

Cancer Centre Network Annual Report 2022



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY



CONTENTS

Introduction	4
Director of the Cancer MCAN	4
Chief Executive Officer Saolta	5
Chief Clinical Director Saolta	6
President University of Galway	7
Saolta at a glance	8
OECI	9
Section 1: Clinical Care Services.....	10
Adolescent and Young Adults Cancer Programme	11
Breast Cancer	12
Breast Screening Programme	14
Colorectal Cancer	15
Bowel Screen Programme	17
Endocrine Cancer	21
Gynaecological Cancer	22
Head and Neck Cancer	25
Haematology Oncology	26
Lung Cancer and Thoracic Surgery	30
Oesophageal-Gastric Cancer	36
Skin Cancer	37
Urological Cancer	38
Department of Anatomical Pathology.....	45
Medical Oncology.....	48
Multidisciplinary Team Meetings	56
Nursing Oncology	57
Palliative Medicine	59
Pharmacy: Oncology.....	61
Radiation Oncology	62
Radiology Department	65
Section 2:	
Health and Social Care Professionals... 68	
Dietetics	69
Occupational Therapy	71
Health Promotion Services	72
Physiotherapy	74
Oncology Social Work.....	78
Speech and Language Therapy	79
Section 3: Cancer Support Groups	80
Cancer Care West.....	81
Irish Cancer Society	83
Section 4:	
Cancer Research and Developments.... 90	
Cancer Academic Developments and Activities 2022	91
Advanced Therapies and Cancer Trials Cluster at Galway University Hospitals	96
National Breast Cancer Research Institute	97
Appendix.....	99
Appendix 1: Publications.....	100

Introduction



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



The Saolta Cancer Programme provides an extensive programme of cancer care to a population of almost 1 million people across the west and northwest and beyond. Complex cancer care is delivered at University Hospital Galway with an extensive programme of cancer care delivered across the Saolta network at Letterkenny University Hospital, Sligo University Hospital, Mayo University Hospital and Portlinculla University Hospital. Cancer care is delivered in line with the strategic priorities of the National Cancer Strategy (2017 - 2026).

The Saolta University Cancer Network became a member of the Organisation of European Cancer Institutes (OECI) in 2021 with a view to becoming a European accredited cancer network to quality assure the cancer programme within region. The OECI Accreditation and Designation programme is considered internationally as the gold standard for cancer care focusing on cancer diagnosis, treatment, education and research.

In 2022 the Cancer MCAN had considerable engagement with the OECI to agree the accreditation process and designation for our region. By participating in this prestigious accreditation process the Saolta University Cancer Network has committed to ongoing quality improvement in cancer care through research, innovation, partnership and patient empowerment. Our vision is to

create a centre of excellence delivering the highest international standards in cancer treatment, research and education across our network and the OECI accreditation process will enable us to deliver patient centred cancer care at the highest standards internationally.

A key priority for the Saolta Cancer MCAN is to progress infrastructural development across the network which will enable the delivery of cancer care programmes in fit for purpose facilities across the network. We envisage a Cancer centre at the level 4 hospital at GUH with ambulatory centres across the region. This will future proof the cancer programme, empowering it to respond to increased demand, new and innovative technologies and the recruitment and retention of high calibre healthcare experts. Ensuring that patients in the Saolta catchment have equitable access to high quality facilities and world renowned cancer care leading to enhanced patient outcomes.

We will engage with the National Cancer programme to secure key posts for cancer care across our region including many new posts required to staff the new 'state of the art' Radiation Oncology centre which is due to open in 2023.

The Saolta Cancer MCAN wishes to acknowledge and thank all those staff who have provided excellent care to our patients across the region throughout the year.



Mr Tony Canavan
Chief Executive Officer
Saolta University Health Care Group

It is a pleasure once again to endorse The Saolta Cancer Centre Annual Report for 2022, which is a statement of our ambition to achieve better outcomes and better standards of care for our patients and is an acknowledgement of the level of care that continues to be provided across the network.

The Saolta Cancer Managed Clinical & Academic Network (MCAN) became a member of the OECl in 2021 and in 2022 continued to progress towards OECl Accreditation and Designation with the completion of a comprehensive suite of metrics required as part of the eligibility criteria. We are hopeful that the submission will meet the OECl criteria so that we can move to the next stage in 2023, requiring us to self-assess the Saolta Cancer Programme against the 345 OECl standards. OECl Accreditation & Designation status will enable European wide collaboration with other accredited Cancer Centres in the years ahead, with

enormous opportunities for shared learning and better patient outcomes. We look forward to the commissioning of the New Radiation Oncology Facility at the cancer centre at UHG, which when completed in 2023, will allow our patients radiation oncology treatment in a state of the art facility with the most advanced technologies. I envisage that this will be the start of many infrastructural developments for cancer in the years ahead not only in Galway but across the network.

Finally, I wish to acknowledge the outstanding work and dedication of all our staff from many disciplines who provide the best possible care for our cancer patients and their families, across the Saolta Group. I would like to thank Professor Michael Kerin for his continued leadership and strategic vision for the delivery of the cancer programme across the Saolta.



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 2022 Saolta Cancer Centre Annual Report, which builds on previous reports.

Under the Directorship of Prof Michael Kerin, the Saolta Cancer MCAN, continued to strengthen the governance of cancer delivery across the region throughout 2022 and also continues to strengthen linkages with our academic partners, National University of Galway.

I am pleased to support the Saolta Cancer MCAN as they embark on the OECI Accreditation & Designation process, which, will quality assure the Saolta Cancer Programme across our network. As Europe's leading cancer accreditation agency, the OECI sets the gold standard for cancer delivery in Europe and beyond and we look forward to engaging with the process across all our hospital sites.

Another of our key strategic priorities is to deliver cancer infrastructure at the Cancer Centre at UHG and at each of our model 3 hospitals to enable us to successfully diagnose and treat the predicted doubling of cancer cases in the years ahead (NCRI). This will enable the Saolta Group to provide patients with the right care, in the right place at the right time in world class facilities adopting a balanced regional development approach.

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 and his team for their drive and commitment to enhance cancer care delivery for our population.



Professor Ciarán Ó hÓgartaigh

President
University of Galway

As President of 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 our university's research and education mission.

Our university has invested in cancer research and healthcare education and acknowledges the work done by all our colleagues and students in raising the reputation of the University through national and international networks, graduate researcher training, and public and patient engagement.

University of Galway can be an active partner and advocate in improving outcomes from cancer by training and empowering the next generation of healthcare professionals and researchers, with long term health, economic, and societal benefits for our region. The next few years offer exciting opportunities for our university, working with the Saolta Cancer Managed Clinical Academic Network, as they undertake the OECl accreditation programme to deliver a Cancer Centre of excellence which will be underpinned by research and education.



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY

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



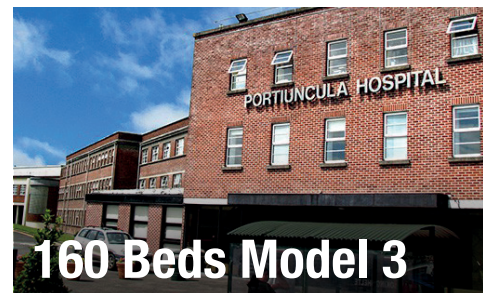
63 Beds Model 2

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**

Saolta Cancer Programme OECI Accreditation and Designation

In June 2021 Saolta University Cancer Network was accepted as a member of the Organisation of European Cancer Institutes (OECI). The OECI have created a quality assurance Accreditation and Designation Programme (A & D) for Cancer centres which focuses on institutional quality and capabilities, with the objective of providing accreditation for quality cancer care including prevention, clinical care, research, education networking and patient involvement. In February 2022 the OECI, board advised the Saolta group to proceed with metric submission for Galway University hospitals.

The submission of step 1 application to proceed into the OECI A&D programme was completed in April 22. This resulted in a positive outcome to proceed toward the next stage of accreditation as an OECI Cancer Centre. Following submission of additional metrics per step 3 in September, including clinical trials and diagnostics, as the Cancer programme is delivered across the region in a 'hub and spoke' model with GUH as the hub, the OECI advised that our submission should be as GUH Cancer Centre with our partner level 3 hospitals being represented as satellite centers.

The OECI process is supported by the Saolta executive and the steering group will be chaired by Saolta CEO, Mr Tony Canavan. Next steps in the process will be to establish a steering group and communicate the OECI message across all of the Saolta hospitals. From then a project plan and timeline for completion will be implemented with working groups set up to answer the 'self-assessment' standards.

We hope to be ready for a peer review early 2024 and accreditation will be based on our quality improvement plan. These are exciting times for the cancer programme with a chance for all to show case what we do well but also to highlight what we need to do to improve the care we give to our patients and their families into the future.

On February 1st 2022 the Cancer MCAN team were joined by Helen O'Reilly, OECI Co-ordinator. Also joining the team in early 2022 was Jackie Lillis, Cancer Group Quality and Patient Safety. In June 2022 Helen and Dr Michael McCarthy attended the OECI annual oncology days conference in Valencia, Spain.



Helen O'Reilly and Michael McCarthy



Section 1

Clinical Care Services

AYA Cancer Programme

In April 2022, the National Cancer Control Programme (NCCP) nominated University Hospital Galway as one of three National Adolescent and Young Adult (AYA) Cancer centers in Ireland. The development of a network of AYA units are planned to focus on the specific needs and risks of AYA cancer patients with a view to improving the care and outcomes for this population.

In August 2022, we were delighted to welcome Professor Owen Patrick Smith, National Clinical lead for Children, Adolescents and Young adult cancers and other members of the National AYA Steering Group and Ms Fiona Bonas Assistant National Director of the NCCP to UHG.

Professor Margaret Murray, Clinical Director, Saolta Laboratory Directorate led a discussion around the needs of the AYA population focusing on the need to create a safe and sustainable programme for AYA patients. The meeting was attended by an extensive multi-disciplinary team including senior nursing management, the Deputy General Manager as well as representation from Medical Oncology, Radiation Oncology, Haematology, Palliative Care, Psycho-Oncology, SLT, Social Work, OT, Physiotherapy and dietetics.

Dr Niamh Keane, Consultant Haematologist agreed to lead out on the AYA programme in UHG. The plan is to appoint an AYA Clinical Nurse Specialist in 2023.

The vision is that a National MDM will be established in 2023 to enable AYA patients to be discussed by key specialists involved in their care.

A local AYA steering group was established in 2022 to progress the NCCPs Framework for the Care and Support of Adolescents and Young Adults with Cancer in Ireland 2022-2026. We look forward to enhancing the care provided to this group of patients in line with the National AYA framework within the Saolta region in the years ahead.

Breast Cancer



Mr Ray McLaughlin

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

Over 14,900 patients attended the Symptomatic Breast Programme at UHG and LUH in 2022 resulting in over 500 new diagnoses of breast cancers across our region. In addition over 290 breast cancers were diagnosed in BreakCheck bringing the total number of breast cancers diagnosed in 2022 to over 800.

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.

All patients with a suspicion of Breast cancer are referred for multidisciplinary discussion. There were 2,220 patient discussions at the Symptomatic Breast multidisciplinary meetings (MDMs) in 2022.

Symptomatic Breast Outpatient Clinic Attendance 2022

Outpatient Clinic Statistics	UHG	LUH	Total
New patients Urgent	3,934	1,224	5,158
New patients Non-Urgent	1,701	1,223	2,924
Review patients	3,270	3,609	6,879
Total No. of patients seen	8,905	6,056	14,961

Symptomatic Breast Service Cancer Diagnoses 2022

Performance Parameter	2022
No. of new patients diagnosed with breast cancer UHG	400
No. of new patients diagnosed with breast cancer LUH	109
Total Breast Cancer Diagnoses	508

Symptomatic Breast Cancer Surgical Interventions 2022

Surgical Intervention	LUH	UHG	Totals
Wide Local Excision	72	196	268
Excision of Margins	4	25	29
Mastectomy	26	69	95
Sentinel Node Biopsy	61	180	241
Axillary Clearance	30	58	88
Breast Reconstruction Procedures (Immediate)	9	17	26
Breast Reconstruction Procedures (Delayed)	-	4	4

* WLE First surgery only. Remaining surgeries first, second surgeries etc.

Number of Breast MDM Discussions

Breast MDM Discussions per year	2022
Number MDM discussions	2,219
Number of Patients Discussed at MDM	1,324

Key Achievements 2022

- Implemented the plan to address the waiting lists.
- Maintaining a robust multidisciplinary team meeting.
- In December 2022 an Advanced Nurse Practitioner was appointed for Breast family history.

Key Priorities 2023

- To continue to address the waiting lists with an aim to get all patients seen within KPI.
- Continue to ensure the Breast programme provides the highest quality patient centered care and continues to provide personalized treatment plans for all breast cancer patients.
- Explore options to increase mammography capacity across the region.
- Recruitment of clinical staff to increase capacity to meet the growing demand.

Breast Screening Programme



Dr Aideen Larke
Clinical Director & Lead Consultant Radiologist
BreastCheck West

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 National Screening Registry Ireland (NCRI) published a report in September 2022, titled Breast, Cervical and Colorectal cancer 1994-2019: National trends for cancers with population-based screening programmes in Ireland. The report stated that cancers detected via screening were found at a much earlier stage; decreases in mortality rates for the three cancers were more substantial and that survival is now higher and has improved more markedly for all three cancers.

The BreastCheck Western Unit opened in Galway in December 2007 to deliver a high-quality screening service to eligible women in the large geographical catchment area of the West and North West of Ireland. This includes counties Galway, Mayo, Sligo, Donegal, Roscommon, Leitrim, Clare and Tipperary North. 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 approx. 120,000 women. 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 re- call programme.

In 2022, there were 38,460 women invited for a screening mammogram; 33,485 of whom attended.

Key Achievements 2022

1. BreastCheck was nominated for the Irish Healthcare Awards in 2022. The programme was nominated in the Equality Initiative of the Year Category.
2. BreastChecks AIRE Project (Assessment Information Record and Evaluation) continued to meet all milestones and remained on schedule. The system will replace BreastCheck’s original IT software which is over 20 years old.
3. Screening participation exceeded expected levels by 22.6% (based on revised targets).
4. BreastCheck continued to recover from delays due to covid restrictions. The service exceeded the programme covid adjusted target by 4.5%.

Key Priorities 2023

1. Recruitment of clinical staff to enable the increase in capacity and access to screening.
2. Re-align BreastCheck service delivery with the key performance indicators defined in the BreastCheck Women’s Charter by increasing capacity.
3. Plan and implement a real-time digital patient experience survey to capture and understand women’s experiences in the programme and identify opportunities for improvement.
4. Continue to implement a new client and radiology information management system.

Performance Parameter	Western 2022
Number of women screened	33,485
Number of women re-called for assessment	1,490
Re-call rate	9.3%
Number of women diagnosed with cancer	299

Colorectal Cancer



Mr Mark Regan

Consultant Surgeon & Lead Clinician
Saolta University Health Care Group

The Colorectal Cancer Programme at UHG provides effective, safe, high quality and patient centred care for patients across the Saolta Network with all colorectal cancer patients being discussed at the Joint Upper & Lower Gastrointestinal (GI) weekly Multidisciplinary Meeting (MDM).

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

In 2022, 50 multisite GI MDMs occurred with 1,843 patient discussions and personalised treatment plans recommended for each cancer patient.

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 Rectal Cancer Programme is required to deliver care in line with Key Performance Indicators (KPI's) developed by the National Cancer Control Programme (NCCP).

NCCP Rectal Cancer KPI Returns 2022	UHG
Newly diagnosed rectal cancer patients referred to the cancer centre	112
Newly Diagnosed Primary rectal cancer patients who had a primary radical surgical procedure (incl. APR)	48
Total BowelScreen Patients with newly diagnosed primary rectal cancer who underwent radical surgery (incl. APR)	6

Colorectal Stoma Care University Hospital Galway (UHG)

Mary Quigley
Aisling Dunne

Stoma Care CNS
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 2022 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 reviews. Having learned to adapt our service and striving to work closely with public health nurses and GP practices in order to keep patients out of hospital throughout the pandemic, we have noticed that patients are happy to engage with an initial phone consultation and only come into the clinic when a visit is deemed absolutely necessary. We were delighted to be able to hold our Patient Educational Evening after an absence of two years.

We had a wonderful turn-out with very positive feedback from the public.

Colorectal/Stoma Care Activity 2022	UHG
Pre-assessment clinic activity (not including phone pre-assessments)	25
Pre - op siting/counselling (no stoma created)	61
New Stoma created (65% oncology related)	173
Reversal of stoma	33
Inpatients review (established stoma with problems, e.g. Chemo/ Radiotherapy related)	132
Outpatient Review Nurse Led Clinic	270
Virtual reviews (established stoma with problems, e.g. Chemo/ Radiotherapy related)	10-15 calls per day

Portiuncula University Hospital (PUH)

Mr Eddie Myers	Consultant Surgeon
Mr Joseph Garvin	Consultant Surgeon
Mr Ali Chaudhary	Consultant Surgeon
Mr Osama El-Sadig	Consultant Surgeon
Ms Aine Kennedy	Clinical Nurse Specialist Colorectal/Stoma Care



The surgical service at PUH comprises of:

- 4 Surgical outpatients' clinics per week
- 4 endoscopy lists per week
- 24 surgical elective lists per week
- Operating lists in UHG.

In 2022, there were 51 new cases of colorectal cancer diagnosed in Portiuncula University Hospital (16 rectal cancers and 35 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 coordinated 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.

This includes:

- Assessing pre-operatively, providing education, and counselling for stoma formation
- Post-operative education, review during any admission in Portiuncula or as an outpatient.
- Telephone service providing support to ostomates and other health care professionals
- Education in relation to reversal of stomas
- Fistula Management

Bowel Screen Programme



Dr Eoin Slattery

Consultant Gastroenterologist & Lead Clinician
Saolta University Health Care Group

The primary goal of BowelScreen – the National Screening Service (NSS) is to reduce mortality from colorectal cancer in people aged 55 – 74 in Ireland. Over 2,000 people are diagnosed with bowel cancer in Ireland each year. Bowel cancer is the second most common invasive cancer in men. For women it is the second most common of all cancers in men and the third most common of all cancers in women in Ireland.

The BowelScreen colorectal screening programme will offer free screening to people aged 55-74 on a two-yearly cycle. To develop capacity for the full population, the programme will be implemented on a phased basis, starting with people aged 60-69. Over 130,000 have already been invited since start of the programme (May 2014). This age group has the highest incidence of cancer within the wider age range. The maximum benefit in terms of reduction in mortality and cost-effectiveness will occur when the programme targets the full 55-74 age population. The number of new cases is expected to increase significantly over the next 10 years, due mainly people have pre-cancerous growths (known as polyps) removed as a result of bowel screening. This can prevent cancer from actually developing in the first instance.

Screening offers the chance for early detection – before cancer develops or when there are no symptoms – which means treatment is often more effective than if diagnosed later. In 2022 over 303,000 men and women were invited for screening which was above the annual target.

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. Five of the Saolta Group hospitals are BowelScreen centres: University Hospital Galway (UHG), Letterkenny University Hospital (LUH), Sligo University Hospital (SUH), Roscommon University Hospital (RUH) and more recently Mayo University Hospital.

Galway University Hospital (GUH), BowelScreen Programme

Galway University Hospitals BowelScreen End of Year Activity Report 2020 - 2022

BowelScreen Activity	2020	2021	2022
Number of index and surveillance BowelScreen colonoscopies performed	250	331	324
Number of repeat procedures performed	23	12	30
Total number of BowelScreen procedures performed	273	343	354
Number of CTC performed following referral from this unit	3	3	2
Number of patients referred for EMR	N/A	4	11
Number of patients with pathology referred for discussion at the BowelScreen MDM	197	256	300

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 Letterkenny University Hospital and is supported by Dr Daniella Crosnoi, Consultant Gastroenterologist. The bowel screen service in LUH is facilitated by the Registered Advanced Nurse Practitioner (RANP) in Gastroenterology Deirdre Diver, also a screening Endoscopist, and Clinical Nurse Specialist in BowelScreen, Grainne Boyle.

All Bowel Screen patients are pre-assessed by the RANP / CNS and if deemed suitable attend for colonoscopy to LUH. During 2022, 115 clients had a screening colonoscopy following a positive FIT test, and 126 clients had a surveillance follow up colonoscopy. 207 clients had polyps detected, with 10 clients requiring EMR's. 7 clients had cancers detected and the continuing care pathway for these clients includes referral to the surgical and or wider multidisciplinary teams at UHG.

The last two years presented many challenges to our health service including the COVID 19 pandemic and the Cyber-attack in 2021 which resulted in many cancellations in our endoscopy service. We are working towards ensuring all our clients are assessed and scheduled for colonoscopy where appropriate in a timely manner.

The success of bowel screening at LUH is attributed to the huge dedication and commitment of the endoscopy staff and the wider multidisciplinary team. The Endoscopy Unit at LUH continues to demonstrate its commitment to maintain and develop a high quality patient-centred endoscopy service for the people of Donegal.

Letterkenny University Hospitals BowelScreen End of Year Activity Report 2020 - 2022

BowelScreen Activity	2020	2021	2022
Number of index and surveillance BowelScreen colonoscopies performed	157	187	241
Number of repeat procedures performed	11	14	21
Total number of BowelScreen procedures performed	168	201	262
Number of CTC performed following referral from this unit	4	7	8
Number of patients referred for EMR	5	6	10
Number of patients with pathology referred for discussion at the BowelScreen MDM	140	163	207
Numbers of cancers confirmed	4	7	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).

All 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 with our colleagues in GUH. RUH BowelScreen clients requiring EMR attend GUH every year under the care of Professor Slattery.

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 GUH/PUH for further management. As a team we also run different initiatives for the month of April to ensure awareness of bowel cancer symptoms and the Bowel Screening programme.

In 2022, the RUH BowelScreen programme detected seven cancers.

Roscommon University Hospitals BowelScreen End of Year Activity Report 2020 - 2022

BowelScreen Activity	2020	2021	2022
Number of index and surveillance BowelScreen colonoscopies performed	175	234	276
Number of repeat procedures performed	24	24	30
Total number of BowelScreen procedures performed	199	258	306
Number of CTC performed following referral from this unit	2	2	2
Number of patients referred for EMR	1	1	6
Number of patients with pathology referred for discussion at the BowelScreen MDM	143	184	213
Numbers of cancers confirmed	3	5	7

Sligo University Hospital (SUH), BowelScreen Programme

Sligo University Hospital commenced screening in May 2013. Currently BowelScreen endoscopists include Dr Kevin Walsh (Clinical lead) and Dr. Aisling Murphy.

A total of 222 BowelScreen procedures were carried out through weekly lists and with the addition of a weekend list which was facilitated by Totally Health Care in conjunction with BowelScreen. 11 cancers were detected over this time period. 5 patients underwent EMR locally with 2 patients requiring referral to Professor Eoin Slattery, Consultant Gastroenterologist at UHG, of which 1 required surgical resection. 168 cases were discussed at the weekly Saolta polyp multidisciplinary team meeting.

In 2022 a return to near normal services post pandemic was achieved with JAG (Joint Advisory Group on GI Endoscopy) reaccreditation remaining a key priority for SUH.

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 service.

Sligo University Hospitals BowelScreen End of Year Activity Report 2020 - 2022

BowelScreen Activity	2020	2021
Number of index and surveillance BowelScreen colonoscopies performed	229	216
Number of repeat procedures performed	4	6
Total number of BowelScreen procedures performed	233	222
Number of CTC performed following referral from this unit	3	5
Number of patients referred for EMR	4	7
Number of patients with pathology referred for discussion at the BowelScreen MDM	187	168
Numbers of cancers confirmed	8	11

Mayo University Hospital (MUH), BowelScreen Programme

In April 2022 BowelScreen announced that Mayo University Hospital (MUH) would be performing colonoscopies on behalf of the programme.

The MUH BowelScreen programme, joins Saolta Hospitals: University Hospital Galway, Letterkenny University Hospital, Roscommon University Hospital, and Sligo University Hospital in providing BowelScreen services for the people of the West of Ireland.

The service launch comes as acute hospital and endoscopy services - regionally and nationwide - continue to navigate the significant impact COVID-19 restrictions and high infection rates have had on operations. It is anticipated that when fully operational, the Saolta University Health Care Group will deliver around 20% of BowelScreen's colonoscopies per year.

The service at MUH will provide colonoscopy services for BowelScreen participants in the Mayo region who have been referred for further investigation having received a 'not normal' result on their home FIT kit tests.

Catherine Donohoe, MUH General Manager, said: "This is great news for the people of Mayo, particularly the patients who meet the criteria for BowelScreen. Partnership with BowelScreen will help us deliver vital services closer to where people live in the west. I am very proud of the hospital team for progressing this positive service for our patients at a time where the hospital services are still under pressure."

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.

HIPE Endocrine Activity 2022

Diagnosis	Admissions
Benign disease	61
In Situ	0
Primary	76
Secondary	18
Total	155

Surgery	Number
Thyroidectomy	92
Parathyroidectomy	41
Adrenalectomy	2
Total	135

Endocrine MDM	2022
MDM discussions	547

Gynaecological Cancer



Mr Michael O'Leary

Consultant Gynaecology Surgeon & Lead Clinician
Saolta University Health Care Group

The Gynaecological Oncology tertiary level service for the Saolta Hospital Group located in University Hospital Galway. Of note women from Letterkenny diagnosed with Gynaecological cancer continue to be referred outside of the hospital 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.

This is a summary of the activity in the Gynaecological Oncology service for 2022:

Within the geography of the Saolta Group in 2022 there were 250 Gynaecological cancers diagnosed, however due to historical referral pathways a number of women were referred for treatment outside of the group.

- LUH referred 48 patients to St James Hospital in Dublin.
- SUH referred 20 patients to the Mater Hospital in Dublin.
- MUH referred 3 patients outside the Saolta group (2 to Dublin and 1 to Limerick).

There were 179 New or Recurrent Gynaecological Cancers diagnosed within the Saolta Group and treated in University Hospital Galway. 98 Surgeries took place for Gynaecological cancers diagnosed in 2022.

Age Profile of Cancers treated at UHG

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
4	4	4	9	7	13	16	14	22	28	23	16	19

Type of Gynaecological Cancer diagnosed 2022:

Type	Cervical	Endometrial	Ovarian	Vulval	Uterine	Primary Peritoneal	Unknown Primary	Other	Total
No.	30	71	49	7	2	6	7	*7	179

* Other included 2 colorectal cancer with metastatic disease to the ovaries, 1 Breast cancer to uterus, 1 Lung Cancer to the cervix, 1 Melanoma to Vulva, 1 pelvic mass and a cancer of the fallopian tube.

Type of Tumour Diagnosed 2022:

Primary	Secondary	Metastatic	Recurrence
133	7	13	26

Surgery Type 2022

Of the 98 surgeries/procedures that took place for patients diagnosed in 2022, see breakdown:

Surgery/Procedure	Number
Cytoreductive Surgery	8
Debulking Surgery	4
TAH and BSO	20 (2 Laparoscopic)
Lap TAH, BSO and Sentinel Lymph Node Biopsy	11
Lap Assisted Vaginal Hysterectomy and BSO	-
TAH, BSO, Omentectomy, Appendicectomy and Lymph Node Biopsy/Dissection (SLNB and PLND)	37
Radical Hysterectomy, BSO and SNLB	8
Radical Anterior Vulvectomy and SNLB	1
Posterior Vulvectomy	-
Lap to Open BSO	-
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
2020	37	55	13	15	120
2021	44	52	8	8	112
2022	59	62	7	19	147

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

Management and Treatment

Of the 179 patients diagnosed with a Gynaecological cancer in 2022, 91.6% were discussed at the Gynaecology MDT. (374 patients were discussed in total for

2022 including benign cases and patients diagnosed with a Gynae cancer in 2021). This was a 44% increase in MDT discussions on the previous year.

Key Achievements 2022

- A second Clinical Nurse Specialist for Gynaecological Oncology was appointed.
- The securing of a Clinical Nurse Specialist post for survivorship service for women who have had Gynaecological cancers.
- 91.6% (164) of Gynaecological Oncology patients diagnosed in 2022 had an initial MDT discussion, 35.2% (63) had a second MDT discussion, 5.6% (10) had a third MDT discussion and 1.1% (2) had a 4th MDT discussion.

Key Priorities 2023

- Improving the capacity for timely access to theatre for women with gynaecological oncology condition.
- Establish a joint MDM with the gynaecological Oncology service in Limerick.
- Appoint the CNS for Gynaecological oncology survivorship.

Colposcopy Service



There are currently 4 colposcopy units located within the Saolta Hospital Group each of which are part of the National Cervical Screening Programme. Each of the colposcopy clinics have an identified Consultant lead and a small team of Nurse colposcopists working at

specialist and Advanced level. Services operate under a memorandum of understanding (MOU) agreed between the units and CervicalCheck Ireland. Below are the clinical statistics for the Colposcopy services in the Saolta University Healthcare Group.

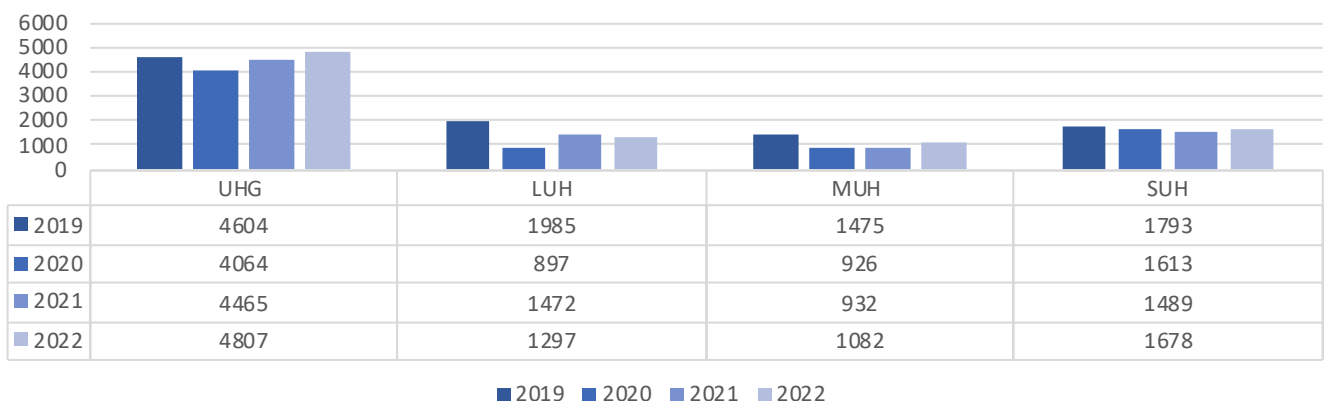
Group Histology Result Summary Table 2022:

Histology Result	UHG	LUH	MUH	SUH	Total
Cancer	30	3	0	2	35
Cervical Cancer	29	3	0	2	34
Adenocarcinoma in situ	10	7	2	1	20
CIN 3	212	64	36	124	436

Group Activity Summary Table 2022:

Activity	UHG	LUH	MUH	SUH	Total
Total Attendance	4,807	1,297	1,082	1,678	8,864
New Referrals	1,781	577	561	737	3,656
Follow Ups	3,478	720	521	887	5,606
Non-Attendance	350	92	151	159	752
% Non-Attendance	7.3%	7.1%	12.2%	9.5%	9% Av

Total Colposcopy Attendance per site 2019 - 2022



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 2022, the Head and Neck Oncology Multidisciplinary Team remained 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. 138 patients were treated in the radiotherapy department in 2022.

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 2022

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

Key Priorities 2023

- 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 programme.

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.

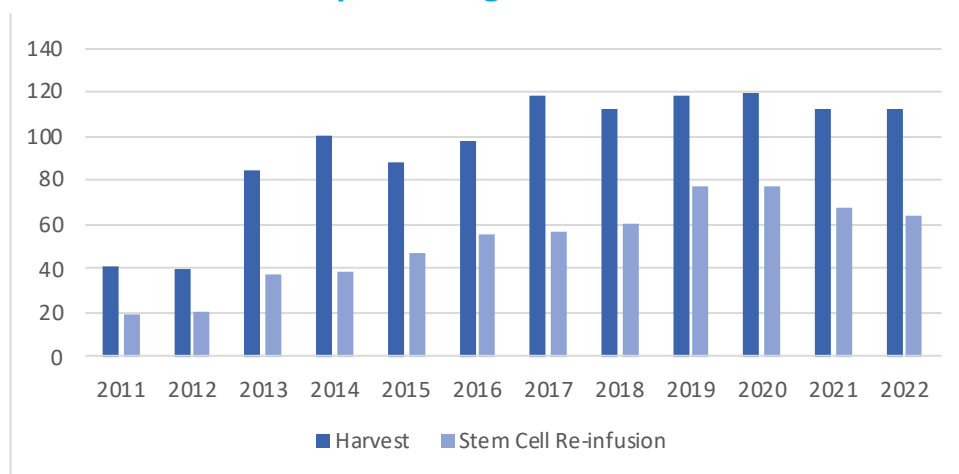
Saolta Haematology Clinical Programme

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, Portlinculla 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.

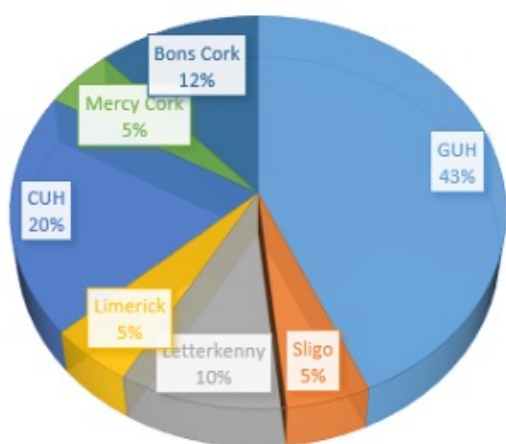
UHG Stem Cell Transplant Programme 2011-2022



In 2022, the programme accepted referrals from Saolta Group Hospitals and from the South / South West Hospital Group.

10 of these 15 patients from Cork University and Mercy Hospital in Cork were transferred to CUH for recovery with 5 remaining in Galway. It is envisaged that from Jan 2023 all CUH

and Mercy hospital patients will return there for recovery. 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.



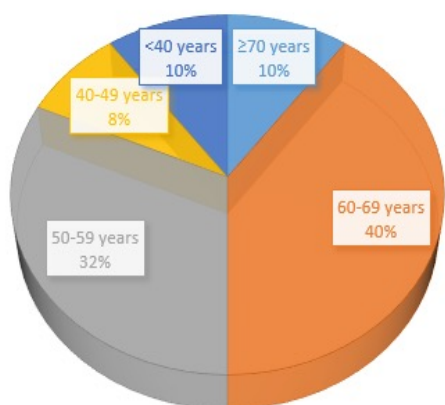
Referring Hospitals for Stem Cell Transplants

Surgery	Number
Galway University	26
Sligo	3
Letterkenny	3
Cork - Bons Secours	7
Cork University	12
Cork - Mercy	3

The Stem Cell Transplant Programme in UHG, treating multiple myeloma, lymphoma and other cancers has grown exponentially from 18 re-infusions in 2011 to 63 in 2022.

In the last five years 2018-2022, an average of 65 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 25 bed Claddagh ward. This

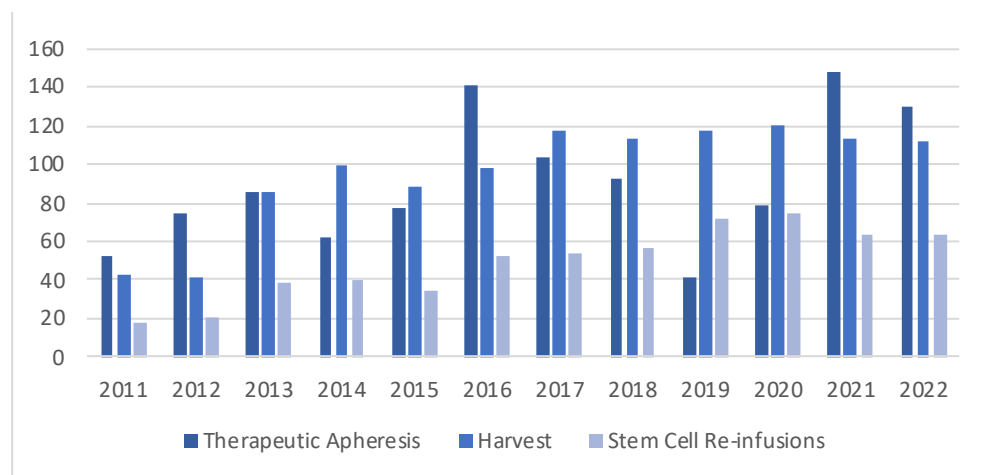
specialist ward of 25 individual positive ventilation rooms ensures high quality care and improved patient safety, reducing infection risk during this and other intensive haematology treatments. The processing and storage of stem cells occurs in the fully licensed and regulated GBTE Laboratory on site. In 2022, 82% of transplants were for the treatment of Multiple Myeloma, 17% for Lymphoma and a small percentage of patients with other conditions received autologous stem cell transplant also.



Age Profile

Age	Number of Patients
≥70 years	6
60-69 years	24
50-59 years	19
40-49 years	5
<40 years	6
Total	60

Apheresis/Stem Cell Transplant Workload 2011-2022



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Therapeutic Apheresis	52	74	85	62	77	141	104	92	42	79	148	130
No. of patients	-	-	-	-	-	-	-	-	8	14	15	14
Harvest	43	42	85	99	89	98	118	113	118	120	113	112
No of patients harvested	-	-	-	-	-	-	-	-	70	70	65	71
Stem Cell Reinfusions	18	21	38	40	35	53	54	56	72	74	64	63

Saolta Group Haematology Outpatient New and Review Attendance 2019 - 2022

Year	2019	2020	2021	2022
University Hospital Galway New	719	590	838	987
University Hospital Galway Review	3,175	3604	4,324	5,771
University Hospital Galway Total	3,894	4,194	5,162	6,758
Mayo University Hospital New	22	7	4	19
Mayo University Hospital Review	637	654	496	505
Mayo University Hospital Total	659	661	500	524
Sligo University Hospital New	292	306	227	215
Sligo University Hospital Review	1418	1,757	2,227	2,447
Sligo University Hospital Total	1,748	2,063	2,454	2,662
Letterkenny University Hospital New	248	232	190	167
Letterkenny University Hospital Review	1965	1,521	1,557	1,068
Letterkenny University Hospital Total	2,213	1,753	1,747	1,235
Saolta Hospitals Group New	1281	1,135	1,259	1,338
Saolta Hospitals Group Review	7195	7,536	8,604	9,791
Saolta Hospitals Group Total	8,476	8,671	9,863	11,179

Haematology Oncology Systemic Anti-Cancer Therapy KPIs

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 2022, the overall Group performance averaged 85% with UHG's average over the year being 83% an improvement of 17%

on 2021. 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 2022

- The introduction of NCCP Guidance on the management of acute capacity challenges in Systemic Anti- Cancer Therapy in Ambulatory Day Units by maximising capacity.
- Reviewed procedures undertaken in Day Wards and prioritise parenteral SACT.
- Explored the option to provide low risk treatments off site.
- Designated as one of 3 Adolescent and Young adult cancer centres.
- In October 2022 UHG was formally designated as the second designated centre in Ireland for the delivery of Car-T therapies.

Key Priorities 2023

- Continue to explore work with the NCCP to fully implement the SACT model of care.
- Support the outreach SACT unit in Merlin Park hospital providing further support and training for staff.
- Continue to select low risk treatments to be given in outreach areas in line with NCCP SACT Model of Care.
- Work with AYA project team to advance this service within the Saolta Group.
- CAR-T service and technical readiness to be progressed over 12-18 months.
- Advocate for essential posts needed to support CAR-T and AYA services.

Lung Cancer & Thoracic Surgery



Dr David Breen
Consultant Respiratory Physician
Lead Clinician, Interventional Pulmonologist



Mr Alan Soo
Consultant Thoracic Surgeon
Thoracic Surgery Lead

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

Lung cancer is the third most common cancer in Ireland accounting for 2,672 new cases per year from 2018 – 2020. The annual 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 to 3,713 cases (+131%) for males, and 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, accounting 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.

It is the biggest cancer killer in Ireland causing one in five of all cancer related deaths. Lung cancer claims more lives yearly 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 diagnosis is 70-74. This population frequently has multiple competing co-morbidities and a 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 the 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 favorably with the best in Europe and the rest of the world. Rapid Access Lung Clinics, which were set, up as part of the NCCP in order that patients could 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

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. He was the clinical director of the interventional bronchoscopy service. He has worked in Galway University Hospital for the last ten years and is the clinical lead of the lung cancer service in the Saolta Group and the chairs 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 responsibility 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 Clince is the CNS for the Service. Her wealth of experience is evident in the support she provides for this vulnerable patient group. Janet is a designated key worker for patients going through their diagnosis journey.

Claire Kelly, CNS organises the Joint Thoracic Clinic attendances and is a key worker for patients attending this clinic. She also organises patient follow up from their discussion at Lung MDM.

Together with staff nurse Jacinta Murphy, this team of nurses bring an abundance of experience and skills to the service. Jacinta has worked in the RALC for nine years. She attends the RALC

and the Joint Thoracic Clinic. She completed her smoking cessation course in 2020 and has enjoyed adding this skill to her practice.

Cora manages the RALC with a focus that the NCCP KPI's are maintained. Cora also organises all virtual and follow up appointments from this clinic.

Nainsi Corcoran officially took up her post as the Rapid Access Lung Patient Navigator this year. Nainsi enables the efficient running of the Lung MDM and her assistance to the service is invaluable.



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



Ranking 3rd among most common cancers



1 in 33 chance of females being diagnosed with lung cancer before 75



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



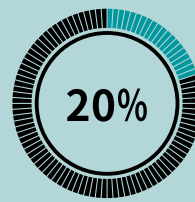
Most common treatment regimes: radiotherapy, chemotherapy, surgery



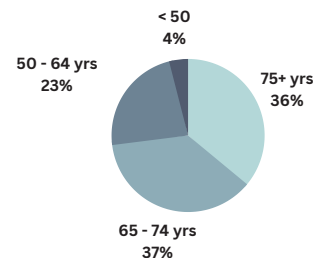
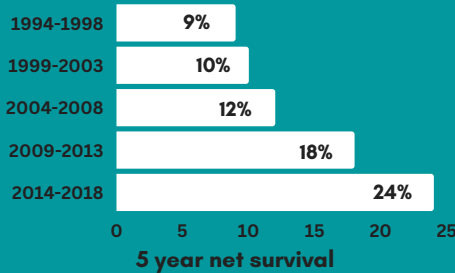
1,894 lung cancer deaths per year (2017-2019)



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
- www.cancer.ie
- www.mariekeating.ie
- www.ncri.ie

Galway University Hospital Rapid Access Lung Clinic

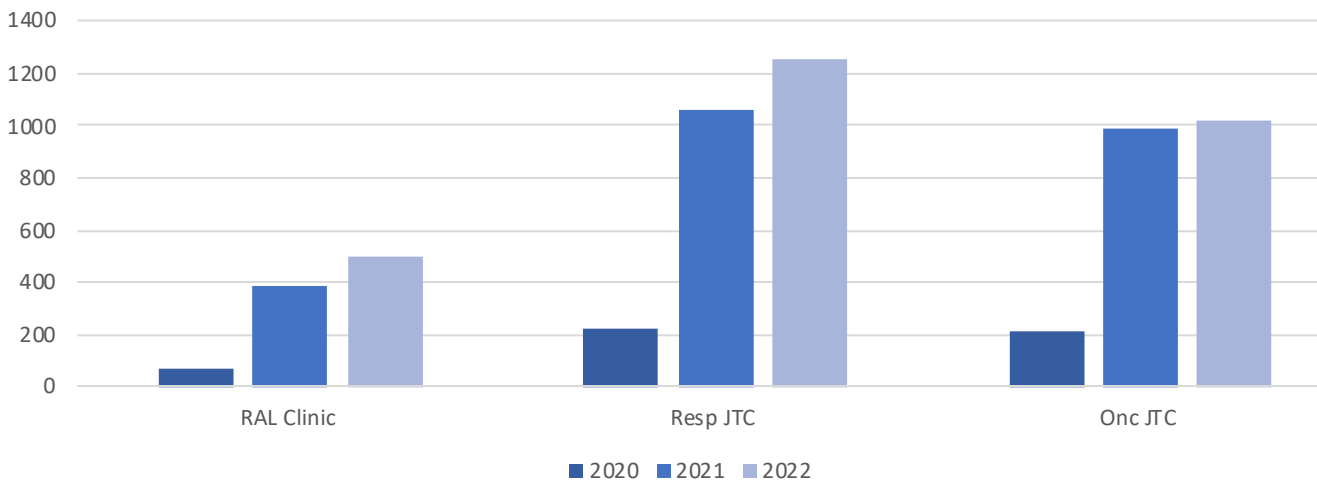
In patients with (presumed) lung cancer, timely access to specialist services, that ensures rapid assessment and diagnostics by a specialist team and onward referral for appropriate treatments, has long been identified as the key for improving outcomes.

The RALC works under the principles and KPI's 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 them. 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 their nursing assessment, the patients 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 they are kept up to date with their care plan.

The Rapid Access Lung Team in GUH strive to maintain the NCCP's KPI's. GUH's RALC is consistently above average in KPI achievements. In 2022, KPI one, first visit within ten days of receipt of referral was above 90% each month, reaching 100% achievement for August, September and October 2022. GUH's RALC made an excellent rebound from Covid-19 and continues to grow year on year as shown in the tables below.

Attendance RAL, Resp JTC and Onc JTC 2019-2022



RAL= Rapid Access Lung Clinic
Resp JTC = Respiratory Joint Thoracic Clinic
Onc JTC = Oncology Joint Thoracic Clinic

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

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.

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.

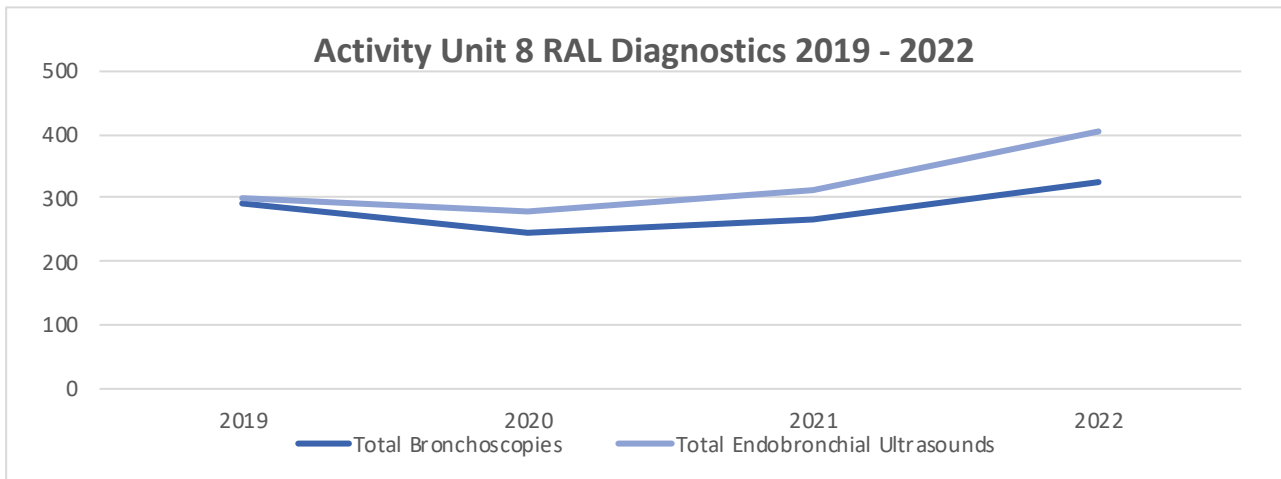
For patients with early stage disease, quitting will reduce post-operative complications. For patients with advanced disease, quitting smoking is linked to decreased dyspnoea and fatigue. Reducing the severity of symptoms is a key component of treating advanced disease. For the patients who do not have 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.

GUH's Rapid Access Lung Clinic is proud to be the first in Ireland to provide radical EBUS procedures and fluoroscopies.

Overleaf are the activity number for biopsies performed by Dr Breen in Unit 8 throughout 2022.

Unit 8 Merlin Park Statistics 2022



The GUH RAL team were delighted to begin carrying out navigational bronchoscopy procedures within the Theatres of Galway

University Hospital in 2022. The long awaited introduction of navigational bronchoscopies is of huge benefit to the service overall.

Multi-Disciplinary Team Meetings

The Lung Cancer MDM is held in UHG on Mondays and joined via video link by Sligo, Mayo & Portlinculla University Hospitals. A panel of experts including specialities of respiratory medicine, Thoracic surgery, Medical Oncology, Radiation oncology, Radiology and Pathology, discusses 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 the data is obtained for cancer diagnosis. Here the cases will be discussed individually and an outcome will be recommended based on the expert opinions of the team. There were 1,372 discussions at the Lung MDM in 2022 a 39% increase on 989 in 2018.

Joint Thoracic Clinic

After their MDM discussion the patients are brought for a follow up appointment in the Joint Thoracic Clinic. This is a unique clinic, the only one of its kind in Ireland, in that the 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 Lung MDM and directly afterwards will be seen by

Medical Oncologist, Dr. Silvie Blazkova, Radiation Oncologist, Dr. Nazir Ibrahim/ Dr. Claudia Sanjines or Cardiothoracic Surgeon, Mr. Alan Soo/Mr. Ronan Kelly. Patients are referred to these specialities as required and on a patient by patient basis. The clinic is entirely patient focused and avoids multiple hospital visits.

Challenges

As the Rapid Access Lung service continues to grow, the projected increase in case load will mean 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

The appointment of Cardiothoracic Surgeon, Mr. Ronan Kelly has been of huge benefit to the Service and the process to recruit a second lung cancer consultant is in progress.

The RALC has obtained nodule software (Lung Cancer Orchestrator) which it aims to launch in the near future. This software will greatly improve the detection and surveillance of lung cancer.

The RALC is looking forward to the future. The overall aim is to provide continued service improvements and therefore the best possible service to patients with (presumed) 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. The team of cardiothoracic surgeons include Prof. Alan Soo and Mr. Ronan Kelly. Mr. Kelly joined the department as a consultant surgeon in February, 2022 and has a keen interest in minimally invasive lung resection.

The Cardiothoracic surgery team work closely with the Department of Respiratory Medicine and the Oncology department caring for patients within the Saolta University Healthcare Group catchment area.

In UHG, the cardiothoracic surgery department performs 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 begins 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-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.

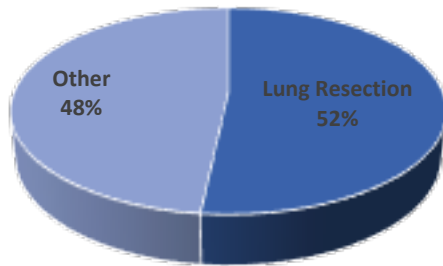
Departmental Audits/Research

Audits are regularly conducted as part of the ongoing quality improvement and learning process within the department of cardiothoracic surgery. The team are continuously engaged in research in the field of cardiothoracic surgery.

Examples of some of the audits/research carried out in the department in 2022 include;

- Assessing the accuracy of pre-operative written consent with intra-operative cardiothoracic interventions in University Hospital Galway.
- Resection of stage IIIA non-small cell lung cancer: a multidisciplinary feat.
- Pathogenesis of Empyema Thoracis and the Path to Decortication: A 6-year Perspective from an Irish Tertiary Hospital Cardiothoracic Surgery Unit.
- Bronchogenic cyst: A rare case of malignant transformation.

Thoracic Surgical Activity 2022



■ Lung Resection ■ Other

UHG Cardiothoracic Surgical Unit 2022 Activity

Procedure	Activity
Total Number of Thoracic Procedures	265
Total Number of Lung Resections	137
Other Thoracic	128
Procedure Type	Total Number of cases performed
Lobectomy	105
Pneumonectomy	5
Segmentectomy	1
Wedge Resection	26
Chest Wall Biopsy/Resection/Reconstruction/Rib Fixation	8
Mediastinal Biopsy/Excision of mediastinal mass	31
Pericardial biopsy/pericardial cyst excision	1
Bullectomy/Blebectomy/Pleurectomy/Pleurodesis/LVRS	32
Decortication	14
Bronchoscopy	7
Pleural/Lung Biopsy	16
Thymectomy	4
Pectus Repair	1
Hernia Repair	3
Diaphragmatic	4
Thoracic Sympathectomy	3
Other	4
Grand Total	265

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 2022. Prof. Chris Collins, Prof. Oliver McAnena, and Mr. Paul Carroll deliver the service.

The Minimally Invasive Upper GI Resection programme headed up by Mr. Carroll, continued in 2022 with the 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 2022.

UHG Upper G.I. NCCP KPIs 2022

Parameter	Jan - June	July - Dec	Full Year
No. of newly diagnosed cases with Oesophageal/OGJunction/Gastric Cancer	55	88	143
Total no. of patients proceeded to neoadjuvant treatment as first treatment intervention	19	16	35
Total no. of patients proceeded to surgery as first treatment intervention	7	5	12
Total no. of patients had neoadjuvant treatment followed by surgical intervention	12	15	27

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

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.

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

Skin Cancer is the most common form of cancer in Ireland with over 13,000 new cases diagnosed every year. The National Cancer Registry of Ireland (NCRI) expects this number to double by 2040. Early detection of skin cancer is crucial, if spotted early, up to 90% of cases are curable.

The main types of skin cancer are:

1. Non melanoma skin cancers, these include basal cell and squamous cell carcinomas. They tend to grow in areas exposed to the sun and are more common in older individuals.
2. Melanoma skin cancer: although rare, melanoma affects young people. On average, 1,100 melanoma skin cancers were diagnosed in Ireland during 2018 – 2020. Approximately 12,000 non – melanoma skin cancers were diagnosed in Ireland during 2018 – 2020. In University Hospital Galway (UHG) and Roscommon University Hospital (RUH), 2,964 skin cancers were diagnosed in 2022. Basal cell carcinoma was the most common

skin cancer diagnosed (51%), followed by squamous cell carcinoma (35 %). Melanoma accounted for 14% of skin cancers diagnosed in 2022.

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.

In University Hospital Galway the skin cancer 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. 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 2022, 882 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.

Skin Cancer Data 2019 - 2022 (Data Source: Pathology)

	Basal Cell Carcinoma	Squamous Cell Carcinoma in situ	Squamous Cell Carcinoma	Melanoma in-situ	Invasive melanoma	Total Skin Cancer
2019	1,621	208	812	193	168	3,002
2020	1,284	182	684	173	195	2,518
2021	1,488	221	717	174	178	2,778
2022	1,514	281	766	166	237	2,964



In 2022 the Dermatology department in UHG were awarded the Rogers first Prize for excellence in Clinical Dermatology at the Irish Association of Dermatologists for their study on malignant melanoma.

Urological Cancer



Ms Catherine Dowling
Lead Clinician
Urological Cancer Lead
Consultant Urological Surgeon

The Saolta Urological Cancer Programme continues to provide 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 2022.

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 2022, the RAPAC remained challenged with an ever-increasing demand while the need to maintain



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

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 2023 is to improve on 2021 and 2022s KPI for access to RAPAC clinics.

Scheduled OPD care

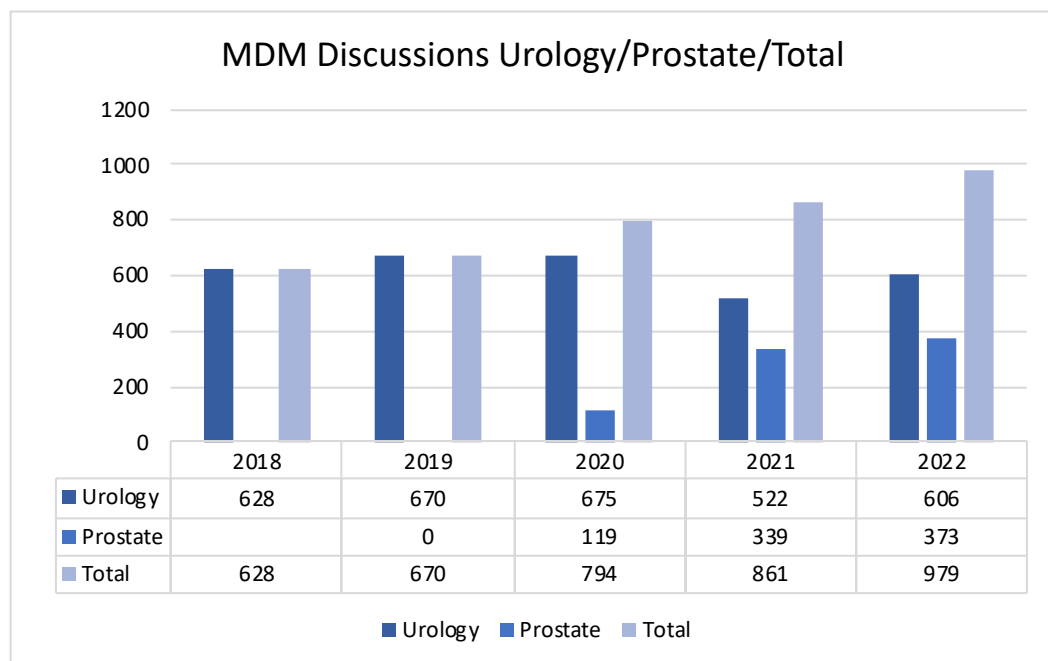
There has been a year on year increase in the OPD activity in both general urology clinics and Rapid Access Clinics in UHG over the past 4 years. The table below demonstrates the increasing level of activity year on year. The Rapid access service saw a 33% increase in total activity 2019 v 2022 and general urology activity a 60% increase.

UHG Rapid Access Prostate OPD Attendance 2019-2022

	2019	2020	2021	2022
New Patients	934	638	804	983
New (virtual)	-	60	9	12
Review Patients	4547	3556	4317	3560
Review (Virtual)	-	2770	1746	2726
Nurse Led	42	83	154	438
Nurse Led (virtual)	94	28	26	384
Totals	5,617	7,135	7,056	8,103

MDM Discussions

In 2022 there were over 970 MDM discussions with urology and prostate MDMs held on alternate weeks as depicted in the table below



Rapid Access Prostate Diagnoses and Surgical Activity 2020 - 2022

	2020	2021	2022
Total number of new primary diagnoses	223	268	248
Total number of secondary & other cancers diagnosed	108	53	38
Total new primary plus secondary & other cancer diagnoses	331	321	286
Total number of prostate surgeries	149	143	156

Urology Day Service and Bladder Cancer Service: Flexible Cystoscopy and Intravesical Treatments

In 2022, there were 1020 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.

Of these, 342 cystoscopies were bladder cancer surveillance, representing an 11% increase

over 2021. A record number of combined intravesical chemotherapy and immunotherapy installations were delivered in the department in 2022, increasing from 404 in 2021 to 528 in 2022, representing a 31% increase and reflecting improved concordance with best practice guidelines.

	2016	2017	2018	2019	2020	2021	2022
Immunotherapy Instillations	173	203	329	358	336	384	515
Chemotherapy Instillations	57	85	102	71	35	20	13
Total	230	288	431	429	371	404	528

Rapid Access Prostate Service Nursing Programme

Rachael Dalton, Advanced nurse practitioner (ANP) coordinated the rapid access prostate assessment and biopsy clinics at University Hospital Galway in the first half of 2022. Marie O'Loughlin CNM2 joined the service in September 2022. The RAPAC services are supported by our dedicated nursing team. The nursing team provide men and their families with care, advice & education both prior to and following treatments for prostate cancer.

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 point 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 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 physio clinic, active surveillance and post prostatectomy PSA surveillance clinics continue in 2022. The number of patients referred to this nurse led service continued to increase year on year. 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 & new referrals within the RAPAC service.

The aforementioned clinics offer consultations via an attend and virtual platform. Within these clinics, we continue to provide a cancer surveillance programme and a patient survivorship programme. The bespoke survivorship Programme aims to provide patients and their families with education and support delivered at appropriate intervals throughout the patient care continuum. We continue to work closely with community teams and refer patients as appropriate to the various nursing, psychological & social care services available.

In 2022, Rachael McHugh began her post as a specialist continence physiotherapist in the urology department. This new post allowed us to increase the capacity within the survivorship clinic and also to provide an additional

physiotherapy assessment and review clinic on Thursdays. This has been a very welcome addition to our survivorship programme.

Pre surgery education classes continue throughout 2022. 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, I introduce men 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 indeed, they are once again provided with the ANP 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 2022. The prostate cancer support and information series class is coordinated by Cancer Care West and the ANP and is delivered via a virtual platform. The aim of the sessions 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 contributed to the growth of the programme, and we saw an increase in participants from Mayo, Sligo and Donegal in attendance. In 2022, the series facilitated presentations from Dr Paul Donnellan consultant Medical 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:

“Presenter was an expert in this domain and shared her experience and knowledge in a transparent and comfortable manner for her audience”

“Lots of relevant info, some I had heard before and some that I hadn't”

“Presentation very good”

Rachael trained as a facilitator on the Androgen deprivation therapy programme in late 2021 and facilitated the first Irish class

in 2022. The aim of this programme is to provide men with education and information on how to manage side effects related to their treatment. Classes are facilitated every month and men across Ireland and the UK are welcome to register. More details in relation to this programme are available at www.lifeonadt.com.

Rachael was invited to join the urology clinical leads group at the NCCP in 2021. This provided opportunity to become involved in guideline development for our prostate cancer patients in the future. In 2022 guideline development for the support, self-managed follow up programme began. Working with the NCCP the goal of this programme is to move patients from a busy urology clinic setting to a remote support follow up pathway. Galway urology department will be one of three sites for phase one of this project. We hope to begin recruiting patients in 2023.

Rachael's role as adjunct lecturer continued in 2022. This close link with University of Galway facilitated many teaching & moderation opportunities over the year. The Journal and Research Club established in 2021 continued to have bi monthly meetings throughout 2022. This group, spearheaded by Mr Robert McConkey ANP continues 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. The team will be travelling to Milan in 2023 for the EAUN annual conference where Rachael will present on the development of the Research and journal club on behalf of the team.

In 2022, the NCCP secured funding for a new clinical nurse specialist post in prostate cancer for Galway university hospital. Donna Coy was the successful candidate and will commence her new role in Jan 2023.



September 16th saw the NCCP launch the National Clinical guidelines-Diagnosis and staging of patients with Prostate cancer.

Department of Anatomic Pathology



Dr Anne Marie Quinn

Head of Department of DAP, GUH

Overview Of Service

Within the Saolta region histopathology and cytology diagnostic services are provided by 5 anatomical pathology departments, namely GUH, SUH, PUH, MUH and LUH. All participate in the RCPI Faculty of Pathology's National Quality Improvement Programme. Cancer-related services include tissue (histopathology) and cytology assessment and diagnoses and addition to case review for multidisciplinary team meetings. The departments in addition provide services such as autopsy and diagnostic non-cancer pathology reports.

GUH houses the largest pathology department within Saolta and in 2022 employed 19 histopathologists. The department supports Breastcheck, CervicalCheck and BowelScreen services. The screening programmes and symptomatic cancer workloads are supported by an in-house immunohistochemistry and molecular service. Predictive biomarker testing includes PD-L1 screening for non small cell lung cancer, head and neck cancer and breast cancer. The subspecialty areas covered by the DAP service include gastrointestinal, urology, renal pathology, dermatopathology, gynaecological pathology, cardiothoracic, haematopathology, head and neck and endocrine pathology. Non consultant hospital doctor training is provided in conjunction with the RCPI accredited training programme.

The number of cases processed per annum continued to grow, expanding from 38,208 in 2021 (66,563 specimens) to 39,487 (69,270 specimens) in 2022, approximately 3% growth rate. There was a significant increase in the number of cases reviewed for MDM at 6408 for 2022 compared to 5003 for 2021.

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'Keefe).

Key Achievements 2022

- The department of anatomic pathology successfully recruited to a newly created permanent consultant histopathology post.
- PD-L testing for head and neck squamous carcinoma was validated and initiated using the 22c3 clone
- 2 senior scientists completed skin dissection training facilitating the gross examination and processing of specimens and supporting specimen turnaround.

Key Priorities 2023

- The department aims to recruit into a permanent consultant post funded by Breastcheck
- Following the amalgamation of the Breastcheck and DAP histopathology departments the merger will be supported. By employing unified staffing levels and workload distribution this will increase the overall efficiency of the combined department.

Division of Anatomic Pathology Workload at GUH 2022 (Data source: Pathology GUH LIS)

P Code		Cases	Cases
P01	Small biopsy	7,732	13,822
P02	GI biopsy	10,102	21,686
P03	Non biopsy Cancer resection	2,112	5,806
P04	Non biopsy Non Cancer resection	16,552	23,632
P05	CSF	69	70
P06	Non Gynae Cytology FNA	948	1,999
P07	Non Gynae Cytology Exfoliative	1,547	1,856
P10	Autopsy Coroner	382	382
P11	Autopsy Other	43	43
Total	All procedures	39,487	69,270

Malignancy Case Detail 2022 (Data source: Pathology GUH LIS)

	2022
Total malignant cases	7,691
Surgical	7,012
Cytology	427
Referral	252

Cases Referred to The Division of Anatomic Pathology For Testing/ Review/Opinion/Mdm Discussion 2022 (Data Source: Pathology GUH LIS)

	2022
Cases Referred	590

Cases reviewed for discussion at MDM (Data source: Pathology GUH LIS)

	2022
Total cases reviewed/ discussed	6,408
Surgical cases	5,555
Non Gynae cytology cases	595
Referred cases	258

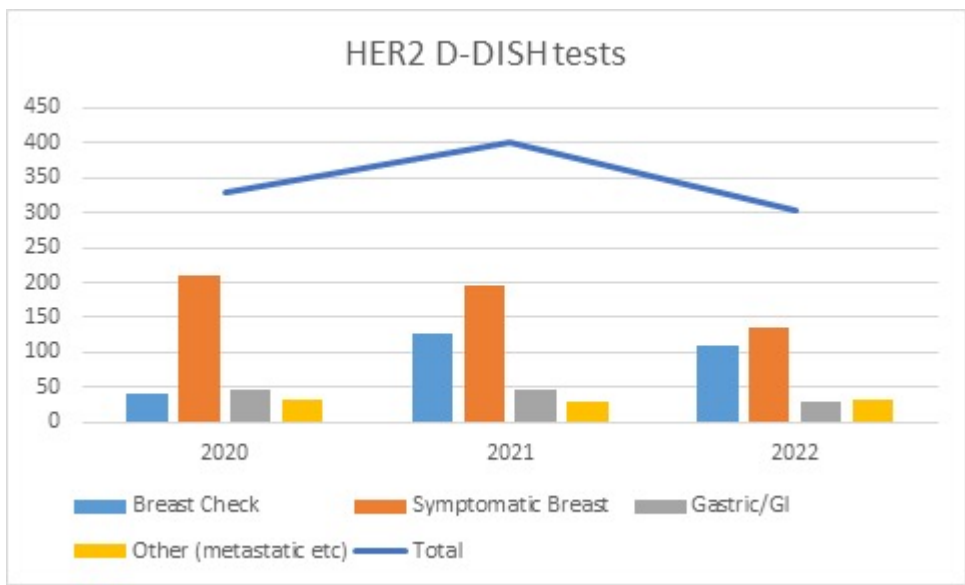
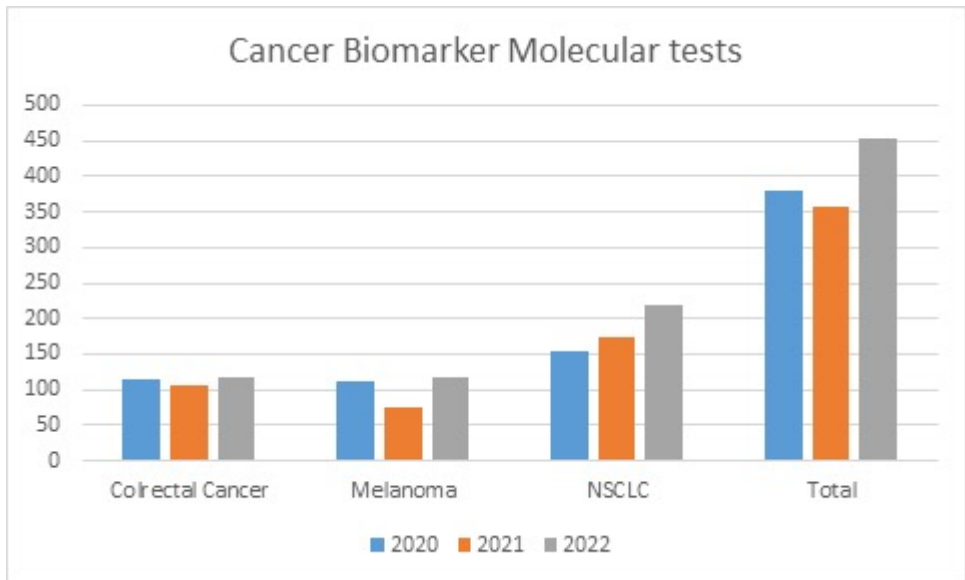
Precision Medicine Service



Prof Sean Hynes
 Chair Saolta Precision Medicine Working Group

The precision medicine service aims to provide integrated reporting and support for predictive and prognostic biomarkers for cancer patients within the Saolta hospital group. In parallel to our single gene testing molecular pathology service we are now transitioning to our next generation sequencing service initially in

solid tumours thanks to support in this area from both the Cancer MCAN and the NCCP. In addition, in 2022 we have provided the widest range PDL1 testing in the country expanding our indications covered to include triple negative breast cancer, non-small cell lung cancer and head & neck cancer.



Letterkenny University Hospital Laboratory



Dr Gerry O'Dowd

Consultant Pathologist Laboratory Directorate and Cancer MCAN aCD

Histopathology LUH Overall Activity 2022

P Code	Procedure Codes	Cases	Specimens	Blocks
P01	Small biopsy	3,507	4,715	6,252
P02	GI biopsy	4,452	10,527	10,674
P03	Non biopsy Cancer resection	166	414	2,727
P04	Non biopsy Non Cancer resection	2,522	2,909	7,805
P05	Non Gynae Cytology CSF	30	30	0
P06	Non Gynae Cytology FNA	46	65	32
P07	Non Gynae Cytology Exfoliative	376	475	183
P10	Autopsy Coroner	159	159	2,050
P11	Autopsy Other	1	1	0
Total	All procedures	11259	19295	29723

Pathology Cases Details 2022 (Data source: Pathology LUH)

Malignancy Cases		Cases Discussed at MDM	
Surgical	2,563	Surgical cases	895
Non Gynae Cytology	81	Non Gynae cytology cases	22
Total Malignant Cases	2,644	Total No. Discussed/Reviewed	917
Cases referred to the Division of Anatomic Pathology for testing/review/opinion/MDM discussion		917	

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

Intra-Departmental Consultation 2022

Histology (P01-P04)	6.46%	(688 cases)
Non Gynae Cytology FNA (P06)	36.96%	(17 cases)
Non Gynae Cytology Exfoliative (P07)	15.16%	(57 cases)
Inter-institutional Consultation	1.45%	(161 cases)
Cases received for review	0.00%	(0 cases)
Cases referred for opinion	0.29%	(32 cases)

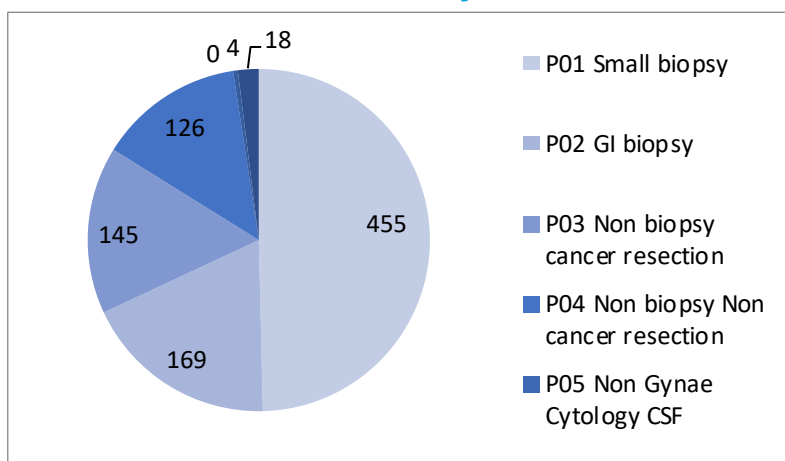
LUH Histopathology Cancer Related Testing 2022

P Code	No. of Cancer Related Tests
Major Cancer Resections	166
Breast Core Biopsies	288
Prostate needle core biopsies	90
Bone Marrow Trepines	260
Lung needle biopsies	57
Lymph node needle biopsies	23
Soft tissue needle biopsy	60
Liver needle biopsy	86
Bladder biopsies	72
Immuno stains (Inc. Controls)	3,699
Special stains (exc. Controls)	509
Total	5,310

LUH MDM Cases Discussed By Procedural Code 2022

P Code	No. of Cases
P01 Small biopsy	455
P02 GI biopsy	169
P03 Non biopsy cancer resection	145
P04 Non biopsy Non cancer resection	126
P05 Non Gynae Cytology CSF	0
P06 Non Gynae Cytology FNA	4
P07 Non Gynae Cytology Exfoliative	18
Total	917

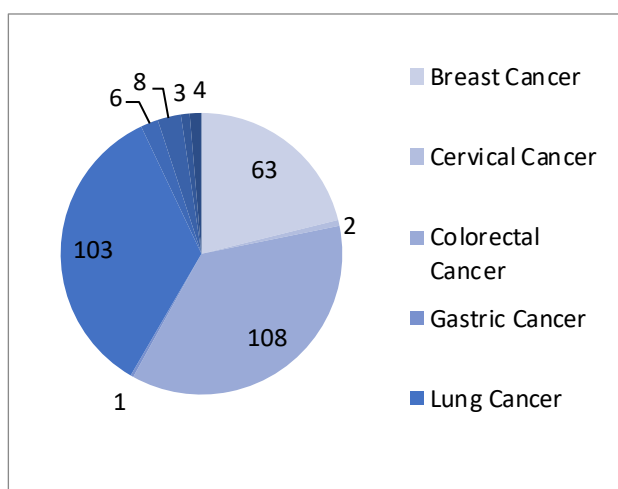
LUH MDM Cases Discussed By Procedural Code 2022



Molecular Service LUH Molecular Referrals 2022

Specimen Type/Mutation Test	2022 Total\Test	Cancer Diagnosis	2022
FISH	27	Breast Cancer	
Oncotype DX	32	Breast Cancer	
PD-L1	3	Breast Cancer	
Oncomine Panelinc. PIK3 CA	1	Breast Cancer	63
PD-L1	2	Cervical Cancer	2
KRAS	31	Colorectal Cancer	
MSI (by PCR)	12	Colorectal Cancer	
MLH1 Methylation	1	Colorectal Cancer	
NRAS	32	Colorectal Cancer	
BRAF	32	Colorectal Cancer	108
DDISH	1	Gastric Cancer	1
ALK	22	Lung Cancer	
PD-L1	36	Lung Cancer	
ROS-1	22	Lung Cancer	
EGFR	23	Lung Cancer	103
C-MYC	6	Lymphoma	6
BRAF	4	Malignant Melanoma	
NRAS	4	Malignant Melanoma	8
BRCA	3	Ovarian Cancer	3
PD-L1	4	Urothelial Cancer	4
	298		298

LUH Molecular Referrals 2022



Medical Oncology



Dr Michael McCarthy
 Consultant Medical Oncologist
 UHG & MUH
 Lead Clinician in Medical Oncology, Saolta Health Care Group

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.

Dr Michael McCarthy joined the Medical Oncology team in UHG at the end of 2021. He has since taken up the role of lead for medical oncology across the group and will also play a pivotal role in advancing the OECl accreditation and designation process for the Saolta group. 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. Ensuring all regimens prescribed are on the National Cancer Information System (NCIS) is one of the medical oncology groups main priorities for 2023.

The Medical Oncology consultants across the Saolta Group provide care for those patients undergoing systemic anti-cancer therapy, six 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

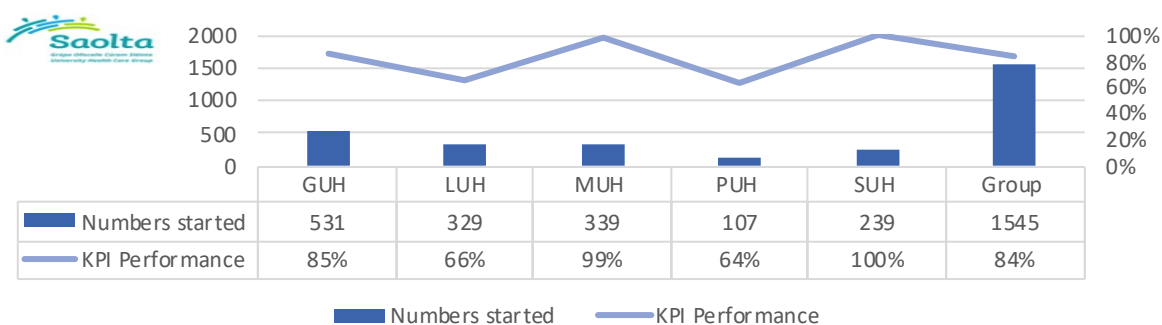
of their treatment and beyond.

In September 2022 the NCCP published their Systemic Anti-Cancer Therapy Model of Care. The NCCP SACT Model of Care considered and incorporated international best practice and made recommendations to enhance SACT services in Ireland with the underlying principles aligned to Sláintecare. Twenty five key recommendations were set out in the Model of Care to optimise SACT services to ensure the provision of a safe and quality driven service for all service users. These key recommendations focus on areas including patient experience, organisation of services, governance, quality and safety and defined SACT pathways. The NCCP SACT Model of Care will provide a roadmap for the continued development of SACT services across Ireland and will form a template for the highest quality SACT to be delivered to the Irish population over the coming years. Saolta Consultant Medical Oncologist, Professor Maccon Keane, chaired the SACT Model of Care group as medical oncology clinical advisor to the NCCP.

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 settings 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 table below illustrates the KPI performance for New Systemic Anti-Cancer (SACT) starts for Saolta Group Hospitals and the number of first treatments started across the group

SACT New Starts and KPI by hospital site



Saolta Group Medical Oncology Outpatient New and Review Attendance 2020 - 2022			
	2020	2021	2022
University Hospital Galway New	708	958	1,078
University Hospital Galway Review	3,752	5,360	6,308
University Hospital Galway Total	4460	6318	7386
Mayo University Hospital New	129	119	117
Mayo University Hospital Review	1,756	1,241	1,230
Mayo University Hospital Total	1,885	1,360	1,347
Portiuncula University Hospital New	54	92	82
Portiuncula University Hospital Review	483	971	1,426
Portiuncula University Hospital Total	537	1,063	1,508
Sligo University Hospital New	190	237	215
Sligo University Hospital Review	1,378	1,020	1,209
Sligo University Hospital Total	1,568	1,257	1,424
Letterkenny University Hospital New	314	318	350
Letterkenny University Hospital Review	1,242	1,436	1,110
Letterkenny University Hospital Total	1,556	1,754	1,460
Saolta Hospitals Group New	1,395	1,724	1,842
Saolta Hospitals Group Review	8,611	10,028	11,283
Saolta Hospitals Group Total	10,006	11,752	13,125

Key Achievements 2022

- The continued rollout of NCIS prescribing. Many regimens are now routinely prescribed on NCIS.
- Assessed the state of readiness of other hospitals in the group to roll-out NCIS prescribing.
- Worked with the NCCP to roll out the SACT model of care published in September 2022.
- Recovered the time to treatment KPI from 75% Jan 2022 to 87% Dec 2022 at UHG.
- Appointment of SACT outreach CNM 3 whose roll will facilitate identifying and setting up alternative facilitate for low risk SACT treatments.

Key Priorities 2023

- Identify ways in which the Haematology Oncology Day wards can continue to improve KPIs through identifying new ways to treat and new sites to administer low risk treatments.
- Complete the migration of all prescriptions to NCIS reducing paper prescriptions.
- Identify Oral anti-cancer medications to be administered in new ANP led clinics.



Systemic Anti-Cancer Therapy Model of Care

In June Prof Maccon Keane, Associate Director of the Saolta Cancer MCAN and NCCP National Clinical Lead for Medical Oncology with other members of the NCCP launched the Systemic Anti-Cancer Therapy (SACT) Model of Care which sets out the future strategic direction for the delivery of SACT services in Ireland. Prof Keane has been extensively involved in the development of the SACT Model of Care with the NCCP over the last few years.

Oncology and Haematology Nursing in Letterkenny University Hospital



Janice Richmond
ANP Medical Oncology

Thank you for the opportunity to contribute and outline the improvements, challenges and changes within Oncology & Haematology nursing in Letterkenny University Hospital (LUH).

In 2022 we welcomed a few new posts and additional expansion of services. Congratulations to Adrian O Dálaigh who became candidate ANP Haematology and Caroline Clancy registered as ANP Oncology. An additional Haematology CNS staff was appointed, and we welcome Maria Antazo to this role. These new roles will allow for the further development of patient support services, research activities and new nurse-led clinics going forward.

As with every passing year, the increase in activity and intensity in Oncology Haematology for 2022 is clearly visible. There continues to be a significant increase and requirement for patient care in the inpatient, outpatient and day ward settings.

CNM2 Maggie McGinley & CNM1 Stephanie Brady manage the inpatient ward. This 11-bedded ward continues to be full to capacity consistently, with existing space proving inadequate for the care requirements and a constant over spill into outlying wards. This brings further challenges in managing a specialized group of patients who are not centralized into one area.

CNM2 Rory McCauley & CNM1 Lorraine McLoone manage the Day Ward. This area remains busy and despite a small extension into the previous urology clinical room and acquiring the previous consultant office for medical reviews, the space is grossly inadequate. The referral of patients receiving oral anti-cancer medications (OAM) to the ANP-led clinic (post cycle 2 onwards) has been a help but capacity is still a challenge. The numbers of patients requiring systemic anti-cancer treatment (SACT) being referred into the Day Unit exceeds those stopping SACT or

being referred onwards so the workload is increasing continually and shows no sign of abating.

The Northwest Cancer Centre (NWCC) in Altnagelvin Hospital, Derry continues to provide radiotherapy to a cohort of Donegal/ Republic of Ireland patients. St Luke's Radiation Oncology Network and the Radiation Oncology Department, Galway provides other site specific radical treatment/specialist treatments. CNS Noreen Rodgers is the Liaison nurse for this service and manages this cohort of patients through ongoing liaison and attendance at monthly Radiotherapy Operational Meetings (NWCC/LUH/GUH) to optimise and standardise patient referral, transfer, treatment and repatriation pathways. Travel for patients to the NWCC remains costly and even if they qualify for accommodation (if they live 70 minutes away), they still have to finance their travel from the hotel in Derry to the NWCC as there is no onsite accommodation. CNS Rodgers highlights this inequity at every available opportunity and works to try and obtain solutions. In 2022, Noreen also updated the LUH booklet for Co Donegal patients undergoing radiotherapy cancer treatment at the NWCC.

CNS Mary McCollum (Lung CNS) works with the respiratory service in the diagnosis and work-up of lung cancer. CNSs in Oncology Caroline Nee, Shay Lar Uddin & Mary Grace Alegarme and CNS in Haematology Claire Dunnion work in Outpatients clinics in the support and work-up of patients pre SACT and with those on ongoing follow up.

The ANP Oncology and CNM Mary Grace Kelly continued their work on developing and piloting the safety and efficacy of an integrated ANP-led care model for the management of patients receiving oral anti-cancer agents. The pilot commenced in 2022 and from the 10.01.2022 onwards, a cohort of patients receiving OAMs had their care delivered in an ANP-led clinic in a community setting.

The results of the research were positive and demonstrated that the ANP-led model delivered external to the acute hospital was it was safe, effective and preferred by patients. By end 2022, 4 publications on this research were completed and more were being prepared.

Teraze Toby is the Daffodil Centre Information nurse and coordinates//hosts the LACES (Life and Cancer – Enhancing Survivorship) patient education workshop. This is for adults who have finished their active cancer treatment and are beginning their follow up. CNS Noreen Rodgers became a champion for LACES in 2022. The LACES programme compliments the ‘Moving on Programme’, which is a self-management programme to improve physical and psychological health of cancer survivors. The part-time coordinator (Teraze Toby) receives referrals from the wider team and this launched online in January 2022. A hybrid version was delivered in July whereby participants first met in person for the information talks and then followed the programme online. This work is supported by CNM2 Mary Grace Kelly.

The Acute Oncology/Haematology CNS (Geraldine Mullan) continues on a part-time basis and efforts are underway to recruit another staff member to make 1 whole time equivalent. This service has greatly reduced ED admission and supports the acute SACT services. ANP Caroline Clancy leads the PICC service which provides an efficient central line service for timely SACT provision. Other educational activities continue on a cyclical basis as per the Centre of Nursing and Midwifery Education Centre calendar and in particular the NCCP national SACT course is delivered locally annually. The nursing team contributes heavily to this annual NCCP course which is also presented online to other cancer nurses from other cancer centres.

The senior Haematology/Oncology nurses have quarterly meetings throughout the year to discuss and resolve issues, update on local and national initiatives and plan ahead. Overall, there are new and ongoing exciting initiatives in LUH. In the midst of increasing workload, staff shortages and recovery from a global pandemic it is important to keep striving to improve patient care.



C. Dunnion
Clinical Nurse Specialist



G. Mullan
Clinical Nurse Specialist



M. McCollum
Clinical Nurse Specialist



Clinical Nurse Specialists
S.L. Luddin, M.G. Alegarme, C. Nee

Mayo University Hospital

The Oncology/Haematology service at MUH continues to run a very busy satellite service complimenting the Day ward in UHG. The following outlines the activities and changes to service during the year.

In total there were 5272 day ward attendances recorded by HIPE for the administration of SACT and supportive therapies. This was broken down into 4644 Oncology and 628 Haematology. The total combined number of haematology and oncology outpatients was 1579, 1199 of whom were Oncology patients.

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 once again achieved above this level in 2022 with a 99% target reached over the year. In total for the NCCP's new treatment starts KPI, there were 334 patients, 330 of whom commenced SACT treatment 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.

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 coordinated 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 2022 298 reviews took place in this nurse led service and 30 new patients were seen. The assessment and

review area for this clinic is in a separate thus allowing increased capacity in the Day ward.

Miriam Dyer our dedicated Oncology Haematology dietician reviewed 513 patients in the day ward in 2022.

2022 saw the introduction of nurse-led Acute Oncology service; this has meant that where possible cancer patients will avoid attendance to ED. Patients are guided to call a dedicated hotline Monday-Friday 8am-4pm, and through utilisation of UK ONS telephone triage system are triaged, assessed and managed. Most are managed at home with regular follow up calls, whilst some are referred onto GP/ Palliative Home care etc. Some patients do require ED attendance/ review, but they are managed within an agreed pathway. 2022 saw the service receive 614 calls, make 5012 follow up calls, with 115 admissions arising from those calls. Thereby 499 patients, 81%, potentially avoiding admission with the implantation of this service.

There are three qualified radiology referrers. In 2022 a total of 1033 requests were made from nurses on NIMIS. This number does not include cardiac Echo's and Dexa scans, which are requested by nurses. The requests include ultrasounds, portacath insertions, venous US, CT PA and various x-rays. Of note 581 of this total was for CT scans, a very high number. There was no oncology registrar cover for a prolonged period due to difficulty recruiting.

700 inpatient reviews took place by the Nursing Oncology team and approx. 10 reviews weekly of Haematology patients. With a new Haematology CNS appointment more accurate data will be kept going forward.

Key Achievements 2022

- The hospital was fortunate to have Dr. Fergus Cafferty Consultant Radiologist take up post in 2022. Among the many benefits for oncology/haematology patients was that he commenced the insertion of portacath's in interventional radiology. For the first time since the service began 25 years ago patients no longer have to travel to Galway for the procedure.
- Congratulations to Sinead Fallon CNS who took up post as Candidate Advanced Nurse Practitioner cANP, a very welcome and deserved post and a huge benefit to the service.
- Also congratulations to Bernie Kelly who after many years of supporting the haematology service in a staff nurses role, was appointed as the CNS and took up post in May 2022.
- We were delighted to welcome Dr Michael McCarthy Consultant Medical Oncology to MUH. Michael will attend once weekly to clinic, day ward and inpatient services. MUH now has a third visiting Medical Oncologist.



Key Priorities 2023

- To upload all prescriptions onto NCIS. This will improve medication safety.
- Develop a standard operation procedure to standardize the safe transfer of patients who need to be cared for in the model 4 cancer centre.
- Work with the NCCP and the Cancer MCAN in implementing the SACT model of Care recommendations.

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)

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 satellite Oncology Unit 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.

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.

Globally, the number of cases and incidences of cancer are increasing; from 9.8 million in 2018 to 15 million in 2040, this indicates that 53% more individuals will require first-line chemotherapy, with 75% of those treatments being given intravenously. Treatments for cancer are now tailored to the genetic makeup of each patient and include targeted immunotherapies, thanks to advances in our understanding of molecular and genetic human biology. The Portiuncula Oncology department has adapted to these developments, enabling patients to receive these therapies locally.

As an exclusively nurse led unit, led by Ms. Sally Carey, CNM 11 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.

Marie Daly joined the team this year and along with Cora Shaughnessy are currently undertaking their Postgraduate Diploma in Health Sciences (Oncology and Haematology).

Caitriona Duggan is the Registered Advanced Nurse Practitioner in Oncology. She is a 1st year PhD student in the University of Galway and is currently undertaking the first European wide survey on all vascular access devices used to treat all cancer types with systemic anti-cancer therapy. We as a nurse-led unit are deeply committed to lifelong learning to make sure patients are receiving treatment that is grounded in the most recent evidence-based practice. Sarah Ennis cANP also joined the team this year. The role of ANP oncology covers weekly 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 and Sarah look after a caseload of patients receiving Oral anti- cancer therapy.

The Acute Oncology Service here in Portiuncula is now fully established in the hospital on a Monday to Friday basis, with the help-line numbers circulated to all patients prior to commencing chemotherapy. From January 2022 to August 2022, the numbers using this service has more than doubled. Close links have been established between the Acute Oncology Service here in Portiuncula Hospital and Galway University Hospital. Eilís hopes to commence the 'Authority to Refer for Radiological Procedures' course in the near future in order to further enhance the care provided to patient's accessing the service.

Multidisciplinary Meetings



Ms Cathy Walsh & Ms Aideen Mulkerrins
MDM coordinators

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:

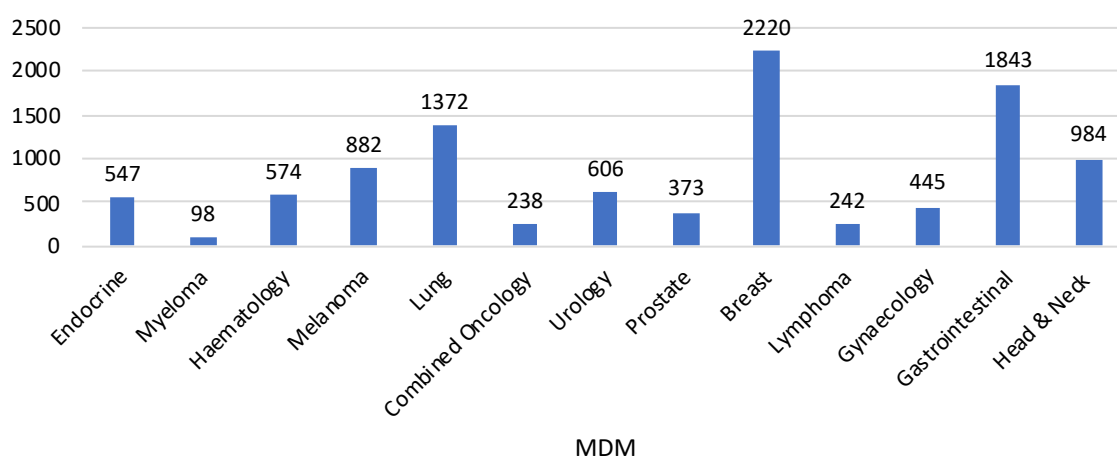
The Multidisciplinary Programme within the Saolta Cancer Centre continues to be a high

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 and urology and prostate following in 2022.

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 coordinated manner. Cathy Walsh and Aideen Mulkerrins continue to run this very busy programme.

As can be seen from the table below the MDM programme continued at a consistently high level with a total of 10,424 MDM discussions in 2022.

MDM Patient discussions 2022



Key Achievements 2022

- Sustained a consistently high number of MDM discussions across all tumour sites.
- The successful implementation of the NCIS MDM module across the prostate and urology tumour sites

Key Priorities 2023

- Continue the roll out of NCIS MDM module to the remaining tumour sites.
- Review & update all MDM SOPs for each tumour site

Nursing Oncology



Olive Gallagher
Director of Nursing, Saolta Cancer MCAN
Executive Summary

2022 Cancer Nursing report highlights the commitment and contribution of our cancer nursing community to innovation, service development and new initiatives improving patient care and experience. Reflecting on the past year has demonstrated our ability to overcome the challenges brought on by a global pandemic demonstrating resilience and collaborative recovery and bringing forth new opportunities.

Achievements

2022 saw the launch of our Cancer Nursing Research Group. The purpose of the group is to further develop the Cancer Nursing Research agenda, enhancing research capacity of nurses working within Saolta Cancer Services, creating a culture of inquiry and scholarship. The group was launched at the Wren meeting in Sligo with representation from across the region.

Caitriona Duggan ANP Portiuncula was the recipient of the Irish Cancer Society PhD Researcher of the year award, building on the culture of nursing researchers within cancer services.

Many of our cancer nurses shared their knowledge and expertise throughout 2022 both locally, nationally and internationally. Chrissie Callaghan Acute Oncology CNS SUH presented her work on Metastatic Spinal Cord Compression at the Sligo CNME and demonstrated the positive impact of the acute oncology service at the SUH Clinical Audit forum in June along with Margaret Burkes audit on oral care in patients receiving chemotherapy.

Janice Richmond ANP LUH presented her research poster on Oral Anti-Cancer treatment on the International stage at the European Oncology Society Nursing Conference in Paris in September.

Sarah Connolly cANP Haematology GUH presented her research on the lived experience of patients with Myelodysplasia and AML receiving SC Azacitidine at the Haematology Association of Ireland Conference in Cork in

October.

2022 saw the progression of additional cancer nursing posts from staff nurses to promotional grades, including CNS's and ANP's across the region thanks to the support of the NCCP. We also saw the appointment of 2 first in kind posts within Saolta:

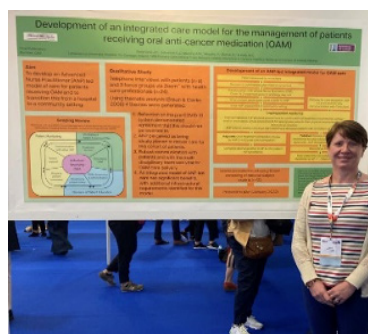
- The appointment of Patricia Gleeson as the first CNS in Adolescent and Young Adults (AYA) within Saolta was welcomed. This post is a result of the Framework for the Care and Support of Adolescents and Young Adults with Cancer in Ireland, with GUH designated as one of the 3 designated Adolescent and Young adult cancer centres
- Sheila Talbot was appointed as CNM3 SACT Outreach in GUH whose role is to scope out and facilitate SACT outreach services as part of the NCCP SACT Model of Care 2022.

2022 saw the undertaking of the Training Needs Analysis of Nurses Caring for Cancer Patients within 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 also aligned with the OECI Standards. Undertaking this training needs analysis was possible through the support of the NMPDU and was led by Christina Farrell.

We look forward to what 2023 will bring with the progression of the OECI Accreditation and Designation and the critical role nursing will play in this.



Cancer Nursing Research Group



Janice Richmond ANP LUH

Palliative Medicine



Dr Dympna Waldron
 Consultant Palliative Medicine
 Lead Clinician

We are continuing our work towards earlier integration of palliative medicine in the cancer patient journey. Appropriate and timely 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.

Galway University Hospitals

The palliative medicine liaison service reviews patients with advanced life limiting illness and complex symptom control or psychosocial needs. Our aim is to maximise the patients comfort and quality of life throughout their illness.

In 2022 we saw 1269 patients in UHG, 100% of whom were seen within two days of referral. We provide intensive and responsive support to patients and families including a 24/7 on call cover to patients across Galway and Roscommon supporting hospitals, hospices and community palliative care teams.

We continue our commitment to undergraduate and postgraduate education initiatives, delivering an intern workshop on end of life care, a prescribing workshop for final medical students, postgraduate education at grand rounds and clinical case presentations. We are a recognised training centre for HST palliative medicine and provide education and mentorship for NCHDs on service. Our team presented at IAPC / EAPC and published a number of articles in palliative medicine journals in 2022.

GUH Palliative Care Activity 2022

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
New Referrals	80	96	87	94	99	85	88	86	96	83	75	77
Re-Referrals	6	13	18	7	23	29	19	24	18	23	24	11
Total	86	109	105	101	122	114	115	110	114	106	99	88

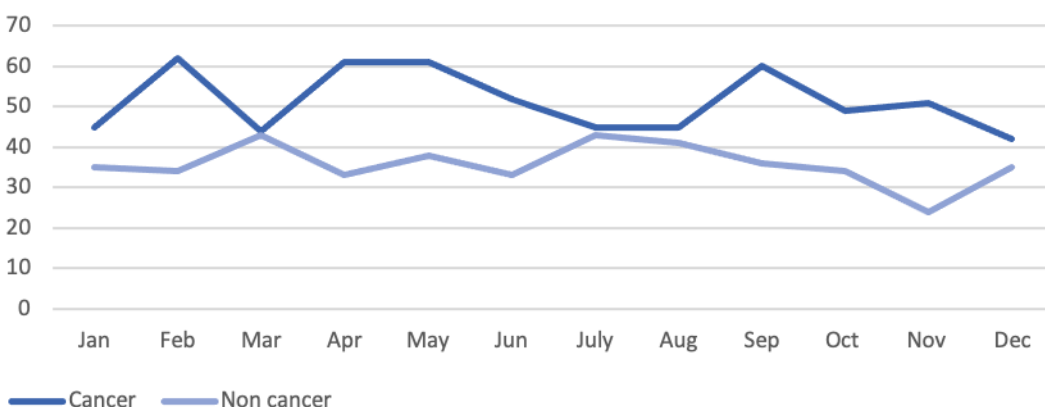
GUH Age At Referral To Palliative Medicine Services:

Age	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0-17	2	1	1	0	1	0	0	0	0	1	1	0
18-64	23	28	19	25	30	19	15	21	24	22	16	25
>65	55	67	67	69	68	66	73	65	72	60	58	52

GUH Patient Diagnosis:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Cancer	45	62	44	61	61	52	45	45	60	49	51	42
Non-Cancer	35	34	43	33	38	33	43	41	36	34	24	35

Diagnostic Category Palliative care referrals 2022



Activity GUH 2022

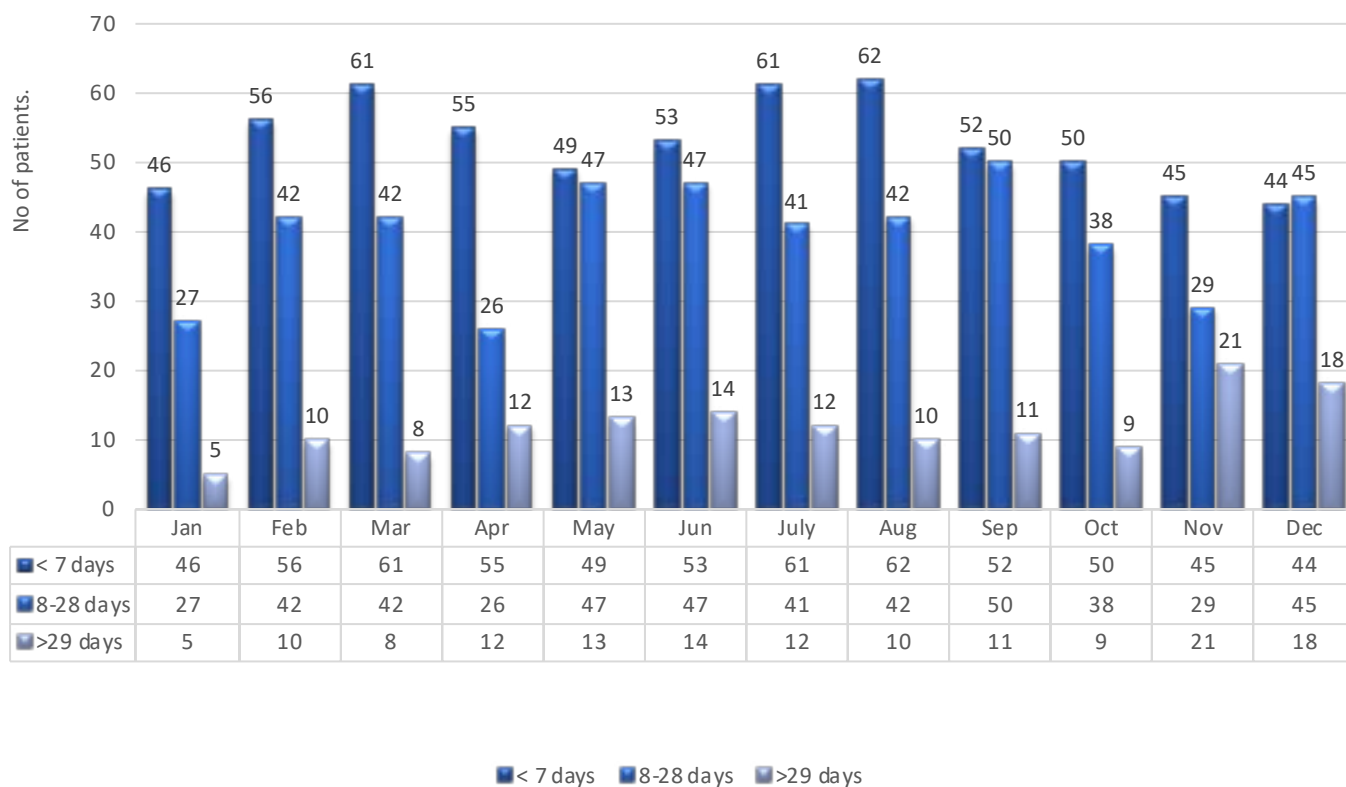
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Single Visit	283	303	329	339	338	347	425	445	329	309	383	338
Joint Visit	302	265	267	237	256	249	281	231	238	231	272	234
Total Visits	585	568	596	576	594	596	706	676	567	540	655	572

GUH Outcome Data 2022

Age	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Died in Hospital	34	34	33	39	37	44	55	52	55	37	38	45
DC with CPCT	26	50	52	38	45	56	43	40	36	40	35	43
DC without CPCT	4	3	2	5	2	3	2	1	1	2	2	2
DC to Hospice	6	7	12	6	15	7	7	9	12	10	14	11
DC to Level 2 Bed	5	6	3	2	5	2	2	9	3	2	4	1
DC from Service	3	8	8	3	5	2	5	3	6	4	2	5

CPCT = Community Palliative Care Services

Time to Outcome from First Palliative Care Review 2022



Palliative Care 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. The service is attended by Dr Sharon Beatty and Dr Kathleen Cronin, Helen Ely cANP and Leona Butterly CNS.

In 2019 there were a total of 269 referrals to the specialist palliative care service 94% of referrals were seen within two days of referral. 33% of patients referred to our service had a diagnosis of malignancy.

2022 brought a period of growth for our team. In February 2022, Helen Ely commenced the cANP programme, the first ANP in palliative medicine in the SAOLTA group. In August 2022 we welcomed Leona Butterly CNS to the PUH team. We look forward to further expanding our inpatient and

ambulatory service to meet patients needs in the coming months and years.

Bereavement evenings for bereaved family members were held in March and October 2022. Educational initiatives continued throughout 2022 including the delivery of an educational programme to support the replacement of T34 pumps by the Bodyguard T syringe driver. The team delivered two education days to support staff in practice change. We also delivered local education sessions during palliative care week and a targeted palliative care study day for ward staff in October 2022. The team delivered 'Final Journeys' training for hospital staff and small group teaching on palliative and end of life care for NCHDs. The team continued their commitment to audit and QI initiatives in PUH and submitted research for presentation at IAP.

PUH Palliative Care Activity 2022

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
New Referrals	17	28	25	17	20	19	16	25	27	20	15	20
Re-Referrals	2	0	0	2	0	0	3	5	6	1	0	1
Total	19	28	25	19	20	19	19	30	33	21	15	21
Face to Face consultations	703	730	737	667	740	669	800	828	728	615	680	593

PUH Age At Referral To Palliative Medicine Services:

Age	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
0-17	0	0	0	0	0	1	2	1	0	0	0	0
18-64	0	4	2	1	6	1	1	1	2	2	3	1
>65	17	24	23	16	14	17	13	23	25	18	12	19

PUH Patient Diagnosis:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Cancer	3	8	7	7	8	6	5	15	14	5	5	7
Non-Cancer	14	20	18	10	12	13	11	10	13	15	10	13

GUH Outcome Data 2022

Age	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Died in Hospital	14	12	14	5	11	7	6	11	14	9	6	7
DC with CPCT	3	7	7	4	8	3	6	8	8	8	6	7
DC without CPCT	1	1	0	1	2	3	1	2	2	0	0	0
DC to Hospice	2	1	2	1	0	0	1	1	3	0	0	0
DC to Level 2 Bed	0	1	3	5	1	2	1	1	4	4	0	2
DC from Service	1	0	1	0	1	0	0	1	0	0	0	0

PUH Age At Referral To Palliative Medicine Services:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Outcome < 7	19	16	17	16	12	13	12	19	21	13	13	15
8-28 Days	3	6	11	3	8	4	4	6	8	3	2	3
>29 Days	1	1	1	0	0	0	0	0	1	0	0	0

Pharmacy Oncology

SACT Performance on (NCIS) platform

NCIS was still in the adoption phase, and accelerated significantly in 2022

830
Patients Treated

177
SACT Treatments
per week given on
digital platform
in UHG

17 to 33%
READY day before
(critical for
productive work)

47
Active SACT
Agents

5 Day Model
for manufacturing
and outpatient
administration

3 Systems
for clinical documentation
systems in use MOSAIQ, NCIS,
Clinichemo

Fig 1. Head-line figures for 2022.

Aliming for Red (Made day before)

DaysMadePrior (Blank) ● 0 ● 1 ● 2 ● 3 ● 4 ● 5 ● 6

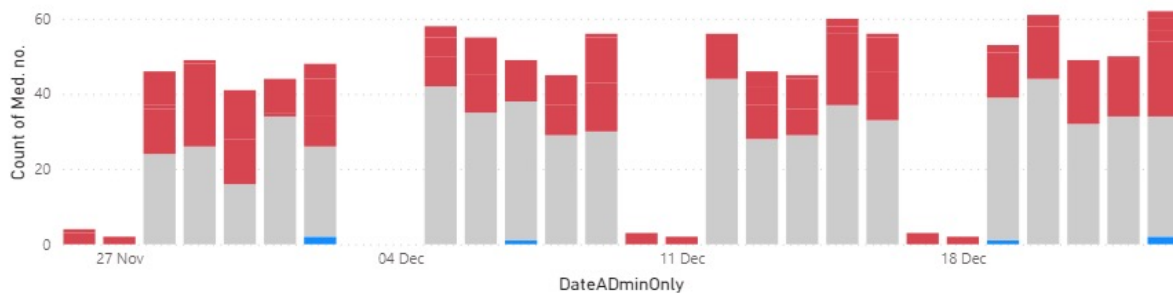


Fig 2. Key to improving patient journeys was the readiness of SACT prior to patient arrival. The 5-day pattern highlights opportunities for improvement. Growing the proportion of SACT treatments ready the day before will deliver increased manufacturing and administration capacity to the cancer service. This required a team-focus on pre-assessing patients as fit for treatment PRIOR to arrival on the unit.

Opportunities for 2023

- Complete implementation so that 100% SACT is on digital platform NCIS (make Clinichemo redundant in 2023)
- Continue to develop Business Intelligence prototype to assist in patient journey improvements (See Fig 2 above)
- Continue to lead national user groups in pursuit of improved software for future releases
- Roll-out clinical trials on NCIS platform
- Continue to advocate for a suitable oral chemotherapy solution within NCIS (preferably)

Radiation Oncology



Dr Cormac Small

Consultant Radiation Oncologist
Lead Clinician

2022 saw an acceleration in the ongoing building of our new Radiation Oncology Department. Four linac machines arrived for installation in September 2022 as well as the infrastructure to operate them. A radiation survey was carried out in October and November 2022 as required by EPA for licensing clinical use of these treatment machines. The acceptance testing and commissioning program for these linacs began in November to enable and verify all the additional functionality offered by this equipment for patient treatment. This commissioning program is long and complex and will continue into 2023.

2022 was a busy year for recruiting. With support and funding from the NCCP a total of 26 new posts were given to support the new facility including Consultant Radiation Oncologists, an Advanced nurse practitioner, Clinical Engineers, Dosimetrists, Radiation Therapists, Staff Nurses and physicists. The recruitment of these highly specialized roles is not without its challenges however the ability to be finally able to offer a new state of the art facility with leading edge technology has proven to be a drawing force.

In 2022 we commenced sending our current radiation therapists to Cork University Hospital for training in preparation for the move to the new building to enhance their overall skill mix.

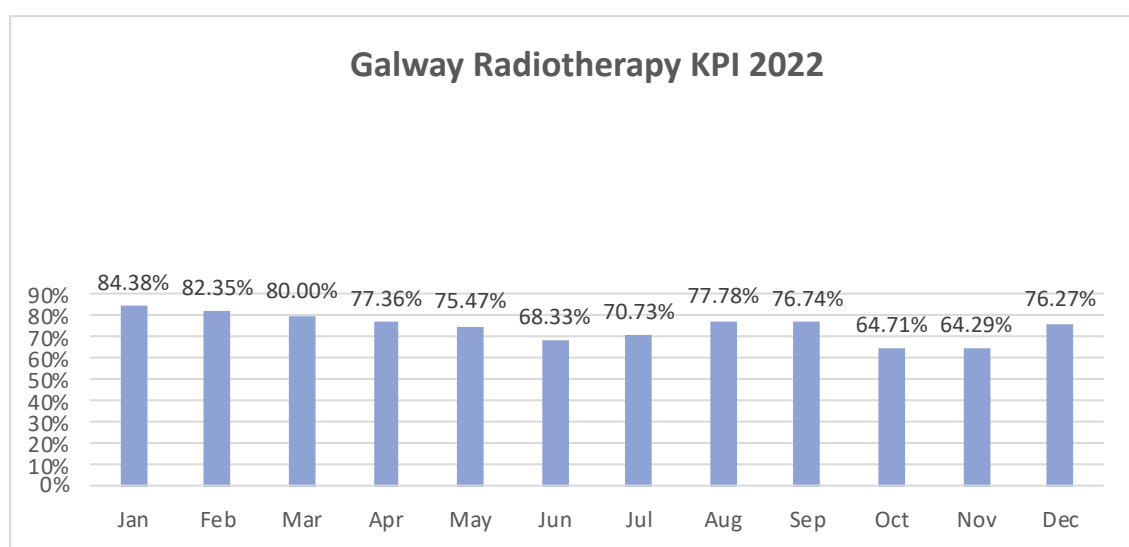
In spite of all the preparation for the move to our new department we continued to improve services in the department with the introduction of 3 field Deep inspiration breath hold (DIBH) for 3 field breast treatment technique.

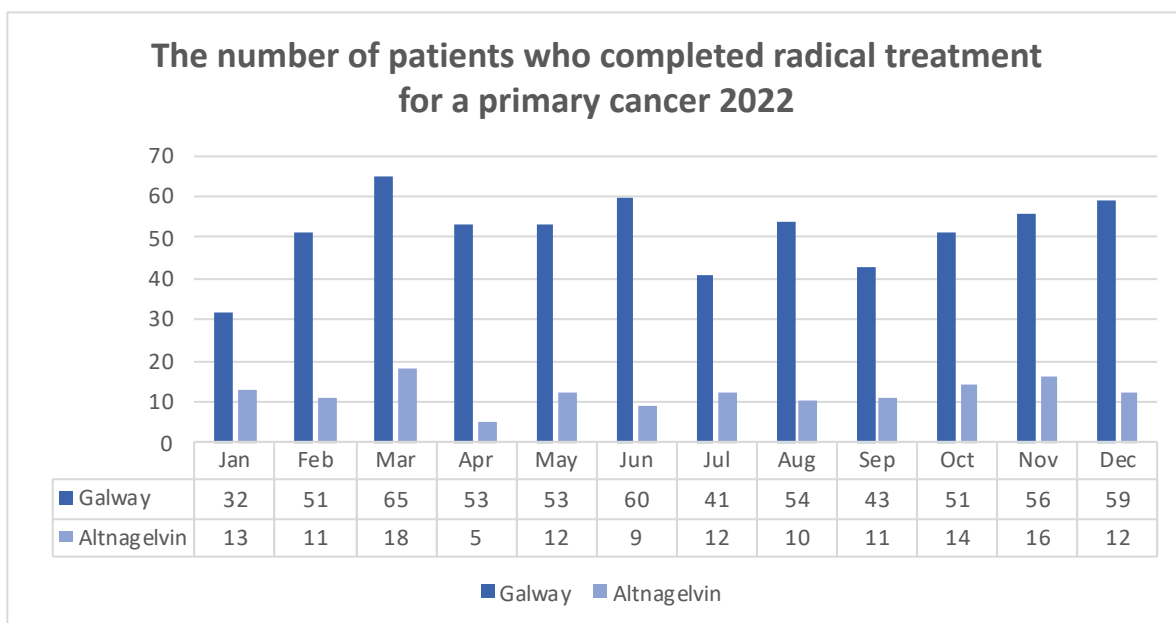
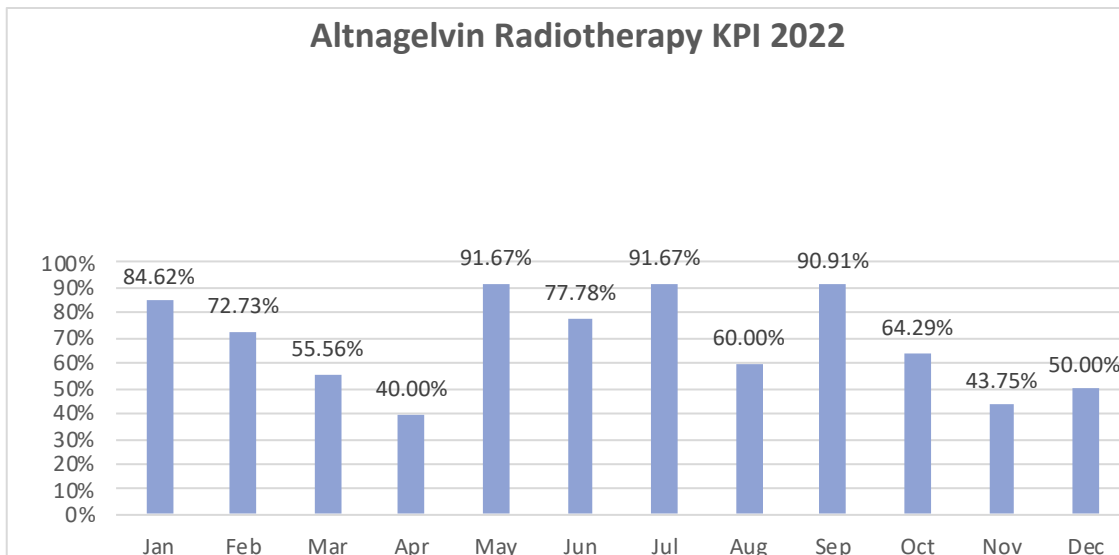
As part of her master's degree one of our radiation therapists conducted a research study in the department exploring the psychosexual experiences of gynaecological cancer patients after radiotherapy. This paper was published in a peer-reviewed journal, the Psychosocial Oncology Journal. She followed this up by being instrumental in setting up and running, in conjunction with Cancer Care West (CCW), a "Sexuality after Pelvic Cancer" support group.

Patients treated – Brachytherapy Gynaecology

Radiotherapy Activity	2022	
	Patients	Activites
HDR Intravaginal (15312-00 No Anesthetic Requirement)	16	47
HDR Intravaginal & Intrauterine (15320-00 Anesthetic Required)	8	23
	24	70

Radiotherapy Activity	2022
New Referrals to Radiation Oncology (GUH, SUH & MUH)	1,156
New Virtual Clinics (GUH, SUH & MUH)	551
Review Clinics (GUH, SUH & MUH)	1944
Review Virtual Clinics (GUH, SUH & MUH)	3455
Registered Advanced Nurse Practitioner Virtual Follow-up Telephone Clinic for Prostate and Erectile Dysfunction Patients	2047
RANP Erectile Dysfunction Clinic- New Referrals	187
RANP Activity within the Radiation Oncology Prostate Clinics	1245
Patients treated with EBRT (External Beam Radiation Therapy)	1029
Patients treated - Orthovoltage	54
Total Number of Orthovoltage Treatments	680
Patients treated - Brachytherapy Prostate Seeds	29
HDR-Brachytherapy	22
Ultrasound Biopsy (Requires Anesthetics)	56
Number of Fractions Treated on LINACS - EBRT	19,532





Key Achievements 2022

- Safe delivery and ongoing commissioning of Linacs machines
- Training of Radiation Therapists for new equipment use
- Ongoing safe treatment of patients in existing unit
- Recruitment of new staff for new Radiation Oncology Building
- The continued progression of the National Radiation Oncology build.

Key Priorities 2023

- The opening of the new Radiation Oncology building with minimal disruption to patients and staff.
- Continue to progress the National Radiation Oncology project and continue 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 2022

2022 was yet another challenging period for Radiology GUH. Overall Radiology GUH activity continues its inexorable rise, total patients seen in 2021 was 132,821 compared to 142,466 in 2022 an increase in patient throughput by 7%. 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 2023.

Quality And Patient Safety

The Radiology Directorate Team are committed to continuous quality and safety improvements in order to positively affect the outcomes for our patients in the Saolta Group and are implementing initiatives to enable this.

Skilled Caring Staff

A key challenge for the Radiology Directorate is attracting high quality staff to deliver innovative, safe and sustainable radiology services to our patients. There is a specific focus to retain the skilled radiographic workforce while attracting high quality candidates nationally and internationally across all grades.

Research, Education and Innovation

We are committed to prioritising and supporting professional development of all radiology staff with the expansion of training posts for undergraduate and post graduate Radiographers. We aim to provide a stimulating work and educational environment providing radiographers with opportunity to train in various modalities, build on their knowledge and enhance radiology service deliver. Radiographer training is provided in collaboration with University of Galway, UCD School of Radiography and more recently with UCC. Consultant Radiologists are supported in their continued professional development, research and education. GUH Radiology Department encourages innovation and research. It is currently incorporating artificial intelligence innovations to enhance patient imaging and care.

MDM's are a key component in the delivery of care to patients including weekly Oncology MDM's, subspecialty medical and surgical

MDMs. MDM's involve collaboration with teams across Saolta hospital sites. We will continue to encourage and support our administrative and radiology support staff to undertake further training and upskilling.

Patient Access

In 2022 The Radiology Directorates priority is to improve patient access incorporating the following:

- Addressing demand and capacity mismatch to reduce waiting times in all modalities
- Improving GP access to radiology examinations and exploring further synergies with our clinical colleagues in CHO1 and Community Healthcare West.
- Streamlining of patient pathways for imaging to provide the service as close to home as possible
- Development of CT services to meet increasing demand.
- Improve access for inpatients to IR UHG
- Development of interventional radiology services on the Merlin Park Site to increase from 3 days to 5 day week. Transferring all appropriate elective out-patient and day case UHG work to be done in MPUH will allow UHG to concentrate exclusively on in-patient and high acuity cases.
- Continuing streamlining of the outreach symptomatic breast services at MUH and SUH

Key Challenges

Increasing capacity to match demand and reduce waiting times in particular for MRI, CT, Ultrasound, Interventional Radiology and Breast Services

- Critical shortage of Radiographers/ Mammographers / Sonographers.
- RSM 1 Post Vacant.
- Increased inpatient/outpatient waiting lists.
- Increased on call/inpatient services.
- Continue to explore option to outsource activity to deal with service demands.
- Increase access to Radiology services to GP's across Saolta Group.

Galway University Hospitals - Radiology Activity Comparison 2021 v 2022

Galway University Hospitals	2021	2022	% Increase
Total Examinations	159,693	169,782	6%
Total Patients	132,821	142,466	7%

MRI

The 2nd MRI (MRI 2 Alliance) scanner in GUH is running concurrently which is having a positive impact in reducing wait times and increase throughput for our in-patients/outpatients.

In addition we continue to use the option of outsource MRI activity to MPIC 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 Performed UHG	2021	2022	% Increase
Total Examinations	8,469	9,146	8%
Total Patients	7,835	8,383	7%

CT Activity

CT 1 (end of life) needs to be replaced – priority replacement equipment

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 ie (CT 1) is an absolute priority as this machine is nearing end of life.

CT 1 is operating at 25 % capacity which is no longer sustainable.

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

CT Performed UHG	2021	2022	% Increase
Total Examinations	20,211	21,872	8%
Total Patients	17,500	18,987	8%

Ultrasound

Increasing demand for ultrasound scans has increased workload and waiting times. Weekly insourcing Ultrasound lists funded by NTPF and Cancer MCAN have helped reduce

waiting times. There is a significant shortage of Sonographers and this will also prove challenging to deliver optimum service going forward.

Ultrasound Performed UHG	2021	2022	% Increase
Total Examinations	12,334	13,567	10%
Total Patients	10,171	11,543	13%

Mammography

Significant challenges in Mammography services due to insufficient Mammographers available. Rolling recruitment campaigns and

agency are being utilised to fill the gaps in service. In-house training of mammographers to be explored.

Equipment New/Replacement 2022

No equipment replaced or reconfiguration works carried out in 2022 in Radiology.

Installation of CT Research Scanner took place in 2022. Not operational.

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. Significant numbers of Radiographer posts remain unfilled due to large numbers of Radiographers leaving after Covid- 19 restrictions have lifted to go travelling abroad. This impacted all Radiology Services significantly across all modalities during 2022.

Postgraduate training on going in 2022

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

Consultant Staffing

- Replacement Applications submitted to the Consultant applications advisory committee (CAAC) for 3 Consultant Radiologists due to retirements in 2022
- Continue to seek Locum cover to fill current vacancies owing to retirements and leave

Nursing Staffing Training 2021/2022

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

Interventional Radiology

Development of interventional radiology services on the Merlin Park Site to increase from 2 to 3 days a week. Transferring all appropriate elective out-patient and day case UHG work to be done in MPUH will allow UHG to concentrate exclusively on in-patient and high acuity cases.

Timely access to day case Interventional Radiology services is critical to the treatment of all patients, but especially in Oncology and Haematology, where treatments can be very time dependent.

Key Achievements 2022

- Development of Interventional Radiology services in Merlin Park hospital now increased from 2 to 3 days per week
- An ongoing increase in patient throughput by 6 % per annum

Key Priorities 2023

- 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
- PET CT Business Case

Section 2

**Health & Social Care
Professionals**

Dietetics

Grainne O'Byrne

Dietetics Manager

Noelle Coughlan/Edel Barrett

Oncology Dietic

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. Medical Oncology and Haematology have one senior dietician however this post was vacant in 2022. Radiation Oncology dieticians increased from 1 WTE to 1.5 in October 2022.

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 2022 there were 206 outpatients referred to the Radiotherapy dietician, 181 patients were seen (87%). During 2022 a pre-treatment leaflet for all Head and Neck Cancer patients was developed and launched. This information is given to patients at their first CT SIM appointment. This provides dietary advice for patients to follow prior to commencing radiotherapy.

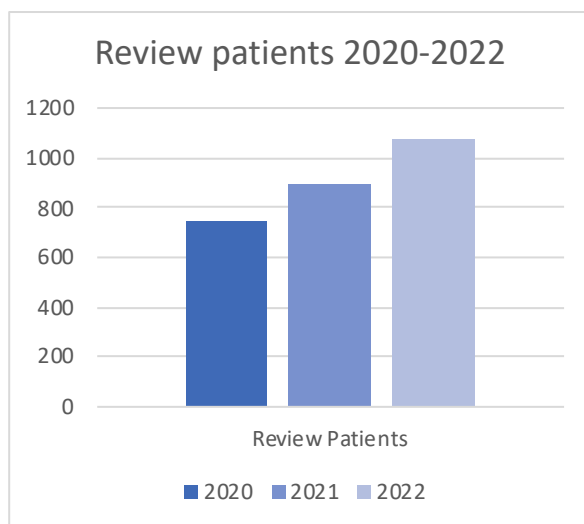
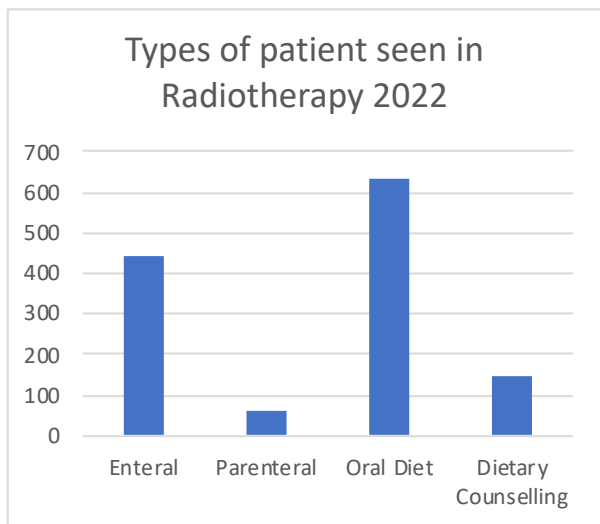
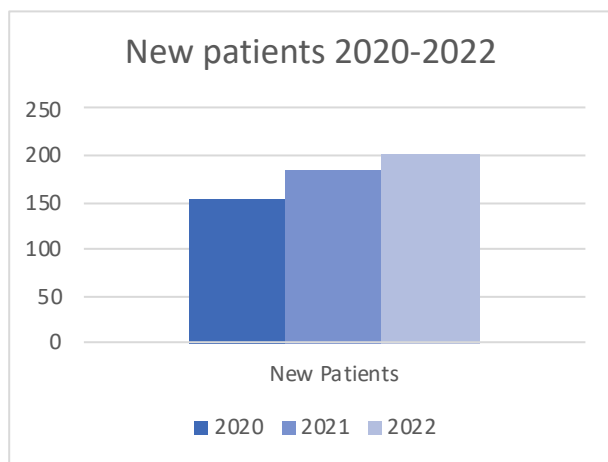
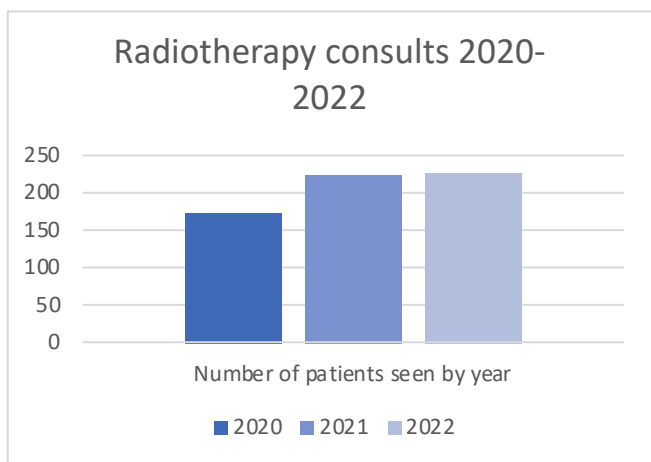
Key Achievements 2022

- The Clinical Nutrition and Dietetic Service continued to provide quality care to patients:
- Dietetic telephone review clinics were commenced to correspond with consultant telephone review clinics.
- Development of 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

Key Priorities 2023

- Increase the WTE in dieticians to address the needs of Haematology and Medical Oncology patients

Clinical Nutrition & Dietetic Service Activity 2022



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 2022

- 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 University Hospitals

Summary of 2022 Health and Wellbeing Activity

Actions	Outcomes
Healthy Eating and Active Living.	<ul style="list-style-type: none"> • Gold Medals awarded to both staff canteens at GUHs. This is in recognition of measures and implemented National policies in relation to creating a Healthier Food Environment and supporting heart health. These awards were delivered by HSE, Healthy Ireland and in association with the Irish Heart Foundation. • Compliance with Healthy Vending Policy across both sites. • Upgrading of staff facilities to support active travel measures including securing funding for establishment of new secure bike shelters on both sites at GUHs. • Staff Representation in focused walk and bike themed days as part of our smarter travel partner initiatives with the National Transport Authority.
Making Every Contact Count- Prevention and management of chronic disease.	<ul style="list-style-type: none"> • Achieving National targets for Making Every Contact Count ELearning and Skills into Practice KPIs. • Free Stop Smoking Medications to all HSE staff who engaged with the QUIT stop smoking services • Bursary Awarded of 5,000 from HSE in light of Quality Improvements implemented as part of Tobacco Free Campus policy. • QUIT Smoking at Galway University Hospitals. • Galway University Hospitals is committed to reducing the use of tobacco and its harmful effects by creation a tobacco-free environment for its patients, service users, visitors and staff. QUIT Services, supports and resources are widely communicated across both hospital campus. The GUHs Tobacco Free Campus committee meet 5 times a year with the aim of implementing the HSE Tobacco Free Campus Policy which helps reduce exposure to nicotine • GUHs staff are offered free Nicotine Replacement Therapy when they commit to a 12 week "HSE Staff Stop Smoking Support" programme.
Promoting Healthy Childhood	<ul style="list-style-type: none"> • Maternity Services GUHs support Increasing rates of breastfeeding through provision of various infant feeding supports and provision of both universal and tiered additional supports and programmes to families. • Maternity Services at GUHs continues to embed standardised child health information resources in service settings and they also support the developments of content on mychild.ie website. • Staff at both Paediatric and Maternity Services in GUHs participate in all child health services and supports related to infant/child mental health.

Actions	Outcomes
Promoting Mental Health and Wellbeing	<ul style="list-style-type: none"> • Implemented and scaled up delivery of evidence-based mental health promotion programmes including HSE Balancing Stress-a practical course on stress management. • GUHs continued to work in partnership with the community and voluntary sector to integrate and scale up social prescribing across the health services, in line with the HSE Social Prescribing Framework.
Actions Promoting Health and Wellbeing Communications	<ul style="list-style-type: none"> • National Campaigns promoting wellbeing and healthy behaviours are communicated through all available channels at GUHs including, digital, print and media.
Infection Prevention and Control	<ul style="list-style-type: none"> • In line with HSE recommendations COVID-19 and adult seasonal influenza vaccines are offered to all individuals identified in "At Risk" Categories, including Healthcare workers, Over 65Years, pregnant and individuals with chronic disease. These vaccines are administered during the relevant season, typically October to March each year which can be co-administered where practicable, to maximise uptake. • GUHs continues to implement the WHO five moments of hand hygiene throughout both hospital sites. The Infection Prevention & Control team invite everyone to participate in the following drop-in education sessions: HAND HYGIENE & PPE EDUCATION SESSIONS.
Screening	<ul style="list-style-type: none"> • The health promotion service at GUHs continues to support the delivery of screening programmes in conjunction with the National Screening Service population based, call-recall screening programmes including • Colposcopies (CervicalCheck) • BreastCheck Surgeries (BreastCheck) • Colonoscopies (BowelScreen) • Diabetic RetinaScreen consultation and treatment.
Empowering people and Communities	<ul style="list-style-type: none"> • The health promotion service continues to support the implementation of the reformed clinical programmes & new integrated care programmes in line with national direction to emphasise prevention, early detection and self-care. • Self-care support programmes for patients identified with cardiovascular disease, respiratory diseases and diabetes are implemented in line with national framework. • Patient Advocate Liaison Service (PALS) provide general information and support to patients and families in line with the Saolta University Healthcare Group Strategic Priority plan.

Physiotherapy



Catherine O’Sullivan
 Physiotherapist Manager in Charge III UHG

Cancer Rehabilitation addresses the musculoskeletal, cardiopulmonary and functional impairments expected in cancer. It has the potential to limit and manage the side effects of cancer and its associated treatments, improving the quality of life of anyone living with cancer. 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.

Exercise has been shown to be safe and effective for cancer patients at all stages of treatment and is recommended by multiple international guidelines.

Physiotherapy plays a key role in providing cancer rehabilitation services to patients at both a ward based level and gym rehabilitation as appropriate. The caseload encompasses patients throughout their cancer journey (diagnosis, treatment, survivorship and through to end of life, palliative care). Physiotherapists play a key role in the management of cancer related side effects e.g. peripheral neuropathy, fatigue, steroid induced myopathy, bone/ brain metastases, spinal cord compression, breathlessness etc.

Physiotherapists participate in weekly multidisciplinary team meetings with the primary focus on patient centred goal setting.

This is essential to ensure the safe and timely discharge of patients from the acute setting and aid patient flow in an ever increasing and busy service. In 2022, there was an increase in the inpatient caseload in Oncology and Radiotherapy compared to 2021 (Table 1). Activity levels were likely to have been unusually low in 2021 secondary to COVID and this impacted our service significantly. Overall inpatient activity, though not quite back to pre-COVID levels has substantially resumed and other challenges in meeting patient’s needs are coming to the fore. These include increases in age of patient cohorts, older patients being treated with systemic anti-cancer treatment, advances in treatments for patients with metastatic disease. Due to this high demand, we were unable to consistently provide gym rehabilitation or the intensity of therapy that these patients require.

2022 saw an increase in staffing with an extra 0.5 WTE staff grade joining the team. This made a significant impact on managing the caseload, in particular with the increasing dependency levels of patients who have increased rehabilitative needs. The physiotherapy service is now provided by 2.0 WTE Senior staff and 1 WTE staff grade.

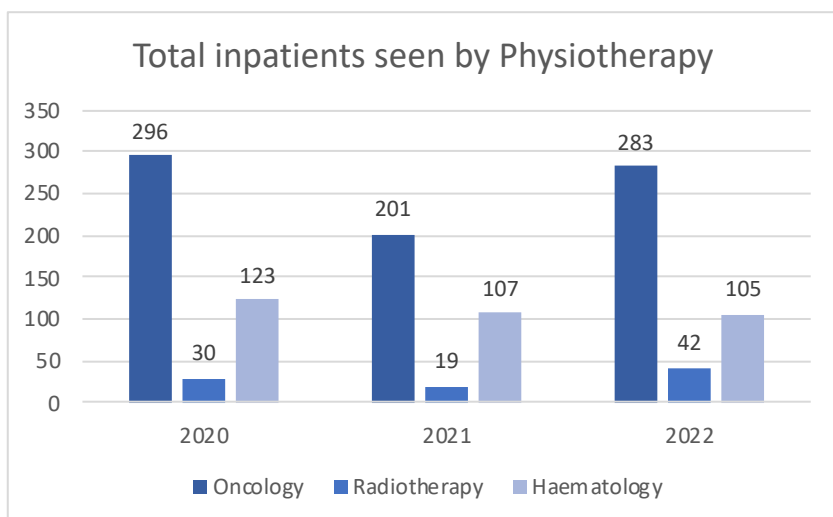


Table 1

Outpatient Service

With the lifting of COVID restrictions in 2022 we re-commenced in-person outpatient service to lymphoedema patients and post-operative breast patients with musculoskeletal complications. Activity levels significantly increased as a result of this (Table 2).

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. It is a chronic, progressive condition which becomes more complex, and can lead to significant costs to the health service and the patient if left untreated. Lymphoedema can cause swelling, pain, skin changes, cellulitis and reduced function which can be very distressing and adversely affect quality of life. Interventions for lymphoedema consists of exercise, skincare advice, complete decongestive therapy and garment prescription.

In GUH we provide some cover for oncology related patients who develop lymphoedema. However, due to lack of dedicated staffing to this service, we cannot provide intensive treatment to these patients. There is an absence of an Early Detection service which has shown promising results having been rolled out in other cancer centres in Ireland such as the Mater Hospital with plans to expand to St James and University Hospital Limerick.

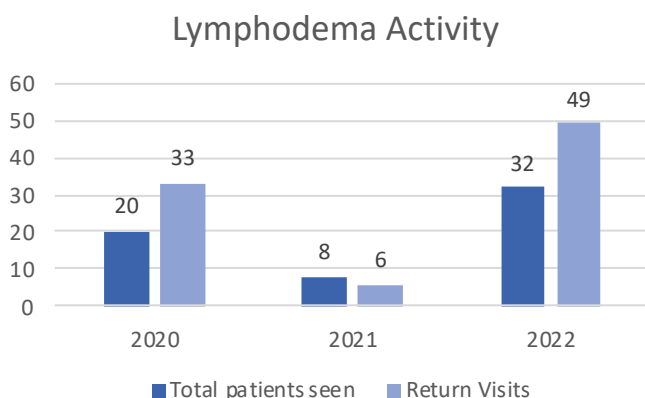


Table 2
Outpatient Lymphoedema activity 2020,2021 and 2022

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.

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 also reported fatigue as a significant issue.

In March 2022, a NCCP funded 0.5 WTE Senior Physiotherapist was appointed to develop and deliver a service to prostatectomy patients. 266 patients availed of the service in its inaugural year. The service is provided to patients under the care of 3 surgeons performing robot assisted radical prostatectomy; Ms. Catherine Dowling, Mr. Garrett Durkan and Mr. Patrick O'Malley. The service in UHG caters for patients from Galway, Mayo and counties outside the Saolta group.

Achievements in Year 1 Include:

- Development of pre-operative service for patients undergoing prostatectomy surgery offering individual assessment and tailored education to prepare patients for surgery to optimise recovery post operatively.
- Development of an enhanced post-operative physiotherapy service primarily focused on training and re-education of the pelvic floor to address incontinence issues and also providing advice re return to work/ sport/exercise/hobbies etc.

- Development of updated pelvic floor exercise leaflet for patients undergoing prostatectomy surgery.

Priorities for service improvement:

- To develop a standardised Physiotherapy pathway for prostatectomy patients
- To develop a virtual patient follow up service
- To provide education to staff on the RACAP unit re role of physiotherapy
- Explore options to develop the service for patients undergoing radiotherapy for prostate cancer

Colorectal

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.

Physiotherapy currently provides a limited service to colo-rectal surgery patients, primarily at the perioperative 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. This was discontinued during Covid and has not yet recommenced.

Lung Cancer

There is growing evidence of the success of Enhanced Recovery After Surgery (ERAS) and prehabilitation programmes in cancer care. Such programmes have been shown to optimise post-operative recovery, reduce post-operative complications as well as reducing hospital length of stay. The Lung Cancer Enhanced Recovery Programme was established in GUH in October 2022, with the appointment of a NCCP funded 0.6 WTE Senior Physiotherapist, to meet the needs of patients with lung cancer across the entire SAOLTA region. The Lung ERAS service is based in u8 Merlin Park University Hospital. It is a Physiotherapy led service providing assessment, prehabilitation and post-operative rehabilitation for people undergoing surgery. Patients referred to the service undergo an in-depth assessment of their physical and

respiratory function and participate in weekly online or in-person exercises classes in advance of their surgery. After surgery they are followed up for post-operative assessment and weekly rehabilitation. The aim of the programme is to optimise physical fitness and lung function in order to aid in post-operative recovery, to support patients through their treatment journey and improve quality of life.

Breast Cancer

It is estimated that more than 1 in 5 women who survive breast cancer will develop arm lymphoedema.

Most current cancer services, including GUH, provide a lymphoedema service for cancer patients that have already developed lymphoedema at an irreversible stage. This results in a requirement for more intensive treatment from a lymphoedema service and life-long monitoring and support. It has been demonstrated that lymphoedema in breast care patients leads to higher health costs and hospitalisation due to cellulitis. Research has demonstrated that patient education regarding risk reduction and provision of early detection and treatment can be successful in preventing lymphoedema. If lymphoedema does develop early intervention lessens the impact and progression and reduces the need for more costly intervention.

Physiotherapy currently provides a limited 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.

Continuing Professional Development

Physiotherapists working in Cancer related services were supported to undertake education, based on a training needs analysis and development conversations with their manager.

Some of the highlights include:

- Essential Care in Lymphoedema
- PINC Cancer Rehab Certificate Course
- Trinity /St James Cancer Conference
- 'Nuts & Bolts' of Prostate Cancer
- Breathing Pattern Disorder Study Day
- Making Every Contact Count Training (MECC)

Physiotherapy team members and managers attended the first meeting of Saolta Cancer MCAN HSCP Research Group in November and plan on becoming active participants in this meeting going forward, so that we can come together with other HSCPS working in Saolta Cancer Services to enhance areas such as education, audit and research.

Undergraduate Student Education

The physiotherapy department has an ongoing commitment to supporting undergraduate student placements across oncology, radiotherapy and associated services. Student physiotherapists work alongside their physiotherapy and wider HSCP colleagues in providing evidenced based best practice in the assessment and management of this patient cohort.

Areas for Development

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.

Explore opportunities to collaborate with academic partners across the Saolta Group and beyond and become more involved in multi-disciplinary education, research and audit.

Oncology Social Work

Rachel Macken
Senior Radiation Oncology Social Worker
Mairead Hutchinson
Medical Social Worker, Medical Oncology
Jessica Donlon
Medical Social Worker, Medical Oncology

Medical Social Work at Galway University Hospital has been providing a support service to medical oncology patients for approximately twenty-two years since the first dedicated social work post to cancer services commencing in 2000. This was then complimented with a dedicated resource to Radiation Oncology patients in 2005. The cornerstone of our work is client advocacy and a focus on providing a compassionate service placing the person at the centre of all interventions. Social Workers work systemically both within the hospital and with services in the community looking at the person’s psycho-social and other needs and those of their family/ significant others. At a time of societal change and even greater complexity in health care systems, we try to provide a listening ear and a caring response and also to relay the voice of the patient in terms of their perception of service needs at local and national level.

The clients we meet face the same stresses as other members of the population (college exams, paying a mortgage, rearing young children, caring for an elderly parent or ill partner, loneliness, mental health issues, housing problems, trying to secure employment etc.) but on top of that they have to face the diagnosis of a cancer condition and the implications of this physically, emotionally, psychologically and financially. Social Workers therefore try to extend a helping hand at this traumatic time and advise and support e.g. with worries about social welfare, child care, costs of treatment, coping strategies to deal with treatment plans, frequent hospital appointments and perhaps longer hospital stays.

Theories of grief and loss and crisis intervention

inform our work with patients and their families. We recognise and acknowledge the loss of identity that occurs for the patient including his or her family e.g. due to loss of work, changes in the roles of persons in a family unit or community. We seek to support the reorganisation that takes place due to the impact and effects that can take place because of their illness. Our clients are often a long way from home and this brings with it its own set of emotions (isolation, unease, depression etc.) and social workers can try to pinpoint available resources to address these needs. This might involve looking at family/ friendship systems, liaison with cancer care supports or local community agencies etc. We provide a safe place for patients to discuss their distress and anxiety about their illness and intervene at times of crisis to help negotiate solutions around their concerns. For example we assist patients and their families explore ways to navigate difficult conversations and topics which can emerge due to their illness. At times the patient may request a home care package, convalescence or step-down care and the social worker will facilitate the patient’s wishes here if possible, always ensuring that the consent of the person is sought. At times a pre-discharge meeting may be advisable pre-discharge and the patient is a very central part of this meeting in planning for their current and future needs. In 2022 the Medical Social Work service continued to highlight the need for social work posts in palliative care and haematology as per the model of care evident within other centres of excellence in Ireland. We are members of IPSON and attend ongoing meetings of the National Oncology and Haematology Social Workers Group.

Year/ Speciality	Oncology	Haematology	Radiotherapy	Total
2019	242	105	75	422
2020	280	111	88	479
2021	344	141	102	587
2022	320	82	123	525

Inpatient referral rates over the previous three years have demonstrated a year on year increase in demand for social work support and intervention. It is crucial that the areas of Palliative Care and Haematology are allocated dedicated social workers as a matter of urgency particularly to meet rising demand for social work intervention across all areas of cancer support services as detailed in number below.

An additional post was approved under the

National Cancer Care Programme in 2021 for Psycho oncology care. Psycho oncology care has been the main stay 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 2023.

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

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.

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.

Radiation/Oncology 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.

Section 3

Cancer Support Groups

Cancer Care West



Inis Aoibhinn



Cancer Care West is a not for profit organization dedicated to supporting those whose lives have been affected by cancer. Their vision is that no one in their region will go through cancer alone.

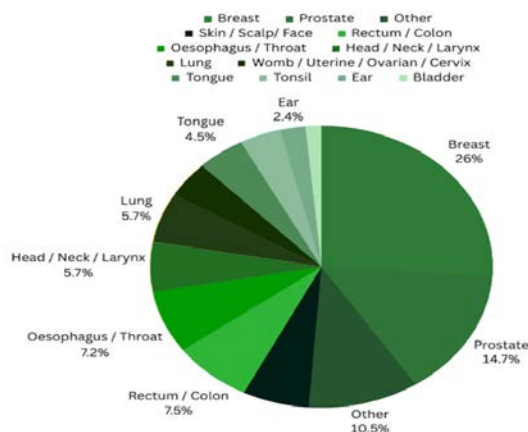
Cancer Care West's services include residential services for patients on radiotherapy, as well as psychological, practical and holistic support services for patients and their families. We also provide transport services to and from our residential facility at University Hospital Galway. Alongside our range of direct support services the charity undertakes a wide range of cancer awareness and educational programmes and research on patient care.

Inis Aoibhinn is Cancer Care West's thirty-three bedroom lodge on the grounds of University Hospital Galway. Patients can stay at the lodge, with a family member or friend, for the duration of their treatment where they have complete independence as well as the comfort of 24 hour nursing care. Referrals to Inis Aoibhinn are made through the Radiotherapy department at University Hospital Galway. The centre runs to capacity each year and in 2022 we provided accommodation and meals for 334 patients. We also provide free transport services to and from the lodge as well as working with local companies to provide extended transport support on other commercial links.

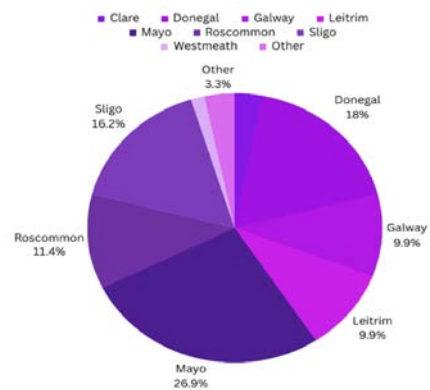
Each year the facility provides (numbers are approximate):



Inis Aoibhinn Resident's Country of Origin 2022



Summary Breakdown of Resident's Diagnosis 2022



Cancer Support Centres



Cancer Care West’s support centre facilities are located in Galway and Letterkenny and are staffed by psychologists, counsellors, oncology nurses and a range of qualified cancer support specialists. Our services include Psycho-Oncology and Counselling Services, Complimentary Therapies, Physical Rehabilitation and Exercise, Psycho-Oncology Nursing Support and Benefits and Advocacy Advice. We provide individual support, workshops and groups are for every type and stage of cancer, whether a patient is

newly diagnosed, facing a recurrence or are dealing with side effects of treatment. We also provide support for families and friends who are affected by a loved one’s diagnosis as well as a range of services especially designed for children and young adults. In 2022 our two centres were visited by 1,888 people affected by cancer involving approx. 9,000 interactions. During the year we also continued to build our digital outreach programme broadcasting 6 in-person and interactive webinars over the year on a range of cancer related topics. Staff from the cancer centres also provided Psycho-Oncology support services to 264 patients in hospitals in the region.

Each year our support centres offer services to nearly 3,000 people affected by cancer including (numbers are approximate):



Fund Raising

All of our services are offered free of charge which means we need to raise over €1m each year to make this happen. The funds are raised through a combination of large and small events, individual sponsored efforts, continuous giving through direct debits, online donations and payroll donations as well as corporate sponsorships and some flagship

annual events. Our largest annual events are the Galway Bay Swim, which in 2022 raised over €100k, and the Donegal Camino which raised over €50k. Cancer Care West is deeply grateful to everyone who supports their work and helps them to reach their fundraising targets.



Galway Bay Swim 2022



Donegal Camino 2022

Irish Cancer Society

University Hospital Galway



Introduction

In 2022 **26,757** people had contact with our 13 Daffodil Centres around the country.

Since its opening in September 2009, the Daffodil Centre in University Hospital Galway (UHG) has had contact with **24,784** people. The Daffodil centre in Letterkenny University hospital opened in September 2013 and has since had contact with **17,167** people. This report outlines Daffodil Centre activity in UHG and LUH during the period of January to December 2022.

Daffodil Centre Staff

The Daffodil Centres are open from 8.30am to 4.30pm Tuesday to Friday (UHG) and 9:00am to 5pm (LUH) also Tuesday to Friday. Fionnuala Creighton and Terry McMahon are the Daffodil Centre Cancer Nurses in UHG and Teraze Toby is the Daffodil Centre Cancer Nurse in LUH.

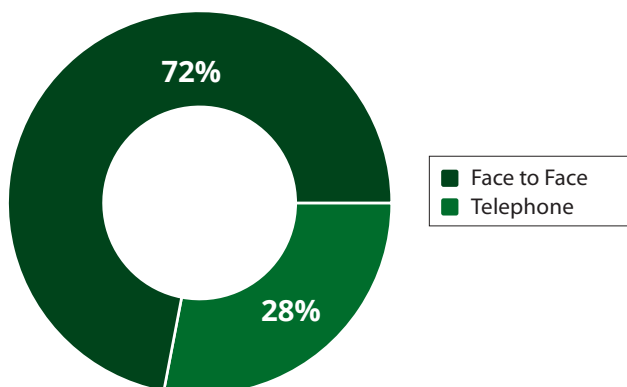
The Daffodil Centre Volunteers returned to fulltime duties in 2022. Currently there are 5 active volunteers in both centres. Volunteers attend the centre for a minimum of 3 hours per week from either 9am to 1pm or from 2pm to 4.30pm.

Enquirer Activity

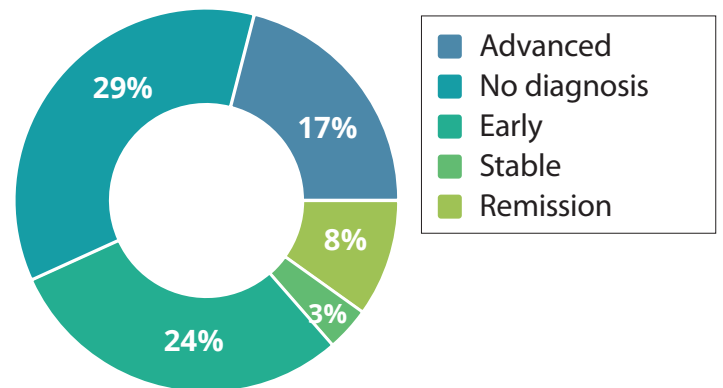
Information below based on GUH activity similar breakdown available for LUH

- The total number of enquirers was **1043**
- **50%** of enquirers were in contact for the first time
- **23%** of enquirers were referred by Healthcare Professionals
- The majority of enquirers were female (**74%**)

Mode of Contact



Disease Status



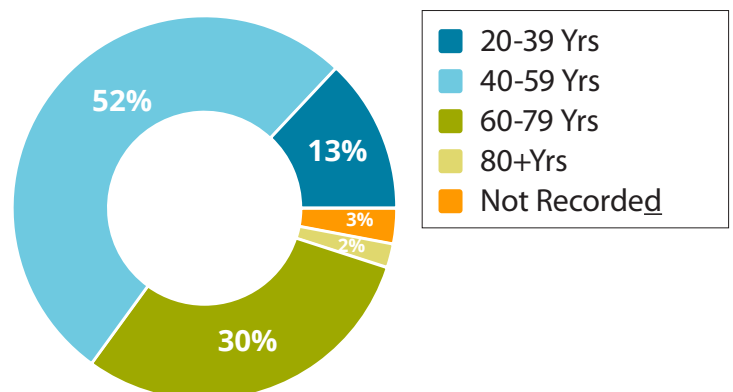
Primary Cancer Type - Top 5

- 18% Breast
- 7% Head and Neck
- 7% Lung
- 7% Bowel
- 5% Prostate

Type of Enquirer

- 71% of enquirers were people with cancer or their family and friends
- 25% 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

Age Profile



Advocacy Health – Top 5

- No access to Psycho-oncology services within the hospital
- Unmet psychological needs
- Treatment side effects - Physical
- Delay in starting treatment – Chemotherapy or targeted therapy
- Difficulty accessing specialist care for long term side effects

Subject of Enquiry – Top 5

- Emotional support
- Cancer treatments and side effects

- Hospital and community health services
- Irish Cancer Society services
- Talking about cancer; personal/family, children and friends

Advocacy Financial – Top 5

- Transport
- Parking charges
- Difficulties accessing a medical card
- Lack of information and support in accessing social welfare benefits
- Cost of side effects caused by treatment

GUH Daffodil Centre Activity - Points of Interest 2022

The range of information, education and support offered by the Daffodil Centre Cancer Nurse in 2022 was similar to 2021 although more of this work was carried out face to face rather than by phone. This is due to the easing of Covid-19 restrictions.

Face to face consultations accounted for 72% of interactions with enquirers in 2022 with telephone accounting for 28% of interactions.

Enquirers to the Daffodil Centre

There has been a 23% increase (from 1007 to 1043) in enquirers from 2021 to 2022. The low increase despite easing of Covid-19 restrictions is due to the long term sick leave of one Daffodil Centre Cancer Nurse with the second Nurse providing cover while alternating her Nurse and Team lead roles.

Referrals from Health Care Professionals

Referrals from Health Care Professionals were 25% in 2022. The national average is 22

Cancer Prevention

2% of enquirers were specifically seeking lifestyle/cancer prevention information and 5% of all enquirers were provided with information on lifestyle/screening/SunSmart or Smoking Cessation.

Advocacy Health and Advocacy Financial

Transport, parking charges and accessing a medical care were the top three advocacy financial issues accounting for 62% of issues raised with the Daffodil Centre Cancer Nurses while unmet psychological needs, treatment side effects and delay in starting treatment were the top three advocacy health issues accounting for 75% of issues raised.

Promotional Activities

Aside from the regular interactions the Daffodil Centre Cancer Nurses conducted with Health Care Professionals within University Hospital Galway throughout the year, other promotional activities were difficult to organise. Face to face meetings, moving between departments and adding information to ward noticeboards were not permitted so promotion was limited to e-mail and online activity. Examples included:

- Sending regular e-mails to all Health Care Professionals to inform them of the Daffodil Centre and Irish Cancer Society services.
- Sending targeted emails about LACES (Life and Cancer – Enhancing Survivorship) and chemotherapy education to staff in cancer services.
- Regular meetings with the ADON to keep up to date with changes to hospital restrictions and to provide Daffodil Centre Service updates.
- Attending as members and contributing to the Tobacco Free Campus, Healthy Ireland, Health Literacy and the End of Life hospital committees.
- Attending as members and contributing to the Tobacco Free Campus, Healthy Ireland, Health Literacy and the End of Life hospital committees.

Cancer Awareness/Early Detection Information Stands

Due to hospital restrictions and the repurposing of space originally used by the Daffodil Centre Cancer Nurses, no Cancer Awareness or Early Detection Information stands were facilitated in UHG in 2022.

Patient Programmes and Services

Chemotherapy Education Programme – Understanding Chemotherapy

A recognized and established education programme provided by Cancer Nurses in many 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. These sessions are delivered by Daffodil Centre Cancer Nurses in group sessions face to face or online via Microsoft Teams. Referrals are received from Clinical Nurse Specialists (CNS).

In 2022 there was no room availability in the hospital for education so the Daffodil Centre Cancer Nurses facilitated 131 one to one Chemotherapy Education sessions in the Oncology Day ward and in the Daffodil Centre.

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 in UHG while the generic chemotherapy education programmes are conducted twice weekly by a team of Daffodil Centre Cancer Nurses throughout the country.

In 2022 the Daffodil Centre Cancer Nurses conducted 2 hospital specific chemotherapy education sessions with 4 attendees.

LACES – Life and Cancer – Enhancing Survivorship

This is a patient Education Workshop which 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 is for adult patients who have finished their active cancer treatment and are beginning their long-term follow up. This includes patients who are post-surgery, radiation therapy, 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. Delivering workshops, using online platforms, commenced in June 2021.

The Daffodil Centre Cancer Nurses in UHG, have undergone training to deliver this programme and they facilitated 2 online sessions to 7 attendees in 2022.

Remote Counselling Service

In 2020 the 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.

This includes all people diagnosed with cancer as well as their carers and loved ones. It is also available for children through a therapeutic support model and for teenagers using appropriately trained and vetted practitioners.

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

4% of all enquirers in 2022 were advised of the Irish Cancer Society Remote Counselling Service by the Daffodil Centre Cancer Nurses in UHG.

LUH Daffodil Centre Activity - Points of Interest 2022

The range of information, education and support offered by the Daffodil Centre Cancer Nurses in 2022 was similar to 2021 and again more of this work was carried out by phone rather than face to face. This was due to the implementation of Covid-19 restrictions in the first half of the year.

Face to face consultations accounted for **43%** of interactions with enquirers in 2022 with telephone accounting for **46%**, e-mail for **6%** and video calling and social media for **5%**.

Enquirers to the Daffodil Centre

There has been a **141%** increase (from 277 to 597) in enquirers from 2021 to 2022. They may be explained by the easing of Covid-19 restrictions in 2022.

Referrals from Health Care Professionals

Referrals from Health Care Professionals have increased from **11%** in 2020 to **25%** in 2021. The national average is **22%**.

Primary Cancer Type

31% of enquirers identified breast cancer as the primary cancer type vs **25%** in 2021 and **17%** in 2020.

Cancer Prevention

1% of enquirers were specifically seeking lifestyle/cancer prevention information and **5%** of all enquirers were provided with information on lifestyle/screening/SunSmart or Smoking Cessation.

Advocacy

Transport was the top advocacy financial concern accounting for **47%** of financial issues raised with day to day living expenses accounting for **22%**. Delays in starting treatment and unmet psychological needs were the top health advocacy concerns accounting for **50%** of issues raised.

Cancer Awareness/Early Detection Information Stands	Attendees
January General Cancer Awareness	9
April Bowel cancer Awareness	6
May Bowel Cancer Awareness General Cancer Awareness	36 100
June SunSmart	14
July SunSmart	73
August SunSmart	33
October Breast Cancer Awareness	92
November Men's Health Awareness	92

Promotional Activities

In addition to the regular meetings the Daffodil Centre Cancer Nurses conducted with Health Care Professionals within Letterkenny University Hospital throughout the year, other promotional activities included:

- Acting as secretary to the hospital Clinical Nurse Specialist group. This involves organising the meetings, taking, typing and disseminating the minutes and organising gifts/cards for members of the group who are leaving or on long term sick leave.
- Attending the Haematology/Oncology Senior Nurse meetings.
- Contributing as a member of the hospital "End of Life" committee.
- Contributing to the update of the LUH booklet for patients undergoing radiotherapy cancer treatment at the North West Cancer Centre, Derry.
- Participating with the National Cancer Control Programme (NCCP) in roundtable discussions about physical activity and cancer.
- Presenting on "Patient Education and Communication Skills" at the NCCP SACT education.
- Attending and contributing to the LUH menopause focus group meetings.
- Representing the Daffodil Centre and Cancer Information Services at Relay for Life, Donegal.

Patient Programmes and Services

Chemotherapy Education Programme – Understanding Chemotherapy

A recognised and established education programme provided by Cancer Nurses in many 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. These sessions are delivered by Daffodil Centre Cancer Nurses in group sessions face to face or online via Microsoft Teams.

Referrals are received from the Oncology Clinical Nurse Specialist and nursing staff on the inpatient ward.

In 2022 there were 107 face to face Chemotherapy Education sessions with an attendance of 186 patients and family members.

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 in LUH while the generic chemotherapy education programmes are conducted twice weekly by a team of Daffodil Centre Cancer Nurses throughout the country.

In 2022 the Daffodil Centre Cancer Nurses conducted 23 hospital specific chemotherapy education sessions with 39 attendees and 3 generic sessions with 5 attendees.

LACES – Life and Cancer – Enhancing Survivorship

This is a patient Education Workshop which 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 is for adult patients who have finished their active cancer treatment and are beginning their long-term follow up. This includes patients who are post-surgery, radiation therapy, 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. Delivering workshops, using online platforms, commenced in June 2021.

In 2022 the Daffodil Centre Cancer Nurse in LUH facilitated 5 sessions for 18 attendees.

Remote Counselling Service

In 2020 the 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.

This includes all people diagnosed with cancer as well as their carers and loved ones. It is also available for children through a therapeutic support model and for teenagers using appropriately trained and vetted practitioners.

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.

The hospital has been made aware of this service but the majority of patients and their family/friends are referred directly to the local cancer support services.

Other Activities

Donegal Schools Project

The Daffodil Centre Cancer Nurses have been working with the Irish Cancer Society Patient Education Programme Manager, members of the Donegal Relay for Life Committee and local

school representatives in the development of an educational tool for teachers to use in supporting children around cancer.

When a child or their family member has cancer, teachers can find that they are contacted by the family for information and/or support for the child. A gap was identified by teachers in their ability to provide such information and support.

A short learning module has been created with appropriate and consistent guidance for teachers who find themselves in this situation. The resource will be available in both English and Irish.

This educational tool was launched at the Donegal Relay for Life Cancer Conference in February 2022. It is planned to revise this tool in 2023.

Moving On 12 Week Programme

The Daffodil Center Cancer Nurses alongside the Oncology Advanced Nurse Practitioner and Research Nurse have been involved in the creation and development of the online Moving On 12 Week Programme which has been funded by the Irish Cancer Society and HSE.

The programme is designed for individuals with a cancer diagnosis who have completed the active part of their cancer treatment. It consists of tailored lifestyle information sessions with a physiotherapist, dietician and clinical psychologist available to support self-management of health behaviour through barrier identification and goal setting.

The Daffodil Centre Cancer Nurses have been involved in planning the content of the 12 week programme, design of the graphics for the platform, producing hard copy leaflets and posters and writing social media posts.

Individual packs have been created for the participants which involved meeting and collaborating with companies such as ExWell Medical (a community-based chronic illness rehabilitation programme), EBOW (a Digital marketing agency), Open Social (a community engagement platform) and HSE social media staff.

The programme launched online in January 2022. A hybrid version was delivered from July whereby participants first met in person for information talks and then followed the programme online.

Section 4
**Cancer Research
and Developments**



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY

Cancer Academic Developments and Activities 2022

Best practice and outcomes in cancer care is underpinned by an environment rich in research and continuous education. Cancer research in the Saolta University Cancer Network spans basic, translational, clinical and survivorship research and takes place across University of Galway and hospital campuses.

Caitriona Duggan was awarded the Irish Cancer Society PhD Researcher of the Year. Caitriona is an oncology advanced nurse practitioner in Portiuncula University Hospital and is undertaking her PhD in the School of Nursing with Dr Peter Carr. Dr Alice Le Bonniec of the School of Psychology was awarded Irish Cancer Society Senior Researcher of the Year.

Emer Hennessy was appointed as Cancer Centre Research Manager in February 2022. This is the first dedicated cancer research manager in the University of Galway, acting as an academic liaison with the Cancer MCAN and supporting the OECl accreditation process. Preliminary research quantitative and qualitative metrics were submitted for Step 3 of the OECl accreditation process in July 2022.

Research led by Dr Matthew Davey, Professor Michael Kerin and Dr Nicola Miller at the Lambe Institute, determined that biomarkers known as microRNAs can help predict which patients with breast cancer are likely to face a recurrence of the disease and death.

This national, multi-centre translational research trial involved 124 patients who were treated with chemotherapy and was supported by the HRB-Clinical Research Facility and Cancer Trials Ireland. Dr Davey was invited to present this research at the American College of Surgeons Clinical Congress in October 2022.

The **National Breast Cancer Research Institute**, launched its 2023-25 strategic plan in November 2022, committing to continued support for breast cancer research at the Lambe Institute and the development of a European accredited cancer centre for the west and northwest of Ireland.

The College of Medicine, Nursing and Health Sciences launched its **FutureCare** strategic plan 2023-25 in October 2022.

The **Saolta Cancer Nursing Research Group and Saolta Health and Social Care Professional Research Group** were established, led by Olive Gallagher, Cancer MCAN Director Nursing and Ger Cooley, Cancer MCAN General Manager respectively.

The **Cancer Seminar Series** commenced in October 2022. The series is hosted by Dr Michael McCarthy, Consultant Medical Oncologist. It is a joint University of Galway and Saolta University Healthcare Group education initiative by, and for, clinical, academic and research staff, students, and trainees. CPD credits are applicable for HSE staff. Presenters are invited from the fields of cancer science, survivorship, clinical care, education, and innovation, with the aim of encouraging interdisciplinary activities and communication. Seminars take place on the **first working Monday of the month in person in the Clinical Science Institute and online** for colleagues across regional hospital and university campuses.

Cancer Seminar Series Oct 2022 – Dec 2022

Date	Seminar Title	Speaker
03/10/2022	Development and implementation of a personalised at-home exercise programme for cancer patients using Tele-medicine tools	Dr. Ananya Gupta (Photo 1)
07/11/2022	New Clinical Biomarkers in Cancer: Real and Virtual	Prof. Sean Hynes (Photo 2)
05/12/2022	Cancer Biobanking: The Participant’s Capital	Dr. Nicola Miller



Dr. Michael McCarthy and Guest Speaker Dr. Ananya Gupta at the Cancer Seminar Series October 2022



Dr. Michael McCarthy and Guest Speaker Prof. Sean Hynes at the Cancer Seminar Series November 2022

Cancer Symposia and Networking Events 2022

On May 27th cancer academics, clinicians, oncology nurses, and leadership gathered in Sligo for a Cancer Meeting as part of the School of Medicine Western Region Education Network (WREN) meeting.

University of Galway cancer researchers hosted a visiting delegation of faculty and leadership from the University of Notre Dame Harper Cancer Research Institute as part of the *Biseach Initiative* in June 2022. Cancer leads from both Universities took part in a two-day research retreat at the Notre Dame Global Centre at Kylemore Abbey to establish research collaborations.

Hosted by **Dr Nicola Miller** and **Dr Sonja**

Khan and the Cancer Biobank, the inaugural BioBANC Symposium was convened on September 2nd at the **University of Galway**. The symposium was attended by over fifty multidisciplinary national delegates.

The Blood Cancer Network Ireland Annual Symposium was held on September 9th, hosted by Dr Eva Szegezdi and national Blood Cancer Network Ireland colleagues.

The School of Medicine Undergraduate Research Day took place on October 7th, hosted by Dr Sanjeev Gupta and the School of Medicine Research Committee. Medical students who undertook summer research presented their work.

New Cancer Research Funding 2022

Funder (Award)	Recipient(s)	Research Project (Reference)
Enterprise Ireland-Government of Ireland (Disruptive Technologies Innovation Fund)	Professor Martin O'Halloran Professor Aoife Lowery <i>Luminate Medical</i> <i>School of Medicine/School of Engineering</i>	LILAC-IntelliSense is a software system that models a prognosis for Chemotherapy Induced Peripheral Neuropathy.
Health Research Board	Prof Michael Connall Dennedy <i>School of Medicine</i>	Irish Clinical Academic Training (ICAT-2) Programme
Health Research Board	Dr Joseph Martin <i>Galway University Hospitals</i>	Irish Research Radiation Oncology Group (IRROG) Clinical Trials Network
Higher Education Authority (North-South Research Programme)	Dr Roisin Dwyer Professor Michael Kerin <i>School of Medicine</i>	All Island Cancer Research Initiative (AICRI)
Higher Education Authority (North-South Research Programme)	Dr Eva Szegezdi <i>School of Biological and Chemical Sciences</i>	Health Ireland
Higher Education Authority (North-South Research Programme)	Dr Pilib O Broin <i>School of Mathematical and Statistical Sciences</i>	CLuB Cancer Consortium
Irish Cancer Society (Clinical Research Leadership Award)	Professor Aoife Lowery <i>School of Medicine</i>	Clinician Research Leadership Award to develop the cancer survivorship research Women's Health Initiative.
Irish Cancer Society (PhD Scholarship)	Ana Walsh (PhD Candidate) Dr Aideen Ryan Dr Roisin Dwyer <i>School of Medicine</i>	Investigating the role of extracellular vesicle sialic acids in colorectal cancer tumour derived immunosuppression
Irish Cancer Society (Women's Health Initiative)	Professor Aoife Lowery Dr Veronica McInerney <i>School of Medicine, HRB-CRFG</i>	Women's Health Initiative cancer survivorship LYSA and UCARE
Irish Research Council (Government of Ireland Postgraduate Award)	María Borja González (PhD Candidate) Dr Kasia Whysall <i>School of Medicine</i>	Therapeutic potential of miR regulation in cancer cachexia.

Engagement and Outreach

Type	Details	Principal Investigator
Article	NeuroPredict Team Develop New Device February 2022 - Hospital Professional News	Dr. Ananya Gupta
Article	Can-REACT Cancer Rehabilitation Programme February 2022 - Hospital Professional News	Dr. Ananya Gupta
Article	Cancer Treatment Related Cardiac Dysfunction February 2022 - Hospital Professional News	Dr. Matthew Davey, Prof Aoife Lowery and the Precision Cardio-Oncology Research Enterprise (P-CORE) Group
Film Screening	The People There to Catch Us July 2022 – Galway Film Fleadh	Dr. Roisin Dwyer and Precision Oncology Ireland
Open House	Precision Oncology Ireland Open House for World Cancer Research Day September 2022 – Lambe Institute	Dr. Roisin Dwyer, Dr Eva Szegezdi, Precision Oncology Ireland researchers
Open House	National Breast Cancer Research Institute Research Showcase at the Lambe Institute November 2022 – Lambe Institute	Dr. Roisin Dwyer, Professor Michael Kerin, Professor Aoife Lowery and NBCRI researchers
Online Blog	The multiple possibilities of small microRNAs in breast cancer December 2022 - Hospital Professional News	Dr. Vinitha Richard



Western Region Education Network (WREN) 2022 was held in Sligo May 2022



Saolta Cancer Research Nursing Group with Prof Risteard O'Laoidé, NCCP Director, and Prof Michael Kerin, Cancer MCAN Director, at the WREN meeting in Sligo May 2022



University of Galway and University of Notre Dame Cancer Research Leads meeting for the Biseach Initiative in Galway June 2022



University of Galway Precision Oncology Ireland Pls, Dr Róisín Dwyer and Dr Eva Szegezdi with members of the POI Research Team at the World Cancer Research Day Open House Event September 2022

Advanced Therapies and Cancer Trials Cluster at Galway University Hospitals and University of Galway



OLLSCOIL NA
GAILLIMHE
UNIVERSITY
OF GALWAY

In 2022, the **Advanced Therapies and Cancer Trials Cluster (ATC)** continued its mission to advance cancer research through clinical trials, focusing on improving patient outcomes and expanding trial accessibility. Backed by support from Galway University Hospitals and the University of Galway, ATC enhanced its trial capacity and increased its impact through broadened collaborations and improved trial delivery.

Strategic Objectives and Achievements

A core objective for 2022 was to streamline operational processes at Galway University Hospitals and enhance the trial portfolio and recruitment. This objective was underpinned by integration with the Cancer Managed Clinical Academic Network (MCAN), where cancer clinical trials became an important agenda item.

The ATC continued to expand the trial portfolio through strategic collaboration with Cancer Trials Ireland, international cooperative groups (Hovon, European Myeloma Network, EORTC) and the pharmaceutical industry resulting in an increased access to a diverse trial portfolio.

Trial Enrolment and Integration Achievements

In 2022 the cluster substantially increased the enrolment of patients and expanded the portfolio of recruiting clinical trials:

- CPD DARA trial, Phase I, investigator lead trial designed and initiated in ATC: seven patients with multiple myeloma.
- BeiGene trial: Phase III, four patients with advanced mantle cell lymphoma.
- CLL17 trial, Phase III: five patients with chronic lymphocytic leukaemia.
- Hovon 150 trial, Phase III: two patients with acute myeloid leukaemia.
- LYSA trial: Twenty-one patients were included in this Women's Cancer Survivorship (breast cancer) trial.
- Regeneron R 2810 trial, Phase III: one patient for Lung cancer.
- Trio 45 trial, Phase III: sixteen patients with breast cancer.

In addition to the new trial initiations, in 2022, we continued a substantial body of ongoing work within the cluster. Throughout the year, twenty-one additional interventional trials remained

active, involving a comprehensive follow-up of 148 patients. These ongoing trials are critical to the cluster's research program, providing valuable insights that drive current treatment improvements and future research directions.

Governance and Educational Frameworks

The Governance of the conduct of cancer clinical trials was reinforced through oversight provided by Clinical Research Development Office (CRDO), which now oversees trials across the SAOLTA region. Financial oversight was strengthened by reviews conducted by a newly appointed Finance Officer within the CRDO. A Steering Committee for Nursing Cancer Research and Training was established, emphasizing the cluster's dedication to nurturing professional development and ensuring continuous educational growth within cancer nursing.

Research Collaborations and Capacity Building

The ATC deepened its collaborative efforts with clinical research organizations, cancer research networks and pharma partners. These partnerships facilitated the opening of new trials and expanded recruitment options. The collaborative meetings with stakeholders like European Myeloma Network, Hovon and pharma have significantly improved the cluster's ability to secure and coordinate multi-centre trials efficiently.

Future Directions

Looking ahead, the ATC plans to significantly increase access to a wide portfolio of trials, with a particular focus on collaborations with National and International partners and innovative therapies like cancer cell therapy trials.

Conclusion

2022 marked a significant increase in recruitment and clinical trial portfolio expansion. Through collaborations and partnerships, the cluster improved its research portfolio and positioned itself well to secure further funding in 2023.

Key Achievements 2022:

Expanded the trial portfolio across cancer disease groups, increase trial recruitment, and prepare for the 2023 HRB funding application.

Key Priorities 2023:

The further expansion of clinical trials portfolio, increase in recruitment, submission of 2023 funding application.

In 2022, the National Breast Cancer Research Institute (NBCRI) emerged from the challenges of Covid-19 with renewed fundraising efforts. New events like 'Walk in Pink' debuted in Galway, expanding to other counties, aiming to become a national initiative.

Business too were eager to support the charity and the Connacht Hospitality Group hosted 'The Restaurant' a live event at the HYDE Hotel which raised over €8,150. 'Mayo Pink Ribbon' returned for its thirteenth year and once again received incredible support from the people of Mayo who have raised over €1.5 Million Euro to date.

Golfers were back on the fairways of the country to support 'Play in Pink' with Golf Clubs nationwide getting behind the initiative once more. The highlight of the year was when NBCRI/Play in Pink became the charity partner for the KPMG Women's Irish Open at Dromoland Castle.

The Pink Afternoon luncheon in The Lodge at Ashford Castle, one of the charity's most popular events was back and ladies flocked to Cong for a fabulous afternoon of entertainment, food and fun with special guest X Factor star, Mary Byrne.

In Summer the Galway Races returned and so too did the 'First Furlong' fundraising lunch at the Ardilaun Hotel, Galway for NBCRI celebrating its 10th Anniversary. In June our Vhi Women's Mini Marathon team did us proud as they joined thousands of women in taking to the streets of Dublin for charity.

During Covid our popular 'Pink Ribbon Cycle' became virtual and renamed as the 'All Ireland Cycle' where participants were asked to cycle as many kilometres as possible in ten days while fundraising for NBCRI. The event was sponsored by Zurich Life and over 200 cyclists raised €35,000 managing to pedal 46,000kms in the process.

The now annual 'Win a BMW' raffle returned where you had the chance to win a BMW X1 Hybrid for just €20. The draw received great national support and raised over €145,000.

In October the second 'Swim in Pink' took place and numbers were up on the previous year with more people than before taking to the water for breast cancer research. The event was a great success raising a fantastic €46,181.

Also in October it was back to Ballybrit for one of the highlights of NBCRI's fundraising calendar, 'Race in Pink'. The sold-out event saw guests enjoy a full day of racing, lunch and music in the stunning surroundings of the Galway Race track.

The charity was delighted to, once more, be one of three beneficiaries of the 'Breffni 3 Province Challenge' in Arva, Co. Cavan with The Friends of St Lukes Cancer Care and Cavan/Monaghan Homecare Association.

As the year drew to a close, Dromoland Castle in Co. Clare hosted a special fundraising 'Ladies Christmas Dinner' which was a sell-out week in advance.

NBCRI are truly grateful for the incredible groups of individual fundraisers around the country who consistently come up with novel fundraising ideas to support the charity. In 2022 four ladies from Portumna cycled from Mizen Head, the most southerly point on the island, to Malin Head a total of 600km in just three days and raised over €15,145. Paying tribute to their Mum and Granny, three girls from Athenry cut their long hair and raised over €8,000 for NBCRI they then donated their hair to The Rapunzel Foundation. In Tipperary a group of friends came together in aid of NBCRI and walked the 'Tipperary Heritage Way', a 56km route raising €13,236.86 for the charity.

2022 was also very important for NBCRI's fundraising as the charity welcomed a new initiative, 'Charlotte's Vision' set-up in memory of Charlotte Sweeney that will raise funds for metastatic breast cancer research via the National Breast Cancer Research Institute into the future.

Overall, 2022 was a pivotal year for NBCRI, characterised by resilience, community support, and the launch of impactful new initiatives. NBCRI would like to thank all our hard working volunteers and supporters for your effort during the year.



Registered Charity Number (RCN): 20025175
Companies Registration Office Number: 168740

Appendix

Cancer Research Publications 2022

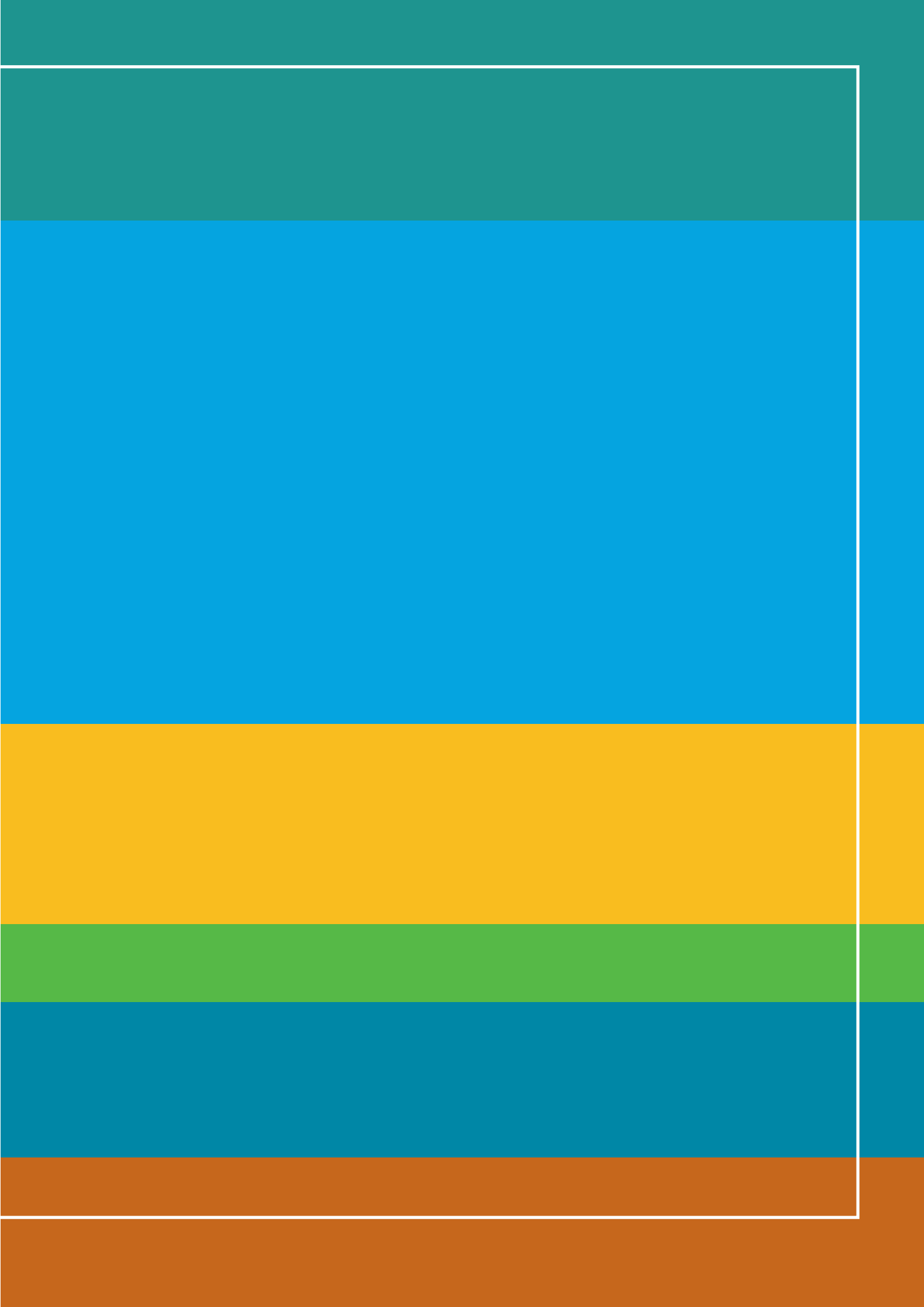
1. Li, M., Devane, D., Beecher, C. and 12 more (...) (2022).Prioritising Informed Health Choices Key Concepts for those impacted by cancer: a protocol. **HRB Open Research**,5
2. Davey, M.G., Davey, M.S., Lowery, A.J. and 1 more (...) (2022).What Proportion of Systematic Reviews and Meta-Analyses Published in the Annals of Surgery Provide Definitive Conclusions—A Systematic Review and Bibliometric Analysis. *Publications*,10(2)
3. Griffin, L., Ho, L., Akhurst, R.J. and 11 more (...) (2022).Genetic polymorphism in Methylenetetrahydrofolate Reductase chloride transport protein 6 (MTHFR CLCN6) gene is associated with keratinocyte skin cancer in a cohort of renal transplant recipients. **Skin Health and Disease**,2(2)
4. Keeling, E., Hynes, J., Pender, E.K. and 2 more (...) (2022).Skin cancer diagnosis in renal transplant recipients during the Covid-19 pandemic. **Skin Health and Disease**,2(1)
5. Prete, A., Subramanian, A., Bancos, I. and 96 more (...) (2022).Cardiometabolic Disease Burden and Steroid Excretion in Benign Adrenal Tumors A Cross-Sectional Multicenter Study. **Annals of Internal Medicine**,175(3) 325-334
6. Richard, V., Davey, M.G., Annuk, H. and 2 more (...) (2022).The double agents in liquid biopsy: promoter and informant biomarkers of early metastases in breast cancer. **Molecular Cancer**,21(1)
7. Kouli, O., Murray, V., Bhatia, S. and 2,187 more (...) (2022).Evaluation of prognostic risk models for postoperative pulmonary complications in adult patients undergoing major abdominal surgery: a systematic review and international external validation cohort study. **The Lancet Digital Health**,4(7) e520-e531
8. Dimopoulos, M.A., Richardson, P.G., Bahlis, N.J. and 249 more (...) (2022).Addition of elotuzumab to lenalidomide and dexamethasone for patients with newly diagnosed, transplantation ineligible multiple myeloma (ELOQUENT-1): an open-label, multicentre, randomised, phase 3 trial. **The Lancet Haematology**,9(6) e403-e414
9. DeAngelo, D.J., Jonas, B.A., Liesveld, J.L. and 8 more (...) (2022).Phase 1/2 study of uproleselan added to chemotherapy in patients with relapsed or refractory acute myeloid leukemia. **Blood**,139(8) 1135-1146
10. Warde, K.M., Lim, Y.J., Ribes Martinez, E. and 4 more (...) (2022).Mitotane Targets Lipid Droplets to Induce Lipolysis in Adrenocortical Carcinoma. **Endocrinology** (United States),163(9)
11. O’Gorman, P., Laubach, J.P., O’Dwyer, M.E. and 25 more (...) (2022).Phase 2 studies of lenalidomide, subcutaneous bortezomib, and dexamethasone as induction therapy in patients with newly diagnosed multiple myeloma. **American Journal of Hematology**,97(5) 562-573
12. Somasundaram, V., Ridnour, L.A., Cheng, R.Y. and 23 more (...) (2022).Systemic Nos2 Depletion and Cox inhibition limits TNBC disease progression and alters lymphoid cell spatial orientation and density. **Redox Biology**,58
13. Gurney, M., Stikvoort, A., Nolan, E. and 9 more (...) (2022).CD38 knockout natural killer cells expressing an affinity optimized CD38 chimeric antigen receptor successfully target acute myeloid leukemia with reduced effector cell fratricide. **Haematologica**,107(2) 437-445
14. Kamarajah, S.K., Nepogodiev, D., Hodson, J. and 580 more (...) (2022).Textbook outcome following oesophagectomy for cancer: international cohort study. **British Journal of Surgery**,109(5) 439-449
15. Ridge, A., Lim, B.C.W., Avalos, G. and 1 more (...) (2022).The iris clue: blue-grey periphery, blue collarette and absence of freckles predict risk of skin cancer in a Northern European population. **Journal of the European Academy of Dermatology and Venereology**,36(7) e542-e543
16. Davey, M.G., Casey, M.C., McGuire, A. and 10 more (...) (2022).Evaluating the role of circulating microRNAs to aid therapeutic decision making for neoadjuvant chemotherapy in breast cancer a prospective, multicenter clinical trial. **Annals of Surgery**,276(5) 905-912

17. Daly, J., Sarkar, S., Natoni, A. and 5 more (...) (2022). Targeting hypersialylation in multiple myeloma represents a novel approach to enhance NK cell-mediated tumor responses. **Blood Advances**,6(11) 3352-3366
18. Alsharabasy, A.M., Glynn, S., Farràs, P. and 1 more (...) (2022). Interactions between Nitric Oxide and Hyaluronan Implicate the Migration of Breast Cancer Cells. **Biomacromolecules**,23(9) 3621-3647
19. Fitzgerald, J.C., Duffy, N., Cattaruzzi, G. and 18 more (...) (2022). GMP-Compliant Production of Autologous Adipose-Derived Stromal Cells in the NANT 001 Closed Automated Bioreactor. **Frontiers in Bioengineering and Biotechnology**,10
20. Moran, P., Cullinan, J. (2022). Is mammography screening an effective public health intervention? Evidence from a natural experiment. **Social Science and Medicine**,305
21. Creedican, S., Robinson, C.M., Mnich, K. and 11 more (...) (2022). Inhibition of IRE1 α RNase activity sensitizes patient-derived acute myeloid leukaemia cells to proteasome inhibitors. **Journal of Cellular and Molecular Medicine**,26(16) 4629-4633
22. Davey, M.G., Feeney, G., Annuk, H. and 5 more (...) (2022). MicroRNA Expression Profiling Predicts Nodal Status and Disease Recurrence in Patients Treated with Curative Intent for Colorectal Cancer. **Cancers**,14(9)
23. Howard, J., Wynne, K., Moldenhauer, E. and 15 more (...) (2022). A comparative analysis of extracellular vesicles (EVs) from human and feline plasma. **Scientific Reports**,12(1)
24. Gurney, M., O'Reilly, E., Corcoran, S. and 7 more (...) (2022). Concurrent transposon engineering and CRISPR/Cas9 genome editing of primary CLL-1 chimeric antigen receptor-natural killer cells. **Cytotherapy**,24(11) 1087-1094
25. Drury, A., Dowling, M., Diez de los Rios de la Serna, C. and 4 more (...) (2022). Advanced breast cancer education for cancer nurses: A systematic review. **Nurse Education Today**,117
26. Shafik, L., Griffin, L., Laing, M. (2022). Ireland has the highest per capita use of fake tan in the world: effect on dermatology clinics. **Clinical and Experimental Dermatology**,47(11) 2030-2032
27. Burke, A.J., McAuliffe, J.D., Natoni, A. and 3 more (...) (2022). Chronic nitric oxide exposure induces prostate cell carcinogenesis, involving genetic instability and a pro-tumorigenic secretory phenotype. **Nitric Oxide - Biology and Chemistry**,12744-53
28. Miller, I.S., Khan, S., Shiels, L.P. and 17 more (...) (2022). Implementing subtype-specific pre-clinical models of breast cancer to study pre-treatment aspirin effects. **Cancer Medicine**,11(20) 3820-3836
29. Davey, M.G., Cleere, E.F., O'Donnell, J.P. and 3 more (...) (2022). Value of the 21-gene expression assay in predicting locoregional recurrence rates in estrogen receptor-positive breast cancer: a systematic review and network meta-analysis. **Breast Cancer Research and Treatment**,193(3) 535-544
30. Davey, M.G., Kerin, M.J. (2022). Using menopause status and 21-gene expression assay to inform chemotherapy benefit in node-positive breast cancer. **Breast Cancer Research and Treatment**,195(1) 83-84
31. Moloney, B.M., McAnena, P.F., Abd Elwahab, S.M. and 8 more (...) (2022). Microwave Imaging in Breast Cancer – Results from the First-In-Human Clinical Investigation of the Wavelia System. **Academic Radiology**,29S211-S222
32. Lunardi, M., Al-Habbaa, A., Abdelshafy, M. and 11 more (...) (2022). Genetic and RNA-related molecular markers of trastuzumab-chemotherapy-associated cardiotoxicity in HER2 positive breast cancer: a systematic review. **BMC Cancer**,22(1)
33. O'Connor, D.J., Davey, M.G., Barkley, L.R. and 1 more (...) (2022). Differences in sensitivity to neoadjuvant chemotherapy among invasive lobular and ductal carcinoma of the breast and implications on surgery – A systematic review and meta-analysis. **Breast**,6111-10
34. Davey, M.G., O'Donnell, J.P.M., Boland, M.R. and 4 more (...) (2022). Optimal localization strategies for non-palpable breast cancers – A network meta-analysis of randomized controlled trials. **Breast**,62103-113

35. Kerin, E.P., Davey, M.G., McLaughlin, R.P. and 6 more (...) (2022). Comparison of the Nottingham Prognostic Index and OncotypeDX® recurrence score in predicting outcome in estrogen receptor positive breast cancer. **Breast**,66227-235
36. Davey, M.G., Davey, C.M., Bouz, L. and 4 more (...) (2022). Relevance of the 21-gene expression assay in male breast cancer: A systematic review and meta-analysis. **Breast**,6441-46
37. Cleere, E.F., Davey, M.G., O'neill, S. and 6 more (...) (2022). Radiomic Detection of Malignancy within Thyroid Nodules Using Ultrasonography—A Systematic Review and Meta-Analysis. **Diagnostics**,12(4)
38. Dey, R., Alexandrov, S., Owens, P. and 3 more (...) (2022). Skin cancer margin detection using nanosensitive optical coherence tomography and a comparative study with confocal microscopy. **Biomedical Optics Express**,13(11) 5654-5666
39. Szudy-Szczyrek, A., Ahern, S., Krawczyk, J. and 2 more (...) (2022). MiRNA as a Potential Target for Multiple Myeloma Therapy—Current Knowledge and Perspectives. **Journal of Personalized Medicine**,12(9)
40. Davey, M.G., Jalali, A., Ryan, É.J. and 8 more (...) (2022). A Novel Surrogate Nomogram Capable of Predicting OncotypeDX Recurrence Score®. **Journal of Personalized Medicine**,12(7)
41. O'Donnell, J.P.M., Gasior, S.A., Davey, M.G. and 6 more (...) (2022). The accuracy of breast MRI radiomic methodologies in predicting pathological complete response to neoadjuvant chemotherapy: A systematic review and network meta-analysis. **European Journal of Radiology**,157
42. Istuk, N., Gioia, A.L., Benchakroun, H. and 3 more (...) (2022). Relationship between the Conductivity of Human Blood and Blood Counts. **IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology**,6(2) 273-279
43. Bottiglieri, A., O'Halloran, M., Ruvio, G. and 1 more (...) (2022). Management of adreno-cortical adenomas using microwave ablation: study of the effects of the fat tissue. **International Journal of Hyperthermia**,39(1) 1179-1194
44. Sebek, J., Cappiello, G., Rahmani, G. and 12 more (...) (2022). Image-based computer modeling assessment of microwave ablation for treatment of adrenal tumors. **International Journal of Hyperthermia**,39(1) 1264-1275
45. Sebek, J., Shrestha, T.B., Basel, M.T. and 11 more (...) (2022). System for delivering microwave ablation to subcutaneous tumors in small-animals under high-field MRI thermometry guidance. **International Journal of Hyperthermia**,39(1) 584-594
46. Davey, M.G., Keelan, S., Lowery, A.J. and 1 more (...) (2022). The Impact of Chemotherapy Prescription on Long-Term Survival Outcomes in Early-Stage Invasive Lobular Carcinoma – A Systematic Review and Meta-Analysis. **Clinical Breast Cancer**,22(8) e843-e849
47. Davey, M.G., Browne, F., Miller, N. and 2 more (...) (2022). Pathological complete response as a surrogate to improved survival in human epidermal growth factor receptor-2-positive breast cancer: systematic review and meta-analysis. **BJS Open**,6(3)
48. Davey, M.G., O'Flaherty, C., Cleere, E.F. and 4 more (...) (2022). Sentinel lymph node biopsy in patients with ductal carcinoma in situ: Systematic review and meta-analysis. **BJS Open**,6(2)
49. Evison, H., Carrington, M., Keijzers, G. and 6 more (...) (2022). Peripheral intravenous cannulation decision-making in emergency settings: A qualitative descriptive study. **BMJ Open**,12(3)
50. Gurren, L., O'Sullivan, E., Keogh, I. and 1 more (...) (2022). Barriers to accessing psycho-oncological support in head and neck cancer: A qualitative exploration of healthcare professionals' perspectives. **European Journal of Oncology Nursing**,58
51. Challapalli, R.S., Dwyer, R.M., McInerney, N. and 2 more (...) (2022). Evaluation of human adipose-derived stromal cell behaviour following exposure to Tamoxifen. **Tissue and Cell**,77
52. Davey, M.G., Davey, M.S., Richard, V. and 5 more (...) (2022). Overview of MicroRNA Expression in Predicting Response to Neoadjuvant Therapies in Human Epidermal Growth Receptor-2 Enriched Breast Cancer – A Systematic Review. **Breast Cancer: Basic and Clinical Research**,16

53. Browne, R., McAnena, P., O'Halloran, N. and 4 more (...) (2022).Preoperative Breast Magnetic Resonance Imaging as a Predictor of Response to Neoadjuvant Chemotherapy. **Breast Cancer: Basic and Clinical Research**,16
54. McAnena, P., Moloney, B.M., Browne, R. and 7 more (...) (2022).A radiomic model to classify response to neoadjuvant chemotherapy in breast cancer. *BMC Medical Imaging*,22(1)
55. Davey, M.G., Kerin, M.J. (2022).Evaluating the Fragility of Long-Term Outcomes for Neoadjuvant versus Adjuvant Chemotherapy Prescription in Early Breast Cancer: Pooled Data from 10 Randomised Clinical Trials. **Breast Cancer: Targets and Therapy**,14343-350
56. Zhao, W., Gupta, A., Krawczyk, J. and 1 more (...) (2022).The miR-17-92 cluster: Yin and Yang in human cancers. **Cancer Treatment and Research Communications**,33
57. Jalali, A., Miresse, D., Fahey, M.R. and 5 more (...) (2022).Peripheral Blood Cell Ratios as Prognostic Indicators in a Neoadjuvant Chemotherapy-Treated Breast Cancer Cohort. **Current Oncology**,29(10) 7512-7523
58. Linnane, S., Quinn, A., Riordan, A. and 1 more (...) (2022).Women's fertility decision-making with a diagnosis of breast cancer: A qualitative evidence synthesis. **International Journal of Nursing Practice**,28(4)
59. Cleere, E.F., Davey, M.G., Young, O. and 2 more (...) (2022).Intra-operative nerve monitoring and recurrent laryngeal nerve injury during thyroid surgery: a network meta-analysis of prospective studies. **Langenbeck's Archives of Surgery**,407(8) 3209-3219
60. Houlihan, E., Lucey, M., Pandian, A. and 5 more (...) (2022).Case of recurrent *Achromobacter xylosoxidans* bacteraemia and PICC (peripherally-inserted central catheter) line infection in an immunocompromised patient. **Infection Prevention in Practice**,4(1)
61. Abd Elwahab, S.M., Cosgrave, J., Doherty, E. and 1 more (...) (2022).Grit personality trait of doctors and medical students in level 4 acute hospital. **Surgeon**,20(4) 216-224
62. Cormican, O., Dowling, M. (2022).Providing Care to People Living with a Chronic Hematological Malignancy: A Qualitative Evidence Synthesis of Informal Carers' Experiences. **Seminars in Oncology Nursing**,38(6)
63. Verbruggen, A.S.K., McCarthy, E.C., Dwyer, R.M. and 1 more (...) (2022).Temporal and spatial changes in bone mineral content and mechanical properties during breast-cancer bone metastases. **Bone Reports**,17
64. Courtney, D., Davey, M.G., Moloney, B.M. and 6 more (...) (2022).Breast cancer recurrence: factors impacting occurrence and survival. **Irish Journal of Medical Science**,191(6) 2501-2510
65. Kamil, A.M., Davey, M.G., Marzouk, F. and 5 more (...) (2022).The impact of COVID-19 on emergency surgical presentations in a university teaching hospital. **Irish Journal of Medical Science**,191(3) 1059-1065
66. Bolger, J.C., Donlon, N.E., Butt, W. and 13 more (...) (2022).Successful maintenance of process and outcomes for oesophageal cancer surgery in Ireland during the first wave of the COVID-19 pandemic. **Irish Journal of Medical Science**,191(2) 831-837
67. slam, M.N., Griffin, T.P., Whiriskey, R. and 7 more (...) (2022).Reference intervals for commonly requested biochemical and haematological parameters in a healthy Irish adult Caucasian population. **Irish Journal of Medical Science**,191(1) 301-311
68. Hennessy, O., Fowler, A.L., Hennessy, C. and 4 more (...) (2022).Riding the waves: the ongoing impact of COVID-19 on a national surgical training cohort. **Irish Journal of Medical Science**,191(4) 1823-1829
69. Davey, M.G., O'Donnell, J.P.M., Maher, E. and 5 more (...) (2022).General data protection regulations (2018) and clinical research: perspectives of patients and doctors in an Irish university teaching hospital. **Irish Journal of Medical Science**,191(4) 1513-1519
70. Fahy, E.J., Sugrue, C.M., Jones, D. and 6 more (...) (2022).A retrospective cohort study of cutaneous squamous cell carcinoma of the scalp: features of disease and influence of sociodemographic factors on outcomes. **Irish Journal of Medical Science**,191(3) 1217-1222

71. K McHugh, J., Offiah, G., Daly, S. and 4 more (...) (2022). Postgraduate training in Cancer Genetics—a cross-specialty survey exploring experience of clinicians in Ireland. **Irish Journal of Medical Science**, 191(3) 1427-1434
72. Swan, D., Henderson, R., McEllistrim, C. and 15 more (...) (2022). CyBorD-DARA in Newly Diagnosed Transplant-Eligible Multiple Myeloma: Results from the 16-BCNI-001/CTRIAL-IE 16-02 Study Show High Rates of MRD Negativity at End of Treatment. **Clinical Lymphoma, Myeloma and Leukemia**, 22(11) 847-852
73. Adamina, M., Ademuyiwa, A., Adisa, A. and 2,595 more (...) (2022). The impact of surgical delay on resectability of colorectal cancer: An international prospective cohort study. **Colorectal Disease**, 24(6) 708-726
74. Ingram, P.R., Kilgarriff, S., Grzelak, M. and 6 more (...) (2022). Risk factors for catheter related thrombosis during outpatient parenteral antimicrobial therapy. **Journal of Vascular Access**, 23(5) 738-742
75. Rodriguez, L., Dolan, P., Kerin, M. and 1 more (...) (2022). "There was help for me at the time, but I didn't feel like I deserved it": exploring the unmet needs of adolescents experiencing maternal cancer in Ireland. **Qualitative Research Journal**, 22(3) 307-324
76. Costello, M., Cantillon, P., Geoghegan, R. and 3 more (...) (2022). Experience-based learning: how a crisis solution informed fundamental change in a clinical education curriculum. **Clinical Teacher**, 19(1) 42-47
77. McCabe, G.P., Newell, J. (2022). The art of translational statistics. **Stats**, 11(1)
78. Moghaddam, S., Newell, J., Hinde, J. (2022). A Bayesian Approach for Imputation of Censored Survival Data. **Stats**, 5(1) 89-107
79. Hurley, C.M., ALNafisee, D., Jones, D. and 4 more (...) (2022). Head and Neck Merkel Cell Carcinoma: A 12-Year Single Institutional Experience. **JPRAS Open**, 33161-170
80. Davey, M.G., Feeney, G., Annuk, H. and 5 more (...) (2022). Identification of a Five-MiRNA Expression Assay to Aid Colorectal Cancer Diagnosis. **Gastrointestinal Disorders**, 4(3) 190-204
81. Senaratne, R., Casey, M.-C., Balakrishnan, T. and 5 more (...) (2022). Patient preferences regarding communication of minor surgery results: Who and how? **British Journal of Health Care Management**, 28(5) 122-126
82. Hurley, C.M., McInerney, N. (2022). Improving Patient Discharge Summary Communication. **Irish Medical Journal**, 115(1)
83. Houlihan E, Lucey M, Pandian A. and 5 more (...) (2022) Case of recurrent *Achromobacter xylosoxidans* bacteraemia and PICC (peripherally-inserted central catheter) line infection in an immunocompromised patient. **Infect Prev Pract**, 4(1):100202.
84. Ding Y, Carvalho E, Murphy C. and 6 more (...) (2022) Corrigendum to "Derivation of familial iPSC lines from three patients with retinitis pigmentosa carrying an autosomal dominant RPE65 mutation (NUIGi027-A, NUIGi028-A, NUIGi029-A)" **Stem Cell Res**, Aug;63:102850.
85. Mohamed SA, Duffy A, McInerney V. and 10 more (...) (2022) Marrow changes and reduced proliferative capacity of mesenchymal stromal cells from patients with "no-option" critical limb ischemia; observations on feasibility of the autologous approach from a clinical trial. **Cytotherapy**, Dec; 24 (12):1259-1267.
86. Groenendijk W, Bogdanet D, Dervan L. and 13 more (...) (2022) Reference intervals for clinical biochemistry and haematology tests during normal pregnancy. **Ann Clin Biochem**. Nov; 59(6):433-446.





Grúpa Ollscoile Cúram Sláinte
University Health Care Group

Galway University Hospitals
Letterkenny University Hospital
Mayo University Hospital
Portiuncula University Hospital
Roscommon University Hospital
Sligo University Hospital