

## MATERNITY SERVICES ANNUAL REPORT 2014

South/South West Hospital Group







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# Foreword

I warmly welcome this first consolidated annual report of the four maternity units in the South/South West Hospital Group and I congratulate all those involved in bringing together under the one cover such a wide array of data on our maternity services for the year 2014. It is our intention that this should become an annual publication of accurate and reliable data that will be widely used by patients, clinicians, managers, media and members of the public.

There are four maternity units in the South/South West Hospital Group – University Hospital Waterford, Kerry General Hospital, South Tipperary General Hospital and Cork University Maternity Hospital – spanning four of the largest counties in the country. "Maternity services" as used in this report includes neonatology and gynaecology as well as midwifery and obstetrics.

An area of such critical importance to so many people must establish and constantly renew its reputation for safe and reliable services and for this it depends on the quality of the clinical staff who deliver it, the effectiveness of the managers and clinical leaders, the corporate support of the hospital group, the patient pathways through which the larger units support the smaller ones, and good communication between staff and patients. It is vital that maternity services are properly resourced to meet the expectations of our patients.

Hospital services for women are constantly in the eye of public attention and often the subject of public censure. This can be unsettling for staff who must often work under great psychological and emotional stress. I want to acknowledge the excellent work that they do and I hope that this report, and others that follow it, will provide a steadying basis of factual information that will speak for itself in authenticating the service they provide.

### **Professor Geraldine McCarthy**

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



# Introduction

The South/South West Hospital Group (SSWHG) serves a population of over 1 million people. Everyday 8,859 staff contribute to our results in cure, care, research and education. Prior to the formation of the Hospital Groups, there were:

- Over 50 acute hospitals, with 19 maternity units, in Ireland operating in relative isolation
- Very few formal links between hospitals
- No formal links between our smaller hospitals and academic sector.

Today, formal links have been established through the formation of six hospital groups, integrated with the academic sector, resulting in increased potential for:

- Higher patient outcomes
- Higher quality services
- More consistent standards of care

- More consistent access to care
- Stronger leadership
- Greater access across all groups to teaching, training, research and innovation.

The Hospital Groups were set up to ensure that each Group has at least one major maternity unit.

All these benefits are available to the maternity and gynaecological services in the new South/South West Hospital Group if we commit to working together to make it happen.

There are four maternity units in our Group, namely Cork University Maternity Hospital (CUMH), University Hospital Waterford, Kerry General Hospital and South Tipperary General Hospital. A number of obstetric and gynaecology clinics also operate in the region.



Cork University Maternity Hospital



University Hospital Waterford



Kerry General Hospital



South Tipperary General Hospital

In 2014 there were 12,473 mothers who delivered 12,746 babies in SSWHG maternity units which translates to an average of 34 births per day across the Group. This represents approximately 20% of the national figure of 67,462 births<sup>1</sup>.

Among the admissions to our neonatal units are the smallest and most demanding of the patients we care for. There were also many thousands of patient visits to our emergency departments and to our gynaecological services. As a demand-led service, we must deal with whoever presents at whatever hour of the day and night. This makes our workload busy, unpredictable, often stressful, occasionally dramatic but never boring and always worthwhile.

We are committed through research and education to furthering our knowledge and applying this knowledge to enhancing the care we provide. Continuing professional development is key to our success.

To mark the establishment of the SSWHG we are bringing the reports of each of our four maternity units together in a single consolidated report for the year 2014.

This is the first time a consolidated report has been produced for maternity services in the hospitals of Kerry, Tipperary, Cork and Waterford. Sincere gratitude is due to the staff of the four maternity units and our gynaecological centre at the South Infirmary Victoria University Hospital (SIVUH) for providing the information requested of them at short notice. As the SSWHG develops greater coordination and integration of services, further data will be included in future years, particularly in the specialties of gynaecology and anaesthetics as it relates to maternity services. The ongoing collation and presentation of data in this report should therefore be regarded as a work in progress.

# **Our Hospitals**

## **Cork University Maternity Hospital**

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 2014, CUMH delivered 8,071 babies and over 14,000 patient contacts were recorded in gynaecology and colposcopy clinics.

CUMH maternity services comprises of:

- 12 bedded delivery suite
- 87 bedded postnatal ward
- 31 bedded antenatal ward
- 3 bedded HDU
- 5 bedded induction ward
- 4 obstetric/gynaecology theatres
- 24 bedded gynaecology ward (16 gynaecology and 8 other)
- Stand alone outpatients department for antenatal, gynaecology, urodynamics, colposcopy and ultrasound scanning department.
- Dedicated gynaecology theatre at SIVUH
- Dedicated emergency room

Maternity Services at CUMH support the education of undergraduate Nursing & 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 at CUMH allow students to participate in lectures with study space and video conferencing facilities to link with their colleagues at other sites.

CUMH is committed to the development and provision of programmes of education and training to support service delivery. All programmes support the on-going maintenance of clinical competence and promote evidence based care.

<sup>1</sup>CSO Publication 29th May 2015 www.cso.ie/en/releasesandpublications/ep/p-vs/vitalstatisticsfourthquarter2014/

## Kerry General Hospital

Kerry General Hospital (KGH) opened in 1984. The hospital provides acute general hospital services to the population of Co. Kerry and beyond. In 2014, KGH delivered 1,454 babies and 2,439 patients contacts were recorded in gynaecology clinics.

KGH maternity services comprises of:

- 4 bedded delivery suite
- 24 bedded postnatal/gynaecology ward
- 9 bedded antenatal ward
- Stand alone outpatients department for antenatal, gynaecology, urodynamics, colposcopy and ultrasound scanning department.

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

### South Tipperary General Hospital

St Joseph's Hospital Clonmel was renamed South Tipperary General Hospital in 2007 following the amalgamation surgical services at Our Lady's Hospital in Cashel and St Joseph's hospital in Clonmel. This hospital provides acute hospital services to the population of Tipperary, West Waterford and South Kilkenny. In 2014, STGH delivered 1,102 babies and over 5000 patient contacts were recorded in the Gynaecology and colposcopy clinics. STGH also has two outlying obstetric clinics in Tipperary town and Thurles which are run on alternate weeks.

STGH maternity Services comprises of:

- 2 bedded delivery suite and obstetric theatre,
- 28 bedded maternity ward which includes antenatal and postnatal patients

- 10 bedded Gynaecology ward
- Stand alone OPD with Antenatal, Gynaecology, colposcopy, foetal assessment and a midwifery led clinic.

Maternity Services at STGH supports the undergraduate Medical students from University College Cork and undergraduate Nursing Students from Waterford Institute of Technology and undergraduate midwifery student from The University of Limerick.

There are Library facilities which allows students to participate in lectures, with study space and video conferencing facilities to link with their colleagues at other sites.

### **University Hospital Waterford**

University Hospital Waterford (UHW) opened in 1952 and rebuilt in 1989. It is one of the busiest acute hospitals in the country. In 2014, UHW delivered 2,119 babies and over 6,300 patient contacts were recorded in gynaecology and colposcopy clinics.

UHW Maternity Services comprises of:

- 4 bedded delivery suite with a 3 bedded stage 1 room
- Obstetric theatre on delivery suite with a recovery room
- 24 bedded postnatal ward
- 32 bedded antenatal gynaecology ward that houses the early pregnancy unit and a specifically nominated bereavement room
- Stand alone outpatients department for antenatal, gynaecology, urodynamics, colposcopy and ultrasound scanning department.

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) as well as elective placements of postgraduate midwifery students from Cork & Dublin to the Integrated Hospital and Community Midwifery Service (IHCMS) to complete the midwifery and nursing education programme in Waterford.

Medical students from University College Cork (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.

# Clinical Data

## Maternal and Delivery Characteristics

	SSWHG		Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford
Mothers delivered	12473	7878	1434	1087	2074
Babies born >500g	12746	8071	1454	1102	2119

### Figure 1.1: Distribution of maternal and delivery characteristics - Nationality

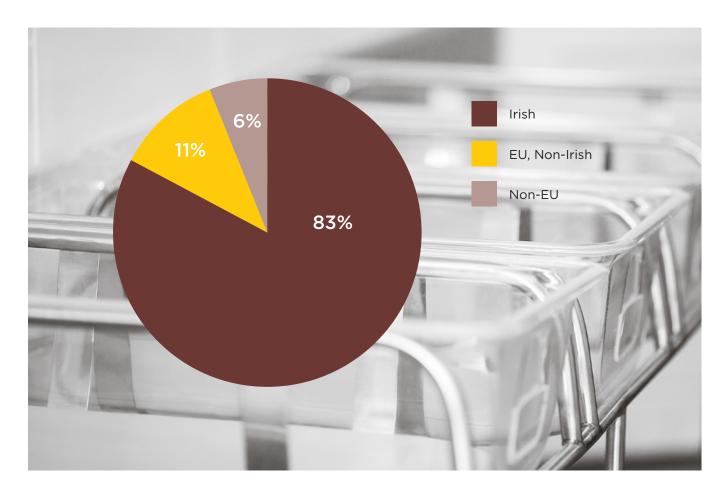


Table 1.2: Distribution of maternal and delivery characteristics						
Parity	<b>SSWHG</b> N (%) (N=12473)	CUMH N (%) (N = 7878)	Kerry General Hospital N (%) (N=1434)	South Tipperary General Hospital N (%) (N=1087)	University Hospital Waterford N (%) (N=2074)	
Nulliparous	4596	2949	491	381	775	
	(36.84)	(37.43)	(34.24)	(35.05)	(37.37)	
Multiparous	7877	4929	943	706	1299	
	(63.15)	(62.57)	(65.76)	(64.95)	(62.63)	

Gestations	<b>SSWHG</b> N (%) (N=12473)	CUMH N (%) (N = 7878)	Kerry General Hospital N (%) (N=1434)	South Tipperary General Hospital N (%) (N=1087)	University Hospital Waterford N (%) (N=2074)
Singleton	12204	7689	1414	1072	2029
	(97.84)	(97.60)	(98.60)	(98.62)	(97.83)
Twin	265	185	20	15	45
	(2.12)	(2.35)	(1.39)	(1.30)	(2.16)
Triplet	4 (0.03)	4 (0.50)	0	0	0



Table 1.3: Distribution of spontaneous and instrumental vaginal birth for all infants							
	<b>SSWHG</b> N (%) N=12746	CUMH N (%) N=8071	Kerry General Hospital N (%) N=1454	South Tipperary General Hospital N (%) N=1102	University Hospital Waterford N (%) N=2119		
Vaginal delivery	8680	5480	959	688	1553		
	(68.09)	(67.89)	(65.95)	(62.43)	(73.28)		
Spontaneous vaginal	6410	3961	737	553	1159		
	(50.29)	(49.07)	(50.68)	(50.18)	(54.69)		
Ventouse	1839	1188	180	116	355		
	(14.42)	(14.71)	(12.37)	(10.52)	(16.75)		
Forceps incl. combined instrumental	398	303	41	19	35		
	(3.12)	(3.75)	(2.81)	(1.72)	(1.65)		
Vaginal breech	33 (0.25)	28 (0.34)	1 (0.06)	0	4 (0.18)		

Table 1.4: Incidence of caesarean delivery for all maternities						
	<b>SSWHG</b> N (%) N=12473		Kerry General Hospital N (%) N=1434	South Tipperary General Hospital N (%) N=1087	University Hospital Waterford N (%) N=2074	
Caesarean delivery	3873	2452	482	404	535	
	(31.05)	(31.12)	(33.61)	(37.16)	(25.79)	
Elective	1979	1291	221	191	276	
	(51.09)	(52.15)	(45.85)	(47.27)	(51.58)	
Emergency	1894	1161	261	213	259	
	(48.90)	(47.34)	(54.14)	(52.72)	(48.41)	

Percentages calculated on caesarean delivery number

Table 1.5: Incidence of maternal high dependency unit admission and hospital readmission							
Admission Status	<b>SSWHG</b> N (%) N=12473		Kerry General Hospital N (%) N=1434	South Tipperary General Hospital N (%) N=1087	University Hospital Waterford N (%) N=2074		
Admission to HDU	489 (3.92)	473 (6.00)	9 (0.62)	5 (0.45)	2 (0.09)		
Readmission after delivery	285 (2.28)	237 (3.00)	8 (0.55)	N/A	40 (1.92)		

 $^{\ast}$  Includes admission to the delivery suite based HDU



## Maternal Mortality

There was one maternal mortality recorded in 2014. This was the tragic death of a multiparous women, aged 36 years, who died at 16 weeks gestation from a subarachnoid haemorrhage (Indirect Maternal Death)

## Perinatal Mortality

Table 1.6: Perinatal deaths						
Perinatal deaths	<b>SSWHG</b> N (%) N=12746		Kerry General Hospital N (%) N=1454	South Tipperary General Hospital N (%) N=1102	University Hospital Waterford N (%) N=2119	
Antepartum deaths	55 (0.43)	36 (0.44)	4 (0.27)	4 (0.36)	11 (0.51)	
Intrapartum deaths	4 (0.03)	3 (0.37)	0	0	1 (0.04)	
Stillbirths	59 (0.46)	39 (0.48)	4 (0.27)	4 (0.36)	12 (0.56)	
Early neonatal deaths	24 (0.19)	16 (0.19)	1 (0.06)	3 (0.27)	4 (0.19)	
Late neonatal deaths	4 (0.03)	3 (0.37)	1 (0.06)	0	0	
Infant deaths	15 (0.11)	6 (0.07)	2 (0.13)	7 (0.63)	0	



Table 1.7: Perinatal mortality rates							
	<b>SSWHG</b> N=12746	CUMH N=8071	Kerry General Hospital N=1454	South Tipperary General Hospital N=1102	University Hospital Waterford N=2119		
Overall perinatal mortality rate per 1000 births	6.51	6.80	3.43	6.35	7.50		
Perinatal mortality rate corrected for congenital anomalies	4.00	4.30	2.00	2.72	5.10		
Stillbirth rate per 1000 births	4.63	4.80	2.75	3.63	5.60		
Stillbirth rate corrected for congenital anomalies	3.22	3.60	0.68	1.82	3.80		
Early neonatal death rate per 1000 births	1.88	2.00	0.68	2.72	1.90		
Early neonatal death rate corrected for congenital anomalies	0.78	0.74	0.68	0.91	1.40		

All infants weighing 500g and/or over 24 weeks gestation are reported

Table 1.8: Stillbirths							
Cause	SSWHG		Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford		
Congenital anomalies	18	10	1	2	5		
Placental abruption	5	5	0	0	0		
Placental (all causes)	16	12	1	2	1		
Cord	3	1	1	0	1		
Fetal	4	4	0	0	0		
Infection	5	5	0	0	0		
Unexplained / Unclassified	8	2	1	0	5		

Table 1.9: Early neonatal deaths							
Cause	SSWHG	СИМН	Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford		
Congenital anomalies	14	10	1	2	1		
Asphyxia	3	2	0	1	0		
Prematurity	5	2	0	0	3		
Pulmonary Hypoplasia	1	1	0	0	0		
Infection	1	1	0	0	0		

Table 1.10: Autopsy						
	SSWHG		Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford	
Stillbirths	38	29	4	1	4	
Early neonatal deaths	9	6	1	1	1	
Late neonatal deaths	1	0	1	0	0	
Infant deaths	0	0	0	0	0	

Overall SSWHG autopsy rate (perinatal death) 54.54%



## Gynaecological Services

Table 1.11: Gynaecological Outpatient Activity						
Clinics	SSWHG	CUMH*	Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford	
General Gynae	19094	9623	2439	3473	3559	
СоІроѕсору	10505	4682	1501	1565	2757	
Total	29599	14305	3940	5038	6316	

\*Includes, South Infirmary Victoria University Hospital, Bantry General Hospital,

St. Finbarrs Hospital, Mallow General Hospital, Cork University Hospital

Table 1.12: Operative procedures						
Gynaecology procedures	SSWHG	CUMH*	Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford	
Major Procedures	1841	1077	127	393	244	
Minor Procedures	2799	1228	504	756	311	
Total	4640	2305	631	1149	555	

\*Includes, South Infirmary Victoria University Hospital, Bantry General Hospital,

St. Finbarrs Hospital, Mallow General Hospital, Cork University Hospital

# Staff

The numbers of administration, allied health professions and support staff working in the maternity services in the entire South/South West Hospital Group were not available for this report. Without their magnificent contribution we could not provide our high quality clinical services.

Table 1.13: Overall SSWHG Staff Numbers						
		Kerry General Hospital	South Tipperary General Hospital	University Hospital Waterford		
Consultants (Obs & Gynae)	16*	4	3	3		
Consultants (Neonatologists)	5*	0	0	0		
Midwives	390	52	42.62	102.50		
NCHDs	47**	13	12	16		

\* 12.2 Obs/Gyn and 4.7 neonatal clinical WTE

\*\* Includes Obs/Gyn and neonatal

# Education, Research and Innovation

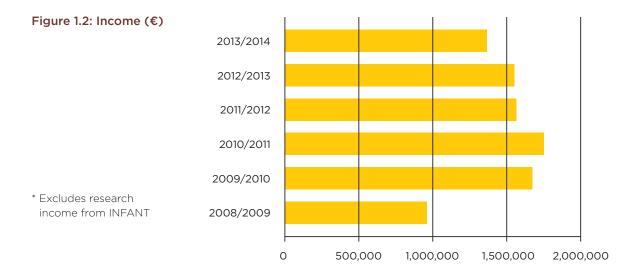




SSWHG support the education of both undergraduate and postgraduate medical, midwifery and nursing students. This leads to an interdisciplinary teaching and learning environment.

## Department of Obstetrics and Gynaecology, UCC

The department is located on the fifth floor of Cork University Maternity Hospital. It provides a formal undergraduate programme to UCC medical students co-ordinated by Dr Mairead O'Riordan. The department also provides a unique postgraduate programme led by Dr Keelin O'Donoghue, namely, the MSc in Obstetrics and Gynaecology, aimed at clinical trainees in the specialty. The aim of the department 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 Cork University Maternity Hospital, thus providing a high quality academic service across a broad range of clinical, educational and research activities.





#### Reports

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### INFANT

INFANT (Irish Centre for Fetal and Neonatal Translational Research) is Ireland's foremost perinatal research centre and seeks to address the largely unmet global clinical need for innovation in the perinatal domain. Based in Cork University Maternity Hospital, INFANT is founded upon over a decade of world class collaborative research and a diverse array of national and international academic and industry partnerships, INFANT is now an international leader of discovery and innovation in perinatal healthcare.

In just its second year, INFANT has undergone a period of exponential growth. By aligning with national research priorities and by nurturing an industry-facing ethos reflecting relevant roadmaps, we have developed an active grant portfolio of almost €25 million.

The INFANT Strategy is, and always will be, to strive for scientific excellence and disruptive innovation in our quest to become the world's leading centre for translational perinatal research. We have a clear vision of how we will achieve this and it is perfectly aligned with national research priorities, continuously informed by industry roadmaps. This work will enable us to deliver scientific excellence, innovation and societal and economic impact now and for the next generation.

### School of Nursing & Midwifery

Located in the Brookfield Health Sciences Complex, the School 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. There are currently 76 undergraduate and 21 postgraduate student midwives in the service. Student midwives are supported in practice by the Midwifery Practice Development Officer, Clinical placement Co-ordinators, 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.

#### **Book Chapters**

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### **Department of Neonatology**

The Neonatal Research Centre was opened in 2009 and this facility is located directly adjacent to the neonatal unit and provides office and desk space for seven research staff. In collaboration with the Neonatal Brain Research Group (NBRG) UCC and the newly established INFANT Centre, the development of the research centre remains a major advance for the research activities of the Department of Neonatology, bringing science and technology closer to the cot side. The INFANT Centre at University College Cork is hosted by the UCC Department of Obstetrics and Gynaecology at Cork University Maternity Hospital and 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.

Research Grants awarded = upwards of €12 million.

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