

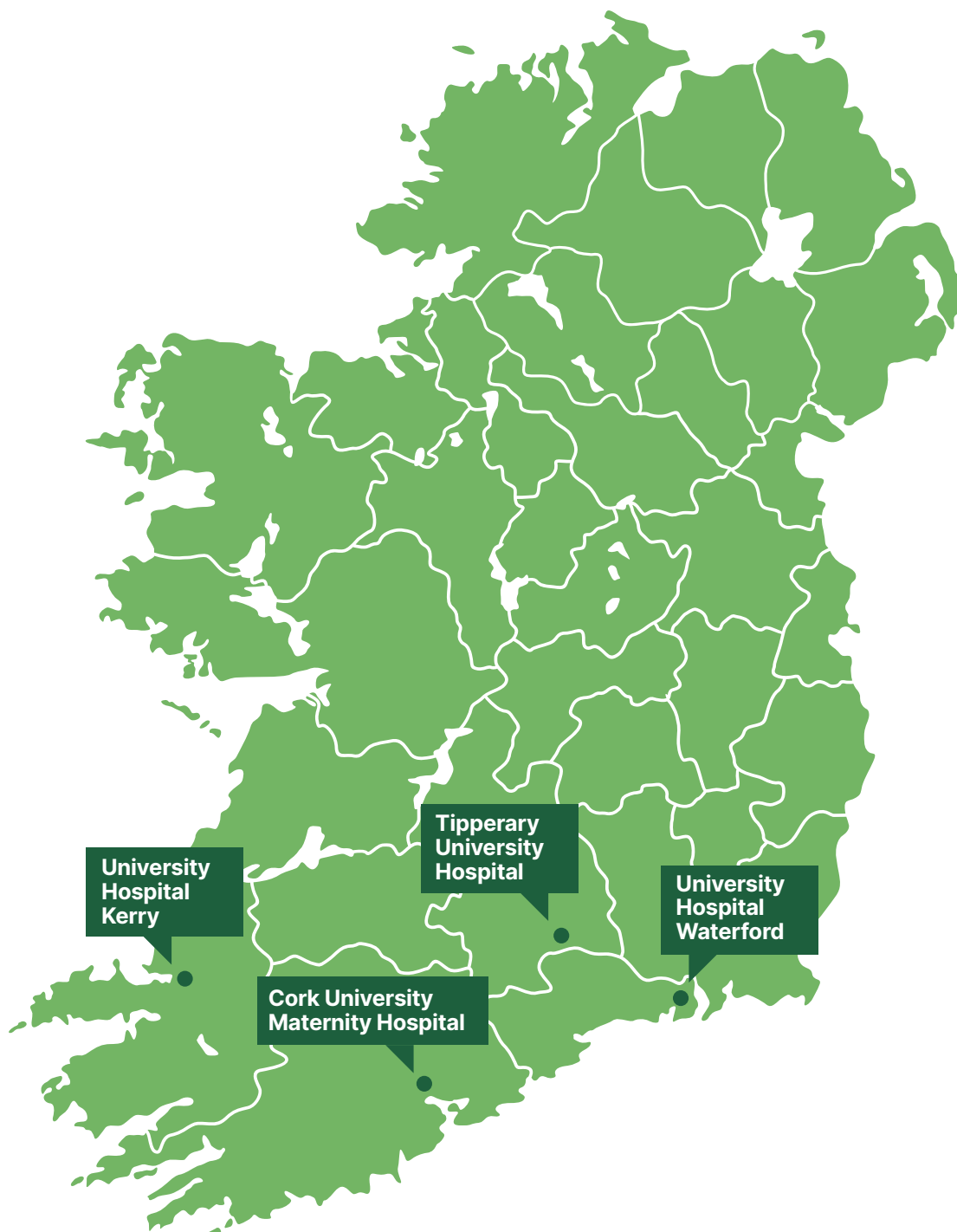


Annual Report

Ireland South Women & Infants Directorate
HSE South/South West Hospital Group



Together with women, babies and families, our academic healthcare network strives for clinical excellence & innovation



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2023 at a glance



Births
9,447



Gynaecology
Outpatients
54,524

Gynaecology
Inpatients
5,176

38 Consultant Obstetrician & Gynaecologists
7.5 Consultant Neonatologists



730.23 Midwifery
13.85 HSCP
101.5 NCHD
111.64 Admin



Only Maternity
Directorate in Ireland



Our mission

Together with women, babies and families, our academic healthcare network strives for clinical excellence and innovation.

Our values

Our values guide us as we strive to improve and advocate for the health and wellbeing of women, infants and families. They include:

Collaboration

The formation of the Directorate has changed how the hospitals relate to each other – and has built a collaborative partnership across the 4 hospitals to provide the best possible care to all mothers and their infants across the network.

Compassion

Everyone in Ireland South Women and Infants Directorate has a responsibility to be kind and compassionate and to respect the dignity of the women and families we care for and all of our co-workers.

Excellence

We remain committed to the highest standards of care, delivering higher quality services, more consistent access to care and stronger leadership.

Innovation

With UCC as our academic partner, we strive towards an academic health centre model, with the pillars of education, training, research and innovation closely integrated with clinical service across our Directorate.

Introduction



In 2023, the Ireland South Women and Infants Directorate marked its sixth year of operation. Since its formation, the Directorate has transformed how we work together, strengthening collaboration across our four maternity units, University Hospital Waterford (UHW), University Hospital Kerry (UHK), Tipperary University Hospital (TippUH), and Cork University Maternity Hospital (CUMH), to provide the highest standard of care for women, infants, and families throughout the region.

Over the course of the year, a total of 9,447 babies were delivered across our four maternity units, an average of 26 births each day. After several challenging years dominated by Covid-19 and the HSE Cyber Attack, 2023 felt like a year of renewal. While the impact of those events was still felt, it was also a year of exciting new initiatives designed to enhance the care and support we offer to women and infants in Ireland South. We are deeply grateful for the continued support of the South/South West Hospital Group, the National Women and Infants Health Programme (NWIHP), and the HSE, whose partnership has enabled significant service improvements across our region.

One of the key developments during the year was the selection of UHK as one of the pilot sites for the NWIHP-funded Postnatal Hubs, an initiative inspired by feedback from mothers who participated in the HIQA National Maternity Experience Survey. Continuity of care remains a key priority for our Directorate, and these new hubs make it possible to provide seamless, ongoing support to mothers and babies after birth. The Women and Infants Health Hub at Kinsale Road, Cork, was officially opened in December 2023 by Tánaiste Micheál Martin TD. This state-of-the-art regional hub enhances access to specialist care, reduces waiting times, and brings vital services closer to the community. Establishing services within local settings not only alleviates pressure on hospital clinics but also acknowledges the emotional and practical needs of women accessing care. It represents a compassionate and progressive shift in how maternity and gynaecology services are delivered across Ireland South.

In November, Maggie Dowling, Director of Midwifery at TippUH, and I were honoured to welcome guests to the official opening of the newly refurbished Maternity Unit at Tipperary University

Hospital. Surrounded by panoramic views of the Comeragh Mountains, the redesigned unit offers a modern, safe, and welcoming environment that reflects the hospital's commitment to high-quality, person-centred care for women and families in South Tipperary.

A highlight of the year came in September when our Directorate, particularly our neonatal team, was featured in *Born Too Soon*, the Virgin Media documentary series that offered unprecedented access to the Neonatal unit at CUMH. Filmed over the course of a year, the series followed the journeys of babies, families, and staff in one of Ireland's busiest and most advanced neonatal units. We extend our sincere thanks to our colleagues in UHK, UHW, and TippUH, who collaborated with us to share the stories of babies transferred to and from the CUMH NICU for specialist care. The documentary beautifully showcased how collaboration and mutual support across hospitals lead to the best possible outcomes for our most vulnerable patients.

We were deeply saddened by the passing of our dear colleague and friend, Professor Tony Ryan, on 23 November 2023, following a short illness. His expertise, compassion, and unwavering dedication to neonatal care have left an enduring legacy within the Directorate and beyond. A heartfelt tribute from Professor Eugene Dempsey in this report commemorates Tony's extraordinary contribution to the lives of countless babies and families.

Finally, I would like this report to recognise and honour the staff of the Ireland South Women and Infants Directorate. Recruitment and retention continued to be a significant challenge throughout the year, yet the commitment, professionalism, and compassion demonstrated by our teams ensured that our services remained operational and that women and families continued to receive safe, high-quality, women-centred care every day. To each of you, thank you for your dedication, resilience, and care.

John R. Higgins

UCC Professor of Obstetrics and Gynaecology
Clinical Director

Ireland South Women & Infants Directorate Management Structures

Executive Management Committee

The Executive Management Committee (EMC) of the Ireland South Women & Infants Directorate supports the Clinical Director in the exercise of management oversight for maternity, neonatology and gynaecological services. It is chaired by the Clinical Director and meets weekly.

The EMC has a multidisciplinary membership (see Figure 1) and deals directly with the clinical service (operations), strategy and planning, and capital development within the maternity units of Ireland South (see Figure 2). The EMC delegates to standing committees in the areas of quality and patient safety, information governance, education and training, and research and innovation (see Figure 3).



Figure 1: The multidisciplinary membership of the EMC

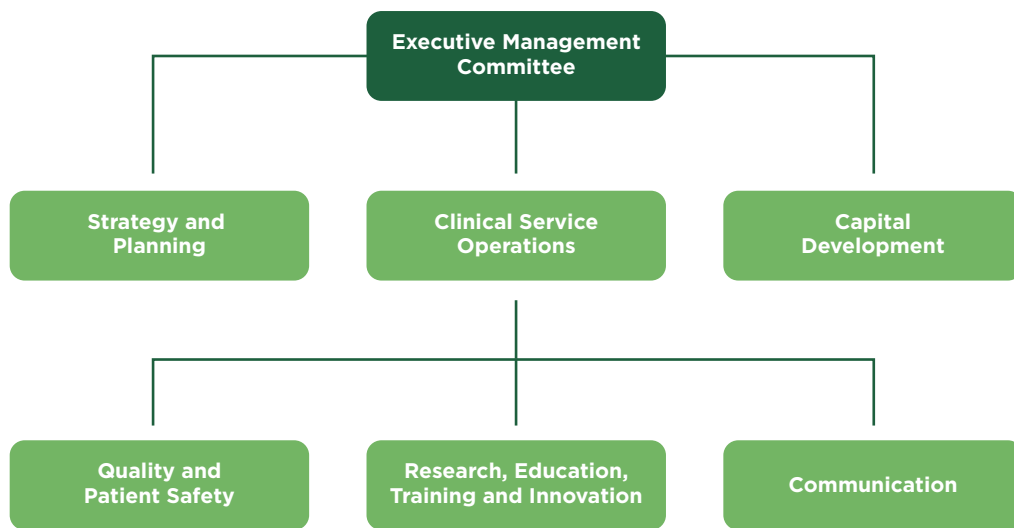


Figure 2: Ireland South EMC major work streams

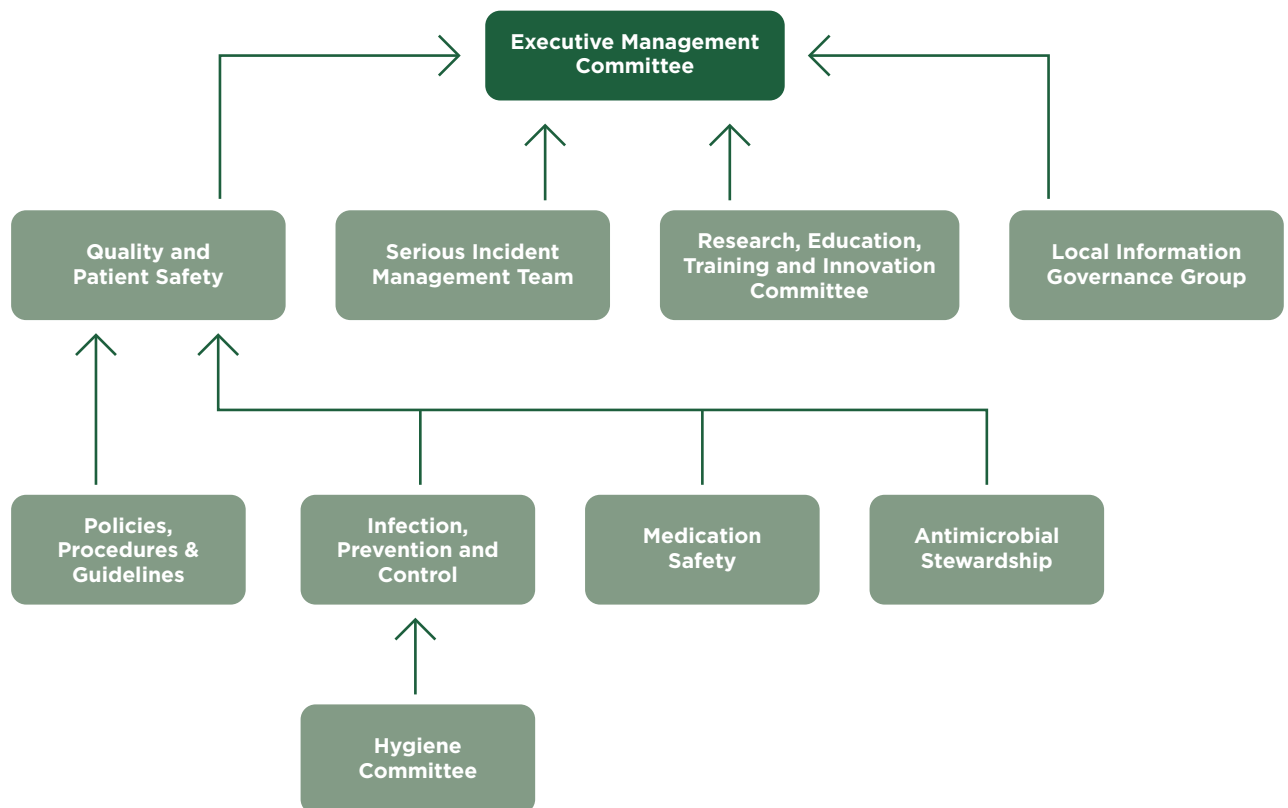


Figure 3: EMC subcommittee structures

Executive Management Committee



Professor John R. Higgins
Clinical Director



Dr Peter Filan
Clinical Lead
Neonatology



Stephen O'Connor
Head of Operations, Ireland South
Women & Infants Directorate



Katie Bourke
Director of Midwifery, CUMH



Dr Waleed Khattab
Clinical Lead UHK



Dr Eddie O'Donnell
Clinical Lead UHW



Dr Vijayashree Hiremath
Clinical Lead TippUH



Paula Curtin
Director of Midwifery,
UHW



Sandra O'Connor
Director of Midwifery,
UHK



Maggie Dowling
Director of Midwifery,
TippUH



Dr Mairead O'Riordan
Clinical Lead Quality &
Patient Safety, Ireland South
Women & Infants Directorate



Claire Everard
Quality and Patient Safety Manager,
Ireland South Women & Infants
Directorate



Professor Richard Greene
Chair, Local Information
Governance Group



Maria Leahy
Health and Social Care
Professions Representative



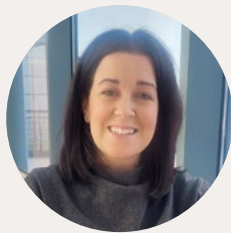
Ms Orfhlaith O'Sullivan
Clinical Lead Gynaecology,
Ireland South Women &
Infants Directorate



Fiona Forde
Finance Manager,
Ireland South Women &
Infants Directorate



Louise Riordan
Project Manager

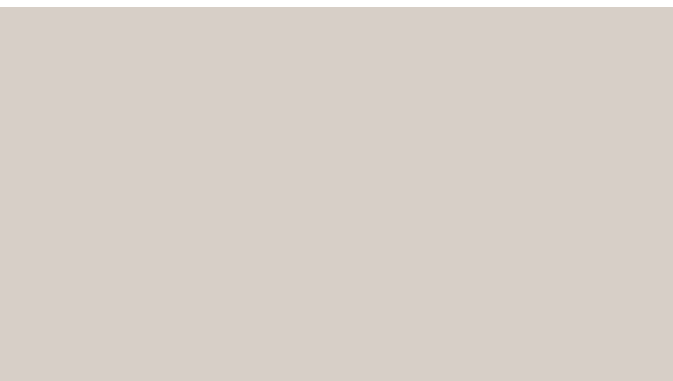


Elaine Harrington
Communications
Project Manager



Lynsey Horgan
Administrative
Coordinator

Our Maternity Units



Cork University Maternity Hospital

Dr Mairead O'Riordan, Clinical Director CUMH

Katie Bourke, Director of Midwifery

Steve O'Connor, Head of Operations

Cork University Maternity Hospital (CUMH) opened in 2007 and involved the amalgamation of maternity services from Erinville Hospital, St. Finbarr's Maternity Hospital, Bon Secours Maternity Unit and gynaecology services from Cork University Hospital.

In 2023, CUMH delivered maternity and gynaecology services comprising of:

- An 11 bedded delivery suite with an alongside 3-room induction suite.
- 110 inpatient antenatal and postnatal beds with a dedicated area for high-risk patients.
- A 31-bedded gynaecology ward (23 gynaecology and 8 dedicated pregnancy loss beds).
- A 7 bedded gynaecology surgical suite and ambulatory unit.
- A stand-alone outpatient ultra-sound department and fetal assessment unit.
- A dedicated early pregnancy assessment unit which was relocated to a new purpose-built location at Kinsale Road clinic.
- A dedicated physiotherapy service to women in CUMH, St Marys Health Campus and new Kinsale road clinic
- A newly developed outpatient gynaecology suite for urogynaecology and fertility services (located offsite at the Lee Clinic).
- Outreach clinics for maternity and gynaecology services in St Mary's Health Campus, and Mallow, Mitchelstown, Carrigaline, and Carrigtwohill primary care centres providing supportive care as outlined in the 2016 - 2026 National Maternity Strategy.



Neonatal Intensive Care Unit (NICU)

The Neonatal Intensive Care Unit (NICU) at Cork University Maternity Hospital (CUMH) continues to serve as a key regional hub for specialised neonatal care across the Ireland South Women & Infants Directorate and beyond. The unit has the capacity to provide care across a full range of acuity levels with:

- 32 Special Care cots
- 6 High Dependency cots
- 12 Intensive Care cots

CUMH accepts neonatal transfers from Tipperary University Hospital (TippUH), University Hospital Waterford (UHW), and University Hospital Kerry (UHK) for advanced care interventions such as ventilation and therapeutic hypothermia. Additionally, babies requiring therapeutic hypothermia are also referred from University Hospital Limerick (UHL) and from other national sites on an emergency basis when neonatal intensive care capacity is required.

Maternity Care Developments

In 2023, CUMH continued to implement strategic developments in maternity care, aligned with national standards and the National Maternity Strategy.

• Antenatal Pathways

Obstetric and midwifery teams continued their work on aligning women to three standards of care through the development and rollout of the new Antenatal Care Pathways, ensuring that maternity care is tailored and responsive to the needs of each individual. The three care pathways are Supported Care (Normal Risk), Assisted Care (Medium Risk) and Specialist Care (High Risk).

• Homebirth Services Integration

Homebirth services transitioned successfully into CUMH in 2023. The hospital now operates under a Memorandum of Understanding (MOU) with five Self-Employed Community Midwives (SECMs) who provide homebirth services across the South/South West Hospital Group (SSWHG). Further recruitment of SECMs is planned for 2024, reflecting growing demand and a commitment to offering choice in birth settings.

• Postnatal Hub Clinics

CUMH launched its first Postnatal Hub Clinic in December 2022, offering postnatal care in a local community setting. The initiative has expanded steadily, with multiple additional hubs planned for opening throughout 2024, providing women with timely and convenient postnatal support closer to home.

Specialist Women's Health Physiotherapy

CUMH continues to invest in specialist women's health physiotherapy, recognising its vital role in supporting women through pregnancy, birth, and the postnatal period. The service offers individualised care for a range of pelvic health and gynaecological conditions, and works in partnership with community pelvic health services for seamless care pathways.

Leadership in Developmental Neonatal Care – NIDCAP

CUMH proudly supports Ireland's first Nurse Specialist role in the Newborn Individualised Developmental Care and Assessment Program (NIDCAP). This internationally recognised, evidence-based approach focuses on individualised, developmentally supportive care for preterm and medically fragile newborns.

Looking ahead, CUMH is on track to become a designated NIDCAP Training Centre by 2024/25. As a training site, CUMH will support NIDCAP candidates from across Ireland in achieving certification and implementing this model in their own neonatal units – advancing national standards in neonatal care and outcomes.

Birth Reflections



The Birth Reflections service at Cork University Maternity Hospital (CUMH) was established to provide emotional support and a listening space for women following the birth of their baby. Recognising that each birth experience is unique, this service is designed to offer a safe, respectful, and non-judgemental environment where individuals can talk through and process their experience of childbirth.

The service is available to:

- Anyone who has given birth in CUMH or had a CUMH-linked homebirth since 2020.
- Women who are currently pregnant and attending CUMH, who may wish to reflect on a previous birth.

Located in St. Mary's Primary Care Centre, the service is delivered by experienced midwives who are specially trained to support women in discussing their experiences in a way that is both compassionate and empowering.

Birth Reflections is not a clinical review but rather a supportive conversation, tailored to the needs of the individual. It allows women to explore aspects of their labour and birth they may not fully understand as well as reflecting on emotions, concerns, or questions they may have postnatally. Women and partners should feel heard and validated in a calm, private, and supportive setting.

Early Pregnancy Unit (EPU) Report – 2023

The Early Pregnancy Unit (EPU) at Cork University Maternity Hospital (CUMH) is a dedicated clinic established to provide timely, expert care for women experiencing early pregnancy complications. The unit is specifically equipped to diagnose and manage conditions such as miscarriage and ectopic pregnancy, aiming to reduce both physical and psychological morbidity through early intervention by trained medical professionals.

In September 2023, the EPU at CUMH was successfully relocated to a new offsite premises, approximately 4 km from the main maternity hospital. This move was necessitated by the recognition that the existing EPU space was no longer fit for purpose in terms of patient comfort or staff functionality.

With this relocation, the EPU became the first offsite EPU in Ireland, marking a significant advancement in service delivery and innovation. The benefits of the new unit include:

- Ample free parking directly adjacent to the clinic
- Large, dedicated waiting area with privacy-enhancing frosted glass door
- Dedicated toilet facilities for patient use
- Three large ultrasound scan rooms
- Separate clinical areas for phlebotomy and medical review
- Three private waiting bays for patients awaiting medical consultation

Patient feedback has been predominantly positive through informal channels, and formal feedback from both service users and staff is currently being collected and analysed.

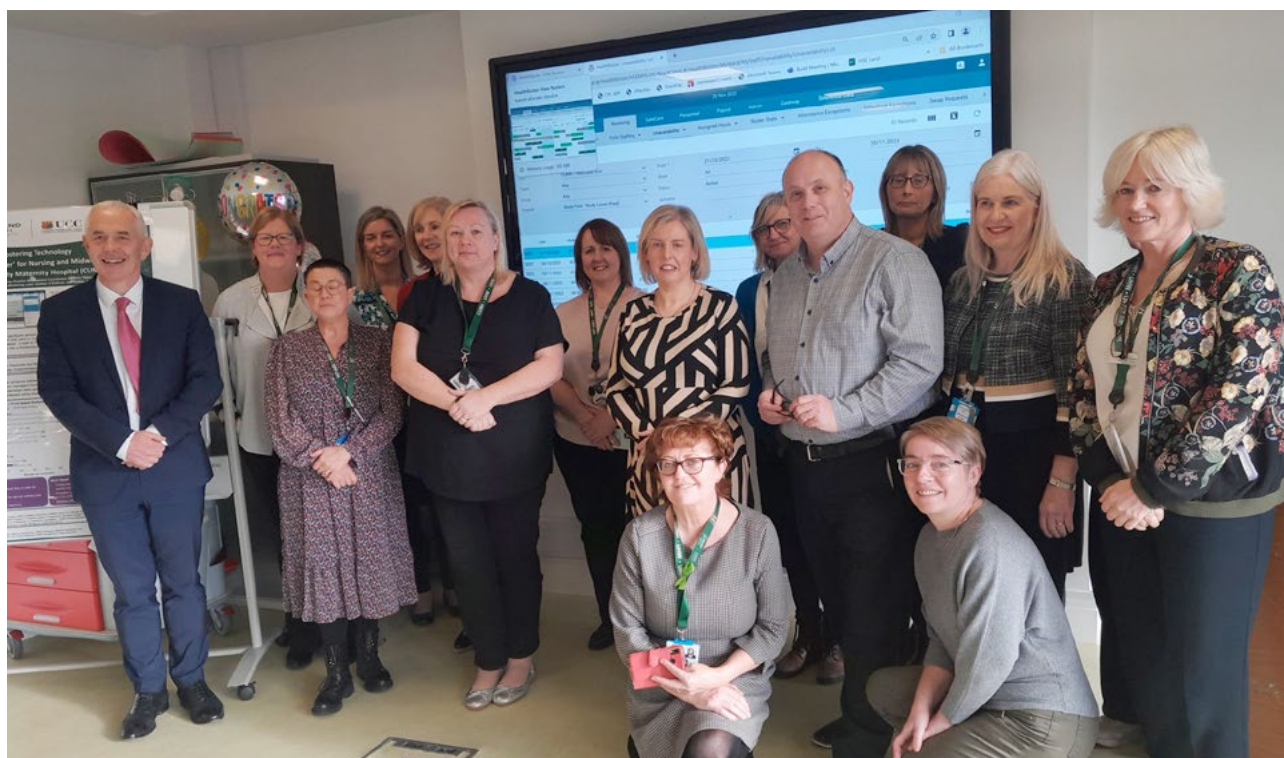
Activity and Performance in 2023

In 2023, the EPU operated Monday to Friday, from 08:00 to 13:00, and delivered care to a total of 5,302 women. This included:

- 3,276 first-time appointments
- 3,202 follow-up appointments

Following the move to the new clinic, over 2,000 ultrasound appointments were completed between September and December 2023. During this time:

- 19 women required transfer to CUMH
 - 3 transfers were by ambulance
 - 16 women self-transferred
- This represents a transfer rate of less than 1%, demonstrating the safety and appropriateness of the offsite model.





In January 2023, the EPU introduced a Manual Vacuum Aspiration (MVA) service—an outpatient procedure that allows for:

- Ambulatory surgical management of miscarriage, early abortion, or retained pregnancy tissue
- Avoidance of general anaesthesia and hospitalisation
- Increased capacity in inpatient gynaecology beds and theatre lists

A total of 16 MVA procedures were performed in 2023:

- No complications were reported
- Patient satisfaction rates were reported to be high

eRostering

In 2023 the completion of the eRoster rollout marked a significant achievement in workforce management for 700 midwives and nurses. This initiative streamlined scheduling processes, improved shift allocation transparency, and enhanced flexibility in managing staffing needs.

NiSRP

In 2023, the National Integrated Staff Records and Pay (NiSRP) programme was successfully rolled out across the South/South West Hospital Group (SSWHG), including CUMH.

This significant digital transformation project introduces a standardised, SAP-based system for managing staff records and payroll functions, contributing to the broader goal of creating a modern, efficient, and integrated health system.

Key Benefits of NiSRP:

- Enhanced Workforce Data: Managers now have access to real-time workforce information, supporting improved planning, reporting, and decision-making.
- Streamlined Processes: The new platform eliminates paper-based systems, increasing efficiency and reducing administrative workload.

Self-Service Portal:

- Staff can update personal details, request leave, and submit expense claims directly.
- Managers are enabled to review and approve leave and travel requests efficiently within the system.

Nursery Nurse Programme

In 2023, Cork University Maternity Hospital (CUMH) marked an important milestone in workforce development with the launch of a new Nursery Nurse Programme in collaboration with a local College of Further Education. This programme was developed in response to evolving service needs and aims to create a clear educational pathway into careers within maternity services.

- Eighteen students enrolled in the inaugural programme.
- All participants successfully completed the year and achieved a full QQI award.
- The course offers excellent progression routes into Nursing and Midwifery degree programmes across Ireland, enhancing its appeal and long-term value.

Looking ahead, CUMH is exploring opportunities to create dedicated Nursery Nurse and Maternity Healthcare Assistant positions for graduates, contributing to a sustainable and skilled support workforce within maternity and neonatal care

Termination of Pregnancy (TOP) at CUMH

Since the introduction of the Health (Regulation of Termination of Pregnancy) Act in January 2019, Cork University Maternity Hospital (CUMH) has provided termination of pregnancy (TOP) care under all four legal provisions:

- Under 12 weeks' gestation
- Fetal indication
- Maternal health
- Maternal emergency

Clinical Outcomes (2019–2023)					
Year	Total Cases	<12 Weeks	Fetal Indication	Maternal	Emergency
2019	69	44 (64%)	20 (29%)	5 (7%)	0
2020	61	38 (62%)	17 (28%)	5 (8%)	1 (2%)
2021	54	38 (70%)	13 (24%)	2 (4%)	1 (2%)
2022	64	44 (69%)	17 (26%)	3 (5%)	0
2023	87	54 (63%)	28 (32%)	4 (4%)	1 (1%)

Termination of Pregnancy Cases in 2023

In 2023, the distribution of TOP cases at CUMH was as follows:

- <12 weeks' gestation: 63%
- Fetal indication: 32%
- Maternal health: 4%
- Maternal emergency: 1%

Pregnancy Options Service

The Pregnancy Options Service at CUMH provides care for women under 12 weeks' gestation seeking TOP or experiencing complications following early medical abortion (EMA) in the community. Women are referred to the service by:

- General practice abortion providers
- Other clinical areas within CUMH

The service operates Monday to Friday and is staffed by a multidisciplinary team, including:

- Obstetricians
- Midwives
- Social workers

Activity in 2023

- Total primary reviews: 417
 - Dating ultrasound pre-EMA: 219 (53%)
 - Post-EMA reviews due to suspected complications: 144 (35%)
 - Referrals for 10–12 weeks' gestation or comorbidities: Remaining cases
- Follow-up appointments required: 210
- TOP cases under 12 weeks' gestation: 54
 - Medical abortions: 49 (90%)

Practice Development Team Report

The Practice Development (PD) Team at Cork University Maternity Hospital (CUMH) plays a pivotal role in coordinating and supporting all activities related to nursing and midwifery requirements, standards, and practices. The team works

collaboratively through a variety of committees and working groups within the Ireland South Women and Infants Directorate, as well as with key clinical stakeholders including site-based teams, university partners, and the multidisciplinary workforce.

Staff Support and Education

Newly qualified and recently appointed midwives and nurses are supported by Clinical Skills Facilitators across all clinical areas. The PD Team ensures that all new staff are provided with ongoing education, skills training, and clinical support to promote competence and confidence in their roles.

In 2023, we welcomed several new appointments to the PD Team:

- 0.5 WTE Midwifery Practice Development Coordinator
- 1 WTE Clinical Placement Coordinator to support student midwife placements
- 1 WTE Clinical Skills Facilitator to support staff through in-service training

Student Midwives and Nurse Education

The revised Higher Diploma in Midwifery Requirements and Standards, implemented in 2021, continues to be successfully delivered. Fourteen Higher Diploma student midwives continued their training throughout 2023.

The Undergraduate BSc Midwifery cohort who commenced in 2019 successfully qualified on 15th September 2023. This milestone was celebrated with CUMH's first midwifery hospital graduation ceremony. Of the 19 students who completed the programme, 16 have taken up midwifery posts within CUMH.

During 2023, CUMH facilitated clinical placements for:

- 176 Nursing Students
- 123 BSc Midwifery Students
- 8 Public Health Nursing (PHN) Students

These placements aimed to maintain a consistent, high-quality learning environment. Midwifery students from CUMH also completed placements in University Hospital Kerry, University Hospital Waterford, and Tipperary University Hospital within the Ireland South Women and Infants Directorate. The E-CAT

assessment booklet remained a successful tool for evaluating student performance during clinical placements.

Prescribing and Advanced Practice

Nurse and Midwife Prescribers continued to be supported by the Practice Development Coordinator. In 2023:

- 1 candidate successfully completed the Prescribing Programme in collaboration with University College Cork
- 2 additional prescribers began the programme

Clinical Training and Emergency Preparedness

The Clinical Skills Facilitators, along with other PD Team members, facilitated emergency obstetric drills and skills training throughout the hospital. They led the implementation of the National Postpartum Haemorrhage Quality Improvement Initiative (PPHQII) and continued to deliver PROMPT training for staff involved in obstetric emergencies.

Additional training supported by the PD Team included:

- Basic Life Support (BLS)
- Neonatal Resuscitation
- Routine antenatal domestic violence screening
- Parenteral nutrition education (delivered by the Clinical Skills Facilitator in the Neonatal Unit)

Audit, Quality Improvement, and Metrics

The PD Team continues to collect and review Nursing and Midwifery Quality Care Metrics and develop associated quality improvement action plans. Audits conducted included:

- IMEWS and INEWS audits against national PPPG indicators
- K2 fetal monitoring audit to maintain staff competence



Policies, Procedures, Protocols and Guidelines (PPPGs)

Practice Development Coordinators are active members of the PPPG Committee, responsible for implementing both national and local policies across the Ireland South Women and Infants Directorate. The PD Team provides critical support for the implementation and training aspects of new policies. Work continues to streamline PPPG development processes across all four maternity hospitals/units within the Directorate.

The PD Team also provides guidance and support in the use of QPulse, helping both staff and students access the PPPG Library and Training Portal.

Vaccination Programmes

The flu vaccination programme was successfully delivered in 2023 with strong support from the Practice Development Team and the Infection Prevention and Control Team. The implementation of the Covax system helped streamline registration and administration of Peer Vaccination, while reducing paper use.

- Flu vaccination uptake among salaried staff at CUMH was 63.7%
- The Covid-19 vaccine was administered by the community support team.





University Hospital Waterford

Dr Eddie O'Donnell, Clinical Lead, Consultant Obstetrician and Gynaecologist
Paula Curtin, Director of Midwifery

University Hospital Waterford (UHW) has been delivering babies as a maternity unit since 1995 and delivered 1,652 babies to 1,619 mothers in 2023.

The maternity unit of UHW comprises of:

- A 4-bedded delivery suite with a 3-bedded first stage room and two admission rooms.
- An obstetric theatre is in the delivery suite, and an adjacent recovery room is available.
- 24 bed Maternity Ward for antenatal & postnatal care.
- 29 bed gynaecology/women's health ward that caters for all early pregnancy issues.
- A protected bereavement room on the gynaecology ward.
- An Early Pregnancy Treatment Unit is in the gynaecology women's health ward.
- Neonatal Intensive Care Unit (NICU) and Special Care Baby Unit (SCBU)-18 cots in total.
- A stand-alone outpatient department for antenatal and gynaecology services, including urodynamics, ambulatory gynaecology, and midwifery and specialist clinics for diabetes and perinatal mental health services. The midwifery-led scanning department is located in the outpatient department to ease patient appointment flow.
- The Integrated Hospital and Community Midwifery Service (IHCMS) is in the outpatient department and can deliver women in this purpose-built, low-risk room.
- The colposcopy service is in a separate, purposely equipped outpatient department (OPD 7) in UHW.
- The Sexual Assault Treatment Unit (SATU) is in a discrete location in UHW but with full support and access to maternity and gynaecology services as required. It is hoped it will move to a new location on the grounds of UHW in 2024, which will offer increased space.
- Maternity services outreach clinics in Dungarvan, Co. Waterford, Ferrybank Primary Care, and Carrickpherish Library Waterford.



Specialist roles

There is a Clinical Midwife Specialist (CMS) in Bereavement and Loss services. This role has proven to be of great value to families and staff alike. The CMS also undertakes recurrent miscarriage clinics with Dr Azriny Khalid in addition to an educational role for staff.

UHW maternity services have a long history of midwifery-led ultrasonography services. There are three CMS's in place that provide the entire scanning programme for all attendees.

The role of Oncology Liaison CMM2 streamlines the journey of women attending Gynae oncology service in UHW and ensuring full psychological support during their surgery/aftercare.

CMS lactation offers invaluable support to mothers. The role has a strong education focus for staff, which reaps benefits in the delivery of daily lactation care for women.

The Advanced Midwife Practitioner (AMP) role in UHW has been in place since 2011. This senior role brings many benefits to the service in terms of education, staff development and clinical supervision of midwifery-led services, as well as to many women who attend the AMP with a specific pathway of care. A Candidate AMP who has vast experience, including home birth care, currently fills this role and hopes to be registered AMP in 2024.

The Clinical Midwife Manager 2 (CMM2) for Perinatal Mental Health offers a robust programme of support for women attending services under the Specialist Perinatal Mental Health Services Model of Care for Ireland.

The clinical midwife manager 2 (CMM2) for Ambulatory Gynaecology coordinates the termination of pregnancy services promptly and sensitively. This service is adaptive to the needs of women and includes an out-of-hours approach should this be required.

The candidate Advanced Nurse Practitioner (ANP) in ambulatory gynaecology continued to develop her role in 2023. This post has allowed for significant streamlining of the Hysteroscopy clinics. In late 2024/early 2025, the post holder will undertake hysteroscopy training in the UK.

The Clinical Midwifery Manager 2 (CMM2) Urodynamics continued to grow and develop the service in 2023. It proved a vital link in women's journey.

The CMS diabetes brings excellent cohesion to the Diabetes Service along with Dr A Khalid. A digital



health project began in 2023 to allow flexibility in the delivery of care for women. This project has proved successful and will continue to grow and develop in 2024.

The Clinical Skills Facilitator CMM2 has brought cohesion to the education and training programme in Maternity Services. This role is invaluable in the development of staff, and this, in turn, supports the safe delivery of care. Her CPD Newsletter is a source of great information for the service.

In line with The National Maternity Strategy, Maternity Services has developed an Early Transfer Home service. The CMM2 Early Transfer Home/Outreach has benefited from this service. It has continued to grow and develop the outreach services. It is hoped to develop a postnatal hub in 2024 that will signpost women into any services they may require in their parenting journey.

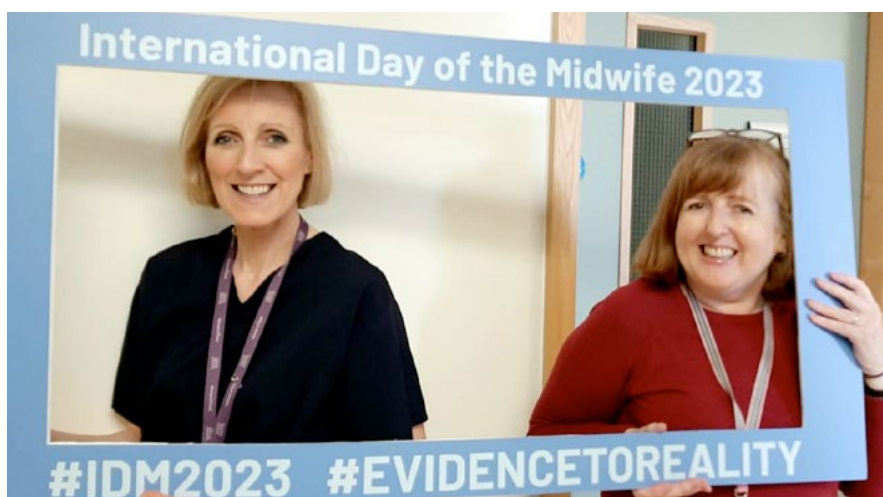
2023 saw the commencement of candidate ANP Neonatal Care. This valuable post will strengthen and develop nursing within the NICU/SCBU setting. We look forward to the evolution of the post for the services.

UHW: Key Achievements 2023

- MaternityONESouth: Ongoing participation in the MaternityONESouth project with the other hospitals/units in Ireland South Women & Infants Directorate. This project aims to improve the safety and quality of the service we provide to women and their babies when emergencies occur and to ensure all our staff have access to evidence-based up-to-date policies and training.
- A quality improvement project was completed in 2023 by ADON with support from the decontamination lead in UHW to use Trophan/Nanosonics for scanning department trolley side decontamination. In addition, a Track and Trace system was introduced to the service for

all reusable devices in an in-house education programme for all staff involved.

- In 2023, the birthing pool continued to be used for water immersion in labour in the alongside unit. This has been a very well-evaluated service. This complemented the Integrated Hospital and Community Midwifery service's ongoing home birth service. The service has managed to continue to deliver choices for women using innovative midwifery rotas, and great credit goes to the staff.
- Senior Midwifery staff continued to represent Maternity & Gynaecology Services on UHW committees such as Clinically Deteriorating Patient, Medicines and Therapeutics, including prescribing sub-group, VTE, Infection Prevention and Control, Blood transfusion, Quality & Patient Safety. The DOM is the Chair of the UHW PPPG committee, sits on the UHW Ethics Committee and is Chair of Children First Steering Group UHW.
- Many staff undertook further education programmes with support and funding from NMPDU.
- The SSWHG Maternal Sepsis Audit was undertaken in December 2023, with some QIPs developed to be completed in Q1 2024.
- 2023 saw the continuation of the Newborn Work Stream committee to facilitate quality initiatives for the newborn journey. These initiatives included v2 of the newborn baby chart and the work around the warm bundle.
- Coleen Cormack, Clinical Psychologist ISWID, continued to support the Multidisciplinary Team. In December, she explained her role in the services. As a service, this role is invaluable for staff support.
- The HIQA Bereavement Survey QIP was undertaken in Q1 2023, and all issues are to be signed off by Q4 2023.
- Viewpoint project continued in 2023 to introduce Viewpoint 6 to the main scanning and Early Pregnancy Unit scanning departments. This package will facilitate a comprehensive storage solution for all scans undertaken.
- Neonatal Resuscitation Programme (NRP) Edition 8 rollout continued in 2023. There was a 90% uptake by staff in the service.
- NWIHP audits (Breastfeeding and Antenatal Education) were undertaken in 2023, with QIP in place, and will be completed by Q4 2023.
- ADON represented Maternity Services on the UHW Assisted Decision Making Committee (ADM) and undertook training to fulfil this role.
- Video enabled care (VEC) project for diabetes service undertaken in 2023 by DR Khalid, Janet Murphy ADON, Anne Reilly CMS Diabetes, and Emer Sheridan-lead VEC HSE & IT Dept UHW. This went live in June 2023 and was evaluated well by the initial small cohort of GDM patients. The service will continue to expand over 2024.
- The routine administration of Anti-D in Pregnancy project commenced in 2023 in OPD with the aim of targeted administration of Anti-D.
- Mr Justin Gleeson, CNS Drug and Alcohol, commenced in the regional post (funded by the Dept of Social Inclusion) and supported staff in education and having a client caseload.
- Sip to Send project –anaesthetic-led- commenced in late 2023 to consider fasting pre-Caesarean Section.
- Grace Walsh CMM2 won the poster competition at the UHW Quality Conference in Nov 2023. Her poster demonstrated the bridge of care that she provides as the Early Transfer Home Coordinator.
- A number of infrastructural improvements were achieved in 2023 (great thanks to Linda Connolly, Business manager)
- New drug preparation areas in the Gynaecology and Maternity wards were added to enhance the safe administration of all prescriptions.



- Funding for replacement lights, painting of the delivery theatre and new automated doors was granted, and these will be installed in early 2024.
- A new call-bell system was installed in the gynaecology ward.
- Fit out of skills lab with minor additions in Q1 2024.
- New chart room maternity ward.
- Multiple minor décor improvements and new furniture to enhance ward environments.

Education, UHW

Undergraduate

UCC/RCSI medical students continued to receive clinical training in UHW in 2023.

UHW provided clinical placements to BSc Nursing students from South East Technological University (SETU) and BSc Midwifery students from the University of Limerick (UL) and UCC, as well as elective placement to the Integrated Hospital and Community Midwifery Service (IHCMS) team from UCC and UCD.

UHW was a maternity placement site for Public Health Nurse Students from UCC.

UHW was an occasional placement site for Paramedic Training (Delivery Suite).

Successful NMBI visit October 2023 (UL placement sites). Complimentary feedback regarding midwifery care.

Professional development

- UHW continued with PROMPT 3 obstetric emergency training in 2023. The training was in person. This training has received a positive evaluation from the multidisciplinary team- with many staff attending.
- In-house perineal repair education occurred on three occasions in 2023. RCNME facilitated it with local representation by Linda Coughlan, CSF.
- A selection of online/in-person programmes were supported by RCNME and undertaken by many maternity/gynaecology staff members. These programmes included:
 - Biomechanics of Birth
 - Breastfeeding programmes
 - Fetal monitoring
 - Care of Newborn
 - Termination of Pregnancy Education
 - Care of Critically Ill Pregnant Person (CIPP)

Each of these programmes was well attended and evaluated. These education programmes align with service needs, staff interests, and skills. Many thanks to the Regional Centre for Nurse and Midwifery Education (RCNME) for their ongoing support of UHW Maternity Services.

- In 2023, there was a continued drive for online Domestic Violence Awareness training, with many staff attending.
- 'Children First' continued to be a priority for all staff, and the HSE Training & Development Officer facilitated online training for Mandated Persons in 2023. This will continue into 2024.
- Maternity and gynaecology staff undertook UHW (NPDU) facilitated education in stoma care, wound care, nutrition, fall awareness, and pressure care. In addition, all staff complete clinical safety updates.
- The LAMH training undertaken by Maria Murtagh CMM3 ensures that the best quality care can be delivered in the healthcare setting by facilitating staff to communicate with simple hand shapes.
- Joanne Halpin, CNM2 Gynaecology Surgical Ward, completed Final Journeys training to ensure appropriate end-of-life care in the acute setting.
- PDP education commenced in late 2023 with a planned rollout for staff throughout 2024.

UHW: Key challenges 2023

- Recruitment and retention: Staffing recruitment and retention remained a major focus throughout 2023.
- To ensure staff were released for ongoing education in the face of roster challenges. This included an eye towards succession planning in ultrasound scanning.
- Gynaecology waiting lists: The strategy to deal with outpatient waiting lists for gynaecology services is multidimensional and ongoing.
- To learn from the challenges of the COVID-19 pandemic and continue to deliver online parent craft education for women/families, with a move back to in-person classes if required. A key element here was to give choice to women.
- To ensure the VEC project for Diabetes care was delivered promptly to provide safe care of service users.
- To continue with infrastructural improvements.
- Ensuring we continued to grow outreach projects to facilitate care closer to home for families.



University Hospital Kerry

Dr Waleed Khattab, Clinical Lead, Consultant Obstetrician and Gynaecologist
Sandra O'Connor, Director of Midwifery

University Hospital Kerry (UHK) opened in 1984. The hospital provides acute general hospital services to the population of County Kerry, North Cork and West Limerick.

In 2023, UHK delivered 1,137 babies.

UHK provides antenatal, postnatal, neonatal, gynaecology inpatient and day case and outpatient services including ambulatory gynaecology and colposcopy outpatient clinics.

UHK maternity services comprises:

- 4 bedded delivery suite including home from home delivery suite.
- 22 bedded postnatal.
- 6 bedded gynaecology ward.
- 8 bedded antenatal ward & 3 bed admission space.
- 10 cots - Special Care Baby Unit (SCBU).
- Outpatient services supporting gynaecology, urodynamics, urogynaecology, ambulatory gynaecology, hysteroscopy and sexual health/sexually transmitted infections
- Obstetrics care pathways including Supported, Assisted and Specialist Care pathway. Midwifery led scanning for dating/anatomy and wellbeing scanning. Postnatal Hub, Early Transfer Home services

very successful and has resulted in the reduction of hospital stay from five days to one day, which allows Kerry women to resume their activity sooner after a major surgery as well as reducing post-operative complications such as wound infection.

Breastfeeding in UHK

In 2023, work on increasing education for staff and service users on breastfeeding and breastfeeding resources continued. CNM2 Infant Feeding Coordinator Mairead O Sullivan IBCLC, focused on supporting staff within UHK in enabling service users to achieve their breastfeeding goals and protect their journeys.

Staff breastfeeding education was facilitated by the UHK CNME Midwifery tutor Priscilla Lyons and newly appointed Kerry PHN IBCLC Helen Sheehy. The aim was also to further integrate the support women received on their breastfeeding journey in antenatal education or inpatient facilities in UHK and the community upon discharge. Additional specific education was provided to the Paediatric Team and GP trainees regularly during the year, and evidence on breastfeeding support services in UHK was feedback to Maternity Service Governance presentations. Antenatal breastfeeding classes were supported fortnightly, mostly in person with some virtual capacity. Additional specialist classes were facilitated for mothers expecting twins and 1:1 individual sessions were arranged in the CentrePoint OPD facility.

UHK: Key achievements 2023

In 2023, the Obstetric and Gynaecology department at UHK had a particular focus on reducing the overall hospital stay in Obstetrics through the ETH facility as well as in Gynaecology by maximising efficiencies in outpatient, inpatient and day gynaecology services. The introduction of more minimally invasive surgeries, in particular laparoscopic hysterectomies, has been



Pictured above: Laura McHugh National Infant feeding co-ordinator, Angela Dunne NWIHP Director of Midwifery, Helen Byrt CMS Lactation Limerick Maternity Hospital, Mairead O'Sullivan UHK, Clare Kennedy Infant Feeding NWIHP ADOM, Susan O'Driscoll CMS Infant Feeding CUMH, Clare Ferris, CMM2 Infant Feeding TUH, Marina Cullen CMM2 Infant Feeding Rotunda, Janice McHugh BM University Hospital Kerry, Mary Stack Courtney ADOM/Practice Development University Hospital Kerry and Hazel O'Leary CMM2 Community Midwifery Team.

Postnatal Infant Feeding OPD clinic continued and increased to twice weekly sessions on Tuesdays & Thursdays in combination with the Postnatal Hub facilities. Therapeutic ultrasound and photobiomodulation treatment were also available in the postnatal infant feeding OPD unit at CentrePoint.

In 2023, an additional midwife was supported by UHK Maternity Services to complete her IBCLE education and examination and become a registered IBCLC.

In May 2023 University Hospital Kerry Maternity Services hosted the NWIHP Infant Feeding Forum Hybrid meeting.

UHK breastfeeding rates for 2023 show initiation of 50.3%.

The Perinatal Mental Health Service in UHK

In 2023, the Perinatal Mental Health Service continued to grow, with an increase of 25% in referrals from the previous year. The service offers face-to-face and virtual antenatal and postnatal Perinatal Mental Health Clinics. In 2023 the service expanded into the community by providing support with Postnatal Hubs. Innovation funding was secured for two quality improvement initiatives: the Mellow bumps programme, an early intervention framework aimed at increasing mums to be's knowledge on activities for managing mental illness while promoting mother to bond with her unborn baby, and Art Therapy for launch in 2024. The Perinatal Mental Health Service have worked collaboratively with the Bereavement Service in pregnancy after loss with a plan to structure this clinic. A joint Perinatal Mental Health Governance Group integrating maternity and

mental health services was established to provide a coordinated and supportive structure for clinical staff to deliver high-quality, safe and compassionate Perinatal Mental Health Support to women and families of University Hospital Kerry.



Above: Zodwa Lenihan CMS Perinatal Mental Health.

Maternal and Newborn Clinical Management System: MN-CMS 2023 UHK

MN-CMS had a code upgrade (2018), and the server changed to Remote Hosted Option in 2023. This involved multiple workflow tests, training of all MDT users, and upgrading the hardware and software. Immediately after the code upgrade, Fetalink application was upgraded to new RHO environment. The work streams are back to full capacity, and the workflows are upgraded per requests from the local sites and demands per national policies. Bimonthly LIT meetings continued in 2023 and were the platform to bring on the MN-CMS related issues. In 2023, 104 new users were trained on MN-CMs In addition, four planned classroom-based optimisation

training and ward-based optimisation sessions on documentation were offered. 4 standalone 724 PCs are set up to aid with any planned or unplanned downtime. MN-CMS is looking forward to getting the Operation Theatre back with electronic health records and planning for electronic transfer of maternal and newborn discharge summaries in the near future.

UHK Maternity Services Represent People of the Year 2023

On the 1st of August, the Ballygarry Estate outside Tralee played host to the much-awaited People of UHK Awards, a heart-warming ceremony orchestrated by University Hospital Kerry (UHK) to celebrate the exceptional individuals and teams shaping lives within their care. Now in its second year, this event shines a spotlight on those who exemplify the essence of compassion, dedication, and innovation within UHK, leaving an indelible mark on patients, families, and colleagues.

Mrs Mary Fitzgerald, General Manager of UHK, opened the event with her inspiring opening remarks, expressing profound gratitude to the nominees and the entire UHK team for their unwavering commitment to the well-being of their patients and the seamless operation of the hospital. Commenting on the People of UHK, she said "The people receiving awards today are representative of the many great people who work in UHK. People who work together and as a team produce the best results."

The hospital received approximately 500 nominations from the public and UHK team members, a testament to the profound impact made by the people who work in UHK. Mairead Brosnahan, hailed for her exemplary leadership, was crowned with the esteemed Leadership Award. At the same time, Ann O'Riordan earned the coveted People of UHK Award, a tribute to her outstanding service and embodiment of the hospital's values.

The Cashel Ward team's collaborative brilliance was recognised with the Team of the Year Award, a testament to their seamless teamwork in delivering unparalleled patient care. Shining a spotlight on the unsung staff members who play a crucial role behind the scenes in UHK, the Unsung Champion Award found its deserving recipients in Cora Walsh and Carty O'Donoghue, both embodying the true essence of selfless support and dedication to their colleagues at UHK.

The People of UHK Awards 2023 spotlighted exceptional individuals whose remarkable contributions to patient care left an indelible mark on those they served. These seven winners, Joann Malik, Advanced Midwife Practitioner; Dr Jack O'Connor, Surgical SHO; Viviane Fogarty, Newborn Hearing Screener; Joe Horgan, Endoscopy Staff Nurse; Joe Diggins, Catering Department; Elaine Dennehy, Renal Nurse Specialist, and Deirdre Colgan, Nurse Sonographer were nominated by patients and their families for their unwavering commitment to providing compassionate and professional care.

The public nominations spoke volumes about the genuine gratitude patients and their families held for these exceptional individuals. Their testimonials of heartfelt appreciation reaffirm the immense value of patient-centred care at UHK. Honouring the seven award winners for the People of UHK Awards 2023 showcased the true essence of healthcare excellence –their dedication and selflessness inspire us all and serve as a testament to the transformative power of genuine care.

A poignant moment arrived at the end of the awards, with the presentation of a Lifetime Achievement Award to Mr Jim O'Mahony, a well-admired figure in the Biochemistry department at UHK, who for in the region of four decades has shown his unwavering commitment to excellence has exemplified the spirit of service and leadership.

Mrs Mary Fitzgerald extended her heartfelt congratulations to all the winners. "Each of our winners is exceptionally deserving," she remarked, "their dedication and service inspire us all, and we extend our gratitude to the wider community in Kerry for their invaluable nominations."

The event's eloquent host, Elaine Kinsella, beautifully concluded the People of UHK Awards 2023, thanking the staff of UHK for their unwavering devotion. The Management of UHK wants to express profound appreciation to the judging panel, the community, and everyone involved in making the People of UHK Awards an overwhelming triumph.



Above (l-r): Joann Malik AMP, Vivienne Fogarty New-born hearing screening and Deirdre Colgan CMS Sonographer.



Bereavement Services UHK

In the last year, the National Maternity Bereavement Experience Survey was rolled out and completed. The results were very favourable to our Bereavement service within the Maternity Services in UHK. We scored above the national average and have now developed quality improvement plan to explore what needs to be improved.

Working collaboratively with other specialities within the Maternity services to the benefit of the bereaved mother/parents, the concept of Lactation after Loss is being explored with the support of the Infant Feeding Co-Ordinator and working with the CMS Perinatal Mental Health Midwife to establish a Pregnancy after Loss support clinic.

Our Snowdrop Room was officially opened. This room was needed because, as stated in the Bereavement Care Standards: "The hospital facilitates access to rooms and spaces where breaking bad news, end-of-life care and bereavement care can take place in a quiet, comfortable environment where privacy is ensured." Parker et al. (2014); IHF (2014); Gibson et al. (2011); SANDS (2016); ISANDS (2007).

www.designanddignity.ie

This space now achieves this need and offers bereaved parents access to a respectful, private, reflective and dignified space whilst experiencing pregnancy loss within our Maternity Services.

Finance was provided by the National Women and Infants Health Programme, and finance was also obtained from the Bereavement Fund which was fundraised by bereaved parents.

The Bereavement service in UHK continues to grow with the planned expansion to welcoming bereaved parents to a Miscarriage clinic, a Pregnancy after Loss support clinic and a recurrent pregnancy loss investigations clinic. These are all based within an allocated off-site clinic led by the CMS Bereavement and a dedicated Consultant.

Community Midwifery Services 2023

Parent Craft Education

In 2023, the Parent Craft Services continued to offer a diverse selection of antenatal pregnancy classes. In-person classes were adapted this year to combine the in-person class with the Parent Craft Educator and the Infant Feeding Coordinator. Women have greatly received this adaptation to the classes.

Mid-pregnancy classes grew to include the Perinatal Mental Health Midwife and the physiotherapy team in the virtual class. The material discussed in the online class details how to maintain a healthy pregnancy, a healthy diet, an introduction to Labour Hopscotch & more. Plans are in place to commence a movement class in association with the physiotherapy department in 2024.

Hypnobirthing was a highly sought-after class for mothers and offered hybrid options, either online or in person. In 2023, hypnobirthing was provided to expectant parents in 5 in-person classes or 5 online sessions. Two trained hypnobirthing instructors offered this option, and due to this expansion in the class provision, the number of attendees almost

doubled from 2022 numbers of 100 to 192 couples in 2023.

Twin pregnancy class was offered on a 1:1 basis in a virtual setting for those who required this specialised class. 7 families expecting twins availed of this specialised antenatal class. A further addition to the antenatal education service was an in-person 1:1 class for mothers who requested a 1:1 class.

The UHK Advanced Midwife Practitioner (AMP) in Supported Care continued with Birth Choices Clinic. In its third year, 116 women attended this clinic in 2023. In addition, a two-part virtual VBAC (Vaginal Birth after Caesarean) class continued. This specialises in tailored information for those wishing to experience a vaginal birth following a previous caesarean section. 76 women were in attendance in 2023, an increase of 11% compared to the previous year.

UHK Postnatal Hub Pilot Site

UHK was selected as one of the pilot sites for the NWIHP-funded postnatal hubs. The origin of the postnatal hub grew from feedback from mothers who participated in the HIQA National Maternity Experience Survey. The inaugural postnatal hub took place on the 17th of January 2023 in the Tralee hub in Centrepont. This service is provided within a Hub and Spoke model. The Hub site is based in Tralee and provides midwifery, infant feeding, and perinatal mental health support. Spoke sites are attended by midwives only in 2023. The hub site is awaiting the appointment of a 0.5 WTE Physiotherapist in 2024.

The expansion of the spoke sites continued in 2023 to include Listowel and Dingle in April, followed by Killarney in July and Cahersiveen in September. Evaluation and feedback from service users in 2023 led to a planned evening postnatal hub being commissioned in Tralee in 2024. A postnatal hub aims to provide extra postnatal care in the community and align midwifery care with HSE Sláintecare strategy, providing it closer to mothers' homes and, at times, that suited families.

In 2023, 382 postnatal hub appointments were carried out by the integrated community midwifery team. Correlating with the most populous towns in Kerry, the busiest site was Tralee, with 237 appointments, followed by Killarney, which commenced in Q3 of 2023 and had 72 appointments attended. Listowel has 47 attendees, followed by Cahersiveen and Dingle with 6% and 3% of appointments respectively.

Community Supported Care Pathway Clinics

These continued in 2023, and are offered in a co-located model with the postnatal hubs in 5 sites across county Kerry. These are in Tralee, Killarney, Listowel, Dingle and Cahersiveen.

The clinics are located in local community hospitals or primary care sites; the spoke sites offered 322 antenatal appointments.

The Dingle Supported Care Antenatal Clinic was established in January 2022. This clinic is ideally located in the Dingle Community Hospital. In 2023, 32 women from this location were cared for in this community outreach antenatal clinic.

Early Transfer Home Service (ETHS)

ETHS service continued to provide a 7-day service. This continued development saw ETHS numbers increase throughout 2023. In total, almost double the number of families availed of ETHS in 2023 compared with 2022. This increased from 89 families to 162, correlating with an equal increase from 266 home visits in 2022 to 501 home visits in 2023, completed by the Community team. Due to this increased workload, telephone follow-up calls were introduced as part of ETHS care to allow prioritisation of mothers who required increased support.

HSE Homebirth Service

The HSE Homebirth Service saw the commencement of a new Designated Midwifery Officer for Homebirths in Q4 2023. This role supports the self-employed community midwives contracted to the HSE to provide this free service to mothers who wish to avail themselves of an alternative place of birth.

Advanced Midwifery Practice

Advanced midwifery practice in supported care has been in operation since Sept 2022. The role of the AMP has been to coordinate and develop the UHK midwifery-led services in the community, as detailed above. In addition to this, the AMP has produced a birth choices clinic for women who have experienced a previous caesarean birth. The aim is to provide the women with information about the risks and benefits of vaginal birth elective caesarean while maintaining continuity of care for a caseload of these women who are choosing vaginal birth and have no significant risk factors. This clinic saw 111 women for a first appointment; 15 were within the caseload, and five women attended the clinic in collaboration with the obstetricians.

Diabetes in Pregnancy Service 2023

- Maternity Services Diabetes: Maternity services at UHK include a Medical/Antenatal Clinic in association with a Consultant Endocrinologist and Clinical Nurse Specialist in diabetes. The number of women attending the clinic is steadily increasing. Maternity services continue to aim to guide, advocate for, and support women and their families throughout their journey within the services.

Overview of service

Diabetes in Pregnancy Service

- Combined medical/antenatal every Tuesday
- Pre-conceptual clinic established 3rd Wednesday of every month
- All women with pre-existing diabetes referred to Diabetic Retina Programme
- All women with pre –existing given continuous / flash blood glucose monitoring
- Video enabled clinics incorporated into maternal diabetes clinics

Risk factors for this patient group

- BMI >30 – 28
- Family History of Diabetes – 30
- More than 1 risk factors (as per HSE 2010 guidelines) – 52
- Previous history of GDM – 39 (negative OGTT)

Antenatal Diabetic Clinics attendance

- Total number of attendances – 964
- Total number face to face appointments – 263 (Medical Antenatal Clinic)
- Total virtual+ face to face appointments – 701 (Marie Nolan Maternal Clinic)
- Patient attendances with Thyroid Disease – 115 virtual(Dr Higgins)
- Total number of OGTT performed – 753

Breakdown of patients attending the clinic with Diabetes

- Gestational Diabetes(GDM) – 133
- Type 1 Diabetes – 7
- Type 2 Diabetes – 4
- Total – 144



Treatment of GDM

- Diet and lifestyle intervention – 118
- Insulin therapy and lifestyle intervention – 15

Diagnostic Criteria

- 50 women diagnosed on fasting value
- 16 women on 1hour value
- 8 women on 2hour value
- 17 women had 2 values positive
- 3 women had 3 values positive
- 39 normal OGTT (History of GDM group)

Investment in infrastructure/ Capital developments

Women's Health Hub

Work is ongoing to establish the Women's Health Hub in Tralee. The hub will provide support services, including colposcopy, ambulatory gynaecology, hysteroscopy, and urogynaecology. The new centre will also accommodate our supported care pathway along with Antenatal Education & Post Natal Hub, which is supported by our physiotherapy team, infant feeding, and perinatal mental health colleagues.

UHK Maternity Services, Key Challenges 2023

Recruitment and retention

Recruitment and retention remained an ongoing challenge during 2023 and are being addressed by a workforce planning group that has implemented an action plan. Local, national and international recruitment drives are continuing.





Tipperary University Hospital

Dr Vijayashree Hiremath, Clinical Lead, Consultant Obstetrician and Gynaecologist
Maggie Dowling, Director of Midwifery

TippUH provides acute hospital services for the population of South Tipperary and the surrounding region. The Maternity in TippUH provides care to women who reside in South Tipperary, West Waterford and North Cork. In 2023, TippUH maternity services delivered 727 babies and provided inpatient and outpatient gynaecology services. There was a 21.6% decrease in the birth rate from 2022.

TippUH maternity services comprise of:

- A two-bedded delivery suite that includes an obstetric theatre to facilitate a Category 1 LSCS.
- A four-bed assessment unit (first stage) in the labour ward.
- A five bedded Special Care Baby Unit (SCBU), comprising of an isolation room to facilitate babies who have been repatriated to the area.
- A 20-bed combined antenatal and postnatal ward with a dedicated induction of labour room to facilitate privacy, rest and comfort for women.
- A shared outpatient area for antenatal and gynaecology clinics. CNS-led diabetic maternity clinics are also now available.
- A self-contained Colposcopy Unit is located adjacent to the theatre.
- Plans to develop an Ambulatory Gynae service have been predesignated as a Women's Health hub, with HSE Estates to look at potential locations.
- A scanning unit for booking, anatomy, placental location, growth and reassurance scans. The consultation room in this area is available for social work, bereavement and perinatal mental health services every afternoon and all weekend.
- Maternity services outreach clinics in Tipperary Town, Carrick-on-Suir (commenced 16 August 2023) and Thurles, providing supportive care to South Tipperary, West Waterford and North Cork women. Plans to extend this service to Cahir PCC in Q1 2024.



Colposcopy Services

The Colposcopy Department at TippUH provides a comprehensive range of outpatient gynaecological procedures, including:

- Colposcopy examinations
- LLETZ (Large Loop Excision of the Transformation Zone) procedures
- Mirena coil insertions
- Nurse-led smear clinics

To further enhance the service, the A/CMM2 has commenced training as a Nurse Colposcopist, supporting the future development of a nurse-led colposcopy pathway at TippUH.

Baby Friendly Health Initiative Accreditation

Tipperary University Hospital has maintained full accreditation with the WHO/UNICEF Baby Friendly Health Initiative (BFHI) since 2015. TippUH was the first unit within the Ireland South Women & Infants Directorate to receive this prestigious recognition, which acknowledges hospital practices that protect, promote, and support breastfeeding in line with global best practice standards.

Specialist Midwifery and Nursing Roles

Specialist roles remain central to the multidisciplinary approach at TippUH, with key posts continuing in:

- Clinical Placement Coordination
- Bereavement and Loss
- Ultrasonography
- Infant Feeding
- Diabetes Care
- Clinical Skills Facilitation
- Perinatal Mental Health Services

A Candidate Advanced Midwife Practitioner (AMP) was appointed in 2023 to strengthen supportive care pathways and enhance maternity services in community-based settings. Unfortunately, this post is currently vacant, with recruitment efforts ongoing.

Clinical Education and Student Placements

Tipperary University Hospital remains committed to the education and clinical training of the next generation of healthcare professionals.

- Midwifery and Nursing Education:
 - Undergraduate midwifery students from the University of Limerick (UL) undertake placements at TippUH
 - Postgraduate midwifery students from University College Cork (UCC) were placed at the hospital in 2023
 - Registered General Nurse (RGN) students from South East Technological University (SETU) complete 2-week clinical placements
 - In 2023, Public Health Nursing (PHN) students from UCC were also welcomed on placement
- Medical Student Training:
 - Undergraduate medical students from UCC are supported with on-site facilities, including lecture rooms, dedicated study spaces and video conferencing technology to connect with peers and lecturers across hospital sites

TippUH:

Dr Vijayashree Hiremath, Consultant Obstetrician & Gynaecologist, continues to serve as the Clinical Lead for Obstetrics and Gynaecology at Tipperary University Hospital (TippUH), under the umbrella of the Ireland South Women & Infants Directorate. In addition to her clinical leadership role, Dr Hiremath is also a member of the Executive Management Team at TippUH.

As Clinical Lead, Dr Hiremath works in close partnership with Maggie Dowling, Director of Midwifery, to guide and support the multidisciplinary maternity team at TippUH.

In November 2023, Professor John R. Higgins, Clinical Director of the Ireland South Women and Infants Directorate, and Maggie Dowling, General Manager of Tipperary University Hospital, proudly welcomed guests to the official opening of the newly refurbished Maternity Unit at Tipperary University Hospital.

This significant event marked an important milestone in the ongoing commitment to enhance maternity care services for women and families in South Tipperary. The refurbished unit, surrounded by beautiful panoramic views of the Slievenamon mountains, thoughtfully redesigned with both comfort and functionality in mind, offers a modern, safe, and welcoming environment that reflects the hospital's dedication to high-quality, person-centred care.

The opening ceremony was attended by staff from across the Directorate, NWIHP, local representatives, and community stakeholders who praised the project as a valuable investment in the health and wellbeing of local women and newborns.

This refurbishment once again reflects the collaborative efforts of the Ireland South Women and Infants Directorate, NWIHP, HSE, working together to ensure that women across the region have access to state-of-the-art maternity services in a supportive setting.



In 2023, it was primarily business as usual in TippUH maternity services. All service changes made in 2020 have been reinstated (e.g., the hearing screening programme.)

Online Parent Education: The facilitation of antenatal education continued as an online experience by delivering live online antenatal classes. All pregnant women attending the hospital were informed of the online antenatal education resources. The multidisciplinary classes were very well received by our service users. The popularity of online classes was evident in the number of those attending. A new scheduling appointment system was introduced to facilitate pregnant women to book classes that suited them. In 2024, these classes will remain somewhat hybrid but ideally wholly face-to-face.

Special Care Baby Unit (SCBU): Visiting restrictions were lifted in 2023, and both parents were facilitated to visit their babies in the unit. The refurbishment of the area allowed for an extra isolation room in the unit. This will be of utmost importance in facilitating the transfer of babies to and from the other units, particularly the Southeast.

Outreach clinics: In a bid to minimise contact within the acute setting and reduce the risks when travelling, the demand for TippUH outreach clinics increased. Plans are in place to extend to a fourth clinic in Q1 2024.

In 2022/2023, Thurles and Tipperary Town clinic attendance exceeded 1,200 women. The new Carrick-on-Suir clinic proved very popular throughout 2023 and continued to grow.

Booking appointments by telephone: Our approach in 2022 continued in 2023 to combine both telephone and in-person booking visits to align with the suitability and availability of the women at the time. This ongoing system has proven to be very convenient for TippUH service users.

2023 saw the changing of wearing masks from surgical masks to FFP2 masks and returning to surgical masks as the hospital and public adapted to the pandemic. Mask-wearing can make it more difficult to reassure pregnant women coming in for appointments. As a result, eye contact and tone of voice played an essential part in reassuring women throughout their pregnancy. 2023 also saw the removal of all mask use in clinical settings, which was a welcome relief to staff and patients.

Midwife, Consultant and HSCP recruitment:

Additional midwives and healthcare assistants were recruited in 2022 following an ongoing recruitment initiative. However, staffing in 2023 remained a concerning issue. International recruitment resulted in a panel being created of 17 midwives who would require a period of adaptation. This was completed with the support of colleagues in CUMH and an additional group to commence adaptation in UHK.

The maternity unit is also supported by a dedicated dietician, physiotherapist, pharmacist and social worker. The support given to the service by our HSCP colleagues is appreciated. Additional support has been given to support the service from our colleagues across the Ireland South Women & Infants Directorate during times of sick leave associated with COVID-19. We welcome all colleagues recruited to our maternity service in 2023, and we are proud to have a diverse and multicultural workforce at TippUH.

Termination of Pregnancy Service:

TippUH Gynae Emergency Area continues facilitating early pregnancy dating scans for women to return to their General Practitioner to consider options. Women accessing medical termination of pregnancy in the community at less than nine weeks gestation may require interaction with the Obstetrics and gynaecology services on the gynaecology ward for follow-up care.

In circumstances of pregnancy beyond 12 weeks' gestation where there is a diagnosis of fatal fetal abnormality, there is a care pathway in place to facilitate a review in CUMH. The gynaecology ward has processes in place, both legally and clinically, when providing care to women in any of the above circumstances.

The Termination of Pregnancy Service is scheduled to commence in 2024 when the fifth Consultant takes up their role.

Education, TippUH

Undergraduate/Postgraduate

BSc midwifery students from the University of Limerick, undergraduate and post-grad midwifery students from UCC and general nursing students from Waterford Institute of Technology continued to complete clinical placements in TippUH in 2023 successfully.

NMBI granted a successful request by TippUH to be a recognised Adaptation Site for all international nurses who wished to register as a midwife on the live register. The adaptation status has been extended until 2028.

Professional development

There is significant education ongoing in TippUH. Supported by the NMPDU:

- One midwife completed an MSc in Midwifery.
- A/CNM in bereavement completed her second year of MSc in bereavement.
- One midwife completed her MSc in Ultrasound.
- PROMPT (Practical Obstetric Multi-Professional Training). The benefits of PROMPT to staff include better response to emergencies and improved outcomes for mothers and babies. This training is every two years and is ongoing on-site.

Recruitment and retention

In 2023, the Maternity Management Team at Tipperary University Hospital (TippUH) continued to strengthen its leadership structure to support ongoing service development, staff support, and a steadfast focus on patient safety and quality of care.

A key milestone during the year was the appointment of the hospital's first Assistant Director of Midwifery (ADOM), Ms Stasia McGuigan, marking a significant step forward in the strategic leadership of the maternity service. Additionally, Ms Sinéad Bracken was appointed as the replacement CMM3, contributing her expertise to the ongoing enhancement of clinical and operational oversight.

In addition, several staff members were appointed in acting roles, ensuring flexibility and responsiveness in service delivery. New appointments included:

Ms Karina Nugent, CMM2 Ante/Postnatal Ward
Ms Caitriona Coughlan, CMM2 LW
Ms Marie Murphy, A/CSF
Ms Julie O'Brien, A/CPC
Ms Claire Ferris, Infant Feeding Specialist
Ms Aoife Ryan, CMM2 ANC

Gynaecology

TippUH continued to operate a smooth-running gynaecology service for outpatients and inpatients in 2023. Consultants operated at a high level to ensure that gynaecology waiting lists were negligible and manageable throughout 2023.





Neonatology Report

The neonatal unit at CUMH is the tertiary neonatal center within the Directorate supporting the neonatal services at University Hospital Waterford (UHW), Tipperary University Hospital (TUH), and University Hospital Kerry (UHK). CUMH also accepts infants requiring neonatal neurocritical care and therapeutic hypothermia from University Maternity Hospital Limerick and other centers when required. As a neonatal neurocritical care unit, CUMH is the only center providing therapeutic hypothermia outside Dublin.

Dr Peter Filan (Clinical Lead for Neonatology, ISWID) and Grainne McNabola (Clinical Nurse Manager 3, Neonatal Unit) lead a multidisciplinary team of Consultant Neonatologists, Neonatal Nurses, Advanced Neonatal Nurse Practitioners, Neonatal Dieticians, Physiotherapists, Speech and Language Therapists, Occupational Therapist, Psychologist and Social Workers.

The Consultant Neonatologists include:

Dr Caroline Ahearne	Dr Neidin Bussmann
Professor Eugene Dempsey	Dr Aisling Garvey
Dr Mmoloki Kenosi	Dr Liam O'Connell
Dr Andreea Pavel	Professor Brian Walsh

Neonatal Nursing Report

This year has been another remarkable year for our nursing team, with several members achieving advanced qualifications that will enhance their expertise, highlighting their dedication to professional growth and commitment to excellence in neonatal care.

Below are the key educational accomplishments

Post Graduate Master's Degree

One nurse successfully completed her Master's in Nursing Program with another three nurses commencing this program, taking the next step in their academic and professional growth.

Master's in Nursing Education

A nurse achieved a Master's in Nursing Education, equipping her with advanced skills and knowledge to facilitate, co-ordinate and educate.

Postgraduate Higher Diploma in Neonatology Nursing

Four nurses graduated in 2023 with their Postgraduate Higher Diploma in Neonatology Nursing from University College Cork, specialising in providing advanced care for new-born's and critically ill neonates.

Additionally, four nurses commenced this program in September 2023, marking a new chapter in their academic journey as they focus on specialised care for neonates.

Advanced Neonatal Nurse Practice (ANNP)

In 2023 two candidate ANNPs started their training. Amy Reidy will qualify in 2024 and Laura Coleman will qualify in 2025. The ANNP role will bring a new perspective to the delivery of care within the neonatal service.

World Prematurity Day

World Prematurity day continued to be a significant and meaningful day again this year.

The day was marked by efforts to raise awareness within the hospital and unit of prematurity. A celebration in Brú Columbanus was again especially memorable with many families and babies returning to participate in the day. It offers support and inspiration to many families that have been touched by prematurity.

There were several other key days celebrated throughout the year, including Father's day, Mother's day, Valentines and Christmas days. These special days were marked with thoughtful gestures such as personalised cards/ footprints, all creating meaningful and memorable moments for the parents.

Annual Read-a-thon

The Annual Read-a-thon took place over two weeks, an event that has continued to be an overwhelming success, engaging many parents and staff and prompting the importance of reading. We look forward to seeing this initiative grow even more in the coming years.

Retinopathy of Prematurity treatment programme

Retinopathy of prematurity (ROP) is an eye condition that can affect premature infants, in particular those infants born very prematurely and receiving intensive care. Our Consultant Ophthalmology colleagues (Mr Eamonn O'Connell, Mr Zubair Idrees and Ms Sarah Moran) provide a weekly ROP screening service. All infants born < 32 weeks gestation and/or < 1501 grams are screened. Some infants will go on to require treatment for ROP which until now required urgent transfer to Dublin.

In 2023 the retinopathy of prematurity treatment programme was launched. Both laser and intra-vitreous injection therapy are now available in CUMH. Critically treatment can now be provided on the same day as the decision for treatment. The successful introduction of this service was made possible through extensive collaboration, education, and organisational efforts, ensuring local access to this specialised treatment. A total of four laser eye treatments and one intra-vitreous injection were carried out during the year.

We continue to provide the outpatient ROP clinic every Thursday morning. At this clinic we review infants who have been discharged from CUMH as well as infants who are still inpatients in University Hospital Kerry. Over the year, 265 cases were assessed in the clinic.

ISWID Neonatal Unit admissions, 2023

The following tables outline the clinical activity of the four neonatal units within Ireland South Women and Infants Directorate. The tables have been collated from the monthly statistics collected by each unit.

The percentage infants admitted to their birth neonatal unit is a key performance indicator of maternity care. This is calculated from the total number of inborn babies admitted as a percentage of the total number of births in each hospital. In 2023 the primary admission rate for inborn infants in each of the four ISWID maternity services was as follows: CUMH (17%), TippUH (34%) UHK (17%) and UHW (23%).

Table 1: Summary data of neonatal unit activity across ISWID 2023				
	CUMH	TippUH	UHK	UHW
Total births	6447	726	1137	1652
Total admissions to neonatal unit	1148	248	205	397
Primary admissions	1087	245	193	385
Readmissions (% of total admissions)	61 (5)	3 (1)	12 (6)	12 (3)
Gestation (weeks)				
• ≤ 27 ⁺⁶	28	0	1	9
• 28 ⁺⁰ – 31 ⁺⁶	56	6	5	26
• 32 ⁺⁰ – 36 ⁺⁶	300	29	48	112
• ≥ 37 ⁺⁰	705	210	139	238
Birthweight (grams)				
• ≤ 1500	81	4	2	33
• 1501 – 2500	213	27	43	102
• ≥ 2501	795	214	148	250

Table 2: Reason for admission

Reason for admission N (%)	CUMH	TippUH	UHK	UHW
Total admissions	1148	248	205	397
Prematurity	239 (21)	32 (13)	26 (13)	101 (25)
Respiratory	329 (29)	43 (17)	74 (37)	100 (25)
Gastrointestinal	303 (26)	6 (2)	36 (14)	92 (23)
Infection	75 (7)	66 (27)	14 (7)	16 (4)
Neurological	115 (10)	1 (0.5)	15 (7)	22 (6)
Low birth weight	6 (0.5)	19 (8)	5 (2.5)	27(7)
Congenital abnormality	22 (2)	1 (0.5)	1 (0.5)	3 (1)
Cardiac	26 (2)	2 (1)	0	3 (1)
Others	33 (3)	78 (31)	22 (11)	20 (5)

Criteria for deciding reasons for admission: this is the primary reason for admission at the time of admission, this is not the final diagnosis at time of discharge, and the criteria are as follows:

Prematurity: defined as <35 weeks, in CUMH all infants born at ≤ 34+6 weeks are automatically admitted to the neonatal unit. In UHK, TippUH and UHW this is < 36 weeks, all infants ≤ 35+6 weeks are admitted.

Respiratory: Any cause respiratory distress eg TTN pneumonia, meconium aspiration, RDS in near term infants, apnoea/cyanotic spells.

Gastrointestinal: includes jaundice, poor feeding, vomiting, bilious vomiting, hypoglycaemia, concern re weight gain.

Infection related: infants admitted where the primary concern is infection, sepsis/suspected sepsis/significant risk of sepsis based on septic risk factors, positive maternal blood culture, skin/scalp/bone infection, does not include infants with respiratory distress who have a partial septic screen.

Neurological: Where the primary concern is neurological either central or peripheral, encephalopathy (neurological causes) seizures, abnormal movements, low cord pH, low apgars, hypotonia, neonatal abstinence syndrome.

Low birth weight: >35+0 weeks gestation and <2.0kg.

Congenital abnormality: Congenital anomalies either structural or genetic (chromosomal/deletions/gains/single gene), when known/suspected at time of birth.

Cardiac: Infant with a known or suspected cardiac condition as the primary reason to admit.

Others: Miscellaneous category when infant does not fit into any of the above categories.

Cork University Maternity Hospital, Neonatal Unit admissions 2023

In 2023 there were 1087 infants admitted to the neonatal unit. 30 of these infants were outborn. There were 6447 births at CUMH in 2023. 1057 inborn infants were admitted to the neonatal. This equates to a 17% admission rate for inborn infants. This is similar to the inborn admission rate from 2022.

In 2023 there was 1148 total admissions to the neonatal unit. This includes 61 readmissions, 5% of total admissions.

In 2023 there were 82 very low birth weight infants (≤1500g) admitted to the neonatal unit. 86 infants <32 weeks gestation were admitted. Both the VLBW and <32 weeks gestation numbers are lower than 2022 and 2021.

20 infants received therapeutic hypothermia in CUMH in 2023. 12 of these infants were inborn and 8 were outborn.

Table 3: Number of infants admitted to the neonatal Unit

Year	2023	2022	2021
N	1087	1137	1325

Table 4: Number of admissions to the neonatal unit (includes readmissions)

Year	2023	2022	2021
N	1148	1186	1411

Table 5: Source of admissions to the neonatal unit

Admissions to Neonatal Unit	N (%)
Total admissions	1148
Primary admissions (% total admissions)	1087 (95)
• Labour ward	614 (56)
• Postnatal ward	402 (37)
• Home	41 (4)
• Other hospital	30 (3)
Readmissions (% total admissions)	61 (5)
• Postnatal ward	25 (41)
• Home	19 (31)
• Other hospital	17 (28)

Table 6: Primary admissions by gestational age category

Gestational age groups N (%)	2023	2022	2021
≤ 27 ⁺⁶	29 (3)	35 (3)	34 (3)
28 ⁺⁰ – 31 ⁺⁶	57 (5)	83 (7)	62 (5)
32 ⁺⁰ – 36 ⁺⁶	304 (28)	299 (26)	371 (28)
≥ 37 ⁺⁰	697 (64)	720 (63)	858 (65)
Total	1087	1137	1325

Table 7: Primary admissions by gestational age (weeks)

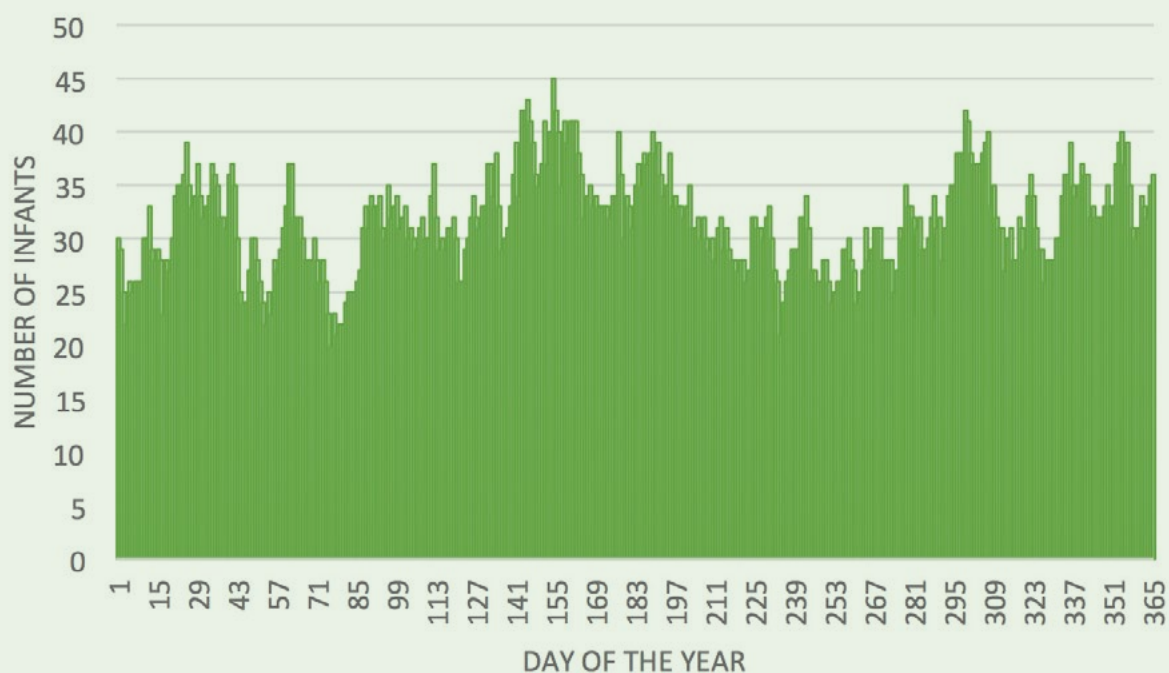
Gestation (weeks)	2023	2022	2021
23	8	5	8
24	6	3	5
25	5	7	4
26	4	10	7
27	6	10	10
28	8	10	10
29	20	25	10
30	14	20	17
31	15	28	25
32	28	24	25
33	45	43	45
34	53	59	87
35	55	63	91
36	123	110	123
37	167	176	208
38	165	171	213
39	173	165	210
40	134	152	133
41	58	56	92
42	0	0	2
Total	1087	1137	1325

Table 8: Primary admissions by birthweight category

Birthweight (g)	2023	2022	2021
≤ 500	3	2	3
501 – 1000	26	40	33
1001 – 1500	53	53	45
1501 – 2000	71	101	95
2001 – 2500	142	130	162
2501 – 4500	770	797	967
≥ 4501	22	14	20
Total	1087	1137	1325

Neonatal cot occupancy

Cot occupancy is measured as the number of infants in the neonatal unit at 08.00 each day. Figure 1 highlights the wide variability in daily occupancy that is a recognised feature of neonatal care. Figure 2 represents occupancy numbers in relation to average number of infants in the neonatal unit and the interquartile range. The median occupancy was 32 (IQR 29, 35), Minimum 20, Maximum 45.

**Figure 4: Neonatal Unit Cot Occupancy by number of infants in neonatal unit per day**

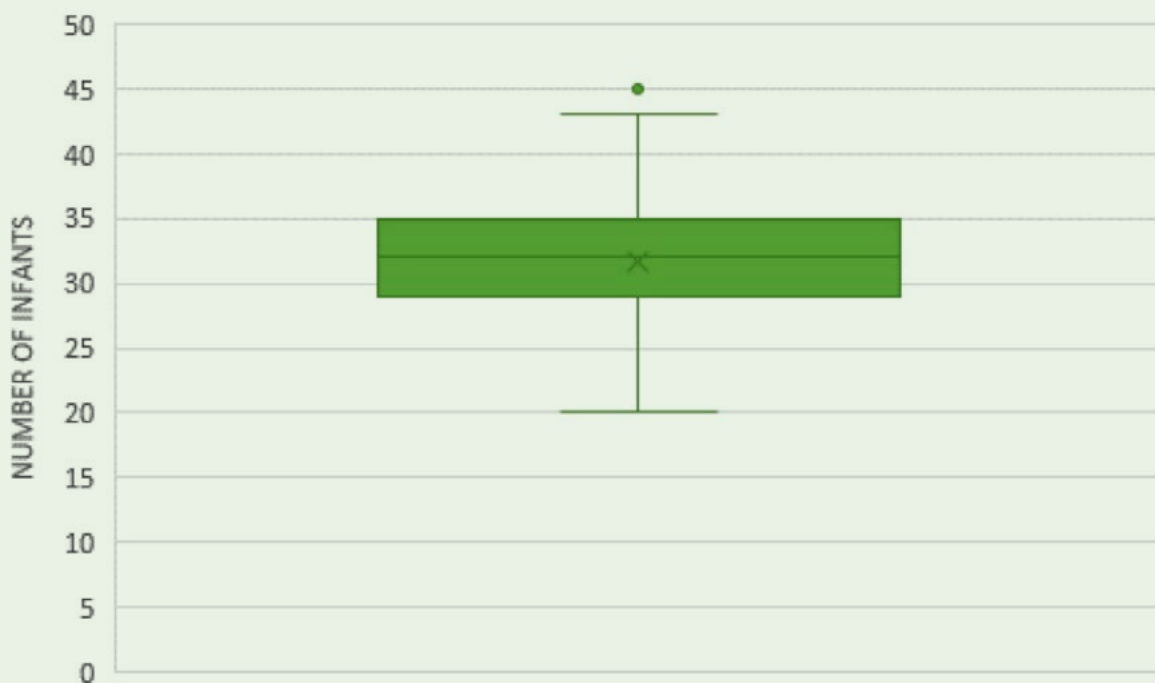


Figure 5: Neonatal unit cot occupancy - median, interquartile ranges

Levels of neonatal care

Using the BAPM criteria, the level of care that each infant is receiving is documented each morning by the neonatal nurse in charge. In addition the level of respiratory support an infant is receiving is also documented. 2023 is the first year that we have collected a complete dataset for the year.

Table 9: Levels of neonatal care (BAPM criteria) and days of respiratory support

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Patient days	934	831	865	949	1073	1089	1048	900	828	1035	948	1072	11572
Level 1 (1:1 care)	108	75	97	89	143	141	73	77	90	68	109	149	1219 (10%)
Level 2 (1:2 care)	186	202	230	268	192	258	254	350	242	308	262	223	2975 (26%)
Level 3 (1:4 care)	640	554	538	592	738	690	721	473	496	659	577	702	7380 (64%)

Table 10: Days of respiratory support

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Ventilation	67	59	56	46	80	100	38	46	39	21	74	83	709
CPAP	46	56	142	111	99	145	152	169	177	146	113	127	1483
HFNC	107	53	74	161	66	106	97	137	85	151	115	85	1247

CUMH Very Low Birthweight Infants, Vermont Oxford Network (VON) dataset

The Vermont Oxford Network (VON) is a voluntary collaboration of 1400 hospitals across the world, working together to improve neonatal care. Its mission is to improve the quality, safety, and value of care for newborn infants and their families through a coordinated program of data-driven quality improvement, education, and research.

Cork University Maternity Hospital contributes anonymised data to the VON Very Low Birth Weight database. Anonymised data on all live born infants whose birth weight is less than or equal to 1500 grams OR whose gestational age is less than or equal to 29 weeks 6 days who is admitted to CUMH within 28 days of birth are entered into the VON database. This allows us to compare short-term outcomes and quality metrics to other centres globally, ensuring appropriate benchmarking of the care we provide.

Table 11: Numbers of infants reported to VON annually

Year	2023	2022	2021	2020	2019	2018	2017	2016
N	79	97	83	84	71	86	79	91

Table 12: Survival to discharge by gestation amongst infants reported to VON

Gestation (weeks)	N =79	2023 Survival to discharge N (%)	2017-2022 % Survival to discharge	VON 2023 % Survival to discharge
23	8	3 (37)	59	48
24	6	5 (83)	74	64
25	5	4 (80)	86	75
26	4	4 (100)	81	83
27	5	5 (100)	81	89
28	8	6 (75)	97	92
29	21	20 (95)	88	94
30	9	9(100)	96	96
31	5	5 (100)	95	96
≥32	8	7 (87)	91	95

Table 13: Survival to discharge by birthweight categories amongst infants reported to VON

Birthweight (grams)	N =79	2023 N (%)	2017-2022 (%)	VON 2023 (%)
≤500	3	1 (33)	33	25
501 – 750	13	9 (69)	79	65
751 – 1000	13	11 (85)	84	86
1001 – 1250	22	19 (86)	91	94
≥1251	28	28 (100)	94	96



Table 14: Clinical demographics of infants reported to VON

N = 79	2023 N (%)	VON 2023 %
Inborn	75 (95)	87
Male	40 (51)	51
Prenatal Care	78 (99)	95
Chorioamnionitis	10 (14)	13
Maternal Hypertension	22 (28)	39
Antenatal Steroids	76 (96)	84
C-Section	62 (79)	74
Antenatal Magnesium Sulphate	65 (83)	65
Multiple Gestation	32 (41)	24
Congenital Malformation	2 (3)	7
Small for Gestational Age	12 (15)	21

Table 15: Summary of respiratory support amongst infants reported to VON

Intervention (N = 79)	2023 N (%)	VON 2023 %
Intubation in delivery suite	33 (42)	36
Surfactant (in delivery suite)	31 (39)	18
Surfactant (at any time)	59 (75)	57
Mechanical Ventilation	49 (62)	50
High Frequency Ventilation	8 (10)	24
CPAP (at any time)	67 (85)	79
Initial CPAP and subsequent intubation	22 (43)	41
Nitric Oxide	9 (11)	8

Table 16: Neonatal morbidity amongst infants reported to VON (N=79 unless otherwise stated)

Morbidity	2023 N (%)	VON 2023 %
Mortality	11 (14)	16
Admission temperature < 36°C	4 (5)	10
Pneumothorax	5 (6)	4
Oxygen at 28 days	37/62 (60)	48
Oxygen at 36 weeks CGA	25/58 (43)	33
Postnatal steroid therapy	13 (17)	14
Home oxygen	2/55 (4)	13
Ibuprofen for PDA	3 (4)	5
Paracetamol for PDA	12 (15)	11
PDA ligation	1 (1)	3
NEC	1 (1)	5
NEC surgery	0 (0)	3
Coagulase negative Staph. in blood culture	4 (5)	5
Fungal infection	0 (0)	1
Grade 3 or 4 IVH	10 (14)	8
Cystic PVL	1 (1)	3
Neurosurgery	2 (3)	1
Retinopathy of prematurity (any stage)	17/60 (28)	31
Retinopathy Laser Surgery	6/60 (10)	6
Retinopathy anti-VEGF	2 (3)	2

Neonatal encephalopathy

All infants with neonatal encephalopathy are recorded and documented as either hypoxic ischaemic encephalopathy or non-HIE encephalopathy.

The criteria for a diagnosis of Hypoxia Ischaemic Encephalopathy requires the presence of one of the following:

- Apgar ≤5 at 10 mins
- Continued need for resuscitation at 10 minutes (intubation or IPPV)
- Acidosis within 60 mins after birth pH < 7.0 in cord blood or any neonatal sample (arterial venous or capillary)

- Base excess ≥-16 mmol/L within 60 minutes after birth in cord blood or any neonatal sample (arterial venous or capillary)

Cork University Maternity Hospital Infants provides therapeutic hypothermia for the Ireland South Women and Infants Directorate region and receives referrals from University Maternity Hospital Limerick (UMHL). All cases of therapeutic hypothermia will be reviewed by their internal hospital serious incident management team (SIMT) and reported to the national obstetric event support team (OEST). In 2023 twelve CUMH inborn infants received therapeutic hypothermia. Outborn referrals included three from UHW, three from UHK, one from TUH and one from UMHL. There were no deaths during their inpatient stay.

Table 17: Summary of infants with neonatal encephalopathy (both HIE and non-HIE cases)		
	Inborn	Outborn
Hypoxic ischaemic encephalopathy	14	7
• Severe (grade 3)	1	2
• Moderate (grade 2)	11	5
• Mild (grade 1)	2	0
Non HIE encephalopathy	3	4
Therapeutic hypothermia	12	8

Table 18: Therapeutic hypothermia numbers annually from 2013-2023											
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Inborn	8	12	5	13	15	14	22	17	9	7	12
Outborn	5	6	6	4	6	10	7	6	7	6	8
Total	13	18	11	17	21	24	29	23	16	13	20

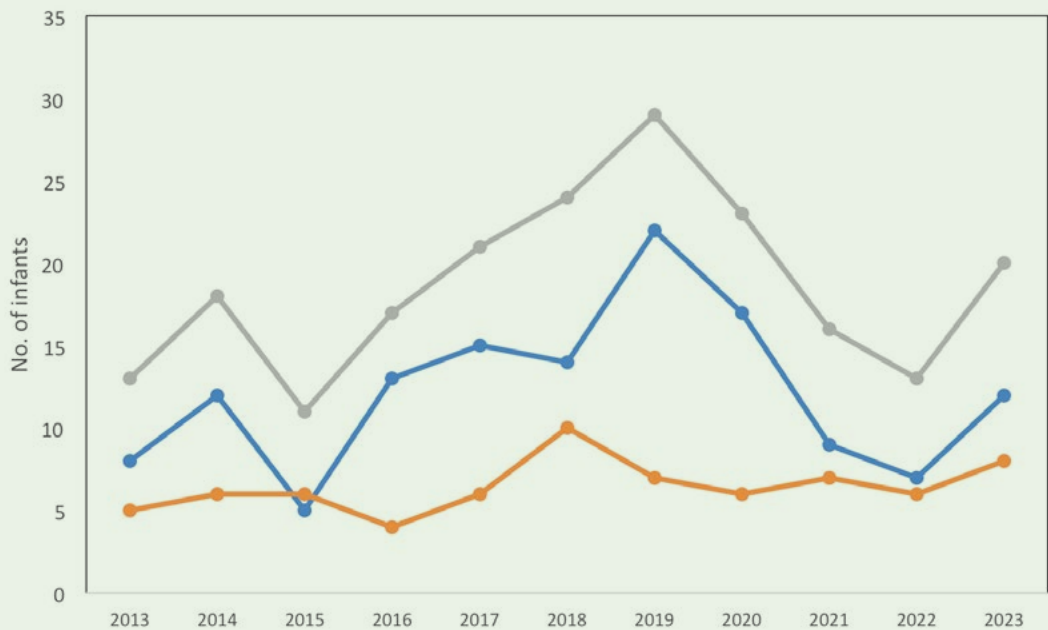


Figure 6: Graphical trends in therapeutic hypothermia from 2013-2023



University Hospital Waterford (UHW)

Dr Brendan Murphy,
Consultant Neonatologist, UHW

University Hospital Waterford (UHW) serves as the Level 2 centre within the Directorate, aligning with the National Neonatal Model of Care. The hospital provides inpatient neonatal care for infants born at ≥ 28 weeks' gestation, including referrals from Tipperary University Hospital within the Directorate and Level 1 centres outside the Directorate, such as Wexford General Hospital and St. Luke's Hospital, Kilkenny within the Dublin South East Regional Health Area.

Neonatal Activity in 2023

- Total births: 1,652
- Admissions to the Neonatal Unit (NNU): 389 (23.5% of births)
- Very Low Birth Weight (VLBW) admissions (<1500g): 24
- Respiratory support provided:
 - Ventilation: 7 infants
 - CPAP: 59 infants
- Parenteral Nutrition (PN):
 - Standardized PN: 40 infants
 - No infants required Individualized PN
- Transfers:
 - To tertiary centres: 25 infants
 - Readmissions from tertiary centres for Level 2 care: 28 infants

Neonatal Unit Facilities & Capabilities

The Neonatal Unit at UHW consists of:

- 10 NICU beds and 8 SCBU beds
- 3 isolation rooms and 1 negative pressure room

The unit is equipped to provide advanced neonatal care, including:

- Respiratory support, such as ventilation, CPAP, and nitric oxide inhalation
- Invasive procedures, including thoracostomy chest drains and Percutaneous Intravenous Central Catheter (PICC) insertion
- Neurological monitoring with Amplitude Integrated EEG (CFAM)
- Therapeutic hypothermia induction pre-transfer for infants with Hypoxic Ischemic Encephalopathy (HIE)

UHW facilitates outbound transfers to Level 3 Neonatology centres and Children's Health Ireland for tertiary care, while also managing retro-transfers for infants requiring continued Level 2 support.

Staffing & Multidisciplinary Support

- Medical team:
 - 0.5 WTE Consultant Neonatologist
 - 8.0 WTE Consultant Paediatricians
 - 9 SpR/Registrars and 9 SHOs (on a shared rota with Paediatrics)
- Specialist neonatal nursing team, including a Registered Advanced Neonatal Nurse Practitioner (RANP)
- Multidisciplinary support:
 - Paediatric Dietitian
 - Paediatric Physiotherapist
 - Lactation Consultant
 - Liaison Perinatal Mental Health CNS

UHW also benefits from on-site specialist services, including:

- Paediatric Radiology (for cranial ultrasound screening)
- Paediatric Ophthalmology (for Retinopathy of Prematurity (ROP) screening)
- Paediatric Orthopaedics (through the Regional Developmental Dysplasia of the Hip (DDH) clinic)



Neonatology UHK

Neonatal services: UHK is a Level 1 neonatology service that includes ten bedded Special Care Baby Units (SCBUs) with facilities to care for, stabilise, and ventilate up to two critically ill babies. Two HDU cots are in the unit, managed by a highly motivated baby and family-friendly medical/Nursing team. The unit was delighted to see the end of Covid restrictions and return to routine care for our babies.

In 2023, the Neonatology Services in UHK continued to provide extensive newborn services against the backdrop and end of the COVID-19 pandemic with all the resultant challenges relating to staff shortages due to illness/ isolation and hospital visitor restrictions. Many lessons were learned from two years of unprecedented new ways of healthcare during a pandemic. These were the catalysts for further improving our quality care provision and person-centred care, with an ongoing plan to redesign and develop a new unit. We developed a parental information leaflet covering what to expect with your preterm baby and the practicalities of the common issues babies experience. We hope this will support and guide parents through this challenging time in their journey.

University Hospital Kerry Neonatal Services celebrated World Prematurity Day, "Born Too Soon", on 17 November 2023. This day highlights awareness of preterm birth and the challenges associated with both infants and their families. We promote breastfeeding through several activities throughout the year to raise awareness and support willing parents.

The unit has seen growth and a positive emphasis on staff education: Neonatal modules done by most staff, and Post Grad in Neonatal Nursing has been completed by two staff in the past 2 years, and a Masters in Neonatal Nursing completed by one staff. 2 nurses completed IV cannulation and venepuncture,

adding to the enhanced skills that already exist in the progressive unit with a new incoming CNM1, Ceire MarCathy. The clinical teams in neonatology engage in robust clinical educational activities with weekly neonatal resuscitation simulation, weekly maternity governance, and quarterly perinatal morbidity and mortality meetings. UHK also supports the ongoing education of UCC medical students and nurses from MTU and UCC.

Some exciting projects include a quality improvement audit on preventing hypothermia upon admission to the NICU and welcoming new staff with a wide range of experience and skills, e.g., IBCLC, New NRP instructors teaching in-house and clinical skills. Focus on development and quality care and encourage initiatives to enhance that. We remain committed to the hospital's mission statement and values to provide the best possible care with compassion, learning and ensuring trust in our patients and families.

Neonatal Unit TippUH 2023

As hospital services returned towards regular post-Covid, TippUH continued to provide the best care to newborns at our five-bed Level 1 Neonatal Unit (Special Care Baby unit). We provide care to term and preterm newborns, including growing preterms returning from tertiary Neonatal Units in Cork and Dublin. Our SCBU was refurbished in 2023 along with the adjacent maternity ward to create a single isolation room that works well for infants requiring isolation, especially after returning from CHI in Crumlin & Temple St.

Our medical and nursing staff, who are NRP instructors, continue to run regular NRP courses to keep all medical and nursing staff providing neonatal resuscitation up to date.

The medical and nursing teams participate in monthly perinatal meetings and three monthly obstetric and paediatric governance meetings.

The unit has medical students from UCC and nursing students from SETU rotating through the unit.

We have received the draft Model of care for Neonatal services in Ireland for discussion and feedback to the National Clinical Programme for Paediatrics & Neonatology. This has identified

deficiencies in our service, particularly concerning the recommended numbers of NCHD Medical staff and SCBU nursing staff, as well as the need for dietetic and physio support to our Neonatal Unit. We hope to bring this to the attention of our new Hospital Group (IEHG) in due course so that we can improve our service to infants and their families into the future.



Tribute to Professor Tony Ryan

By Professor Eugene Dempsey

Our dear colleague and friend Professor Tony Ryan died on Nov 23, 2023 following a short illness. Tony was a scholar, researcher, mentor, and a truly remarkable clinician who touched the lives of so many. Tony was a UCC graduate (1977), completing his initial paediatric training in Cork, Dublin and the UK, before moving to Edmonton, Canada to complete his fellowship in neonatal care in 1986. He then worked as a neonatologist in the Royal Alexandra Hospital at Edmonton before returning to the Erinville Hospital, Cork in 1994 to take over the neonatal services in Cork. Tony was the first neonatologist appointed outside of Dublin. His ambition and vision saw the establishment of a tertiary neonatal centre at Cork University Maternity Hospital in 2006.

On his return to Ireland in 1994 Tony was an active member of the Faculty of Paediatrics serving as a convenor of the Neonatal Subcommittee until 2002. He was a member of the Commission for Assisted Reproduction and also a member of Comhairle na nOspideal. Tony's first love was teaching. Tony took part in the first Postgraduate programme in Teaching and Learning in Higher Education in UCC in 2004 and was among the first graduates of the Masters in 2007-2008. Tony had a great interest in the arts in education and went on to do renowned work on Visual Thinking Strategies, heightening the awareness and understanding of medical students and junior doctors in clinical assessment. He has inspired a generation of doctors with his teaching methodology.

He introduced The Neonatal Resuscitation Programme to Ireland in 1995. He oversaw the establishment of the programme nationally at a time when he was the sole neonatologist working in Cork. He subsequently was involved in the delivery of the STABLE programme and later the Helping Babies Breathe programme, which

he was instrumental in delivering in Omdurman, Sudan. Tony led the introduction of Newborn Individualised Care and Assessment Programme (NIDCAP) in Cork. He also led the introduction of Therapeutic Hypothermia for the care of newborn infants in Cork in 2008, having been part of a large international trial assessing this therapy.

Tony was a very dynamic researcher, involved in a number of international studies leading to changes in practice. He saw the importance of collaboration and developed very strong links locally, nationally and internationally. His research interests were broad including newborn resuscitation, newborn ethics, the neonatal microbiome and newborn brain injury. He has supervised many students, junior doctors, and allied healthcare professionals across a broad range of topics. Recently Tony was listed amongst the most Highly Cited Researchers 2023 list from Clarivate (Top 1% internationally) which recognises pioneers in their field whose citation records position them in the very highest strata of research influence and impact.

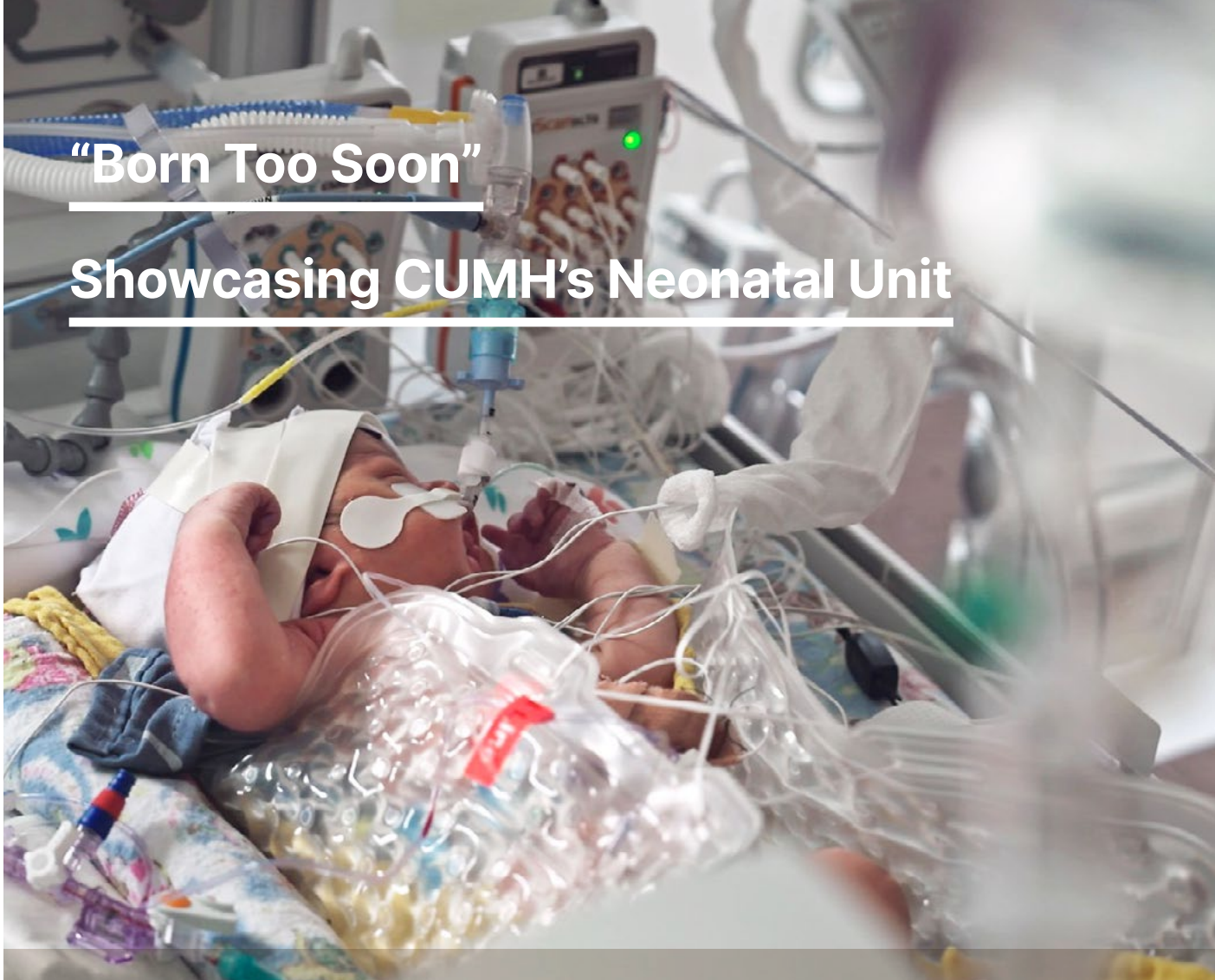
Following his retirement in 2018 Tony embarked on a 'second career' as a certified Physician Development. He acted as a coach/mentor for trainees and emerging consultants at the RCPI. He wished to support and mentor physicians at different stages of their careers, in particular those who may be struggling, those transitioning to new careers and those embarking on leadership positions.

Tony's legacy is immeasurable; the students he taught, the junior doctors he looked out for and mentored over the years, the colleagues he supported whether that be at the bedside or in the classroom, and the thousands of patients he has cared for over the years. Tony is the epitome of a caring, compassionate physician and a role model that all can aspire to.

We offer our sincere condolences to his wife Jo Ann, his children Heather and Paul, and to his siblings and extended family.

"Born Too Soon"

Showcasing CUMH's Neonatal Unit



In September 2023, viewers across Ireland were deeply moved by the Virgin Media documentary series *Born Too Soon*, which offered unprecedented access to the Neonatal Intensive Care Unit (NICU) at Cork University Maternity Hospital (CUMH).

Filmed over the course of a year, this highly emotive and inspiring full-access documentary followed the journeys of babies, families, and staff in one of Ireland's busiest and most advanced neonatal units. The series provided an intimate look at the lives touched by the NICU—both within the hospital walls and beyond—as families navigated some of the most challenging and life-affirming moments of their lives.

A Unique Insight Into Neonatal Care

Born Too Soon gave viewers a rare and authentic insight into the extraordinary care required for some of the most vulnerable newborns, highlighting the skill, compassion, and resilience of both staff and families.

Dr Peter Filan, Clinical Lead in Neonatology at CUMH, reflected:

"Initially, we were concerned that filming in the NICU might be intrusive or disruptive, but the team at Tyrone Productions, led by Producer Sarah Brophy, were an absolute joy to work with. They immediately put both families and staff at ease, and I was genuinely surprised by how many families chose to share their journey. We can't thank them enough—they were incredibly brave during such a challenging time.





I would also like to extend my sincere gratitude to our colleagues in University Hospital Kerry, University Hospital Waterford, and Tipperary University Hospital, who collaborated with us to share the stories of the babies transferred in and out of the NICU at CUMH for further care. This documentary beautifully showcased how collaboration and mutual support across hospitals ensures the best possible outcomes for our most vulnerable patients.”

Gráinne McNabola, CNM3 in the Neonatal Unit, added:

“The staff in our unit are incredible. I’m so proud of each and every one of them. ‘Born Too Soon’ gave us a valuable opportunity to highlight the work they do every day in supporting babies and families.”

Celebrating Compassionate Care

The documentary not only captured the clinical excellence and dedication of NICU staff, but also celebrated the strength of the families whose stories were shared with compassion and authenticity. It stands as a tribute to the unwavering commitment of the neonatal team at CUMH and the trust and courage of the families who allowed their journeys to be told.

Department of Obstetrics and Gynaecology, UCC



The Department of Obstetrics and Gynaecology aims to lead the development of teaching and research in obstetrics and gynaecology in Ireland and to become a centre of excellence internationally.

This academic agenda is fully integrated with the delivery of clinical care in Cork University Maternity Hospital and the maternity units in Tipperary University Hospital, University Hospital Waterford and University Hospital Kerry, thus providing a high-quality academic service across a broad range of clinical, educational and research activities.

The department is located on the fifth floor of Cork University Maternity Hospital. It provides formal undergraduate teaching to UCC medical students. The department also provides postgraduate and continuous professional development opportunities in Ireland South Women & Infants Directorate.

Awards

Anu Undergraduate Gold Medal in Obstetrics and Gynaecology, Department of Obstetrics & Gynaecology, University College Cork, 21 July 2023.

Ms Roisin Curry

Anu Undergraduate Scholar Medal in Obstetrics and Gynaecology, Department of Obstetrics & Gynaecology, University College Cork, 21 July 2023.

Ms Emily Mulcahy

PhD Graduates in Obstetrics and Gynaecology, Department of Obstetrics & Gynaecology, University College Cork

Tamara Escanuela Sanchez was awarded her PhD for her thesis "Reducing stillbirth through behaviour change intervention."



Above: Emily Mulcahy and Roisin Curry.

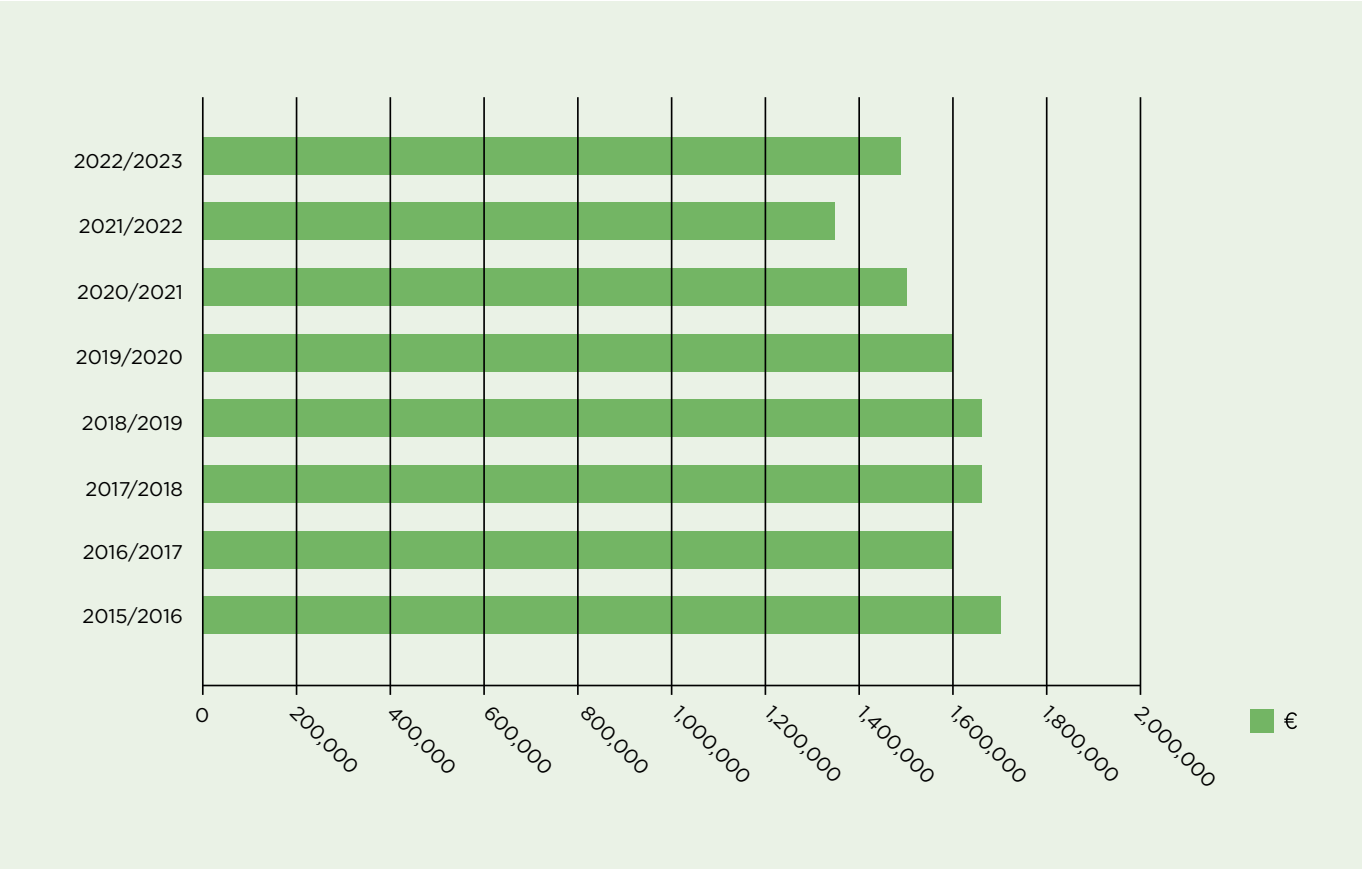


Figure 7: Research Income in the Department of Obstetrics and Gynaecology, 2015-2023



The National Perinatal Epidemiology Centre (NPEC)

The overall objective of the National Perinatal Epidemiology Centre is to collaborate with each of the 19 Irish maternity services to translate clinical audit data and epidemiological evidence into improved maternity care for families in Ireland.

The NPEC is a team of midwives, researchers, administrators, and clinicians and is directed by Professor Richard Greene.

The NPEC produces annual national clinical audit reports on Perinatal Mortality in Ireland, Several Maternal Morbidity in Ireland, Registered homebirths in Ireland, Very Low Birth Weight Infants Audit (VLBW) - Vermont Oxford Network (VON), and Neonatal Therapeutic Hypothermia in Ireland, subject areas that constitute key indicators of quality of maternity and neonatal care.

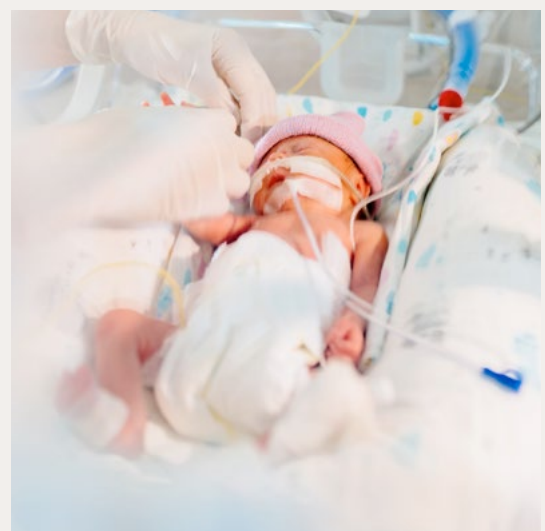
In 2023 the National Clinical Effectiveness Committee (NCEC) endorsed the National Clinical Audit of Perinatal Mortality as the second audit to be quality assured by the NCEC. NCEC endorsement mandates that the appropriate services engage with the National Clinical Audit of Perinatal Mortality, thereby superseding all other national clinical audits on the topic.

From the NPEC clinical audit report findings the NPEC recommends. However, it recognises that recommendations are ineffective if they are not implemented. To ensure that the recommendations are acted upon, and that learning is achieved from its clinical audits at both hospital level and national level, the NPEC works with the National Office of Clinical Audit (NOCA) and more recently, the National Centre for Clinical Audit (NCCA).

The NPEC has always strategically aimed to close the audit loop and since the establishment of the National Women and Infants Health Programme (NWIHP) in January 2017, a number of the NPEC recommendations have progressed. The NPEC works in collaboration with NWIHP and acknowledges the key relationship that has developed between the two organisations.

At local hospital level, the NPEC provides customised feedback to individual hospitals on how they compare and what areas of their care they might review in the context of benchmarking against the national average.

The NPEC actively encourages the use of data in the units and appreciates the importance of working with the units to ensure they know their data and understand how this data can be used in their units. A number of research projects, local clinical audits have been completed.



Obstetrics Report



Table 19: Frequency (N) of maternities and births 2014-2023

	Ireland South	CUMH	TippUH	UHK	UHW
Mothers delivered					
2023	9769	6305	722	1123	1619
2022	9935	6382	785	1120	1648
2021	11210	7273	935	1270	1732
2020	10398	6876	771	1141	1610
2019	10773	7023	875	1177	1698
2018	11359	7401	960	1230	1768
2017	11354	7224	979	1349	1802
2016	11745	7442	1017	1389	1897
2015	12343	7903	1054	1389	1997
2014	12473	7878	1434	1087	2074
Babies born >500g					
2023	9447	6446	727	1137	1652
2022	10143	6539	796	1131	1677
2021	11435	7438	948	1284	1765
2020	10612	7040	782	1155	1635
2019	11010	7204	885	1193	1728
2018	11601	7577	969	1254	1801
2017	11577	7386	982	1368	1841
2016	12011	7629	1032	1410	1940
2015	12620	8113	1062	1406	2039
2014	12746	8071	1454	1102	2119

Table 20: Distribution of maternal and delivery characteristics

	Ireland South N(%) (N=9769)	CUMH N(%) (N=6305)	TippUH N(%) (N=722)	UHK N (%) (N=1123)	UHW N (%) (N=1619)
Nulliparous	3993 (40.9)	2651 (42.0)	268 (37.1)	440 (39.2)	634 (39.2)
Multiparous	5776 (59.1)	3564 (58.0)	454 (62.9)	683 (60.8)	985 (60.8)

Table 21: Frequency (N) Induction of labour characteristics

	Ireland South N(%) (N=9769)	CUMH N(%) (N=6305)	TippUH N(%) (N=722)	UHK N (%) (N=1123)	UHW N (%) (N=1619)
Inductions of labour (Total)	3482 (35.6)	2323 (36.8)	225 (31.1)	288 (25.6)	646 (39.9)
Inductions nulliparas (% of total nulliparous women delivered)	1733 (43.4)	1151 (43.4)	117 (43.6)	152 (34.5)	313 (49.4)
Inductions multiparas (% of total multiparous women delivered)	1749 (30.2)	1172 (32.8)	108 (23.7)	136 (19.9)	333 (33.8)

Table 22: Distribution of maternal and delivery characteristics - Vaginal delivery

	Ireland South N(%) (N=9769)	CUMH N(%) (N=6305)	TippUH N(%) (N=722)	UHK N (%) (N=1123)	UHW N (%) (N=1619)
Vaginal Delivery (Total)	5863 (60.0)	3614 (57.3)	455 (63.0)	500 (60.5)	1115 (68.8)

Table 23: Distribution of maternal and delivery characteristics – Operative Vaginal Delivery (OVD)

	Ireland South N(%) (N=9769)	CUMH N(%) (N=6305)	TippUH N(%) (N=722)	UHK N (%) (N=1123)	UHW N (%) (N=1619)
OVD (Total)	1356 (13.8)	852 (13.5)	80 (11.0)	179 (15.9)	245 (15.1)
OVD Nulliparas (% of total nulliparous women delivered)	1030 (25.7)	647 (24.4)	62 (23.1)	128 (29.8)	193 (30.0)
OVD multiparas (% of total multiparous women delivered)	326 (5.6)	205 (5.7)	18 (3.9)	51 (5.8)	52 (19.5)

Table 24: Incidence of caesarean delivery per total mothers delivered

	Ireland South N(%) (N=9769)	CUMH N(%) (N=6305)	TippUH N(%) (N=722)	UHK N (%) (N=1123)	UHW N (%) (N=1619)
Caesarean delivery	3906 (40.0)	2691 (42.7)	267 (37.0)	444 (39.5)	504 (31.1)
C-sections nulliparas (% of total nulliparous)	1660 (41.6)	1201 (45.3)	95 (35.4)	168 (38.2)	196 (30.9)
C-sections multiparas (% of total multiparous women delivered)	2691 (38.9)	1490 (41.8)	172 (37.9)	276 (40.4)	308 (31.3)

Table 25: Distribution of labour epidurals

	Ireland South N(%) (N=9769)	CUMH N(%) (N=6305)	TippUH N(%) (N=722)	UHK N (%) (N=1123)	UHW N (%) (N=1619)
Labour Epidurals	3899 (39.9)	2464 (39.1)	258 (35.7)	391 (34.8)	786 (48.5)

Table 26: Inutero transfers admitted

	Ireland South N(%) (N=9935)	CUMH N(%) (N=6382)	TippUH N(%) (N=785)	UHK N (%) (N=1120)	UHW N (%) (N=1648)
Inutero transfers admitted	60	23	2	0	35

Table 27: Inutero transfers sent out

	Ireland South N(%) (N=9935)	CUMH N(%) (N=6382)	TippUH N(%) (N=785)	UHK N (%) (N=1120)	UHW N (%) (N=1648)
Inutero transfers sent out	34	0	17	6	11

Table 28: Maternal transfers for critical care

	Ireland South N(%) (N=9935)	CUMH N(%) (N=6382)	TippUH N(%) (N=785)	UHK N (%) (N=1120)	UHW N (%) (N=1648)
Maternal transfers for critical care	304	282	8	9	5

Total number of women transferred for critical care to Level 2 and/or Level 3 care facilities (i.e., ICU, HDU, or CCU). Transfers may include those within the same maternity hospital/unit or to another hospital/unit. In the event of a woman being transferred to another hospital/unit, these should be recorded by the hospital where she gives birth. There is no gestation parameter on this metric – it may include transfers from early pregnancy through post-natal re-admissions.



Table 29: Severe maternal morbidity

	Ireland South Frequency N	CUMH Frequency N	TippUH Frequency N	UHK Frequency N	UHW Frequency N
Major obstetric haemorrhage (MOH)	37	23	3	8	3
Uterine rupture	3	-	-	2	1
Peripartum hysterectomy (PH)	3	2	-	-	1
Eclampsia	2	-	-	1	1
Renal or liver dysfunction	4	3	-	1	-
Pulmonary oedema	-	-	-	-	-
Acute respiratory dysfunction	3	2	-	1	-
Pulmonary embolism	2	1	-	1	-
Cardiac arrest	1	-	-	1	-
Coma	-	-	-	-	-
Cerebro-vascular event	2	2	-	-	-
Status epilepticus	-	-	-	-	-
Septicaemic shock	4	4	-	-	-
Anaesthetic problem	2	1	-	1	-
Other severe morbidity	-	-	-	-	-
Interventional radiology (IR)	1	1	-	-	-
ICU/CCU admission	26	7	7	10	2

*Note: the specific SMM numbers represent the number of women affected by the specific morbidity; more than one morbidity may apply per woman.

Maternal Mortality

Maternal mortality is a devastating outcome for a family left without their mother/daughter/ partner. Maternal deaths have a significant effect on the staff also. There was one case of maternal death in Ireland South Women and Infants Directorate.

Definition and classification of maternal death

A maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy,* from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Maternal deaths are subdivided into two groups, direct and indirect obstetric deaths.

Classification of maternal deaths

Direct obstetric deaths: direct obstetric deaths are those resulting from obstetric complications of the pregnancy state (pregnancy, labour and the puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above. Indirect obstetric deaths: indirect obstetric deaths are those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by physiologic effects of pregnancy. Coincidental maternal deaths: deaths from unrelated causes which happen to occur in pregnancy or the puerperium.

Reference

International Classification of Diseases, 10th Revision, Geneva, World Health Organisation, 2004.

Table 30: Distribution of maternal and delivery characteristics

	Ireland South (N)	CUMH (N)	TippUH (N)	UHK (N)	UHW (N)
Overall perinatal mortality numbers	49	34	4	4	10
Overall perinatal mortality rate per 1000 births	5.18	5.27	5.50	3.5	6.05

Total number of infant deaths, including stillbirths and early neonatal deaths weighing at least 500 grams A stillbirth refers to the death of a fetus weighing ≥ 500 g. An early neonatal death refers to the death of a live born infant during the first week (seven partial or completed) days of life. This metric is not adjusted to exclude congenital anomalies.

Gynaecology Report



During 2023, Ireland South Women & Infants Directorate continued to provide extensive gynaecology services to the women of our region in addition to expanding and further developing service offerings. Building on learnings from 2022, the multidisciplinary teams across the four hospital/units in Ireland South continued to work innovatively and collaboratively to deliver gynaecology services in the safest way possible.

General and specialist gynaecology care is provided across the Directorate. Gynaecology clinics are run at the four main hospitals/units as well as outreach clinics in different areas. More specialised areas such as urogynaecology, colposcopy, oncology and ambulatory services, which also include outpatient hysteroscopy and cystoscopy are also included.

Despite staffing challenges, further gynaecology services across the Directorate were introduced or enhanced.

CUMH Gynaecology Services

General gynaecology clinics are delivered by CUMH consultants in CUMH, South Infirmary-Victoria University Hospital, Carrigaline, Mitchelstown and Mallow Primary Care Centres.

These clinics are delivered in partnership with local GP surgeries, enabling effective, community-based care closer to home for patients. The outreach model continues to demonstrate value in improving access and service efficiency across the region.

This service is open to anyone who has given birth in CUMH (or had a homebirth linked with CUMH) since 2020, or who is currently pregnant and attending CUMH.

Specialist Gynaecology Services

CUMH provides a range of specialist clinics, ensuring targeted care for women with more complex needs. These services include:

- Endometriosis
- Fertility
- Gynaecological Oncology
- Post-Menopausal Bleeding
- Urogynaecology

Urogynaecology

Delivered from the Lee Clinic since late 2021, this specialist service offers:

- Urodynamic assessments
- Perineal clinic
- Pessary management
- Intravesical treatments
- Continence education and support

Fertility

Since 2022, weekly fertility clinics have been relocated to the Lee Clinic to streamline services. Planning is ongoing for the development of a Regional Fertility Hub, which will further enhance the accessibility and integration of fertility care.

Colposcopy Services

The Colposcopy Service, based at the St. Finbarr's Hospital campus, continues to operate as part of the National CervicalCheck Screening Programme. Services include:

- Smear testing and colposcopic assessment for women with abnormal cervical smear results
- Evaluation of symptoms such as post-coital bleeding or abnormal cervical appearance
- Diagnostic interventions to rule out invasive malignancies

Ambulatory Gynaecology clinic

Minor ambulatory procedures are carried out in the Ambulatory Gynaecology clinic at CUMH such as:

- Diagnostic hysteroscopy (camera test that looks inside your womb).
- Operative hysteroscopy (removal of polyps and fibroids from within the womb).
- Endometrial ablation (a treatment for heavy periods which removes the lining of the womb).
- Insertion and retrieval of intrauterine devices (e.g Mirena®, copper IUCD).
- Vulval biopsies and removal of vulval skin tags/ cysts

Physiotherapy Services

In November 2023, CUMH's physiotherapy services transitioned to the new, state-of-the-art Kinsale Road Clinic. Specialising in women's health, the physiotherapy team provides:

- Individualised assessment and treatment for complex gynaecological conditions
- Seamless referral pathways to community pelvic health physiotherapy services, where appropriate

Surgical Gynaecology Services

Elective and emergency gynaecology surgeries are performed at:

- CUMH
- SIVUH
- Bon Secours Hospital Cork

Some procedures are also performed in Bantry General Hospital, Mater Private Hospital Cork, or the Bon Secours Hospital Cork.

Perineal Clinic at CUMH

Dr Deirdre Hayes-Ryan, Consultant Obstetrician Gynaecologist.

The Perineal Clinic operates fortnightly from Lee Road as part of the Urogynaecology services at Cork University Maternity Hospital (CUMH). The clinic provides specialised care for women who have sustained an obstetric anal sphincter injury (OASI) following vaginal delivery at CUMH.

Appointments for postnatal assessment are typically scheduled 4 to 6 months after delivery, allowing time for:

- Recovery and strengthening of the anal sphincter
- Physiotherapy review and input, which is a key component of rehabilitation

The clinic also provides antenatal assessment, offering guidance on future modes of delivery based on individual patient history.

Clinical Activity in 2023

- Total women assessed: 75
- Indications for assessment:
 - OASI of varying severity (3a, 3b, 3c, 4th degree, buttonhole tears)
 - Investigation of suspected occult injury
- Maternal age at OASI:
 - Range: 19–43 years
 - Mean age: 32 years
 - Nulliparous at delivery: 57 women (76%)
- Delivery location:
 - CUMH: 68 women (90%)
 - Other units in Ireland, abroad, or homebirths: 10%





- Mode of delivery:
 - Spontaneous vaginal delivery: 56%
 - Ventouse-assisted: 25%
 - Forceps-assisted: 9%
 - Combined ventouse/forceps: 9%
- Fetal birth weight:
 - Range: 2.3 kg – 4.66 kg
 - Mean weight: 3.56 kg

Assessment & Outcomes

Women attending the Perineal Clinic undergo a comprehensive assessment, including:

- Detailed history and clinical examination
- Endoanal ultrasound to assess anal sphincter integrity
- Endoanal manometry to evaluate sphincter function
- Faecal incontinence questionnaire to assess symptoms

Key Findings in 2023

- Faecal incontinence symptoms:
 - Asymptomatic: 52%
 - Minimal symptoms: 32%
- Endoanal manometry results:
 - Resting sphincter pressure: 20–50 mmHg (Mean: 36.8 mmHg)
 - Squeeze sphincter pressure: 32–157 mmHg (Mean: 70 mmHg)
- Endoanal ultrasound findings:
 - External anal sphincter integrity: 71 women (95%)
 - Internal anal sphincter integrity: 74 women (98%)
- Further referrals:
 - Colorectal specialist referral required for 3 women

Cervical One Stop Assessment Clinic (COSAC)

The Cervical One Stop Assessment Clinic (COSAC) operates twice weekly from Clinic B, St. Finbarr's Hospital, as part of the gynaecology services at Cork University Maternity Hospital (CUMH). This service provides timely access to diagnostic gynaecology care for women with clinical cervical concerns referred by their primary care providers.

Clinical Activity in 2023

- Appointments offered: 606
- Total attendees: 543
- Did Not Attend (DNA) rate: 10%

Primary Reasons for Referral:

- Abnormal cervical appearance: 305 women (56%)
- Abnormal vaginal bleeding pattern: 177 women (33%)
- Cervical polyp: 60 women (11%)

Demographics of Attendees:

- Age range: 18–77 years (Mean: 38 years)
- Nulliparous women: 196 (36%)
- Currently smoking or vaping: 76 (14%)
- Cervical screening status (aged ≥25 years):
 - Not up to date: 48 (10%)
 - Previous colposcopy attendance: 94 (20%)
 - Previous cervical treatment in colposcopy: 64 (13%)

Assessment & Findings

Women attending COSAC undergo a comprehensive cervical assessment, including:

- Detailed history
- Cervical examination with biopsy capability if required

Cervical Examination Outcomes (n=540)

- Normal findings: 54%
- Cervical ectropion: 14%
- Nabothian cysts/follicles: 13%
- Cervical polyp: 10%
- Cervicitis: 6%
- Irregular cervical appearance: 1% (all underwent histological sampling; all benign)
- Suspected advanced cervical cancer: 1 case (0.2%), later confirmed as squamous cell carcinoma

Screening & Biopsy Findings

- Cervical screening performed on 27 women (5%) where it was overdue
 - 1 case of high-risk HPV with low-grade abnormal cytology, referred to colposcopy

- Cervical biopsy/histological sampling performed on 128 women (24%)
 - Benign results: 81%
 - Cervicitis: 18%
 - Squamous cell carcinoma: 0.7%

Service Efficiency & Referrals

The primary goal of COSAC is to provide a single-visit service, enabling timely diagnosis and management. In 2023, 91% of attendees were seen and discharged on the same day.

Further Referrals & Procedures

- Ambulatory hysteroscopy: 13 cases
- Colposcopy referral: 9 cases
- Cold coagulation for symptomatic ectropion: 7 cases
- General gynaecology clinic referral: 3 cases
- Inpatient theatre referral: 3 cases

At the end of 2023, the waiting lists in CUMH stood at:

Table 31: Waiting lists in CUMH	
Outpatient Waiting List Number	2191
Ambulatory Gynae Waiting List	142
Inpatient & Day Cases Waiting List Number	1052

The total number of referrals to gynaecology services in 2023 were:

Table 32: Referrals to Gynaecology Services in 2023	
General Gynae	4544
Fertility	764
Urogynae	1317
PMB	1201
Paediatric Gynae	176
Oncology	217
Endo	52
Total	8271
Ambulatory	2055
Total	2055
UDS	855
Continence	34
Pessary	802
Gynae Scans	4023
Fertility Scans	456
Referrals rejected	0

Table 33: Gynae Outpatient Waiting List		
Gynae OPWL	Has appointment date	No appointment date
0-3 Months	572	1320
3-6 Months	141	131
6-9 Months	17	5
9-12 Months	1	1
12-15 Months	2	0
15-18 Months	1	0
Grand Total	734	1457

Physiotherapy

CORU Registered Physiotherapists assess and treat Gynaecology Inpatients and Outpatients.

The Physiotherapy service for patients attending the complex Urogynae/Mesh complications clinic commenced in 2022.

Table 34: Gynae Physiotherapy treatments		
	New patients seen	Number of Physiotherapy Treatments
Inpatients		
Gynaecology	124	198
Neonatology	355	1274
Obstetrics	1839	2016
Outpatients		
Gynaecology	979	4426
Neonatology	254	827
Obstetrics	3251	7574

The Fertility Hub

The public Fertility Hub at CUMH offers a multidisciplinary service to individuals and couples who are experiencing fertility issues. Patients are offered fertility investigation and a medical assessment and consultation with our doctors.

The Fertility Hub is part of an initiative supported by the National Women and Infants Health Programme (NWIHP) and the Ireland South Hospital Group. In September 2023, the HSE started funding for the regional hubs to refer couples that fit the criteria, for publicly funded treatments such as IUI, IVF and ICSI.

The CUMH Fertility Consultant Team is led by Dr Moya McMenamin, along with her colleagues Dr Minna Geisler and Dr Manal Younis.

The Nursing team for the Fertility Hub are Eilis McCarthy CMM 3 Fertility, Emma Farrell CNM2, Ann Marie Ennis CNM2 and Ann Long Staff Nurse.

Table 35: Fertility Hub	
New Referrals to hub	710
New appointments	532
Return appointments	641
Ovulation Induction Treatment Cycles	134
Referral for HSG	291
Referral for Semen Analysis	233
Referral for IUI treatment	91

CUMH gynaecology services

Outpatient and Inpatient numbers. The CUMH gynaecology services recovered in 2022 after the impact of COVID-19 and the HSE cyberattack during 2021. Overall attendance numbers are reflected in the table below.

Table 36: CUMH Gynaecology service – Outpatient attendances 2023	
Sub-specialty/clinic:	
General Gynaecology (includes outreach clinics SIVUH clinics and telephone clinics)	6662
Oncology	1835
Post-menopausal bleeding (PMB)	1527
Post-menopausal bleeding (PMB) scans	661
Colposcopy (consultant led)	2181
Colposcopy (nurse led)	4518
Colposcopy (smears)	923
COSAC clinic	544
Gynae ultrasound scanning	1941
Urogynaecology (consultant led clinics)	1623
Urogynaecology Mesh Specialty Clini	88
Urogynaecology (nurse led clinics)	3888
Perineal clinic	87
Physiotherapy for Gynaecology patients (New & Return)	4426
Fertility	1670
Fertility Scanning	702
Gynae pre-operative assessment	1421
Ambulatory Gynaecology	1937
Endometriosis	535
Adolescent Gynaecology	192
Complex Menopause	47
Total	37408

Table 37: CUMH gynaecology service - Inpatient and day case procedures 2023	
Total inpatient and day case procedures	2677

Gynaecology Report UHW

2023 was another busy year for Gynaecology Outpatient clinics in UHW. General and gynaecology oncology services are provided in UHW with an expert, multidisciplinary approach that aligns with the best evidence-based practice. The Gynaecology OPD is adjacent to Maternity Services for ease of use and support.

Other specialist services include Ambulatory Gynaecology Services, Colposcopy, Sexual Assault Treatment Unit (SATU) and Urodynamics clinics. All gynaecology in-patient services are provided on the UHW hospital campus in the Gynaecology Ward or the Ambulatory Day Care Unit (ADCU).

Colposcopy services are provided in a purpose-designed clinic within the wider OPD setting in UHW, and SATU is in a discrete location in UHW; both services have full support and access to maternity and gynaecology services as required.

UHW: Key achievements in gynaecology 2023

Oncology

The Gynae oncology service led by Dr John Stratton, Consultant Obstetrician & Gynae Oncologist, is supported by Aoife Hartwell, CMMII Gynae Oncology Liaison.

Throughout 2023, the service provided care for over 100 newly diagnosed cancers. A total of 1491, including benign gynae patients, were reviewed. 201 of these women were discussed at the bimonthly MDT meetings, resulting in the delivery of individualised patient pathways, including medical oncology treatment on-site in UHW and onward referral for radiation therapy provided in UPMC Whitfield and St Luke's Hospital Rathgar Dublin.

Treatments provided included:

- 144 surgeries (including complex pelvic, cancer and benign gynae). 30 patients had adjuvant chemotherapy, 8 neoadjuvant, and 4 adjuvant radiotherapy.
- 29 cervical cancer patients were under the care of Dr Stratton. 5 had surgery, 1A1 x8, Palliative chemotherapy x2, Primary Chemo radiation x14 (Neuroendocrine x2). Palliative x 2
- Aoife Hartwell CMM2 Gynaecology Oncology Liaison saw 351 patients that attended the Gynae/ oncology clinic for provision of education, supports and specialist nursing input for patients and families. The role also assists in managing patients on their primary surgical pathway.

Table 38: UHW Gynaecological surgical procedures 2023

Gynaecology surgical procedure	Number of women
Cervical/uterine	5
Ovarian cancer	24
Uterine cancer	27
Vulval cancer	10
Vaginal cancer	0

Colposcopy Service

The Colposcopy Service in UHW offers a multidisciplinary team approach to the care of women attending the service under the auspices of CervicalCheck, the national cervical screening programme. UHW is one of 15 centres providing colposcopy support to Ireland's CervicalCheck programme. The service is provided by Dr Stratton, Dr Bermingham, Dr Butler, and the nursing team. The services aim to provide timely access to the standardised level of quality assured care.

In 2023, UHW had 3,674 (colposcopy and smears) attendances in colposcopy clinics, including larger than projected numbers of new patient referrals. KPI data is collected and returned in line with CervicalCheck guidelines.

SATU Service

The SATU at UHW is staffed 24 hours per day, 7 days per week, on a shift or on-call basis. The aim of the service is to provide holistic, responsive, and

patient-focused care for all service users who have experienced sexual crime.

2023 Attendances

Option 1	58%
Option 2	20%
Option 3	20%
Total Attendances	81

90% of patients were seen within 3 hours of a request for forensic clinical examination. 94% of patients identified as female and 6% as male.

Minimal Access Surgery

2023 saw the continuation of gynaecological procedures being performed through minimal access surgery, allowing for greater hospital bed availability and faster patient recovery. With this service, we continuously review our waiting lists for patients who can benefit from it. We look forward to continued expansion of this service into 2024.

Outpatient Hysteroscopy Clinic (OHC)

The OHC provides a one stop "see and treat" setting for women in the ambulatory gynae clinic space. The service is supported by a Consultant Gynaecologist/Obstetrician, a candidate Advanced Nurse Practitioner and Health Care Assistants. In-person clinics and virtual clinics take place every week. The virtual clinic allows for history taking, information and question-asking ahead of the in-person visit, thus reducing the time of the in-person clinic visit.



323 patients attended the OHC clinic in 2023. Access to this clinic means that patients can be seen, have a diagnosis, and treatment as required, all in the one day. This negates the need for attendance at a general gynaecology clinic, a second attendance for a scan and a third attendance for treatment. This service is time-saving for both the patient and the hospital. Referrals to the service continue to rise, and we look forward to expanding and developing the service as needed.

Gynaecology Outpatient Waiting Lists

In 2023, 3,230 referrals were made to the gynaecology service.

At the end of 2021, the longest wait time for a gynaecology outpatient appointment was 24 months. Due to the high referral rate in 2023, the number of people waiting for an appointment increased from 9 months to 11 months. We will continue to work on these wait times in 2024 with twilight clinics’ assistance and NTPF’s support.

Table 39: Numbers of attendances in gynaecology outpatient clinics at UHW

Outpatient activity	UHW
Gynaecology	3119
Ambulatory gynaecology (including hysteroscopy at UHW)	323
Colposcopy	2388
Smears	1286
Urodynamics	185
STI/SATU	81
Reproductive Clinic	N/A
Total	7382

Table 40: Numbers of inpatient and day case gynaecology procedures at UHW

Surgery activity	UHW
Inpatient procedures	449
Day case procedures	648
Total	1097

Table 41: Gynaecology waiting lists at UHW

Gynaecology waiting lists	UHW
Outpatients	953
Inpatients/day cases	284

Gynaecology Report UHK

UHK Gynaecology & Ambulatory Services 2023

General and specialist gynaecology care from minor to major inpatient procedures are provided in UHK on the gynaecology (Kells) ward. Care is provided under a Women’s Health Service umbrella consisting of a colposcopy clinic, hysteroscopy outpatient services, ambulatory gynaecology services, COSAC (Cervical One Stop Assessment Clinic), Sexual Health/STI Clinics and Urodynamics clinics. The care provided is in line with the best evidence-based practice and is carried out using a multidisciplinary approach.

The Gynaecology ward takes care of pregnant women up to 19+6/40 in agreement with patients’ consultants and close collaboration with antenatal/ delivery suite staff. The gynaecology ward also accommodates an ED pathway for women who present to the emergency department and, following triage, are deemed suitable for direct pathway are transferred to the ward and managed to admit or discharge.

In addition, the gynaecology services also oversee the Urodynamics Clinic Service for UHK. This is an outpatient clinic that assesses bladder function.

- The following clinics/services are provided in gynaecology services in UHK:
- Ambulatory gynaecology
 - Women’s Health Service: colposcopy/ hysteroscopy/ smear clinics/sexual health clinics/urogynaecology
 - Continence advice
 - Endometriosis
 - General gynaecology and telephone follow-up
 - Reproductive workup service
 - Paediatrics/Adolescent gynaecology
 - Postmenopausal bleeding pathway
 - Pre-operative assessment

UHK gynaecology waiting lists at December 2023

Gynaecology Waiting List	December 2023
OPD Waiting List	545 (Active 394)
Waiting List OPD (Over one year)	2 (active waiters 2)
Gynaecology (Inpatient and Day case)	127 (39 Active waiters) (53 pre-admit & 35 Suspensions)



Pictured above: Colposcopy Team University Hospital Kerry.

UHK: Key achievements in gynaecology 2023

Termination of Pregnancy Service: Women accessing medical termination of pregnancy in the community less than 9 weeks gestation may require interaction with the Obstetrics and Gynaecology services on the gynaecology (Kells) ward for follow-up care.

In circumstances of a pregnancy beyond 12 weeks' gestation where there is a diagnosis of fatal Fetal abnormality or where a risk to the life of the mother has been identified, a UHK Consultant Obstetrician/ Gynaecologist may facilitate a termination of pregnancy in line with national legislation.

The gynaecology (Kells) ward has legal and clinical processes for providing care to women in any of the above circumstances.

In June 2023, the gynaecology department in UHK commenced medical termination of pregnancy to women between 9 and 12 weeks gestation. Patients can access this service via their GP practice or myoptions.ie. The TOP service is also a link between GP services, providing TOP in the community (up to 9 weeks) and facilitating access to dating scans. It has been greatly beneficial in offering choice and bodily autonomy for women's health in Kerry.

Urogynaecology Service

The UHK Urogynaecology service offers women a multidisciplinary approach to manage Pelvic floor dysfunction. The department aims to provide efficient, safe, convenient, and effective investigation and treatment associated with high levels of patient satisfaction.

The addition of an advanced nurse practitioner for urogynaecology and women's health in 2023 has been a positive development where enhanced services can now be offered to women. The RANP currently attends GOPD with the gynaecology teams and manages a designated caseload in collaboration with consultant support. This has been integral in streamlining the service and offers dedicated follow-up where the RANP oversees cases requiring additional time with ongoing expertise.

The service provides the following:

1. Full Urogynaecology Assessment to identify presenting bothersome symptoms
2. Prolapse assessment and management with pessary insertion, future management options are:
 - Return to RANP POP clinic
 - Self-management
 - GP
 - GOPD clinic where repeated pessary insertion has failed

3. Continence assessment and promotion, including bladder training with lifestyle education, advice, medication and follow-up.
4. Intravesical treatment regimen for Painful Bladder Syndrome.
5. Pre- and post-void bladder scanning is used to check for incomplete emptying, with a follow-up management plan including the option to teach and support Intermittent Self-Catheterisation (ISC) where appropriate.

6. Urodynamic bladder studies (date for restart to be confirmed)

7. PTNS clinic to be developed
The transition from cANP to a registered advanced nurse practitioner role in 2023 has had a positive impact on waiting list activity:

- cANP/ANP activity encounters 2023
- Pelvic Organ Prolapse = 382
 - Incontinence (no POP) =22
 - Bladder instillations x 2 women = 16 visits
 - ISC = 3

The RANP is planning to restart the urodynamic studies clinic which has been paused since the onset of the Covid 19 pandemic, a date is yet to be confirmed while a suitable temporary location is sought.

The introduction of silicone pessaries as a treatment option has had two advantages: firstly, women have more choice as well as control, especially with the option to learn self-management and secondly, a reduction in return visits enables waiting list management to be more efficient. This remains an ongoing initiative that will free up clinic spaces over time.

The ANP is a trained continence advisor; this additional knowledge and expertise has been instrumental in educating, supporting and advising women about lifestyle adaptations to improve QOL-impacted.

Table 42: Number of Attendance as Outpatients in University Hospital Kerry	
Gynaecology Attendance Outpatient	UHK
Gynaecology OPD	2687
Ambulatory Gynaecology including (Hysteroscopy and COSAC)	575
Colposcopy (Including smears)	1335
Reproductive Clinic	468
STI	
Total	4865



Pictured above: Deirdre Moss ANP Gynaecology and Maria O'Sullivan Healthcare Assistant at newly established ANP Urogynaecology Service UHK.

Table 43: Numbers of inpatient and day case Gynaecology procedures at UHK

Surgery Activity	UHK
Inpatient Procedures	289
Day Case Procedures	787
Total	1089

Table 44: Gynaecology waiting lists at UHK

Gynaecology Waiting List	UHK
Outpatient	545
Inpatient/Daycase	127

After eight remarkable years of dedicated service, we bid farewell to our esteemed Lead Consultant Colposcopist, Professor Noirin Russell. Her exceptional expertise and unwavering support have been invaluable, especially during challenging times. We extend our heartfelt gratitude for her commitment and wish her the very best in her future endeavours. We were delighted to welcome Dr Waleed Khattab, Gynaecology Consultant, who has assumed the mantle as our new Lead Colposcopist. Dr Khattab brings a wealth of knowledge and experience to our team.



Cervical One Stop Assessment Clinic (COSAC)

Dr Deirdre Hayes-Ryan, Consultant Obstetrician Gynaecologist.

The Cervical One Stop Assessment Clinic (COSAC) operates twice weekly from Clinic B, St. Finbarr's Hospital, as part of the gynaecology services at Cork University Maternity Hospital (CUMH). This service provides timely access to diagnostic gynaecology care for women with clinical cervical concerns referred by their primary care providers.

Clinical Activity in 2023

- Appointments offered: 606
- Total attendees: 543
- Did Not Attend (DNA) rate: 10%

Primary Reasons for Referral:

- Abnormal cervical appearance: 305 women (56%)
- Abnormal vaginal bleeding pattern: 177 women (33%)
- Cervical polyp: 60 women (11%)

Demographics of Attendees:

- Age range: 18–77 years (Mean: 38 years)
- Nulliparous women: 196 (36%)
- Currently smoking or vaping: 76 (14%)
- Cervical screening status (aged ≥25 years):
 - Not up to date: 48 (10%)
 - Previous colposcopy attendance: 94 (20%)
 - Previous cervical treatment in colposcopy: 64 (13%)

Assessment & Findings

Women attending COSAC undergo a comprehensive cervical assessment, including:

- Detailed history
- Cervical examination with biopsy capability if required

Cervical Examination Outcomes (n=540)

- Normal findings: 54%
- Cervical ectropion: 14%
- Nabothian cysts/follicles: 13%
- Cervical polyp: 10%
- Cervicitis: 6%
- Irregular cervical appearance: 1% (all underwent histological sampling; all benign)
- Suspected advanced cervical cancer: 1 case (0.2%), later confirmed as squamous cell carcinoma

Screening & Biopsy Findings

- Cervical screening performed on 27 women (5%) where it was overdue
 - 1 case of high-risk HPV with low-grade abnormal cytology, referred to colposcopy
- Cervical biopsy/histological sampling performed on 128 women (24%)
 - Benign results: 81%
 - Cervicitis: 18%
 - Squamous cell carcinoma: 0.7%

Service Efficiency & Referrals

The primary goal of COSAC is to provide a single-visit service, enabling timely diagnosis and management. In 2023, 91% of attendees were seen and discharged on the same day.

Further Referrals & Procedures

- Ambulatory hysteroscopy: 13 cases
- Colposcopy referral: 9 cases
- Cold coagulation for symptomatic ectropion: 7 cases
- General gynaecology clinic referral: 3 cases
- Inpatient theatre referral: 3 cases

Specialist Perinatal Mental Health Service

Perinatal mental health problems are those that arise during pregnancy and in the postnatal period (up to 12 months).

Epidemiology

- 10-15% of women suffer from mild to moderate postnatal depression.
- 3% of women suffer from moderate to severe mental health illness.
- Similar number with anxiety.
- 2/1000 women delivered are likely to suffer from a postnatal psychosis.
- 3% with Post Traumatic Stress Disorder.
- Adjustment or Acute Stress reactions/disorders are even more common.

There is a wide range of mental health morbidity that can occur during the perinatal period, and timely access to a specialist service is of the utmost importance.

Dr Deirdre Muller Neff, Consultant Perinatal Psychiatrist, is the Clinical Lead for the Specialist Perinatal Mental Health Service (SPMHS) in Ireland South Women & Infants Directorate. The Specialist Perinatal Mental Health Service is being developed in line with the National Model of Care for SPMHS, which was launched in November 2017.

National specialist perinatal mental health services are delivered via a hub and spoke model. Within the Directorate, CUMH is the hub site where the multidisciplinary team are based.

Staffing

Table 45: Complete SPMHS Multidisciplinary Team, Model of Care

Consultant Perinatal Psychiatrist	Dr Deirdre Muller Neff (0.6) Dr Tom Ryle (0.4)
Senior Registrar	Dr Myelone Tharmasaleen (NCHD)
Clinical Nurse Specialist	Rachel O'Donoghue
Clinical Nurse Specialist	Elaine Healy
Mental Health Midwives	Breda Bird & Louise Chawke
Senior Mental Health Social Worker	Post vacant
Senior Occupational Therapist	Eithne Lynch
Senior Clinical Psychologist	Dr Freda Wynne
Administrative Officer	James Egan



Figure 8: Specialist Perinatal Mental Health Team staffing

Table 46: Headline numbers/clinical activity 2022

Referrals to SPMHS 2023:	Total referrals 1,209 *does not include perinatal liaison referrals
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It is important to note that each member of the SPMHS MDT carries a caseload of up to 40 patients in addition to triaging and assessing new referrals. Triage of referrals occurs daily and is completed by all team members.

Referrals to the SPMHS are received from various sources, including booking and antenatal clinics, ED CUMH, private rooms, Community Mental Health teams, GPs and private psychiatrists.

As the number of referrals to the service in CUMH (similarly to other sites nationally), all referrals are triaged in the first instance to assess how quickly someone needs to be seen and ensure the most appropriate clinical team member is linked with them to address their needs promptly.



Once a patient is accepted to the SPMHS, various interventions are offered, including, but not limited to, psychoeducation, medication review, pre-conception counselling and ongoing assessment of need. Referrals that are not accepted are signposted as appropriate.

Clinical team members continue to work with women based on need, and a typical caseload per team member is 35-40 at any given time.

The SPMHS provides a timely and responsive service. Urgent or emergency presentations (i.e., unscheduled care) are seen within 48 hours following a risk assessment. To date, most urgent referrals are seen on the same day.

The role of the Mental Health Midwife is to promote parity of esteem between mental and physical health difficulties during the perinatal period.

Mental Health Midwives (MH), alongside their health promotion and educational roles, assess and follow up women presenting with a wide variety of mild to moderate mental health difficulties.

The Mental Health Midwife has a crucial role in ensuring routine screening and early identification of women with mental health difficulties is carried out in booking and antenatal clinics.

Over the last 18 months, SPMHS has developed and rolled out various therapeutic interventions, most notably, groups including baby massage and various psychoeducational groups such as emotion regulation groups. This is a key priority for the team going forward.

The team also support and treat women with a history of birth trauma and plans to liaise closely with the birth reflection service when it commences. This will ensure that timely and effective support and treatment is available to all women affected by birth trauma.

Mental Health Midwives play a significant role in birth trauma through assessment support and onward referral to psychology and/or Medical review as necessary.

Development of the hub and spoke model across the Directorate.

The SPMHS hub teams accept referrals for second opinions from Community Mental Health Teams (CMHTs) and liaison psychiatrists for women attending antenatal care in the spoke hospitals. Any urgent concerns concerning a perinatal mental health issue arising in the spoke hospital can be discussed with the consultant perinatal psychiatrist in the hub team.

Further development and integration between the hub and spokes planned for 2024 include continuing monthly meetings organised by the SPMHS hub team. The focus of these meetings is education in perinatal mental health presentations. These meetings are for health professionals directly involved in perinatal mental health in the spoke hospitals, including liaison psychiatrists, midwives and obstetricians. Apart from the availability of second opinion assessments, further input from the SPMHS Hub perinatal psychiatrist has yet to be possible, given the number of referrals from within the hub. This would only be addressed with additional consultant WTE and, ideally, MDT within the spoke maternity hospital to work alongside the MH midwife.

Education and Training

Education and training are core components of the Specialist Perinatal Mental Health Service.

Given our interface with a wide variety of healthcare professionals. These sessions were delivered in small group settings to take social distancing into account, but more importantly, to facilitate and encourage interactive learning.

Peer teaching also took place, where the team presented various topics of interest, and guest speakers provided us with information on their areas of interest in CUMH and UCC.

Student midwives and nursing students regularly have placements in the SPMHS throughout the academic year.

The team provides regular education sessions in the CME for various disciplines, including student midwives, both undergraduates and postgraduates, newly appointed staff on induction days, PHNs, and high-dependency course students, to name but a few.

An Education Day took place in February 2023, which was very successful. Education days will continue on an annual or bi-annual basis.

Education on both a formal and informal basis remains a priority for the SPMHS. Key priorities going forward will be community HCPs, most notably GPs and PHNs.

It is important to note that a large proportion of perinatal mental health care is delivered within the primary healthcare setting. SPMHS play a key role in education, particularly around prescribing and providing advice to GPs to facilitate milder presentations managed at the primary care level.

Key challenges in SPMHS across the Directorate

An ongoing challenge for the team has been limited access to rooms for further development of subspecialist clinics, including pre-conceptual counselling clinics and second opinion clinics for complex cases (second opinions would include the whole Directorate).

Accommodation for the SPMHS remains suboptimal, but with continuing development, as previously mentioned, the development of further clinics and space for therapeutic interventions will grow as the service expands over time.

Staff shortages (which have included an administrator) remain a significant issue due to the loss of particular expertise from the MDT and the increasing burden of work. Staff vacancies have also, as expected, adversely impacted the aforementioned service development priorities, such as groups, workshops, and clinics.

There is also the concern that team innovation and availability for education will be negatively impacted due to the increasing workload burden.



CUMH Pharmacy

The CUH Pharmacy Department provides clinical pharmacy and dispensary services across the CUH campus, including CUMH, with the primary aim being the safe, effective, and economical use of medications.

Dispensary services include purchasing, supplying, dispensing and delivering medications, intravenous fluids, and parenteral nutrition. Dispensary services are provided by a team of pharmacists, pharmaceutical technicians, porters and clerical officers. All staff supporting the pharmacy service to CUMH have rostered Dispensary commitments.

Pharmacy support to CUMH in 2023 was provided by:

- Chief Pharmacist for Maternity Services: Joan Ryan
- Senior Clinical Pharmacist (Obstetrics & Gynaecology): Alana Dineen
- Senior Clinical Pharmacist (Neonatology): Sarah Fenton
- Antimicrobial Stewardship Clinical Pharmacist: Susan Potter; Kate Finch (Maternity Leave Cover)
- Basic Grade Clinical Pharmacist (Obstetrics & Gynaecology): Maria Mulrooney
- MN-CMS Clinical Informatics Pharmacist: Beibhinn O'Leary (from Sept 2023)
- Senior Pharmaceutical Technician: Suzie Copps (to Oct 2023); Bernie Lawlor (Oct – Dec 2023)
- CUH Clinical Pharmacists (Paediatrics) who provided NICU clinical pharmacy cover: Marianne O'Callaghan, Triona O'Sullivan, Jeslin Joseph

The CUMH Pharmacy team collaborates closely with colleagues in maternity and neonatal services across the ISWID Directorate and nationally, sharing knowledge and information.

In 2023, Senior Clinical Pharmacist Alana Dineen was invited to join the NWIHP Clinical Guidelines Expert Advisory Group and the NWIHP National Maternal Medication Safety Group. Joan Ryan and Alana Dineen joined the NWIHP Guideline Development Group, led by Prof. Keelin O'Donoghue, to develop a national clinical practice guideline on antenatal corticosteroids.

During 2023, Senior Clinical Pharmacist Sarah Fenton commenced Year 2 of an Employment-based PhD (UCC), while Clinical Pharmacist Maria Mulrooney commenced Year 2 of an MSc in Clinical Pharmacy (Robert Gordon University).



Pictured above: CUMH Pharmacy team November 2023: Bernie Lawlor, Beibhinn O'Leary, Alana Dineen, Maria Mulrooney, Sarah Fenton, Joan Ryan

Dispensary and Medication Supply Services

The Chief Pharmacist for Maternity Services, Joan Ryan, in conjunction with the Senior Pharmaceutical Technician, is responsible for the CUMH pharmacy stock supply and management. Technician-led Top-Up services were provided in 2023 by Suzie Copps (to October) and Bernie Lawlor to the Neonatal Unit and the five adult wards, ensuring an appropriate stock of medications and intravenous fluids is readily available at all times, reducing nursing and midwifery stock management time. Dispensary-based stock supply services are provided to the CUMH Theatre, Delivery Suite, Emergency Room, OPD, Urogynaecology, and Early Pregnancy clinics.

Medications for inpatients that are not stock items are dispensed via the Dispensary on the foot of requisitions and prescriptions, which the CUMH clinical pharmacists review.

Clinical Pharmacy Services to Obstetrics & Gynaecology

Front line clinical pharmacy services are provided by two clinical pharmacists, Alana Dineen and Maria Mulrooney, with daily reviews of patients on 2 South (gynaecology, gynae-oncology, palliative care and pregnancy loss), 4 South (antenatal), and the High Dependency Unit. Patients with a history of epilepsy or seizures, on anti-epileptic medication or direct oral anticoagulants (DOACs), or those referred by the medical team are also reviewed. A locally developed *CUMH Clinical Pharmacist Prioritisation Tool* guides the prioritisation of patients for pharmacist review.

Summary of Clinical Pharmacy Statistics Obstetrics & Gynaecology 2023	Number
Number of medications reviewed by a pharmacist: 'green pen'	11,050
Pharmacist Clinical Notes added to patients' EHRs	7,025
Clinical Pharmacist Interventions (dose, interactions, monitoring, renal adjustment)	1,545
Medicines reconciliation / histories performed by pharmacist	1,010
Medicines Information Queries: from MDT, GPs, community pharmacies, Public Health Nurses	118

CUMH Clinical Pharmacy Statistics, Obstetrics & Gynaecology 2023

Pharmacists support the High-Risk Obstetrics Clinic through specialist advice on the safety of medicines pre-conception and in pregnancy for patients with complex medical conditions, with clinical pharmacist attendance at the weekly Obstetric Multidisciplinary Team meeting to contribute to discussion and review of complex cases.

Pharmacist-delivered DOAC counselling was provided for gynae-oncology patients post-major abdominal surgery. Clinical pharmacists review all nurse and midwife prescribers' Collaborative Prescribing Agreements, advising on medication choice, dosage, and alignment with guidelines.

The ISBAR communication tool was adopted in 2022 as a handover tool between the CUMH pharmacists and their CUH colleagues to reduce the risk of medication error or miscommunication between electronic healthcare records when critically unwell patients are transferred from CUMH to the ICU in CUH. Effectiveness was reviewed in 2023, with the results presented as a poster by Maria Mulrooney at the Hospital Pharmacists Association of Ireland Clinical Conference, where it won First Prize in the Innovation Category! Congratulations to Maria on a very successful project. The communication handover tool is being used continuously. The prize included a Bursary to present at the European Hospital Pharmacy Conference in Bordeaux in 2024.

Clinical Pharmacy Neonatology

Sarah Fenton, Neonatal Clinical Pharmacist, attends the daily NICU ward round, reviewing each infant's medications and providing specialist information on the prescribing and administering of intravenous and oral medications. Sarah supports the multidisciplinary team in prescribing individualised parenteral nutrition (IPN). She coordinates the ordering, stability review, and delivery of IPN with the parenteral nutrition manufacturers. Training and education on 'Parenteral Nutrition in the Neonatal Unit' was delivered at local study days in 2023.

Neonatal pharmacist attendance at Neonatal Unit MDT meetings links the Pharmacy Department and the Neonatology service, supporting safe and effective medication management in the NNU. In November 2023, a multidisciplinary working group was established to review and maintain evidence-based neonatal drug monographs. Clinical pharmacist medication management support, was provided for neonatal clinical trials led by the INFANT research team.

As part of Sarah's Employment-Based PhD with the INFANT research centre, in conjunction with the Neonatal Nutrition Research Group, the national preterm Standardised Parenteral Nutrition (SPN) Study was launched at the RCPI Paediatric Faculty meeting in October 2023. This study will provide important information about the SPN system. The SPN system was designed following a collaboration between Cork University Maternity Hospital and University College Cork and is now the National Model of Care for Preterm Parenteral Nutrition.

We very much appreciate the clinical pharmacy cover that the CUH Paediatrics clinical pharmacists provide to the Neonatal Unit, which also ensures they are familiar faces to our special care infants and their families if admitted to CUH Paediatric wards in the future.

Antimicrobial Stewardship (AMS)

AMS pharmacists Susan Potter and Kate Finch (Maternity Leave cover) provide specialist information and support to the multidisciplinary team on optimal management of antimicrobial therapies for adult and neonatal inpatients. The AMS pharmacist works closely with the CUMH consultant microbiologist, undertaking regular antimicrobial stewardship rounds and audits and collaborating with CUH AMS pharmacists to promote antimicrobial stewardship

across the campus by implementing annual AMS programmes. The AMS pharmacist is an active member of the CUMH Infection Prevention & Control, Antimicrobial Stewardship, and Deteriorating Patient committees, contributing to ongoing committee work.

The CUMH adult and neonatal antimicrobial guidelines are kept under review with interim guideline updates as required, including responding to temporary supply shortages of a number of antibiotics in 2023. Full reviews of the CUMH Obstetrics and Gynaecology Antimicrobial Guidelines and the Neonatal Antimicrobial Guidelines were completed in 2023 in collaboration with the consultant microbiologist, Microbiology registrars, and Neonatal Clinical Pharmacist.

Audits undertaken in 2023 included a safety review of increased vancomycin dosing for intrapartum antimicrobial prophylaxis to reduce early-onset neonatal GBS disease in patients with a severe penicillin allergy. A general audit on intrapartum antibiotic prophylaxis for the reduction of early-onset GBS disease was also completed.

In May 2023, CUMH participated in the European Centre for Disease Prevention and Control (ECDC) point prevalence survey (PPS), which takes place every five years. This was the third ECDC PPS of healthcare-associated infections (HAIs) and antimicrobial use in European acute care hospitals. It was important for CUMH to be a part of this



Above: CUMH European Antibiotic Awareness Day November 2023

European-wide data set as it presented an excellent opportunity to take a snapshot of our local practice and compare it with equivalent services. There was no national PPS in 2023 due to the ECDC PPS.

Education and training for medical, nursing, and midwifery staff was delivered at in-person sessions on topics including an overview of antimicrobial stewardship; updates on CUMH Antimicrobial Guidelines; penicillin allergy; audit feedback; IV to PO switch; and the new NWIHP guideline on the 'Prevention of early-onset Group B Streptococcal disease in term infants'.

European Antibiotic Awareness Day took place in November, and there were many promotional materials for staff and visitors. We joined a Twitter conversation using #KeepAntibioticsWorking.

Medication Safety, Multidisciplinary Collaboration

All pharmacists are members of the CUMH Medication Safety Committee, contributing to advancing a positive medication safety culture at CUMH by collaborating with the wider multidisciplinary team on a range of medication safety initiatives.

Quarterly pharmacy audits of controlled drug safe storage and record keeping on all wards and clinical areas were undertaken in 2023, and results and quality improvement plans were shared with CNM/ CMMs and the Medication Safety Committee.

Progress continued on increasing oxytocin safety in conjunction with the multidisciplinary Oxytocin Working Group: introduction of single standardised oxytocin infusion concentration for induction, augmentation, and PPH management; design of new oxytocin infusion label; commencement of collaboration on cross-discipline consensus on a single more concentrated infusion for fluid restricted patients.

As part of the NWIHP and NPEC Postpartum Haemorrhage Quality Improvement Initiative (PPHQII), Joan Ryan and Alana Dineen collaborated with a CUMH based team led by Dr Aenne Helps, Consultant Obstetrician, and Joye McKernan, National Perinatal Epidemiology Centre (NPEC), to develop a PPH Medication Toolkit for use in maternity units nationally.

During 2023, Alana Dineen and Joan Ryan were authors and/or reviewers on several key guidelines to advance medication safety, including the Prescribing and Administration of Methotrexate for Medical Management of Ectopic Pregnancy CUMH & UHK and

the Administration of Peripheral Intravenous Morphine by Nursing & Midwifery Staff in the Theatre Recovery of CUMH.

A collaborative, multidisciplinary project to develop guidelines on Postoperative Venous Thromboembolism (VTE) Prophylaxis for Gynaecology Oncology Patients post Major Abdominal Surgery at CUMH using a Direct Oral Anticoagulant (DOAC) was undertaken by Alana Dineen and Joan Ryan, in conjunction with Dr Zibi Marchoki, Consultant Gynaecologic Oncologist, Dr Maeve Crowley, Consultant Haematologist, and nursing colleagues from Gynaecology services and Practice Development.

A DOAC Counselling Checklist for CUMH Healthcare Professionals, developed by Alana Dineen and Dr Virginia Silvani, CUH Cardiology Clinical Pharmacist, was added to the EHR for counselling gynaecology patients newly prescribed oral anticoagulants. Alana Dineen and Maria Mulrooney led education for clinical and nursing staff.

We were delighted that this collaborative project won the Thrombosis Ireland VTE Exemplar Award for Best Maternity Hospital in 2023. Congratulations to the multidisciplinary team involved! A very informative stand in CUMH marked World Thrombosis Day 2023.



Above: World Thrombosis Day 2023 collage

Education and Training

The CUMH clinical pharmacists presented at several CUMH, CME, and UCC Study Days in 2023, including the Maternity Critical Care Module, Epidural Study Day, Diabetes in Pregnancy Study Day, Medications in Breastfeeding, and the Postgraduate Diploma in Neonatal Nursing.

Medication training was provided for NCHD induction, with ward based educational updates for frontline medical, midwifery and nursing staff provided as required.

MN-CMS Clinical Informatics

We were delighted to welcome Beibhinn O'Leary to the CUMH Pharmacy team in September 2023 when she took the MN-CMS Clinical Informatics Pharmacist position.

The Clinical Informatics Pharmacist has a dual role: as a local expert for EHR medication-related issues and a core member of the national MN-CMS Medications Workstream. Beibhinn supports the local MDT through education and training and responds to queries and suggestions relating to medication functionality. Beibhinn's national role includes collaboration on the expansion of system functionality and clinical decision support to enhance EHR medication safety.

Shortly after taking up her position, Beibhinn joined several working groups, including the CUMH Home Birth Services group, to develop MN-CMS functionality to support their move to acute services, as well as the local group to facilitate rollout and MN-CMS build for the national Postpartum Haemorrhage Protocol. Beibhinn also joined the Neonatal Monographs and Oxytocin multidisciplinary working groups.



Beibhinn O'Leary qualified as a pharmacist in 2011 (UCC), completing her Masters in Pharmacy in 2012 (RCSI). Beibhinn initially gained experience as a community pharmacist before moving to London to pursue a career in hospital pharmacy at Guy's and St Thomas', as well

as the Royal Free London NHS Foundation Trusts. In 2018, Beibhinn was appointed Superintendent Pharmacist for Point of Care Pharmacy (Dublin), which provides services to the HSE, including Home Outpatient Parenteral Antimicrobial Services (H-OPAT). While there, Beibhinn gained extensive IT and project management skills, undertaking further education in both. Beibhinn relocated to Cork in October 2020, taking up a senior clinical pharmacist role in CUH, initially working in the neurosurgery ward and the HIV clinics before moving to Paediatrics.

Above: Beibhinn O'Leary, MN-CMS Clinical Informatics Pharmacist CUMH

Future Developments

The further development of pharmacy services to our adult and neonatal patients will continue in 2024, with frontline clinical pharmacy, medication safety, guideline development, and medication-focused audit and research priorities for the CUMH Pharmacy team.



Pregnancy Loss Research Group



The Pregnancy Loss Research Group (PLRG) is led by Professor Keelin O'Donoghue and is based at Cork University Maternity Hospital (CUMH). The Group encompasses a multidisciplinary team of doctors, researchers, scientists, midwives, nurses, social workers, pathologists and chaplains alongside medical, Masters and Doctoral students, and people with lived experience of pregnancy loss.

The PLRG leads national research to better understand pregnancy loss experiences and impacts, and the development of resources and evidence-based advice and interventions, to improve health care and health and social outcomes for women, babies and their families.

The Group researches all types of pregnancy and infant loss, including first trimester

miscarriage, second trimester miscarriage, ectopic pregnancy, molar pregnancy, multiple pregnancy complications, stillbirth, termination of pregnancy, neonatal death and pregnancy after loss.

Research activities are funded by a range of organisations, including the Department of Children, Equality, Integration and Youth, Féileacáin, Health Research Board, Irish Research Council and Science Foundation Ireland. Partnerships and collaborations are integral to the PLRG's work, and include national and international academic institutions, public bodies, and non-governmental organisations.

The PLRG was formally established in 2012 and meets monthly at CUMH.

Website: www.ucc.ie/pregnancyloss

X (formerly Twitter): @PregnancyLossIE

Instagram: @pregnancylossresearchgroup

LinkedIn: <https://www.linkedin.com/in/pregnancy-loss-research-group-plrg-ab7128285/>



Key work during 2023

- Professor Keelin O'Donoghue continued her role as Clinical Lead for Guideline Development (Maternity & Gynaecology) <https://www.rcpi.ie/faculties/obstetricians-and-gynaecologists/national-clinical-guidelines-in-obstetrics-and-gynaecology/>
- Professor O'Donoghue continued to lead the development of the National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death in all 19 Irish maternity units on behalf of the HSE's National Women and Infants Health Programme
- Professor O'Donoghue finished her four-year term on the National Screening Advisory Committee at the Department of Health in May 2023 <https://www.gov.ie/en/publication/c0d9f8-about-the-national-screening-advisory-committee/>
- Professor O'Donoghue continued her work with the Royal Irish Academy Life and Medical Sciences Committee <https://www.ria.ie/work/multidisciplinary-work/life-and-health-sciences/>
- Members of the PLRG supported Baby Loss Awareness Week, held from 09-15 October, in several ways:
 - Information stand in CUMH throughout the week
 - Annual Service of Remembrance held on 15 October
 - The PLRG launched a 'Call to Action' to increase awareness and action around pregnancy loss. Titled 'Why don't we talk about pregnancy loss?', the document outlines key statistics around the incidence of pregnancy loss in Ireland. It also highlights the evidence to support the lack of public awareness and discussion of pregnancy loss, poor care experiences, the need for staff

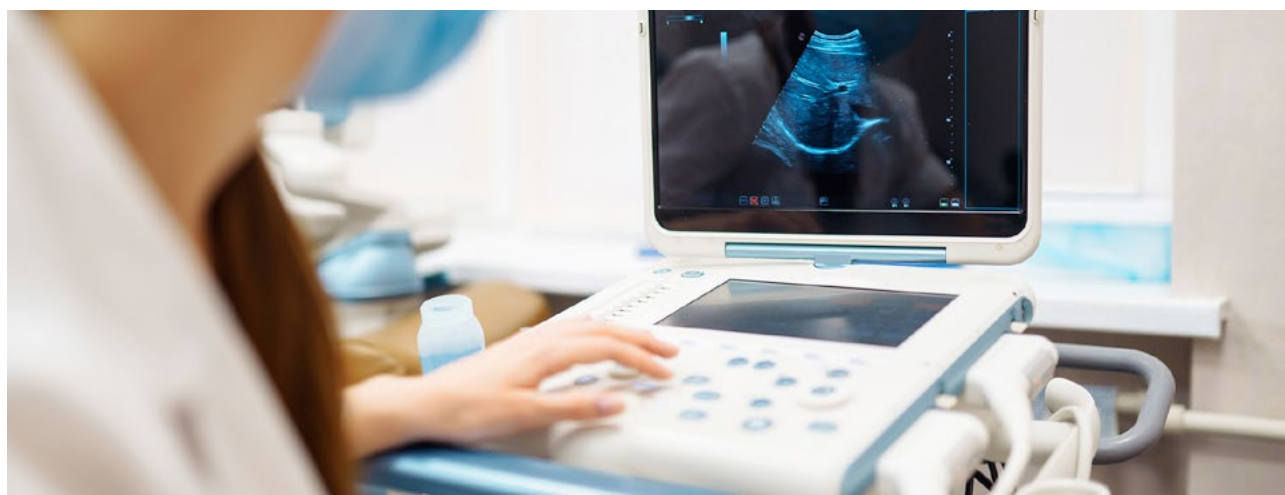
education and training, the fear of litigation, and the need for enhanced staff supports <https://www.ucc.ie/en/pregnancyloss/newsandmedia/why-dont-we-talk-about-pregnancy-loss-call-to-action-from-the-plrg-during-baby-loss-awareness-week.html>

- At an ordinary meeting of Cork City Council, held on 09 October, members approved a motion calling on Minister for Health Stephen Donnelly to improve and standardise miscarriage care and services nationally based on findings from the RE:CURRENT project led by the PLRG <https://www.ucc.ie/en/pregnancyloss/newsandmedia/cork-city-council-approves-motion-on-enhancing-miscarriage-care-and-services-during-baby-loss-awareness-week.html>
- Professor O'Donoghue delivered invited keynotes at a range of conferences, including:
 - International Stillbirth Alliance Conference 2023, Sheffield, 29 June to 02 July
 - UCC College of Medicine and Health (COMH) Futures Research Conference 2023, UCC, 21 September
 - International Society for the Study and Prevention of Perinatal and Infant Death Conference 2023, Florence, 05-08 October.

Funding and Award successes in 2023

Funding

- Professor Keelin O'Donoghue was awarded funding from Féileacáin for a project titled "The Coronial Investigation into Perinatal Deaths – Impacts on Coroners, Bereaved Parents, Healthcare Professionals and The Community". <https://www.ucc.ie/en/pregnancyloss/researchprojects/thecoronalinvestigationintoperinataldeaths/>



- Marita Hennessy PhD was awarded a Government of Ireland Postdoctoral Fellowship by the Irish Research Council in September 2023. <https://www.ucc.ie/en/pregnancyloss/researchprojects/supportingstaffafteranadverseevent/>

Awards

- Professor Keelin O'Donoghue was awarded the International Stillbirth Alliance (ISA) Distinguished Researcher Award for her contribution or her contribution to research on stillbirth/newborn death. The award was conferred at the closing ceremony of the 2023 conference, hosted at the University of Sheffield from 30 June to 02 July <https://www.ucc.ie/en/pregnancyloss/newsandmedia/professor-keelin-odonoghue-receives-international-stillbirth-alliance-distinguished-researcher-award.html>
- Dr Laura Linehan and Marita Hennessy PhD won the Bright Futures Pro-Am Three-Minute Thesis Trophy at the UCC College of Medicine and Health's 'Bright Futures – Celebrating our Researchers' Day in March <https://www.ucc.ie/en/pregnancyloss/newsandmedia/showcasing-pregnancy-loss-research-at-bright-futures-research-day.html>
- Dr Daniel Nuzum received the Lord Mayor of Cork's Civic Award in June in recognition of his commitment to spiritual and pastoral care and education in perinatal bereavement and palliative care <https://www.ucc.ie/en/pregnancyloss/newsandmedia/dr-daniel-nuzum-receives-lord-mayors-civic-award-in-recognition-of-his-commitment-to-spiritual-and-pastoral-care-and-education-in-perinatal-bereavement-and-palliative-care.html>
- Caroline O'Connor was awarded the International Stillbirth Alliance Best Poster Award for her poster titled "Risk factors and characteristics associated with stillbirth in twin pregnancies" at the 2023 conference <https://www.ucc.ie/en/pregnancyloss/newsandmedia/pregnancy-loss-research-group-attend-international-stillbirth-alliance-conference-in-sheffield.html>
- Caroline Joyce obtained Fellowship (by examination) of the Royal College of Pathologists London in September <https://www.ucc.ie/en/pregnancyloss/newsandmedia/caroline-joyce-receives-fellowship-of-the-royal-college-of-pathologists-frcpath.html>
- The Perinatal Pathology Team at Cork University Hospital and Cork University Maternity Hospital were highly commended for their project titled "Development of a Novel Specialist Perinatal Medical Scientist Programme" under the Innovation

in Service Delivery Category at the 2023 Health Services Excellence Awards in October <https://www.ucc.ie/en/pregnancyloss/newsandmedia/perinatal-pathology-team-highly-commended-at-2023-health-service-excellence-awards.html>

- A paper led by Dr Peter Jackson – in collaboration with Dr Stacey Power-Walsh, Dr Rebecca Dennehy and Professor Keelin O'Donoghue – won the HSE Open Access Research Award in the Acute Care and Hospitals category in November. Titled 'Fatal fetal anomaly: Experiences of women and their partners', this paper explores the care experiences of parents whose pregnancy was diagnosed with a fatal fetal anomaly following the legalisation of termination of pregnancy in 2019 in Ireland <https://www.ucc.ie/en/pregnancyloss/newsandmedia/paper-on-experiences-of-fatal-fetal-anomaly-led-by-dr-peter-jackson-wins-hse-open-access-research-award-.html>

Research project updates

- Tamara Escañuela Sánchez successfully defended her PhD in March. Funded by Science Foundation Ireland, Tamara's PhD titled "Rethinking stillbirth through behaviour change" aimed to build the evidence-base to inform the development of a behaviour change intervention to raise awareness of and reduce modifiable risk factors for stillbirth in Ireland <https://www.ucc.ie/en/pregnancyloss/researchprojects/relevant/>
- Sinead Harkin, second year graduate entry medical student at UCC, began her Health Research Board (HRB) Summer Student Scholarship with the PLRG in June. Sinead worked with Professor Keelin O'Donoghue and Marita Hennessy PhD on a scoping review of bereavement care training for maternity staff following pregnancy loss and perinatal death
- Work continued on various projects, including the following:
 - ACHIEVE | Appraise and CHange PerInatal Mortality EVEnts: Structured evaluation and implementation of a national perinatal mortality review tool for Ireland <https://www.ucc.ie/en/pregnancyloss/researchprojects/achieve/>
 - Biomarkers for Gestational Trophoblastic Disease <https://www.ucc.ie/en/pregnancyloss/researchprojects/biomarkersforgestationaltrophoblasticdisease/>
 - Infertility and recurrent miscarriage <https://www.ucc.ie/en/pregnancyloss/researchprojects/infertilityandsubsequentrecurrentmiscarriage/>



Above: Launch of the National Clinical Practice Guidelines in Obstetrics & Gynaecology in Dublin, January 2023

- MILESTONE | Multiple pregnancy: An investigation of the risk factors and outcomes in the Republic of Ireland <https://www.ucc.ie/en/pregnancyloss/researchprojects/milestone/>
- PLACES | Pregnancy Loss in Workplaces: Informing policymakers on support mechanisms <https://www.ucc.ie/en/pregnancyloss/researchprojects/places/>
- RE:CURRENT Knowledge Translation Award <https://www.ucc.ie/en/pregnancyloss/researchprojects/recurrent/>

tO, Professionals) across the Saolta Hospital Group. Members of the PLRG collaborated with colleagues in Galway to deliver the workshop to 42 members of staff from Galway University Hospital and the Saolta Group. The workshop was kindly hosted by the Centre of Nursing and Midwifery Education Galway.

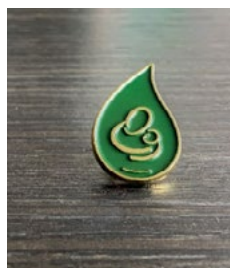
- A TEARDROP pin was introduced in April 2023 and is now given to all staff who have completed the training <https://www.ucc.ie/en/pregnancyloss/aboutus/whatwedo/educationandworkshops/>

Patient and public involvement

At the Pregnancy Loss Research Group, we work alongside people with lived experience of pregnancy and baby loss across all of our activities. Members of the public can become involved in all stages of the research process including deciding on what research is conducted, and how, as well as helping to share the findings of the research. People with lived experience of pregnancy loss are members of the overall Pregnancy Loss Research Group and/or join specific projects. <https://www.ucc.ie/en/pregnancyloss/aboutus/patientandpublicinvolvement/>

Training programme

- In April 2023, PLRG members travelled to University Hospital Galway (UHG) to facilitate the roll-out of TEARDROP (Teaching, Excellent, pArent, peRinatal, Deaths-related, inteRactions,



Dissemination activities

- Members of the group published 23 peer-reviewed journal articles in 2023.
- Members co-authored three national clinical guidelines, which were launched in January 2023:
 1. Investigation and Management of Complications of Termination of Pregnancy: Dr Sophie Boyd, Dr Deirdre Hayes Ryan
 2. Recurrent Miscarriage: Dr Laura Linehan, Marita Hennessy PhD, Professor Keelin O'Donoghue
 3. Stillbirth - Prevention, Investigation, Management and Care: Dr Jessica White, Dr Tamara Escañuela Sánchez, Ríona Cotter, Dr Margaret Murphy, Professor Keelin O'Donoghue
- Dr Tamara Escañuela Sánchez wrote an invited commentary for the Perinatal Mortality National Clinical Audit in Ireland Annual Report 2021 (NPEC, 2023) titled "Exploring the complexity of stillbirth prevention: Insights from the RELEVANT Study on risk factors and implications for policy and practice"

- The Group published its first graphic narrative – Why my baby died – in June 2023. This was a collaboration with Amy Lauren, an illustrator based in Dublin, to show bereaved parents' views and experiences of hospital processes to find out why their baby died; funded through an Irish Hospice Foundation Seed Award. More information:



<https://www.ucc.ie/en/pregnancyloss/researchprojects/whymybabydied/>

- The Group published four policy briefs, available at <https://www.ucc.ie/en/pregnancyloss/publications/policybriefs/>
 1. The impact of perinatal death on healthcare staff: A rationale for change in education, training and introduction of support systems
 2. Irish inquiry reports relating to perinatal deaths and pregnancy loss services: What can we learn?
 3. Impact of the COVID-19 pandemic on recurrent miscarriage services: More compassionate, person-centred policies and approaches within maternity services needed
 4. Why don't we talk about pregnancy loss?



Above, panel discussion (l-r): Orla O'Connell, Dr Deirdre Hayes-Ryan, Dr Tamara Escañuela Sánchez, Dr Laura Linehan, Sinéad Harkin, Dr Margaret Murphy, Maria Moynihan (Chair)

New PLRG website launched

The Group launched its new website – www.ucc.ie/en/pregnancyloss – at an event hosted in the Glucksman Gallery in May 2023. Development was supported via the Irish Research Council-funded PLATFORM (Pregnancy Loss knowledge trAnslATion FOR iMpaCt) project. Read more: <https://www.ucc.ie/en/pregnancyloss/newsandmedia/pregnancy-loss-research-group-launches-new-website-to-enhance-awareness-and-action-around-pregnancy-loss.html>



Pictured at the launch (l-r): Professor Geraldine Boylan (Director, INFANT Centre), Professor Keelin O'Donoghue (Lead, Pregnancy Loss Research Group-PLRG), Professor John O'Halloran (President, UCC), Marita Hennessy PhD (Postdoctoral Researcher, PLRG), Ms Maria Moynihan (Journalist), and Ms Paula O'Reilly (CEO, Irish Hospice Foundation). Photo: Gerard McCarthy Photography

- The Group also continued to maintain and develop its affiliated websites: pregnancyandinfantloss.ie and corkmiscarriage.com.

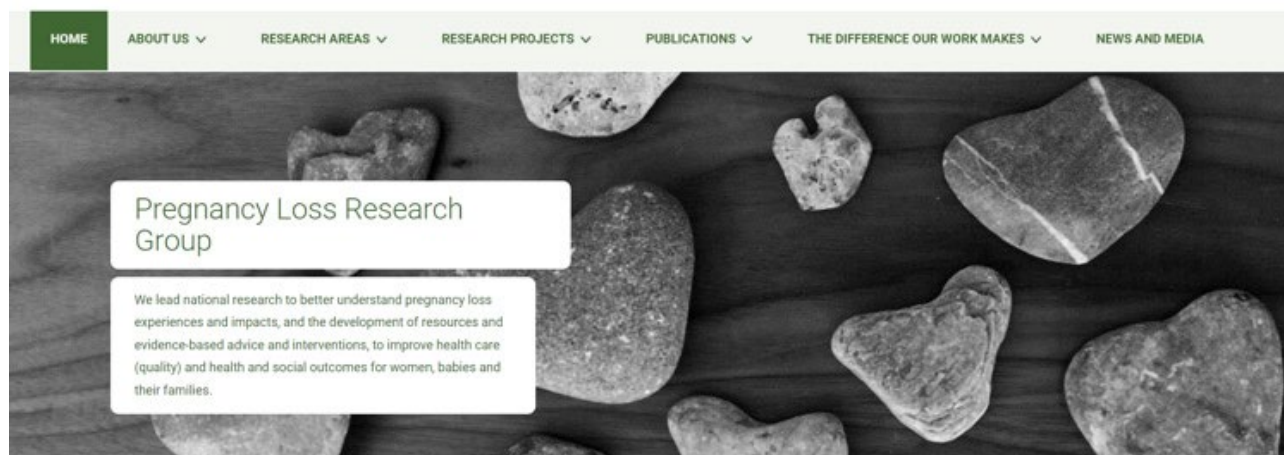
Newsletters/News items

- For all PLRG news items, please see: www.ucc.ie/en/pregnancyloss/newsandmedia

Media coverage

Print

- Griffin N. Time to break the silence around pregnancy loss, says leading obstetrician. Irish Examiner, 03 May 2023 <https://www.irishexaminer.com/news/arid-41131051.html>
- O'Donoghue K. Opinion: As a society, we still prefer to pretend pregnancy loss doesn't happen. Irish Times, 01 June 2023 <https://www.irishtimes.com/opinion/2023/06/01/as-a-society-we-still-prefer-to-pretend-pregnancy-loss-doesnt-happen/>
- Donaghy K. Five things you need to know about recurrent miscarriage. Irish Independent, 10 July 2023 <https://www.independent.ie/life/health-wellbeing/health-features/five-things-you-need-to-know-about-recurrent-miscarriage/a652634080.html>



Radio

- O'Donoghue K. Why we need to talk about pregnancy loss. Moncrieff, interviewed by Stefanie Preissner. Newstalk, 06 June 2023 <https://www.newstalk.com/podcasts/highlights-from-moncrieff/why-we-need-to-talk-about-pregnancy-loss>
- O'Donoghue K. Bereaved parents call for an overhaul of perinatal inquests. Drivetime, interviewed by Barry Lenihan. RTÉ Radio 1, 12 June 2023 <https://www.rte.ie/radio/podcasts/22262290-bereaved-parents-call-for-an-overhaul-of-perinatal/>
- O'Donoghue K. Miscarriage bereavement leave - 'They're not ill, they're grieving'. Lunchtime Live, interviewed by Andrea Gilligan. Newstalk, 17 August 2023 <https://www.newstalk.com/news/miscarriage-bereavement-leave-theyre-not-ill-theyre-grieving-1497759>

Research from the Pregnancy Loss Research Group was presented at the following National and International conferences in 2023

- 43rd Annual Pregnancy Meeting of the Society for Maternal-Fetal Medicine, San Francisco, 06-11 February
- The Trinity Health and Education International Research Conference, Dublin, 07-09 March
- SPHeRE Network 9th Annual Conference, RCSI Dublin, 23 March
- UCC College of Medicine and Health's 'Bright Futures – Celebrating our Researchers' Day, UCC, 26 March
- 11th European Organisation for Treatment of Trophoblastic Diseases Meeting, Warsaw, 11-12 May
- Annual Psychology, Health, and Medicine Conference, Limerick, 26 May
- RCOG World Congress, London (Hybrid), 12-14 June

- International Society for Prenatal Diagnosis 27th International Conference on Prenatal Diagnosis and Therapy, Edinburgh, 18-21 June
- International and Interdisciplinary Conference on Communication, Medicine and Ethics (COMET) 2023, UCC, 20-22 June
- RAiN Equity for People Living with a Rare Disease: An International Symposium, Dublin, 27 June
- International Stillbirth Alliance Conference 2023, Sheffield, 29 June to 02 July
- Health Services Research UK 2023, Birmingham, 04-06 July
- Broadly Conceived, Birbeck College, London, 08 July
- International Conference on Policies and Parental Support, York, 20-21 July
- UCC College of Medicine and Health (COMH) Futures Research Conference 2023, UCC, 21 September
- International Society for the Study and Prevention of Perinatal and Infant Death Conference 2023, Florence, 05-08 October
- 69th Annual Meeting of the Paediatric Pathology Society, Madrid, 14-16 September
- The Association of Clinical Biochemists in Ireland Conference, Dublin, 20-21 October
- After the Review: What Next for Irish Abortion Services?, Trinity College Dublin, 27 October
- Annual Association of Early Pregnancy Units Scientific Meeting 2023, Telford, 16-17 November
- Annual Scientific Meeting of the Junior Obstetrics & Gynaecology Society, Dublin, 24 November.

In addition, members of the Group gave a variety of invited talks/webinars throughout the year:

- Dr Laura Linehan presented on recurrent miscarriage and the new national clinical guideline

at an online webinar “Early Pregnancy Loss Care”, hosted by the Regional Centre for Nurse and Midwife Education HSE South (South East) on 21 February

- Professor Keelin O'Donoghue and Dr Daniel Nuzum delivered a webinar titled “Recurrent Miscarriage and Termination of Pregnancy for Fetal Anomaly: Current challenges and future directions” to members of the UCC Medical Graduates Association on 01 March
- Marita Hennessy PhD presented an overview of the Group's graphic narrative “Why my baby died” at the Irish Hospice Foundation Arts and Creative Engagement Roundtable Gathering on 15 June
- The PLRG held a webinar “Stillbirth Matters – Prevention, Investigation, Management, and Care Webinar” in conjunction with the Institute of Obstetricians & Gynaecologists, Royal College of Physicians of Ireland on 04 October featuring talks from Professor Keelin O'Donoghue, Dr Tamara Escañuela Sánchez, Dr Brendan Fitzgerald and Dr Daniel Nuzum
- Professor Keelin O'Donoghue and Marita Hennessy PhD presented at the Hospice Friendly Hospitals Maternity & Perinatal Loss Network Meeting 2023 in Dublin on 08 November

- Marita Hennessy PhD delivered an INFANT Seminar on behalf of the RE:CURRENT Team titled “The RE:CURRENT Study: Enhancing recurrent miscarriage care through an integrated knowledge translation approach” on 24 November
- On 28 November, Professor Keelin O'Donoghue, Ruadh Kelly-Harrington, Marita Hennessy PhD and Professor Mary Donnelly (School of Law) briefed members of the Oireachtas on the findings of the PLACES Project on behalf of the research team. The PLACES Project - Pregnancy Loss in Workplaces: Informing policymakers on support mechanisms - was commissioned by the Department of Children, Equality, Disability, Integration and Youth (DCEDIY) to examine workplace experiences of pregnancy loss before 24 weeks gestation and identify needed supports. <https://www.ucc.ie/en/pregnancyloss/newsandmedia/places-team-presents-findings-on-workplace-experiences-of-pregnancy-loss-to-members-of-the-oireachtas.html>



Pictured above (l-r): Professor Keelin O'Donoghue, Professor Mary Donnelly, Marita Hennessy PhD and Ruadh Kelly-Harrington standing outside Leinster House following their briefings

School of Nursing & Midwifery

Located in the Brookfield Health Sciences Complex, the School of Nursing & Midwifery offers three midwifery registration programmes in partnership with the Ireland South Women & Infants Directorate: a 4-year BSc (Hons) Midwifery, an 18-month post-registration Higher Diploma in Midwifery (Beginning Sept/March alternate years) and MSc Advanced Practice Nursing/Midwifery). In addition, an MSc in midwifery is offered, and two modules are run in partnership with the Centre of Midwifery Education, NU6167 Maternity Critical Care and NU6153 Parenthood Education. These modules attract students both locally and nationally.

The midwifery academic staff are Dr Geraldine McLoughlin, Dr Margaret Murphy, and Ms Agnes Phelan. Dr Rhona O'Connell retired in September 2023, and Ms Mary O'Regan's Lecture commenced in 2023.

The CUMH is the main site for the clinical practice experience of UCC midwifery students. However, they are also placed in Tipperary University Hospital, University Hospital Kerry's and University Hospital Waterford. The CUMH also facilitate placements for BSc General Nursing students, BSc Mental Health Students and Public Health Nursing students for their required maternity placements.

Student midwives are supported in clinical practice by the Midwifery Practice Development Coordinator, Clinical Placement Coordinators, Allocations Liaison Officer and link lecturers. The school supports a postgraduate skills facilitator for the Higher Diploma programme. All students at all levels are supported by midwife/nurse preceptors.

Advanced Midwife Practitioner

One AMP candidate who commenced in September 2023 is Ms Louise Dooley

BSc (Hons) in Midwifery 2019 – 2023 (18 Graduates)

Maressa Byrne Fogarty, Honor Corbett, Megan Darcy, Pamela Erett, Kate Gallagher, Sophie Grant, Sarah Hosford, Orla Hynes, Tara Leahy, Melissa Macbeth Sheahan, Jessie Mc Carthy Morley, Meabh Mc Donogh, Sophie McMahon, Lena Mc Sweeney, Teagan Mc Sweeney Lynch, Hannah Murphy, Therese Nwoye, Treasa O'Neill



BSc Women's Health Studies 2019 – 2023

Ciara Walsh

BSc Health Studies (Women's Health) 2020 -2023

Helen O'Mahony

Higher Diploma in Midwifery

14 Students commenced in March 2022

MSc Midwifery 2023

Eilish Condon, Sarah Keohane, Ramz Rafiq

Student Achievements 2023

HH Stewart Medical Scholarship in Midwifery Award 2023

1st Prize Jessie McCarthy Morley BSc Midwifery, UCC.

COMH Quercus Scholarships 2022

BSc (Midwifery) Year 1 Aryth Stryker
BSc (Midwifery) Year 2 Claire McCarthy
BSc (Midwifery) Year 3 Natalie Moore

National NMBI Student Midwife Debate 10th November 2023 University College Dublin

The School of Nursing and Midwifery was represented by Aryth Stryker BSc (Midwifery) Year 1

Student Midwife Hospital Graduation

The first Student Midwife Hospital graduations took place in September 2023 for the BSc Midwifery 2019-1013 graduates who were presented with a hospital badge. This was hosted by the Midwifery Practice Development Team in CUMH, Centre of Midwifery Education staff and attended by the Director of Midwifery, Ms Kate Bourke, and Dr Mairead O Riordan. School of Nursing and Midwifery lecturers, students' families, and friends attended.

Erasmus funded Blended Intensive Programme (BIP) for Midwifery Students.

A Blended Intensive Programme for Midwifery was organised by Dr Geraldine McLoughlin in collaboration with midwifery educators from University College Leuven, UCLL, Hogeschool Belgium in October 2023. A Blended Intensive programme at Erasmus is a short programme that uses innovative, broad, and varied teaching and learning methods for participating students and lecturers. For the UCC/UCLL collaboration, six BSc Midwifery students (Vuyelwa Lisa Ndlov, Ellie Lambe Sisk, Niamh Buggy, Sophie Leenders, Sarah Lynch, and Kate Kelly) travelled to the School of Nursing and Midwifery, UCLL, with their lecturers Dr Geraldine McLoughlin and Dr Margaret Murphy. The group from UCC was joined by midwifery colleagues from Belgium and the University of Savonia (Kuopio), Finland, for a weeklong training programme on pan-European midwifery education, training, and cultural exchange. *The Future of Midwifery Care - Challenges of the Midwife in the changing world* was the concept for consideration. Students collaborated with their European counterparts to explore this concept, culminating in presenting their research, experiential learning, and projects to the assembled group. All students were innovative in their presentation, using podcasts, 'TikToks', and interactive art to disseminate their information. This was the first time students from the School of Nursing and Midwifery, UCC, were involved in a Blended Intensive Programme, which helps foster European collaboration. The midwifery team hopes to travel to Munich and Finland in 2024 and host a return visit to UCC planned for 2025.





Publications

Bakhbakhi, D., Siassakos, D., Davies, A., Merriel, A., Barnard, K., Stead, E., Shakespeare, C., Duffy, J., Hinton, L., McDowell, K., Lyons, A., Fraser, A., and Burden, C., iCHOOSE Collaborative Group: Maggie Redshaw, Vicki Flenady, Alexander Heazell, Laura Timlin, Mary Lynch, Soo Downe, Pauline Slade, Lisa Thorne, Heather-Jane Coombs, Aleena Wojcieszek, **Margaret Murphy**, Heloisa de Oliveira Salgado, Lindsey Wimmer, Danielle Pollock, Neelam Aggarwal, Susannah Hopkins Leisher, Kate Mulley, Irene Attachie, Bethany Atkins (2023). Interventions, outcomes and outcome measurement instruments in stillbirth care research: A systematic review to inform the development of a core outcome set. *BJOG: An International Journal of Obstetrics & Gynaecology*, 130(6), 560-576.

Curtin, M., **Murphy, M.**, Savage, E., O'Driscoll, M., & Leahy-Warren, P. (2023). Midwives', obstetricians', and nurses' perspectives of humanised care during pregnancy and childbirth for women classified as high risk in high income countries: A mixed methods systematic review. *Plos one*, 18(10), e0293007.

Greene, E., Hegarty, J., **O'Connell, R.**, and **Murphy, M.** (2023). The evidence underpinning the procedural elements of the complete examination and screening of the healthy term neonate: a protocol for a scoping review and evidence map.

Greene, L. M., Hegarty, J., **O'Connell, R.**, Connaughton, B., Coveney, K., Hardie, P., Horton, S. Szafranska, M., and **Murphy, M.**

(2023). Instruments measuring practitioner performance of the complete examination and screening of neonates: A systematic review. *Journal of Paediatrics and Child Health*, 59(4), 613-624.

Hannon, K., Nilsen, A. B. V., **Murphy, M.**, Eri, T. S., Leahy-Warren, P., **Corcoran, P.**, Downe, S., and Daly, D. (2023). What women identify as positive aspects and areas for improvement of maternity care and services in Ireland: An online survey. *Women and Birth*, 36(4), 341-348.

Murphy, M. Stillbirth Advocacy Working Group. (2023). Preventing and addressing stillbirths along the continuum of care: a global advocacy and implementation guide: version 1. New Jersey: International Stillbirth Alliance Stillbirth Advocacy Working Group; 2023.

Murphy, M. M., Dandona, R., Blencowe, H., Quigley, P., Leisher, S. H., Storey, C., Siassakos, D. ... Flenady, V. (2023). *The Hidden Global Mortality Burden. Systems Thinking for Global Health: How can systems-thinking contribute to solving key challenges in Global Health* In Larkan, F., Vallieres., Hasheem., Kodate. Systems Thinking for Global Health: How can systems-thinking contribute to solving key challenges in Global Health, Oxford University Press: Oxford.

Monis, M., **O'Connell, R.** and Andrews, T., (2023). 'It will dictate how many children I will have'-Women's decision-making in pregnancy following a previous caesarean birth (CB). *Midwifery*, 116. p.103533.

An Introduction to Clinical Pastoral Education for Healthcare Professionals

The UCC CPD short course 'An Introduction to Clinical Pastoral Education for Healthcare Professionals' has successfully run for seven years as a short CPD offering from the Department of Obstetrics and Gynaecology by Dr Daniel Nuzum. In 2023, it was run as a piloted credited module in the School of Nursing and Midwifery. Following this successful initiative, it is hoped that it will be offered more widely as a credited module in the College of Medicine and Health.

Based on the principles of Clinical Pastoral Education, which Daniel provides through CUH and CUMH for training professionals in pastoral ministry and healthcare chaplaincy, this shortened programme for other healthcare professionals

has proved popular for personal and professional growth and well-being in healthcare practice.

The areas covered in the programme include:

1. Introduction to action/reflection model of learning.
2. What is spirituality?
3. Personal, pastoral and professional identity.
4. Communication, listening and responding skills.

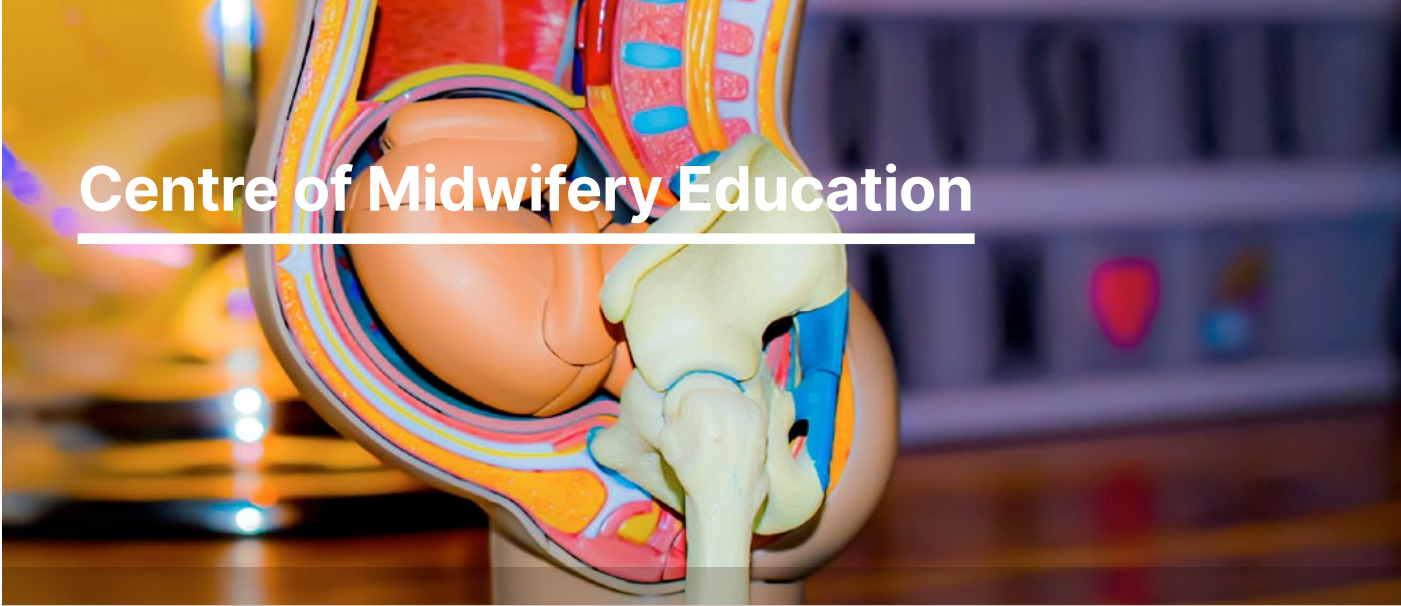
5. Intra-personal and Interpersonal skills, empathy, self-care and teamwork.
6. Introduction to grief and loss.
7. Introduction to Reflective Practice.
8. Scope and impact of the pastoral role, including boundaries, confidentiality and privacy.
9. Spiritual Care, what is it? Who does it? Spiritual pain; assessment and referral in clinical practice.
10. Integrating the course components into clinical practice.

This accessible course provides multidisciplinary healthcare professionals with an opportunity to focus on the relational aspects of clinical practice and healthcare, as well as an opportunity to explore self-care and well-being.

The course has received consistently positive feedback from participants. Elements of the programme have also been provided in the MSc programme in Radiation Therapy and in the undergraduate medical programme both at UCC.

Further information can be found here: www.ucc.ie/en/cpd/options/medhealth/cpd1621/





Centre of Midwifery Education

Centre of Midwifery Education (CME) – 2023 Overview

The Centre of Midwifery Education (CME) at Cork University Maternity Hospital (CUMH) strategically leads and supports the development and provision of high-quality education and training programmes for registered midwives, nurses, and the multidisciplinary team.

The CME plays a vital role in supporting CUMH's commitment to safe, effective, and person-centred care. It ensures that all education programmes contribute to:

- The development and ongoing maintenance of clinical competence
- Support for service delivery and responsiveness to evolving service needs
- Promotion of a learning culture that enhances staff performance and patient outcomes

In 2023, the CME:

- Coordinated 191 education programmes
- Supported the training and development of 1,819 staff members

These figures reflect the team's strong commitment to continuous professional development across all clinical and support disciplines within the hospital.

The CME also contributes to regional education by making a range of its programmes available to University Hospital Waterford (UHW), Tipperary University Hospital (Tipp UH) and University Hospital Kerry (UHK).

In these sites, continuing education is primarily delivered through the Nursing and Midwifery

Planning and Development Unit (NMPDU) Kilcreene, the Regional Centre for Nurse and Midwifery Education (RCNME), and the Centre of Nursing and Midwifery Education at UHK. The CME at CUMH complements this provision by offering additional access to selected programmes for regional staff.

CME Activity and Achievements

- Pilot Site for the National Infant Feeding Programme 24th January 2023

The Centre of Midwifery Education Team

- 1 Midwife Tutor completed the Manual Handling Instructor Programme 2023
- 1 Tutor Completed the National Healthcare Communication Programme Module 1 Making Connections
- Specialist Coordinator Midwifery Fionnuala Hunt presented at the Nursing and Midwifery Board of Ireland NMBI Series 2023: 'Partnership in Practice' 7th September 2023
- Specialist Coordinator Midwifery Áine Blake presented -An overview of maternal sepsis, UCC Grand Rounds @ Cork University Hospital on 13th September 2023.

Classroom Management System

- All the CME's continuous professional development and training can be accessed through the classroom management system in HSeLand.

Development and Introduction of New Programmes & Workshops 2023

- A Coroner's Inquest – Understanding the Process, Information and Support when attending a Coroner's Inquest
- An Introduction to Infant Mental Health
- Antenatal Update for Midwives

- Assessment, Management and Care of the Patient Receiving Intravenous Patient-Controlled Analgesia
- Basic Principles of Ventilation for Neonatal Nurses
- Caring for Women with an Epidural Infusion post-Gynaecological Surgery.
- Caring for the mother and new-born in operating theatre recovery
- Caring for Women with Epilepsy within the Maternity Context – A Multidisciplinary Team Approach
- Caring for the obstetric women on a Gynaecology ward - A Nursing Perspective
- Deteriorating Patient
- Labour Hopscotch
- Leading an Empowered Organisation (LEO)
- Neonatal Development Care
- Parenteral Nutrition use in the Neonatal unit
- Management of Diabetes in Pregnancy-A Multidisciplinary Approach
- Making Every Contact Count (MECC)
- Management of “Impacted Fetal Head at Caesarean Section” (PROMPT 3 workshop)
- Management of “Vaginal Breech Birth” (PROMPT 3 workshop).
- National Facilitator Education Programme
- Nursery Nursing Studies (Nursing Studies) in Collaboration with Cork College of FET
- Perinatal Mental Health Education
- The Care of Mothers and Infants in the Postnatal Period
- The care of women with Female Genital Mutilation (FGM) within an Irish Maternity Context
- Uro-gynaecological Education

All educational programmes delivered by the Centre of Midwifery Education (CME) carry Continuing Education Units (CEUs) from the Nursing and Midwifery Board of Ireland (NMBI). In addition, several programmes hold academic accreditation, supporting the professional development and lifelong learning of nursing and midwifery staff.



Support and Acknowledgements

The CME extends sincere thanks to the management of Cork University Maternity Hospital (CUMH), the Nursing and Midwifery Planning and Development Unit (NMPDU), Cork/Kerry, and the National Women and Infants Health Programme for their ongoing support. In 2023, funding provided by these bodies enabled:

- The delivery of instructor training programmes
- The purchase of essential new equipment to support high-quality education

The CME acknowledges the dedication and hard work of its team in developing responsive and innovative educational programmes that meet evolving service needs. Their commitment ensures the provision of a strong culture of learning within CUMH, fostering excellence in patient-centred care.

Throughout 2023, the CME delivered a comprehensive suite of Continuous Professional Development (CPD) opportunities, empowering staff to maintain and enhance clinical competencies.

The CME would like to extend heartfelt thanks to all CUMH staff who collaborated with the CME to develop and facilitate educational initiatives and those who participated in education programmes during 2023, demonstrating a shared commitment to professional growth and excellence in care.



Infant

INFANT is a leading translational Research Centre in maternal and child health. INFANT's mission is to deliver pioneering translational research to improve health outcomes in pregnancy, birth, newborn and early childhood phases of growth and development.

INFANT is hosted by University College Cork (UCC) and is co-located with clinical partners Cork University Hospital and Cork University Maternity Hospital (CUH/CUMH). INFANT's state-of-the-art, co-located facilities serve the centre's research goals and support multi-disciplinary and trans-disciplinary collaboration between the university and hospitals.

The INFANT strategy is to strive for scientific excellence and disruptive innovation in our quest to become a leading Institute of Maternal and Child Health of international renown. We have a clear vision of how we will achieve this, enabling us to deliver scientific excellence, innovation, and societal and economic impact now and for the next generation.

Some key achievements for INFANT during 2023 were:

- **In4kids**, the national children's clinical trial network funded by the Health Research Board and led by the INFANT Research Centre at University College Cork, was officially launched.
- **The Cerebral Palsy Foundation's programme of excellence** was officially launched in May 2023 to establish Ireland as an international leader for CP care and research. INFANT is leading the priority area of Early Detection & Intervention.
- As part of this new CP programme, Professor Deirdre Murray was appointed the new Chair in Early Brain Injury and Cerebral Palsy.

- **Funding** – secured a total of €18.03m, from exchequer and non-exchequer sources including Science Foundation Ireland, Enterprise Ireland, Irish Research Council, Health Research Board, Cerebral Palsy Foundation, Medical Research Council, Wellcome Leap and Feileacain.
- **Publications** – INFANT published 112 peer-reviewed journal publications in 2023 – with several key breakthroughs published in high-impact journals such as New England Journal of Medicine, The Lancet and JAMA.
- **PhD Graduates** – INFANT had 2 PhD graduates in 2023.
- **PhD/MD Registrations** – INFANT had 31 postgraduate (PhD/MD) students registered during 2023 across all disciplines.
- **Research Leadership** – INFANT was delighted to appoint Professor Brian Walsh as INFANT Principal Investigator.
- 2 INFANT Principal Investigators and 1 INFANT Lead Investigator were appointed as Editors or Associate Editors to three international journals.
- 12 INFANT Investigators were members or leaders of 15 national and international organisations that influence research, clinical practice, and policy.
- **Global Health** – In partnership with Kilimanjaro Clinical Research Institute, researchers at INFANT have created a ground-breaking digital delivery register for reproductive health in low- resource settings in Northern Tanzania. The digital register, Kilimanjaro Ultra 2020, will help reduce maternal and perinatal mortality rates in developing countries. In 2023, they piloted the system at three Dispensaries, two Health Centres, a Regional Hospital and a Zonal Hospital and have recorded around 4,000 deliveries in the system.

- **Spinouts** – INFANT launched a spin-out company, NeuroBell in October 2023, led by Dr Mark O'Sullivan. NeuroBell are developing a novel medical device providing portable EEG monitoring with real-time and automated neonatal seizure detection at the bedside.

Awards

- Professor Geraldine Boylan was presented with the Tom Connor Distinguished Investigator Award 2023 by Neuroscience Ireland, at the Royal College of Surgeons Ireland (RCSI) during the annual Neuroscience Ireland conference.
- Professor Keelin O'Donoghue was presented with Distinguished Researcher Award for her contribution to research on stillbirth & newborn death at the International Stillbirth Alliance 2023.
- INFANT PhD student Caroline Joyce received her Fellowship of the Royal College of Pathologists - September. Caroline's PhD work is on the identification of Biomarkers for the Diagnosis, Management and Follow-up of Women with Gestational Trophoblastic Disease.
- NeuroBell was a finalist in the University of Notre Dame New Venture competition, securing a top 5 place out of 150 start-up innovations.
- Dr Mark O'Sullivan also won "Best Early Stage" Munster regional trophy at the InterTradeIreland Seedcorn Investor Readiness Munster regional final.
- Dr Cathal O'Connor, INFANT PhD Student was awarded the Future European Society of Dermatological Research award.
- **UCC CoMH Bright Futures Conference:**
 - Sonia Lenehan won Promotion of Equality and Diversity Award 2023 for her Science4sightLoss project.
 - Dr Marita Hennessy (Postdoc) & Dr Laura Linehan (PhD student) won the first prize for the 3 min Pro-Am for presentation on Recurrent miscarriage and infertility.
- **Irish Association of Dermatology Spring Meeting**
 - ICAT Fellow Dr Cathal O'Connor won Burrows cup for best oral presentation of scientific research with the "SPINDLE" study.
- **European Academy of Allergy and Clinical Immunology** - EAACI congress - Lead Investigator Dr Juan Trujillo & Team (Caoimhe Cronin & Aoife Gallagher) won 4 first places in their respective categories.
- **International Stillbirth Alliance 2023** - PhD student, Caroline O'Connor won best poster award for the Milestone study.
- **8th International Neonatology Association Conference** - Dr Anne Murray won best oral presentation.
- **Irish Paediatrics Association Annual Conference**
 - Dr Aoife Gallagher and Dr Cathal O'Connor both won best oral presentation.



Left: INFANT Spin-out company, NeuroBell Launch. **Centre:** Professor Boylan presented the Tom Connor Distinguished Investigator Award 2023 by Neuroscience Ireland. **Right:** Professor Keelin O'Donoghue was presented with Distinguished Researcher Award.

Health Innovation Hub Ireland



Femtech @ Health Innovation Hub Ireland stimulates and supports the development of high-potential new products, services and start-ups in Femtech. Female-centric healthcare solutions supported by HHIH will impact the health and well-being of 50% of our population, create a geographical Femtech focus and build an ecosystem of experts and entrepreneurs driving and innovating in Femtech.

Femtech @ Health Innovation Hub Ireland continues to support the drive for more female founders and attract more investors to Ireland (More than 70% of Femtech companies had female founders) (McKinsey.com February 14th, 2022)

Enabling Femtech

Access to clinical, research and business expertise is critical to developing disruptive women's health solutions. Femtech @ Health Innovation Hub Ireland delivers clinical expertise through the Ireland South Women and Infants Directorate, which provides access to discipline-specific clinical teams. Femtech entrepreneurs also have access to critical research and expertise through UCC Innovation, and business and enterprise support is provided by our Femtech Advisors.

HHIH Femtech Call 2023

The HHIH annual call for innovations, HHIH Femtech Call 2023, was launched on October 20th, 2023. This marked Ireland's first ever FemTech call and was a trailblazer for Femtech industries in Ireland

as it's the first time there has been a focus on innovations that address women's health.

The focus was female healthcare, which builds on the Femtech @ Health Innovation Hub Ireland initiative. The call targeted innovators (companies, pre-startups and researchers) with innovations that could significantly impact women's healthcare in Ireland and internationally, either market-ready or in development.

Applicants were selected based on novelty, the significance of the problem addressed, market and the potential for future investment. Five of the eleven winners had products considered 'deep tech', and 27 of the 37 companies had female founders (73%). In total, there were 37 applications, 11 were selected as winners.

The winning FemTech products included innovations in fertility, menopause, contraception, postpartum health, fitness, bladder health and Parkinson's in women. The winners of Ireland's first FemTech call are Altascience, Amara Therapeutics, AURIN, Aveta Medical, Identify Her (now Peri), My Moves Matter, PPR Healthcare, OnaWave Medical, Saor, the Menopause Hub and VoxAI.

HHIH's FemTech Network has grown to 450 members since its launch in 2022. To join the network and get involved in Ireland's Femtech revolution, visit <https://hih.ie/initiatives/femtech/>



Staffing across Ireland South Women and Infants Directorate



Table 47: Overall staff numbers for Ireland South in 2023 (WTE)

Staff	Ireland South	CUMH	UHK	TippUH	UHW
Consultants Obs & Gynae	38	23	5	5	5
Consultant Neonatologists	7.5	7	0	0	0.5
NCHDs	101.5	62.5	16	5	18
Nurses/ Midwives	730.23	445.55	118	57.18	109.5
HSCP	13.85	3.42	4	3.43	3
Admin	111.64	79.94	13.6	4.6	13.5
Total	1024.51	621.41	156.6	75.21	150.5

Table 48: Health and Social Care Professions (HSCPs)

HSCPs	Ireland South	CUMH	UHK	TippUH	UHW
Dietetics	5.5	3	0	0.5	0.5
Occupational Therapy	0.6	0.6	0	0	0
Pharmacy	7	5	0.6	0.4	1
Physiotherapy	15.3	9.91	1	1.9	2.5
Social Work	8.6	6.1	0.5	0.5	0.5
Speech & Language Therapy	1.5	1.5	0	0	0

Table 49: Neo-Natal Staffing CUMH

HSCP Discipline	Current WTE	NCP Recommendation	Current deficit
Dietetics	1	2	1
Occupational Therapy	0.6 (funded by paed)	1.5	0.9
Physiotherapy	1	2.7	1.7
Social Work	1	1	
Speech & Language	1.5	2	0.5

Highlights

Let's Talk About Menopause

In November 2023, our colleagues Dr Coleen Cormack, Senior Clinical Psychologist for Staff Support and Wellbeing, Ireland South Women and Infants Directorate, Orla McCarthy, Clinical Specialist Physiotherapist, and Dr Brenda Moran, GP, along with other valued contributors, were shortlisted in the Cork/Kerry Community Healthcare Staff Recognition Awards.

Their nomination recognises the development of the resource "Let's Talk About Menopause"—an empowering booklet designed to support women through the menopause by providing clear, accessible information and promoting open conversations.



Launch of New Website to Support Education, Patient Information and Family Engagement across Ireland South

In 2023, Ireland South Women and Infants Directorate proudly launched its new and improved website, designed to serve as a comprehensive digital hub for patients, families, healthcare professionals, and students across the region.

The new platform provides accessible, accurate, and user-friendly information about the wide range of maternity, gynaecology, and neonatal services available at CUMH, TippUH, UHK and UHW.

Ireland South provides access to care and choice to the women of Waterford

'I am delighted to be in Waterford today handing over the keys of a new car to our colleagues in UHW. We are implementing a model of community midwifery in each of our units across our Directorate in Cork, Kerry, South Tipperary

and here in Waterford to provide access to safe, standardised, high-quality care to the women, infants and families within our region.’ Said Professor John R. Higgin, Clinical Director, Ireland South Women and Infants Directorate.

On Thursday, April 6th, Professor Higgins, and Steve O’Connor, Interim Head of Operations at Ireland South Women and Infants Directorate, were proud to deliver a second car to UHW maternity services. Glistening in white and green and proudly brandishing the Ireland South and HSE logos, the first fleet of cars was distributed across the Directorate in early 2021. The vehicles purchased by the Directorate are to support the provision of midwifery-led care in line with the National Maternity Strategy 2016-2026, ensuring women and babies have access to care in a setting that is most appropriate to their needs.

On receiving the keys, Dr Eddie O’Donnell, Clinical Lead UHW, Consultant Obstetrician and Gynaecologist, ‘Thank you to Professor Higgins and Steve for providing UHW maternity services with a second car to support women accessing our services both in the hospital and community. Being part of Ireland South Women and Infants Directorate is a positive force for UHW and these stylish, new Hyundai hybrid cars represent another benefit of being part of the only Maternity Directorate in Ireland’.



Launch of Instagram

As part of its commitment to enhancing communication and public engagement, ISWID launched a new Instagram page in 2023. This social media initiative is designed to reach patients, families, staff, students, and the wider community in a more dynamic, accessible, and relatable way.

“We launched our Instagram page to connect with our audience where they are,” said Elaine Harrington, Communications Manager at Ireland South Women and Infants Directorate. “Social media allows us to share important updates, celebrate our staff, and promote health messages in a way that is immediate and engaging.”



Professor John R. Higgins appointed CEO of South/South West Hospital Group

On May 15, 2023, Professor John R. Higgins was appointed Chief Executive Officer of the South/South West Hospital Group (S/SWHG). Professor Higgins brings extensive experience in clinical leadership and executive management, currently serving as Group Clinical Director for the Ireland South Women and Infants Directorate and Professor of Obstetrics and Gynaecology at University College Cork.

A practising clinical academic, Professor Higgins combines frontline healthcare experience with a strategic vision for reform and development within the health service.

Commenting on the appointment, Mary Day, the HSE’s National Director of Acute Operations, said: “At this time of change in the Health Services, I am confident that Professor Higgins will lead and steer the S/SWHG through the transition to the Regional Health Areas while maintaining the Group’s commitment to continuous improvement in services we provide in the region.”

In his own remarks, Professor Higgins stated: “I am delighted to take up this position of CEO and build on the excellent work of the South/South West Hospital Group. I am completely committed to patient care and privileged to serve the people of this region at a time of great opportunity in our Health Services.”

Newly Refurbished Maternity Unit opens at Tipperary University Hospital

In November 2024, Professor John R. Higgins, CEO of the South/South West Hospital Group, together with Director of Midwifery Maggie Dowling, officially opened the newly refurbished maternity unit at

Tipperary University Hospital. The event marked a significant milestone in the hospital's ongoing commitment to enhancing maternal and infant care in South Tipperary.

The refurbishment project focused on creating a modern, patient-centered environment, with improvements designed to promote comfort, safety, and dignity for mothers, babies, and their families.

Speaking at the opening, Professor Higgins said: "This newly refurbished maternity unit reflects our ongoing dedication to providing high-quality, compassionate care for the women, infants and families of South Tipperary. It is a tangible example of how investment in healthcare infrastructure can directly benefit the experiences and outcomes of patients and staff alike. Sincere thanks to NWIHP and the HSE for their ongoing support."

Maggie Dowling, Director of Midwifery, also welcomed the development, stating: "This unit was redesigned with the voices of our women, families, and midwives in mind. We are proud to offer a space that not only meets clinical standards but also provides a calm and supportive environment for childbirth. It is a place where families can begin their journeys together with confidence and care."

The opening of the upgraded facility comes at a time when the South/South West Hospital Group is progressing with wider healthcare reforms, including the transition to Regional Health Areas, with a strong focus on improving access, quality, and integration of care across all services.



Opening of Kinsale Road Clinic

The CUMH Women and Infants Health Hub opened in the South Ring Business Park in Autumn 2023, supported by the National Women and Infants Health Programme (NWIHP). The beautifully renovated clinic welcomed Early Pregnancy Scan patients on Monday, August 28th, 2023 and Physiotherapy patients on September 4th.

A state-of-the-art regional hub for women and infants' health, established outside CUMH, improves access and reduces wait times for specialist care for women in Ireland South. This model of care will also benefit the hospital system, freeing up clinic capacity for managing other obstetric and gynaecological patients by caring for Early Pregnancy investigations and Women's Physiotherapy at the new clinic in Kinsale Road.

The early pregnancy unit (EPU) is a dedicated specialist department that deals with problems in early pregnancy. These are often the first signs of a potential problem with the pregnancy, such as a miscarriage. Miscarriage or fetal loss is the most common complication of pregnancy and affects, on average, 20 per cent of all pregnancies. Experiencing pregnancy loss in a maternity setting surrounded by women progressing in their pregnancy journey can often add to a family's distress. Our new clinic provides parents a separate space to receive appropriate, relevant support and compassionate care. Relocating the Physiotherapy Department clinic will have a significant positive impact by providing treatment for a range of women's health problems in an easily accessible location with free parking.



New Antenatal Care Pathways

Cork University Maternity Hospital has introduced new Antenatal Care Pathways to better meet the varied needs of women during pregnancy. These pathways are designed to provide personalised care based on the level of risk identified for each woman, ensuring that she receives the appropriate level of attention and support throughout her pregnancy.

The pathways are divided into three categories of care: Supported Care, Assisted Care, and Specialist Care, each designed to address the unique needs of women based on their health status, risk factors, and specific pregnancy circumstances.



Birth Reflections

The Birth Reflections Service was launched in 2023 to support women and their partners who have given birth under the care of Cork University Maternity Hospital (CUMH) since 2020. This service provides a confidential, non-judgmental space where individuals can explore and discuss their birth experience in a supportive environment.

Whether the experience was straightforward or challenging, the service offers women the opportunity to ask questions, seek clarity on events that occurred during labour and delivery, and gain emotional support and understanding. This can be particularly beneficial for those who may have experienced unexpected outcomes, interventions, or emotional distress during childbirth.

The Birth Reflections Service is run from St. Mary's Primary Care Centre by two highly experienced midwives, Alex Campbell and Gillian Walsh, who are specially trained in providing reflective and trauma-informed maternity care. Their role is to help individuals make sense of their experiences, support emotional healing, and – where appropriate – guide them toward additional services, including mental health support or future maternity care planning.

Dr Richard Horgan climbs highest peak in every Irish County in memory of Sister-in-law

In a remarkable display of endurance, compassion, and dedication, Dr Richard Horgan completed a unique and emotional challenge – climbing the highest peak in each of Ireland's 32 counties within just seven days. The challenge was undertaken in memory of his sister-in-law, Orla Gosnell, and aimed to raise vital funds for Cork University Maternity Hospital (CUMH).

Richard embarked on the challenge almost five years after the untimely death of Ms Gosnell in December 2018. A 38-year-old mother of five and a devoted social care worker, Orla passed away just five months after giving birth to her youngest child at CUMH.

Driven by a desire to honour Orla's memory and improve patient care, Dr Horgan's fundraising will go toward the creation of dedicated spaces at CUMH for both patients and staff.

Throughout the week-long trek, Dr Horgan was joined by friend and colleague Professor Richard Greene. Together, they scaled an astonishing combined altitude of 16,000 metres – nearly twice the height of Mount Everest – as they traversed Ireland's most challenging terrain.

The journey culminated on Galtymore, the 918-metre peak straddling the Limerick-Tipperary border. As Dr Horgan descended the final mountain, he was joined by colleagues from across the Ireland South Women and Infants Directorate, as well as Orla's husband Robert, her mother Myriam, and her father Kees – a poignant moment of shared remembrance and triumph.

Reflecting on the experience, Dr Horgan said: "What a fantastic week. It has been challenging and brilliant. If Orla could see us now, she'd be crying happy tears."



Publications

- Predicting perineal trauma during childbirth using data from a general obstetric population.**
 Maher GM, O'Byrne LJ, McKernan J, Corcoran P, Greene RA, Khashan AS, McCarthy FP.
 HRB Open Res. 2023 Oct 10;5:79. doi: 10.12688/hrbopenres.13656.2. eCollection 2022.
 PMID: 37928404 Free PMC article.
- Designing a behaviour change intervention to address the behavioural risk factors for stillbirth: A study protocol.**
 Escañuela Sánchez T, Matvienko-Sikar K, Greene RA, Byrne M, O'Donoghue K.
 HRB Open Res. 2023 Jul 26;6:35. doi: 10.12688/hrbopenres.13751.1. eCollection 2023.
 PMID: 39925645 Free PMC article.
- Introduction of a Single Electronic Health Record for Maternity Units in Ireland: Outline of the Experiences of the Project Management Team.**
 Sheehan OM, Greene RA, McKernan J, Murphy B, Cahill C, Cleary B, Lawlor F, Robson M; MN-CMS National Project Team.
 JMIR Form Res. 2023 May 12;7:e38938. doi: 10.2196/38938. PMID: 37171841 Free PMC article.
- Umbilical Cord Milking Versus Delayed Cord Clamping in Infants 28 to 32 Weeks: A Randomized Trial.**
 Katheria A, Szychowski J, Carlo WA, Subramaniam A, Reister F, Essers J, Vora F, Martin C, Schmölzer GM, Law B, Dempsey E, O'Donoghue K, Kaempf J, Tomlinson M, Fulford K, Folsom B, Karam S, Morris R, Yanowitz T, Beck S, Clark E, DuPont T, Biniwale M, Ramanathan R, Bhat S, Hoffman M, Chouthai N, Bany-Mohammed F, Mydam J, Narendran V, Wertheimer F, Gollin Y, Vaucher Y, Arnell K, Varner M, Cutter G, Wilson N, Rich W; RRT; Finer N. Pediatrics. 2023 Dec 1;152(6):e2023063113. doi: 10.1542/peds.2023-063113. PMID: 37941523 Clinical Trial.
- Bereaved parents involvement in maternity hospital perinatal death review processes: 'Nobody even thought to ask us anything'.**
 Helps Ä, O'Donoghue K, O'Connell O, Leitao S. Health Expect. 2023 Feb;26(1):183-198. doi: 10.1111/hex.13645. Epub 2022 Nov 6. PMID: 36335583 Free PMC article. Review.
- Fatal fetal anomaly: Experiences of women and their partners.**
 Jackson P, Power-Walsh S, Dennehy R, O'Donoghue K. Prenat Diagn. 2023 Apr;43(4):553-562. doi: 10.1002/pd.6311. Epub 2023 Jan 29. PMID: 36639719
- A systematic review of standardised tools used in perinatal death review programmes.**
 O'Connor E, Leitao S, Fogarty AP, Greene R, O'Donoghue K. Women Birth. 2024 Feb;37(1):88-97. doi: 10.1016/j.wombi.2023.09.006. Epub 2023 Oct 2. PMID: 37793961 Free article. Review.
- A national survey of surgical training in gynaecology: 2014-2021.**
 Galvin D, O'Reilly B, Greene R, O'Donoghue K, O'Sullivan O. Eur J Obstet Gynecol Reprod Biol. 2023 Sep;288:135-141. doi: 10.1016/j.ejogrb.2023.07.013. Epub 2023 Jul 26. PMID: 37517105
- Reply to: "The partner-an underutilized facilitator to support healthy gestational weight gain".**
 Escañuela Sánchez T, Meaney S, O'Donoghue K, Byrne M, Matvienko-Sikar K. BMC Pregnancy Childbirth. 2023 Jun 15;23(1):445. doi: 10.1186/s12884-023-05713-3. PMID: 37322420 Free PMC article.
- Exploring first-time mothers' experiences and knowledge about behavioural risk factors for stillbirth.**
 Escañuela Sánchez T, Matvienko-Sikar K, Meaney S, O'Donoghue K. Health Expect. 2023 Feb;26(1):329-342. doi: 10.1111/hex.13662. Epub 2022 Nov 23. PMID: 36416378 Free PMC article.
- Factors influencing medical students' decision to pursue a career in obstetrics and gynaecology.**
 Ní hÉalaithe C, Howard A, Corcoran P, McCarthy CM, Horgan M, Bennett D, O'Donoghue K, O'Sullivan S. PLoS One. 2023 Dec 5;18(12):e0288130. doi: 10.1371/journal.pone.0288130. eCollection 2023. PMID: 38051720 Free PMC article.
- Barriers to attendance at a tertiary hospital's perinatal mortality meeting.**
 Burke B, Boyd S, McNamara K, O'Donoghue K. Ir J Med Sci. 2023 Jun;192(3):1265-1270. doi: 10.1007/s11845-022-03137-0. Epub 2022 Sep 2. PMID: 36053388 Free PMC article.
- Factors that shape recurrent miscarriage care experiences: findings from a national survey.**
 Flannery C, Hennessy M, Dennehy R, Matvienko-Sikar K, Lucey C, Dhubhgain JU, O'Donoghue K. BMC Health Serv Res. 2023 Mar 31;23(1):317. doi: 10.1186/s12913-023-09347-1. PMID: 36997901 Free PMC article.
- Critical discourse analysis on the influence of media commentary on fatal fetal anomaly in Ireland.**
 Power S, O'Donoghue K, Meaney S. Health (London). 2023 Mar;27(2):244-262. doi: 10.1177/13634593211015279. Epub 2021 May 13. PMID: 33983049
- A protocol for a systematic review of standardised tools used in perinatal death review programmes.**
 O'Connor E, Greene R, O'Donoghue K, Leitao S. HRB Open Res. 2023 Aug 24;5:52. doi: 10.12688/hrbopenres.13574.2. eCollection 2022. PMID: 37753168 Free PMC article.
- 'An extra level of kind of torment': Views and experiences of recurrent miscarriage care during the initial phases of COVID-19 in Ireland-A qualitative interview study.**
 Dennehy R, Hennessy M, Dhubhgain JU, Lucey C, O'Donoghue K. Health Expect. 2023 Aug;26(4):1768-1782. doi: 10.1111/hex.13791. Epub 2023 Jun 9. PMID: 37300364 Free PMC article.
- An examination of care received by women with recurrent miscarriage and infertility against guideline-based key performance indicators.**
 Linehan L, Hennessy M, O'Donoghue K. Eur J Obstet Gynecol Reprod Biol. 2023 Mar;282:17-23. doi: 10.1016/j.ejogrb.2023.01.002. Epub 2023 Jan 2. PMID: 36621261

- **Fetal anomaly diagnosis and termination of pregnancy in Ireland: a service evaluation following implementation of abortion services in 2019.**
Miremborg H, Oduola O, Morrison JJ, O'Donoghue K. *Am J Obstet Gynecol*. 2023 Oct;25(10):101111. doi: 10.1016/j.ajogmf.2023.101111. Epub 2023 Jul 31. PMID: 37532025
- **Long-term cardiometabolic health in people born after assisted reproductive technology: a multi-cohort analysis.**
Elhakeem A, Taylor AE, Inskip HM, Huang JY, Mansell T, Rodrigues C, Asta F, Blaauwendraad SM, Håberg SE, Halliday J, Harskamp-van Ginkel MW, He JR, Jaddoe VWW, Lewis S, Maher GM, Manios Y, McCarthy FP, Reiss IKM, Rusconi F, Salika T, Tafflet M, Qiu X, Åsvold BO, Burgner D, Chan JKY, Gagliardi L, Gaillard R, Heude B, Magnus MC, Moschonis G, Murray D, Nelson SM, Porta D, Saffery R, Barros H, Eriksson JG, Vrijkotte TGM, Lawlor DA. *Eur Heart J*. 2023 Apr 21;44(16):1464-1473. doi: 10.1093/eurheartj/ehac726. PMID: 36740401 Free PMC article.
- **A proteomic profile of the healthy human placenta.**
Manna S, Scheel J, Noone A, McElwain CJ, Scaife C, Gupta S, English J, McCarthy C, McCarthy FP. *Clin Proteomics*. 2023 Jan 2;20(1):1. doi: 10.1186/s12014-022-09388-4. PMID: 36593452 Free PMC article. Review.
- **Hypertensive disorders of pregnancy and long-term risk of maternal stroke—a systematic review and meta-analysis.**
Brohan MP, Daly FP, Kelly L, McCarthy FP, Khashan AS, Kublickiene K, Barrett PM. *Am J Obstet Gynecol*. 2023 Sep;229(3):248-268. doi: 10.1016/j.ajog.2023.03.034. Epub 2023 Mar 27. PMID: 36990309 Free article. Review.
- **Maternal and perinatal outcomes following a diagnosis of Hodgkin lymphoma during or prior to pregnancy: A systematic review.**
Houlihan OA, Buckley D, Maher GM, McCarthy FP, Khashan AS. *BJOG*. 2023 Mar;130(4):336-347. doi: 10.1111/1471-0528.17347. Epub 2022 Dec 12. PMID: 36424902 Free PMC article. Review.
- **Mode of delivery and asthma in childhood and adolescence: Findings from the Millennium Cohort Study.**
O'Connor A, McCarthy FP, Kelly L, Khashan AS, Maher GM. *Clin Exp Allergy*. 2023 Apr;53(4):459-464. doi: 10.1111/cea.14282. Epub 2023 Jan 16. PMID: 36645187 No abstract available.
- **Predicting perineal trauma during childbirth using data from a general obstetric population.**
Maher GM, O'Byrne LJ, McKernan J, Corcoran P, Greene RA, Khashan AS, McCarthy FP. *HRB Open Res*. 2023 Oct 10;5:79. doi: 10.12688/hrbopenres.13656.2. eCollection 2022. PMID: 37928404 Free PMC article.
- **Association between socioeconomic status with pregnancy and neonatal outcomes: An international multicenter cohort.**
Maher GM, Ward LJ, Hernandez L, Kublickas M, Duvekot JJ, McCarthy FP, Khashan AS, Kublickiene K. *Acta Obstet Gynecol Scand*. 2023 Nov;102(11):1459-1468. doi: 10.1111/aogs.14659. Epub 2023 Aug 21. PMID: 37602747 Free PMC article.
- **L-ergothioneine reduces mitochondrial-driven NLRP3 activation in gestational diabetes mellitus.**
McElwain CJ, Musumeci A, Manna S, McCarthy FP, McCarthy CM. *J Reprod Immunol*. 2024 Feb;161:104171. doi: 10.1016/j.jri.2023.104171. Epub 2023 Nov 24. PMID: 38029485 Free article.
- **Prenatal maternal cortisol, stress and anxiety, and childhood obesity at 5 years: a nested case-control study.**
Matvienko-Sikar K, Butler E, Keefe LO, Dijk WV, Hayes CB, Huizink AC, Kearney PM, Costelloe SJ, Curtin S, Foley K, McCarthy FP, Mahony SO, Khashan A, Murray DM. *J Reprod Infant Psychol*. 2023 Nov 29:1-15. doi: 10.1080/02646838.2023.2288298. Online ahead of print. PMID: 38018852
- **Association Between Chronic Hypertension and the Risk of 12 Cardiovascular Diseases Among Parous Women: The Role of Adverse Pregnancy Outcomes.**
Al Khalaf S, Chappell LC, Khashan AS, McCarthy FP, O'Reilly ÉJ. *Hypertension*. 2023 Jul;80(7):1427-1438. doi: 10.1161/HYPERTENSIONAHA.122.20628. Epub 2023 May 12. PMID: 37170819 Free article.
- **Maternal pre-eclampsia serum increases neurite growth and mitochondrial function through a potential IL-6-dependent mechanism in differentiated SH-SY5Y cells.**
Barron A, Manna S, McElwain CJ, Musumeci A, McCarthy FP, O'Keefe GW, McCarthy CM. *Front Physiol*. 2023 Jan 12;13:1043481. doi: 10.3389/fphys.2022.1043481. eCollection 2022. PMID: 36714304 Free PMC article.
- **Pregnancy and birth complications associations with long-term adverse maternal mental health outcomes: a systematic review and meta-analysis protocol.**
Bodunde EO, Buckley D, O'Neill E, Maher GM, Matvienko-Sikar K, O'Connor K, McCarthy FP, Khashan AS. *HRB Open Res*. 2023 Oct 24;6:3. doi: 10.12688/hrbopenres.13660.3. eCollection 2023. PMID: 37954095 Free PMC article.
- **Heterogenous Differences in Cellular Senescent Phenotypes in Pre-Eclampsia and IUGR following Quantitative Assessment of Multiple Biomarkers of Senescence.**
Manna S, McElwain CJ, Maher GM, Giral Martín M, Musumeci A, McCarthy FP, McCarthy C. *Int J Mol Sci*. 2023 Feb 4;24(4):3101. doi: 10.3390/ijms24043101. PMID: 36834513 Free PMC article.
- **Cohort profile: Improved Pregnancy Outcomes via Early Detection (IMPROVED), an International Multicentre Prospective Cohort.**
Maher GM, Kenny LC, Navaratnam K, Alfievic Z, Sheehan D, Baker PN, Glud C, Tuytten R, Kublickas M, Niklasson B, Duvekot JJ, van den Berg CB, Wu P, Kublickiene K, McCarthy FP, Khashan AS. *HRB Open Res*. 2024 Jun 24;6:65. doi: 10.12688/hrbopenres.13812.2. eCollection 2023. PMID: 38911611 Free PMC article.
- **Association between intrapartum fetal pulse oximetry and adverse perinatal and long-term outcomes: a systematic review and meta-analysis protocol.**
Mitchell JM, Walsh S, O'Byrne LJ, Conrick V, Burke R, Khashan AS, Higgins J, Greene R, Maher GM, McCarthy FP. *HRB Open Res*. 2024 Mar 28;6:63. doi: 10.12688/hrbopenres.13802.2. eCollection 2023. PMID: 38628596 Free PMC article.
- **Planned delivery for pre-eclampsia between 34 and 37 weeks of gestation: the PHOENIX RCT.**
Chappell LC, Brocklehurst P, Green M, Hardy P, Hunter R, Beardmore-Gray A, Bowler U, Brockbank A, Chiochia V, Cox A, Duhig K, Fleminger J, Gill C, Greenland M, Hendy E, Kennedy A, Leeson P, Linsell L, McCarthy FP, O'Driscoll J, Placzek A, Poston L, Robson S, Rushby P, Sandall J, Scholtz L, Seed PT, Sparkes J, Stanbury K, Tohill S, Thilaganathan B, Townend J, Juszczak E, Marlow N, Shennan A; PHOENIX Study Group. *Health Technol Assess*. 2023 Dec;27(28):1-22. doi: 10.3310/CWWH0622. PMID: 36547875 Free PMC article. Clinical Trial.

- **Robot-assisted laparoscopic pelvic floor surgery: Review.**
Daykan Y, Rotem R, O'Reilly BA. *Best Pract Res Clin Obstet Gynaecol.* 2023 Dec;91:102418. doi: 10.1016/j.bpobgyn.2023.102418. Epub 2023 Sep 14. PMID: 37776580 Review.
- **The impact of artificial intelligence on academic life.**
Daykan Y, O'Reilly BA. *Int Urogynecol J.* 2023 Aug;34(8):1661. doi: 10.1007/s00192-023-05613-2. Epub 2023 Jul 24. PMID: 37486360 No abstract available.
- **Vaginal erbium laser treatment for stress urinary incontinence: A multicenter randomized sham-controlled clinical trial.**
O'Reilly BA, Viereck V, Phillips C, Tooze-Hobson P, Kuhn A, Athanasiou S, Lukanović A, Palmer B, Dahly D, Daykan Y, Cardozo L. *Int J Gynaecol Obstet.* 2024 Mar;164(3):1184-1194. doi: 10.1002/ijgo.15222. Epub 2023 Nov 5. PMID: 37927157 Clinical Trial.
- **The role of artificial intelligence in the future of urogynecology.**
Daykan Y, O'Reilly BA. *Int Urogynecol J.* 2023 Aug;34(8):1663-1666. doi: 10.1007/s00192-023-05612-3. Epub 2023 Jul 24. PMID: 37486359
- **A cost-effective model for training in Robot-Assisted Sacrocolpopexy.**
Daykan Y, Farinha R, Schraffordt SE, Motttrie A, O'Reilly BA. *Int Urogynecol J.* 2023 Dec;34(12):3059-3062. doi: 10.1007/s00192-023-05604-3. Epub 2023 Jul 15. PMID: 37453031
- **A national survey of surgical training in gynaecology: 2014-2021.**
Galvin D, O'Reilly B, Greene R, O'Donoghue K, O'Sullivan O. *Eur J Obstet Gynecol Reprod Biol.* 2023 Sep;288:135-141. doi: 10.1016/j.ejogrb.2023.07.013. Epub 2023 Jul 26. PMID: 37517105
- **Robot-assisted pelvic floor reconstructive surgery: an international Delphi study of expert users.**
Simoncini T, Panattoni A, Aktas M, Ampe J, Betschart C, Bloemendaal ALA, Buse S, Campagna G, Caretto M, Cervigni M, Consten ECJ, Davila HH, Dubuisson J, Espin-Basany E, Fabiani B, Faucheron JL, Giannini A, Gurland B, Hahnloser D, Joukhadar R, Mannella P, Mereu L, Martellucci J, Meurette G, Montt Guevara MM, Ratto C, O'Reilly BA, Reisenauer C, Russo E, Schraffordt Koops S, Siddiqi S, Sturiale A, Naldini G. *Surg Endosc.* 2023 Jul;37(7):5215-5225. doi: 10.1007/s00464-023-10001-4. Epub 2023 Mar 23. PMID: 36952046 Free PMC article.
- **M1 transcranial direct current stimulation augments laparoscopic surgical skill acquisition.**
Galvin D, Toth AJ, O'Reilly B, O'Sullivan R, Campbell MJ. *Sci Rep.* 2023 Aug 23;13(1):13731. doi: 10.1038/s41598-023-40440-x. PMID: 37612337 Free PMC article. Clinical Trial.
- **Can obesity impact mesh exposure rate after mid-urethral sling operation? Medium term follow-up.**
Daykan Y, Klein Z, Eliner O, O'Reilly BA, Yagur Y, Belkin S, Ribak R, Arbib N, Schonman R. *Eur J Obstet Gynecol Reprod Biol.* 2023 Jan;280:98-101. doi: 10.1016/j.ejogrb.2022.11.014. Epub 2022 Nov 21. PMID: 36442380
- **Correlation between Mediterranean diet, bowel function, and isolated posterior vaginal defect: A cross-sectional study.**
Daykan Y, Ovadia M, Dokic D, Cohen G, Schonman R, Arbib N, Klein Z, O'Reilly BA. *Int J Gynaecol Obstet.* 2023 Jun;161(3):847-853. doi: 10.1002/ijgo.14685. Epub 2023 Feb 7. PMID: 36662747
- **Maintaining the apex: a novel technique for vault suspension during vaginal hysterectomy.**
Daykan Y, Rotem R, Galvin D, O'Sullivan OE, O'Reilly BA. *Int Urogynecol J.* 2024 Jan;35(1):253-256. doi: 10.1007/s00192-023-05666-3. Epub 2023 Nov 8. PMID: 37938398
- **Sinus pericranii (subgaleal varix).**
Finn BP, Crimmins D, Walsh BH, Ni Chroinin M. *Arch Dis Child.* 2020 Nov;105(11):1110. doi: 10.1136/archdischild-2018-316645. Epub 2019 Jul 11. PMID: 31296603 No abstract available.
- **The Periorbital Rash of Neonatal Lupus.**
Thoreby CV, Walsh BH. *J Pediatr.* 2022 Mar;242:258-259. doi: 10.1016/j.jpeds.2021.11.064. Epub 2021 Dec 3. PMID: 34864051 No abstract available.
- **Neuro-Specific and Immuno-Inflammatory Biomarkers in Umbilical Cord Blood in Neonatal Hypoxic-Ischemic Encephalopathy.**
Toorell H, Carlsson Y, Hallberg B, O'Riordan MN, Walsh BH, O'Sullivan MP, Boylan GB, Zetterberg H, Blennow K, Murray D, Hagberg H. *Neonatology.* 2024;121(1):25-33. doi: 10.1159/000533473. Epub 2023 Sep 29. PMID: 37778335 Free article.
- **Smartphone technology enhances newborn intubation knowledge and performance amongst paediatric trainees.**
Hawkes CP, Walsh BH, Ryan CA, Dempsey EM. *Resuscitation.* 2013 Feb;84(2):223-6. doi: 10.1016/j.resuscitation.2012.06.025. Epub 2012 Jul 11. PMID: 22796404
- **Medical management of first trimester miscarriage: a quality improvement initiative**
Deirdre Hayes-Ryan 1, Sharon Cooley 2, Brian Cleary 3 4 Affiliations Expand
PMID: 34426487
- **Follow-up and outcomes of patients with a pregnancy of unknown location: A comparison of two prediction models**
McCarthy, Claire M. et al.
European Journal of Obstetrics and Gynecology and Reproductive Biology, Volume 287, 126 - 129
- **Surgical instrument wrap: a pilot recycling initiative**
Ir J Med Sci 2023 Sep 21
Rooney DJ, Linehan L, Burke C
- **Postmenopausal bleeding: incidence of endometrial pathology with endometrial thickness of 3mm-3.9mm**
Ir Med J. 2023 Feb 23;116(2):728
Treacy T, Stokes J, Rochford M, Geisler M, Burke C
- **A qualitative review of challenges in recruitment and retention in obstetrics and gynecology in Ireland: The consultants' solution based perspective.**
PLoS One. 2022 Dec 28;17(12):e0279635. doi: 10.1371/journal.pone.0279635. PMID: 36576936; PMCID: PMC9797065.
- **Factors influencing medical students' decision to pursue a career in obstetrics and gynaecology**
Ní hÉalaithe C, Howard A, Corcoran P, McCarthy CM, Horgan M, Bennett D, O'Donoghue K, O'Sullivan S. (2023) *PLOS ONE* 18(12): e0288130. <https://doi.org/10.1371/journal.pone.0288130>

