolving relationship with their deceased parent and develop resilience. The overall aim is to produce a robust, evidenced-based therapeutic programme driven by feedback from the children and parents who have availed of the programme.

#### Multiple Myeloma Intervention Programme

A second important clinical initiative was the launch of a collaborative research project with the haematology department at University Hospital Galway to develop an intervention for Multiple Myeloma patients, which has both a psychological and physical rehabilitation element to it. This has been funded by the NCCP and the delivery of the first six-week pilot project was completed in 2021. Funding was secured for a research assistant to work on this project and this will be available by summer 2022.

### Key Priorities for 2022

#### Alliance of Community Cancer Support Centres and Services

The Alliance of Community Cancer Support centres and services is an initiative of the National Cancer Control Programme (NCCP) whose aim is to ensure safe and quality services are available across all community cancer support centres to an agreed standard. Cancer Care West has already completed an assessment for membership of this alliance, which was successful. The alliance will be launched in April 2022 and the charity will be a full member and will prioritise the resulting work streams.

#### Children's Psychosocial Services

The Children, Adolescents and Young Adults (CAYA) Model of Care (MoC) is currently being developed by the NCCP. Part of this model is the development and expansion of regional Psycho-Oncology services for children and their families. Cancer Care West is an integral part of this model, given its expertise in delivering children's services over the past decade. This MoC will be launched in Autumn 2022 and the charity will focus on developing and implementing the agreed recommendations.

#### SAOLTA MCAN Infrastructure Project

The Saolta Managed Clinical and Academic Networks (MCAN) project enables a collaborative approach to providing care, with hospitals and specialities working together to improve quality and outcomes for patients. The Cancer MCAN was established in 2020 and works closely with individual hospitals to develop and implement strategy, group-wide policies and clinical pathways to ensure improved cancer services across the Saolta region. Cancer Care West has committed to supporting the Cancer MCANs key objective to deliver a cancer centre and ambulatory cancer centres across the network, as per the National, Development plan 2021-2030 and will be advocating strongly for its timely delivery.



## University Hospital Galway Letterkenny University Hospital

The Irish Cancer Society Daffodil Centres are hospital based local cancer information and support centres.

In these centres, enquirers will find cancer nurses and trained volunteers on hand to answer cancer related questions, to provide a confidential listening ear and to provide information on everything from local support groups to help for the travel or financial problems cancer can create.

The Daffodil Centres are open to the public and all are welcome whether they have a cancer diagnosis, are worried about cancer, are visiting on behalf of a friend or relative or are a healthcare professional looking for the information and support for patients/clients. An appointment or referral is not necessary and the Cancer Nurse will take the time to listen and provide tailored information, advice and support.

The Cancer Nurses provide free and easy to understand information on

- Cancer types.
- Tests and investigations used to diagnose cancer.
- Cancer prevention and early detection.
- Screening and early detection of cancer.
- Cancer treatments and side effects.
- Local cancer support services.
- End of life services.
- Life after cancer treatment.
- Financial and practical supports.

Three qualified Irish Cancer Society Cancer Nurses and two teams of specially trained volunteers staff the Daffodil Centres in University Hospital Galway (UHG) and Letterkenny University Hospital (LUH).

Both Daffodil Centres have strong working relationships with their hospitals, which builds a successful partnership between the Irish Cancer Society and the Saolta Group.

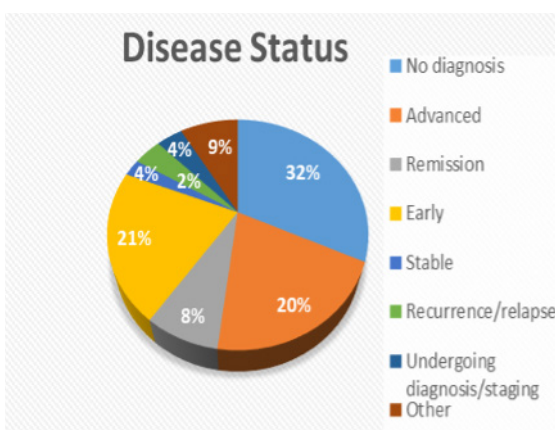
## Daffodil Centres Activity

### University Hospital Galway

- The total number of enquirers was 1007
- 44% of enquirers were in contact for the first time
- 25% of enquirers were referred by healthcare professionals
- The majority of enquirers were female (80%)

### Primary Cancer Type

- 18% Breast
- 7% Lung
- 5% Bowel
- 5% Head and Neck
- 4% Oesophageal

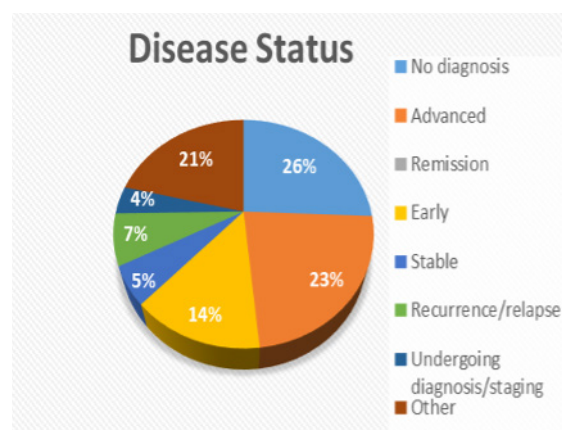


### Letterkenny University Hospital

- The total number of enquirers was 277
- 57% of enquirers were in contact for the first time
- 25% of enquirers were referred by healthcare professionals
- The majority of enquirers were female (76%)

### Primary Cancer Type

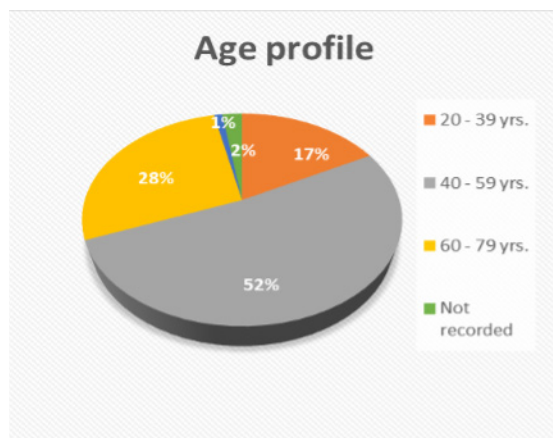
- 25% Breast
- 7% Bowel
- 6% Prostate
- 6% Lung
- 4% Ovarian



## University Hospital Galway

### Type of Enquirer

- 68% of enquirers were people with cancer or their family and friends
- 28% of enquirers were healthcare professionals within the hospital, seeking information on behalf of their patients/clients
- 2% of enquirers were seeking information on cancer prevention



### Subject of Enquiry – Top 5

1. Emotional support
2. Cancer treatments and side effects
3. Hospital and community health services
4. Irish Cancer Society services
5. Symptom management

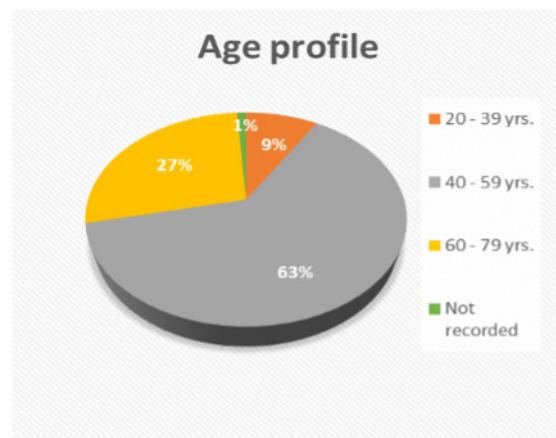
### How Enquiry was dealt with – Top 5

1. Listening/Emotional support
2. Referred to services within the hospital
3. Referred to services within the community
4. Referred to Irish Cancer Society services
5. Information booklet/leaflet

## Letterkenny University Hospital

### Type of Enquirer

- 74% of enquirers were people with cancer or their family and friends
- 22% of enquirers were healthcare professionals within the hospital, seeking information on behalf of their patients/clients
- 3% of enquirers were undiagnosed with symptoms)



### Subject of Enquiry – Top 5

1. Emotional support
2. Cancer treatments and side effects
3. Hospital and community health services
4. Irish Cancer Society services
5. Practical support and advice (equipment/childcare/travel)

### How Enquiry was dealt with – Top 5

1. Listening/Emotional support
2. Information booklet/leaflet
3. Referred to a cancer support centre/group
4. Referred to services within the hospital
5. Referred to Travel2Care

## Patient Programmes and Services:

### Chemotherapy Education Programme – Understanding Chemotherapy

A recognised and established education programme provided by Cancer Nurses in Daffodil Centres throughout the country, this group educational session is for patients and families about to start chemotherapy. The session focuses on providing the right tools and knowledge to cope with chemotherapy and its side effects. Daffodil Centre Cancer Nurses deliver these sessions in group sessions face to face or online via Microsoft Teams.

### Online Chemotherapy Education Programme

In response to the suspension of the normal group education sessions as a result of COVID-19, a telephone referral service was set up initially to enable health care professionals to refer enquirers for telephone Chemotherapy Education advice and support. This was followed by setting up hospital-specific and generic online chemotherapy education sessions. The generic sessions provide information recommended by all hospitals and do not provide hospital-specific guidelines in relation to the management of side effects.

The hospital-specific sessions are organised as required by the Daffodil Centre Cancer Nurses while the generic chemotherapy education programmes are conducted twice weekly by a team of Daffodil Centre Cancer Nurses throughout the country.

### LACES – Life and Cancer – Enhancing Survivorship

This is a patient education workshop that has been jointly created by the National Cancer Control Programme (NCCP) and the Irish Cancer Society. The intention is to bridge the gap in services between the end of active treatment and potentially, suitable longer term support.

The Life and Cancer – Enhancing Survivorship (LACES) workshop supports adult patients who have finished treatment or are settled into maintenance therapy and living well with advanced cancer. This includes patients who are post-surgery, post radiation

therapy, post the acute phase of their chemotherapy treatment and patients with advanced cancer, who have discontinued treatment or who are on ongoing treatment. The workshop allows patients to access appropriate information and signposting to improve their quality of life after cancer. The focus is on health and well-being, enhancing the use of community supports and survivorship programmes. The delivery of workshops using online platforms commenced in June 2021.

### Remote Counselling Service

The Irish Cancer Society developed a new model for its delivery of professional counselling to ensure that those who are unable to access face-to-face counselling due to COVID-19 containment measures are able to access the care they need.

Irish Cancer Society remote counselling is available to all those affected by a cancer diagnosis, even those who have lost a loved one to cancer. The Society works with adults, children and teenagers using accredited and qualified counsellors and therapists.

Patients and family members can avail of counselling in a recognised Cancer Centre nearest to them or can be referred by the Daffodil Centre Nurses to a counsellor for online or phone sessions.

### Volunteer Driver Service

Our Volunteer Driver Service provides transport for cancer patients to and from their hospital chemotherapy treatments. Patients must be attending one of the hospitals participating in the programme and must be referred by the hospital. University Hospital Galway and Letterkenny University Hospital are participating hospitals. As well as our chemotherapy transport service, we offer radiotherapy transport service from Donegal to Galway for patients who are staying for the full week in Inis Aoi bhinn.

In 2021, we accommodated 369 bookings from Letterkenny and 368 bookings from UHG.



# 4

SECTION 4

## *Cancer Research and Developments*

## Cancer Research at Saolta – University of Galway

Cancer is a strategic research priority for the College of Medicine, Nursing and Health Sciences at the University of Galway, in partnership with Saolta. Cancer research engages a wide variety of basic, translational, clinical, and healthcare researchers across the University and regional hospitals. Translational and clinical research trials are integrated with the HRB-Clinical Research Facility through the Advanced Therapies and Cancer cluster.

University of Galway, as the academic partner of the Saolta Cancer MCAN, is committed to supporting the bid to become an accredited OEI comprehensive cancer centre that delivers cancer care underpinned by research, innovation education and healthcare training.

### Cancer Research Awards and Achievements

Year	Award Details	Awardee (PI/Mentor)
2021	Poster merit award, IACR Annual Meeting - RRM2 and CDC6 are novel effectors of XBP1-mediated endocrine resistance in ER-positive breast cancer cells	David Barua (Sanjeev Gupta)

### Cancer Research Awards and Achievements

Year	Degree	Thesis Title	Student (Supervisor)
2021	PhD	Molecular Impact of Human Endogenous Retrovirus K (HERV-K) on Breast Cancer Progression	Dr Dana Bhattacharyya (Dr Sharon Glynn)
2021	MD	Application of genetic profiling to thyroid cancer risk and states	Dr Patrick Owens (Prof Aoife Lowery)
2021	PhD	Current and potential diagnostic modalities in the detection and management of breast cancer	Dr Brian Moloney (Dr Roisin Dwyer, Prof Michael Kerin)
2021	PhD	Investigating the Role of Amplified Centrosomes in Tumourigenesis of Breast Cancer	Dr Anu Prakash (Dr Emer Bourke)

### Cancer Research Events

Date	Event	Convenor(s)
February 2021	Biseach Initiative Symposia	Dr Emer Bourke, Prof Michael Kerin
May 2021	International Workshop on Nitric Oxide and Cancer: Special Focus on the Tumor Microenvironment	Dr Sharon Glynn
September 2021	Freyer Cancer Symposium	Prof Michael Kerin
October 2021	Irish Society of Surgical Pathology Meeting	Prof Sean Hynes
November 2021	Dedication to Dr Anna O'Coinne	Prof Michael Kerin

## Developments and Achievements



### July 2021

Undergraduate cancer research students at the Lambe Institute. The HRB, Wellcome Trust, and National Breast Cancer Research Institute funded medical and Science students.



### November 2021

Visit of An Taoiseach Micheál Martin TD to the Lambe Institute to dedicate a research facility to Dr Anna O'Coinne, founding member and Honorary President of the National Breast Cancer Research Institute.

L to R: Professor Tim O'Brien, Dean College of Medicine, Nursing and Health Sciences, University of Galway; Caroline Loughnane, Chairperson National Breast Cancer Research Institute; Professor Ciarán Ó hÓgartaigh, President University of Galway; An Taoiseach Micheál Martin TD, and Professor Michael Kerin, Director, Saolta Cancer MCAN.

<p><b>Sir Peter Freyer Symposium   Cancer Session</b> Saturday, September 4<sup>th</sup> 2021</p> <p>Introduction Minister Stephen Donnelly   Minister for Health</p> <p>10.00am Professor Liam Gallagher   Professor of Cancer Biology, University College Dublin <i>Potential for an All Island Cancer Research Initiative</i></p> <p>10.15am Professor Mark Lawler   Chair in Translational Cancer Genomics, Queen's University Belfast <i>The Impact of COVID: How We as Europeans Can Be Part of the Recovery and Improve the Outcome from Cancer</i></p> <p>10.30am Professor Roisin Connolly   Chair in Cancer Research, University College Cork <i>OECD Accreditation - How Important is it and How is it Run?</i></p> <p>10.45am Professor Risteárd Ó Laoide   Director of the National Cancer Control Programme <i>National Cancer Control Programme and COVID Recovery</i></p> <p>11.00am Dr Terri McVeigh   Consultant Clinical Geneticist, The Royal Marsden NHS Foundation Trust <i>Genetics, Genomic Profiling and Personalised Therapy</i></p> <p>11.15am Professor Michael Kerin   Professor of Surgery, Saolta-NUI Galway Cancer MCAN Director <i>Comprehensive Cancer Care for the Saolta Region</i></p> <p>12.00pm <b>SIR PETER FREYER MEMORIAL LECTURE</b> Dr Mike Ryan   Executive Director of WHO Health Emergencies Programme <i>Impact of COVID19 on other Diseases, Health Service Delivery and Disease Control Objectives</i></p> <p>Closing Remarks   Professor Ronan O'Connell   RCSI President</p>		
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### September 2021 -

Sir Peter Freyer Cancer Symposium, opened by Stephen Donnelly TD, Minister for Health.

# National Breast Cancer Research Institute



NATIONAL BREAST CANCER  
RESEARCH INSTITUTE

Based at the Lambe Institute, University of Galway, The National Breast Cancer Research Institute is a national charity that funds a comprehensive research programme led by Professor Michael Kerin.

1 in 7 Irish women will be diagnosed with breast cancer before the age of 75 and there are 3,507 cases diagnosed annually. Breast cancer is the second most common cancer in Irish women in Ireland after skin cancer and the most common cancer in women over 50. The role of the National Breast Cancer Research Institute is paramount, as its research can help to ascertain the causes and factors that influence breast cancer and therefore help to develop effective screening, treatments and medication to combat it.

Our research is patient-focused, involving clinicians and scientists and contributes to new knowledge, treatments and better outcomes. Translational Research, i.e. bringing lab findings to the clinical setting, is a long-term commitment and is expensive. Our research team collaborate with genetic scientists, clinical trial lists, medical technology engineers and Big Data engineers at universities and hospitals here and abroad. Our research is not only impacting breast cancer here in Ireland, but across the globe.

The charity relies on voluntary contributions and does not receive direct funding from the Government. We raise funds for research from charity events, community-based fundraising, and support from individuals and companies.

2021 was another challenging year for the charity due to COVID-19. However, we re-imaged and converted many of our fundraising activities to virtual events with great success.

Our annual Valentine's Ball became a 'Virtual' Valentine's Concert MC'ed by Marc Roberts and featured many stars who graciously supported us including; Daniel and Majella O'Donnell , Nathan Carter, Sean Kean, Cliona Hagan, Mike Denver plus many more, raising €68,447 on the night.

Cycling events too became virtual as the 'Pink Ribbon Cycle' became the 'All Ireland Cycle' where participants were asked to cycle as many kilometres as possible in a week for their county with Waterford crowned champions for 2021 and collectively €85,000 raised for the charity.

Golfers returned to the greens between lockdowns and clubs continued to support 'Play in Pink' hosting socially distanced PINK days and raising an incredible €445,000.

'Win A BMW' was not affected by Covid-19 and thankfully lots of people fancied having a new BMW so the raffle was very popular during lockdown.

'Mayo Pink Ribbon' became the 'The Pink Ribbon Sessions' with acts such as; The 4 of Us, Sean Keane, Christy Dignam, Daniel O'Donnell, Michael English and Matt Molloy creating a magical night of entertainment for all.

Our individual fundraisers determination and creativity never ceases to amaze us, and many head shaves, runs, walks, concerts and raffles took place for the charity throughout the year.



# Cancer Research Publications 2021

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