



Contents

Foreword	3
Introduction	5
Our Hospitals	6
Ireland South Women & Infants Directorate Management Structures	10
Executive Management Committee Communication and Collaboration	
Survey on Women's Experience of Maternity Care	14
2018 Highlights	15
Obstetrics Report	24
Gynaecology Services	31
Staff	32
Academic Departments	33
Research and Innovation	36
Appendix 1: Case Reviews	38
Appendix 2: Selection of Publications	41



Clinical Data – List of tables and figures

Obstetric Report

Table 1.0:	Frequency (N) of maternities and births 2014-2018
Table 1.1:	Distribution of maternal and delivery characteristics
Table 1.1a:	Distribution of maternal and delivery characteristics – Spontaneous vaginal delivery
Table 1.1b:	Distribution of maternal and delivery characteristics – Instrumental delivery
Table 1.1c:	Incidence of caesarean delivery per total mothers delivered
Table 1.2:	Induction of labour characteristics
Table 1.3:	Distribution of labour epidurals
Table 1.4:	Distribution of obstetric blood transfusions
Table 1.5:	Inutero transfers admitted
Table 1.6:	Inutero transfers sent out

Perinatal Mortality

Table 2.0:	Perinatal deaths
Table 2.1:	Perinatal mortality rates

Review of Perinatal Mortality

Table 2.2:	CUMH Stillbirths
Table 2.3:	CUMH Early neonatal deaths
Table 2.4:	STGH Stillbirths
Table 2.5:	STGH Early neonatal deaths
Table 2.6:	UHK Stillbirths
Table 2.7:	UHK Early neonatal deaths
Table 2.8:	UHW Stillbirth
Table 2.9:	UHW Early neonatal neaths

Perinatal Pathology

Table 2.10:	Autopsy rate
-------------	--------------

Severe Maternal Morbidity

Table 3.0:	Severe Maternal Morbidity – number of times event occurred
------------	--

Clinical incidents

Table 4.0:	Total clinical incidents as reported to NIMS 2018
------------	---

Staff

Table 5.0:	Overall Ireland South Staff Numbers
------------	-------------------------------------

Gynaecology Services Report

Figure 1.1:	Distribution of births 2014-2018
Figure 1.2:	Distribution of maternal and delivery characteristics 2018 – Nationality

Appendix 1: Ireland South Case Reviews

Table 1:	CUMH case reviews – Stillbirths
Table 2:	CUMH case reviews – Early neonatal deaths
Table 3:	CUMH case reviews – Late neonatal deaths
Table 4:	STGH case reviews – Stillbirths
Table 5:	STGH case reviews – Early neonatal deaths
Table 6:	UHK case reviews – Stillbirths
Table 7:	UHK case reviews – Early neonatal deaths
Table 8:	UHK case reviews – Late neonatal deaths
Table 9:	UHW case reviews – Stillbirths
Table 10:	UHW case reviews – Early neonatal deaths





Foreword

The maternity directorate in the South/South West Hospital Group was established in February 2017, bringing together the four maternity units in the group with UCC as the academic partner. The maternity directorate leads the way as the first maternity network in Ireland. Cork University Maternity Hospital is the tertiary centre alongside the maternity units of South Tipperary General Hospital, University Hospital Kerry and University Hospital Waterford.

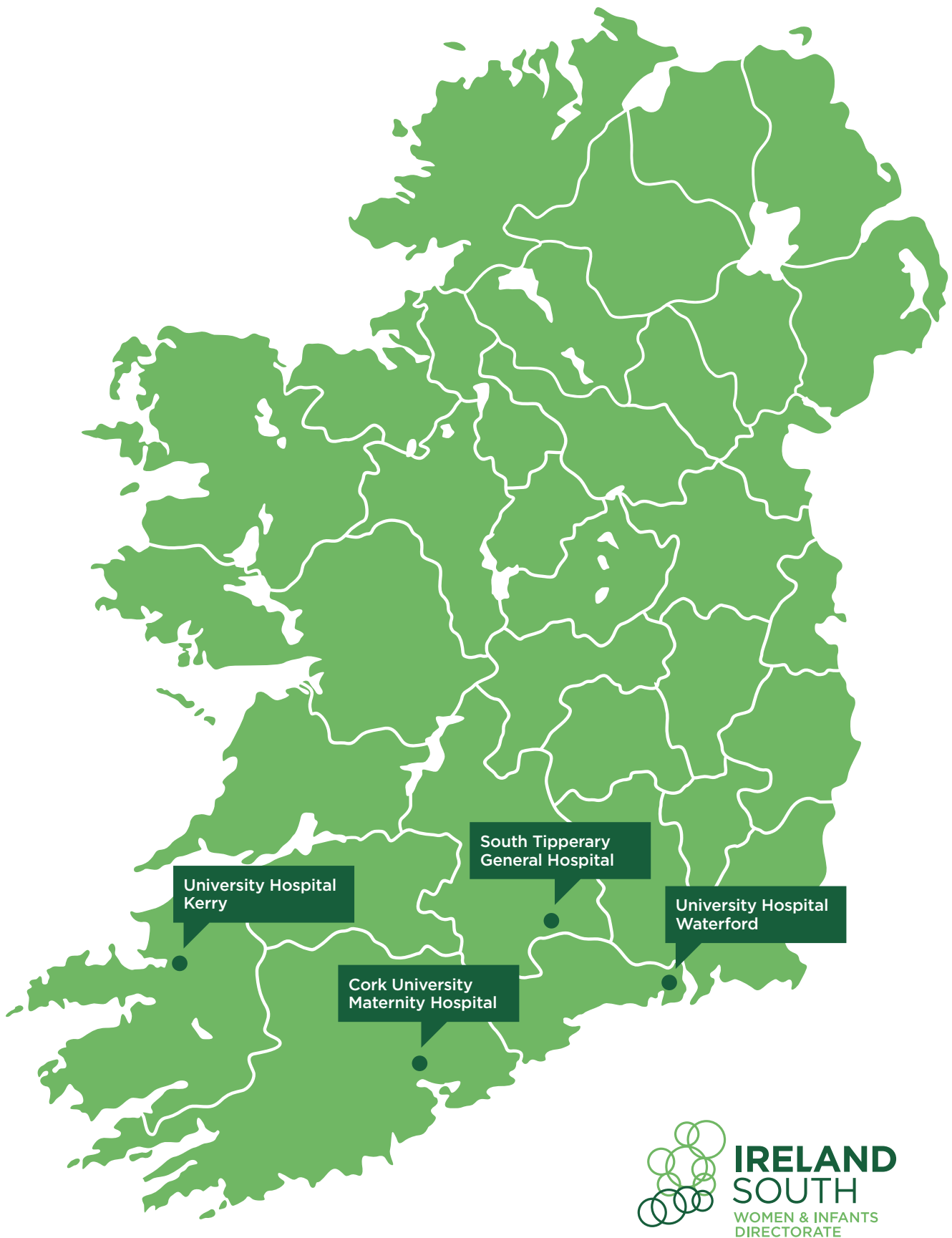
2017 formally established clinical and executive authority over maternity, gynaecology and neonatology services in Cork University Maternity Hospital under the leadership of Professor John R. Higgins. 2018 focused on building a collaborative partnership across the four hospitals and the further establishment of protocols and procedures. From 2019, clinical and executive governance is set to be extended from Cork to the maternity, gynaecology and neonatology services in Tipperary, Kerry and Waterford.

In this 2018 annual report on maternity and gynaecology services in the South/South West Hospital Group, service and clinical performance results are detailed, illustrating the clinical excellence that is delivered on a day-to-day basis. I am proud to present these results as a benchmark for the reporting of regional maternity statistics.

Finally I wish to acknowledge the continuing work and dedication of our staff who deliver services for women and their newborn infants in our four units in Cork, Waterford, Clonmel, and Tralee. I offer sincere thanks to the Executive Management Committee, all the managers who support our staff and the primary care practices who refer to us, for their the consummate professionalism and commitment to Irish healthcare.

Professor Geraldine McCarthy

Chairperson of the South/South West Hospital Group
and Professor Emeritus, University College Cork





Introduction

One fifth of all babies born in the Republic of Ireland are born in the Ireland South Women & Infants Directorate. In 2018 a total of 11,359 mothers delivered 11,603 babies across the four maternity units including Cork University Maternity Hospital, and the maternity units of South Tipperary General Hospital, University Hospital Kerry and University Hospital Waterford. This translates to an average of 32 babies born per day across the group. This figure is similar to 2017.

The Ireland South Women & Infants Directorate leads the way in the development of a clinically-led network of maternity hospitals and units, collaborating and supporting one another and providing many opportunities to achieve real change and improve patient outcomes.

The open door 'no refusals' policy is the first of its kind in Ireland and ensures the safe movement of babies and patients in need of specialist critical care, thanks to ongoing effective co-operation among all four maternity units.

Gynaecology waiting list management remains a key challenge and focus in 2018. Significant progress has been made in reducing the outpatient waiting list in Cork University Maternity Hospital. Figures were down to 2,700 in December 2018 from a high of 4,700 in April 2017. Sincere thanks are due to the teams of multi-disciplinary staff as they continue to pull together to reduce this extraordinary waiting list.

Open communication exists among the four maternity hospitals, and decisions are made collaboratively that enhance the care provided to all mothers and babies in the region. The sharing of clinical expertise, the offering of support to colleagues and the daily communication between the hospitals is proving beneficial to all. In this report we provide detail on the management structures, communications, and strategic frameworks that have been put in place, and outlines some of the highlights of 2018.

Sincere gratitude is extended to the staff of our four maternity units in the timely provision of detailed data for this report. Their commitment to go beyond clinical care and contribute to this important process is ever appreciated.

John R. Higgins

UCC Professor of Obstetrics and Gynaecology
Clinical Director

Our Hospitals



Cork University Maternity Hospital

Professor John R. Higgins, Clinical Director
Olive Long, Director of Midwifery
Miriam Lyons, Business Manager

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 2018, CUMH delivered 7,577 babies.

CUMH maternity services comprises:

- 12 bedded delivery suite
- 87 bedded postnatal ward
- 31 bedded antenatal ward
- 24 bedded gynaecology ward (16 gynaecology and 8 other)
- Stand-alone outpatients department for antenatal, gynaecology, urodynamics, colposcopy and midwifery-led scanning
- Maternity services outreach clinics in Mallow Primary Care Centre, Mitchelstown Primary Care Centre, St Mary's Health Campus, Bantry hospital and Carrigaline Primary Care Centre providing supportive care as outlined in the 2016-2026 Maternity Strategy.

The neonatal intensive care unit at CUMH has 25 special care cots, 21 high dependency cots and 6 intensive care unit cots. CUMH accept babies from STGH, UHW and UHK for specialised treatments such as ventilation and cooling. CUMH also accept babies requiring cooling from University Hospital Limerick, and from other areas when an emergency neonatal unit bed is required.

Clinical midwife specialist posts exist in bereavement and loss, ultrasonography and diabetes. Additional roles include lactation, clinical skills and a perinatal mental health team. The Domino (Domicillary Care Inside and Outside of Hospital) model of care has been in place since 2014, encouraging low risk women towards a natural birth in line with 2016-2026 Maternity Strategy recommendations.

Maternity services at CUMH support the education of undergraduate nursing and midwifery students from University College Cork (UCC). Medical students from UCC also gain clinical experience as part of their placement and this lends to an interdisciplinary teaching environment.

Facilities in the Department of Obstetrics and Gynaecology at CUMH allow students to participate in lectures with study space and video conferencing facilities to link with their colleagues at other sites.

The education team in the Centre for Midwifery Education, CUMH, is committed to the development and provision of programmes of education and training for registered midwives and nurses, to support service delivery and be responsive to on-going service development. All programmes support the development and on-going maintenance of clinical competence and promote evidence based care.



South Tipperary General Hospital

Dr Vijoyashree Hiremath, Clinical Lead, Consultant Obstetrician and Gynaecologist
Sinéad Heaney, Director of Midwifery

South Tipperary General Hospital (STGH) opened in 2008. This hospital provides acute hospital services for the population of County Tipperary. In 2018, STGH delivered 969 babies and provided gynaecology and colposcopy clinics.

STGH maternity unit comprises:

- 2 bedded delivery suite and obstetric theatre
- 28 bedded maternity ward
- 10 bedded gynaecology ward
- 6 bedded special care baby unit
- Outpatients department for antenatal, gynaecology, urodynamics, colposcopy and midwifery-led scanning.

STGH has had full accreditation with the WHO/UNICEF Baby Friendly Health Initiative since 2015, the first in Ireland South to achieve this award, which recognises practices that protect, promote and support breastfeeding. Clinical midwife specialist posts exist in bereavement and loss as well as ultrasonography. Additional roles include lactation, clinical facilitation and perinatal mental health.

Maternity services at STGH support the education of undergraduate medical students from University College Cork and University of Limerick, and undergraduate nursing and midwifery students from University College Cork.

Facilities allow students to participate in lectures with study space and video conferencing facilities to link with their colleagues at other sites.



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 1,801 babies in 2018.

UHW maternity unit comprises:

- 4 bedded delivery suite with a 3 bedded 1 stage room
- Obstetric theatre on delivery suite with a recovery room
- 24 bedded postnatal ward
- 32 bedded antenatal and gynaecology ward that houses the early pregnancy unit and a specifically nominated bereavement room
- 18 cots across the neonatal intensive care unit and special care baby unit
- Stand-alone outpatients department for antenatal, gynaecology, urodynamics, colposcopy and midwifery-led scanning.

The Integrated Hospital and Community Midwifery Services (IHCMS) team offers a DOMINO and home birth model of care in line with 2016-2026 Maternity Strategy recommendations. UHW has full accreditation with the WHO/UNICEF Baby Friendly Health Initiative since 2017 reflecting breastfeeding best practices. Over 100 home births have been facilitated since the inception of the service.

Clinical midwife specialist posts exist in bereavement and loss and ultrasonography. In addition, the Advanced Practice (Midwifery) pathway of care is in place bringing many benefits to education, staff development and clinical supervision of midwifery-led services.

Maternity services at UHW support the education of undergraduate midwifery students from the University of Limerick (UL) and undergraduate nursing students from Waterford Institute of Technology (WIT). UHW also supports elective placements of postgraduate midwifery students from University College Cork (UCC) and Dublin to the Integrated Hospital and Community Midwifery Service (IHCMS) to complete the midwifery and nursing education programme in Waterford.

Medical students from UCC and Royal College of Surgeons Ireland (RCSI) also gain clinical experience as part of their placement and this lends to an interdisciplinary teaching environment.

Facilities allow students to participate in lectures with study space and video conferencing facilities to link with their colleagues at other sites.



University Hospital Kerry

Dr Paul Hughes, Clinical Lead, Consultant Obstetrician and Gynaecologist
Kerry McAuliffe, Director of Nursing

University Hospital Kerry (UHK) opened in 1984. The hospital provides acute general hospital services to the population of Co. Kerry. In 2018, UHK delivered 1,254 babies and provided gynaecology and colposcopy clinics.

UHK maternity unit comprises:

- 4 bedded delivery suite
- 24 bedded postnatal/gynaecology ward
- 9 bedded antenatal ward
- 10 bedded special care baby unit
- Stand-alone outpatients department for antenatal, gynaecology, urodynamics, and midwifery-led scanning.

In 2018, the Ambulatory Gynaecology Clinic at UHK Cill Íde Unit was established as a 'one stop shop' clinic for gynaecological procedures provided in an outpatient setting. A clinical nurse specialist for diabetes is also available for obstetric patients in UHK.

Maternity services support the education of undergraduate nursing students from the Institute of Technology Tralee (ITT). Medical students from UCC also gain clinical experience as part of their placement and this lends to an interdisciplinary teaching environment.

Facilities at UHK allow students to participate in lectures with study space and video conferencing facilities to link with their colleagues at other sites.

Ireland South Women & Infants Directorate Management Structures

Executive Management Committee

The Executive Management Committee (EMC) of the 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 fortnightly.

The EMC has a multidisciplinary membership and deals directly with the clinical service (operations), strategy and planning, and capital development within the maternity units of Ireland South (see Figure 1). 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 2).



Figure 1: The multidisciplinary membership of the EMC

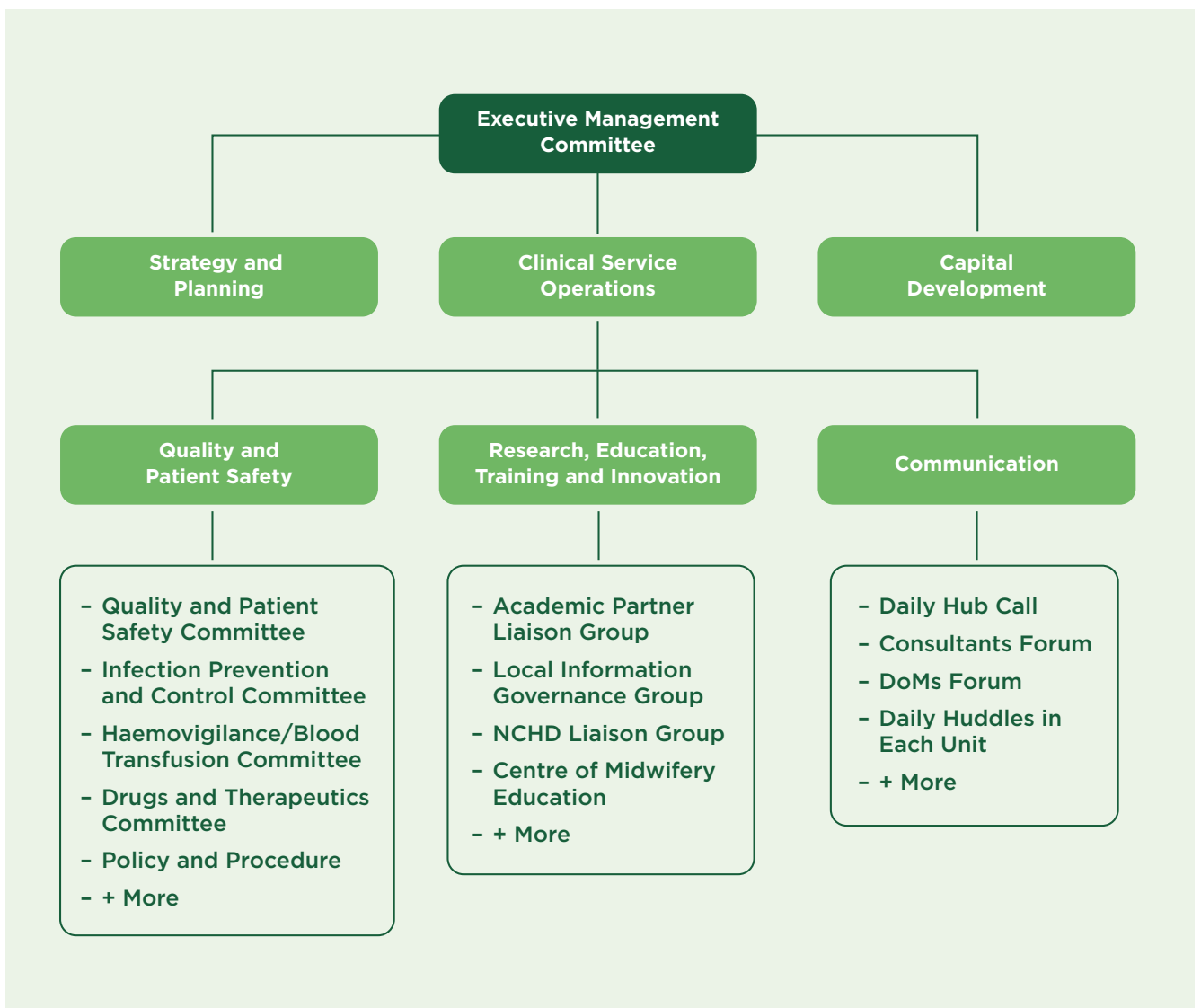


Figure 2: Ireland South EMC Major Work Streams

Executive Management Committee



Professor John R. Higgins
Clinical Director



Dr Eddie O'Donnell
Clinical Lead UHW



Dr Vijoyashree Hiremath
Clinical Lead STGH



Dr Paul Hughes
Clinical Lead UHK



Olive Long
Director of Midwifery, CUMH



Paula Curtin
Director of Midwifery, UHW



Kerry McAuliffe
Director of Nursing, UHK



Sinéad Heaney
Director of Midwifery, STGH



Dr Brendan Murphy
Clinical Lead Neonatology



Dr Mairead O'Riordan
Clinical Lead Quality & Risk,
CUMH



Professor Richard Greene
Chair, Local Information
Governance Group



Miriam Lyons
Business Manager, CUMH



Louise Riordan
Administrative Coordinator



Dervla Hogan
Project Manager, SSWHG



Donna Burtchaell
Communications Project Manager



Michael Hanna
Academic Advisor



Maria Leahy
Health and Social Care
Professions Representative

Communication and Collaboration

Daily Teleconference 'Hub Call'

The four Directors of Midwifery (DoMs), CUMH Business Manager and Clinical Director (or nominated representative) communicate via a succinct teleconference, termed the 'hub call,' each weekday morning.

Maternity Services Working Group for Midwifery

The Maternity Services Working Group for Midwifery meets monthly to discuss the necessary support to enhance and continuously improve evidence based midwifery care in the SSWHG. This group is chaired by the SSWHG Chief Director of Nursing and Midwifery and its membership includes the DoMs from each maternity site.

Neonatology Network

The Neonatology Network facilitates important collaboration between neonatologists in the tertiary centre in CUMH and paediatricians in the maternity units who do not have the services of consultant neonatologists on site. When necessary, referral from STGH and UHK to UHW (rather than to CUMH) can be considered depending on the level of care required.

Consultant Forum

Consultant Obstetricians/Gynaecologists and Consultant Neonatologists in the Women & Infants Directorate attend this forum every 4 weeks (or as otherwise advised) in person or by videoconference. The purpose of the forum is to communicate updates to all consultants in the region.

National Women and Infants Health Programme

The National Women and Infants Health Programme was established in January 2017, to lead the management, organisation and delivery of maternity, gynaecology and neonatal services. Ireland South Women & Infants Directorate management meet with NWIHP on a quarterly basis to ensure the consistent delivery of high quality care in these services and oversee the development of maternity networks nationally.

UltraNews: Newsletter

A quarterly newsletter is distributed to all staff in the Women & Infants Directorate covering interesting news stories from all four maternity hospitals/units, as well as the latest offerings under education and research. This newsletter curates content from staff and is published in both digital and printed formats.



Survey on Women's Experience of Maternity Care

by Dr P. Leahy-Warren (Principal Investigator), Dr H. Mulcahy, Dr R. O'Connell, Ms M. O'Connor, School of Nursing and Midwifery and Dr P. Corcoran, NPEC, UCC

In 2017, a survey took place across the South/South West Hospital Group (SSWHG) whose primary aim was to examine women's experiences of maternity care at a time of significant evolution and restructuring of services in the South/South West region. The key findings are summarised here. Thanks to the women who completed the survey, the nursing and midwifery managers, and the staff and research assistants at all four maternity units who helped facilitate this survey.

Emotional Wellbeing and Mental Health

66% reported being asked about their emotional and mental health during pregnancy.

80% reported being asked about their emotional and mental health during the postnatal period.

Women's Choice

29% reported having the choice of midwifery-led care.

31% reported having the choice about where their antenatal check-ups would take place.

61% reported that they 'had not been provided with any choices' in relation to where they would give birth.

Infant Feeding

58% stated that they had decided how to feed their baby before they became pregnant, **18%** made the decision in early pregnancy, and **9%** did not decide on the method of infant feeding until after the birth.

61% reported breastfeeding for as long as they had planned, whilst **29%** reported that they did not.

Participants: **70%** of women were in their 30s and the majority of them were public patients. **10%** were from another European country, whilst **2%** were from a non-European country.

Antenatal Care Highlights:

- **68%** reported having their first booking at 12 week's gestation or earlier.
- **66%** reported being offered HSE antenatal classes / education.
- **79%** reported that they always had sufficient time to ask questions and discuss their pregnancy during antenatal visits.

Birth Experience Highlights:

- **91%** reported feeling well supported by staff during labour and birth.
- **6.7%** reported having one midwife during labour, nearly a third had two midwives, nearly a quarter had three, **16%** had four, **27%** had five or more.
- The highest proportion of women (**35%**) reported giving birth with their legs supported in stirrups.
- **71%** reported receiving the pain relief they wanted.

Postnatal Care Highlights:

- **81%** reported having skin-to-skin contact with their infant after birth.
- **77%** reported that they felt listened to by staff during the postnatal period in hospital.
- **78%** reported that they saw their PHN often enough, with nearly **20%** wanting more visits and only a small portion wanting fewer (**3%**).



Areas of Good Experience:

Interactions with maternity staff during pregnancy, birth and postnatal period.

Opportunity for skin-to-skin contact following birth.



Areas Needing Improvement:

Continuity of care(r).

Provision of midwifery-led care.

Birth place choices.



2018 Highlights

- Full access to 21-23 week anatomy scans available across Ireland South
- 32 new staff for the Women & Infants Directorate in 2018
- Annual SSWHG Midwifery Conference
- National Maternity Strategy: Ireland South Review 2018
- Mum-to-be Wellbeing Group in STGH
- CUMH second hospital in Ireland to roll out targeted RAADP
- Appointment of Dr Azy Khalid, UHW's new consultant obstetrician and gynaecologist
- CUMH National Quality Award: Best Improvement In Patient Safety
- CUMH Ideas Forum 2018
- Fáilte Ireland National Conference Ambassador Awards
- The introduction of Ambulatory Gynaecology Clinics in UHK

EDUCATION

- First Gold and Scholar Anu Undergraduate Medals in Obstetrics and Gynaecology
- BSc (Hons) Midwifery graduates 2018
- MSc graduates 2018
- Undergraduate Quercus College Scholarships 2018

RESEARCH

- ANSeR Project: Using artificial intelligence (AI) to detect seizures in newborns
- INFANT Research Centre in An Post series
- The Anu Research Medal 2018
- CUMH wins Innovation Award for nutritional products for preterm babies

Full access to 21-23 week anatomy scans available across Ireland South



Since December 2018, all pregnant women across the maternity units of Ireland South Women & Infants Directorate have equal access to a mid-Trimester fetal anatomy scan, carried out between 21-23 weeks. This landmark development would not have been achieved without the support of the Leadership Team of SSWHG, the National Women and Infants' Health Programme and most of all, the sonographers across the Women & Infants Directorate.

This is significant progress as not all maternity unit locations had the required number of trained sonographers available. It has taken considerable time to train and recruit sonographers to ensure an equal service is in place across the region. An ongoing training and development programme will ensure sustainable service provision.

32 new staff for the Women & Infants Directorate in 2018



In March 2018, the National Women and Infants Health Programme (NWIHP) confirmed funding for the recruitment of staff in maternity and gynaecology services in South/Southwest Hospital Group. This is in line with the National Service Plan 2018 that sets out the type and volume of health and social care services to be provided by the HSE, within the funding available.

Additional, vitally needed staff - midwives, consultants, administrative staff and health and social care professionals (HSCPs) - are coming to all four maternity units soon. Recruitment will be ongoing during 2018 and 2019 for these 32 new posts.



Annual SSWHG Midwifery Conference

The annual SSWHG Midwifery Conference was held on 1 May 2018. The theme was 'From 1918 to 2018: Celebrating an on-going journey in midwifery in Ireland (100 years of midwifery regulation)'. Guest speaker, Dr Mary Ross-Davie, Director of RCM Scotland focused on how policy was translated and implemented in midwifery practice in Scotland.

National Maternity Strategy: Ireland South Review 2018



Senior midwives in Ireland South Women & Infants Directorate review progress against the National Maternity Strategy each year. The 2018 review took place in November at the Marymount University Hospital and Hospice auditorium in Cork. Led by Professor John R. Higgins, with presentations by Directors of Midwifery Paula Curtin, UHW, Olive Long, CUMH, Sinéad Heaney, STGH and an update by Carrie Dillon CNM2, UHK, it was a welcome opportunity to come together and discuss progress and challenges as one team.



If you have asked yourself these questions
YOU ARE NOT ALONE
 There's a group that can help.
"MUM - TO - BE WELL BEING"
 Thursday 13th/20th/27th September & 4th October
 10:00am - 12:30pm
 Clonmel Resource Centre, Kikham St, Clonmel.
Take care of you, take care of baby.

Mum-to-be Wellbeing Group in Tipperary

Emma Maloney, Senior Medical Social Worker in South Tipperary Maternity Services set up a new initiative in 2018: a four week 'Mum-to-be Wellbeing' programme focusing on emotional and social wellbeing during pregnancy.

The aim of the programme is to reduce anxiety by providing information and education on the emotional aspect of pregnancy in a supportive, non-judgemental forum. Emphasis was also placed on recognising early warning signs for those women who require input

from the specialist mental health services. This will ensure a comprehensive care plan is in place with the woman and the services involved in their care, including post-natal follow up.

The roll-out in September 2018 is a pilot study. Following an evaluation, it is hoped the programme will be facilitated throughout the year and will be an option to any woman attending South Tipperary Maternity Services who is interested in attending.



CUMH second hospital in Ireland to roll out targeted RAADP

Cork University Maternity Hospital is the second hospital in Ireland to successfully roll out a programme of targeted Routine Antenatal Anti-D prophylaxis (RAADP) for Rhesus negative patients. The key driver for introducing this programme is that targeted antenatal Anti-D prophylaxis reduces the risk of giving unnecessary Anti-D to Rh negative women from 40% to 2%. This benefits the patient by avoiding unnecessary injections and blood products. This programme is cost neutral to the hospital with time required up front saved in the emergency room at a later date.

Dr Khalid, UHW's new consultant obstetrician and gynaecologist

Dr Azy Khalid joined as a new consultant obstetrician and gynaecologist in University Hospital Waterford in 2018 - the first female consultant in the maternity unit.

Originally from Malaysia, Dr Khalid came to Ireland in 2000 to study, and graduated in 2005 from Trinity College Dublin. After a number of years as a non-consultant hospital doctor, Dr Khalid did her research Medical Doctorate in UCC on 'Obstetric Ultrasound in the Low-Risk Irish Population' and entered the Higher Specialist Training scheme afterwards.

Dr Khalid aims to strengthen pregnancy loss services and to develop an ambulatory gynaecology service in UHW. This should provide a more efficient pathway for patients with abnormal uterine bleeding whilst cutting down on outpatient waiting lists and theatre expenditure.



CUMH National Quality Award: Best Improvement In Patient Safety

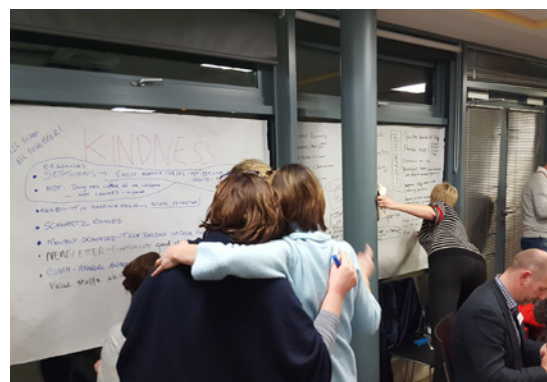
Cork University Maternity Hospital (CUMH) were delighted to win the "Best Improvement in Patient Safety" in relation to C-section wound outcomes at the Irish Manufacturing and Surgical Trade Association (IMSTA) awards in 2018.

This was a collaboration between CUMH and Smith & Nephew. The project was led by Dr Mairead O'Riordan, Lorraine O'Connor, Claire Everard and Pat McCluskey from CUMH, with support from Nigel Clancy and Susanne Busted of Smith & Nephew.

The project ran from March 2016 to March 2017 looking at the clinical outcomes and cost effectiveness of PICO™ disposable negative pressure wound therapy in high risk C-sections patients. The results



were phenomenal. The surgical site infection rate was reduced to 2.51% with a readmission rate of 2.01% with major cost savings and capacity release for CUMH. Smith & Nephew presented the award to CUMH.



CUMH Ideas Forum 2018

The first ideas forum held in CUMH in January 2018 was set up to look at ideas that could improve workflow, use of space and patient care on the CUMH ground floor. Supported by the Quality Improvement Division and led by Dr Nóirín Russell, consultant obstetrician and gynaecologist, this initiative is hoped to be repeated in the other maternity units in 2019/2020.

The top ideas that staff selected to work on, with the agreement of CUMH senior management, were as follows, and many more not listed here are already in progress in other forums:

CUMH Ideas for Action Planning Forum 6 Sept 2018

1. Induction of labour: Designated person in charge to ensure oversight and balancing of numbers on a daily basis
2. Induction of labour: Reviewing the location / use of space for inductions
3. Support for efficient patient transfers between wards and departments in CUMH
4. Waiting room for ERPC and gynaecology pre-operative patients
5. Transforming/redesigning birthing suite rooms
6. Avoiding prolonged preoperative fasting (gynaecology patients)

7. Improving the patient experience of lifts (eg feet first to preserve dignity)
8. Educating staff about benefits of laboratory chutes (PODS) for transfer of specimens
9. Newsletter to share information with staff
10. Improving staff wellbeing

The next stage, the CUMH Ideas for Action Planning Forum, took place in September 2018 to progress the top ideas. Nearly 50 staff came together outside their normal working hours, and made time to develop practical solutions to the ideas they felt strongest about.

Feedback on the action planning ideas forum has been hugely positive:

- 95% felt their contribution was very much or extremely a) acknowledged and b) valued.
- 84% felt very much or extremely engaged in their work following these sessions.

Teams have since been working together to develop their suggestions and were invited back in November to present their carefully thought out solutions to CUMH management and to start progressing the ideas to action.



Fáilte Ireland National Conference Ambassador Awards

Fáilte Ireland National Conference Ambassador Awards took place in Christ Church Cathedral Dublin on Friday, 23 November 2018. Fáilte Ireland honoured 83 (of which 12 are UCC academics) of its leading Conference Ambassadors at the Award Ceremony.

Dr Keelin O'Donoghue was presented with a Conference Ambassador award, recognising her contribution to conferencing in Ireland. Keelin was instrumental in delivering the International Stillbirth Alliance Conference in Cork in 2017.

Professor Geraldine Boylan was given special recognition on the night for her significant contribution to international conferencing in Ireland, taking home the Conference Ambassador of the Year Award. Geraldine Boylan is a Professor of Neonatal Physiology in the Department of Paediatrics and Child Health, University College Cork, and Director of the INFANT Research Centre. In 2015, Professor Boylan won her bid to host the 9th International Conference on Brain Monitoring and Neuroprotection in the Newborn in Cork. Having hosted a successful conference, Geraldine won it again for 2017, this time bringing the delegates to her home county of Kerry.



The benefits of Ambulatory Gynaecology Clinics in UHK

The Ambulatory Gynaecology Clinic at UHK Cill Íde Unit was established in April 2018 and is a 'one-stop-shop' clinic for gynaecological procedures provided in an outpatient setting. The clinic currently provides services such as outpatient hysteroscopy, removal of missed Mirena coil, insertion and removal of coils, polypectomy and vulval biopsy. It is also planning to provide endometrial ablation and manual vacuum aspiration in the near future.

Education



First Gold and Scholar Anu Undergraduate Medals in Obstetrics and Gynaecology

At the Department of Obstetrics and Gynaecology in UCC, excellence is rewarded and celebrated. Professor John R. Higgins presented final medical year students Sinéad Flanagan and Sinéad O’Riordan, with the first Anu undergraduate gold and scholar medals in obstetrics and gynaecology in June 2018.

BSc (Hons) Midwifery graduates 2018



On 26 October 2018, 15 students graduated from the BSc (Hons) Midwifery programme in UCC. Claire Cronin, Sophie Ege, Kristie Foley, Caitlyn Horgan, Sarah-Jane Hurley, Natasha Jeggo, Laura Kelly, Megan Kennell-Webb, Stephanie Kirwan, Aoife Mc Donnell, Nadine Murphy, Lorna O’Driscoll, Levi O’Keeffe, Juliet Stark and Aoife Whyte are now registered with the Nursing and Midwifery Board of Ireland (NMBI) and all have sourced employment as midwives in maternity units in Ireland.

Photo: Courtesy of Lafayette Photography



Congratulations MSc graduates

On a sunny Friday in February in UCC, three midwives from CUMH, graduated with an MSc in Midwifery. They are Úna Cahill, Sheila Coughlan and Naomi O’Donovan. Two doctors from CUMH graduated with an MSc in Obstetrics and Gynaecology: Dr Michelle McCarthy and Dr Sabina Tabirca, both CUMH. Congratulations to all!

Undergraduate Quercus College Scholarships 2018



The annual Quercus College Scholarship ceremony, held in Brookfield Health Sciences Complex, College of Medicine and Health, University College Cork took place on Wednesday, 6 December 2018. The Scholarships were awarded to students with the highest aggregate score (an overall grade of First Class Honours) in each degree programme within the College of Medicine and Health.

Three BSc Midwifery students received these Quercus Awards.

- Sarah O’Connor BSc Midwifery Year 2
- Clarisse Lynch BSc Midwifery Year 3
- Eloise Douglas BSc Midwifery Year 4

Research

ANSeR Project: Using artificial intelligence (AI) to detect seizures in newborns

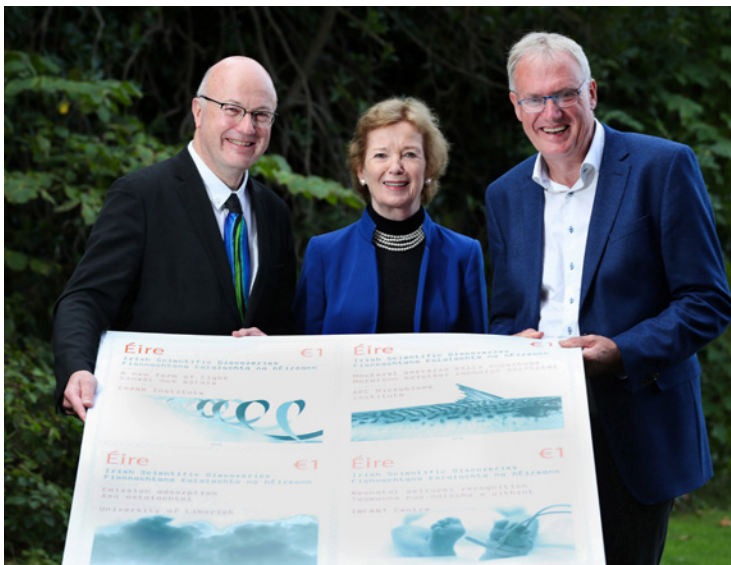
The ANSeR research study at the INFANT Centre, a world leading perinatal research centre in Cork, is focused on diagnosing when babies are suffering from brain injuries and creating algorithms that can detect seizures.

One in every 500 babies is at risk of developing seizures, which need urgent treatment. Unlike adults, newborn infants often do not show any visible signs that they are having a seizure. As a result, the only way to reliably detect seizures in newborns is to use an EEG monitor.

EEG records the tiny electrical impulses from the baby's brain using small sensors applied to the scalp. The equipment and expert knowledge needed to interpret EEG signals are simply not available in many hospitals. Researchers at the INFANT Centre in Cork,



used artificial intelligence (AI) to develop algorithms that can monitor and interpret brain signals. The algorithm can then alert medical staff if there is a problem. By detecting seizures quickly, babies are treated faster with medication. These treatments improve the long term outcomes for these babies who have had a difficult start in life.



INFANT Research Centre in An Post series

An Post unveiled a series of four new stamps in 2018 celebrating scientific discoveries in Ireland, one of which honours work led by the INFANT Research Centre in Cork University Maternity Hospital.

The **Predicting Neonatal Seizures** stamp features the work to prevent brain injury in new-born babies, and is a novel and effective way to ensure the public are aware of the impact of ground-breaking research. INFANT's director Professor Geraldine Boylan, the only female scientist honoured in the series, and her team, Professor Liam Marnane, Dr Andrey Temko and Dr Gordon Lighbody, used artificial intelligence to develop algorithms that can monitor and interpret brain signals. The technology has recently been licensed and will be extended to maternity units worldwide as an early alarm system to help medical staff interpret EEGs and respond immediately.



The Anu Research Medal 2018

The Anu Research Centre is based within the Department of Obstetrics and Gynaecology, UCC in CUMH. Research is focused on the mother and the unborn baby and brings together expert academic and clinical staff.

The prestigious Anu Research Medal is awarded at the end of each academic year to doctors in training who present their research at the Anu Research meeting. Dr Karen McNamara beat 9 other entrants with her research titled 'Serious Adverse Events in Obstetrics and Subsequent Effects on Clinical Activity and Health Care.'

CUMH wins Innovation Award for nutritional products for preterm babies



Cork University Maternity Hospital (CUMH) received the National Health and Social Care Professions (HSCP) Office Driving Quality and Improvement Award for their BabyGrow project in November 2018.

CUMH were recognised for delivering data driven innovations in parenteral nutrition (PN) for preterm babies and their two newly developed products are to be rolled out nationally.

The project, titled *BabyGrow: Translating Research into Improved Nutritional Care for Preterm Infants* is

a true multi-disciplinary effort, led by Dr Ann-Marie Brennan as a Clinical Specialist Neonatal Dietitian.

Using these improved PN products, instead of bespoke individualised prescriptions, has delivered cost savings of approx. €60,000 per annum to CUMH – a 20% saving on overall PN costs – with potential for far greater cost savings nationally. National roll-out will facilitate the nourishment of preterm infants in Ireland to be in line with best evidence-based practice.

Obstetrics Report

Maternal and Delivery Characteristics

Table 1.0: Frequency (N) of maternities and births 2014-2018

	Ireland South	CUMH	STGH	UHK	UHW
Mothers delivered 2018	11,359	7,401	960	1,230	1,768
Mothers delivered 2017	11,354	7,224	979	1,349	1,802
Mothers delivered 2016	11,745	7,442	1,017	1,389	1,897
Mothers delivered 2015	12,343	7,903	1,054	1,389	1,997
Mothers delivered 2014	12,473	7,878	1,434	1,087	2,074
Babies born >500g 2018	11,601	7,577	969	1,254	1,801
Babies born >500g 2017	11,577	7,386	982	1,368	1,841
Babies born >500g 2016	12,011	7,629	1,032	1,410	1,940
Babies born >500g 2015	12,620	8,113	1,062	1,406	2,039
Babies born >500g 2014	12,746	8,071	1,454	1,102	2,119



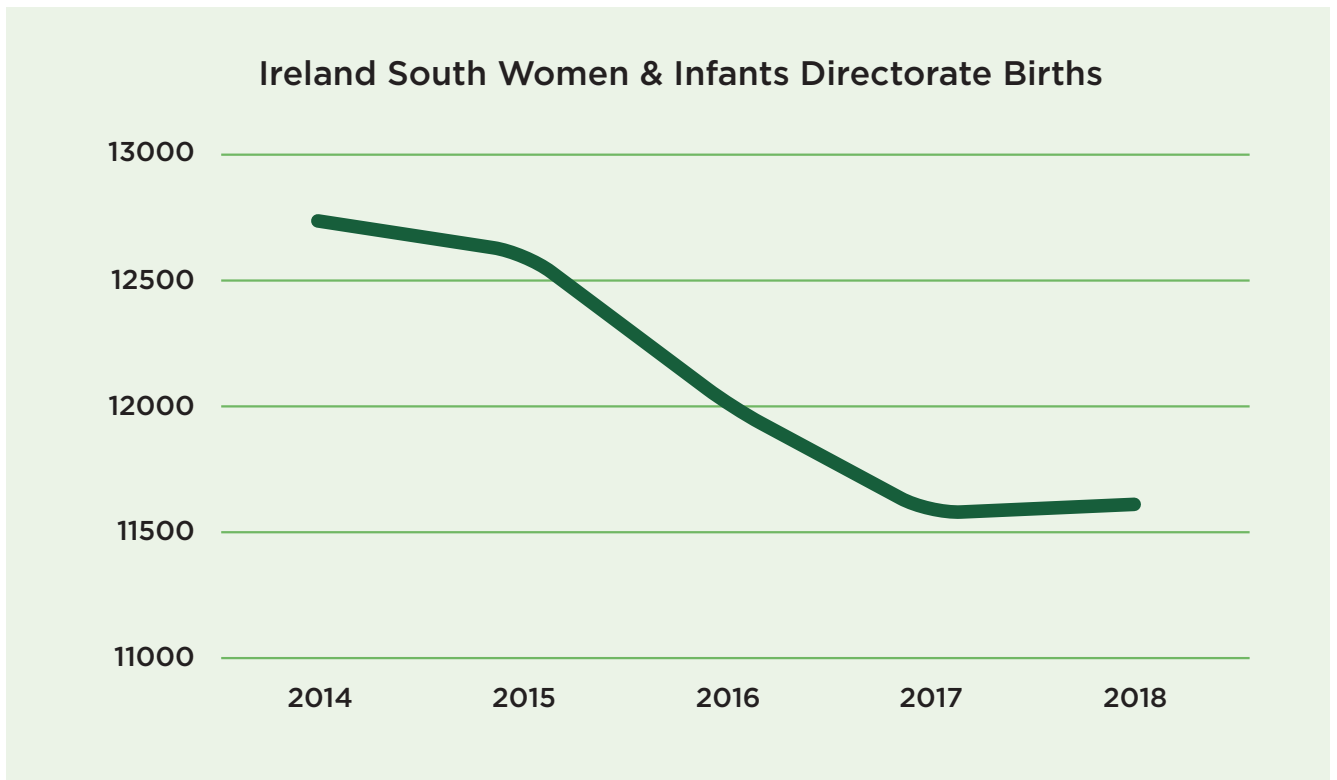


Figure 1.1: Distribution of births 2014-2018 - Ireland South Women & Infants Directorate

19% of all births in the republic of Ireland (ROI)
 Number of births in ROI - 61,016*
 *CSO statistical publication

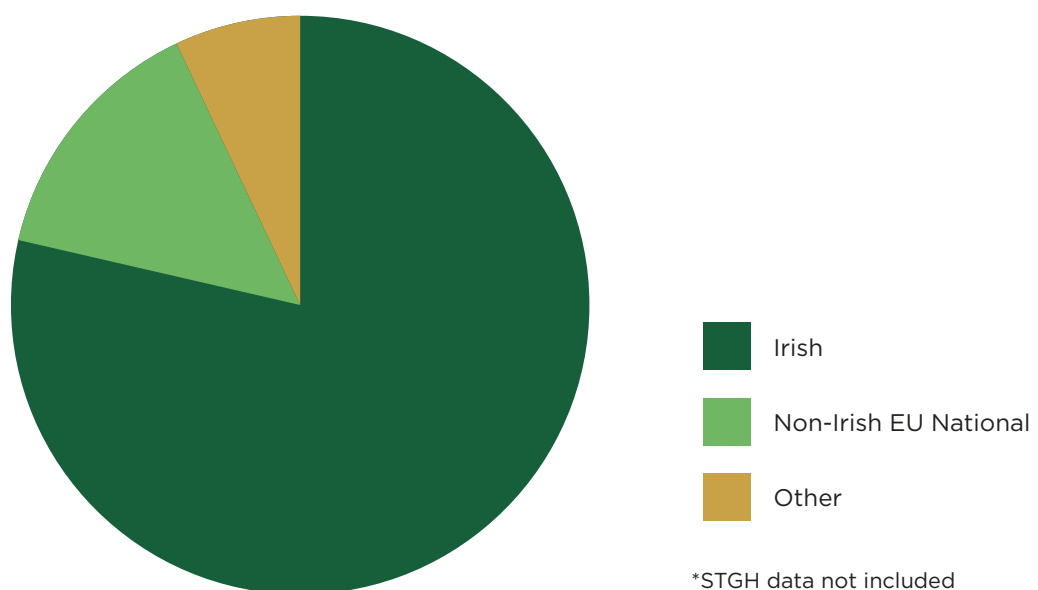


Figure 1.2: Distribution of maternal and delivery characteristics 2018 - Nationality

Table 1.1: Distribution of maternal and delivery characteristics

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Nulliparous	4,257 (37.5)	2,894 (38.6)	300 (31.2)	461 (37.5)	602 (34)
Multiparous	7,095 (62.5)	4,507 (61.4)	659 (68.8)	769 (62.5)	1166 (65)

Table 1.1a: Distribution of maternal and delivery characteristics - Spontaneous vaginal delivery

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Spontaneous Vaginal Delivery (Total)	5728 (50.4)	3,658 (49.4)	469 (48.8)	562 (45.6)	1039 (58.7)

Table 1.1b: Distribution of maternal and delivery characteristics - Instrumental delivery

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Instrumental Delivery (Total)	1855 (16)	1314 (17.8)	108 (11.3)	179 (14.5)	254 (14.4)
Instrumental Delivery nulliparas	1336 (31.4)	956 (33.0)	65 (21.7)	128 (27.7)	187 (31.0)
Instrumental Delivery multiparas	519 (7.3)	358 (7.9)	43 (6.53)	51 (6.63)	67 (5.75)

Table 1.1c: Incidence of caesarean delivery per total mothers delivered

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Caesarean delivery	3,776 (33.2)	2,429 (32.8)	383 (40.0)	489 (39.7)	475 (26.9)
C-sections nulliparas	1,481 (34.7)	982 (33.9)	136 (45.3)	203 (44.0)	160 (26.6)
C-sections multiparas	2,295 (32.3)	1,447 (32.1)	247 (37.5)	286 (37.2)	315 (27.02)

Please note data is unknown in some cases.

Table 1.2: Induction of labour characteristics

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Inductions of labour (Total)	3,922 (35)	2,706 (36.6)	290 (30.2)	303 (24.6)	623 (35.2)
Inductions nulliparas	1,767 (41.5)	1,245 (43.0)	121 (40.3)	153 (33.2)	248 (41.2)
Inductions multiparas	2,155 (30.3)	1,461 (32.4)	169 (25.6)	150 (19.5)	375 (32.2)

Table 1.3: Distribution of labour epidurals

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Labour Epidurals	4460 (39.2)	2970 (40.1)	334 (34.8)	342 (27.8)	814 (46.0)

Table 1.4: Distribution of obstetric blood transfusions

	Ireland South Rate per 1000 (N) (N=11,359)	CUMH Rate per 1000 (N) (N= 7,401)	STGH Rate per 1000 (N) (N=960)	UHK Rate per 1000 (N) (N=1,230)	UHW Rate per 1000 (N) (N=1,768)
Obstetric Blood Transfusions	34.5 (392)	35.3 (260)	27.1 (26)	19.5 (24)	46.4 (82)

Table 1.5: Inutero transfers admitted

	Ireland South Rate per 1000 (N) (N=11,359)	CUMH Rate per 1000 (N) (N= 7,401)	STGH Rate per 1000 (N) (N=960)	UHK Rate per 1000 (N) (N=1,230)	UHW Rate per 1000 (N) (N=1,768)
Inutero transfers admitted	7.0 (80)	5.4 (41)	0 (0)	0 (0)	22.0 (39)

Table 1.6: Inutero transfers sent out

	Ireland South Rate per 1000 (N) (N=11,359)	CUMH Rate per 1000 (N) (N= 7,401)	STGH Rate per 1000 (N) (N=960)	UHK Rate per 1000 (N) (N=1,230)	UHW Rate per 1000 (N) (N=1,768)
Inutero transfers sent out	3.6 (41)	0.14 (1)	15.6 (14)	13.0 (16)	5.6 (10)

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. Sadly, we had 3 maternal deaths in Ireland South in 2018.

- Case A is a woman who died 3 weeks post-natal
- Case B is a woman who died during early pregnancy
- Case C is a woman who died 6 months post-natal

These cases are currently under review with the coroner, the final cause of death awaits confirmation.

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.

*This includes delivery, ectopic pregnancy, miscarriage or termination.

Complications of pregnancy or childbirth can lead to death beyond the 6 weeks postpartum period which is classified as a late maternal death.

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
- **Late Maternal Deaths:** the death of a woman from direct or indirect obstetric causes, more than 42 days, but less than 1 year after termination of pregnancy.

Reference: International Classification of Diseases, 10th Revision, Geneva, World Health Organization, 2004

Perinatal Mortality

Perinatal deaths	Ireland South (N= 11,601)	CUMH (N=7,577)	STGH (N=969)	UHK (N=1,254)	UHW (N=1,801)
Stillbirths	42	30*	2	2	8
Early neonatal deaths	13	8	1	2	2**
Late neonatal deaths	7	6	0	1	0

*Cause unknown for 2 cases

**Cases excluded does not meet criteria

Stillbirth: Baby delivered without signs of life from 24 weeks gestation or with a birthweight $\geq 500g$.¹

Early neonatal death: Death of a live born baby occurring within 7 completed days of birth.

Late neonatal death: Death of a live born baby occurring after the 7th day and within 28 completed days of birth.

¹ Stillbirths Registration Act, 1994.

*As used by the National Perinatal Epidemiology Centre

Table 2.1: Perinatal mortality rates

	Ireland South (N= 11,601)	CUMH (N=7,577)	STGH (N=969)	UHK (N=1,254)	UHW (N=1,801)
Overall perinatal mortality rate per 1000 births	4.7	5.0	3.0	3.1	4.4
Perinatal mortality rate corrected for congenital anomalies	2.4*	2.6*	1.0	1.6	2.7
Stillbirth rate per 1000 births	3.6	3.9	2.0	1.5	4.4
Stillbirth rate corrected for congenital anomalies	2.4*	2.6*	1.0	1.5	2.7
Early neonatal death rate per 1000 births	1.1	1.0	1.0	1.5	0.0
Early neonatal death rate corrected for congenital anomalies	0.0	0.0	0.0	0.0	0.0

*Cause unknown for 2 cases

All infants weighing 500g and/or over 24 weeks' gestation are reported.
All mothers who booked and delivered are included.

Review of Perinatal Mortality

In-depth case reviews are included in Appendix A

Table 2.2: CUMH Stillbirths (n=30)

Cause	Totals
Congenital anomalies	8
Antepartum/Intrapartum Haemorrhage	2
Placental (all causes)	10
IUGR	2
Other	4
Associated Obstetric Factors	2
Awaiting Coroner's PM	2

Table 2.3: CUMH Early Neonatal Deaths (n=8)

Cause	Totals
Congenital anomalies	8

Table 2.4: STGH Stillbirths (n=2)

Cause	Totals
Congenital anomalies	1
Cord	1

Table 2.5: STGH Early Neonatal Deaths (n=1)

Cause	Totals
Congenital anomalies	1

Table 2.6: UHK Stillbirths (n=2)

Cause	Totals
Placental	1
IUGR	1

Table 2.7: UHK Early neonatal deaths (n=2)

Cause	Totals
Congenital anomalies	2

Table 2.8: UHW Stillbirth (n=8)

Cause	Totals
Congenital Anomalies	3
Placental abruption	1
Placental (all causes)	1
Fetal	1
Unexplained / Unclassified	2

Table 2.9: UHW Early neonatal deaths (n=2)

Cause	Totals
Extreme Prematurity	2

Perinatal Pathology

Table 2.10: Autopsy rate

	Ireland South Frequency N (%)	CUMH Frequency N (%)	STGH Frequency N (%)	UHK Frequency N (%)	UHW Frequency N (%)
Stillbirths	26 (61)	22 (73)	0	0	4 (50)
Early neonatal deaths	5	3 (37.5)	1 (100)	1 (50)	0

Overall autopsy rate for Stillbirths and Early Neonatal Deaths is 53.4%

Table 3.0: Severe Maternal Morbidity – number of times event occurred

	Ireland South Frequency N (%) (N=11,359)	CUMH Frequency N (%) (N= 7,401)	STGH Frequency N (%) (N=960)	UHK Frequency N (%) (N=1,230)	UHW Frequency N (%) (N=1,768)
Major obstetric haemorrhage (MOH) Estimated blood loss \geq 2500mls Transfused with \geq 5 units of blood Received treatment for coagulopathy	26	17	5	1	3
Uterine rupture	2	1	0	0	1
Peripartum hysterectomy (PH)	2	2	0	0	0
Eclampsia	5	3	0	1	1
Renal or liver dysfunction	2	2	0	0	0
Pulmonary oedema	2	1	0	1	0
Acute respiratory dysfunction	4	4	0	0	0
Pulmonary embolism	5	5	0	0	0
Cardiac arrest	0	0	0	0	0
Coma	1	0	0	1	0
Cerebro-vascular event	0	0	0	0	0
Status epilepticus	0	0	0	0	0
Septicaemic shock	2	2	0	0	0
Anaesthetic problem	0	0	0	0	0
ICU/CCU admission **please specify indication for admission	12	7	0	0	4 HDU 1 ICU
Other severe morbidity please specify	16	14	0	0	2
Interventional radiology (IR)	0	0	0	0	0

Table 4.0: Total clinical incidents as reported to NIMS 2018

	Ireland South	CUMH	STGH	UHK	UHW
Clinical Incidents	1,648	1,073	136	136	303

Gynaecology Services

General and specialist Gynaecology care is provided throughout Ireland South Women & Infants Directorate. Clinics are run at the four main hospital units as well as outreach clinics in different areas. The following clinics/services are provided in the Ireland South Women & Infants Directorate;

- General Gynaecology and Telephone Follow Up
- Urogynaecology
- Gynaecological Oncology
- Colposcopy
- Paediatric / Adolescent Gynaecology
- Infertility
- Ambulatory Gynaecology
- Postmenopausal Bleeding
- Hereditary Gynaecological Cancers
- Perineal
- Pre-Operative Assessment
- Endometriosis
- Hysteroscopy
- Postmenopausal Bleeding Clinic
- Continence Advice
- Smear Clinics

Gynaecology Waiting List Initiative

Background

In 2017 the CUMH gynaecology outpatient waiting list stood at nearly 4,700 and was one of the biggest risks to the South/South West Hospital Group. In addition, the CUMH waiting list was the highest in Ireland, representing 16% of patients waiting nationally for outpatient gynaecology services. Of the 4,700 patients on the list, nearly 1,500 were long waiters (waiting 15 months+) and a further 2,100 were waiting longer than 12 weeks.

In response, CUMH introduced the Gynaecology Waiting List Initiative. This initiative was developed to tackle the extraordinary CUMH gynaecology outpatient waiting list in the short term and work towards a sustainable model of service delivery and patient care in the medium term.

The primary objectives of the CUMH Gynaecology Waiting List Initiative are:

1. To reduce the CUMH outpatient gynaecology waiting list to 1,000 patients
2. To reduce the average waiting times for gynaecology outpatients to 12 weeks
3. To maximise the number of patients seen in outpatient gynaecology clinics.

Implementation, Tactics and Strategy

To manage this significant workload, an innovative approach was implemented where patients were reclassified into 8 major diagnostic groups:

- These 8 patient cohorts with similar medical issues were then seen together rather than in general clinics leading to a faster throughput of patients
- This new process enabled a better understanding of the type of referrals coming in, allowing for better planning and will lead to a more sustainable model of service delivery.

A focus was put on the numbers and maximising the gynaecology service output through:

- A dedicated Project Manager
- Weekly Gynaecology Steering Group meetings to review the waiting list numbers and plan the Strategy
- Detailed review on new referral demand patterns and specific breakdown by gynaecology sub-specialty to align resources
- An overbooking rate was applied to gynaecology clinics to minimise the impact of DNA's and cancellations.

The extra capacity required was provided through:

- Additional weekly gynaecology initiative and late night consultation clinics
- Major summer teaching clinics (where all doctors in training have been available and all the clinic space has been available to them)
- The commencement of a weekly outreach clinic in Mallow Primary Health Centre in conjunction with GPs in November 2018.

Results

At the end of 2018, the outpatient gynaecology waiting list had reduced to 2,700, from its peak of approximately 4,700 in April 2017. In addition to this, the team also saw nearly 5,000 new patient referrals. The total number of patients waiting over 12 months has reduced from 1,900 to 600 during the period. This initiative will continue in 2019 to ensure a sustainable model of service delivery and patient care is provided throughout all gynaecology services.



Staff

Table 5.0: Overall Ireland South Staff Numbers

Staff	Total number	CUMH	STGH	UHK	UHW
Consultants	31	20	3	4	4
Midwives	611.87	406.75	42.62	52	110.5
NCHDs	93	46	16	14	17
HSCPs*	20.37	17.2	0.97	1.2	1
Administration	71.63	53.33	0.7	5.6	12
Total	827.87	543.28	63.29	76.8	144.5

*includes Dietetics (2.17), Occupational Therapy (0.6), Pharmacy (3.1), Physiotherapy (7.25), Social Work (6.75), Speech and Language Therapy (0.5)

HSCPs	Total	CUMH	STGH	UHK	UHW
Dietetics	2.17	2	0.07	0.1	0
Occupational Therapy	0.6	0.6	0	0	0
Pharmacy	3.1	2.6	0	0.5	0
Physiotherapy	7.25	5.75	0.4	0.6	0.5
Social Work	6.75	5.75	0.5	0	0.5
Speech & Language Therapy	0.5	0.5	0	0	0
Total	20.37	17.2	0.97	1.2	1

Health and Social Care Professionals (HSCPs)

A diverse range of Health and Social Care Professionals are involved in safe, high quality maternity care. The Health and Social Care Professions Group (HSCPs) in the Ireland South Women & Infants Directorate represents the following range of professions as related to maternity services:

- Dietetics
- Occupational Therapy
- Pharmacy
- Physiotherapy
- Social Work
- Speech and Language Therapy

The majority provide services to maternity units and in the general hospital setting.



Academic Departments

Department of Obstetrics and Gynaecology, UCC

The Department of Obstetrics and Gynaecology's aim is 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 the four units of the Ireland South Women & Infants Directorate, thus providing a high quality academic service across a broad range of clinical, educational, maternity 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 a unique postgraduate programme namely the MSc in Obstetrics and Gynaecology programme aimed at clinical trainees in the specialty.

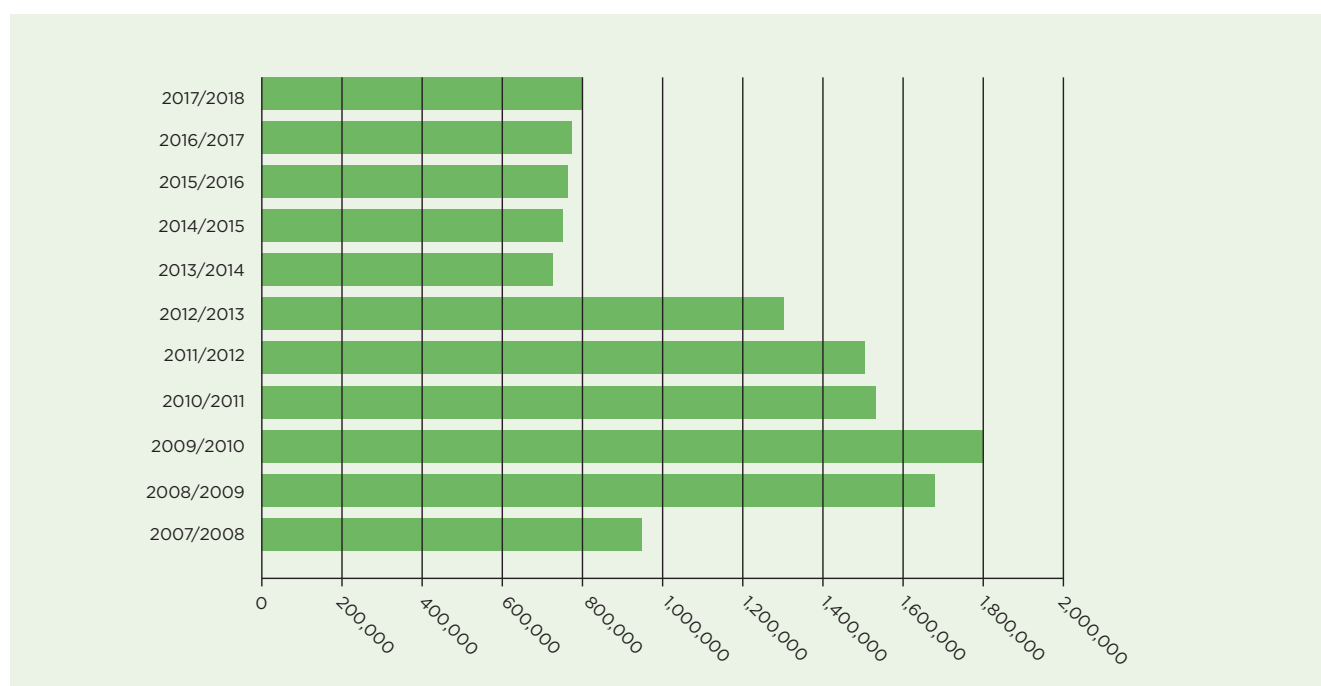


Figure 1: Research Income in the Department of Obstetrics and Gynaecology, 2007-2018

Awards

Anu Research Medal, Anu Research Meeting, Department of Obstetrics & Gynaecology, University College Cork, 15 June 2018

Dr Karen McNamara, PhD student

Anu Undergraduate Gold Medal in Obstetrics and Gynaecology, Department of Obstetrics & Gynaecology, University College Cork, 28 June 2018

Sinéad Flanagan, Undergraduate student

Anu Undergraduate Scholar Medal in Obstetrics and Gynaecology, Department of Obstetrics & Gynaecology, University College Cork, 28 June 2018

Sinéad O'Riordan, Undergraduate student

Prize for Best Poster Presentation. University College Dublin Children's Research Network PhD Symposium September 2018

Stacey Power, PhD student

Prize for Best Oral 5 Minute Rapid Round. Society for Social Medicine Annual Scientific Meeting September 2018

Stacey Power, PhD student

Student Achievements

Postgraduate Diploma in Obstetrics & Gynaecology October 2018

Dr Shurouq Al Khalifa
Dr Moriamo Igbinsosa

Completed MSc in Obstetrics and Gynaecology October 2018

Dr Sabina Tabirca
Dr Michelle McCarthy
Dr Zainab Ashraf

School of Nursing and Midwifery, UCC

Located in the Brookfield Health Sciences Complex, the School of Nursing and Midwifery offers two registerable midwifery programmes in partnership with the Cork University Maternity Hospital; a 4-year BSc in Midwifery and an 18 month post registration Higher Diploma in Midwifery. The BSc in Midwifery has 20 students in each year of the programme and the Higher Diploma in Midwifery has 32 students in each intake. In 2018, 77 undergraduate and 24 postgraduate student midwives are in the service.

Student midwives are supported in practice by the Midwifery Practice Development Officer, Clinical placement Coordinators, Postgraduate Clinical Coordinator, Allocations Liaison Officer and Link

Lecturers. Midwives provide preceptor support to students to ensure that their midwifery competencies are achieved. Midwifery lecturers support students in practice settings and contribute to the PROMPT and NRP multidisciplinary training sessions.

The School offers continuing education for midwives including an MSc Midwifery and two Continuing Professional Development (CPD) modules in conjunction with the Cork University Maternity Hospital. Four midwives from Cork University Maternity Hospital and one midwife from South Tipperary General Hospital undertook the MSc in Midwifery in 2018.



Student Achievements

Completed MSc Midwifery 2018

Una Cahill (CUMH)
Sheila Coughlan (CUMH)
Naomi O'Donovan (CUMH)
Maggie Dowling (STGH)
Antoinette Fletcher (Portlaoise Hospital, Maternity Unit)

COMH Quercus Scholar awards 2018

Sarah O'Connor, BSc Midwifery Year 2
Clarisse Lynch, BSc Midwifery Year 3
Eloise Douglas, BSc Midwifery Year 4

Dr H.H. Stewart Medical Scholarship in Midwifery 2018

2nd prize Amy Fitzgerald, BSc, University College Cork

National student midwife debate University of Limerick 2 May 2018

Arisha Mohammed BSc Midwifery Year 1

Doctor of Nursing 2018

Awarded to Margaret M. Murphy for her thesis entitled 'Experiences of couples in pregnancy after stillbirth: an interpretative phenomenological analysis'.

Supervisors: Dr Patricia Leahy-Warren and Professor Eileen Savage.

Centre of Midwifery Education

The Centre of Midwifery Education (CME) is based in Cork University Maternity Hospital and is committed to the development and provision of programmes of education and training for registered midwives, nurses and the multidisciplinary team, to support service delivery and be responsive to on-going service development. All education programmes support the development and on-going maintenance of clinical competence and promote evidence-based care.

UHW and STGH have access to continuing education through the Nursing and Midwifery Planning and Development Unit (NMPDU) in Kilcreene, Kilkenny and the Regional Centre for Nurse and Midwifery Education (RCNME) based at University Hospital Waterford. A range of the programmes provided by CME are open to staff in UHK.

All programmes provided by the CME carry Continuing Education Units (CEUs) from the Nursing and Midwifery Board of Ireland (NMBI).

Programmes on offer include:

- Anaphylaxis
- Basic Life Support
- Emergency Births in Community Hospitals
- Irish Maternity Early Warning System (IMEWS)
- Intravenous Therapy
- Infant Mental Health Network Group
- K2 Perinatal Training Programme
- Kinderguard Baby Security Training
- Manual Defibrillator Training
- Maternity Critical Care programme
- Midwifery Induction 5 week programmes
- Nurse Induction 5 week programmes
- One day Midwifery and nursing Induction programmes
- Open Disclosure
- People Moving and Handling
- Perineal Repair Workshop
- Practical Obstetric Multiprofessional Training 3 (PROMPT 3)

- Preceptorship
- Preparation for Birth and Parenthood Education Facilitation Module incorporating the promotion, protection and support of normal birth (CUMH/UCC NU 5081/NU 6153)
- Prostin Administration
- Seasonal Influenza Peer Vaccination Programme
- Venepuncture and Peripheral Intravenous Cannulation

The staff of the CME provide Irish Maternity Early Warning System (IMEWS) education with the Practice Development Team. They are also involved in the provision of the Neonatal Resuscitation Programme (NRP) in conjunction with the NRP team in CUMH. In addition a number of programmes offered by the CME employ e-learning including K2 training, venepuncture and peripheral intravenous cannulation.



Research and Innovation

Anu Research Centre

The Anu Research Centre is the dedicated research facility within the Department of Obstetrics and Gynaecology, UCC focusing on the mother and the unborn baby. The Anu Research centre strengthens the Department's commitment to maternity and neonatal healthcare and is central to its aims and philosophy. The Centre is a purpose-built integrated research and clinical centre in human reproduction bringing together expert academic and clinical staff.

National Perinatal Epidemiology Centre

The National Perinatal Epidemiology Centre collaborates with Irish maternity services in order to translate clinical audit data and epidemiological evidence into improved maternity care for families in Ireland. The NPEC has a national focus, working in collaboration with all 19 of Ireland's maternity units: it audits and reviews the practice of the Irish maternity services with a view to deriving learning and making recommendations based on that learning. The NPEC produces annual reports on perinatal mortality in Ireland, maternal morbidity in Ireland, home births in Ireland and very low birth weight babies in Ireland.

At local hospital level, the NPEC provides customised feedback to individual hospitals on how they compare against the national average. The NPEC is funded by the Health Service Executive (HSE) and is based at Cork University Maternity Hospital in the UCC Department of Obstetrics and Gynaecology. *Every time a mother gives birth in Ireland, the important interventions, the good outcomes and the complications are recorded and analysed at a national specialist centre.¹* Unusual trends are easily and quickly observed and most importantly acted on. The NPEC also investigates pertinent research topics in maternal and perinatal health.

¹health.gov.ie/blog/press-release/tanaiste-announces-new-national-perinatalepidemiology-centre-in-cork-university-hospital/

Research and Innovation in Gynaecological Surgery

The Centre for Research and Innovation in Gynaecological Surgery is dedicated to research and innovation. Its facilities include two integrated operating theatres fully linked to the educational facility of UCC within the hospital. The theatres are connected to a Da Vinci surgical platform: this is a precision surgical tool used for the treatment of benign and malignant disease by enabling performance of complex and delicate procedures through small incisions. It leads to significantly less pain, less blood loss, fewer complications, less scarring, a shorter hospital stay and a faster return to normal daily activities. It is utilised in both undergraduate and postgraduate education to demonstrate "live surgery."

The Centre has a strong research agenda, including postgraduate students currently undertaking PhDs and it also facilitates research projects for UCC Final Year Medical students and MSc students. The Cork University Maternity Hospital Department



of Urogynaecology and Pelvic Floor Reconstructive Surgery has been accredited by EBCOG/EUGA as a subspecialty training centre in Urogynaecology and is a recommended centre to visit and train in the International Urogynaecological Association (IUGA).

INFANT

The Irish Centre for Maternal and Child Health Research (INFANT) is Ireland's first maternal and child health research centre and seeks to address the largely unmet global clinical need for innovation in this domain. Tri-located at Cork University Maternity Hospital, Cork University Hospital and UCC with partners in RCSI, NUIG, and TCD, INFANT is founded upon over a decade of world class collaborative research across the continuum of pregnancy, birth, newborn and early childhood period. This is underpinned by strategic research themes in areas such as neuroscience, nutrition and biomedical and a diverse array of national and international academic and industry partnerships.

Since launching in 2013 INFANT has undergone a period of exponential growth and celebrated its 5th year anniversary in 2018. During this phase of rapid growth, INFANT has developed an active grant portfolio of over €35 million, employing 100 staff, working with 35+ industry partners and 30+ international collaborators.

The INFANT research focus is driven by clinical domain needs in maternal and child health, focusing particularly on interventions or events that occur in pregnancy, birth, the neonatal period and early infant development. The research framework for this is a refinement and extension of the core perinatal focus where INFANT began, with thematic research programmes in biomarkers, biomedical engineering, connected health nutrition and therapeutics.

INFANT has developed many world-first scientific breakthroughs, helping clinicians to alleviate these challenges e.g. screening tests for pre-eclampsia, automated detection systems for neonatal seizures and breakthrough therapies for peanut allergy.

Some key achievements during 2018 were:

- INFANT secured almost €8m of new funding in 2018, of which almost 50% is non-exchequer and almost €1m is from Industry.
- INFANT received €600k in Philanthropic Donations to support the Centre's mission.
- Prof. Rhodri Cusack, Thomas Mitchell Professor of Cognitive Neuroscience at Trinity College Dublin, joined the INFANT PI group to deepen and extend capability in diagnostic neuroimaging including functional MRI.

- New investigators: Dr Jane English, Dr Fergus McCarthy and Dr Brian Walsh are now embedded in the INFANT centre and leading programmes in Obstetric and Neonatal Research.
- Our Engineering team won Best Application of AI in an Academic Research Body at the AI Awards in Ireland 2018.
- Prof. Johnathan Hourihane's research led to breakthrough treatment for peanut allergy which was published in the NEJM and JAMA.
- Prof. Geraldine Boylan, Prof. Liam Marnane, Dr Andriy Temko and Dr Gordon Lightbody were honoured with a collector's stamp from An Post.
- Dr Keelin O'Donoghue has been instrumental in the implementation of the National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death in all 19 Irish maternity units.
- INFANT Biobank Manager received the NSAI award in recognition of being instrumental in instrumental in the development of ISO 20387.
- Minister Simon Coveney opened a new €5 million UCC Paediatric Academic Unit. The unit is the new home for both paediatric academic training and the paediatric clinical research team of INFANT.
- INFANT is leading Ireland's participation in the Innovative Medicines Initiative to improve clinical trial infrastructure for children and infants in Ireland – the concet4children (c4c) project.
- INFANT received ISO 9001-2015 accreditation in 2018.

Pregnancy Loss Research Group

The Pregnancy Loss Research Group at CUMH encompasses a multidisciplinary team of doctors, midwives, nurses, administrative staff, social workers and chaplains working collaboratively with the common goal – to provide support and information to parents bereaved by early and late pregnancy loss, promote their emotional, psychological, spiritual and physical well-being, as well as improving professional practice and facilitating research in this area. Research from the pregnancy loss research group has been presented at a wide variety of international conferences around the world. Members of pregnancy loss research group have also been involved in a large number of publications and reports, a selection of which are included under Appendix 2.

Neonatal Research Centre

The Neonatal Research Centre was opened in 2009. This facility is located directly adjacent to the neonatal unit and provides office and desk space for seven research staff. Now incorporated into INFANT, it consists of multidisciplinary researchers with outstanding academic, clinical and research track records. These researchers collectively aim to deliver novel screening and diagnostic tests and innovative therapeutic strategies for adverse pregnancy and neonatal outcomes.

Appendices

Appendix 1: Case Reviews

Table 1: CUMH case reviews – Stillbirths (n =30)

Parity	Gestation (Wks.)	BW (g)	Mode of delivery	Conclusion
5	29+2	1470	Spontaneous Vaginal Delivery	Placental Abruption
1	37+2	3120	Elective Caesarean Section	Trisomy 21
2	35+3	2800	Spontaneous Vaginal Delivery	Placentomegaly: Cytogenetic anomaly
3	38+2	3140	Spontaneous Vaginal Delivery	Severe villous immaturity
3	30+1	1320	Spontaneous Vaginal Delivery	Severe villous immaturity and marginal cord insertion
3	31+2	1300	Elective Caesarean Section	IUGR
3	27+3	500	Breech	Placental Insufficiency
2	41	4150	Spontaneous Vaginal Delivery	Cystic Fibrosis
2	28+2	1100	Spontaneous Vaginal Delivery	No identified cause
0	33+4	1700	Spontaneous Vaginal Delivery	Multiple Fetal Anomalies
1	40	3440	Spontaneous Vaginal Delivery	Acute Placental Abruption
1	22+4	660	Breech	Cervical incompetence
2	35+1	2240	Emergency Caesarean Section	Uterine Rupture Previous Caesarean Section
2	32+5	320	-	Trisomy 18
1	34+1	1040	Breech	Umbilical vein and chronic plate vascular thrombosis associated large bowel perforation
1	28+4	690	Breech	Fetal and maternal vascular malperfusion
0	40+4	3370	Spontaneous Vaginal Delivery	Placental Hypoplasia
2	28+5	570	Spontaneous Vaginal Delivery	IUGR/Fetal Anomalies
1	31+2	1520	Elective Caesarean Section	Fetal Hydrops
0	39+2	3200	Elective Caesarean Section	Awaiting Coroner's PM
2	39+6	2660	Spontaneous Vaginal Delivery	Placental Hypoplasia
4	24+5	140	Spontaneous Vaginal Delivery	Fetal vascular malperfusion and placental insufficiency
2	24+6	550	Spontaneous Vaginal Delivery	Fetal vascular malperfusion as a result of an umbilical cord stricture
1	35+1	1840	Spontaneous Vaginal Delivery	Trisomy 21
0	30+1	1920	Breech	Prolonged ruptured membranes evidence of cord compression
2	38+2	2830	Breech	Awaiting Coroner's PM
0	35+4	2350	Spontaneous Vaginal Delivery	Abruption
0	35+6	2730	Spontaneous Vaginal Delivery	Severe distal villitis immaturity
1	29+3	740	Spontaneous Vaginal Delivery	Placental insufficiency sub chronic haematoma
0	27+5	950	Elective Caesarean Section	Unknown etiology

Table 2: CUMH case reviews - Early neonatal deaths (n=8)

GA	BW (g)	Age (days)	Cause of Death	Place
37+3	2600	3	Complex Thoracic Abnormalities	Crumlin
33+2	2500	1	Pulmonary Hypoplasia in context of lower genitourinary tract obstruction /urethral atresia	CUMH
35+4	2760	1	Pulmonary Hypoplasia due to Thanatophoric Dysplasia	CUMH*
37+0	2080	2	GOLTZ Syndrome	CUMH*
32+4	1350	1	Trisomy 18	CUMH
27+0	1090	2	Pulmonary Hypoplasia associated with PPROM	CUMH
34+1	2000	1	Anencephaly	CUMH*
36+5	2260	2	T21	CUMH

*Booked in other unit

Table 3: CUMH case reviews - Late neonatal deaths (n=6)

GA	BW (g)	Age (days)	Cause of Death	Place
27+5	760	15	Severe Pulmonary Interstitial Emphysema and the presence of DORV	CUMH
24+2	660	15	Extreme Prematurity Necrotising Enterocolitis in a 24+2 week gestation infant	CUMH*
29+0	1660	11	Cystic Adenomatoid malformation of Right Lung in a background of 29 week gestation	CUMH
30+2	1070	8	NEC with perforation from clinicians notes	CUMH
23+5	630	10	Sepsis and multiple septic pulmonary emboli with underlying diagnosis of extreme prematurity due to acute chorioamnionitis	CUMH
24+2	760	10	Bowel perforation with Pneumoperitoneum in an extreme preterm with a grade 4 IVH	CUMH

*Booked in other unit

Table 4: STGH case reviews - Stillbirths (n=2)

Parity	Gestation (Wks.)	BW (g)	Mode of delivery	Conclusion
1	32+4	1,690	Spontaneous Vaginal Delivery	Unknown
4	25+0	710	Spontaneous Vaginal Delivery	Trisomy 21

Table 5: STGH case reviews - Early neonatal deaths (n=1)

GA	BW (g)	Age (days)	Cause of Death	Place
	2,530	1	Trisomy 18	STGH

Table 6: UHK case reviews – Stillbirths (n=2)

Parity	Gestation (Wks.)	BW (g)	Mode of delivery	Conclusion
-	36+0	1950	Spontaneous Vaginal Delivery	Placental
-	29+5	610	Spontaneous Vaginal Delivery	IUGR

Table 7: UHK case reviews – Early neonatal deaths (n=2)

GA	BW (g)	Age (days)	Cause of Death	Place
	2500	1	Anencephaly	UHK
	4100	1	Diaphragmatic Hernia	UHK

Table 8: UHK case reviews – Late neonatal deaths (n=1)

GA	BW (g)	Age (days)	Cause of Death	Place
24+2	660	15	Extreme Prematurity Necrotising Entero Colitis in a 24+2 week gestation infant	CUMH

Table 9: UHW case reviews – Stillbirths (n=8)

Parity	Gestation (Wks.)	BW (g)	Mode of delivery	Conclusion
3+0	29+3	1,189	Spontaneous Vaginal Delivery	Cause unknown
3+0	36+3	5,230	Caesarean Section	Macrosomic baby/ diabetes
2+0	32	1,600	Caesarean Section	Abruption
0+1	37	2,570	Spontaneous Vaginal Delivery	Fetal Maternal Haemorrhage
0+0	37+2	2,040	Spontaneous Vaginal Delivery	Diaphragmatic hernia
1+6	Term+10	3,170	Caesarean Section	Cardiac anomaly
1+0	27+5	1,000	Spontaneous Vaginal Delivery	Cause unknown
0+0	33	1,790	Spontaneous Vaginal Delivery	Fetal anomaly

Table 10: UHW case reviews – Early neonatal deaths (n=2)

GA	BW (g)	Age (days)	Cause of Death	Place
	<500	1	Extreme Prematurity	UHW
	<500	1	Extreme Prematurity	UHW

Appendix 2: Selected Publications

Selection of publications from staff 2018

- Barrett PM, McCarthy FP, Kublickiene K, Evans M, Cormican S, Judge C, Perry IJ, Kublickas M, Stenvinkel P, Khashan AS, Adverse pregnancy outcomes and long-term risk of maternal renal disease: a systematic review and meta-analysis protocol
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- Brennan AM, Kiely M, Fenton S, Murphy B, Standardized Parenteral Nutrition for the Transition Phase in Preterm Infants: Bag That Fits
Nutrients. 2018 Feb; 10 (2): 170
- Brennan AM, Fenton S, Murphy BP, Kiely ME, Transition phase nutrition recommendations: a missing link in the nutrition management of preterm infants
Journal of Parenteral and Enteral Nutrition. 2018 Feb; 42 (2): 343-1
- Brown MA, Magee LA, Kenny LC, Karumanchi SA, McCarthy FP, Saito S, Hall DR, Warren CE, Adoyi G, Ishaku S, Hypertensive Disorders of Pregnancy: ISSHP Classification, Diagnosis, and Management Recommendations for International Practice
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National Perinatal Epidemiology Centre, Cork, 2018
- Drummond L, Twomey A, Murphy BP, Corcoran P, Greene RA, on behalf of NICORE Republic of Ireland, 'Very Low Birth Weight Infants in the Republic of Ireland Annual Report 2016'
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Autism Dev Disord. 2018 Jun 13. doi: 10.1007/s10803-018-3626-6. PMID: 29948531
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BMC Health Services Research 2018; Dec 18;18(1):978. doi: 10.1186/s12913-018-3782-6
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Journal of Reproductive and Infant Psychology (CJRI) 19 June 2018 https://doi.org/10.1080/02646838.2018.1477242
- Leahy-Warren, P; Mulcahy, H, Influencing Ireland's community nursing and midwifery policy (Chapter Policy Impacts)
College of Medicine and Health Research for a Healthier Future UCC: Cork (2018)
- Leahy-Warren, P., Varghese, V., Day, M. R., and Curtin, M., Physical restraint: Perceptions of nurse managers, registered nurses and health care assistants
International Nursing Review. 9 Feb 2018 http://onlinelibrary.wiley.com/doi/10.1111/inr.12434/full
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Wojcieszek AM, Shepherd E, Middleton P, Lassi ZS, Wilson T, Murphy MM, Heazell AEP, Ellwood DA, Silver RM, Flenady V, Care prior to and during subsequent pregnancies following stillbirth for improving outcomes *Cochrane Database of Systematic Reviews* 2018, Issue 12. Art. No.: CD012203. DOI: 10.1002/14651858.CD012203.pub2

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British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

British Journal of Obstetrics and Gynaecology 2018; 125 (Suppl S2): 19

CD McKeown, C NiLaighin, KI Ismail, A Hannigan, K O'Donoghue, A Cotter, G Burke,

Antenatal detection of small for gestational age by universal single-scan screening in early third trimester

British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018 *British Journal of Obstetrics and Gynaecology* 2018; 125 (Suppl S2): 27

CD McKeown, KI Ismail, C NiLaighin, K O'Donoghue, A Cotter,

Duration of the third stage of labour: Relationship with placental weight and surface area

British Journal of Obstetrics and Gynaecology 2018; 125 (Suppl S2): 52

Dahly D, Li X, Smith H, Khashan AS, Murray D, Kiely M, Hourihane JO'B, McCarthy FP, Kenny LC, Kearney PM, On behalf of the SCOPE Ireland Cohort study and the Cork BASELINE Birth Cohort Study. Associations between maternal lifestyle factors and neonatal body composition in the Screening for Pregnancy Endpoints (Cork) cohort study *European Congress of Epidemiology, Lyon, France July 2018*

DH Ryan, S Meaney, LC Kenny, K O'Donoghue,

Gestational distribution of placental growth factor in multiple pregnancy: a cross sectional prospective study
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

British Journal of Obstetrics and Gynaecology 2018; 125 (Suppl S2): 63

DH Ryan, S Meaney, C McCarthy, LC Kenny, K O'Donoghue,

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British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

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ISOM, Amsterdam, 6-7 October 2018
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A five year review of fatal fetal anomalies in a large Irish tertiary maternity hospital
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

British Journal of Obstetrics and Gynaecology 2018; 125 (Suppl S2): 101

Lydia Jane Leon, Fergus P McCarthy, Kenan Direk, Arturo Gonzalez-Izquierdo, Lucy Chappell,

Preeclampsia and premature cardiovascular disease in a large UK pregnancy cohort
Pregnancy Hypertension. Volume 13, Supplement 1. Pages S1-S174 (October 2018) Page S34

Safi Alqatari, O'Sullivan Aoife, Harney Sinead, Murphy Grainne, Khashan Ali, Kenney Louise, Mccarthy Fergus, The Use of Biologics in Pregnant Women with Chronic Conditions and Adverse Maternal Outcome: A Systematic Review and Meta-Analysis
International Society of Obstetric Medicine, Amsterdam 2018

S Power, K O'Donoghue, S Meaney, Critical discourse analysis on the influence of media commentary on fatal fetal abnormality in Ireland
Society for Social Medicine Annual Conference, Glasgow, 6-8 September 2018
J Epidemiol Community Health 2018;72:A56.

S Power, S Meaney, K O'Donoghue, Knowledge of Perinatal Palliative Care following a Fatal Fetal Diagnosis
22nd International Conference on Prenatal Diagnosis and Therapy, Antwerp, Belgium, 8-11 July 2018
Prenatal Diagnosis 2018;

S Power, S Meaney, K O'Donoghue, Ethical dilemmas and emotional appeal influence of media commentary on fatal fetal abnormality in Ireland
22nd International Conference on Prenatal Diagnosis and Therapy, Antwerp, Belgium, 8-11 July 2018
Prenatal Diagnosis 2018;

S Power, S Meaney, K O'Donoghue,
The Irish Population's knowledge of Fatal
Fetal Anomalies
22nd International Conference on Prenatal
Diagnosis and Therapy, Antwerp, Belgium,
8-11 July 2018
Prenatal Diagnosis 2018;

S Power, S Meaney, K O'Donoghue
Critical discourse analysis on the influence
of media commentary on fatal fetal
abnormality in Ireland
British Maternal and Fetal Medicine
Society 20th Annual Conference, Brighton,
19-20 April 2018
*British Journal of Obstetrics and
Gynaecology* 2018; 125 (Suppl S2): 97

Williamson, R., McCarthy FP, Kenny LC,
McCarthy C,
"144. Investigating the therapeutic effects
of L-Ergothionine as a treatment for pre-
eclampsia"
Pregnancy Hypertension 13: S27

Selection of conference presentations

Devine D, Power S, Meaney S,
O'Donoghue K
An assessment of UCC student's
knowledge of fatal fetal anomaly and
termination of pregnancy for fetal
abnormalities
*New Horizons School of Medicine Research
Conference, Western Gateway Building,
UCC, 6 December 2018*

Leahy-Warren P,
First-time mothers: Social support and
transition to motherhood
*Maternity and Midwifery Conference,
Canterbury-Hurlstone Park RSL, Sydney,
Australia, 16 November 2018*

Leahy-Warren P,
Undertaking a Concept Analysis
*Graduate Study Day, SoN&M, Western
Sydney University, 15 November 2018*

Leahy-Warren P,
The contribution of social support to
emotional well-being and facilitating
women's transition to motherhood
*School of Human Sciences, University
Western Australia, 31 October 2018*

Leahy-Warren, P., O'Connell, R., Corcoran,
P., O'Connor, M., Mulcahy, H,
Women's Experience of Maternity Care in
the S/SWHG: Pregnancy, labour and birth
*South/South West Hospital Group Midwifery
Conference, BHSC UCC, 1 May 2018*

Leahy-Warren P,
First-time mothers: Social support and
transition to motherhood in conference
proceedings
*Maternity and Midwifery Conference,
Canterbury-Hurlstone Park RSL, 16
November 2018*

McCarthy FP,
Panel Discussion. Hypertensive Disorders
of Pregnancy: ISSHP Classification,
Diagnosis, and Management
Recommendations for International
Practice
*International Society for the Study of
Hypertension in Pregnancy annual meeting,
Amsterdam, October 2018*

McCarthy FP,
*Association of Clinical Biochemists in
Ireland, Annual meeting, November 2018*

McCarthy FP,
Eurotox meeting, Paris, June 2018

McCarthy FP,
Prenatal Diagnosis- An update including
NIPT
*GP Study Day, Reproductive Health
Matters, Killarney, April 2018*

Murphy M M, O' Donoghue K, Savage E,
Leahy-Warren P,
Deciding on pregnancy after loss
and hoping for a born alive baby: the
experiences of couples in pregnancy after
stillbirth
*2018 International Conference on Stillbirth,
SIDS and Baby Survival, Glasgow, UK, 7 -
9 June 2018*

Nieuwenhuijze, M., Leahy-Warren, P,
Empowerment in pregnancy and birth: a
concept analysis
*The From Birth To Health, Lisboa, 17 -18
September 2018*

O'Connor, M., Leahy-Warren, P.
Breastfeeding self-efficacy and skin-to-skin
contact in the post-partum period
*South/South West Hospital Group
Midwifery Conference, BHSC UCC, 1 May
2018*

McCarthy, V., Murphy, A., Leahy-Warren,
P., et al,
Development and psychometric testing
of the Clinical Leadership Needs Analysis
(CLeeNA) Instrument for Nurses and
Midwives in conference proceedings
*Nursing and Healthcare Leadership and
Organisational Performance Conference,
TCD, 7 June 2018*

McLoughlin, G.,
'Wearing the Mask of Motherhood'
*World Congress for Midwifery and
Women's Health. Frankfurt, October 2018*

Mc Loughlin, G
The 'Prism' of Maternal Attachment
*South/South West Hospital Group
Midwifery Conference UCC, 1 May 2018*

Selection of oral presentations

ISL Campillo, S Meaney, K O'Donoghue, P
Corcoran,
Ectopic pregnancy and miscarriage hospital
admission in Ireland: incidence, type of
management and morbidity indicators
*Improving Maternal Health - From
Evidence into Action' Conference. The
MAMMI study.
TCD Dublin, 23 October 2018*

R Cotter, K O'Donoghue,
National Review of Perinatal Bereavement
Services in Irish Maternity Hospitals
*2018 Conference on Stillbirth, SIDS and
Baby Survival; ISPID ISA International
Conference
Glasgow, UK, 7-9 June 2018*

M Curtin, Leahy-Warren P.
Humanisation in pregnancy and childbirth:
A Concept Analysis
*From Birth To Health, Held In Lisboa,
From 17 To 18 September 2018*

Vicky Flenady, HE Reinebrant, SH
Leisher; Jessica Sexton; H Blencowe, RM
Silver; JJ Erwich; A Gordon; D Devane, K
O'Donoghue et al,
Development of a standardised approach
to classification of stillbirth and neonatal
death in data-rich settings: The Cork
Classification Consensus 2017 and
Glasgow 2018 Progress
*Conference on Stillbirth, SIDS and
Baby Survival; ISPID ISA International
Conference
Glasgow, UK, 7-9 June 2018*

D Hayes-Ryan, S Meaney, C McCarthy, LC
Kenny and K'O Donoghue,
A comparative study of two Immunoassays
of Placental Growth Factor
*ISOM Annual Conference, Amsterdam, 6-7
October 2018*

D Hayes Ryan, S Meaney, K O'Donoghue,
Retrospective Review of Hypertensive
Disorders of Pregnancy in Multiple Pregnancy
*ANU Research Meeting, University College
Cork, 15 June 2018*

KI Ismail, A Hannigan, P Kelehan, K O'Donoghue, A Cotter,
Antenatal detection of abnormal placental cord insertion across different trimesters: A prospective cohort study
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

C McCarthy, K McNamara, S Meaney, K O'Donoghue,
Risk Perception on the Labour Ward
ANU Research Meeting, University College Cork, 15 June 2018

K McNamara, R Cotter, K O'Donoghue, M Higgins,
Education in Perinatal Bereavement for Clinical Staff in the Republic of Ireland
Conference on Stillbirth, SIDS and Baby Survival; ISPID ISA International Conference Glasgow, UK, 7-9 June 2018

K McNamara, S Meaney, K O'Donoghue,
Serious Adverse Events in Obstetrics; and Subsequent Effects on Clinical Activity and Health Care Practitioners
ANU Research Meeting, University College Cork, 15 June 2018
Awarded Anu Research Medal for Best Oral Presentation

Murphy, M.M.,
Gendered nature of bereavement care: the experiences of couples following stillbirth and the pregnancy that follows
19th International Nursing Ethics Conference/4th International Ethics in Care Conference, University College Cork, 1-2 September 2018

M Murphy, K O'Donoghue, E Savage, P Leahy-Warren,
Deciding on pregnancy after loss and hoping for a born alive baby: the experiences of couples in pregnancy after stillbirth
Conference on Stillbirth, SIDS and Baby Survival; ISPID ISA International Conference Glasgow, UK, 7-9 June 2018

S Power, S Meaney, K O'Donoghue,
General public's knowledge of fatal fetal anomaly
University College Dublin Children's Research Network PhD Symposium 2018, Dublin September 2018
Awarded prize for best oral presentation

S Power, K O'Donoghue, S Meaney,
Critical discourse analysis on influence of media commentary on Fatal Fetal

Abnormality in Ireland.
Society for Social Medicine Annual Scientific Meeting 2018, Glasgow, 6-8 September 2018
Prize for Best 5 Minute Rapid Round Oral presentation

S Power, S Meaney, K O'Donoghue,
Knowledge of Perinatal Palliative Care following a Fatal Fetal Diagnosis
22nd International Conference on Prenatal Diagnosis and Therapy, Antwerp, Belgium, 8-11 July 2018

R Rice, D Nuzum, O O'Connell, K O'Donoghue,
Bereaved parents as active partners in stillbirth research
Conference on Stillbirth, SIDS and Baby Survival; ISPID ISA International Conference Glasgow, UK, 7-9 June 2018

Wojcieszek AM, Shepherd E, Middleton P, Lassi ZS, Wilson T, Margaret M Murphy, Alexander EP Heazell, David A Ellwood, Robert M Silver, Vicki Flenady
Care prior to and during subsequent pregnancies following stillbirth for improving outcomes: A Cochrane systematic review
22nd Annual Congress of the Perinatal Society of Australia and New Zealand (PSANZ), 25–Auckland, New Zealand, 28 March 2018

Selection of poster presentations

ISL Campillo, J Sheehan, S Meaney, K O'Donoghue,
University student's awareness of causes and risk factors of miscarriage: a cross-sectional study
Improving Maternal Health - From Evidence into Action' Conference. The MAMMI study. TCD Dublin, 23 October 2018

D Devine, S Power, S Meaney, K O'Donoghue,
An assessment of UCC student's knowledge of fatal fetal anomaly and termination of pregnancy for fetal abnormalities
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

B Fitzgerald, JE Dahlstrom, C Everard, M Cregan, S Dineen and K O'Donoghue,
Pathology Information Workshop for Advocacy & Support Groups –

International Stillbirth Alliance (ISA) Cork 2017
2018 Conference on Stillbirth, SIDS and Baby Survival; ISPID ISA International Conference Glasgow, UK, 7-9 June 2018

D Hayes-Ryan, S Meaney, A Hodnett and K O'Donoghue,
Retrospective Review of Hypertensive Disorders of Pregnancy in Multiple Pregnancy
ISOM Annual Conference, Amsterdam, 6-7 October 2018

D Hayes Ryan, S Meaney, LC Kenny and K O'Donoghue,
Gestational distribution of placental growth factor in multiple pregnancy: a cross sectional prospective study
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

Ä Helps, S Leitao, K O'Donoghue,
How Do We Best Review Perinatal Deaths?
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

K Hemming, F Breathnach, A Cotter, D Devane, A Hunter, FM McAuliffe, J Morrison, DJ Murphy, A Kashan, B McElroy, A Murphy, E Dempsey, K O'Donoghue, LC Kenny,
PARROT Ireland: Placental growth factor in Assessment of women with suspected pre-eclampsia to Reduce maternal morbidity: a Stepped Wedge Cluster Randomised Control Trial
New Horizons School of Medicine Research Conference, Western Gateway Building, UCC, 6 December 2018

A HU, N Russell, K O'Donoghue,
Pregnancy outcome following prenatal diagnosis of fetal cystic hygroma or increased nuchal oedema in the fetal medicine unit of Cork University Maternity Hospital (CUMH)
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

KI Ismail, A Hannigan, P Kelehan, K O'Donoghue, A Cotter,
2D Ultrasound Of Placental Surface Area And Volume: Relationship To Postnatal Measurements And Neonatal Birthweight
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

CM McCarthy, K McNamara, S Meaney, K O'Donoghue,
Risk Perception on the Labour Ward
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

CM McCarthy, K O'Donoghue,
Recurrent hepatocellular carcinoma in pregnancy: a case report and literature review
ISOM Annual Conference, Amsterdam, 6-7 October 2018

R McConnell, S Meaney, K O'Donoghue,
Influence of cost on contraceptive choices amongst university students
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

R McConnell, S Meaney, K O'Donoghue,
Sexual Health behaviours amongst University Students
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

C D McKeown, Z Marchocki, K O'Donoghue,
An Audit On The Layout Of Electronic Patient Records To Improve Multidisciplinary Communications
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

CD McKeown, C NiLaighin, KI Ismail, A Hannigan, K O'Donoghue, A Cotter, G Burke,
Antenatal detection of small for gestational age by universal single-scan screening in early third trimester
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

CD McKeown, C NiLaighin, KI Ismail, K O'Donoghue, A Cotter,
Duration of the third stage of labour: Relationship with placental weight and surface area in vaginal deliveries
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

E O'Connor, AM Verling, NE Russell and K O'Donoghue,
A five year review of fatal fetal anomalies in a large Irish tertiary maternity hospital

British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

J M O' Leary, MM Murphy,
Bereavement Support and Attachment Based Care in Pregnancy Following Loss.
2018 International Conference on Stillbirth, SIDS and Baby Survival, Glasgow, UK, 7 - 9 June 2018

DH Ryan, S Meaney, C McCarthy, LC Kenny, K O'Donoghue,
Comparison of placental growth factor immunoassays in a multiple pregnancy cohort
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

S Power, S Meaney, K O'Donoghue,
Knowledge of Perinatal Palliative Care following a Fatal Fetal Diagnosis
22nd International Conference on Prenatal Diagnosis and Therapy, Antwerp, Belgium, 8-11 July 2018

S Power, S Meaney, K O'Donoghue,
Ethical dilemmas and emotional appeal influence of media commentary on fatal fetal abnormality in Ireland
22nd International Conference on Prenatal Diagnosis and Therapy, Antwerp, Belgium, 8-11 July 2018

S Power, S Meaney, K O'Donoghue,
The Irish Population's knowledge of Fatal Fetal Anomalies
22nd International Conference on Prenatal Diagnosis and Therapy, Antwerp, Belgium, 8-11 July 2018

S Power, S Meaney and K O'Donoghue,
Critical discourse analysis on the influence of media commentary on fatal fetal abnormality in Ireland
British Maternal and Fetal Medicine Society 20th Annual Conference, Brighton, 19-20 April 2018

S Shiplo, S Meaney, K O'Donoghue,
Maternity Care Providers' Involvement in Research
Junior Obstetrics and Gynaecology Society Annual Scientific Meeting, Royal College of Physicians in Ireland, Dublin, 23 November 2018

AM Verling, D Nuzum, R Cotter, K O'Donoghue, M Higgins,
Learning from each other and working together with families in mind: Perinatal Bereavement Education for Medical and Midwifery students in the Republic of

Ireland
2018 Conference on Stillbirth, SIDS and Baby Survival; ISPID ISA International Conference
Glasgow, UK, 7-9 June 2018

AM Verling, O O'Connell, K O'Donoghue,
Developments in Pregnancy Loss Care Services at Cork University Maternity Hospital 2008-2018
Bereavement Forum for the Implementation of National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death, Croke Park Events Centre, April 26 2018

Selection of invited lectures

K O'Donoghue "Awareness, Experience and Impact of Pregnancy Loss"
INFANT Research Seminar, Cork University Maternity Hospital, Cork, 15 June 2018

K O'Donoghue "Awareness, Experience and Impact of Pregnancy Loss"
Maternal and Fetal Health Grand Rounds, Institute of Human Development, University of Manchester, St Mary's Hospital, Manchester, 5 June 2018

K O'Donoghue "Implementation of National Bereavement Standards"
Bereavement Forum for the Implementation of National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death, Croke Park Events Centre, Dublin, April 26 2018

K O'Donoghue "Why the Bereavement Standards matter"
Bereavement Forum for the Implementation of National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death, Croke Park Events Centre, Dublin, April 26 2018

K O'Donoghue "Facts around Fatal Fetal Anomalies"
Institute of Obstetricians and Gynaecologists Spring Study Day, Royal College of Physicians of Ireland, Kildare Street, Dublin 2, 9 March 2018

J Stratton, "An Update on Ovarian Cancer" for the Oncology Nurses Study Day, University Hospital Waterford, 2018

J Stratton, 2018 Gynaecological Surgical Workshop, CUMH Asserter centre, 2018

