











## Women's and Children's Directorate

University Hospital Galway
Portiuncula University Hospital
Mayo University Hospital
Sligo University Hospital
Letterkenny University Hospital

**Annual Clinical Report 2015** 

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# Foreword - Dr. Geraldine Gaffney

It gives me great pleasure to introduce the 2015 Annual Clinical Report for the Women's and Children's Directorate.

Once again it is encouraging to see that all the Saolta Group member units have provided statistics for the report and that this has become an integral part of the Annual Clinical Report.

All units in the group faced challenges in 2015 due to limitations of funding, staff shortages and other barriers to our daily work that beset the health service. However, our outcomes that we present in terms of excellent perinatal mortality rates and the sheer numbers of patients that we see and treat allow us to present our statistics transparently and able for close scrutiny.

I wish to thank the contributors who make the report possible with special thanks as ever to Gemma Manning and Niamh Thornbury. Once again I can say that this report serves as a credit to all those who work within the Women's and Children's Directorate across the group.

Speakline Jothan

Geraldine Gaffney Group Clinical Director, Women's and Children's Directorate Saolta University Health Care Group

# Statistical Summary 2015

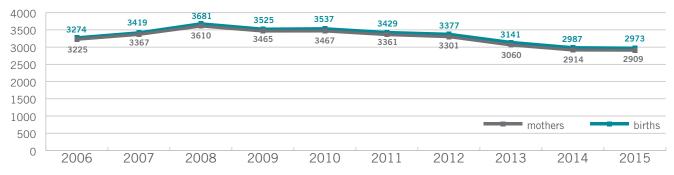
Dr Geraldine Gaffney, Ms Marie Hession & Ms Siobhan Canny.

In 2015, 2973 babies were delivered to 2909 women at GUH. This is a slight increase in the number delivered in 2014. The mode of delivery for the majority were normal vaginal deliveries at 51% and the CS rate remains at 30%. We see that our mothers are of increasing age with 14% being 40 years or more at delivery and 1% being 45 years or more. Of the 394 women who had 1 previous CS,

	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Total Number of Mothers	1148	1761	2909
Total Number of Babies	1183	1790	2973
>24wks or >/= 500gms			

204 attempted labour. Of these 130 delivered vaginally (64%) the remainder requiring a CS in labour. Interestingly, the gestational age, birthweight and parity of our mothers has remained the same over the last 10 years although there has been a small increase in the number of twin gestations. The PNM remains unchanged from previous years.

### No. Mothers/Births over last 10 years



OBSTETRIC OUTCOMES (MOTHERS)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous Onset	571	49.7%	904	51.3%	1475	50.7%
Induction of Labour	432	37.6%	436	24.8%	868	29.8%
No Analgesia	145	12.6%	421	23.9%	566	19.5%
Epidural Rate	745	64.9%	656	37.3%	1401	48.2%
Episiotomy	454	39.5%	155	8.8%	609	20.9%
Caesarean Section	359	31.3%	494	28.1%	853	29.3%
Spontaneous Vaginal Delivery	386	33.6%	1126	63.9%	1512	52.0%
Forceps Delivery	135	11.8%	17	1.0%	152	5.2%
Ventouse Delivery	268	23.3%	117	6.6%	385	13.2%
Breech Delivery	0	0.0%	7	0.4%	7	0.2%
Total	n= 1148		n= 1761		n= 2909	

MULTIPLE PREGNANCIES	PRIMIP (1148)	%	MULTIP (1761)	%	TOTAL	
Twins	34	3.0%	30	1.7%	64	2.2%
Triplets	1	0.1%	0	0.0%	1	0.0%

MULTIPLE BIRTHS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Twins	47	48	63	58	69	66	74	73	69	64
Triplets	1	2	4	1	1	1	1	4	2	1
Total	48	50	67	59	70	67	75	77	71	65

PERINATAL DEATHS	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Stillbirths	3	11	14	0.5%
Early Neonatal Deaths	1	6	7	0.2%

PERINATAL MORTALITY	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth rate (per 1,000)	5	5	5	6	5	3	4	6	5	5
Neonatal Death rate (per 1,000)	2	1	2	3	3	2	2	1	1	1
Overall PMR per 1,000 births	7	6	6	9	8	5	6	7	6	7

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth Rate	0.5%	0.5%	0.5%	0.6%	0.5%	0.3%	0.4%	0.6%	0.5%	0.5%
Neonatal Death Rate	0.2%	0.1%	0.2%	0.3%	0.3%	0.2%	0.2%	0.1%	0.0%	0.2%
Total Rate	0.7%	0.6%	0.7%	0.9%	0.8%	0.5%	0.6%	0.7%	0.6%	0.7%

PARITY	
Para 0 1148	39.5%
Para 1 993	34.1%
Para 2 509	9 17.5%
Para 3 17	1 5.9%
Para 4 59	2.0%
Para 5	1 0.5%
Para 6	7 0.2%
	0.2%
Para 8	2 0.1%

PARITY	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
0	40.5%	40.2%	41.4%	41.1%	43.2%	40.2%	37.9%	38.4%	39.7%	39.5%
1,2,3	56.0%	55.6%	54.5%	55.4%	53.6%	56.3%	58.5%	58.4%	57.3%	57.5%
4+	3.5%	4.2%	4.1%	3.6%	3.2%	3.6%	3.6%	3.1%	3.1%	3.0%

AGE	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
15-19yrs	21	1.8%	4	0.2%	25	0.9%
20-24yrs	118	10.3%	82	4.7%	200	6.9%
25-29yrs	203	17.7%	229	13.0%	431	14.8%
30-34yrs	462	40.2%	515	29.2%	977	33.6%
35-39yrs	263	22.9%	707	40.1%	971	33.4%
40-44yrs	70	6.1%	215	12.2%	285	9.8%
45yrs>	11	1.0%	9	0.5%	20	0.7%
Total	1148		1761		2909	100%

AGE @ DELIVERY	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
15-19yrs	2.6%	2.6%	2.5%	2.4%	2.2%	1.3%	1.5%	1.6%	1.1%	0.9%
20-24yrs	10.6%	10.7%	10.0%	9.3%	9.3%	8.2%	7.4%	6.9%	6.3%	6.9%
25-29yrs	20.8%	21.0%	21.8%	20.9%	20.9%	20.3%	18.4%	16.5%	15.4%	14.8%
30-34yrs	35.9%	34.7%	35.4%	34.6%	36.4%	36.5%	36.0%	35.9%	34.8%	33.6%
35-39yrs	24.7%	25.3%	25.2%	26.7%	25.3%	27.3%	29.5%	32.1%	32.0%	33.4%
40-44yrs	5.2%	5.4%	4.9%	5.9%	5.5%	6.0%	6.8%	6.5%	8.8%	9.8%
45yrs>	0.2%	0.3%	0.2%	0.3%	0.5%	0.3%	0.4%	0.6%	0.6%	0.7%

COUNTY OF ORIGIN	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Galway County	57.9%	56.6%	58.2%	58.9%	56.9%	57.0%	56.3%	54.8%	53.8%	55.0%
Galway City	31.1%	34.4%	33.9%	32.8%	35.9%	35.9%	36.8%	38.9%	39.7%	37.7%
Mayo	2.4%	2.4%	2.3%	2.2%	2.3%	2.3%	3.4%	2.6%	2.3%	2.9%
Roscommon	1.8%	2.0%	1.2%	1.2%	1.3%	1.0%	2.0%	2.4%	1.0%	1.2%
Clare	6.3%	4.2%	4.1%	4.4%	3.2%	3.4%	1.0%	0.8%	2.7%	2.6%
Others	0.5%	0.4%	0.2%	0.5%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%

NON NATIONAL BIRTHS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number	568	675	820	834	929	816	854	732	736	723
%	17.4%	20%	22.7%	23.7%	26.3%	23.8%	25.3%	23.3%	24.6%	24.3%

GESTATION @ DELIVERY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<28 weeks	6	0.5%	7	0.4%	13	0.4%
28 - 31+6	14	1.2%	11	0.6%	25	0.9%
32 - 36+6	65	5.7%	88	5.0%	153	5.3%
37 - 39+6	408	35.5%	906	51.4%	1314	45.2%
40 - 41+6	649	56.5%	745	42.3%	1394	47.9%
42weeks	6	0.5%	4	0.2%	10	0.3%
Total	1148		1761		2909	

GESTATION @ DELIVERY	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<28 weeks	0.3%	0.5%	0.5%	0.6%	0.4%	0.4%	0.3%	0.6%	0.4%	0.4%
28 - 31+6	0.6%	0.7%	0.9%	0.9%	1.0%	0.8%	0.7%	0.9%	0.8%	0.9%
32 - 36+6	4.3%	4.5%	4.8%	5.1%	4.1%	4.9%	4.7%	4.6%	5.3%	5.3%
37 - 39+6	40.8%	42.1%	41.9%	41.8%	41.3%	42.8%	43.1%	47.0%	45.3%	45.2%
40 - 41+6	51.1%	50.2%	50.1%	50.3%	52.6%	50.4%	51.0%	46.5%	47.8%	47.9%
42 weeks	2.8%	1.9%	1.7%	1.2%	0.4%	0.7%	0.2%	0.4%	0.4%	0.3%
Not Answered	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%

BIRTH WEIGHTS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
< 1000gms	6	0.5%	8	0.4%	14	0.5%
1000-1499gms	13	1.1%	15	0.8%	28	0.9%
1500-1999gms	29	2.5%	16	0.9%	45	1.5%
2000-2499gms	39	3.3%	43	2.4%	82	2.8%
2500-2999gms	151	12.8%	175	9.8%	326	11.0%
3000-3499gms	422	35.7%	577	32.2%	999	33.6%
3500-3999gms	369	31.2%	649	36.3%	1018	34.2%
4000-4499gms	132	11.2%	259	14.5%	391	13.2%
4500-4999gms	20	1.7%	44	2.5%	64	2.2%
5000-5499gms	2	0.2%	4	0.2%	6	0.2%
Total	1183		1790		2973	

BIRTH WEIGHTS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<500gms	0.1%	0.1%	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
500-999gms	0.3%	0.6%	0.7%	0.5%	0.7%	0.6%	0.4%	0.6%	0.5%	0.5%
1000-1999gms	1.4%	1.4%	1.6%	2.0%	1.7%	1.7%	1.9%	2.8%	2.1%	2.5%
2000-2999gms	13.6%	13.4%	14.5%	13.9%	14.2%	14.2%	14.8%	15.0%	14.8%	13.7%
3000-3999gms	68.4%	67.1%	66.2%	68.5%	66.3%	68.3%	67.3%	66.4%	66.1%	67.8%
4000-4499gms	14.3%	14.5%	14.2%	13.9%	14.1%	14.1%	15.2%	13.1%	14.4%	13.1%
4500-5000gms	3.1%	2.6%	2.0%	2.4%	2.7%	2.5%	2.5%	1.9%	1.7%	2.2%
5000-5499gms	0.3%	0.2%	0.2%	0.3%	0.2%	0.4%	0.2%	0.1%	0.2%	0.2%
>5500gms	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Number of Babies	3274	3419	3681	3525	3537	3429	3377	3141	2987	2973

INDUCTION OF LABOUR	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2006	396	30.3%	452	23.6%	848	26.3%
2007	398	29.4%	494	24.5%	892	26.5%
2008	482	32.3%	499	23.5%	981	27.1%
2009	446	33.3%	475	23.3%	921	26.6%
2010	483	32.3%	452	23.0%	935	27.0%
2011	429	31.8%	443	22.0%	872	25.9%
2012	439	35.1%	504	24.6%	943	28.6%
2013	418	35.0%	429	22.8%	847	27.7%
2014	431	37.3%	425	24.2%	856	29.4%
2015	432	37.6%	436	24.8%	868	29.8%

PERINEAL TRAUMA	PRIMIP n - 789	%	MULTIP n - 1267	%	TOTAL n - 2056	%
Intact	29	3.7%	277	21.9%	306	14.9%
Episiotomy	452	57.3%	155	12.2%	607	29.5%
2nd Degree Tear	180	22.8%	457	36.1%	637	31.0%
1st Degree Tear	47	6.0%	252	19.9%	299	14.5%
3rd Degree Tear	32	4.1%	21	1.7%	53	2.6%
Other Laceration	49	6.2%	105	8.3%	154	7.5%
Total	789		1267		2056	

INCIDENCE OF EPISIOTOMY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2006	554	59.3%	273	19.1%	827	35.0%
2007	627	64.6%	305	20.5%	932	37.9%
2008	602	58.4%	222	14.4%	824	32.0%
2009	520	52.0%	168	11.2%	688	27.6%
2010	546	53.3%	175	12.0%	721	29.0%
2011	495	53.8%	153	10.5%	648	27.2%
2012	457	51.5%	183	12.1%	640	26.7%
2013	430	55.3%	141	10.7%	571	27.3%
2014	433	55.5%	126	10.4%	559	28.1%
2015	452	57.3%	155	12.2%	607	29.5%

B.B.A.	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2006	1	0.0%	6	0.2%	7	0.2%
2007	1	0.0%	8	0.2%	9	0.3%
2008	0	0.0%	15	0.4%	15	0.4%
2009	3	0.1%	8	0.2%	11	0.3%
2010	3	0.1%	6	0.2%	9	0.3%
2011	2	0.1%	11	0.3%	13	0.4%
2012	0	0.0%	5	0.2%	5	0.2%
2013	1	0.0%	12	0.4%	13	0.5%
2014	1	0.0%	5	0.2%	6	0.2%
2015	1	0.0%	12	0.4%	13	0.4%

3RD STAGE PROBLEMS	PRIMIP		MULTIP		TOTAL	%
Primary PPH(1000mls)	45	3.9%	32	1.8%	77	2.6%
Manual Removal of Placenta	13	1.1%	21	1.2%	34	1.2%
Total	1148		1761			

SHOULDER DYSTOCIA	PRIMIP		MULTIP		TOTAL	
Shoulder Dystocia	13	1.1%	11	0.6%	24	0.8%

FETAL BLOOD SAMPLING	N-1071(BABIES)		N-1422(BABIES)		N-2493	
PH < 7.20	17	1.6%	3	0.2%	20	0.8%
PH 7.20-7.25	39	3.6%	6	0.4%	45	1.8%
PH > 7.25	96	9.0%	95	6.7%	191	7.7%

CORD SAMPLING	N- 1183 (BABIES)		N-1790 (BABIES)		N-2973 (BABIES)	
Cord PH < 7.2	200	16.9%	156	8.7%	356	12.0%
Cord PH 7.2-7.25	125	10.6%	143	8.0%	268	9.0%
Cord PH > 7.25	468	39.6%	499	27.9%	967	32.5%
Total	793	67.0%	798	44.6%	1591	53.5%

CAESAREAN SECTIONS	TOTAL	%
Caesarean Sections 2015	853	29.3%
Caesarean Sections - Singelton	805	28.3%
Caesarean Sections - Multiples	48	73.8%

ROBSON GROUPS 2015	N- CS	N-WOMEN	
Group 1 - nullip singleton cephalic term spont labour	58	535	10.8%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	169	450	37.6%
Group 2a - nullip singleton cephalic term induced	132		29.3%
Group 2b - nullip singleton cephalic term pre-labour C.S.	37		8.2%
Group 3 - multip singleton cephalic term spont labour	7	725	1.0%
Group 4 - multip singleton cephalic term induced or pre-labour CS	35	402	8.7%
Group 4a - multip singleton cephalic term induced	6		1.5%
Group 4b - multip singleton cephalic term pre-labour C.S.	29		7.2%
Group 5 - previous CS singleton cephalic term	345	468	73.7%
Group 6 - all nulliparous breeches	63	63	100.0%
Group 7- all multiparous breeches	39	46	84.8%
Group 8 - all multiple pregnancies	48	65	73.8%
Group 9 - all abnormal lies	20	20	100%
Group 10 - all preterm singleton cephalic	69	135	61%
TOTAL	853	2909	
Total No. of Mothers who had 1 Previous Caesarean Section		394	100.0%
No. of Mothers who opted for an Elective Caesarean Section after 1 previous C	aesarean Section	190	48.2%
No. of Mothers who went into Spontaneous/Induced Labour after 1 previous Ca	aesarean Section	204	51.8%
Outcome for this category	S.V.D	89	43.6%
	Ventouse	32	15.7%
	Forceps	9	4.4%
	Total VBAC	130	63.7%
	Iotal VDAC	100	00.77

# Maternal Morbidity Report

### Cardiac

### 1. 23y P0+0 BMI 29 kg/m<sup>2</sup>

This patient had a past medical history of dilated cardiomyopathy with an implantable cardiovascular defibrillator (ICD) in situ. She was anticoagulated with warfarin also. She had an ECHO during pregnancy that showed normal function of her left ventricle. At 32 weeks the baby was found to be growth restricted but had normal umbilical artery Doppler measurements. While being monitored there were unprovoked decelerations on CTG so a decision for emergency delivery was made. She was delivered of a female infant with normal Apgars. She made an uneventful postnatal recovery.

### 2. 39 y, P 2 (1 SVD and 1 LSCS at 35/40), BMI 45 kg/m<sup>2</sup>

This patient had a history of type 2 diabetes. She was transferred from another hospital 12 days after delivery by CS. This was complicated by pneumonia, hypertension and a critical cardiac event that required admission to ICU. When she had been stabilised she was transferred to GUH. There she was found to have a moderately dilated left ventricle with an ejection fraction of 30 to 35%. She recovered following medical treatment and was discharged on day 18. She presented again on day 39 with a wound infection that was treated with antibiotics for 5 days after which she was discharged again.

### Respiratory

### 1. 33 y, Par O, normal BMI

This patient had a history of Hodgkin's lymphoma (stage 2 B in 2010), DVT& PE and sarcoidosis that was thought to be secondary to chemotherapy. She had prophylactic heparin anticoagulation throughout the antenatal period. The pregnancy was uneventful and at 41 weeks labour was induced. However, due to a NRCTG in labour she had a LSCS. At 2 days post natal she was found to have low O2 saturation (88%) and a right sided wheeze with crepitations. She was commenced on oxygen and hydrocortisone for left basal atelectasis. A CT scan found a small pleural effusion that was treated with frusemide. There was mild heart failure and no PE, and she had a normal ECHO. By day 6 her condition had stabilised and the impression was of deteriorating existing lung disease.

### 2. 20 y, P0, BMI 19

This patient had a history of an anterior mitral valve prolapse and asthma. She had had a previous ICU admission due to asthma in the past. At 25 weeks she presented with an acute exacerbation of asthma precipitated by infection and was treated in ICU with steroids, salbutamol and Beclazone inhalers, antibiotics and oxygen therapy. She was persistently tachycardic and was treated with labetalol. She had positive swabs for Influenza A. She had a 10 day admission following this was discharged and had no further exacerbation during the pregnancy. At term she presented with a SROM but she failed to establish in labour and labour was augmented. She had a LSCS for failure to progress and was delivered of a healthy female infant and had an uneventful post natal period.

#### **Endocrine**

#### 1. 32 y, P1, normal BMI.

This lady had a previous emergency caesarean section in 2009 at 37 weeks for pre-eclampsia. She had pregestational diabetes for 25 years, complicated by nephropathy, neuropathy and retinopathy. She had Graves' disease also. She attended the diabetic pre-conception clinic and thereafter booked at 5 weeks gestation. She had hypertension and proteinuria due to diabetic nephropathy. She was admitted and found to have persistent tachycardia. Her blood sugar was not well controlled and she had symptomatic anaemia. These findings were investigated and treated. At 30 weeks she was admitted again with a history of feeling unwell and chest pain. She was diagnosed with bilateral pneumonia and severe pulmonary oedema. She was managed in ICU with nebulisers, physiotherapy, intravenous antibiotics and insulin for the following 10 days. Finally she was admitted at 35 weeks with raised LFTS and reduced fetal growth. She became jaundiced in the following days and was delivered by CS as a consequence. She was delivered of a male infant that weighed 2560 kg. She was discharged day 7 postdelivery.

### Dr Geraldine Gaffney & Ms Siobhan Canny

### 2. 31 y, P2 (2 previous LSCS) BMI 27 $\ensuremath{\,\text{kg/m}^{2}}$

This patient had a history of pregestational diabetes and previous cataract removal. At 38 weeks, while awaiting a planned CS, she became unresponsive and had a seizure that was due to hypoglycaemia and was treated with 50% dextrose. Her blood sugar at this time was 1.2mmols/l. At the time she had been fasting since midnight and was on a pre-operative infusion of insulin and dextrose. She was admitted to HDU for stabilisation. Thereafter she had a LSCS of a healthy infant once she was stabilised. Her recovery continued without further incident.

### Haemorrhage

### 1. 38 y, P 1 (previous LSCS)

This patient had no medical history of note. Her care was transferred from another hospital, following diagnosis of placenta praevia at 32 weeks. She had an elective LSCS at 38 weeks. Placenta accreta was suspected because of imagining and the appearances at delivery. The blood loss at delivery were 3 litres. Following delivery she received 5 units of RBC, 4 units of plasma, 4 grams of Fibrinogen. She did not require a hysterectomy. She made an uneventful post natal recovery and was discharged home well.

#### 2. 32 y, P 1, normal BMI

At her first delivery in another hospital, this patient had a third degree tear in association with a vaginal delivery. She had no other significant medical history. Following antenatal counselling, which included referral to a rectal injury clinic at the NMH, delivery was to be by elective LSCS. At 39 weeks she presented in labour and had delivery by CS. Immediately following the CS she experienced a significant PPH and was treated medically. The bleeding continued so she returned to theatre for a laparotomy where the uterus was found to be atonic. A B-Lynch suture was attempted but unsuccessful. She had a hysterectomy but continued to bleed. Embolisation of the bleeding vessel was performed by an interventional radiologist and haemostasis was achieved. She received 23 units of RBC, 3 units of platelets, 8 of plasma and 5g of fibrinogen. The EBL was in excess of 4 litres. She made an excellent recovery.

### 3. 39 y, P 0

This patient booked at 15 weeks. She was well antenatally apart from anaemia which was treated iron. She was admitted at term with a SROM. Labour was augmented according to protocol. The CTG was non-reassuring and was compounded by a fetal bradycardia at 7cm. A decision was made to proceed to emergency CS. However in theatre she was found to be fully dilated and a live female infant of 3.4 kg was delivered by NBF. The delivery was complicated by a 3rd degree tear. The Apgar scores were low as was the cord pH, but the infant responded well to resuscitation and was transferred to NICU. The delivery was further complicated by a massive obstetric haemorrhage of 4 L, which was treated with uterotonics. She required ventilation and had arterial and central lines sited. She was resuscitated with 11 units of RBC, 4g of fibrinogen, 2 units of platelets, 8 of FFP, 2 of Octoplas and tranexamic acid. An intrauterine balloon was also inserted. Following stabilisation she was transferred to ICU for 40 hrs where she was ventilated initially. She made a good post natal recovery subsequently and was discharged home on day 8.

### 4. 25 y, P3, (22 week fetal loss from an abruption)

This lady booked in another hospital at 16 weeks and was seen there 3 times but failed to attend on a number of occasions. At 28 weeks she was diagnosed with GDM. She presented to GUH with severe abdominal pain and vaginal bleeding. She had a history of hypertension in addition to GDM. On admission an intrauterine fetal death was confirmed she was noted to be hypertensive. Her condition was complicated by DIC and she required an emergency LSCS under general anaesthetic. At delivery the EBL was over 4 litres. She was admitted to ICU for 24 hours where her condition stabilised and she made a good recovery and was discharged on day 8.

### **Gastro-intestinal**

#### 1. 38 y, P1.

This patient was transferred from another unit at 30 weeks with a small bowel obstruction which did not respond to conservative treatment. She had a past medical history of hypothyroidism and was taking 100 µcg thyroxine daily. She had an uneventful history until 30 weeks when she presented with central abdominal pain and faeculent vomiting. This was treated conservatively for 6 days and it was decided to transfer to GUH for a combined small bowel resection and anastomosis and a CS at 31 week. She delivered a live male infant who was transferred to NICU. She was given MgSO4 for neuroprotection prior to delivery. After delivery she was transferred to HDU and had an uneventful post operative period. Histology of the resected bowel showed a possible perforation.

### **Pre-Eclampsia**

### 1. 37 y, P O, normal BMI

This patient had an uneventful pregnancy until 37 weeks when she presented to another hospital with epigastric pain and dyspnoea. Her platelet count was initially 70 x 106 but fell to 45 x 106. She was transferred to GUH for ongoing management. On admission to GUH she was normotensive with no proteinuria but had reduced urinary output. A decision for delivery was made and prior to LSCS she had a unit of platelets transfused and commenced on MgSO4. Delivery was uncomplicated and the baby was admitted to NICU because of. She was treated with labetolol following delivery for 24 hours. She was discharged home on day 6. On day 12 she presented with left breast swelling and tenderness and offensive lochia. She was treated with intravenous antibiotics. Culture of expressed breast milk grew S. Aureus and E. Faecalis. She was discharged on day 9.

### 2. 46 y, P 1.

This patient was transferred from another hospital with abnormal LFTS, impaired renal function and brisk reflexes at 39 weeks. The impression was that she had severe pre-eclampsia and impending HELLP syndrome. She was commenced on MgSO4 and was delivered by LSCS of a healthy baby girl. Following delivery she was transferred to HDU. There, she was excessively drowsy and difficult to rouse at times. She had a cerebral CT that was normal. On day 3 after delivery, while in HDU, she became jaundiced. A hepatology screen was performed which was normal. A liver USS found ascites with a normal liver. Her liver enzymes improved after 8 days and she was followed as an outpatient.

#### 3. 31 y, PO. .

This lady, who had no past history booked at 12 weeks and was felt to be suitable for midwifery care. She had induction of labour at term + 10. During labour she became pyrexial and was treated with intravenous antibiotics. Subsequently, she had a tonic-clonic seizure which resolved spontaneously. Once stabilised she was delivered of a male infant was delivered weighing 3.760 kg by CS. She was treated with MgSO4 for 24 hours. She did recovered well but required oral antihypertensives to manage hypertension from the second day after delivery. She was discharged on day 5.

### **Sepsis**

### 1. 40 y, P 1 (previous LSCS) BMI = 18.6.

This patient had a history of coeliac disease and endometriosis. She had a number of presentations in the third trimester with back ache, another with right iliac fossa pain and once again with iliac fossa pain. This time, she was pyrexial and had a raised CRP and WCC. She was referred for surgical opinion. A plan for delivery was made whereby a LSCS and appendectomy would be performed. A live baby was delivered in good condition but required NNU admission. In the initial post natal period her condition was stable but on day 4 she developed severe abdominal pain. CT was performed that showed an abdominal collection that was drained via laparotomy. Following the laparotomy she was treated with antibiotics she was discharged home on day 14 postdelivery.

#### 2. 31 y, PO

This lady booked at 13 weeks and was felt to be suitable for the midwifery clinic. She had a number of admissions after 15 weeks with hyperemesis, a lower respiratory tract infection, symphysis pubis discomfort and reduced fetal movements. She was admitted with an APH at 39 weeks and went into spontaneous labour the following day. Delivery was by NBF of a male infant who weighed 3220 kg. Both were discharged the following day. She was admitted twenty-three days after delivery. She complained of left breast tenderness, pyrexia and vomiting. She was admitted and treated with intravenous fluids and antibiotics. Subsequently she became pyrexial with rigors again. Chest X-ray, pelvic ultrasound and breast ultrasound were all normal. However, a high vaginal swab cultured GBS. She was discharged at day 29 well, with no clinical signs of endometritis and continued treatment of mastitis with oral antibiotics. She was admitted a third time after delivery on day 37 with rigors and feeling unwell. She was pyrexial and appeared to have mastitis. She was treated with intravenous antibiotics was discharged well the following day on oral antibiotics.

### Neurology

### 1. 36 y, P1 (previous LSCS), BMI was 39 kg/m<sup>2</sup>

This patient had a complicated medical history that included a sagittal sinus thrombosis, presumed protein S deficiency, essential hypertension and Type 2 diabetes. She was taking antihypertensives, Glucophage and insulin. She was seen in the ANC every 2 weeks. At 38 weeks she was admitted with hypertension. She reported feeling weak and unwell and the decision was made to deliver her by LSCS. After delivery there were no problems until day 4 when her blood pressure started to rise and she reported feeling weak. She complained of chest pain and left sided facial drooping was observed. Cerebral CT found evidence of an old occipital infarct. The episode was attributed to atypical migraine. She made a slow post natal recovery and was discharged home on day 8.

#### Comment

In 2015 there were 17 cases of serious maternal morbidity. Only the most serious cases of haemorrhage and hypertension have been included in this section. Despite that, haemorrhage remains the most common cause of morbidity as it does nationally. There was no case of serious VTE this year but pre-eclampsia / hypertension was the cause of morbidity in 3 cases, 1 of whom had an eclamptic seizure. In 2015, 6 of these 17 women were transferred from other units (35%). As ever, this section of the report would be impossible without the invaluable contribution of Siobhan Canny who collects the cases throughout the year.

# Perinatal Mortality Report

### 1. 27y P $3^{+1}$ GA $28^{+0}$ wks, Weight 1100gms

This patient booked at 26 weeks. At a routine G.P. attendance at 28 weeks faint movements were noted but the fetal heart was not heard. An intrauterine death was confirmed on ultrasound on admission to hospital. She was delivered of a male infant weighing 1100 g.

Autopsy Performed: There was no evidence of congenital heart disease or other congenital abnormality. There was evidence of intrauterine anoxia and the placental findings of hypocoiled cord and subacute fetal thrombotic vasculopathy may suggest obstruction and restriction of fetal blood supply to and from the placenta.

### 2. 39y, P 1<sup>+0</sup> GA 37<sup>+0</sup>wks, Weight 2760gms

This patient was booked for antenatal care in the National Maternity
Hospital where the fetus was diagnosed with Trisomy 21 and an ASVD.
She presented at 37 weeks while visiting Galway with a history of no fetal movements for two days. An intrauterine death was confirmed on ultrasound. She was delivered of a male infant weighing 2760g.

### Autopsy declined

Placenta – Distal villous immaturity and single umbilical artery.

### 3. 41y, P3<sup>+0</sup> GA 36<sup>+2</sup>wks, Weight 1580gms

This patient booked at 13weeks. An anomaly ultrasound at 21+6 weeks showed holoprosencephaly, a 2 vessel cord, proboscis and echogenic kidneys. An amniocentesis was performed and Trisomy 13 was diagnosed. She attended the high risk clinic for her antenatal care. At an ultrasound appointment at 35+6 weeks there was absent end-diastolic flow. The following day she presented with no fetal movements and an intrauterine death was confirmed. She was delivered of a female infant weighing 1580g.

Autopsy not Performed

### 4. 38y P 2<sup>+0</sup> GA 37<sup>+3</sup>wks, Weight 2880gms

The patient booked at 13 weeks, an anomaly ultrasound at 21 weeks was normal. She had an uneventful antenatal course and at her routine antenatal appointment at 37+2 she presented with a history of decreased fetal movements. An intrauterine death was confirmed on ultrasound and abdominal ascites was noted. She was delivered of a male infant weighing 2880g.

**Autopsy Declined** 

### 5. 29y P1<sup>+0</sup> Gest.30<sup>+2</sup>wks, Weight 420g

This patient booked at 13 weeks. An anomaly ultrasound at 20 weeks was abnormal; biometry was less than the 5th percentile, global limb reduction, and abnormal cardiac views. An amniocentesis showed triploidy. At 30 weeks SROM occurred and an intrauterine death was confirmed on ultrasound. She was delivered of a male infant weighing 420g.

### Autopsy not performed

Placental Histology: The placental parenchyma demonstrates scattered foci of infarction in addition to dystrophic calcification and focal early organising thrombus formation within fetal vessels. Scattered foci of sub chorionic acute inflammation are noted.

### 6. 23y P1<sup>+0</sup> GA 24<sup>+4</sup>wks, Weight 0700gms

This patient booked at 10 weeks, at 13 weeks fetal cystic hygroma with ascites was seen on ultrasound. Amniocentesis was declined. By 20 weeks there was a cystic hygroma, fetal hydrops, ascites, plural effusions and oligohydramnios seen on ultrasound. By 23 weeks anhydramnios had developed and at 24 weeks an intrauterine death was found. She was delivered of a female infant weighing 700g.

### Autopsy not Performed Placental Histology:

- 1. Amnion nodosum present.
- 2. Widespread villous oedema secondary to fetal hydrops
- 3. Ethyroblastosis

### Dr Geraldine Gaffney and Ms Marie Hession

### 7. 25y P3<sup>+2</sup> GA 30<sup>+5</sup>wks, Weight 1340gms

This patient was attending for antenatal care at the Rotunda and had a past obstetric history of an intrauterine death at 24 weeks. She presented at 31 weeks with abdominal pain and an intrauterine death was diagnosed. She delivered a female infant weighing 1340g.

Autopsy not performed Placental Histology: Acute chorioamnionitis and an intervillous thrombus seen on the parenchymal

### 8. 22y P0<sup>+0</sup> GA 24<sup>+6</sup>wks, Weight 560gms

This patient booked at 11 weeks and had a normal anomaly ultrasound at 21 weeks. She presented at 24+1 weeks with an intrauterine death. She was delivered of a female infant weighing 560g.

Autopsy not Performed Placenta Histology: The placental parenchyma demonstrates acute thrombus formation and immature chorionic villi with prominent clear cell change.

### 9. 34y P2<sup>+1</sup> GA 25<sup>+6</sup>, Weight 720gms

This patient booked at 17 weeks having been seen previously in the EPAU at 7 weeks with bleeding and an IUCD in situ. She was admitted at 17 weeks with severe back pain and again at 20 weeks with pain and vaginal bleeding. She presented at 21+3 weeks with a history of premature rupture of membranes. Group B streptococcus was detected on a high vaginal swab. She remained in hospital and at 25+5 weeks an intrauterine death was diagnosed. She was delivered of a female infant weighing 720g Autopsy performed- Antenatal asphyxia secondary to compression of prolapsed umbilical cord, complicating prolonged ruptured of fetal membranes.

### 10. 37y P2+0 GA 34+6wks, Weight 1400gms

This patient booked at 13 weeks with a past obstetric history of an unexplained intrauterine death at 32 weeks. She had a normal anatomy ultrasound at 22 weeks. She had an uneventful antenatal course up to 34 weeks when she presented with a minor antepartum haemorrhage and no fetal movements for four hours. An intrauterine death was confirmed on ultrasound. She was delivered of a female infant weighing 1400g.

Autopsy Performed: Normally formed female stillborn infant with moderate maceration.

Very low weight and small size for gestational age.

Anoxic congestion of viscera and anoxic congestive haemorrhages. Dilated blood filled ventricles of heart and soft congested liver.

No congenital anomaly.

Placental Histology: Very small sized placenta with long hypercoiled umbilical cord and extensive old and recent infarction. On histology there is confirmation of chronic hypoxia with severe maternal vascular malperfusion of the placental bed and chronic villitis.

### 11. 34y P 1+5 GA 39+0, Weight 3460gms

This patient booked at 14 weeks. She had a BMI of 44 and a past obstetric history of 5 miscarriages and smoked 15 cigarettes a day. She had a normal anomaly ultrasound at 22 weeks. She did not have a GTT. She had an uneventful antenatal course. She was admitted for an elective caesarean section at 38+4 weeks, the fetal heart could not be auscultated. An intrauterine death was confirmed on ultrasound. She delivered a female infant by LSCS weighing 3460g. Autopsy Performed: - Moderate macerated stillborn female infant. Hypertrophic and dilated heart (twice normal size).

Congested liver

Subcutaneous oedema – appearance consistent with diabetic mother Nesiduoblastosis.

Hypercoiled umbilical cord

### 12. 33y P 0+0 GA 39+4, Weight 3260gms

This patient booked at 16 weeks and had a normal anomaly ultrasound at 19 weeks. She had an uneventful antenatal course. She presented at 39+3 weeks with a history of reduced fetal movements for 24 hours. An intrauterine death was confirmed on ultrasound. She was delivered of a female infant weighing 3260g. A tight band of membranes noted around fetal shoulders and neck.

**Autopsy Performed** – The cause of death was acute hypoxia which was due to severe anaemia due to a fetal bleed from the umbilical cord. The cause of the bleed from the umbilical cord was a mucinous pseudocyst of the cord which was located at or near the umbilical insertion.

### 13. 34y PO+0 GA 39+3, Weight 3140gms

This patient booked at 15 weeks, had a normal anomaly ultrasound at 22 weeks and an antenatal course that was uneventful. She presented at 39+3 weeks with a history of no fetal movements for one week, and an intrauterine death was confirmed on ultrasound. She went into spontaneous labour and delivered a male infant weighing 3140g.

### **Autopsy Declined**

Placental Histology (i) Hypocoiling of the umbilical cord

(b) mural thrombosis of umbilical vein. (c) evidence of downstream impairment of fetal blood flow.

### 14. 33y PO+0 GA 37+1, Weight 1540gms

This patient booked at 12 weeks, and was diagnosed with a lumbro-sacral myelo-meningocoele at L4/5 with bilateral ventriculomegaly at 22 weeks. An amniocentesis was performed that showed Trisomy 18. At 37 weeks she presented in spontaneous labour and delivered a stillborn female infant weighing 1540g.

### Autopsy not Performed

Placenta: Evidence of primary distal hypoplasia of villi secondary to Trisomy 18.

Evidence of fetal hypoxic exposure Evidence of impaired fetal circulation.

### **Early Neonatal Deaths**

### 1. 33y P 2+2 GA 32+2, Weight 2720gms

This patient booked at 12 weeks in Portiuncula Hospital. A cystic hygroma was seen on an ultrasound. She was referred to Galway at 14 weeks and an amniocentesis was performed that was normal. She had frequent ultrasound examinations and at 27+5 weeks there was ascites, a cystic hygroma, and reduced bone length, a 2 vessel cord and a posterior, low lying placenta noted on ultrasound. She was admitted at 28+4 weeks with a PSROM. It was planned to transfer her to Dublin for delivery but she went into spontaneous labour and delivered a female infant weighing 2720g. The baby was admitted to NICU and died on the second day of life. Autopsy not performed Conclusion: Hydrops Fetalis Persistant Pulmonary Hypertension Acute cardiac failure Prematurity,

Ventricular Septal Defect.

### 2. 38y P2+2 GA36+0wks, Weight 4355gms

This patient booked at 12 weeks. An ultrasound at 20+3 weeks showed bilateral echogenic kidneys with mild dilatation of the renal pelvis and bilateral hydroureters. By 22 weeks a small bladder, a cystic space in lower abdomen, an enlarged nuchal fold and bowing of the femurs were noted on ultrasound. Amniocentesis was offered but declined. There was ongoing fetal monitoring and she was delivered by elective caesarean at 35 weeks of a male infant weighing 4355g. He was admitted to NICU and died on day 1 of life **Autopsy Declined** 

### 3. 33y P5<sup>+1</sup> GA 27<sup>+2</sup>wks, Weight 1135gms

This patient booked at 12 weeks. She had multiple admissions with vaginal bleeding. She was admitted at 21+3 weeks with anhydramnios and abdominal pain. She went into spontaneous labour at 25 weeks and delivered a male infant weighing 1135g. Apgars 41 and 65. He was admitted to NICU and died on day 1 of life.

#### **Autopsy Declined**

Placental Histology: The umbilical cord shows early acute phlebitis. The placental membranes demonstrate prominent sub chorionic fibrin deposition with scattered pockets of acute chorioamnionitis present. The placental parenchyma demonstrates prominent clear cell change in association with acute deciduitis.

### 4. 41y P1+0 GA 39+0, Weight 2650gms

This patient booked at 15 weeks and had a normal anatomy ultrasound at 21 weeks. She had an uneventful antenatal course. At 38+6 weeks she presented with a NSAPH and decreased fetal movements. She had a non-reassuring CTG and was delivered by emergency caesarean section of a live male infant weighing 2650gs. Apgars 01 55 and 810 He was admitted to NICU and died on day 2 of life.

**Autopsy performed** – Report not available

### 5. 22y P 1+0 GA 23+0 Weight 680gms

This patient booked at 12 weeks and had a normal anomaly ultrasound at 21 weeks. She was admitted with PPROM but no contractions at 21+5 weeks. At 22+6 weeks she developed an offensive discharge. She was induced and delivered a live male infant weighing 680g. The infant died at 90 minutes of life.

#### Autopsy not performed

Placental Histology: The membranes demonstrate acute suppurative chorioamnionitis. There is vasculitis of the umbilical vein and arteries. The chorionic villi are appropriate for the gestation, but demonstrates multifocal villous oedema.

### 6. 35y PO<sup>+0</sup> GA 25<sup>+3</sup>, Weight 595gms

This patient booked at 16+5 weeks. She attended an independent midwife for a planned homebirth. She presented at 25+2 weeks with a history of leaking liquor, decreased fetal movements and raised blood pressure. An ultrasound showed that fetal growth was on the 3rd percentile. There was reversed end-diastolic flow in the umbilical artery Doppler and no fetal movements observed. She was transferred to the labour ward and magnesium sulphate was commenced.

The CTG was abnormal and she was delivered by emergency caesarean section of a live male infant weighing 595g. The Apgars were 31, 55 and 810. The infant was admitted to NICU but died on day 4 of life.

### Autopsy not performed

Placental Histology: (i) Evidence of chronic uteroplacental insufficiency (a) Distal villous hypoplasia (accelerated villous maturation)

- (b) Retroplacental haemorrhage (x2) with overlying infarction
- (c) Secondary impairment of fetal blood flow thrombosis of chorial vessels
- (ii) Evidence of fetal hypoxic exposure
- (a) Nucleated red blood cells from the fetal circulation.

### 7. 34y P1<sup>+0</sup> GA 22<sup>+2</sup> Twin 1560gms and Twin 2480gms

This patient booked at 12 weeks with a dichorionic diamniotic twin pregnancy. She had a normal anomaly ultrasound at 20 weeks. She presented at 22+1 weeks with crampy pains and went into spontaneous labour and delivered. Twin 1 was a male infant weighing 560g and twin 2 a female infant weighing 480g. Twin 1 Apgars 31 35 Twin 2 Apgars 31 35 Both infants died within the first hour of life.

### Autopsy not performed Placental Histology:

- (i) Dichorionic -diamniotic placentation
- (ii) Evidence of fetal blood flow in twin 1
- (a) villous oedema, multifocal widespread (hypoperfusion).
- (b) chorionic villous haemorrhage (hyperperfusion).

In 2015 there were 14 intrauterine fetal deaths and 7 neonatal deaths giving a PNM of 7.1 per 1000. Of the 21 cases, 7 had a lethal congenital fetal abnormality which gives a corrected PNM of 4.7 per 1000. All of those with a lethal abnormality were diagnosed antenatally. The remainder were due to IUGR/placental causes in 3, infection in 3, extreme prematurity in 2 and haemorrhage in 1. In 5 cases the cause was unknown.

## Anaesthesia Report

Dr Joseph F Costello

In 2015, 2368 procedures were performed in theatre, of which 1589 were elective and 779 were emergencies. This number includes all gynaecological and obstetric procedures for which anaesthesia care was provided.

242 procedures were performed in the labour ward theatre which necessitated the presence of anaesthesia services (this number is included in the overall procedure number of 2368).

There were 2973 deliveries to 2909 mothers in UHG in 2015.

### **Epidurals:**

- 1401 epidurals were performed (48.2%) see Figure 1.
- 745 pimigravidae (64.9 %) received an eipdural
- 656 multigravidae (37.3 %) received an epidural
- 18.9 % of those primigravidae who had an epidural had a Ventouse delivery and 10.6 % had a forceps delivery
- 5.3 % of multigravidae who received an epidural had a Ventouse delivery while 1.0 % had a forceps delivery
- 432 primigravidae were induced and 360 of this group (83.3%) received epidurals
- 571 primigravidae went into spontaneous labour and 385 of this group (67.4%) received an epidural
- 436 multigravidae were induced and of this group, 260 (59.6%) received an epidural
- 904 multigravidae went into spontaneous labour and 396 (43.8 %) of this group received an epidural

#### **Caesarean Deliveries:**

- 853 women (29.3 %) delivered by Caesarean Delivery (CD) (see statistical summary)
- 45 Caesarean Deliveries were performed under General Anaesthesia
- (5.3 % of all Caesarean Deliveries) see Figure 2

### Mode of Anaesthesia for Elective C.S.

	PRIMIP	MULTIP	TOTAL	
Spinal	88	328	416	92.9%
Epidural	3	2	5	1.1%
Combined Spinal	6	16	22	4.9%
G.A.	0	5	5	1.1%
Total	97	351	448	100.0%

### Mode of Anaesthesia for Emergency C.S.

	PRIMIP	MULTIP	TOTAL	
Spinal	68	87	155	38.3%
Epidural	124	30	154	38.0%
Combined Spinal	46	10	56	13.8%
G.A.	24	16	40	9.9%
Total	262	143	405	100.0%

### Mode of Anaesthesia for C.S. following unsuccessful attempt at instrumental delivery

	PRIMIP	MULTIP	TOTAL	
Epidural	12	1	13	72.2%
Spinal	0	0	0	0.0%
Combined Spinal	5	0	5	27.8%
G.A.	0	0	0	0.0%
Total	17	1	18	100.0%

### **Post-Dural Puncture Headaches**

- There were 20 documented dural taps in 2015, giving a dural puncture rate of 1.4 %.
- 10 (50 %) women needed an epidural blood patch.

### Post Anaesthesia Care Unit/High Dependency Unit/Intensive Care (HDU/ICU/PACU) Admissions in 2015

There were 80 gynae admissions to Post Anaesthesia Care Unit(PACU) in 2015 (parturients cannot be admitted to PACU as per protocol)

In 2015, 9 parturients were admitted to the High Dependancy Unit in UHG.

- 4 suffered from Pre Eclampsia
- 3 due to sepsis
- 1 had a small bowel obstruction
- 1 HELLP syndrome

There were 11 obstetric admissions to the intensive Care Unit in 2015.

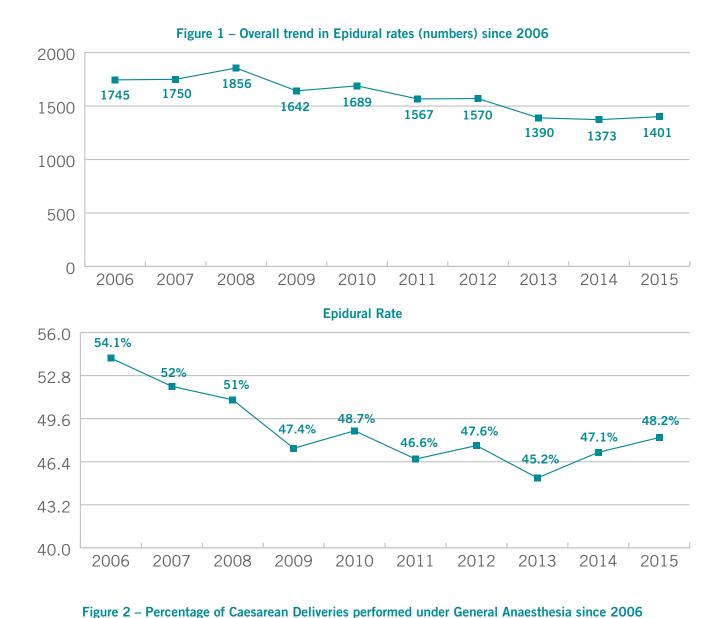
- 2 Women developed PET
- 5 Admitted secondary to Post Partum Haemorrhage
- 3 Admitted due to Sepsis
- 1 Had a caesarean delivery followed by a Rradical Hysterectomy and Oophrectomy (planned)

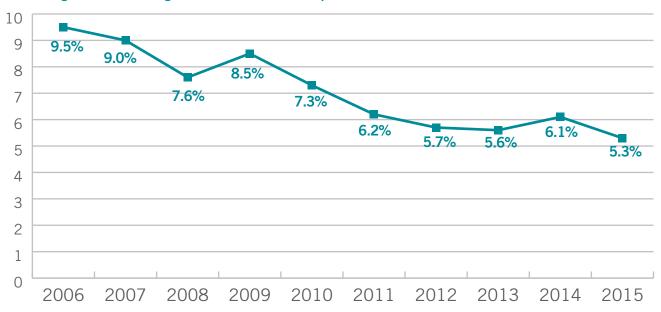
### Summary of parturients needing Level 2 care on the labour ward in 2015

137 women needed level 1 or 2 care on the labour ward in 2015 ( 4.6% of all deliveries). This was an increase from 125 (4.2%) in 2014.

### High risk Obstetric Anaesthesia Clinic

278 women were assessed in the high risk obstetric anaesthesia clinic in 2015.





# Neonatal Clinical Report

### Dr. Donough O'Donovan, Dr. Ethel Ryan and Ms Marie Hession

During the year 2015 a total of 2973 infants were born at GUH, of which 402 (13.5%) were admitted to the neonatal unit (Figure 1).

One hundred and fifty six infants (39%) were admitted from Gynae Theatre, 141 (35%) from the Labour Ward and 89 (22%) from the Post natal ward (Table 3). Seven infants (2%) were transferred to the neonatal unit from outside hospitals.

Sixty percent of the neonatal unit admissions were > 37 weeks gestation, whereas 161 infants (40%) were premature. Of the premature infants 8 were ELBW (BW < 1000g) and 26 infants weighted between 1000g and 1500g at

birth (VLBW). Eleven of the premature infants were < 28 Wks gestation, 28 were born between 28 and 31+6 Wks gestation and 122 were born between 32 and 36+6 Wks gestation (Table 2).

Over the last 10 years there has been on average 160 premature infants admitted to the neonatal unit each year (Range 130-185). Of these an average of 12 infants/year were < 28 Wks gestation (Range 5-18) and 30 infants/year were between 28 Wks and 31+6 Wks gestation (Range 18-37) (Figure 2).

Consistent with previous reports prematurity, respiratory distress and evaluation for sepsis remain the commonest conditions requiring admission to the neonatal unit. There were 6 neonatal unit related deaths in 2015 (Details below). The 2015 overall neonatal unit related neonatal mortality rate (Number of deaths in neonatal unit per 1,000 live births) was 2 per 1000. When the rate was corrected to exclude lethal abnormalities (LCM) the figure is 0.33 per 1000.

A 2008 to 2015 mortality table with gestational age related survival rates for VLBW infants born at GUH is presented below.

The following figures and tables give an overview of the activity in the neonatal unit during the year 2015.

#### Admission to Neonatal Care Unit 2006-2015

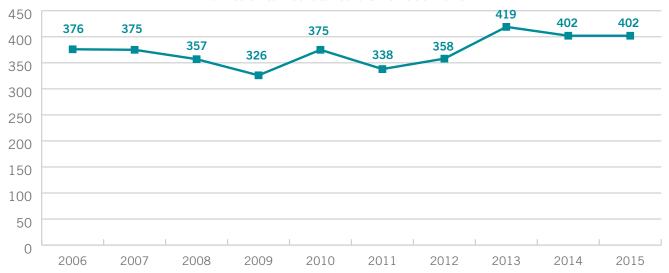


Figure 1 – Distribution of Premature Infants admitted to Neonatal Unit 2006-2015



1. BABY WEIGHTS ON ADMISSION 2015				
Weight	n	%		
<500gms	0	0.0%		
500-599gms	3	0.7%		
600-699gms	0	0.0%		
700-799gms	1	0.2%		
800-899gms	1	0.2%		
900-999gms	3	0.7%		
1000-1249gms	12	3.0%		
1250-1499gms	14	3.5%		
1500-1749gms	26	6.5%		
1750-1999gms	23	5.7%		
2000-2249gms	33	8.2%		
2250-2499gms	31	7.7%		
2500-2999gms	49	12.2%		
>3000gms	206	51.2%		
Total	402	100.0%		

### 2. GESTATION AGE OF NEONATAL UNIT ADMISSIONS 2015

Total	402	100.0%
>37wks	241	60.0%
32-36+6wks	122	30.3%
28-31+6wks	28	7.0%
<28wks	11	2.7%

3. SOURCE OF ADMISSION					
Source of Admission	2015	%			
Delivery Suite	141	35%			
Theatre	156	39%			
St. Angela's Ward	89	22%			
Transfers in	7	2%			
Other	9	2%			
Total	402	100.0%			

## 4. SURVIVAL OF NEONATAL UNIT INFANTS 2015

Weight	Number	Deaths
≤1000g	8	1
1001 - 1500g	26	1
1501 - 2500g	113	0
>2500g	255	4
Total	402	6

# 5. NEONATAL UNIT MORTALITY RATETotal62/1000Excluding LCM10.33/1000Excluding LCM & 00/1000≤1000g

6. GENERAL NEONATAL MORBIDITY		
IPPV	19	
NCPAP	68	
RDS/TTN	114	
Meconium Aspiration	4	
PPHN	3	
Perinatal Stress/HIE	7	
Haematology: Jaundice/HDN/NAIT	22	
Neonatal fractures	2	
NAS	1	
Transferred for Therapeutic Cooling	2	

7. CONGENITAL ABNORMALITIES	
Down Syndrome	10
Pierre Robin Syndrome	3
48XXXX	1
Triple X (47xxx)	1
Trisomy 18	1
Stickler Syndrome	1
Congenital ichthyosiform erythroderma	1

8. CARDIAC/ CHD / SIGNIFICANT ECHO FINDINGS	
ASD / VSD/ PDA	21
Coarctation of Aorta	1
PPHN	2

9. NOTABLE SIGNIFICANT MALFORMATIONS / OTHER	
Small Bowel Perforation	2
Omphalocele	1
Cleft Lip & Cleft Palate	4
Imperforate Anus	1
Hirschsprung disease	1
Congenital Toxoplasmosis	1
Congenital cystic adenomatoid malformation	1

10. FINAL DIAGNOSIS 2015 (OFTEN MOI	RE THAN 1)	
Reason for Admission	Year	%
Prematurity / Low Birth Weight / RDS	161	40.0%
Respiratory Distress / Grunting	61	15.2%
Sepsis at Risk	37	9.2%
Dusky Cyanotic Episode	8	2.0%
Low Birth Weight > 37wks	8	2.0%
Pyrexia	3	0.7%
Social Reason	11	2.7%
Feeding Problem	3	0.7%
Congenital Abnormality	14	3.5%
Jaundice	5	1.2%
Hypoglycaemia	18	4.5%
Other Fetal Reason	73	18.2%
Total	402	100.0%

11. MORTALITY TABLE 2008-2015	- INBORN INFANTS ≤ 1500G REPORTED TO THE VERMONT OXFORD NETWORK
(INCLUDING CHROMOSOME)	ABNORMALITIES/SYNDROMES/ LETHAL CONGENITAL MALEORMATIONS)

Gestation	Number	Survival to 28 days	Survival to discharge
23wks	2	0 (0%)	0 (0%)
24 wks	20	8 (40%)	7 (35%)
25 wks	23	15 (65%)	14 (61%)
26 wks	19	17 (89%)	16 (89%)
27 wks	32	28 (88%)	28 (88%)
28 wks	37	33 (89%)	33 (89%)
29 wks	52	51 (98%)	51 (98%)
30 wks	48	46 (96%)	46 (96%)
>30 wks	79	77 (98%)	77 (98%)
Total	312	275 (88%)	272 (87%)

12. SUMMARY NEONATAL UN	IT DEATHS IN 2015		
Diagnosis	GA	BW	Location of Death
Multicystic dysplastic kidneys & severe pulmonary hypoplasia	36/40	4350 gms	NICU
Unbalanced translocation between chromosome 17 & 22 with multi-system congenital anomalies	39+2/40	2900 gms	NICU
Congenital ichthyosiform erythroderma with severe hypertrophic cardiomyopathy	38+6/40	2650 gms	Crumlin Hospital
Extreme Prematurity	25+3/40	595 gms	NICU
Severe pulmonary hypoplasia	27/40	1135 gms	NICU
Cystic Hygroma, Severe Hydrops Fetalis & Multiorgan Failure	322/40	2720 gms	Coombe NICU

### 13. NEONATAL UNIT RELATED DEATHS IN 2015

A brief synopsis of each neonatal unit related death including relevant obstetric data is outlined below.

1. Pregnancy: Gestation 36/40, BW 4350 gms, Male, Singleton, Elective LSCS for Oligohydramnios/ Anhydramnios/Multicystic Dysplastic Kidneys, Antenatal Steroids, Mother 37yo Para 5+2.

Neonatal Course: Apgars 3<sup>1</sup> & 6<sup>5</sup>, resuscitation with PPV, intubated in the NICU. CXR pulmonary hypoplasia. Renal US multicystic dysplastic kidneys. No UOP. No response to escalation of respiratory support (IPPV/HFOV/NO). Progressive respiratory and cardiovascular failure. RIP at 7.5 hrs of age.

Diagnosis: Multicystic dysplastic kidneys and severe pulmonary hypoplasia.

**Postmortem:** Asphyxiating thoracic dystrophy and multicystic dysplastic kidneys with liver and pancreas cysts.

2. Pregnancy: Gestation 39+2/40, BW 2900 gms, Male, Singleton, SVD, Abnormal fetal anomaly scan, Amniocentesis: Unbalanced translocation between chromosome 17 & 22, Mother 31yo Para 1+1.

Neonatal Course: Apgars 2<sup>1</sup> & 2<sup>5</sup>, multiple dysmorphic features, congenital abnormalities and depressed neurological function. Initially comfort care on PNW. Transferred to Neonatal Unit at 18hrs of age. Investigations included abnormal HUS, ECHO and Renal US. Genetics review in Crumlin Hospital on DOL 21, poor prognosis. Gradual decline in respiratory and neurological function. Died at 2 months of age in the neonatal unit.

Diagnosis: Chromosomal abnormality: Unbalanced translocation between chromosome 17 & 22 with multi-system congenital anomalies.

Postmortem: Declined.

3. Pregnancy: Gestation 38\*6/40, BW 2650 gms, Male, Singleton, Emergency LSCS for reduced fetal movements and non reassuring CTG, Mother 40yo Para 1\*1.

Neonatal Course: Very poor condition at birth, extensive resuscitation with intubation, PPV and chest compressions. Apgars 01 & 55. Multiple dysmorphic features, contractures and severe congenital dermopathy. Critically ill in the NICU. Progressive cardiac and respiratory failure. Transferred to OLHC on DOL 2 for ongoing ICU care and Dermatology, Cardiology and Genetic review. Congenital ichthyosiform erythroderma with severe hypertrophic cardiomyopathy. Progressive clinical deterioration with multiorgan failure. Died on DOL 2 in OLHC.

Diagnosis: Congenital ichthyosiform erythroderma with severe hypertrophic cardiomyopathy.

Postmortem: Yes in OLHC.

4. Pregnancy: Gestation 25+3/40, BW 595 gms, Male, Singleton, Emergency LSCS for REDF, IUGR and non reassuring CTG, Antenatal Steroids, Mg Sulphate, Mother 35yo Para 0+0.

Neonatal Course: Poor condition at birth, resuscitation with intubation and PPV. Apgars 3<sup>1</sup> & 5<sup>5</sup>. Critically ill with HMD, clinical sepsis, persistent metabolic acidosis, refractory hypotension, coagulopathy, pulmonary haemorrhage, Grade IV IVH, NEC and reduced renal function. Full ICU care continued at parent's request. Progressive clinical deterioration with multiorgan failure, high grade IVH and NEC. Died in NICU on DOL 5.

Diagnosis: Extreme Prematurity, clinical sepsis with multiorgan failure, high grade IVH and NEC.

Postmortem: Declined.

5. Pregnancy: Gestation 27/40, BW 1135 gms, Male, Singleton, SVD, PROM since 20wks, Severe Oligohydramnios, Antenatal Steroids, Mg Sulphate, Mother 32yo Para 5+0.

Neonatal Course: Poor condition at birth, resuscitation with intubation and PPV. Apgars 4<sup>1</sup> & 6<sup>5</sup>. Progressive respiratory failure and poor response to ET ventilation and ICU care. CPR commenced at 30 minutes of life. Failed to respond to extensive resuscitation efforts and died at 1.5 hrs of age.

Diagnosis: Severe pulmonary hypoplasia.

Postmortem: Declined.

6. Pregnancy: Gestation 32²/40, BW 2720 gms, Female, Singleton, Emergency LSCS for Cystic Hygroma, Severe Fetal Hydrops and Shortened limbs, Antenatal Steroids, Mg Sulphate, Mother 31yo Para 2\*1.

Neonatal Course: Poor condition at birth, large cystic hygroma, severe hydrops with bilateral pleural effusions and massive abdominal ascites, resuscitation with intubation and PPV. Apgars 61 & 65. Critically ill and complex ICU care with ET ventilation, paralysis, cardiac inotropic support and frequent pleural drainage. Progressive deterioration in respiratory and cardiovascular function. Transferred to Coombe Hospital on DOL 1 for ongoing NICU care and ENT and Genetics input. Condition continued to deteriorate and infant died in the Coombe NICU on DOL2.

Diagnosis: Cystic Hygroma, Severe Hydrops Fetalis, Multiorgan Failure. Normal Chromosome studies.

Postmortem: Declined.

# Paediatric Report

Dr. Edina Moylett

### Introduction

The following report includes all clinical activity on St. Bernadette's ward (the paediatric in-patient unit) of University Hospital Galway (UHG) for the period January 1st to December 31st 2015. Data are also included for paediatric admissions from the Emergency Department (ED), all admissions to UHG up to 16 years old and the paediatric admissions to the Intensive Care Unit.

The majority of paediatric aged (0-14 years) patients attending UHG are admitted to St Bernadette's ward with some exceptions. Owing to capacity and staffing, children beyond their 12th birthday with a surgical diagnosis are admitted to surgical wards, those < 12 years are admitted to St Bernadette's. All children with an orthopaedic

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

diagnosis during 2015 were admitted to the orthopaedic ward (St Finbarr's) regardless of age, as of March 2016 the latter are all admitted to St Bernadette's ward. Finally, the age limit for paediatric medical admissions to St Bernadette's is the 14th birthday, the latter is not in line with national recommendations; the age limit set at 14 is owing to capacity and staffing on St Bernadette's ward. Neonates (0 to 4 weeks), for the most part, are admitted to the Neonatal Intensive Care Unit (see separate NICU report).

Data are broken down into the following principal categories, medical and surgical admissions with day-cases and overnight admissions. Transfer data, where available, are provided for intensive care unit admissions and elective/emergency tertiary hospital transfers.

### **Admission Information**

The majority of data for this report were obtained from the Hospital In-Patient Enquiry (HIPE) system with Intensive Care Unit activity obtained from the Clinical Information System in ICU/HDU, ED data kindly provided by Josephine Mitchell in the ED. Comparative data, where available, are provided for preceding years. The majority of paediatric patients reviewed in the designated paediatric ED area have a medical complaint (95%). It is anticipated that with the reconfiguration of the 'new' paediatric ED area within the main body of the ED at UHG, all children up to 16 years of age will be seen in the designated paediatric ED area. For this reason data on all children presenting to the ED up to 16 years are included.

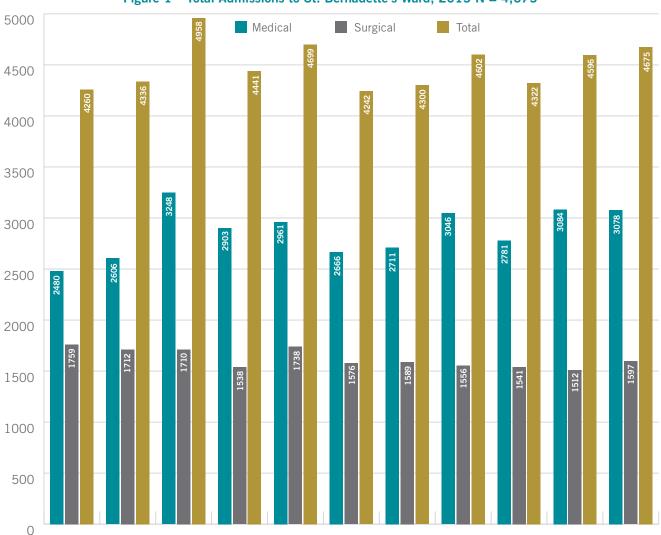


Figure 1 – Total Admissions to St. Bernadette's Ward, 2015 N = 4,675

Patients with a chronic illness, e.g., IDDM, CF are looked after by the paediatric team up to the age of transitioning to adult care which typically occurs at age 18. For that reason, children up to age 18 may be admitted to St Bernadette's ward.

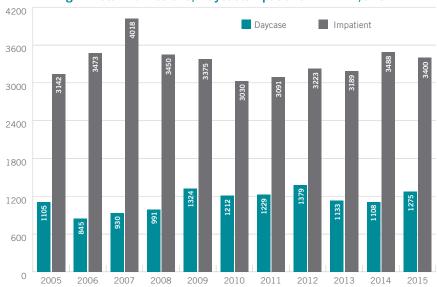
Average length of stay (LOS) for inpatients on the St Bernadette's ward remains unchanged in comparison to previous years at 2.31 days; average age for patients on St Bernadette's ward is 4.7 years.

### Admissions to St Bernadette's Unit and UHG

From January 1st to December 31st of 2015, a total of 4,675 children were admitted to St Bernadette's ward, 3,078 medical admissions and 1,597 surgical (Figure 1); (approx 12 admissions/day). Outside of 2007, the numbers of medical and surgical admissions has remained fairly consistent (Figure 1). Day case activity contributed to approximately 25% of the clinical workload on St Bernadette's ward (1,275 total cases, 795 medical cases, 480 surgical cases) see Figure 2; on average 24 cases per week. Figure 3 provides a breakdown of surgical activity on St Bernadette's unit, ENT, general surgery and plastic surgery comprising the majority of admissions, elective admissions in parentheses on the pie chart.

Outside of admissions to the paediatric ward, 2,189 (1,193 emergency, 996 day cases) children between 14 and 16 years of age were admitted to wards other than St Bernadette's ward during 2015. In total, all paediatric admissions i.e. up to 16 years to UHG during 2015 totalled 6,864 patients.

Fig 2. Total Admissions, Daycase/Inpatient Mix N=4,675



### **Paediatric ED Activity**

During 2015, there were 13,665 attendances to the UHG Emergency Department up to 16 years of age. The attendance figure is similar to 2014 (14,056). Within the current paediatric area of the ED where the age cut off is 14 years and only those with medical complaints are reviewed, 7,231 children (6,913 in 2014) were seen during 2015, almost 20 children per day. Figure 4 demonstrates admission rates from ED, on average 30% of patients are admitted.

### **ICU** admissions

There were 62 children ≤ 14 years of age admitted to the UHG ICU during 2015 (similar to 67 admits during 2014). The age range for ICU paediatric admissions was 18 days to 14 years old, average age 7 years; the average duration of stay was 0.9 days (range, 0.1-3.45 days). During 2015, 3 infants (< 1 months old) were admitted to ICU.

For all ICU paediatric admissions, the principal diagnosis was respiratory related 18/62, followed by seizure related 11 and DKA 9. Surgical diagnosis accounted for 17 admissions, 9 post trauma and 8 for post operative monitoring. The majority (40/62, 64%) of children were discharged to St Bernadette's ward, 14/62 (23%) were transferred to tertiary units; only 5/14 transfers were facilitated by national retrieval service.

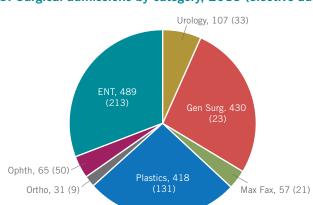
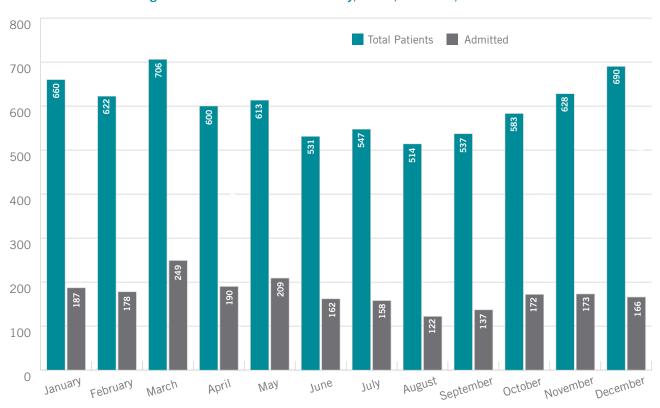


Figure 3. Surgical admissions by category, 2015 (elective admits)





# Paediatric Out-Patient Report

Dr. Mary Herzig

1086

#### Introduction

This report presents the available data on medical paediatric out-patient clinical activity for year-end December 31, 2015. Out-patient procedures performed by nursing staff (e.g. sweat testing, phlebotomy, intravenous infusions, and Mantoux testing), is still not electronically captured and is therefore not reported in this document. Plans are in progress to transfer these duties to a paediatric day ward where patients can be treated in a more calm and private environment. Refurbishment of the existing space is underway. There is increasing demand for more space and clinics in the current facility. At present, the facility is at maximum capacity and a new build will be required with extra staff to accommodate the increasing demand.

The paediatric out-patient department runs 8-9 medical clinics per week accommodating 7 full and parttime paediatric consultants. There are additional clinics for urology, dermatology, and cardiology which are not included in this report. The figures presented represent the cumulative number of patients seen across all paediatric medical clinics. All medical paediatric clinics in UHG are mixed general paediatric with the exception of specialist asthma, diabetic, and allergy/immunology clinics.

#### **2015 DATA**

#### **Number of Patients**

The total number of out-patients appointments offered to patients increased significantly to 6562 as there were a full complement of consultants in 2015 with locums in place. (2784 new (42%)) and 3778 (58% return)). Most of the increase in number of patients seen was in "new patient" category.

YEAR	NUMBER OF APPOINTMENTS
2006	5645
2007	6345
2008	6626
2009	6814
2010	6114
2011	5519
2012	5638
2013	5742
2014	5781
2015	6562

#### Non-Attendance

Historically the usual DNA rate is 20% for "new" patients and 30% for "return" patients. This improved in 2014 due to guidelines from the HSE on the allowable number of missed appointments before discharge back to GP, and also improvement in text messaging reminder system for patients.

DNA RATES	NEW	RETURN
Historical until 2013	20%	30%
2014	7%	24%
(HSE Policy on DI	VA's intro	duced + text)
2015	11%	29%

Efforts to minimise the number of DNAs may be starting to alleviate this problem for new patients but longitudinal data is required. Overall the number of DNA's remains persistently high; however, extra patients are allocated to each clinic in order to achieve maximum capacity.

### **Waiting List**

Data is collected by consultant staff in order to monitor trends in waiting list times. Data had indicated a trend to increased average wait times largely due to increased number of referrals. The paediatric OPD has reached its maximum capacity and a new build with appropriate staffing is required to cater for the increased demand for appointments and to cater for the planned increase in available subspecialties.

# NUMBER OF PATIENTS ON PAEDIATRIC WAIT LIST TOTALS 2013 432 2014 723

2015

The average wait time was kept in check by running extra clinics in available slots starting in 2010. These clinics were run by consultant staff for new patients only but, at present, the lack of nursing, administrative, and clerical support have resulted in sub-optimal use of these available slots. At present there is little scope for increasing the number of OPD clinics.

### **Out-Patient Waiting List 2009-2015**

YEAR	MEDIAN WAIT
2009	5.2 months
2010	9.1 months
2011	3.2 months
2012	4.4 months
2013	4.8 months
2014	4.0 months
2015	5.5 months

### Number of Patients Waiting as of Year End 2015

12-15 months n=58 >15 months n=71

Increasing and continuing effort needs to be made to increase the number of out-patient sessions with appropriate capital and staff resources due to the expanding paediatric department.

Priorities for 2016 include:

- Opening of functioning Day Ward within existing space to alleviate pressure on OPD and ward
- Planning for capital expansion of existing OPD facilities to cater for new specialities and the increasing demand for appointments.

# Paediatric Physiotherapy Report

Breda Cunningham and Aoife Mc Carthy

There were 431 referrals to Physiotherapy in 2015. This was 5% reduction compared to 2014.

There was a significant increase in the number of inpatient paediatric physiotherapy referrals (170 vs. 120) in 2015. Consequently inpatient referrals represented a larger proportion of overall physiotherapy referrals in 2015; 35% as compared to 26% in 2014.

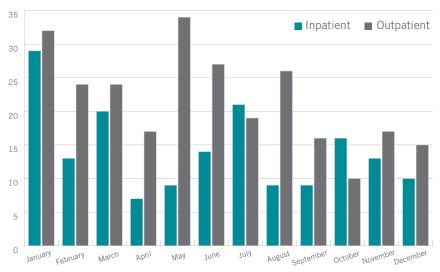
Referrals for outpatient physiotherapy decreased in 2015; 261 in 2015 versus 334 in 2014. This is likely due ongoing improvements and developments in linkages and joint working between GUH and PCCC within the paediatric care pathway.

The breakdown of in-patient and outpatient referrals received each month in 2014 are as follows:

### Paediatric Physiotherapy Service includes:

- Neonatal screening for babies born at <29weeks or <1000g and also for those presenting with birth asphyxia, HIE or IVH.
- Identification of long term needs which may initially present as gross motor delay. This service is available to all consultants. This patient group may require follow up or referral to additional specialist services.
- In-Patient service for all referrals from St Angela's post-natal ward e.g. Foot anomalies (Talipes Calcanoevalgus/Equinovarus), Obstetrical Brachial Plexus Lesions and Torticollis.
- In-Patient service for all referrals on St Bernadette's Paediatric ward including Respiratory, Neurology, Orthopaedics, Neurodevelopmental delay and Rheumatology issues.
- OPD service for musculoskeletal patients aged 0-14 years from Galway City West as well as any complex Orthopaedics, Plastics, Rheumatology, Haematology and Neurology from Galway City and County.

### Number of Paediatric Physiotherapy referrals received in 2015



- OPD service for children that present with complex respiratory conditions that require specialist physiotherapy input e.g. Neuromuscular Disease, Brochiectasis, recurrent RTI's and chronic atelectasis.
- OPD Physiotherapy consultation service for children requiring specialist Physiotherapy input from surrounding counties in the Saolta Group.
- Ongoing joint working and liaison
  with colleagues locally and nationally
  in paediatric services to ensure
  patients receive high quality care in a
  timely manner. This includes regular
  contact and liaison with colleagues
  locally in the Saolta Group (Early
  Intervention Services, PCCC etc)
  and nationally in specialist children's
  centres.
- All physiotherapy interventions are carried out in a child friendly environment, suitable to assess movements and optimise patient assessment.

### **Initiatives:**

- Specialist Paediatric Upper limb clinics are run 4 times per year with Orthopaedics (Mr O'Sullivan),
   Paediatrics, Occupational Therapy and Physiotherapy (PCCC and Acute).
- Ponseti clinic for the management of Congenital Talipes Equinovarus is being run by Physiotherapy at a weekly trauma clinic in Merlin Park Hospital under Mr William Curtin, Orthopaedic Consultant.

### Limitations

- There were inconsistent staffing levels in the paediatric physiotherapy department in 2015. This had an impact on the service provided due to lack of continuity of a regular paediatric physiotherapist with paediatric skills.
- The Physiotherapy led Normal Variance clinic had to put on hold due to these staffing issues. This was a successful clinic ran in previous years, aimed to reduce orthopaedic paediatric waiting list. It is planned to resume this service in 2016.

# Parent Education Report

Ms Carmel Connolly

Parent Education activity levels increased dramatically in 2015.6099 mothers and their partners availed of both our Antenatal and Postnatal Services.

The philosophy of the team is to promote, protect and support normal childbirth and to strive to provide high quality programmes that help and empower the expectant mothers and their partners to make informed choices based on the best evidence available

#### **Antenatal Classes**

The demand for Antenatal Programmes continued to increase. While 13 classes were held weekly the service required an additional 25 extra courses between January and July 2015 to meet the growing demand on the service. In October we were allocated 8 additional midwifery hours which allowed us to facilitate 5 one day programmes in October and increase the postnatal classes from a 3 day to a 5 day service.4735 women and partners attended Antenatal classes in 2015.

#### **Postnatal Classes**

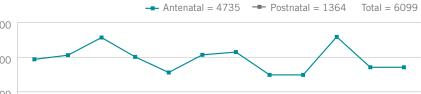
Postnatal Classes activity increased with a new 5 day service (Mon-Friday@11am)

• 1364 women attended Postnatal classes in 2015

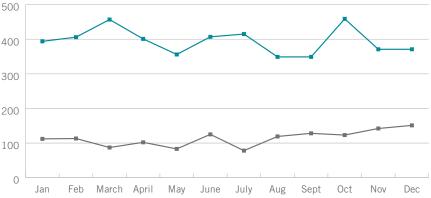
### **Projects in 2015**

The Parent Education Department was involved with many projects in 2015

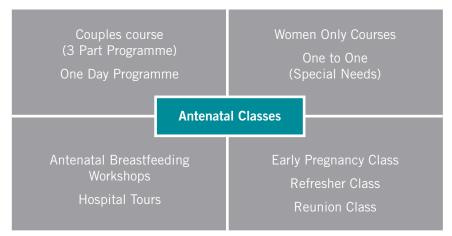
- Collaboration with NUIG. This involved the supervision of two American Students X12 weeks for their Health Promotion Module. Their project involved making a short DVD of the Maternity Unit and interviewing the midwifery and medical staff. The main aim of the project was to provide the women with an audiovisual tool to view if they were unable to attend antenatal classes. The DVD helped to allay the many anxieties of expectant parents by giving a snapshot of the Unit and the many services that are available using a positive and empowering approach.
- Lean Six Sigma: A lean walk was carried out in The Maternity Outpatients Department. This involved mapping the current



**Postnatal and Antenatal Classes** 



### Variety of programmes offered to expectant parents attending UHG



processes step by step with the Multidisciplinary team. Lean focuses on Process Improvement by removing unnecessary steps and creating value for the women. This in turn improves work Flow. Recommendations were presented and the next step will be the implementation stage.

### **Antenatal Breastfeeding Week:** October 2015

Activities

- Interview with Galway Bay FM Radio on the promotion and support of Breast Feeding
- Breastfeeding Workshops
- Breastfeeding Blog written and uploaded on website: www.uhgmaternity.com

In summary the Parent Education service had another busy year. There is an increasing demand for Antenatal Breastfeeding workshops and one day programmes. There is also a demand

for outreach classes and a plan is being put in place for using facilities in Merlin Park as a venue in 2016. While it sometimes proved challenging to provide the required service due to limited resources, the overall commitment and performance of both the midwifery and clerical staff enabled the team to ensure that all waiting lists were cleared and a quality service was provided.

### Challenges

The main challenge was the reduced capacity in our new Antenatal Education room. This had a major impact on our waiting lists which increased the demands on our Antenatal service. Our strategy was to offer One day antenatal education programmes. A multidisciplinary team approach was used and 18 couples attended each session. The waiting lists were cleared and the evaluations were extremely positive.

# **Community Midwives**

Ms Jennifer Duggan

#### Staff Midwife WTE 4.5

The community midwifery team provide care to pregnant women, new mothers, their new-born infant and their families in the hospital, community and their homes. The community midwives promote the normality of childbirth as a normal life event, and provide support, education and information to experience this occasion and lifestyle transition in a positive manner.

### **Midwives Clinics**

The community midwives facilitate woman-centred, antenatal care in the hospital and the community. There are 8 clinics midwife-led clinics provided in the Maternity Out-Patient Department. The community outreach midwives clinics take place in

- Oughterard Health Centre
- Tuam Health Centre
- Doughiska Primary Care Centre
- Gort Dental Clinic

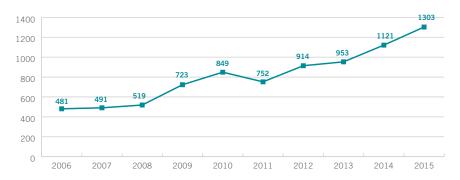
2015 saw the addition of a fifth community outreach midwives clinic at the Athenry Primary Care Centre.

The antenatal clinics afford flexibility and convenience to the woman, while providing safe and effective midwifery care to the low risk pregnant woman in an environment suitable to her needs (NICE, 2014). In 2015, these clinics offered care to 1303 women (44.8% of total deliveries at UHG), comprising of 5694 recheck visits. Furthermore, almost 25% of all women delivered in UHG receive their antenatal care at community outreach clinics.

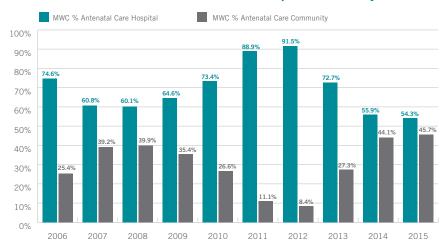
### **Early Transfer Home**

The community Midwives also provide an Early Transfer Home service, facilitating low risk women and their newborn infants discharge home within 8-24 hours post vaginal delivery in the Galway City boundaries including the Claregalway and Oranmore areas. Women can enjoy the comfort and support in their home and with family, while benefiting from Midwifery led care for five days. Continuity of caregiver and information received results in high levels of patient satisfaction. In 2015, 386 women availed of the ETH service.

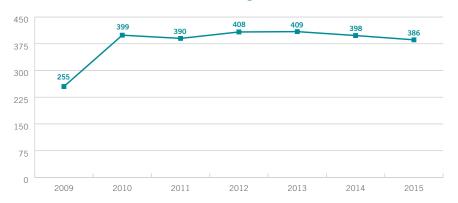
### No. Women who attended Midwives Clinic



### Women attended Midwives Clinics – Hospital/Community (%)



### No. Women Discharged with ETH



# Midwifery Practice Development Unit UHG & School of Nursing and Midwifery NUIG

Ms Margaret Coohill & Ms Anne Fallon

#### 1. Introduction

Midwifery programmes are provided by the School of Nursing and Midwifery, National University of Ireland, Galway (NUIG) in association with the Galway University Hospital, Portiuncula University Hospital Ballinasloe and Castlebar University Hospital. The clinical placement has been extended to include Sligo University Hospital from 2015. The Midwifery Practice Development team for the Saolta University Hospital group provide support to students during their clinical placements. The team also support staff in professional development, multidisciplinary learning and updating policy, guidelines and clinical care pathways for the Saolta group.

### 1.1 Staff of Midwifery Practice Development Unit UHG

Practice Development Co-ordinator

- Margaret Coohill
- Allocation Liaison Officer
- Anne Marie Culkin
- **Clinical Placement Co-ordinators**
- Carmel Cronolly (Ballinasloe)
- Frances Burke (Castlebar)
- Karlene Kearns (Sligo)
- Barbara Bradley (UHG)
- Aisling Joyce (UHG)
- Administrator
- Geraldine Mc Hugh

Midwifery Clinical Skills Facilitator

• Deirdre Naughton

### 1.2 Philosophy of Midwifery Care

The School supports the philosophy that "Midwives recognise pregnancy, labour, birth and the post-natal period as healthy and profound experiences in women's lives" (NMBI 2015 p.12). Midwifery care is provided in partnership with the woman and in collaboration with other health care professionals.

### 1.3 Philosophy of Learning

The students are encouraged to adopt an inquiry based approach to learning with an emphasis on clinical practice in an environment that supports quality and a woman centred approach to care. Midwifery programmes have been developed using an eclectic curriculum which is flexible, dynamic and practice based.

### 2. Midwifery Education

### 2.1 The Higher Diploma in Midwifery

In September 2015, ten students continued the eighteen month Higher Diploma in Midwifery programme at University Hospital Galway.

### 2.2 Bachelor of Midwifery Science (September 2015)

2015 Yr 1 Class: 22 midwifery students commenced the four year programme with clinical placement in UHG, Castlebar and Portiuncula and Sligo Maternity Hospitals.

2014 Yr 2 Class: 19 midwifery students continued with midwifery placements in all three sites and specialist placements in gynaecology and general theatres in UHG and Portiuncula Hospital. Medical and surgical wards were undertaken at UHG.

2013 Yr 3 Class: 19 midwifery students continued with midwifery, neonatal and mental health placements in GUH with some placements in Mayo University Hospital and Portiuncula University Hospitals. These students also had a clinical placement in the Midwife led services in UHG and the community.

2012 Yr 4 Class: 21 midwifery students commenced internship with placements in UHG, Castlebar and Portiuncula Maternity Units.

### 2.3 Clinical Teaching

Student midwives must successfully complete both clinical and theoretical components of the programme to be eligible to register as a midwife with An Bord Altranais agus Cnáimhseachais na hÉireann. Clinical teaching is primarily provided by midwives/preceptors with support from the Clinical Placement Co-ordinators from the Practice Development team and Lecturers from the School of Nursing and Midwifery (NUIG).

### 2.4 Community midwifery placements

These placements are achieved by allocation of students to:

- The Midwife Led Antenatal Clinic,
- Midwife Led Outreach Antenatal Clinics
- Midwife Led Early Discharge Home service at UHG.
- Teenage Pregnancy Project, UHG.

### 2.5 Assessment Process for Student Midwives

Theoretical and clinical assessments are ongoing throughout the academic year. Theoretical modules are assessed using a variety of methods; course work, examination, MCQ's, poster presentations, role play and OSCE's.

Clinical practice is assessed by achieving clinical competencies as outlined by An Bord Altranais agus Cnáimhseachais na hÉireann and the School of Nursing and Midwifery NUI Galway. Clinical competencies are assessed by Midwives/ Preceptors in collaboration with the Clinical Placement Co-ordinators and Link Lecturers as appropriate.

### 2.6 Postgraduate Diploma in Public Health Nursing

The Child and Maternal Health module was undertaken as part of the Postgraduate Diploma in Public Health Nursing at NUIG. Students were facilitated to undertake the clinical component of this module in UHG Maternity Unit, Portiuncula, Castlebar and Sligo University Hospitals.

### 3. Professional Development Courses

### 3.1 Fetal Monitoring Workshops:

Facilitated by Practice Development team and Clinical Midwives. The aim of these workshops is to facilitate multi-professional training in fetal monitoring requirements.

### 3.2 Neonatal Resuscitation Provider Course:

Facilitated by Neonatal Instructors for all staff on an ongoing basis.

### 3.2 Practical Obstetric Multiprofessional Training (PROMPT):

Facilitated by Practice Development team, Clinical Midwives and MDT (Multi Disciplinary Team). The aim of these workshops is to facilitate multi-professional training in the management of obstetric emergencies.

### 3.3 Perineal Suturing Workshop:

Facilitated by Practice Development team.

This workshop is designed to facilitate practitioners to acquire or update their knowledge and skills on perineal repair.

### 3.4 High Dependency Maternity Care Module:

This postgraduate (level 9) module, continued in 2015 for midwives. In 2015, the module was extended to include the Centre for Midwifery Education in the Coombe Hospital, Dublin. It runs as a stand alone option or credits awarded from this module can be accumulated towards other postgraduate courses, and is available to midwives nationally.

### 4. Multidisciplinary Saolta Partnerships

### 4.1 Multidisciplinary Policy, Guideline and Clinical Care Pathways committee

The purpose of these committees is to facilitate consistency and quality of maternity, early pregnancy, gynaecology and neonatal care through standardisation of policies, care pathways and guidelines for the Saolta maternity hospital group.

#### 4.2 Education Committee

Educational needs of staff are identified and relevant education sessions are organised to support professional development.

# Antenatal Ward (St Catherines Ward)

Ms Eithne Gilligan and Ms Helen Byrnes

St Catherine's antenatal ward staff endeavours to provide holistic evidence based individualised care. It comprising of 18 beds to provide care to complex high risk women who are admitted for close monitoring and observation. The midwifery staff work closely with the multidisciplinary team which includes obstetricians, anaesthetic staff, social workers, physiotherapists, public health nurses, teen parent support services, medical and support staff. As University Hospital Galway is a training hospital both undergraduate and higher diploma midwifery students gain valuable experience while on placement on this ward under the supervision of qualified midwives.

Ward activity includes;

- Formal process for improved communication i.e. daily safety pause, attendance at 8 am labour ward handover meeting by CMM
- Monthly audits as per midwifery metrics including documentation, patient satisfaction, medication management, IMEWS
- Referral centre for woman> 20wks gestation
- Antenatal education
- Daily antenatal assessment
- Management of late miscarriage up to 24 weeks gestation
- Provide antenatal and postnatal Bereavement care to those who suffered loss in pregnancy.

# Postnatal ward (St. Angelas)

Ms Heather Helen

The midwives on St. Angela's Ward postnatal ward are part of the multidisciplinary team that provide postnatal care to women and their infants. This involves caring for women, supporting infant feeding, providing parenting support, education and teaching. Other team members working in the unit providing care include Obstetricians, Paediatricians, Physiotherapists, Lactation Consultant, Early Discharge Team, Social Workers, Teen Parent Project officers, Newborn Hearing Screening and PHN Liaison Officers.

A combination of high risk pregnancies, complicated deliveries and a rising caesarean section rate increases the number of women requiring a higher level of care in the postnatal period. The Midwifery staff working on the ward require a high level of knowledge and clinical skills to provide a competent safe standard of care to women and their infants. Some of the midwifery staff are in the process of completing their lactation consultancy exams, having more lactation consultants on the ward will be of great benefit to the women, staff and infants.

Environmentally, we are continuing improvements throughout the ward. In 2015 upgrading took place in some of the rooms with the instillation of wall mounted Dynamap monitors to assist in caring for women that require additional care in the postnatal period.

All infants receive a high level of assessment and observation in the postnatal period, with specific policies in place for those with individual risk factors. All babies at risk are monitored using the NEO-EWS chart with prompt follow up as required. 3% of babies that were born in 2015 were identified as requiring admission to NICU directly from St Angela's ward. The midwives on St Angela's Ward provide noninvasive testing for hyperbilirubinaemia in newborn infants Transcutaneous Bilirubin Meter (TCB) therefore reducing the number of infants who require invasive Serum Billirubin Tests.

In 2015 Neonatal Newborn Bloodspot Screening (NNBS) was carried out on 33.7% of babies prior to discharge with the remaining number referred to the community. The register is managed and audited at ward level ensuring 100% compliance with

Metabolic Screening. There is a close link with the newborn screening laboratory in Temple Street Hospital and St Angela's postnatal ward in the follow up of additional neonatal screening if required.

Newborn Hearing Screening is available throughout the seven days per week, with 99% of babies receiving screening prior to discharge home.

On discharge from the ward a summary of care is generated by the midwifery staff and forwarded electronically to the PHN's and a hard copy is posted out to the G.P. In order to streamline the discharge process we have integrated our discharge education class with the Physiotherapists education session to ensure high quality and standardisation of information for all women.

The midwives on St Angela's ward and midwifery management work closely with health care professionals in the community. A committee of relevant stakeholders within University Hospital Galway and Primary Care Team meet at regular intervals to provide a link between the PHN and Hospital setting.

# Breastfeeding

Ms Claire Cellarius

The HSE National Infant Feeding Policy for Maternity and Neonatal Services was updated in July 2015 and applies to all employees providing maternity and neonatal services. It's purpose is for all staff to protect, support and promote best practice in relation to breastfeeding.

In accordance with the HSE, DOH and WHO/UNICEF recommendations, we should encourage and enable mothers to breastfeed exclusively for the first 6 months and continue thereafter as part of a wider diet until 2 yrs of age.

Increasing our breastfeeding rates is challenging however our initiation rate rose slightly to 67% in 2015, while the exclusive breastfeeding rate from birth to discharge increased to 44.8% (2015) from 40.6% (2014).

In 2015 a UNICEF breastfeeding E-Learning course was available to all maternity staff and 97 staff completed it successfully. Three staff midwives were sponsored to complete the IBCLC exam and in-house staff training is ongoing with monthly breastfeeding refresher courses. We also provide a

weekly breastfeeding drop in clinic for mothers & babies after discharge; pregnant women are also welcome to attend.

As part of National Breastfeeding Awareness Week 2015 we invited Transition Year Students for an information session in our lecture room. 40 girls were made aware of the benefits of breastfeeding and had a opportunity to talk to a new mother with her baby.

# Fetal Medicine Unit/ Ultrasound Department Report

Professor John J Morrison and Ms. Anne Keane

There were in total 11,781 scans performed during 2015 at the Fetal Assessment Unit (FMU) and in the Early Pregnancy Assessment Unit (EPAU). Of these scans 9,902 were performed in the Fetal Medicine Unit and 1,879 were performed in the EPAU. The vast majority of the scans performed in the FMU were done so for obstetric reasons (a total of 20 gynae scans were performed). Gynaecological ultrasound scans are generally performed in the department of radiology at Galway University Hospital. The ultrasound assessments performed in the FMU included routine first trimester scans, detailed fetal anatomy scans at 20-22 weeks gestation, referral cases from other consultant clinics and other hospitals, and referrals for assessment of fetal wellbeing. There were two Consultant Fetal Medicine/ High Risk clinics held weekly during the year 2015.

In addition to the above clinics, there was a specialist Diabetic Clinic/ Endocrine Clinic held on a fortnightly basis. Multiple pregnancies are generally seen in the high risk clinic, and the Fetal Medicine Unit also serves as a centre for Perinatal Ireland Research Studies. In 2014 recruitment for the study GENESIS was completed.

Apart from the Fetal Medicine Unit/ Ultrasound Department there is a formal EPAU which provides dedicated sessions four mornings per week. The sonographers attached to the FMU participate in this service. The EPAU service provides ultrasound for women in early pregnancy with bleeding or other complications.

### **High Risk Fetal Medicine Clinic**

During the year 2015 there were 1,032 attendances at the two high risk clinics. These attendances were for complications in pregnancy pertaining to women booked in Galway University Hospital and also included referrals from outside hospitals in the Saolta Hospital Group. The reason for attendances included suspicion or confirmation of fetal abnormality, multiple

pregnancies, prenatal non-invasive screening, invasive prenatal testing, medical complication of pregnancy, maternal antibodies to red blood cell antigens, and platelet alloimmune disease.

### **Fetal Abnormalities**

During 2015 there were 55 new pregnancies with one or a number of fetal malformations diagnosed leading to further testing. The list of the actual fetal abnormalities is provided below. The remaining attendances were for the purposes of detailed fetal anatomy scanning, nuchal translucency measurements/ combined testing, growth and doppler assessment, ultrasound assessment in the presence of alloimmune antibodies, and a history of previous affected pregnancies.

### **Fetal Abnormalities**

The list and description of fetal abnormalities managed at the FMU during 2015 is outlined below:

#### Cardiovascular malformations

Transposition of the great vessels, hypoplastic left heart, hypoplastic right heart, atrio-ventricular septal defects, ventricular septal defects, coarctation of the aorta, ventricular dysfunction, heart block, and a number of fetal arrhythmias. 14

### **Central Nervous system malformations**

Spina bifida, hydrocephalus, anencephaly, encephalocoele, unilateral ventricuomegly, enlarged cisterna magna, defect in cerebellar vermis. 14

#### Renal tract malformations

Multicystic kidneys, dysplastic kidneys, absent kidney, dilated renal tracts. 11

### Gastrointestinal malformations

Exomphalus, diaphragmatic hernia. 3

### Thoracic malformations

Cystic adenomatoid malformation (CAM), trachea-oesophageal fistula. 3

#### Musculoskeletal malformations

Limb abnormalities, short/long bones, skeletal dysplasia, and talipes equinovarus. 7

Other head and neck malformations Cleft lip/palate 4

### Cystic Hygroma 8

In addition to above there were a total of 36 invasive procedures performed during the year 2015 which included 33 procedures of amniocentesis, and 3 chorionic villus sampling (CVS) procedures. The cases of fetal Aneupolidy detected were as follows:

 $\begin{array}{lll} \text{Trisomy 21} & N=7 \\ \text{Trisomy 18} & N=2 \\ \text{Trisomy 13} & N=4 \\ \text{Triploidy} & N=2 \\ \text{Translocation/Deletion} & N=2 \\ \end{array}$ 

### **Multiple Pregnancy**

The majority of care for multiple pregnancies is based in the FMU. During the year 2015 97 women with multiple pregnancies attended the FMU, which resulted in a total of 536 scans and visits.

### **Diabetic Clinic**

There were 211 patients with gestational diabetes (GDM), 21 patients with type I diabetes, and 10 patients with type II diabetes. There were 50 patients referred with miscellaneous endocrine disorders. There were 796 visits to the joint FMU/ Diabetic/Endocrine clinic.

This clinic is managed by the midwife/sonographer team in the Ultrasound Department, Dr. Geraldine Gaffney, Senior Lecturer, Consultant in Obstetrics & Gynaecology, Professor Fidelma Dunne, Consultant in Endocrinology and Diabetes, Dr. Aoife Egan, SpR in Endocrinology, Ms. Breda Kirwin, Clinical Nurse Specialist in Diabetes Mellitus, and the team in general.

### **General Staffing issues**

Ms. Ann Brady left her post as Clinical Midwife Sonographer in August 2015. Ms. Edel Varden left her post as Clinical Sonographer in Obstetrics & Gynaecology, and research lead for Perinatal Ireland during 2015. They were valued members of the team and we wish them well in their careers otherwise.

# Medical Social Work Report

#### Referrals

Medical Social Work referrals are transitioning to online referrals from CNM's and doctors. This is expected to be completed by end 2016. Self-referrals and referrals from GPs and other voluntary or statutory agencies are also welcomed.

#### **Child Protection**

As we are all designated officers under child protection legislation we are all responsible for the protection of children identified as either suffering or likely to suffer, significant harm as a result of abuse or neglect. Medical Social Workers can complete initial assessments where a child protection concern is noted. We can attend pre birth case conferences and liaise with Tusla social workers regarding child protection care plans for new born infants. Assessments are also made where there are concerns in relation to underage sexual activity.

#### **Emergency Department:**

Social Workers in the Women and Children's Directorate have responsibility to provide support to the Emergency Department where reasonable grounds for concern exist regarding the protection and welfare of children, under 18 years of age.

### **Student Training:**

Our experienced Social Workers continue to support the Masters in Social Work Programme by acting as practice Teachers and providing placement opportunities for 1st and 2nd year students from NUIG, TCD, UCD and UCC.

### **Committees:**

Social Workers endeavour to provide active participation on Perinatal Mental Health Committee, Traveller Midwifery committee and the Perinatal Bereavement Committee when staffing numbers permit.

### **OBSTETRICS & GYNAECOLOGY** Support and counselling

- Crisis intervention, mediation and counselling for various personal and family difficulties.
- Counselling and support for women at the time of diagnosis of serious illness.

- Antenatal support for parents following diagnosis of fetal abnormality.
- Identification and support for women with anxiety, low mood, depression in ante natal or postnatal stage.
- Bereavement counselling and support for parents and family members following a pregnancy loss including stillbirth, miscarriage, neonatal death and termination of pregnancy.
- Referral and liaison with services and patients linked with drugs services and or mental health services.

### Information and guidance

- Support in relation to parenting and/ or childcare issues.
- Support in relation to immigration issues and integration concerns.
- Involvement in research, training and policy development.
- Liaison, advocacy and support in relation to accessing various services.
- Provision of information regarding social welfare, entitlements, birth registration etc.

#### **Domestic Violence**

 A routine enquiry into domestic abuse continues in Maternity Out patients. Should a woman disclose domestic abuse, social workers will respond immediately and work with her to plan for her safety.

### **Crisis Pregnancy**

 The Department offers supportive, non-biased counselling to women presenting with a crisis pregnancy.
 Counselling is offered on all options within the relevant legal guidelines.

### PAEDIATRIC AND NEONATAL INTENSIVE CARE UNIT

The Social Worker is an integral part of the multi-disciplinary care team in the Paediatric and Neonatal units focusing on family-centred care.

### Support available:

- Crisis intervention and counselling to support families coping with life changes associated with illness and hospitalisation, premature birth, diagnosis of long term illness, fetal abnormality
- Enhance coping skills and participation in care, supporting attachment and bonding with caregivers and children

### Ms Maeve Tonge, Senior Social Worker

- Information and support to ensure the smooth transition from hospital to home.
- Support with loss and bereavement
- Advocacy and support with accessing community supports and services.
- Consultation and liaison with hospital and community colleagues in relation to child protection and welfare concerns
- Support with parenting or care-giving concerns

#### Team

Mary Mc Mahon moved from paediatrics to Principle Social Worker managing all Social Work teams in GUH. Maeve Tonge moved into Senior Post with clinical work in Paediatrics. Jenny Wren, continues to provide the Social Work service to Obs/Gynae. We were sorry to see Anne Marie Kelly, Social worker leave our team after many years with us in WAC and we wish her the very best in her future career. Ms Triona O Toole joined the team from Tusla in Dublin and her experience is a great asset to our service.

### **Conclusion:**

As always we would like to acknowledge the support from our colleagues in Obstetrics & Gynaecology, Paediatrics and Neo-Natal departments.

### Teen Parents Support Programme (TPSP) Galway

The Teen Parents Support Programme provides services for young people who become parents when they are aged 19 years and under and supports them until their children are two years of age. This service is for all young parents living in Galway City and County. The programme is located at Galway University Hospital and managed by the Social work Department. It is funded though the HSE West and Tusla Child and Family Agency, under the School Completion Programme. Support is offered in all areas of a young person's life: antenatal care and health, relationships, accommodation, social welfare, education, training, child development, parenting, childcare and any other issue that is of concern to the young parent. Ten similar programmes have been set up nationally. There is a National Co-ordinator based in Dublin.

TPSP Galway offers a non-judgemental, non stigmatising holistic service to young parents. We endeavour to be client led and are flexible and creative in meeting individual needs. Whilst young mothers are our primary clients we value the young father's role in their children's lives and endeavour to be inclusive. Support is offered on a one to one basis, through group activities and through referral to other services.

Since the programme opened in 2000 we have received over 1000 referrals. Approximately 25 ¼ of those referred have been supported to return to education during this time.

We now have a website www.teenparentsgalway.ie and a facebook page tpspgalway which is proving to be a good resource for both Teen Parents and professionals.

# Urogynaecology Report

Dr Susmita Sarma

Once again we are indebted to the Physiotherapists in women's health, who provide the bulk of conservative management for patients with prolapse and urinary symptoms and continue to facilitate a combined clinic on a Monday morning. Special thanks are given to Debbie Fellowes and Rachel Clarke, Physiotherapists for their invaluable help.

#### **Urodynamics:**

In 2015, 107 urodynamic investigations were performed. The bulk of the referrals were from UHG with the remainder from Sligo University Hospital. The assistance of Mary Connolly HCA is greatly appreciated in the urodynamic clinic.

Total Urodynamic Investigations: 107

SOURCE OF REFERRALS:		
UHG clinic and consultants	62 (58%)	
Sligo University Hospital	45 (42%)	

46 (42.9%)
17 (15.8%)
15 (14%)
15 (14%)
7 (6.5%)
7 (6.5%)

SURGERY:	
Tension free vaginal tapes	30
Periurethral Macroplastique	2
Cystoscopy	49
Sacrospinous fixation	3
Colpocleisis	3

Both retropubic and transobturator tapes are inserted for stress incontinence.

Cystistat bladder instillation continues to be used for painful bladder symptoms and also recurrent cystitis.

# Physiotherapy Department in Obstetrics & Gynaecology

Ms Debbie Fallows

#### Introduction

Physiotherapy activity levels increased again in 2015. In spite of a stable birth rate, antenatal musculoskeletal referrals increased by 12.5% and postnatal referrals by 25% on 2014 figures. As a result of these increases, patients referred from gynaecology clinics with pelvic floor dysfunction are now waiting 9 months for physiotherapy assessment.

### Individual Review 1. Postnatal

- A total of 250 postnatal outpatients were referred to physiotherapy in 2015, representing an increase of 25 % on 2014 rates. The greatest increase was seen in patients referred with urinary / faecal incontinence, pelvic organ prolapse and perineal tears.
- In addition, 787 inpatient postpartum mothers were reviewed and monitored individually following instrumental delivery and /or baby weight >4kgs. These patients represent those at greatest risk of complications due to pelvic floor trauma.
- 62 patients were treated following 3° or 4° perineal tears.

### 2. Antenatal

- A total of 783 antenatal patients were referred for physiotherapy in 2015, representing an increase of 12.5 % on 2014 rates. 23% of these were referred from Primary Care. Antenatal referral rate has more than doubled over the last 6 years.
- To manage this increase in activity, more exercise-based group sessions are taking place for patients with pelvic girdle pain.

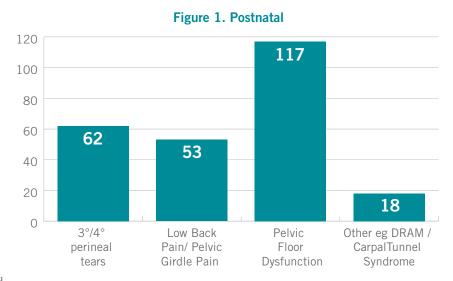
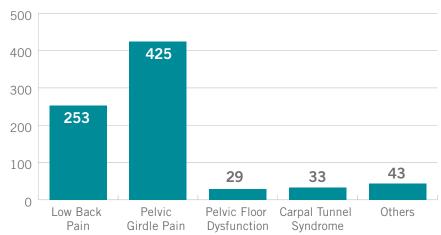
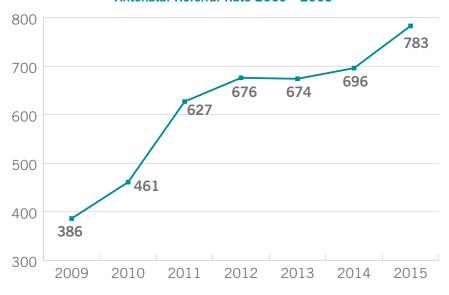


Figure 2. Antenatal



### Antenatal Referral Rate 2009 - 2015



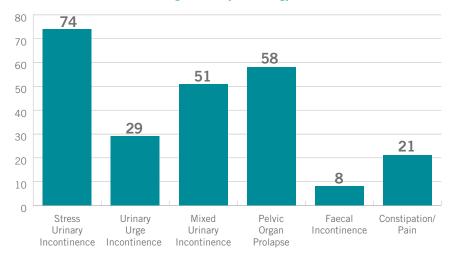
### 3. Gynaecology

• A total of 241 patients were referred from gynaecology clinics in 2015. Of these 85(35%) were seen by a physiotherapist directly from the Urogynaecology clinic.

### **Group Education Sessions**

GROUP PHYSIOTHERAPY SESSIONS	NUMBERS ATTENDING IN 2015
Antenatal education session	2419
Early postnatal education sessions	807
Postnatal review session	101
Post gynae surgery session	229
Pelvic Girdle Pain Session	183

Figure 3. Gynaecology



# St Monicas Gynaecology Ward Report

Ms Annemarie Grealish

St Monicas ward has a capacity of 15 inpatient beds with 4 day case trolleys. The ward specialises in the area of early pregnancy, gynaecology and gynaeoncology. St Monicas has high clinical activity levels with significant patient turn over volumes. The philosophy of care is to provide holistic women centred care that is both efficient and accessible to all women.

St Monicas was awarded a Design and Dignity grant from the Hospice Friendly Hospitals in 2015 to enable works on a designated bereavement room. Plans are ongoing at present, and start date for refurbishment is June 2016

The continuous support of the Clinical Nurse Specialist (Joanne Higgins) in Gynaeoncology services is an invaluable resource. She works directly with the patients and their families to help ease the patient's journey in difficult times. Patient satisfaction surveys recently carried out for Gynae oncology services account for patient satisfaction rates of 100 %.

Many staff have now completed training in cannulation and phlebotomy and many more hope to complete this training in the future.

Some of the Challenges facing St Monicas ward going forward are the waiting lists for women requiring gynaeoncology service. There is limited time and access to the theatre in maternity. Occasionally time and theatre spaces are given in the Main hospital which leads to challenges with ward capacity and caseload. University Hospital Galway

# Gynaecological Surgery Report 2015

Professor John J Morrison and Ms Shaijy Avarachan

The surgical procedures performed during 2015 are outlined below. They

are shown alongside the figures for the 3 previous years. The statistics also

include the gynaecology procedures in the major theatre in the general hospital.

ring 2015 are outlined below. They 3 pr	revious years. The statistics also	t	in the general h	al hospital.		
	2	2012	2013	2014	2015	
LSCS		901	966	924	853	
Laparoscopy 144		138	131	109		
ERPC		205	241	238	184	
Ectopic pregnancy		24	20	28	17	
Hysteroscopy		475	552	551	602	
Tubal ligation		25	18	45	25	
Laparotomy		37	40	40	41	
Wertheim's /Radical hysterectomy		9	3	2	4	
Omentectomy		35	0	21	5	
Node sampling		38	0	0	3	
Abdominal hysterectomy +/- BSO		45	44	90	80	
Myomectomy		16	19	7	6	
Vaginal hysterectomy		6	4	2	7	
Vaginal hysterectomy & PFR		31	22	20	8	
Pelvic floor repair		39	30	39	34	
TCRE		16	14	18	9	
Endometrial ablation		44	25	28	30	
Cystoscopy		21	23	46	26	
TVT-O		15	13	16	26	
Division of TVT		1	0	0	3	
Sacrocolpopexy		0	0	0	0	
Macroplastique collagen		1	2	0	0	
Revision of vaginal mesh		0	0	0	0	
Vulvectomy		2	3	5	2	
LLETZ		13	18	16	10	
Bartholins		14	15	12	10	
Vulval Biopsy		14	14	31	17	
Laparoscopic Hysterectomy		12	16	19	39	
3rd Degree tear repair		25	40	42	39	
Lap dye hysteroscopy		115	142	132	97	
Mirena insertion		135	160	131	148	
Examination under anaesthetic		47	36	32	25	
Cervical cerclage/suture		12	12	19	7	
Manual removal of placenta		27	17	34	23	
Instrumental /vacuum extraction delivery		52	73	66	39	
Fenton's procedure		3	0	2	0	
Caesarean hysterectomy		1	0	0	1	
Ovarian debulking		20	9	28	21	
Laparoscopic BSO					22	
Major	1	L527	1556	1437	1461	
Minor	1	1048	1029	1133	1007	
Total	2	2575	2585	2570	2459	
Elective Cases	1	1845	1807	1873	1680	
Emergency Cases		730	778	697	779	
Total		2575	2585	2570	2459	

# Colposcopy Clinic Report

#### Team

Administration: Ger Dooley, Ann Keane and Caitriona Curley. Consultant: Dr Michael O'Leary (Lead Colposcopist) and Dr Katharine Astbury

Nursing Midwifery: Pat Rogers (RAMP), Maura Molloy (RAMP), Rachael Comer (CNS)

Healthcare assistant: Karen McGinley

#### **Activity**

There was an increase in referrals to the clinic with 1266 new referrals in 2015 compared to 988 in 2014. The increase occurred in the second half of 2015 as a result of the introduction of HPV triage. Cervicalcheck introduced HPV triage in May 2015, this means low grade screening smears are tested for high risk HPV types and if positive the woman is referred immediately to Colposcopy. If negative for HR HPV the woman is at very low risk of cervical cancer or precancer and is returned to routine screening. Previously low grade smear results (ASCUS and LSIL) were repeated in primary care and only referred to Colposcopy if their next smear was abnormal. There are 2 major advantages to HPV triage testing, women with negative results are reassured and don't need intensive surveillance and women with positive results are referred early to Colposcopy thus improving their chances of early detection of precancer. Extra midwife led clinics were held to ensure that the extra numbers of women referred as a result of triage were seen within the 8 week standard set by cervicalcheck for low grade referrals.

TABLE 1 – LLETZ HISTOLOGY **RESULTS 2015 Histology Results** Number Cancer (including 10 microinvasive) 2 AdenoCa in situ 10 /CGIN CIN3 46.5 211 CIN<sub>2</sub> 120 25 CIN1 90 19 HPV / cervicitis 12 2.5 No CIN/No HPV/ 15 3 normal Inadequate /  $\cap$ unsatisfactory **Total** 468

Overall attendance was 4028 compared with 3843 in 2014.Non attendance was 3 % amongst first visits and 9% for follow up appointments, these fall within the target set by Cervicalcheck at <10%. Reminders were issued by text message one week in advance of appointments.

Cytology and high risk HPV testing were provided by Medlab Pathology. Histology services were provided by UHG laboratory. Multidisciplinary team meetings between Colposcopy clinical staff, the cytology laboratory and UHG histology laboratory were held at 1-2 months intervals using gotomeeting software.

There was an increase in LLETZ treatments (n=468) compared to 415 in 2014 and 95% had CIN 1 or > (table 1). Cervicalcheck standards were met (>80% of excisions should have CIN on histology). Increased referrals led to an increase in punch biopsies 1167 in 2015 (1030 in 2014).

#### Cancer

A total of 30 women were seen with cancer diagnosis at the Colposcopy clinic, of these 24 women had cervical cancer, adenocarcinoma (n=4), squamous cell carcinoma (n= 20). A summary of cancer type and treatments is included in table 2.

#### **Service**

Midwifery staff from Galway Colposcopy clinic continued a smear clinic at Portiuncula University Dr Michael O'Leary and Ms Maura Molloy

Hospital Ballinasloe on two Friday afternoons per month, 347 women attended in 2015. The outreach clinic saves women from the midland counties having to travel to and park at UHG for follow up smears.

#### Reporting

Monthly, quarterly and annual report of activity (colp1) was generated and submitted to Cervicalcheck.

#### **Publication**

High Risk HPV testing following treatment for cervical intraepithelial neoplasia. Molloy M, Rogers P, Comer R, Astbury K, O'Leary M, Meskell P, Dowling M, Irish Journal of Medical Science, 2015 DOI 10.1007/s11845-015-1392-4.

#### **Summary**

The Colposcopy team managed increased referrals with additional clinics. The large amount of high grade precancer that is being detected and treated in our Colposcopy clinic will help reduce the incidence of cervical cancer in Irish women. Local and National guidelines were adhered to. The Colposcopy team both clinical and clerical delivered quality assured service to women in the West of Ireland and midlands. Patient satisfaction with the service at the Colposcopy clinic and outreach clinic is high and we are grateful to Portiuncula Hospital for their continued support.

TABLE 2 –	CANCER CASES SEE	n at ga	LWAY CO	LPOSCOPY CL	INIC 20	15
Site	Cancer type	LLETZ	Surgery	Chemo/ radiotherapy	Other	Total
Cervix	Early Squamous cell		7			7
Cervix	Squamous cell > 1a		4*	9		13
Cervix	Adenocarcinoma		3**	1		4
Vulva	Squamous cell		1			1
Vulva	Melanoma		1			1
Vagina	Adenocarcinoma (recurrence)					1
Vagina	Squamous cell			1	1***	1
Endometrium	Sarcoma		1			1
Endometrium	Adenocarcinoma		1			1

<sup>\*</sup>Radical hysterectomy (n=2), Caesarian hysterectomy (n=1), Trachelectomy (n=1)

<sup>\*\*</sup>Radical hysterectomy (n=3)

<sup>\*\*\*</sup>Previous radiotherapy

# Maternity Admissions

Ms Claire Fuller

The admissions/emergency department for obstetrics and gynaecology facilitates elective and emergency admissions.

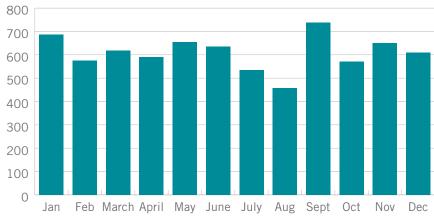
Referrals are received from consultants, NCHD's, GP's, Public Health Nurse's, Midwives Clinic and self referral. The number of women cared for in this department has continued to rise over the last few years. The department is open 5 days per week. Monday – Thursday 8am-5pm, Friday 8am-1300. In September 2015 it was decided to extend the opening hours of the unit to open Monday – Friday 8am-5pm.

### Early Pregnancy Assessment Unit (EPAU)

The EPAU is located within the Maternity Admissions Department. It provides care, support and advice to women who develop complications during the first 13 weeks of pregnancy. EPAU is staffed by a team of NCHD's, midwives, sonographers and a clerical officer, a bereavement counsellor is available when requested. The unit is open four mornings a week providing women with scheduled appointments along with managing emergency referrals and inpatient referrals. Staff provide women with information and support in a sensitive and caring manner, explanations are supplemented with written information leaflets.

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
686	575	617	591	655	634	534	458	738	571	651	610





Referrals are accepted from

- GPs: Where there are complications of early pregnancy.
- If there is a previous history of two or more miscarriages, previous ectopic or previous molar pregnancy.
- Consultants and NCHDs

2036 women were reviewed in the EPAU in 2015, an increase from the previous year of 94 women.

Two midwives completed the Early Pregnancy Ultrasound Certificate in UCD and continue to work within the department.

A business case has been developed for the relocation of the EPAU to a dedicated area within the maternity

# Infertility Service Report

Dr Declan Egan retired from his post as Consultant Obstetrician Gynaecologist during 2015 after a long and successful career since his first appointment to UHG in 1994. At that time he was the first appointed Subspecialist in Infertility in Ireland. The outpatient fertility clinic in the Obstetrics and Gynaecology Department at UHG acts as the first contact point for entry into the fertility programme. The clinic's main function is the investigation and diagnosis of fertility problems, both primary and following recurrent miscarriages. In the absence of treatment options in the public system, Dr Egan set up a private facility to provide a range of treatments to his patients. This clinic (GFC) has grown from a small unit off the maternity wing, employing 3 staff, to its present status as a state of the art, standalone facility in Knocknacarra, employing 25 staff and providing treatment to hundreds of couples each year. See www.fertilityclinic.ie for more information.

The public infertility clinic in the Maternity OPD is now run by Dr Una Conway, and at the end of 2015 a new appointment of Dr Nikil Purandare joined the faculty. Dr Purandare completed his subspecialty training in the Rotunda Hospital, HARI clinic. Dr Conway and Dr Purandare, along with Dr Eithne Lowe, Consultant Gynaecologist, provide supervision of patients undergoing treatment in Galway Fertility Clinic, under the guidance of Dr Egan who continues as Medical Director of GFC.

Initial assessments for couples and individuals are arranged in the OPD, including Laparoscopic and Hysteroscopic surgery as necessary

in the gynaecology theatre at UHG. Endocrinology, Urology, Virology, and Biochemistry support is often necessary with colleagues in those departments.

Andrology diagnoses are carried out in the Galway Fertility Clinic (GFC), whose laboratory performed 717 semen assessments according to WHO criteria in 2015. Following investigations, a personalised fertility treatment plan is drawn up for each patient. In 2015 over 600 couples (both private and public patients) attended for investigation diagnoses. The outpatient fertility clinic initiates ovulation induction treatments using clomiphene citrate and where appropriate refers patients GFC for further management. GFC specialises in all aspects of assisted human reproduction treatments including ultrasound monitored ovulation induction, intrauterine insemination, in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI). It is fully patient funded, and offers reduced price treatments to patients with a medical card.

In 2015 the service saw an increase in patient referrals for single women seeking fertility advice and treatment. GFC can offer treatment involving the use of donor sperm, either by IUI or IVF, under highly regulated guidelines from the EU and HPRA. The clinic has also been granted a licence to freeze eggs for these women, particularly when there is a medical indication. This service will be rolled out in 2016, but as yet this is privately funded only.

In 2015, GFC completed 557 IVF/ ICSI/FER cycles. There were 344 intrauterine insemination procedures

#### Dr Una Conway & Ms Jenny Cloherty

and of these 67 involved the use of donor sperm. All donor sperm are imported from Denmark, as there is no donor sperm bank in Ireland.

GFC, in conjunction with the Department of Urology, provides sperm extraction from testicular biopsy samples with 22 procedures performed in 2015, with subsequent cryopreservation, for use in future ICSI treatments. GFC offers a long-term semen cryopreservation service to men undergoing chemotherapy and radiotherapy, it also offers this service to men about to start long-term contraindicated medication.

During 2015, 250 babies were born following treatment in GFC, including 35 sets of twins and 2 sets of triplets. The risk of multiple pregnancies has been greatly reduced over the last few years with the increased implementation of an elective single embryo transfer policy. This number includes only pregnancies following embryo transfer (fresh IVF or Frozen embryos), and IUI treatments. Pregnancies following simple ovulation induction treatments are additional to this number. The cumulative pregnancy rate per cycle of IVF is increasing significantly over the last few years, with over 40% of all cycles resulting in additional embryos being cryopreserved for future treatment. The attached graph shows the take home baby rates from one fresh transfer, stratified by female age, which is the most important indicator of success. Of 1157 fresh embryo transfers (female age 19 to 41 years ) performed from 2012 to 2014, a take home baby rate of 34.9% is reported. Above this age, while there are some successful pregnancies, the rate is 8.2% (n=85).

# Sexual Assault Treatment Unit (SATU) and Child and Adolescent Sexual Assault Treatment Services (CASATS)

Dr. Andrea Holmes, Dr. Joanne Nelson, Ms. Maeve Geraghty, Ms. Clare Mahon

### Attendance re: Galway, Mayo and Roscommon

- There were 64 attendances at the SATU, Galway in 2015, plus 1 SATU to SATU referrals
- 61 (95%) cases the incident took place within the Republic of Ireland

### Attendance re: Month, Notable Date or Event, Day and Time of Day

- December was the busiest month, with 12 (19%) patients presenting during this month
- Monday was the busiest day, with 13 (20%) patients presenting on that day
- 53 (83%) incidents were reported as occurring between the hours of 21:00-08:59

### Type of Sexual Crime, Assailant, Relationship to Assailant

- 49 (76%) reported that the incident occurred within <7days;
- 4 (6.5%) occurred between >7 days and <1 month
- $\bullet$  10 (16%) the time frame was >1 month
- 1 patient reported long term abuse
- 54 (84%) patients reported a single assailant was involved; 6 (10%) reported multiple assailants
- 16 (25%) patients reported the assailant was a stranger and for 4 (6%) patients the number of assailants was unknown

#### Gender, Age Profile, Referral Source

- 62 (97%) patients were female, 2 (3%) male
- The mean age was 24 years, the youngest patients were 14, the eldest patient was > 55 years (the minimum age criteria is 14 years)
- 51 (80%) patients were referred by An Garda Síochána, 10 (15.5%) self referred, 1 (1.5%) was referred by their GP, 1 (1.5%) was referred by the RCC and 1 (1.5%) was referred by another source

#### Patients Reporting to An Garda Síochána / Time Frame from Incident until SATU attendance

52 (81%) patients reported the incident to An Garda Síochána, of these:

- 43 (83%) attended SATU < 7days, of these.
- 39 (75%) were within < 72 hours, with
- 29 (56%) of the group presenting within 24 hours of the incident

#### **Support Worker in Attendance**

• 53 cases (81.5%) had a Support Worker from the RCC in attendance

#### **Physical Trauma**

• 27 (42%) patients had physical trauma, of these 26 (40%) patients had superficial injuries and 1 (2%) patient attended the ED with minor trauma

#### **Alcohol and Drug Use**

- 46 (72%) patients had consumed alcohol in the previous 12 hours, of these
- 34 (53%) patients had consumed > 4 units of alcohol
- 6 (9%) patients had taken illegal drugs
- In 6 (9%) cases, the patient reported having taken both alcohol and illegal drugs
- 7 (11%) patients were concerned that drugs had been used to facilitate sexual assault
- 7 (11%) patients were unsure if a sexual assault had occurred

#### **Emergency Contraception (EC)**

- 42 (68%) female patients were seen within 72 hours of the incident, of these
- 22 (52%) patients were given PCC

### Sexually Transmitted Infection Prophylaxis and (STI) Screening

- 49 (77%) patients received Chlamydia prophylaxis, 29 (45%) had Hepatitis B immunisation programme commenced and 4 (6%) received PEPSE for HIV
- All patients were offered screening for STI's. 14 (22%) patients of patients attended Galway SATU for follow up
- No patient had an abnormal STI screening results

### Attendance At Galway CASATS 2015

- There were 75 requests for SATU services in 2015
- There were 73 attendances at the CASATS, Galway. Two patients changed their mind re: availing of the service and did not attend or cancelled scheduled appointments. These patients were supported by other agencies (TUSLA).
- In all 75 cases the incident took place within the Republic of Ireland.

#### Attendance re: Month and Time of Day

• October was the busiest month with 14 (19%) of cases presenting in this month

- Wednesday was the busiest day with 27 (37%) examined on that day
- 13 (18%) were seen out of hours (between 17.00-08.00 or over the weekend)

#### Type of Alleged Sexual Crime, Assailant, Relationship to Assailant

- Of the 73 patients who were seen 20 (27%) alleged incidents took place within the previous 7 days (acute)
- 10 (13.5%) of those 20 cases had forensic sampling undertaken. 1 case had forensic samples taken within 8 days of the alleged assault as there was some uncertainty surrounding

- the date on which the incident was alleged to have taken place.
- In 13 (18%) cases multiple assailants were alleged to have been involved.

#### Gender, Age Profile, Referral Source

- 48 (66%) patients were female, 25 (34%) male
- The age mean was 6.8 years, the youngest 1 year old and the eldest 16 years old
- 49 (67%) were referred by An Garda Síochána, 14 (19%) were referred by social workers, 8 (11%) were referred by a Hospital Consultant and 2 (3%) by a GP

# Patients Reporting to An Garda Síochána/Time Frame from Incident until Examination

- 49 (67%) cases reported the incident to An Garda Síochána
- 20 (27%) presented within < 7days of alleged assault. Of these, 15 (20.5%) were within <72 hours although only 8 (11%) of these cases were within 24 hours
- 16 (22%) cases presented between 7-28 days after most recent alleged sexual contact
- In 26 (36%) cases the allegation was of historical abuse i.e. >1 month
- An exact time frame was not specified in 11 (15%) cases

#### **Support Worker in Attendance**

• 66 (90.5%) patients had a CARI Worker present.

#### Sexually Transmitted Infection Prophylaxis and (STI) Screening

- 55 (75%) patients had an STI screen
- 4 (5.5%) patients commenced a Hepatitis B vaccination schedule
- Post coital contraception or HIV PEPSE were not required by any CASATS patients in 2015

### Child Assailants (defined as <17 years at time of alleged assault)

- 25 (34%) cases involved child assailants
- One female child assailant was reported. All other child assailants were male.

• In one case both a child and an adult were suspected perpetrators of inappropriate sexual behaviour towards a child victim.

### Adult Assailants (defined as > 18 years at time of alleged assault)

- In 47 (65%) cases adult males were suspected of instigating sexual abuse of whom 11 (23.5%) were the child's biological father.
- There were no suspected adult female perpetrators of sexual abuse in 2015.

# Antenatal and Gynaecology Clinics Report

Ms Siobhan Page

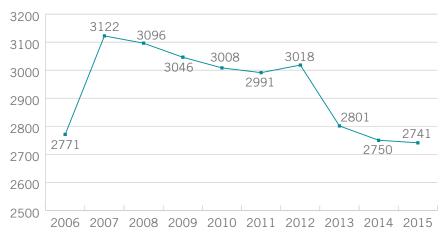
The Maternity Outpatients
Department continues to ensure the provision of evidence based, women/ family centred midwifery care. We aim to provide an efficient service that is safe and accessible. All referral letters to the department are triaged by the consultants weekly.

#### **Antenatal clinics:**

In 2015, 2741 women booked for antenatal care a slight decrease on the previous year (see table 1)

A high risk endocrinology antenatal clinic is held on alternative Wednesdays, these high risk clinics are facilitated by a Consultant Obstetrician and team, Consultant Endocrinologist and team, diabetic nurse specialist and midwives. These high risk clinics run in conjunction with the routine antenatal clinics. All women over the age of 30 years have a routine glucose tolerance test this has greatly increase the activity in the antenatal clinics.





#### Gynaecology, Gynaecology/ Oncology& Fertility clinics:

Six gynaecology clinics are held weekly in the outpatients department. The waiting time for an appointment for these clinics is 12-15 months; however the Gynaecology /Oncology patients are prioritised with earlier appointments at approximately 6 weeks. There were 3318 gynaecology review appointments of these 1805 were new attendees.

There are two fertility clinics; the waiting time for these clinics is approximately 6-12 months for a first visit appointment. However, as with all referral letters these are triaged by the Consultants and prioritised accordingly.

# Quality & Safety Department

Ms Gemma Manning

Quality & Safety Improvement Team meetings are held bimonthly in the Womens & Childresn Department in UHG. There is a set agenda for review and discussion at these meetings

- Safer Better Healthcare Standards Self Assessment
  - Internal Audits , findings and recommendations
  - Incidents
  - Complaints
  - Service Users /patient Feedback / comment cards

Many of our quality & safety improvement opportunities are introduced as a result of patient feedback collected via our established feedback mechanism e.g. comment cards. Completed comment cards are collected from the holders in all areas of the Obstetric & Gynaecology and Paediatric Departement and analysed. The findings are presented and reviewed at the Quality & Safety Improvement Team Meetings and appropriate actions taken as agreed at the meeting.

Incident Reporting in the Womens & Childrens Directorate University Hospital Galway (UHG) continues to increase, complaints reduced in 2015. The Womens & Childrens Directorate team UHG meet forthnightly to review the incidents and complaints reported on the Q-Pulse system.

All incidents and complaints are discussed, accepted, closed or actioned. Internal reviews if required are completed using the Preliminary Assessment Review (PAR) template; PAR is presented to the Serious Incident Management Team (SIMT) and a decision is made by the SIMT if an external review is required using the revised HSE Guideline for Systems Analysis Investigation of Incident and Complaints (December 2015).

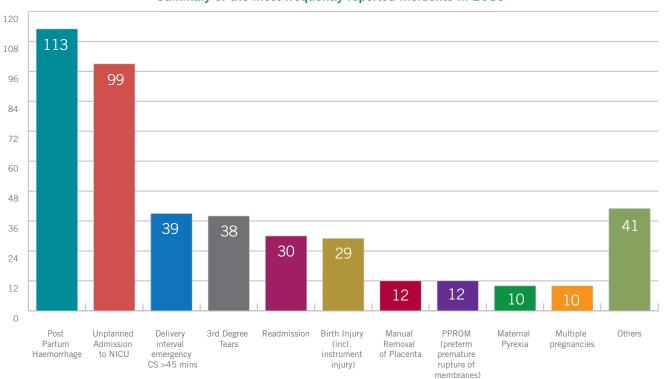
#### General Incidents, Medication Incidents and Complaints Reported in 2015

General Incidents:	770
Medication Incidents:	25
Total	795
Complaints:	51

#### General Incidents, Medication Incidents and Complaints Reported in 2014

General Incidents	753
Medication Incidents:	40
Total	793
Complaints:	69

#### Summary of the most frequently reported incidents in 2015



University Hospital Galway

# Business Manager's Report 2015

Ms Bernie O'Malley

The Women's and Children's Directorate encompasses the Obstetric and Gynaecology service, including the operating theatres and the Neonatal and Paediatric Services.

The governance of the Sexual Assault Treatment Unit also lies within the Directorate but has its own separate allocated budget.

Spending for the year 2015 within the Directorate was as follows:

# Financial Report for the Women's and Children's Directorate at UHH Allocated budget:

£23,947,532.

Total spending for 2015: €23,294,206

While there appears to be an under spend of €653,326 on the budget for 2015, this was due to the cleaning costs for each area not being included in the total spend. This will be adjusted for the 2016 financial report. The main saving was on agency costs, which were down by €247,182 on 2014 spending.

#### **Breakdown of spending costs:**

Pay: €19,687,808

Non Pay: €3,606,398.

Included in non pay was a total of €341,782 on agency costs for the year. While this was down by €247,182 on the 2014 figure, the consultant pay costs increased in 2015.

### New Developments within the Directorate

#### Maternity Day Assessment

In December 2015 a new four bay Maternity Day Assessment opened and criteria for women to be seen in this service developed by the multidisciplinary team.

The development of this unit took considerable refurbishment work and good will from all disciplines who moved their own service to accommodate the space for this.

The aim of this new service is to avoid unnecessary admission of women to the antenatal ward. It is hoped that this will increase the availability of beds on the antenatal ward for more high risk women and avoid admission of antenatal women to the postnatal ward.

Upgrade of the Bereavement Room The bereavement room on the antenatal ward underwent a major face lift A new wall bed was installed to improve the facility for partners who wished to stay overnight. New furniture and soft furnishing was also purchased to

### Focus group on Draft Standards for safer better Healthcare.

make the room more homely.

In November the maternity unit hosted a focus group with HIQA representatives on the development of Draft National Standards on Safer Better Maternity Care.

# Letterkenny University Hospital

Ms Evelyn Smith

Letterkenny University Hospital provides a range of healthcare services to the people of County Donegal, serving a population of over 161,000 people. The catchment area incorporates patients residing in County Donegal, north of Laghey/ Pettigo. It is a 314-bedded acute general and maternity hospital which provides a broad range of acute services on an inpatient, day case and out-patient basis.

#### Introduction

The Maternity Unit in Letterkenny provides care for the needs of the multi-cultural female population of Donegal. We strive to offer a service that supports and empowers women. We endeavour to improve services and maintain a high-quality, family-centred service that offers women advice, choice, information, control and continuity of care. The Maternity Unit acknowledges the use of the word 'family' to refer to significant others as identified by the woman.

Letterkenny Maternity Unit is founded on the philosophy that childbirth is a normal event. It acknowledges that childbirth is a transformative life event for the whole family rather than an isolated episode. Service and care are planned and delivered around these principles.

I am pleased to present the third annual report, detailing statistics, activity and outcomes for Maternity Services in Letterkenny University Hospital for the year 2015. The report also contains comparative data from 2006 to 2015. The publication of this report will serve as a source of internal audit, providing us with an opportunity to reflect on the services we offer and the challenges we face.

In 2015, there were 1,748 mothers who delivered 1,767 babies, showing a slight increase in numbers from 2014.

#### **Developments 2015**

- Further development of KPI's and Quality Assurance Reports
- KPI compliance with early dating scans
- NMBI inspection
- Service audits completed

- IMEWS training
- Metrics
- Care Bundle audits
- PROMPT training
- Advanced CTG training
- National Project Birthrate Plus
- Prescription for Healthy Pregnancy Alcohol Research Project
- Staff Training in care of the criticallyill maternity patient
- National IT Project
- Donegal BreastFeeding Forum

#### Challenges 2016

- Implementation of Maternity Strategy 10-year vision
- Maintain and develop services within current budgetary restraint
- Maintain a commitment to practice development and ongoing professional development
- Maintain a commitment to auditing our services
- Maintain ongoing training and professional development for all staff.

Our annual report is an evolving process. It is anticipated that the report will become more comprehensive each year.

I would like to thank all our staff for their support, hard work and commitment to the Service throughout 2015

### Letterkenny University Hospital General Manager

Mr. Sean Murphy

**Director of Nursing & Midwifery** Dr. Anne Drake

Service Manager and Assistant Director of Nursing / Midwifery, Women's & Children Services

Mrs. Evelyn Smith

#### Consultant Obstetricians

Dr. Chris King

Dr. Eddie Aboud

Dr. Nandini Ravikumar

Dr. Matthew McKernan

Dr. Dafalla Elamin

#### Obstetric Registrars

Dr. Sally Philip

Dr. Farhat Shireen

Dr. Osman Yousif

Dr. Mira Hemeric

Dr. Ashraf Dwidar

#### Consultant Paediatricians

Dr. Mathew Thomas

Dr. Bernadette Power

Dr. Asim Khan

Dr. Chettiyarammel Moosakutty

Dr. Zakaria Barsoum

#### Paediatric Registrars

Dr. Qumar Ali

Dr. Rafiq Ullah

Dr. Maria Mohammed

Dr. Hafiz Butt

Dr. Geza Seremy

Dr. Salvador Guerra

Dr. Maya Hariharan

Dr. Olusequn Oyedey

Dr. Peter Ihidero

#### CMM's Maternity

Ms Mary Lynch	CMM2
Ms Mary Doherty	CMM 2
Ms Raphael Dalton	CMM 2
Ms Marion Doogan	CMM 2
Ms Geraldine Hanley	CMM 2
Antenatal Education Co-	ordinator
Ms Geraldine Gallagher	CMS Fetal
Medicine	

#### CNM's NNU:

Ms Rita Friel CNM 2
Ms Kate Greenough CNM 2

#### Staffing

Multidisciplinary Team
Obstetricians/Gynaecologists (WTE 4.0)
Registrars (WTE 5.0)
NCHD's (WTE 5.0)
ADON Service Manager (WTE 1.0)
CMM 3 (WTE 1.0, post vacant)
CMM 2 (WTE 5.0, allocation 3.4)
CMM 2 Antenatal Education/Clinic
(WTE 0.8)
CMM 2 Fetal Assessment (WTE 2)
Diabetic Clinics (WTE 0.5)

Staff Midwives (WTE 41)

Receptionist (WTE 2.6)

HCA (WTE 10.2)

Allied Services

Maternity/Neonatal/Gynaecology services are supported by a team of allied health professionals: Social Workers, Dietician, Pharmacist, Physiotherapist, Occupational Therapist. Maternity/Neonatal/Gynaecological Services are also supported by core services within LGH:

#### Letterkenny University Hospital

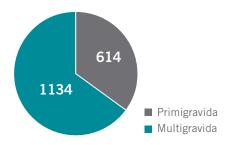
- Administration
- Ambulance
- Bed Management
- Chaplaincy
- Catering Department
- Central Supplies
- Clinical Practice Development
- Consumer Services

- Health Promotion Department
- Health and Safety Department
- Household Services
- Infection Control and Prevention
- Information Technology
- Laboratory Services
- Laundry Services
- Library

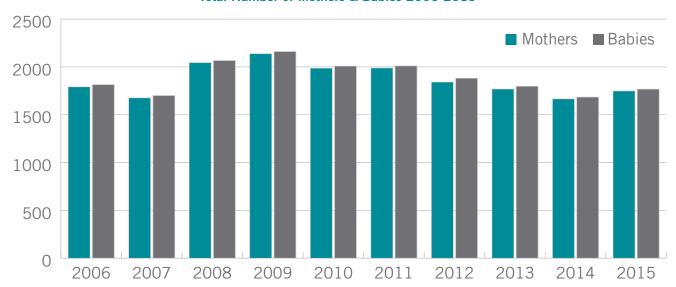
- Medical Records
- Occupational Health
- Portering Service
- Quality and Risk Department
- Radiology
- Security
- Technical Services
- Theatre Services

# Statistical Summaries Report 2015

2015	PRIMIP	MULTIP	TOTAL
Total Number of Mothers	614	1,134	1,748
Total number of Babies	622	1,145	1,767 including 19 sets of twins
Twins	8	11	

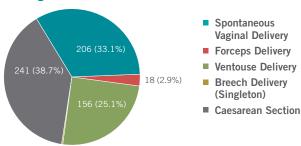


#### Total Number of Mothers & Babies 2006-2015



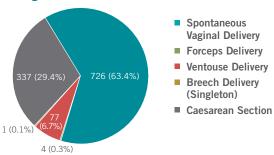
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Number of Mothers	1,791	1,676	2,044	2,137	1,986	1,988	1,841	1,768	1,665	1,748
Total Number of Babies	1,814	1,700	2,066	2,160	2,008	2,010	1,881	1,797	1,684	1,767
Total Number of Twins	23	23	22	23	22	22	40	29	19	19
Total Number of Triplets		1								

#### Primigravida Obstetric Outcome (Babies) 2015

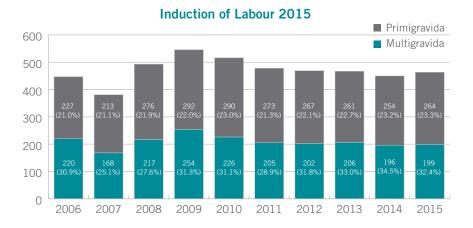


1 (0.2%)

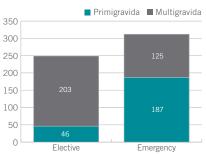
#### Multigravida Obstetric Outcome (Babies) 2015



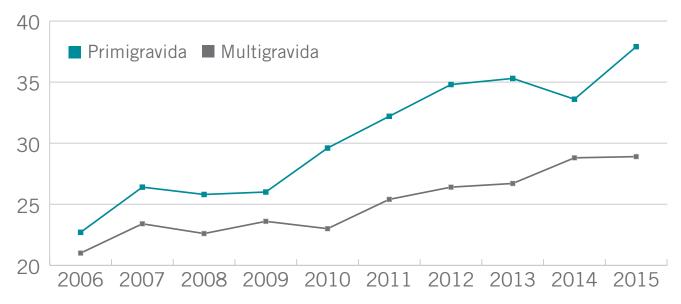
OBSTETRIC OUTCOMES (MOTHERS) 2015	PRIMIPS	%	MULTIPS	%	TOTAL	%
Induction of Labour	199	32.4%	264	23.3%	463	26.5%
Augmentation	267	43.5%	180	15.9%	447	25.6%
No Analgesia	20	3.3%	65	5.7%	85	4.9%
Epidural Rate	238	38.8%	130	11.5%	386	22.1%
Episiotomy	221	36.0%	107	9.4%	328	18.8%
Elective Caesarean Section	46	7.5%	203	17.9%	249	14.2%
Spontaneous Vaginal Delivery	206	33.6%	725	63.9%	931	53.3%
Forceps Delivery	18	2.9%	4	0.4%	22	1.3%
Ventouse Delivery	156	25.4%	76	6.7%	232	13.3%
Breech Delivery	1	0.2%	1	0.1%	2	0.1%
Emergency Caesarean Section	187	30.5%	125	11.0%	312	17.8%
Total	n=614		n=1,134		n=1,748	



### Elective/Emergency Caesarean Section 2015



#### **Caesarean Section Rate**



#### Letterkenny University Hospital

#### **Multiple Pregnancies 2015**

	PRIMIP (614)	%	MULTIP (1,134)	%	TOTAL	%
Twins	8	1.3%	11	1.0%	19	1.1%

#### **Multiple Pregnancies by Year**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Twins	23	23	22	23	22	22	40	29	19	19
Triplets		1								

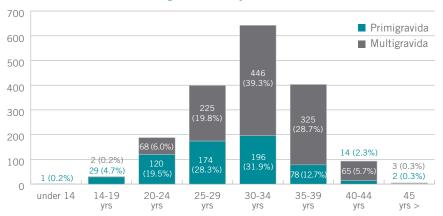
#### Perinatal Deaths 2015

	TOTAL	%
Stillbirths	9	0.5%
Early Neonatal Deaths	4	0.2%

#### **Perinatal Mortality**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of Stillbirths	14	12	6	9	10	12	3	7	5	9
Number of Neonatal Deaths	6	6	7	7	4	2	7	4	1	4
Total Perinatal mortalities	20	18	13	16	14	14	10	11	6	13
Stillbirth rate (per 1,000)	7.7	7.1	2.9	4.2	5.0	6.0	1.6	3.9	3.0	5.1
Neonatal Death rate (per 1,000)	3.3	3.5	3.4	3.2	2.0	1.0	3.7	2.2	0.6	2.3
Overall PMR (per 1,000 births)	11.0	10.6	6.3	7.4	7.0	7.0	5.3	6.1	3.6	7.4

#### Age at Delivery 2015



#### **Non National Births**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number	425	163	230	299	258	254	203	219	143	183
%	23.4%	9.6%	11.1%	13.8%	12.8%	12.6%	10.8%	12.2%	8.5%	10.4%

#### **Perineal Trauma**

TOTAL	%
225	19.0%
328	27.6%
20	1.7%
25	2.1%
18	1.5%
571	48.1%
1,187	100.0%
	225 328 20 25 18 571

#### Parity 2015

	Number of births	%
Para 0	614	35.1%
Para 1	582	33.3%
Para 2	348	19.9%
Para 3	134	7.7%
Para 4	42	2.4%
Para 5	19	1.1%
Para 6	6	0.3%
Para 7	2	0.1%
Para 8	1	0.1%
Total	1,748	100.0%

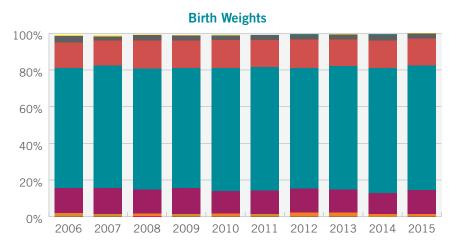
#### Letterkenny University Hospitale

#### Gestation at Birth 2015

	PRIMIPS	%	MULTIPS	%	TOTAL	%
<28 weeks	3	0.5%	6	0.5%	9	0.5%
28-31+6	5	0.8%	3	0.3%	8	0.5%
32-35+6	18	2.9%	17	1.5%	35	2.0%
36-38+6	106	17.3%	239	21.1%	345	19.7%
39-41+6	466	75.9%	845	74.5%	1,311	75.0%
42 weeks	16	2.6%	24	2.1%	40	2.3%
Total	614		1,134		1,748	

#### B.B.A.

	PRIMI- GRAVIDA	MULTI- GRAVIDA	TOTAL
2006	1	8	9
2007	1	6	7
2008	0	3	3
2009	0	5	5
2010	1	6	7
2011	1	4	5
2012	3	4	7
2013	0	3	3
2014	1	4	5
2015	1	4	5



#### <500g

- 500-999g
- 1000-1999g
- 2000-2999g
- 3000-3999g 4000-4499g
- 4500-4499g
- 5000-5499g
- >5500g

#### **3rd Stage Problems**

	PRIMIPS	%	MULTIPS	%	TOTAL	%
Primary PPH (>500mls)	13	2.1%	24	2.1%	37	2.1%
Manual Removal of Placenta	14	2.3%	22	1.9%	36	2.1%
Hysterectomy	0		0		0	

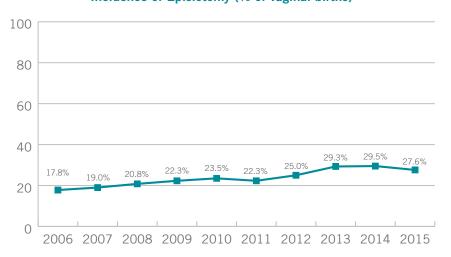
#### **Shoulder Dystocia**

	PRIMIPS	%	MULTIPS	%	TOTAL	%
Shoulder Dystocia	3	0.5%	6	0.5%	9	0.5%

#### Incidence of Episiotomy

	PRIMI- GRAVIDA (		TOTAL
2006	189	62	251
2007	187	53	240
2008	252	103	355
2009	264	96	360
2010	247	102	349
2011	222	98	320
2012	211	115	326
2013	236	129	365
2014	211	130	341
2015	221	107	328

#### Incidence of Episiotomy (% of vaginal births)



### Neonatal Unit

The aim of the staff in the Neonatal Unit, Letterkenny University Hospital, is to provide high quality care to neonates in a safe and friendly environment.

We recognise that parents and families are the most important people in a baby's life. We therefore aim to care for parents as well as babies. We encourage parents to participate in their baby's care and ensure that they receive ongoing information and education as part of the family-centred ethos.

There were 1,767 babies born in Letterkenny University Hospital during 2015, of which 385 babies were admitted to the Neonatal Unit.

Care in the Neonatal Unit is provided in three clinical areas: NICU, HDU and SCBU. The unit comprises 2 intensive care cots and 8 high dependency / special care cots. There is an isolation room for individual care and there is also a parents' room.

Infants are admitted from the labour ward, postnatal ward and theatre, and are also transferred from other hospitals.

### Birth Weights of Neonatal Unit Admissions

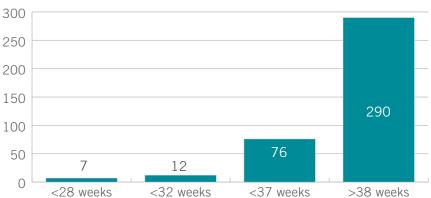
Number of Babies*
0
6
9
17
46
62
82
105
42
15

\*Totals 384 - one baby was not weighed

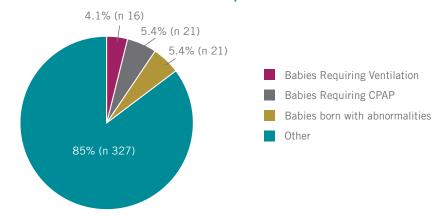
Treatments in the Neonatal Unit include ventilation, CPAP, low flow oxygen therapy, TPN and initiation of therapeutic cooling therapy.

Additional Specialist Services include audiology and ophthalmology screening. MRI, Cat scans and ultrasound facilities are available

#### **Gestation of Neonatal Unit Admissions:**



#### **Admission Requirements**



on site. The multidisciplinary team includes paediatric dietician, social work team, physiotherapists and the paediatric link nurse. The team in the Neonatal Unit liaise with specialists in Dublin, such as the cleft lip nurse specialist, as required. Public Health Nurses play an important part in post discharge care and are communicated with regularly.

#### **Indications for Admission Include:**

- Prematurity
- Respiratory Distress
- Hypoglycaemia, Hypernatraemia/ Poor Feeder
- Sepsis
- Birth Trauma
- Acidosis
- Low Apgars
- Dusky Cyanotic Episode
- Infants of Diabetic Mums on Insulin
- Neonatal Jaundice
- IV Fluid Therapy
- IV Antibiotics Treatment

During 2015, 30 infants were transferred to other hospitals.

The Neonatal Unit has a core staff of 14.5 WTE. This includes 2 CNMs and a combination of midwives, paediatric and staff nurses, with a wealth of experience and qualifications.

Letterkenny University Hospital supports the neonatal staff in their continuing professional development, to ensure that the care provided to babies is safe, of a high standard and evidence-based.

In 2015, one midwife attended the Key Principles of High Dependency and Special Care Nursing course which is accredited by Trinity College Dublin. Other Training Includes:

- NRP training
- STABLE study day
- Hand Hygiene and Mandatory Training
- Breastfeeding Study Days
- Study days relevant to the area of Neonatology
- Equipment Training Updates

Since 2014, the Neonatal Unit has been involved in providing data for the Vermont Oxford Network Database.

# Service Report for Fetal Assessment and Early Pregnancy Clinic 2015

#### Midwife-led Unit

Midwife Sonographers: Geraldine Gallagher CMS Niamh McGarvey CMM

Student Sonographers: Louise Gallagher RM Katriona McCarthy RM

Service provided Monday–Friday, 8am–6pm.

The fetal assessment service in Letterkenny University Hospital is midwife-led and is provided by Midwife Sonographers who have an MSc in diagnostic imaging ultrasound.

A total of 4,944 scans were performed, of which 1,937 were anomaly scans and 1,426 were dating booking scans. All pregnant women have an early booking appointment which includes a scan to date the pregnancy and at that stage they are offered an anomaly scan at 20–22 weeks gestation. Women with a history of having LLETZ treatment have cervical length measured at 12 weeks gestation.

Other scans performed include fetal wellbeing, growth, placental location and estimated fetal weights. Serial scanning was provided for those with high risk pregnancies and scheduled so as to combine with antenatal appointments like the multiple pregnancies.

Antenatal care was provided in conjunction with the consultant for mothers with babies with abnormalities, so that they did not have to attend a busy antenatal clinic thus giving them the necessary time and support that is needed on a difficult journey.

Abnormalities diagnosed included: CNS malformations (Ventriculomegaly, Spina Bifida, Anencephaly, Hydrocephalus); Renal Tract malformations (Multicystic kidneys, Dilated tracts, Hydronephrosis); CVS malformations (AVSD, VSD, Tetralogy of Fallot, Pulmonary Stenosis); Musculo-skeletal malformations (Skeletal Dysplasia); GI malformations (Exomphalus); Thoracic malformations (CCAM); Trisomy 21, Trisomy 18.

Apart from the Fetal Assessment Unit, a formal Early Pregnancy Clinic continues with a morning clinic from 11am–1pm, Monday–Friday.

#### **Obstetric Registrar-led Clinic**

Gynaecology nurses: Marian Keating Michelle Gillespie

These dedicated gynaecology nurses with a certificate in first trimester ultrasound, along with an obstetric registrar, provide this service.

Total number of ultrasound scans performed in 2015: 1,091.

This service provides ultrasound for women up to 12 weeks gestation of pregnancy who have been referred by a GP or Emergency Department staff with pain or bleeding, or for reassurance scans following a previous poor pregnancy outcome.

The introduction of early dating scans in the Fetal Assessment Unit has reduced the number of women referred to the Early Pregnancy Clinic for reassurance and dating.

### Postnatal Report

Our postnatal unit consists of 27 beds. The midwives working in the maternity unit rotate on a four-monthly basis to postnatal, antenatal, and labour wards. Midwifery team members working in postnatal include CMM, midwives, student midwives and HCAs trained in midwifery modules.

The postnatal ward provides a 24-hour postnatal service where staff endeavour to provide holistic and empowering care to mothers and newborn babies. This ward is staffed by midwives, providing postnatal care, feeding and parenting support, education and teaching.

The multidisciplinary team working as part of this ward include Obstetricians, Paediatricians, Physiotherapists, Social Workers, Teen Parenting and Newborn Hearing Screening. We also work closely with health care professionals in the community. On discharge from the ward, a summary of care is generated by midwifery staff and forwarded to the Public Health Office.

There were 1,767 babies born in 2015, with a Caesarean section rate of 32.1%. This impacts on the ward, as these women require a higher level of care in the postnatal period. Midwifery staff are required to have a high level of evidence-based knowledge and clinical skills to provide a competent, safe standard of care. The IMEWS observation tool is used in the provision of care. We also regularly accommodate overflow of Antenatal and postnatal readmissons.

All infants receive a high level of assessment and observation in the postnatal period, with specific policies in place for those with individual risk factors, i.e.

- 1. Diabetic Mothers
- 2. Group B Strep
- 3. PROM

We have invested in a new Billicheck monitor, which provides non-invasive testing for hyperbilirubinaemia in newborn infants. A large part of our responsibility involves metabolic screening tests on babies. As part of recent National Guidelines, we now provide a screening test on all babies, prior to discharge, for early detection of congenital heart disease in newborn infants.

At present, newborn hearing screening is carried out seven mornings a week.

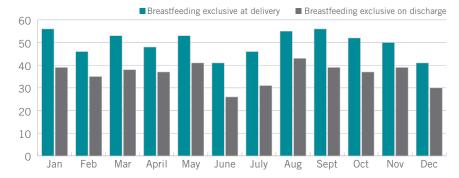
#### **Breastfeeding/Lactation**

Promotion and support for breastfeeding is a key component of care throughout the unit. Maintaining this high standard is very challenging in the current climate, due to severe demands in the clinical area.

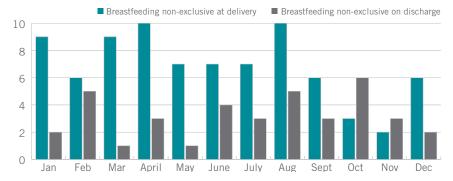
Breastfeeding and skin-to-skin contact are supported by midwives and student midwives as part of our commitment to being a member of the UNICEF Baby Friendly Hospital Initiative. All our staff have received 18 hours of training and regularly attend 4-8 hour updates. We facilitate roomingin on the postnatal ward with good breastfeeding outcomes.

We also provide a 24-hour telephone advice helpline to all breastfeeding mothers and a drop-in clinic once a week.

#### **Breastfeeding Exclusive 2015 %**



#### Breastfeeding Non-Exclusive 2015 %



# Antenatal Education Report

Ms Geraldine Hanley

The demand for Antenatal Education Classes continued throughout 2015. The Antenatal Education Co-ordinator (CMM2) provides and co-ordinates antenatal and postnatal education programmes for families. Pregnant women, partners and students availed of the antenatal classes. The increased demand for one-to-one sessions continued, often necessitating repeat visits, with specific referrals from the social work department, fetal medicine unit and mental health services. Additional tours of the unit with partners were organised, to facilitate the prospective parents. The weekly Breastfeeding Drop-in Clinic continued throughout 2015.

The antenatal education programme continues in an external venue at Letterkenny Women's Centre. The Antenatal Education sessions are woman-focused and educate expectant women and their birth partners on issues relating to:

- Pregnancy
- Labour
- The immediate postnatal period
- Feeding choices
- Baby care
- Demands of parenthood
- Postnatal supports available

Information is also provided to inform parents where to source support and resources on discharge from hospital.

#### 2015 Initiative - Phase 2 of Alcohol & Pregnancy Practice Change Initiative Developed

Final evaluation of the 'Prescription for a Healthy Pregnancy Practice Change Initiative' was completed. This was a multi-disciplinary, multiagency response to maternal alcohol consumption, Letterkenny University Hospital (LUH) Antenatal Clinic being the first national site to pilot the practice change. It is planned to use this model at all LUH antenatal clinics in 2016 and it may have transferability within the Saolta Group and nationally.

### **Breastfeeding Promotion and Supports Available**

LUH participates in the Baby Friendly Hospital Initiative (BFHI). A Donegal Breastfeeding Forum group has been active in supporting breastfeeding locally and a Saolta Hospital Breastfeeding Forum group continues to meet to support each other with the BFHI process.

Antenatal & postnatal breastfeeding support continued throughout 2015, with a hospital-based 'Dropin' Breastfeeding Support Clinic continuing to run weekly, alongside a daily breastfeeding telephone helpline service.

National Breastfeeding Week was celebrated with an information stand made available outside the maternity unit in the hospital for staff and members of the public.

### Source of Referrals to Antenatal Classes

- Antenatal Clinic
- Fetal Assessment
- Self Referral
- Public Health Nurses
- Medical Social Work
- Teen Parent Support Programme (TPSP)
- In-patient Referral
- Diabetic Clinic

#### Other Antenatal Education Coordinator initiative involvement

- Donegal Parent Hub / Child and Family Health Initiative
- Teen Parent Support Programme (TPSP)
- Alcohol & Pregnancy Practice Change Initiative 'Prescription for a Healthy Pregnancy'
- Saolta Breastfeeding Forum
- Donegal Breastfeeding Forum
- Staff Breastfeeding Training
- National Cerner Project

#### 2015 Attendance at Antenatal Education Sessions at LUH

ANTENATAL EDUCATION	CLIENTS	SUPPORT PARTNERS	TOTAL ATTENDANCE
Weekday Sessions	192	0	192
Refresher Sessions	71	20	91
Evening Sessions / Support Partners	192	192	384
Postnatal Reunion Sessions	39		39
Teenage Sessions	11	11	22
1-1 Antenatal Class Sessions	36	33	69
1-1 Education Sessions (AN Clinic)	1,733		1,733
Breastfeeding Drop-in Clinic	36	10	46
Tours of Maternity Unit	854		59 Tours 854 Attendees

Total Number of Mothers Delivered 2015	1,748
Overall Client Attendance at Antenatal Classes	1,419
Primips Postnatal Reunion Attendance	39
Breastfeeding Drop-in Clinic	46
Attendance at Tours of Maternity Unit	854
% Attending Antenatal Classes	81.2%
% Increase from 2014	5.5%

# Colposcopy Clinic Report

#### **Staff Complement**

Consultant Colposcopist
Dr. Edward Aboud, Director of
Colposcopy
Dr. Sally Philip, Sr Registrar Obstetrics
& Gynaecology

Nurse Colposcopists Ms Regina McCabe Ms Pat Hirrell

Healthcare Assistant Ms Marjorie McHugh

Office Administrators Ms Linda Shiels Ms Tanya Graham (0.5 WTE)

The Colposcopy service at Letterkenny University Hospital is consultant–led, with two Nurse Colposcopists, Ms Regina McCabe and Ms Pat Hirrell. All clinicians are BSCCP accredited Colposcopists.

#### **Clinic Attendances**

First visit attendances showed a slight increase in 2015 on the previous year: 543 first visits (2015) compared to 504 (2014). The clinic is contracted by the National Cervical Screening Programme (NCSP) to see 500 first visits per year. There were 1,293 return visits in 2015. The DNA rate for patients attending the clinic for the first time was 4.9%. Follow up appointment DNA rate was 7.8%, giving an overall DNA rate of 7.3%.

Patients are offered appointments within the recommended waiting times. We continually facilitate changing of appointments by offering times to suit work and other commitments.

### Introduction of HPV Triage / New Management Pathway

The introduction of HPV triage saw a change in the management of women and an increase in the number of referrals to Colposcopy in 2015. Since April 2015, CervicalCheck programme laboratories introduced HPV testing as an adjunct test when low-grade abnormalities (ASCUS or LSIL) are detected on cytology specimens. The laboratory tests these samples for the presence of certain types of the HPV virus (hr-HPV) which are associated with CIN and cervical cancer. The Colposcopy visit then evaluates whether triage positive women have already established CIN or whether the positive HPV test represents what is likely to be a harmless transient infection.

Another change since the introduction of HPV testing relates to women post treatment. Combined smear and HPV testing were previously performed at the Colposcopy clinic at 6 months and 18 months post treatment, irrespective of the results of the first test. This resulted in increased numbers attending for follow up smears. Under the new patient management pathway guidelines, women who have a normal (NAD/ASCUS) smear test and a negative HPV test at the first follow up visit to Colposcopy post treatment are discharged to have a follow up smear in the community in one year. This has reduced the need for women to undergo further Colposcopy and has enabled an earlier discharge to primary care when found to be HPV negative.

Whilst this change for women post treatment has impacted on reducing patients' need to return to Colposcopy, the introduction of the reflex HPV test for women with cytology result LSIL or ASCUS has increased the volume coming through the clinics.

#### Treatment and Histology

The majority of patients with cytological and/or Colposcopy evidence of disease are treated within the Colposcopy clinic by LLETZ (Large Loop Excision of the Transformation Zone). The indications for treatment to be carried out in the operating day theatre setting are predominantly based on clinical need and include extent of disease, glandular abnormality or repeat treatment requiring extensive cervical excision. Very occasionally, patients specifically request that the procedure be carried out in the day theatre.

#### **Quality Assurance and MDTs**

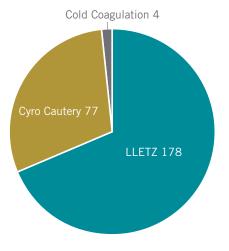
In 2015, we continued to hold CPC/MDT meetings at 2-3 month intervals, supported by the Cytopathology Laboratory, MedLab and Histopathology Department, LUH, and by Colposcopy clinicians. The use of GoToMeeting teleconferencing facilitates live discussion and review of colposcopy/cytology/histology correlation, which add greatly to diagnoses and patient management decisions.

NCSP CLINICAL STANDARD	TARGET	LUH
Proportion of LLETZ performed as outpatients	>80%	97.3%
Proportion of LLETZ as inpatients (DSU)	<20%	2.7%

NCSP CLINICAL STANDARD	TARGET	LUH
DNA rates for first time	<10%	4.9%
DNA rates for follow up	<10%	7.8%
DNA rate overall	<10%	7.3%

NCSP CLINICAL STANDARD	TARGET	LUH
% of women treated by excisional treatments at first visit who had CIN on histology	>80%	100%
% of women treated by excisional treatments at any visit who had CIN on histology	>65%	95%

### LLETZ & Ablative Treatments at Colposcopy Clinic LUH



#### Letterkenny University Hospital

The Colposcopy service provision is based upon Quality Standards set out by the National Cancer Screening Service. The Colposcopy Unit, LUH, continually review our practice against organisational standards such as system management, staffing, clinical and administrative management and governance structures. We submit our monthly, quarterly and annual audits to CervicalCheck.

We continue to meet waiting time targets for referrals as recommended by CervicalCheck. The office administrative staff consistently review appointments places and aim to fill vacant slots as they arise through patient cancellation or postponement.

#### **Summary**

The Colposcopy team at LUH continue to deliver a timely, accessible, quality-assured service adhering to the guidelines laid down by CervicalCheck (NCSP) with the aim of reducing the incidence of cervical cancer in Donegal.

## Urodynamics Unit Annual Stats 2015

2015	CLINICS	WARD REFERRALS	UROFLOW CMG STUDIES	ATTENDED UROGYN CLINIC	PESSARIES	DNA	TOTAL ATTENDED
January	12	10	29	17	8	7	64
February	10	10	20	17	6	6	53
March	13	11	27	18	6	3	62
April	12	10	34	12	6	4	62
May	10	8	32	18	8	4	66
June	10	6	24	17	6	4	53
July	14	12	35	15	6	2	68
August	11	8	21	No clinic*	10	6	39
September	14	13	31	15	12	5	71
October	9	8	20	15	6	4	49
November	12	7	28	23	8	3	66
December	10	8	18	10	10	6	46
Total Urodynamic Numbers	137	111	319	177	92	54	699

<sup>\*</sup>Urogynae clinic no cover Aug.

# Donegal Sexual Assault Treatment Unit (SATU)

Ms Connie McGilloway

#### Introduction

The Donegal SATU, Letterkenny University Hospital, operates 08:00-20:00hrs daily, providing comprehensive medical and forensic care to females and males, 14 years of age and over, who disclose sexual assault and rape. In 2015, the SATU Team consisted of:

- 1 Clinical Director
- 1 Clinical Nurse Specialist (Sexual Assault Forensic Examiner)
- Approximately 8 on-call Healthcare Support Staff

#### **Number of Attendances**

In 2015, there were 45 patient attendances at the Donegal SATU. This showed an increase of five (12.5%) compared to 2014.

#### Where the Incident Took Place

- 42 (93%) incidents took place within the Republic of Ireland.
- 3 (7%) incident took place outside the Republic of Ireland.

#### Type of Reported Sexual Crime

Of the 45 patients:

- 32 (71%) cases were recent sexual assaults.
- 13 (29%) cases were later than 7 days.

#### **Assailants**

- 39 (87%) cases involved a single assailant.
- 5 (11%) cases involved multiple assailants.
- 1 (2%) case, the number of assailants was unknown.

#### Gender

Of the 45 patients that attended the Donegal SATU:

- 39 (87%) were female.
- 6 (13%) were male.

#### Age Profile

- 30 (67%) were under the age of 25 years of age.
- The mean age was 24 years of age.

### Psychological Support Worker in Attendance

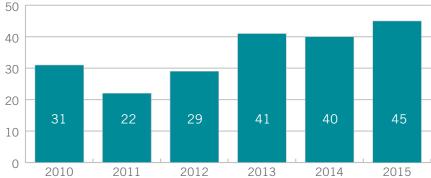
- 41 (91%) patients had a Psychological Support Worker from the RCC at the initial SATU attendance.
- 4 (9%) patients had counselling or psychiatric nursing support in attendance.

#### **Physical Trauma**

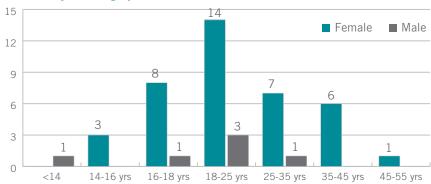
20 (44.4%) patients attending the SATU had physical trauma, of these:

• 17 (85%) patients attending the SATU had superficial trauma.

#### Analysis of Annual Attendance 2010 - 2015



#### Analysis of Age profile in relation to Gender Breakdown (n=45)



- 2 (10%) attended the Emergency Department with minor trauma.
- 1 (5%) attended the Emergency Department with major trauma.

#### **Alcohol and Drug Use**

#### Alcohol

31 (69%) patients had consumed alcohol in the previous 12 hours prior to presentation to the SATU; of these:

• 26 (84%) patients had consumed ≥4 units of alcohol.

#### Drugs

8 (18%) patients had taken drugs; of these:

- 3 (38%) patients had taken prescribed medication
- 4 (50%) patients had taken illegal drugs
- 1 (12%) patient had taken both prescribed medication and illegal drugs.
- 5 (11%) patients were concerned that drugs were used to facilitate sexual assault.

#### Both Alcohol and Drugs

• 6 (13%) patients had taken both alcohol and drugs.

#### **Post-coital Contraception**

30 (77%) female patients presented within 120 hours of the incident; of these:

- 17 (57%) patients were given emergency contraception in the SATU; of these:
- 16 (94%) were given Levonorgestrel 1,500mg.

- 1 (6%) was given Ulipristal Acetate (Ellaone) 30mg.
- 13 (43%) did not receive PCC for various reasons:
- 1 (8%) post-hysterectomy or post-menopausal.
- 1 (8%) received PCC prior to attending the unit.
- 6 (46%) had no penile penetration.
- 5 (38%) already using effective contraception.

# Sexually transmitted Infections (STI) Prophylaxis and Screening

**STI Prophylaxis** 

- 30 (67%) patients received Chlamydia prophylaxis.
- 26 (58%) patients had Hepatitis B immunisation commenced; of these:
- 12 (46%) patients have completed the course to date.
- No patients received post-exposure prophylaxis (PEP) treatment.

#### **Outcome of STI Screening**

Of the 28 patients screened for STI's, no patients had an STI detected.

- 2 (7%) patient had a positive result for Candida
- 2 (7%) patients had a positive result for Bacterial Vaginosis.

# Mayo University Hospital

#### Ms Andrea McGrail & Ms Sile Gill

#### Introduction

Mayo University Hospital is a busy, modern facility, providing a wide range of services. It has 309 inpatient beds and 23 day patient beds. The services provided include General Surgery, General Medicine, Orthopaedics, Renal Dialysis, Accident & Emergency, Oncology, Paediatrics, Obstetrics & Gynaecology and Palliative Care.

Visiting Consultants to the busy Outpatients Department provide additional regional specialities, giving access to a range of expertise to care for our service users.

Our Maternity and Neonatal Department have an excellent working relationship with the other departments within the hospital and have access to the huge bank of expertise, knowledge and skills that serve Mayo University Hospital. I wish to acknowledge all staff for their dedication to the service in 2015.

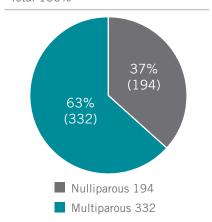
In 2015, 1,604 babies weighing >500g or >24 weeks gestation were delivered to 1,577 women at MUH, showing a slight decrease in numbers again from 2014. The majority of these deliveries (1,051) were vaginal deliveries, including assisted vaginal delivery or, very rarely, vaginal breech delivery.

- There was an overall CS rate of 33.4% (unchanged on 2014 figures).
- Induction of labour was 25.7%.
- Epidural Rate was 30.1%, showing a decrease from 33.8% in 2014.
- General Anaesthetic C/S rate was 7.8%, showing an increase from 7.5% in 2014.

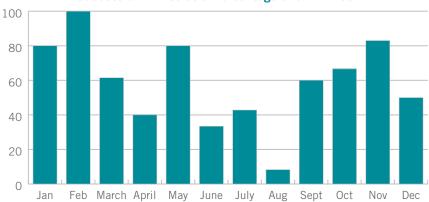
We are delighted that we have had no increase in numbers of C/S. We continue to actively promote and encourage VBAC.

#### **Ceasarean Sections**

Nulliparous (37%) Nulliparous 194
Multiparous (63%) Multiparous 332
Total 100%



#### Successful VBACs as a Percentage of all VBACs



#### **Caesarean Sections**

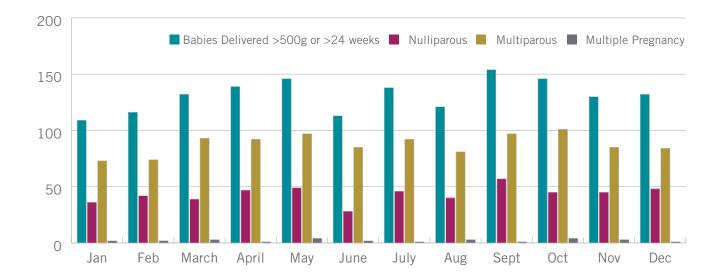
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	TOTAL
Total Number of C/S	28	34	39	57	51	36	47	45	57	55	42	35	526
% of Total Deliveries	25.7%	29.3%	29.5%	41.0%	34.9%	31.6%	34.1%	37.2%	37.0%	37.7%	32.3%	26.5%	33.4%
Number of Elective C/S	16	19	14	24	31	17	15	18	19	28	19	19	239
% of Total C/S	57.1%	55.9%	35.9%	42.1%	60.8%	47.2%	31.9%	40.0%	33.3%	50.9%	45.2%	54.3%	45.4%
Number of Emergency C/S	12	15	25	33	20	19	32	27	38	27	23	16	287
% of total C/S	42.9%	44.1%	64.1%	57.9%	39.2%	52.8%	68.1%	60.0%	66.7%	49.1%	54.8%	45.7%	54.6%
Number of Repeat C/S	15	17	18	28	23	16	18	19	21	24	15	16	230
% of Total C/S	53.6%	50.0%	46.2%	49.1%	45.1%	44.4%	38.3%	42.2%	36.8%	43.6%	35.7%	45.7%	43.7%
Number of Elective C/S Repeat	14	17	13	25	21	13	16	14	19	22	14	13	201
% of Repeat C/S	93.3%	100.0%	72.2%	89.3%	91.3%	81.3%	88.9%	73.7%	90.5%	91.7%	93.3%	81.3%	87.4%

#### **VBAC**

<b>CLINICAL MEASURES</b>	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Attempted VBAC	5	3	13	5	5	9	7	12	10	6	6	6
Successful VBAC	4	3	8	2	4	3	3	1	6	4	5	3
% Successful	80.0%	100%	61.5%	40.0%	80.0%	33.3%	42.8%	8.3%	60.0%	66.6%	83.0%	50.0%

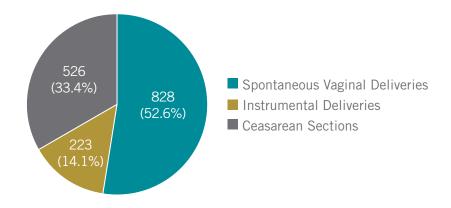
#### Mothers Delivered >500g or >24 weeks

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	TOTAL
Overall deliveries	109	116	132	139	146	114	138	121	154	146	130	132	1,577
Nulliparous	36	42	39	47	49	29	46	40	57	45	45	48	523
Multiparous	73	74	93	92	97	85	92	81	97	101	85	84	1,054
Multiple Pregnancy	2	2	3	1	4	2	1	3	1	4	3	1	27



	BBA										
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0	0	2	2	0	0	0	0	0	0	0	0

Deliveries >500g or >24 weeks								
Spontaneous Vaginal Deliveries	828 (52.6%)							
Instrumental Deliveries	223 (14.1%)							
Ceasarean Sections	526 (33.4%)							
Total	100%							



Mayo University Hospital

# Obstetric Statistics

#### Ms Andrea McGrail & Ms Breda McHugh

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	TOTAL
Total births > 500 grammes	111	118	135	140	150	116	139	124	155	150	133	133	1604
Total mothers delivered	109	116	132	139	146	114	138	121	154	146	130	132	1577
Multiple births	2	2	3	1	4	2	1	3	1	4	3	1	27
Nulliparas	36	42	39	47	49	29	46	40	57	45	45	48	523
Multiparas	73	74	93	92	97	85	92	81	97	101	85	84	1054
Total Operative Vaginal Delivery	22	21	18	17	15	8	20	14	25	23	17	23	223
Operative Vaginal Delivery nulliparas	15	14	10	10	9	4	13	8	17	16	12	19	147
Operative Vaginal Delivery multiparas	7	7	8	7	6	4	7	6	8	7	5	4	76
Total Inductions of labour	26	28	30	29	58	29	46	29	37	28	28	37	405
Inductions nulliparas	15	12	15	20	36	10	24	13	18	17	12	16	208
Inductions multiparas	11	16	15	9	22	19	22	16	19	11	16	21	197
Total Caesarean sections	28	34	39	57	51	35	47	45	57	55	42	35	526
C-sections nulliparas	10	12	15	21	16	8	20	20	24	16	15	16	193
C-sections multiparas	18	22	24	36	35	27	27	25	33	39	27	19	332
General anaesthetic for C-section	0	5	4	2	6	4	5	5	4	1	3	2	41
Labour epidurals	44	36	41	42	34	29	45	30	42	48	41	43	475
3rd/4th degree Perineal tears	1	1	0	1	2	0	2	1	4	3	0	0	15
Eclampsia	0	0	0	0	0	0	0	0	0	0	0	0	0
Uterine rupture	0	0	0	0	0	0	0	0	0	0	0	0	0
Peripartum hysterectomy	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulmonary embolism	0	0	0	0	0	0	0	0	1	0	1	0	2
EPAU first visits	45	53	44	46	56	51	52	37	44	48	60	25	561
Ectopic pregnancies	2	3	3	3	1	3	1	1	1	1	0	0	19
p0	_												

# Gynaecological Surgery Report

PROCEDURES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Total Number Of Patients													717
Total Number Of Procedures													759
Blood Patch		1	2	1			3			3			10
Elective Caesarean Sections	16	19	14	24	31	17	15	18	19	28	19	19	239
Emergency Caesarean Sections	12	15	25	33	20	19	32	27	38	27	23	16	287
ERPC	10	7	13	15	9	9	12	7	7	7	10	7	113
Evacuation of Haematoma post Caesarean Section												1	1
Evacuation of Haematoma Post SVD		1											1
Exploration of Caesarean Scar				1									1
Diagnostic Laparoscopy	1	2				2			1		1		7
Instrumental Delivery	3	2		1		1	1	3	1	1	2	3	18
Laparoscopic Salpingectomy	1	1	3	3	1	1		1	1	1			13
Laparotomy Cystectomy						1							1
Manual Removal of Placenta		1		1		1	1	1	2			1	8
Suturing Of Perineum Tear													0
Suturing of 1st Degree Tear		1											1
Suturing of 2nd Degree Tear													0
Suturing of 3rd Degree Tear				1	1		1		3	1			7
Suturing of 4th Degree Tear	1												1
Tubal Ligation	1	1		2	2	3							9
Failed Instrumental Delivery					1	1						3	5
EUA													0
Insertion of Cervical Suture					1						1		2
Suturing of Episiotomy	4	1							1			2	8
Trans Abdominal Scan						2			1			1	4
Trans Vaginal Scan						2			1			1	4
Repair Of Bladder Tear						1							1
Removal of Cerclage													0
EUA for PPH		2		1		1			1			1	6
Laparotomy		1		1			1					1	4
Insertion of Bakri Post Partum Balloon						1							1
Repair of Lateral Wall Vaginal Tear		1		1								2	4
Deferral	1										1	1	3

# Paediatric Report

Dr Michael B O'Neill

#### **Paediatric Ward**

The Paediatric Ward is shared by 4 General Paediatricians, 3 General Surgeons and 3 Orthopaedic Surgeons. A small number of patients are admitted for dental surgical procedures.

In 2015, there were 2723 admissions, of which 2360 were admitted under Paediatrics, 242 under General Surgeons and 121 under the Orthopaedic Surgeons.

In addition to admitted patients, there is day activity on the Paediatric Ward which consists of day treatment (under 6 hours) and day cases (greater than 6 hours).

In 2015, there were 1130 day cases. This represents a planned care intervention which allows for increased efficiency on the Paediatric Ward. This process has been facilitated by the opening of the new ambulatory Cystic Fibrosis Unit. This Unit, which has two outpatient rooms, allows for the assessment and care of patients with cystic fibrosis who were previously seen and assessed on the Paediatric Ward. Patients with asthma who required assessment had been seen and assessed on the Paediatric Ward prior to 2015. With the opening of the Cystic Fibrosis Unit and in conjunction with physiotherapy services, shuttle testing is now available in the Cystic Fibrosis Unit and consequently these assessments are no longer taking place on the paediatric unit.

The inpatient ward also addresses the needs of Oncology patients through the shared care network with OLHSC, Crumlin, Dublin. These patients have direct ward access without the need of attending the emergency department. The evaluation of inpatient data from the paediatric unit in 2015 has shown trends that will require future proofing of paediatric planning.

PAEDIATRIC ADMISSIONS	EPISODE OF CARE	LENGTH OF STAY	DAYCASES
Consultant A	707	3.28	289
Consultant B	681	2.66	299
Consultant C	706	3.03	208
Consultant D	586	2.77	111
General Surgery	325	2.16	158
Orthopaedic Surgery	134	1.46	65

NUMBER OF DAYS IN HOSPITAL	TOTAL PATIENTS	PERCENTAGE	ALOS	INPATIENT BED DAYS
1	2215	60.85%	1	2215
2	603	16.57%	2	1206
3	327	8.98%	3	981
4	142	3.90%	4	568
5	95	2.61%	5	475
6-27	241	6.62%	15	802
28-110	17	0.47%	40	687
Total	3640	100%	2.95	6934

There are children who require hospitalisation for relatively long periods of time. In 2015, there were 241 (6.6%) who were hospitalised for between six and 27 days, with an average length of stay of 15 days. These children had complex medical needs and required added medical care. A smaller number of patients (17; 0.47%) were hospitalised for between 28-110 days. This small group of patients is composed of several distinct groups, some of whom have life-limiting conditions with complex medical needs; others have complex medical issues which cannot be addressed within the community and consequently the default position is for them to be hospitalised. The setting care planning is required for these patients, as the numbers are likely to increase in the coming years.

### Intensive Care Unit (ICU) Admissions

Paediatric patients are admitted on an 'as needed' basis to the ICU, which provides care for adult patients. In 2014, there were 21 admissions. The indications for admission were Status Epilepticus 6, Status Asthmaticus 4, Coma / reduced level of consciousness 4, Respiratory Failure 3, Drug overdose 3, trauma 1.

#### **Outpatient Department (OPD)**

The Paediatric OPD consists of 5 consultation rooms, with its own waiting area. Clinics are also undertaken in Ballina, Belmullet and in the Safari Club in Castlebar. The outreach service is consultant-delivered. The Paediatric Service operates 36 clinics per month. To improve patient care, patients with similar care needs have been cohorted together. The development of Complex Care clinics allows for smaller clinic size to enable the care needs of specific patients to be addressed.

The Cystic Fibrosis Service offers both clinic and ambulatory assessments in the Outpatient Department. With the opening of the new ambulatory Cystic Fibrosis Unit, day assessments of patients with cystic fibrosis, clinical reviews, and the initiation of antibiotic therapy are no longer undertaken on the Paediatric Ward but in the Cystic Fibrosis Unit. The opening of the Cystic Fibrosis Unit has allowed for modification of the care practice. The Cystic Fibrosis Service consists of a Consultant, Clinical Nurse Specialist, Physiotherapist and Dietician, with Social Work on an 'as needed' basis. Elective CF-related work is undertaken at the clinic.

The clinic space allows for effective cohorting of patients, however the service also provides an ambulatory assessment for those who are ill, where decision with regard to treatment, whether inpatient or outpatient, can be made.

The Diabetes Service offers clinics both at Mayo University Hospital and in Ballina. The team consists of a Consultant, Clinical Nurse Special and Dietician. There is an absence of a paediatric insulin pump service at Mayo University Hospital.

The Asthma Service offers 3 clinics per month, with Physiotherapy in attendance to assess inhaler techniques and a Clinical Nurse Specialist who performs spirometry on all children 5 years and older.

In addition to the clinic, ward assessments are undertaken to both for diagnostic and therapeutic assessments.

The Mayo Early Intervention Service addresses the needs of 195 children. These children have 2 or more complex needs which are the criteria for accessing this service. Twenty-two children of this cohort have Down Syndrome. The school-aged service (children and adolescents between 6-18 years), supported by Western Care Association and the HSE, meets the needs of those with intellectual and physical/sensory disabilities. Currently there are 311 children and adolescents in this service. There are 76 children with autism under 6 years of age registered and receiving intervention/support from the Western Care Autism Service. The communitybased clinics service the needs of these patients through a series of clinics which include The Early Intervention Clinic (at the Safari Club) and the subspecialty clinics at Mayo University Hospital.

In 2015, following a national directive, a multidisciplinary group (comprising doctors and allied healthcare professionals) has been formed to realise the integration of early intervention services for those under 5 years with those children who have autism (<5 years). This body of work will continue through 2016.

ADOS assessments continue to be undertaken by Dr Hilary Stokes. There is also an autism forum to facilitate a multidisciplary discussion of children who may have autism.

OUTPATIENT CLINICS	NEW PATIENTS	REVIEW PATIENTS
Consultant A	620	1782
Consultant B	630	1583
Consultant C	409	990
Consultant D	299	1267

#### **Emergency Department (ED)**

Paediatric patients represent more than 20% of all patients seen in the ED. This year, the number was 8,230 attendances. Those children with medical conditions are seen directly by the paediatric service. Due to space limitation, there is no paediatric waiting area and the absence of a designated paediatric space hampered innovation in paediatric care provision. The layout and functioning of the ED is at variance with current national recommendations for the assessment of children.

# Women's and Children's Directorate Academic Report

Dr Michael B O'Neill

#### Introduction

Mayo University Hospital provides both undergraduate and postgraduate education to trainees in Obstetrics and Paediatrics. At an undergraduate level, medical students from NUIG attend the Medical Academy based in Castlebar for 4-week rotations during the Academic year. The Departments of Paediatrics and Obstetrics offer rotations to students from UCD as well. Both departments also accept, on an individual request basis, medical students from German universities which number 2 to 3 students in each department per year.

At a postgraduate level, the Department of Paediatrics has 6 SHOs (of whom 3 are Basic Specialist Trainees from the National Paediatric Program, 2 are Family Practice trainees and 1 is a stand-alone post). The Registrar complement is 6 (2 SPR and 4 Registrars). The Department of Obstetrics consists of 6 SHOs (of whom 2 are BST and 4 are Family Practice trainees). There are 6 Registrars (2 SPRs and 4 Registrars) and 1 Associate Specialist.

The educational component consists of structured educational handover rounds both in Obstetrics and Paediatrics on a daily basis. These structured handovers facilitate both patient care and educational components.

### ACADEMIC OUTPUT for 2015 Nursing and Midwifery

This year saw the introduction and continued distribution of patient information leaflets by the nursing group chaired by Cathy Kennedy, CNM1, and supported by Dr Stokes, Consultant Paediatrician, and Nursing Practice Development. The leaflets developed include parent / patient advice sheets on Febrile Convulsions, Gastroenteritis, Urinary Tract Infections, Henoch Schonlein Purpura, Constipation in Children, Care of the child following Appendectomy and following Ingrown Toenail. These pamphlets have been well received by parents and are now available on the wards and in the Emergency Department.

#### The Paediatric Educational timetable

Monday	Tuesday	Wednesday	Thursday	Friday
X ray conference 2/month	Neonatology Dr Fox/Kumar 8.30-9.30 Weekly	Paediatrics Dr O'Neill 8.30-9.30 Weekly	Perinatal Meeting Weekly Dr Stokes/O'Neill 8.00 -8.30 am	Dr Stokes 9.30 -10.00 Journal Club/ Community Topics
Educational Handover Round 9.30-10.00 All Consultants in attendance	Educational Handover Round 9.30- 10.00 All Consultants in attendance	Educational Handover Round 9.30- 10.00 All Consultants in attendance	Educational Handover Round 9.30- 10.00 All Consultants in attendance	Educational Handover Round 9.00-9.30 All Consultants in attendance.
Monday 1-2 pm Dr Stokes Tutorial (1/ month)		SPR Tutorial 1-2 Dr O'Neill (3/month)	Dr O'Neill 12.30 -1.00 pm Clinical Slides (2/ month)	
	GP half day release weekly		BST day release 8 per year SPR day release 8 per year	

#### The Obstetrical Educational timetable

Monday	Tuesday	Wednesday	Thursday	Friday
Educational Handover Round 800-9.15 All Consultants in attendance	Educational Handover Round 8.00-9.00 All Consultants in attendance	Educational Handover Round 8.00-900 All Consultants in attendance	Educational Handover Round 8.00-9.00 All Consultants in attendance	Educational Handover Round 8.00-915 All Consultants in attendance
				Structured Teaching For BST and SPR trainees 10.30-12.00
			Obstetric Drills 15.30-16.00	
		GP half Day Release		

#### **Obstetrics**

### National Role of the Department of Obstetrics

- 1) National Guideline Membership National Clinical Effectiveness Committee: Dr Ulrich Bartels Communication (Clinical Handover) in Maternity Services.
- Clinical Advisory Group RCPI IOG. Dr Meabh Ni Bhuinneain and Dr Ulrich Bartels.
- 3) The Specialty Lead for BST Obstetric training is now Dr Meabh Ni Bhuinneain. This is a 3-year term with a potential renewal for a second term.
- 4) HIQA: RCPI –IOG nominee, External Advisor: investigation into the safety, quality and standard of services provided by HSE to patients the Midlands Regional Hospital, Portlaoise. Dr Meabh Ni Bhuinneain.

- 5) Peer Review of National Guidelines. Both Ms Andrea McGrail and Dr Meabh Ni Bhuinneain continue to be active in the reviewal of national guidelines.
- 6) Esther Alliance Accreditation.
  The Global Health North South
  Partnership with a special focus on
  Maternal and Newborn HealthMayo University Hospital partners
  with Londiani District Hospital,
  Kenya, and the Friends of Londiani.
  MUH is only the third Irish hospital
  to receive such accreditation.
  Clinical Lead Dr Meabh Ni
  Bhuinneain.

#### Paediatrics International Committees on Paediatrics

Dr Michael O'Neill was one of the two Irish Representatives to the Board of the European Academy of Paediatrics (EAP). The EAP includes representatives from all European countries, with the aim of improving paediatric care in Europe. The Board of the EAP meets twice yearly to formulate policy on healthcare and paediatric education. In 2014, a central theme was the standardisation of core paediatric training which was referred to as 'The Common Trunk'.

#### **National Committees on Paediatrics**

1) Board Member of the Faculty of Paediatrics. Dr Michael O'Neill.

#### **Paediatric Postgraduate Training**

- Associate Dean Basic Specialist Training Paediatrics RCPI. Dr Michael O'Neill
- 2) ALSG child protection faculty member /course provider. Dr Hilary Stokes
- 3) Community Child Health Subgroup Committee. Dr Hilary Stokes

### Departure of Dr GPP Fox, Consultant Paediatrician

This year saw the departure of Dr GPP Fox from Mayo University Hospital. He commenced as a consultant in 1989. He was an active member of the Faculty of Paediatrics and the Irish Paediatric Society. He was an influential Paediatrician who inspired both medical students and NCHDs to pursue Paediatrics as a career. He was affiliated to NUIG Galway and was instrumental in developing the relationship with UCD which the department has had for many years. He was an examiner for the MRCPI for many years and was an active medical educator.

From a clinical perspective, he developed and enacted the concept of multidisciplinary team for children with both physical and intellectual disabilities. He developed a clinic for children with visual impairment in the 1990's. With Mr John Laing, he pioneered hearing screening at MUH in 1998, prior to the introduction of the National Program. In latter years, he was a member of the adoption board.

He has relocated to the RCSI Medical School in Bahrain and will be continuing his clinical and medical teaching there. The Paediatric Department wishes to both acknowledge and thank him for clinical service to the children of Mayo and his commitment to its educational mission.

# Maternal Morbidity Admission to ICU

Ms Pauline Corcoran

#### Seizures

#### 1 Para 0<sup>+1</sup>, 35y

Booked at 12+2 gestation. Medical history of seizures as a child. Seizure free for 15 years. Uneventful pregnancy. Induction of labour at 42 weeks' gestation. Kiwi vacuum delivery baby weighing 2905g. Day 3 postnatal seizures x 2 transferred to ICU. No further seizure activity. Not preeclampsia. Referred to Neurology.

#### 2 Para 4+4, 42y

Booked at 13+1 weeks' gestation. Medical history of epilepsy, off medication x 2 years. Uneventful antenatal period. Presented to delivery suite at 34+3 gestation, history of seizure, further seizure activity following admission. Emergency caesarean section, fetal bradycardia, live infant weighing 2850g transferred to SCBU. Transferred to ICU postoperatively. Not pre eclampsia. Referred to Neurology.

#### Sepsis 3 Para 0<sup>+0</sup> 27y

Booked at 13+5 weeks' gestation. Uneventful pregnancy. Induction of labour at 42weeks' gestation. Abnormal cardio-tocograph, emergency caesarean section, sustained bladder injury. Live baby in good condition weighing 3340g. Initial care post-operative in HDU then transfer to post natal. On day 4 admitted to ICU sepsis. CTPA showed pleural effusions. Blood profile HB 6.9gdl transfused. E Coli urinary tract infection, E Coli infection wound swab. Transferred from ICU to HDU delivery suite on 3rd day. Good recovery. Discharged home day 13.

### Haemorrhage 4 Para 1<sup>+0</sup>, 36y

Booked at 11+2 weeks' gestation. DCDA twin pregnancy. Previous delivery retained placenta with postpartum haemorrhage. Uneventful antenatal course until admission to delivery suite at 35+3 gestation in labour. In view of fetal tachycardia, twin 2 emergency caesarean section. Both infants born in good condition weighing 2915g and 2315g transferred to SCBU. Massive obstetric haemorrhage progressed to hysterectomy. Transferred to ICU post-operatively. 2nd day post-natal transferred to HDU delivery suite. Made good recovery discharged home on day 16.

#### 5 Para 0+0, 32y

Booked at 12+4 gestation. Uneventful antenatal course. GBS positive low vaginal swab. Presented to delivery suite at 39+5 gestation with ruptured membranes. Induction of labour. Kiwi vacuum delivery live infant weighing 3805g. Post-partum haemorrhage from vaginal wall tear, transfused 2 units RBC and 1 fresh frozen plasma. Examination under anaesthetic in theatre. Transferred to ICU as no HDU bed available on delivery suite. Good recovery. Discharged home day 4.

#### 6 Para 0<sup>+0</sup>, 32y

Booked at 14 weeks' gestation. Uneventful pregnancy till 33+5 gestation. Presented to delivery suite with abdominal pain. Intrauterine death confirmed on ultrasound as unable to hear fetal heart on admission. Placental abruption. Labour induced, progressed to spontaneous vaginal delivery of infant weighing 2325g. EBL 1100 transfused 2 units red blood cells. Transferred to ICU for insertion of arterial line, no peripheral access. Discharged home day 3.

#### 7 Para 2<sup>+0</sup>, 37y

Presented to emergency department abdominal pain and diarrhoea. Positive pregnancy test. Serum lactate 5.3 maternal tachycardia fluid resuscitation. CT abdomen free fluid. Laparotomy ruptured ectopic right salpingectomoy. Transfused 4 units' red blood cells. Good post-operative recovery. Discharged day 5.

#### 8 Para 0+0, 30y

Booked at 14 weeks' gestation. Non substantial antepartum haemorrhage x 2 in antenatal period. Elective caesarean section at 37 weeks' gestation breech infant weighing 3070g. Uneventful postnatal recovery in hospital. Readmitted day 5 with severe headache, neck stiffness, rash, elevated blood pressure, protienurea. Intravenous labetaolol and magnesium infusion. Transferred to ICU. CT brain MRI normal, lumbar puncture negative. Pre-eclampsia. Good recovery, discharged home day 5.

#### 9 Para 3<sup>+0</sup>, 33y

Booked at 14+3 gestation. History of emergency caesarean section ruptured uterus last pregnancy. Presented to delivery suite at 31+5 gestation, severe abdominal pain, known gallstones. Diagnosed acute pancreatitis, nursed HDU on delivery suite. Transferred to ICU condition deteriorated. Transferred to UHG.

#### Maternal Mortality

#### Para 2, 33y

Booked at 12+3 gestation. Previous caesarean section followed by vaginal instrumental delivery complicated by shoulder dystocia. Antenatal visit at 18 weeks' gestation normal. Sudden death at home at 17 weeks. Coronial process ongoing.

# Perinatal Mortality Report

#### **Neonatal Deaths**

#### 1. 34y, P0+0, GA 22+2 weeks

Weight 575g

Booked at 13+6 gestation.

History of vaginal bleed throughout antenatal period.

Presented at 21 weeks' gestation with rupture of membranes.

Spontaneous vaginal delivery at 22+2 gestation. Apgar 1at1.

0 at 5. Male infant weighing 575g. No resuscitation.

#### 2. 33y, P0+0, GA 23+2 weeks

Weight 710g

Booked at 8+6 gestation. Medical history hypothyroidism, hypertension, depression. Gestational diabetes diagnosed at 11 weeks. Presented at 23+2 gestation with history of severe backache. Preterm labour diagnosed, commenced tocolysis. Progressed to spontaneous vaginal delivery live male infant. Active resuscitation. RIP at 9hrs of age.

#### 3. 39y, P0+0, GA 23+1 weeks

Weight 600g

Booked at 13+1 gestation. Uneventful antenatal period. Presented at 23+1 gestation with backache. Pre-term labour diagnosed. Progressed to vaginal breech delivery of live male infant birth weight 600g. No resuscitation.

Post-mortem declined. Placenta histology showed Group B Streptococcus.

Conclusion: Mid-trimester loss. Extreme prematurity. Sepsis.

### 4. 36y, P2+2, 23+1 gestation

Weight 595

Booked at 13+3 gestation. Presented at 23weeks gestation feeling unwell. Maternal sepsis diagnosed. Premature rupture of membranes 12 hrs post admission, progressed to vaginal breech delivery of live male infant. Apgar 1 @1minute, 1@ 5 minutes. No resuscitation. Baby RIP at 43mins age. Post-mortem performed.

Conclusion: Maternal Sepsis. Extreme prematurity. Mid-trimester loss.

#### 5. 39y, P2, 35<sup>+4</sup> gestation

Weight 3020

Booked at 12+4 gestation. Ultrasound myelomeningocele and hydrocephalus diagnosed. Referral to fetal medicine. At 35+4 gestation presented with ruptured membranes and contractions, breech presenting. Live male infant delivered by caesarean section. Baby transferred to tertiary centre for further care. RIP 9 days of age. Conclusion: Chromosomal abnormality with myelomeningocele and hydrocephalus.

#### 6. 29y, P0+0, 25+3 gestation

Weight 425g

Booked at 12+4 gestation. Complicated antenatal period, maternal hypertension and severe intrauterine growth restriction. Referred to fetal medicine. Presented at 25+3 gestation with HELLP syndrome, progressed to caesarean section delivery of live female infant weighing 425g transferred for tertiary care. Baby RIP 3 days of age.

Post-mortem declined. Conclusion: Severe intra-uterine growth restriction. Complications of extreme prematurity.

### 7. 33y, P0<sup>+0</sup>, 37<sup>+1</sup> gestation

Weight 2790

Booked at 7+4 gestation, assisted conception. Referred to fetal medicine at 12+4 gestation increased nuchal translucency. Presented at 37+1 gestation in labour, progressed to delivery of live male infant weighing 2790g. Baby transferred for tertiary care. RIP at 22days of age. Post-mortem declined. Conclusion: Chromosomal analysis Aperts syndrome.

#### **Stillbirths**

#### 1. 27y, P1+0, 39+1 gestation

Weight 3835g

Booked at 13+1 gestation. History of gestational diabetes and post-partum haemorrhage previous pregnancy. High BMI 40 diagnosed gestational diabetes diet control. Presented at 38+4 query rupture of membranes both amnisure and speculum negative. Discharged home. Represented at 38+6 history of no fetal movement since previous evening. No fetal heart

detected on auscultation intra-uterine death confirmed on ultrasound. Labour induced progressed to spontaneous vaginal delivery of male infant. Weight 3835g. Cord tight round neck. Post mortem declined.

#### 2. Age 39y, Para 4+2, 40+6 gestation Weight 3545g

Booked at 18+0 gestation. Uneventful ante-natal course. Presented at 40+6 in labour. On admission no fetal heart detected on auscultation intra-uterine death confirmed on ultrasound. Labour progressed to spontaneous vaginal delivery of female infant. Weight 3545g. Thick meconium at delivery. Post-mortem showed evidence of both old and acute hypoxia. Hypocoiling of umbilical vein.

#### 3. Age 26y, Para 3, 26+3 gestation Weight 379g

Booked at 10+1 gestation. Smoker previous caesarean section and intruterine growth restriction. Complicated ante-natal course raised blood pressure with severe intrauterine growth restriction. Referred to National Maternity Fetal Medicine unit. Reported expected poor outcome. Presented at 26weeks gestation no fetal heart detected. Intra-uterine death confirmed on ultrasound. Labour induced progressed to vaginal delivery of female infant weight 379g. Post-mortem declined. Placental histology multiple infarcts.

#### 4. Age 41y, Para 1+3, 38+1 gestation Weight 1740g

Booked at 10+3 gestation ultrasound showed increased nuchal fold. Referred to fetal medicine unit national maternity hospital. Diagnosed Trisomoy 18. Presented at 37+4 with no fetal heart, intra-uterine death confirmed. Labour induced progressed to vaginal breech delivery of female infant.Weight 1740g.

Declined post-mortem. Chromosomal diagnosis Trisomy 18 Edwards Syndrome.

# Colposcopy Service Report

Ms Ita Lynskey, Ms Ann Lavelle & Ms Siobhan Gallagher

There were 1,173 attendances at the Colposcopy Clinic in 2015, made up of: New - 425
Review - 748

First visit DNA (Did Not Attend) rate was 9.7%

Follow-up DNA rate was 24.6%

Overall DNA rate was 19.3%.

This rate is above the target set by CervicalCheck at <10%. A text message reminder service was introduced in November, 2015. A report was furnished to hospital management outlining the need to have reminders issued by text message one week in advance of appointments. This was piloted within the unit for 3 months and had a positive impact on the DNA rates. As a result of the text service's success in improving the rate of attendance, hospital management have rolled it out to other areas of the hospital.

The waiting times for a Colposcopy appointment are:
Urgents - 1 week
High-grade cell changes - 3 weeks
Low-grade cell changes - 4 weeks

We continue to meet these standards, set by CervicalCheck.

In May 2015, new guidelines were introduced by CervicalCheck. HPV Triage was introduced in the primary screening. This had an impact on the Colposcopy service in the hospital. In order to manage the increase in referrals to the Colposcopy Clinics whilst maintaining waiting times as a result of the changes to the programme staff provide both verbal and written information to assist in educating and reassuring women and advising on the importance of attending follow-up smears and appointments.

Histology services continue to be provided by Mayo University Hospital laboratory. In 2015, 439 biopsies were performed and 267 diagnostic biopsies. 80% of the excisional LLETZ treatments had CIN on the histology.

Multidisciplinary meetings involving the Colposcopy team, Histology Laboratory team and Medical Laboratory team were held quarterly. Monthly, quarterly and annual Colposcopy activity reports were generated and submitted to CervicalCheck as part of our performance check.

Training and ongoing professional development of medical and nursing staff continues within the service. All our Colposcopists and Accredited Trainers have been reaccredited. Two Doctors commenced their Colposcopy training in 2015. We facilitated practice nurses from the primary care services to attend the Colposcopy Clinic to achieve their cervical screening smear-takers' course. Quality cervical smear-taking training is central to an effective national screening programme. Ongoing clinical education continues, to both the medical and midwifery students who attend the Colposcopy Clinic as part of their professional training from UHG.

	OUTCOME	BIOPSY TYPE		TOTAL	
	(HISTOLOGY RESULT)	DIAGNOSTIC (PUNCH)	EXCISION	OTHER	
1	Cervical Cancer	3	2	0	5
2	Adenocarcinoma in situ/CGIN	3	2	0	5
3	CIN3	16	68	2	86
4	CIN2	22	31	0	53
5	CIN1	74	23	1	98
6	CIN Uncertain Grade	0	0	0	0
7	VAIN3	0	0	0	0
8	VAIN2	0	0	0	0
9	VAIN1	0	0	0	0
10	VIN3	1	0	0	1
11	VIN2	0	0	0	0
12	VIN1	0	0	0	0
13	HPV / cervicitis only	49	13	1	63
14	No CIN / No HPV (normal)	99	20	9	128
15	Inadequate	0	0	0	0
16	Result not known	0	0	0	0
17	Other	0	0	0	0
18	Total	267	159	13	439

# Antenatal / Postnatal Report

Our antenatal / postnatal unit consists of 30 beds.

The midwives working in the maternity unit now rotate to postnatal, antenatal and labour wards.

Midwifery team members working in postnatal include CMM, midwives, student midwives and health care attendants trained in midwifery modules.

The antenatal / postnatal ward provides a 24-hour antenatal / postnatal service, where staff endeavour to provide holistic and evidence-based care to mothers and newborn babies.

This unit is staffed by midwives providing antenatal / postnatal care, breast and artificial feeding and parenting support, education and teaching.

The interdisciplinary team working as part of this unit include Obstetricians, Paediatricians, Physiotherapists, Social Workers, Teen Parenting and Newborn Hearing Screening.

We work closely with health care professionals in the community. On discharge from the ward, a summary of care is generated by midwifery staff and forwarded to the Public Health Office and General Practitioner.

There were 1,577 mothers delivered and 1,604 babies born in 2015, with a caesarean section rate of 33.4%. This impacts on the ward, as these women require a higher level of care in the postnatal period.

Midwifery staff are required to have a high level of evidence-based knowledge and clinical skills to provide a competent, safe standard of care. The IMEWS observation and ISBAR tools are used in the provision of care.

We also regularly accommodate early viable pregnancy and postnatal readmissions.

All infants receive a high level of assessment and observation in the postnatal period, with specific policies in place for those with individual risk factors, i.e.

- Diabetic Mothers
- Group B Strep
- PROM
- Metabolic Screening
- Screening for early detection of congenital heart disease in newborn infants
- Newborn Hearing Screening
- EWS for at-risk babies.

#### **Breastfeeding/Lactation**

Promotion of and support for breastfeeding are key components of care throughout the unit. Maintaining this high standard is challenging in the current climate due to clinical work in the clinical area.

Breastfeeding and skin-to-skin contact are supported by midwives, student midwives and clinical staff as part of our commitment to being a member of the Baby Friendly Hospital Initiative and consistency of information groupwide is supported by the Breastfeeding Forum. All our staff have received 18 hours of breastfeeding training and this, together with the introduction in 2015 of online courses as part of the Saolta Breastfeeding Forum initiative, has updated staff knowledge in relation to breastfeeding practices and midwifery and medical knowledge.

We also facilitate rooming-in on the postnatal ward to promote breastfeeding.

# Department of Anaesthesia

Dr Ciara Canavan

The Department of Anaesthesia at MUH is staffed by 7 Consultant Anaesthetists and 12 Non Consultant Hospital Doctors, including 6 doctors rotating from the College of Anaesthetists SAT training scheme, and an Acute Pain Clinical Nurse Specialist.

#### **Antenatal Care**

The midwifery antenatal team run a multidisciplinary antenatal education programme for all pregnant women at MUH. The Anaesthetics Department provides education on epidural analgesia, with the opportunity to ask questions and consult with the anaesthetist one to one.

The High Risk Anaesthetic Antenatal clinic continues in its 4th year, with 2-3 patients per week being referred for individualised care plans.

All women for elective Caesarean section are seen at the Pre Assessment Clinic.

#### **Labour Analgesia**

475 patients had an epidural for labour (30% of all deliveries, 35% of all women who laboured).

The epidurals were complicated by 11 dural punctures (2.3%), of whom 8 developed a headache and were successfully treated with an epidural blood patch, 1 Horners syndrome, and 12 episodes of transient paraesthesia. 4 patients received combined spinal epidural for labour analgesia.

Patient-controlled epidural pumps are in use since 2010 and have lead to improved patient satisfaction and reduction in local anaesthetic dose.

The midwives are leading out on new motor and sensory block observations and we have introduced a modified version of the Obstetric Anaesthesia section of the National Maternity Chart for MUH.

New PCEA/Epidural pumps and infusion regimes have improved patient safety and reduced risk of errors in setting up infusions.

#### **Obstetric Anaesthesia**

1577 mothers delivered 1604 babies at MUH in 2015. 526 had a Caesarean Section (33.4% of all deliveries). 41 had a General Anaesthetic (7.8% of all sections). The others had either a spinal or epidural top-up. The reasons for general anaesthetic included patient request, failure of regional anaesthesia and conversion to general anaesthetic, cord prolapsed, maternal collapse, placental abruption, placenta praevia, low platelet count secondary to pre eclampsia or HELLP syndrome, profound foetal distress and multiple sclerosis.

Anaesthesia in the operating theatre was also provided for a total of 717 patients undergoing 759 procedures related to pregnancy and delivery, which included 113 patients for evacuation of retained products of conception, 18 instrumental deliveries, 8 manual removal of placenta, 8 suturing of perineal tear post delivery,

9 patients for tubal ligation, 2 patients for insertion of cervical suture, 8 patients for suturing of episotomy, 1 patient for repair of bladder tear, 6 patients for EUA for post partum haemorrhage and one patient for insertion of Bakri balloon.

### Intensive Care/ High Dependency Unit admissions

2015 saw 18 patients admitted to our combined ICU/HDU for observation and care (11.4 per 1000 deliveries).

#### **Postnatal Care**

All patients who receive an anaesthetic during labour and delivery are audited and followed up at 24 hours. This ensures early recognition of patient complications and improves our understanding of patient satisfaction with the epidural service provided.

#### **Audit/Education**

Ongoing follow up of complications of obstetric anaesthesia means we now have ten years of data on our practice.

Recent audit of response time to call for epidural shows we are consistently within our target of attending the patient within 30 minutes of being called.

#### Aims for 2016

To expand the Antenatal Assessment Clinic and incorporate it into the Pre Assessment Clinic.

To encourage multidisciplinary meetings including case discussions, emergency drills and shared learning.

# Antenatal Education Report

#### Introduction

The Antenatal Education service continued to support, educate and prepare women and families to be safe in pregnancy and to achieve the optimum outcome for delivery of their baby.

It is a service that provides education, promotes wellbeing and links into the other maternity services in order to support the mother and family fully.

The Childbirth Education service is provided by two midwife educators on a job-sharing basis and is provided in Mayo University Hospital.

The Childbirth Education service uses a team approach in providing the best information. The team includes Physiotherapy, Resuscitation Officer, Dental Health Nurse, Anaesthetics and Obstetric Team.

#### **Service Provision**

The primary provision is block classes monthly for first-time parents. These classes are given on Tuesdays and Thursdays.

Currently we are reaching sixty-five percent attendances of primigravida women, which includes younger parents.

Partners' and support persons' attendance at classes is encouraged.

Other classes provided include:

- Breastfeeding
- Young Parents-to-Be
- Twins
- Early Pregnancy
- Refresher

The Education service includes a strong advocacy supporting role and links closely with the Pregnancy Counselling service and the Social Work Department. This is essential for the support of vulnerable families.

The increased demand for one-to-one sessions continued throughout 2015, often requiring repeat visits, with specific referrals from the Social Work Department, Fetal Assessment Unit and Mental Health Services.

Additional tours of the unit with partners were organised, to facilitate prospective parents.

The Antenatal Education sessions are woman-focused and educate expectant women and their birth partners on issues relating to:

- Pregnancy
- Labour
- The immediate postnatal period
- Feeding
- Baby care
- Demands of parenthood
- Postnatal supports available

Information is also provided to inform parents where to source support and resources on discharge from hospital.

#### **Breastfeeding**

A key area is the promotion of the WHO /UNICEF recommendations on breastfeeding.

Mayo University Hospital participates in the Baby Friendly Health Initiative.

#### Ms Frances Burke & Ms Maura McKenna

The Education service runs a standalone Breastfeeding Antenatal Class where parents are helped to prepare for breastfeeding their babies. As part of Mayo University Hospital's review of services, we are currently reporting on the audit of the breastfeeding class which was commenced in February 2014.

The Education service was a founding member of the Saolta Breastfeeding Forum which has strong links with all the Saolta Hospitals.

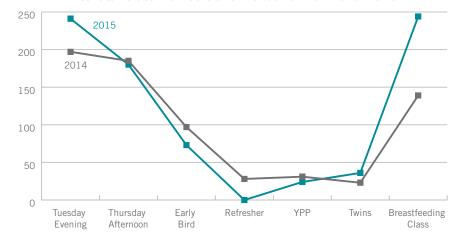
National Breastfeeding Awareness Week 2015 was celebrated with an information stand outside the maternity unit and in the main foyer in the hospital for staff and members of the public.

One-to-one breastfeeding support has been given by phone, ward visits, A&E and office. It is recognised that this service needs better resourcing to provide the optimum support.

Sources of Referrals to Antenatal Classes

- Antenatal Clinic
- Perinatal Unit
- Self Referral
- GP Referral
- Public Health Nurses
- Medical Social Work
- Teen Parent Support Programme
- Inpatient Referral
- Diabetic Clinic

#### Antenatal Class Numbers and Trends for 2014 and 2015



### Antenatal Education figures and comparisons for 2015

ANTENATAL CLASS NUMBERS FOR	2014	2015
Tuesday evening	197	241
Thursday afternoon	185	180
Early bird	97	73
Refresher	28	0
YPP	31	24
Twins	23	36
Breastfeeding class	139	244

Since 2000, the Childbirth Education service has forged links with the Mayo Traveller Support Group, the Road Safety Authority, the Specialist Nurses Group and the Western Region Drug and Alcohol Task Agency.

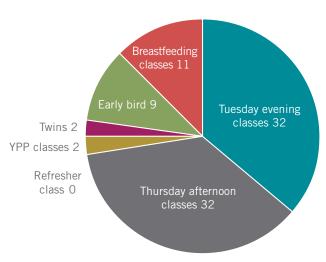
As a result of these collaborations, further projects such as the Annual Women's Health Morning, Safe Drinking in Pregnancy and Safe Driving in Pregnancy campaigns have been highlighted in 2015.

#### **Conclusion**

The service is patient-led and is adapted to meet the needs of all the families using Mayo University Hospital's maternity services by incorporating feedback from service users. We are constantly reviewing the service and changing the delivery of the education programme to offer best practice.

NUMBER OF CLASSES HE 2015	ELD IN
Tuesday evening	32
Thursday afternoon	32
Refresher class	0
YPP classes	2
Twins	2
Early bird	9
Breastfeeding class	11

#### Class Numbers for 2015



# Medical Social Work Department Report

Ms Ann Doherty & Mr. Séamus Moran

The Medical Social Work Department has a Social Worker / Crisis Pregnancy Counsellor dedicated to the Antenatal, Maternity and Special Care Baby Units of Mayo University Hospital, providing emotional, practical and counselling support to all pregnant women and their partners/family members where appropriate. We continued to provide an outreach service in Ballina. When requested, we offer non-directive, three options, counselling support to those who experience an unplanned pregnancy or to those whose pregnancy goes into difficulty.

There continues to be a strong sense of teamwork in the Maternity Services. The Social Worker / Counsellor works closely with colleagues from various professional backgrounds to ensure that each woman referred is linked to the relevant supports within both the hospital and the community to help them cope with any challenges they face. This was a challenge as we worked closely with community teams when two Section 12 orders were processed whilst mothers were on the units.

We continued to meet women of all ages from various socio-economic and cultural backgrounds. We meet people as early as possible in a pregnancy and our highest number of referrals comes from the antenatal clinics in Castlebar and Ballina. In the last year, we have seen a rise in the number of complex, multi-issue, high-priority cases referred. We are conscious of the range of stresses that people have to face in this time that can be a contributing factor to alcohol and drug misuse during pregnancy: domestic violence, unemployment, financial difficulty, cut backs on medical cards for babies born with a disability, rape, undocumented women and women in direct provision, to name but a few. Our service has a strong link with the ante natal education service who provide one to one support, which is essential in supporting our more vulnerable expectant mothers.

### **Crisis Pregnancy Support and Counselling**

In relation to three options counselling, the majority of our referrals come from GPs and through self-referral. We are a non-directive, non-judgemental service that offers women space to explore all options and support in coming to terms with their changed life circumstances and any decision they make about their pregnancy, whether it is to parent, to place for adoption or to terminate a pregnancy. We also offer post-termination counselling. The counselling post and secretarial back-up is funded by the Crisis Pregnancy Programme.

In the last year, we have noticed that referrals for concealed pregnancy have reduced. In other areas, we have noted a reduction in the number of teenage pregnancy referrals and an increase in the number of women referred who are over the age of 40 and who have conceived through IVF and are single.

### **Bereavement Support**

Bereavement counselling and psychological support is provided on a short-term basis to women in pregnancy when a foetal abnormality is diagnosed. This support is offered right throughout a pregnancy and we refer to long-term counselling in the community on discharge. We also offer bereavement support to parents when a baby dies through miscarriage, stillbirth or illness. We are actively involved in running an annual Ecumenical Remembrance Service for families who lost children through miscarriage, stillbirth, termination or at any age. Approximately 300 people attended the service in 2015.

### **Family Support and Child Protection**

We continued to work closely with Tusla Child and Family Agency. We continued to refer to them to ensure that couples with limited supports and experience with children receive follow up through a Family Support Worker or perhaps parenting skills education. We also link very closely with them when there are concerns about a parent's ability to parent and protect and keep a child safe. We have seen a rise in the number of women who report domestic violence to us and we are mindful that it can increase in pregnancy. Domestic violence is a very complex issue that affects numerous families. In our work in this area, we discuss a plan of safety with women, ensuring they are aware of the women's support services, sheltered accommodation, legal advice and counselling support.

### **Teenage/Young Mothers**

Teenage pregnancy presents its own unique challenges. We work closely with the antenatal educators in running an innovative Young Parents Antenatal Education Programme for mothers under the age of 23. We had approximately 75 attendees in 2015, on both a one-to-one and a group basis. Most of our teenagers are well supported by family but may not understand the realities of parenting at such a young age, which is often more complex if they are attending school or college. They may, due to their age, not be in receipt of financial support and may be living at home with their parents while their friends are travelling or living teenage life. It can be quite an isolating experience for teenagers and they often find it beneficial to avail of counselling support and to have space to talk to someone outside of their family. Some need support around how to tell their family.

### Special Care Baby Unit

We regularly support families whose baby is admitted to the Special Care Baby Unit, due to either prematurity or health problems. It is a profoundly difficult experience for families and counselling support is offered. We work closely with families around difficult diagnoses such as Down syndrome, life-limiting conditions and terminal diagnoses.

### **General Support**

We advocate on behalf of families who need other forms of support in the community. Sometimes for women there are financial difficulties, housing difficulties or relationship difficulties. In our work, we advise on financial supports and link with Community Welfare Officers. We also advise on rent supplement and, in cases where a person is homeless, we liaise closely with Mayo County Council to ensure their basic need of housing is met. We also link with Public Health Nursing and the Adult Mental Health Services, particularly when a woman has a history of mental health issues, e.g. depression, a personality disorder or a past history of post-natal depression.

# Obstetric Ultrasound Report

Ms Aishling Gill

The Obstetric Ultrasound Department in Mayo University Hospital is divided into two areas: the Early Pregnancy Unit and the Perinatal Unit. Both areas are staffed by midwives and midwife sonographers. The Early Pregnancy Unit has the added benefit of clerical support.

The Early Pregnancy Unit runs from 08.30 until 10.30, Monday to Thursday, and 08.30 to 12.30 on Friday and covers all areas of pregnancy up to 12 weeks gestation. The Perinatal Unit runs from 08.30 until 18.00, Monday to Wednesday, until 15.30 on Thursday and until 12.00 on Friday. There is also a satellite clinic every Tuesday from 08.30-17.00 in Ballina.

Both units are currently staffed by following midwives:

- Ms Siobhan Ryan
- Ms Aisling Gill
- Ms Sile Gill
- Ms Maura Mc Kenna.

All obstetric ultrasound examinations performed in the Department are done on Voluson Machines. The early pregnancy scans are done using the Voluson E8. The remaining scans are done on the Voluson Expert and the Voluson 730 Pro.

Reports are generated through the Viewpoint reporting system. In Early Pregnancy this is the only scan machine with Viewpoint. We hope to expand it to all machines in 2016.

All appointments are currently made by the sonographers using a diary so again we are looking forward to an electronic appointment system.

There were 1,031 scans performed in the Early Pregnancy Unit.

There were 3,389 scans performed in the Perinatal Unit

There were 784 scans performed in Ballina.

This is a total of 5,204 scans performed by the obstetric ultrasound team.

Ultrasound examinations are performed both abdominally (TAS) and vaginally (TVS).

The following is a list of ultrasound examinations performed:

- Booking/Dating scans
- Cervical length scans
- Second trimester detailed routine anatomy scans
- Growth scans
- Biophysical Profiles
- Doppler studies
- Fetal wellbeing
- Multiple pregnancies

All women who present for booking are offered a dating scan before 14 weeks gestation and a second scan is usually offered before 28 weeks gestation. There are also:

- Referrals from Antenatal Clinics.
- Referrals from Emergency Department, Maternity Ward and Labour Ward.
- Increased surveillance to women who have existing medical conditions, e.g. cardiac, epilepsy, thyroid conditions.
- Increased surveillance to women who have BMI over 35, have a past history of pre-term delivery, or who have had previous small babies.

Surveillance for diabetic women is practised as per the DIP study and these women are scanned at 12weeks, 22 weeks, 28 weeks, 32 weeks, 36 weeks and 38 weeks. These scans would include growth, biophysical profile and umbilical artery Doppler studies. In 2015, there were 144 women monitored under the diabetic criteria – these included 135 women who had gestational diabetes, 8 women who had Type 1 Diabetes and 1 women who had Type 2 Diabetes.

Surveillance for routine multiple pregnancy (usually twins) is as follows: For Dichorionic diamniotic twin pregnancies, women are offered scans every 4 weeks up to 28 weeks, every 2 weeks up to 36 weeks, and weekly up to delivery.

For Monocorionic diamniotic twin pregnancies, women are offered scans every 3 weeks up to 24 weeks, every 2 weeks up to 34 weeks and weekly then until delivery. These twins have the added monitoring on middle cerebral artery Doppler's. In 2015, there were 28 sets of twins, which included 11 sets of monochorionic diamniotic twins.

Fetal abnormalities are diagnosed and managed in the Perinatal Unit. We have a direct referral link with the National Maternity Hospital, Holles Street, who see any patients we refer within 72 hours. We also refer to University Hospital Galway dependent on suspected abnormalities. We are very grateful for their unending support.

In 2015, we referred 55 women with fetal abnormalities. These problems ranged from multi-dysplastic kidneys to fatal fetal abnormalities. All women were given follow up appointments here in Mayo University Hospital. A total of 1,527 women booked through the midwife public booking clinic and received their first ultrasound at this appointment. All patients referred by a GP before the end of the first trimester had 1st trimester scanning up to 14 weeks.

Mayo University Hospital

# Antenatal and Gynaecology outpatients

Ms Melanie Brady, Ms Mona Curry & Ms Andrea McGrail

The Maternity OPD continues to encourage and empower women who attend to look after their overall health and we strive to meet the expectations of the diverse clientele availing of both the antenatal and gynaecology clinics. We aim to provide an efficient service that is safe accessible and womancentred. All gynaecology referral letters are triaged by the consultants weekly and antenatal by midwife sonographers.

### **Antenatal clinics:**

In 2015, we facilitated a total of 10,379 new and review antenatal appointments. These included perinatal reviews / endocrine / diabetes clinics / GTT clinics / midwife booking clinics. We have three onsite antenatal consultant-led clinics and one offsite consultant-led clinic. We have a holistic approach to booking our women, with 1st trimester scan incorporated with dedicated timing of appointments Monday – Thursday.

Antenatal Attendance 10,379 in the public system
Midwife booking clinic 1,527
Review 8,852
DNA 1,297

### **Gynaecology clinics:**

Three gynaecology clinics are held weekly in Mayo University Hospital and one outreach clinic in Ballina. The longest waiting time for an appointment for these clinics is 6 weeks.

In 2015, we facilitated a total number of 3,449 women for gynaecology new and review appointments. These included cytology clinic, colposcopy and general gynaecology clinics.

### **Waiting times for appointments**

Urgent 2-4weeks Semi Urgent 4 - 12 weeks Routine < 24 weeks All referral letters are triaged by a consultant and prioritised into urgent, semi-urgent and routine. The longest time to appointment is 6 weeks. Our gynaecology service is supported by our Ambulatory Gynaecology service and at triage those pathways of care are allocated as appropriate. We have worked hard to achieve our level of new to review patient ratio as you can see from the figures below.

### **Gynaecology Attendances**

New Patients 1,496 Review 1,830 Gynaecology DNA 548

# Ambulatory Gynaecological Unit Report

Ms Runagh Burke, Ms Ann Lavelle & Ms Siobhan Gallagher

#### Introduction

The Ambulatory Gynaecological Unit has been included in this report for the first time this year but has been operational since 2010. It is the only fully operational service of its kind in the Saolta Group and is amongst the leading units in the country.

The Unit is shared by the Early Pregnancy Service each weekday morning and also by the Colposcopy Service. Staffing in the Unit consists of one full-time nurse/midwife, one part-time nurse/midwife and two part-time nurses. Clerical support consists of one full-time and one part-time clerical officer. These staff also partake in servicing EPU and Colposcopy (with the addition of a Colposcopy CMS solely assigned to that area.)

### The One Stop Clinic

Outpatient or ambulatory hysteroscopy clinics provide a means for delivering both diagnostic and therapeutic procedures for common gynaecology conditions in a safe, convenient and cost-effective environment. Advances in endoscopic technology have facilitated the movement of gynaecological interventions from expensive inpatient services requiring general anaesthesia and theatre facilities to a convenient office-based setting.

The clinics are undertaken by a specialist team of four consultants and facilitated by the nursing / midwifery

team. On average, eight to twelve patients are seen per session and extra clinics are facilitated depending on the waiting list.

Core conditions for referral to the unit include:

- Heavy or irregular periods
- Fibroids or polyps
- Post-menopausal bleeding
- Infertility
- Bleeding between periods
- Removal or insertion of an intrauterine contraceptive device

### **Service Provision**

Diagnostic procedures performed include trans-vaginal scans, hysteroscopies, endometrial biopsy sampling and blood investigations. Therapeutic interventions include insertion of intrauterine systems such as the Mirena or Jaydess coils. In addition, in 2015 we introduced operative hysteroscopies, with which endometrial ablation and hysteroscopic sterilisation were performed. The latter was the only procedure of its kind to have been performed in an outpatient setting in Ireland.

A total of 1,090 women were seen in the Unit in 2015, made up of new and review appointments.

970 Transvaginal scans were performed 147 Hysteroscopies 5 Operative hysteroscopies 270 Biopsies (including cervical polypectomies, endometrial and labial) 203 Mirena insertions In addition, in 2015 a new patient information leaflet was compiled by the nursing staff in the Unit, to provide women attending the clinics with information on the full range of procedures available in the Unit and on care during and after procedures. Feedback from service users has been overwhelmingly positive since its introduction. The funding for this initiative was through the NMPDU.

### **Challenges for the service**

Growth of the service and in turn meeting waiting list times for appointments to the Unit can be a challenge. The mix of the three services can be a challenge to waiting times, as certain clinics may overrun their designated times.

#### Conclusion

When a woman is first told that she has a gynaecological condition that requires investigation at a clinic, her reaction is one of anxiety. The staff in the Unit understand and recognise these feelings of fear and anxiety, and deal with each woman in a sensitive and professional manner. The Unit provides a fast and efficient means to diagnosis and treatment for the women attending the clinic, in particular reducing hospital visits. Risks associated with general anaesthesia can be eliminated and disruption to work and family life can be minimised.

Mayo University Hospital

# Women's Health & Paediatric Physiotherapy Report

Ms Fiona McGrath & Ms Edel Devers

### Women's Health Physiotherapy Inpatient Services include:

- A service to the maternity, labour and gynaecology wards.
- Follow up for all perineal tears.

It is essential that postpartum mothers following instrumental delivery, long second stage of labour or baby weight >4kgs are followed up, as these patients represent those at greatest risk of complications due to pelvic floor trauma

• Postnatal education on the ward.

### Women's Health Physiotherapy Outpatient Services include:

- A service for antenatal and postnatal referrals, including low back pain / pelvic girdle pain, symphysis pubis dysfunction / incontinence / pelvic organ prolapse, Carpel Tunnel Syndrome.
- A service for gynaecological referrals to include stress urinary incontinence, urinary urge incontinence, mixed urinary incontinence, pelvic organ prolapse, faecal incontinence and pain.

The physiotherapist delivers antenatal classes in collaboration with the antenatal facilitators.

54 postnatal classes delivered. 32 antenatal classes delivered.

Women's Health physiotherapy is a specialist clinical area and urogynaecological referrals from across the county are seen in Mayo University Hospital. There is a growing demand for the service and a significant waiting time for routine referrals.

### Women's Health

2015	NUMBER OF NEW PATIENTS	NUMBER OF PHYSIOTHERAPY TREATMENTS			
Inpatient	263	582			
Outpatients	476	1,833			

### **Paediatrics**

2015	NUMBER OF NEW PATIENTS	NUMBER OF PHYSIOTHERAPY TREATMENTS
Inpatient	499	1600
Outpatients	446	987

### Paediatric Physiotherapy Inpatient Services include:

- A service to the paediatric ward. This includes the Cystic Fibrosis service to inpatients, outpatients, clinic review and annual assessment adhering to standards of international best practice.
- A service for all referrals from maternity ward and SCBU, e.g. foot anomalies (Talipes Calcanoevalgus/ Equinovarus), Obstetric Brachial Plexus Lesions, Torticollis and Developmental issues.
- Exercise testing / shuttle testing for inpatients and outpatients.
- Attendance at the Asthma Clinics.

### Paediatric Physiotherapy Outpatient Services include:

- Follow-up physiotherapy for all referrals from Maternity and SCBU, as outlined above.
- Developmental delay referrals from Consultants and Public Health Nurses.
- A service for all paediatric musculoskeletal and orthopaedic referrals aged 0-12 years across Co. Mayo.
- A service for all Paediatric Normal Variance referrals across Co. Mayo.
- Liaison with PCCC paediatric services regarding transfer of appropriate infants and children to other services.

# Special Care Baby Unit Report

Ms Joan Falsey & Ms Andrea McGrail

Our aim is to provide high quality care in a safe and friendly environment. We recognise that parents and families are the most important people in a newborn baby's life. We therefore aim to care for parents as well as babies. We encourage parents to participate in their babies' care and ensure that they receive information and education.

During 2015, 1,603 babies >500g and 1 baby < 500g were born and 322 babies (18.9%) were admitted to the Special Care Baby Unit.

The Unit provides high-dependency care and some short-term intensive care prior to transfer to a tertiary centre. The Unit also has an isolation room for individual care. Infants are admitted from the Labour Ward, Postnatal Ward, Theatre and Paediatric Ward.

Additional specialist services available on site include audiology, MRI, CAT scan and ultrasound.

We work closely with our interdisciplinary teams. During 2015, Section 12 orders were invoked within the Unit and we provided care for these babies prior to discharge.

### **INFANTS ADMITTED BY GESTATIONAL AGE GROUP**

Gestation (weeks)	Total Admissions 322
Less than 32	25
32 - 36	87
37 weeks and over	210

TOTAL ADMISSIONS	FROM SOURCE
Theatre	97
Delivery Suite	70
Maternity Unit	123
Other Hospital	28
Paediatric Ward	2
Social Admission	1
BBA	1
TOTAL	322

BIRTHWEIGHT	
Less than 1500g	23
1501 – 2000g	27
2001g – 2500g	40
Over 2500g	232
Total	322

REASONS FOR ADMISSIO	N
Prematurity	108
Respiratory	57
Infection related	46
Gastrointestinal	2
Hypoglycaemia	18
Neurological	4
Cyanotic episodes	8
Low birthweight	10
Infant of insulin-dependent diabetic	7
Congenital abnormalities	15
From Paediatric Ward (3 month RSV)	2
Maternal Hepatitis B	2
Cardiac	2
Social reasons	4
Confirmed bacteraemia on blood cultures	1
Jaundice for phototherapy	15
Poor feeding	20
Facial palsy	1
Total	322

VERY LOW BIRTHWEIGHT (40 – 1500G)	0G
Born in MUH	3
Born in MUH & transferred to regional centre	12
Born in regional centre & transferred back to MUH	8
Total	23

**GESTATIONAL AGE OF VERY LOW** 

BIRTHWEIGHT ADMITTED TO SCBU				
22 -24+6 weeks	1			
25 – 26+6 weeks	6			
27 – 28+6 weeks	2			
29 – 31+6 weeks	12			
32 weeks and over	2			
Total	23			
BIRTHWEIGHT OF VERY LOW				

BIRTHWEIGHT ADMITT	
Less than 501g	1
501 – 750g	1
751 – 1,000g	3
1,001 – 1,250g	5
1,251 – 2,500g	13
Total	23

### **Neonatal Deaths**

GESTATION	BIRTHWEIGHT	AGE	CONCLUSION	PLACE OF DEATH
37+1	2.790g	22 days	Apert Syndrome	Holles Street Hospital
25+3	425g	5 days	Extreme rematurity Maternal PET	Coombe Hospital
TOTAL 2				None in SCBU

# Quality & Patient Safety Department

Mr. Richard Holmes & Ms Caroline Murtagh

The Women's and Children's Directorate, Mayo University Hospital, meet on a monthly basis to review incidents, complaints, risk register material and service user feedback.

If internal reviews are required a Preliminary Assessment Report (PAR) is completed for review using the Saolta Template.

Recommendations from reviews are reviewed at these meetings and action plans are agreed.

Serious Incidents are escalated to SIMT (Serious Incident Management Team) meetings which are held on a monthly basis and actions are agreed.

### Number of Incidents reported in

There were a total of 1,736 incidents reported from 1st January, 2015, to 31st December, 2015. Of that number, 432 incidents pertain to Obstetrics (237), Gynaecology (28) and Paediatrics (167).

### **Local Management of Complaints**

Complaints from service users are dealt with by the Quality and Patient Safety Department following the HSE complaints management process.

### Complaints - Women's & Children's Directorate 2015

There were a total of 13 complaints recorded at Mayo University Hospital in 2015 pertaining to the Women's and Children's Directorate.

The complaints are broken down into the following categories: Safe and effective care 4 Communication / information 1 Dignity and respect 1

Access

# Portiuncula University Hospital

#### Introduction

This report provides an overview of Portiuncula Women's and Children's services for 2015. The demands of the service have been influenced by the National Maternity Strategy and national and local maternity reviews, as well as changing public expectations, and this has impacted resource management, professional development initiatives, service innovation and quality and risk initiatives. Throughout the year, the staff of the unit showed exceptional commitment and dedication to providing the highest quality, evidence-based care to meet the needs of mothers, infants and their families. It is this unbreakable spirit that helps build the foundation of our unit and our staff are our most valuable asset.

The report will be presented as follows:

- Maternity Department
- Outpatient Maternity Services
- Breastfeeding Service
- Perinatal Mortality report
- Early Pregnancy Unit (EPU)
- Neonatal Service
- Paediatric Service
- Social Work Services
- Crisis Pregnancy
- Quality & Safety and Incident Management

### Women's and Children's Services Team

Director of Nursing:

- Ms Marita Fogarty
   Assistant Director of Nursing for Women and Children:
- Ms Siobhán Horkan

### **The Midwifery Team**

Clinical Midwife Managers III:

- Ms Mary Burke
- Clinical Midwife Managers II:
- Ms Anne Regan
- Ms Mary Mulkerrins
- Ms Mary Mulkern
- Ms Zoe Keavney
- Ms Grainne PayneMs Carmel McConn
- Ms Priscilla Neilan (IT)
- Ms Carmel Cronnolly (Clinical Placement Coordinator)

#### Clinical Midwife Managers I

- Ms Anne Benson
- Ms Fionnuala Reilly
- Ms Aisling Dixon

#### Clinical Midwife Specialists

- Ms Mary Mahon (Lactation Consultant)
- Ms Anne Murray (Neonatal Resuscitation)
- Ms Patricia Casserly (Ultrasound)
- Ms Collette Conneely (Ultrasound)
- Staff Midwives: 28 WTE
- HCAs: 8.5 WTE
- Social Worker team and Crisis Pregnancy Service
- Pastoral Care Service

### Consultant Obstetricians & Gynaecologists

After many long years of service, Consultant Obstetrician Dr. John Monaghan retired in 2015. His experience and leadership in the field of obstetrics is greatly missed and he is wished good health and happiness on his retirement. Along with Dr. Michael Brassil and Dr. Naveed Khawaja, two new Consultant Obstetricians, Dr. Marie-Christine De Tavernier and Dr. Naser Giumaa, were welcomed to the team, which also includes:

### Registrars in Obstetrics & Gynaecology

- Dr. Mohd Zairi Mohd Noor
- Dr. Rahema Amjad
- Dr. Mustafa Banni
- Dr. Paul Stanciu
- Dr. Ali Hegazy (Locum)

### Senior House Officers in Obstetrics & Gynaecology

- Dr. Kate O'Doherty
- Dr. Sheikh M. Ammeer
- Dr. Judith Gilmore
- Dr. Eilis Foran
- Dr. Fiona Harrison Intern
- Dr. Kayte Gamble

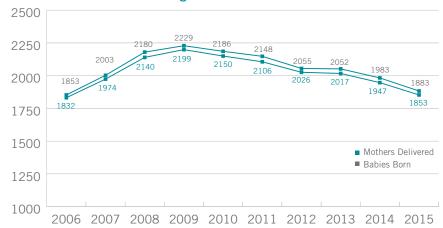
# Maternity Department

Ms Mary Burke, Ms Anne Regan & Ms Priscilla Neilan

### **Activity**

There were 1,883 babies delivered to 1,853 mothers in 2015. This reduction of 5.17% on the previous year is in common with the national trend (Fig 1). The detailed statistical report below demonstrates a concerning increase in Caesarean Section rates. Initiatives to address this trend will be discussed later in the report (see quality and risk initiatives).





YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Mothers Delivered	1832	1974	2140	2199	2150	2106	2026	2017	1947	1853
Babies Born	1853	2003	2180	2229	2186	2148	2055	2052	1983	1883

2015	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Mothers Delivered	643	1210	1853
Babies Born	652	1231	1883

N=643 PRIMIGRAVIDA	%	N=1210 MULTIGRAVIDA	%	N=1853 TOTAL	%
317	49%	621	51%	938	50%
224	35%	260	21%	484	26%
292	40%	128	10%	420	20%
13	2%	69	6%	82	4%
362	56%	457	37%	819	43%
246	62%	104	13%	350	30%
252	39%	430	36%	682	37%
163	25%	667	55%	830	45%
41	6%	13	1%	54	3%
187	29%	98	8%	285	15%
0	0%	2	0%	2	0%
	PRIMIGRAVIDA  317  224  292  13  362  246  252  163  41  187	PRIMIGRAVIDA       317     49%       224     35%       292     40%       13     2%       362     56%       246     62%       252     39%       163     25%       41     6%       187     29%	PRIMIGRAVIDA         MULTIGRAVIDA           317         49%         621           224         35%         260           292         40%         128           13         2%         69           362         56%         457           246         62%         104           252         39%         430           163         25%         667           41         6%         13           187         29%         98	PRIMIGRAVIDA         MULTIGRAVIDA           317         49%         621         51%           224         35%         260         21%           292         40%         128         10%           13         2%         69         6%           362         56%         457         37%           246         62%         104         13%           252         39%         430         36%           163         25%         667         55%           41         6%         13         1%           187         29%         98         8%	PRIMIGRAVIDA         MULTIGRAVIDA         TOTAL           317         49%         621         51%         938           224         35%         260         21%         484           292         40%         128         10%         420           13         2%         69         6%         82           362         56%         457         37%         819           246         62%         104         13%         350           252         39%         430         36%         682           163         25%         667         55%         830           41         6%         13         1%         54           187         29%         98         8%         285

OBSTETRIC OUTCOMES (BABIES)	N=652 PRIMIGRAVIDA	%	N=1231 MULTIGRAVIDA	%	N=1883 TOTAL	%
Spontaneous Vaginal Delivery	163	25.27%	668	54.75%	831	44.13%
Forceps Delivery	41	6.36%	13	1.07%	54	2.87%
Ventouse Delivery	187	28.99%	98	8.03%	285	15.14%
Breech Delivery (Singleton)	0	0.0%	1	0.08%	1	0.05%
Breech Delivery (2nd Twin)	0	0.0%	2	16.00%	2	10.00%
Caesarean Section	261	41%	449	36%	710	38%

MULTIPLE PREGNANCIES	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	
Twins	9	1%	21	2%	30	2%

### Portiuncula University Hospital

MULTIPLE BIRTHS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Twins	21	29	40	30	36	42	29	35	36	30

PERINATAL DEATHS	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Stillbirths	1	8	9	0.48%
Early Neonatal Deaths	2	2	4	0.21%

PERINATAL MORTALITY	
Stillbirth rate (per 1,000)	4.8
Neonatal Death rate (per 1,000)	2.1
Overall PMR per 1,000 births	6.9

BIRTH WEIGHTS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<500gms	5	0.76%	7	0.56%	12	0.63%
500-999gms	1	0.15%	1	0.08%	2	0.10%
1000-1999gms	7	1.07%	12	0.97%	19	1.0%
2000-2999gms	105	16.1%	151	12.26%	256	13.59%
3000-3999gms	441	67.63%	806	65.47%	1247	66.22%
4000-4499gms	76	11.65%	200	16.24%	276	14.65%
4500-4999gms	15	2.30%	46	3.73%	61	3.23%
5000-5499gms	2	0.30%	5	0.40%	7	0.37%
>5500gms	0	0%	3	0.24%	3	0.15%

GESTATION @ DELIVERY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<28 weeks	1	0.16%	1	0.07%	2	0.10%
28-31 weeks+6 days	4	0.62%	2	0.15%	6	0.32%
32-36 weeks+6 days	29	4.51%	59	4.87%	88.4	4.75%
37-40 weeks+6 days	433	67.34%	921	76.15%	1354	73.08%
41 weeks+	176	27.37%	227	18.76%	403	21.75%
Total	643		1210		1853	

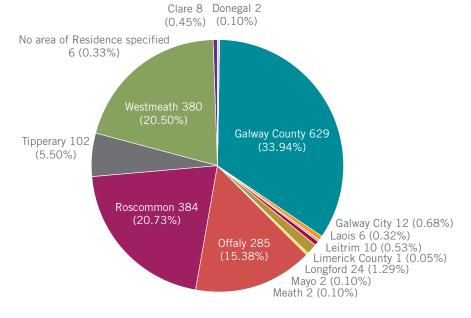
ROBSON GROUPS OF CAESAREAN SECTIONS FOR 2015	NUMBER OF DELIVERIES
Group1 - Nullip >37 weeks, single cephalic presentation, spontaneous labour	80
Group2 - Nullip >37 weeks, single cephalic presentation, induced labour or pre-labour CS	131
Group3 - Multip >37 weeks, single cephalic presentation, spontaneous labour	23
Group4 - Multip >37 weeks, single cephalic presentation, induced labour or pre-labour CS	49
Group5 - Multip Previous CS >37 weeks, single cephalic presentation	307
Group6 - Nullip single breech presentation	30
Group7 - Multip single breech presentation	18
Group8 - all multiple pregnancies	28
Group9 - all abnormal lies	6
Group10 - all single, cephalic pregnancies <37 weeks (including previous CS)	10
Total	682

BBA	PRIMIGRAVIDA	% OF OVERALL PRIMIGRAVIDA	MULTIGRAVIDA	% OF OVERALL MULTIGRAVIDA	TOTAL	% OF OVERALL BIRTHS
2015	0	0	7	0.57%	7	0.37%
2014	0	0	5	0.40%	5	0.25%
2013	1	0.14%	7	0.54%	8	0.39%
2012	0	0	5	0.38%	5	0.24%
2011	1	0.13%	1	0.07%	2	0.09%
2010	1	0.12%	8	0.60%	9	0.41%
2009	0	0.00%	6	0.45%	6	0.27%
2008	2	0.27%	3	0.22%	5	0.23%
2007	0	0.00%	12	0.97%	12	0.60%
2006	1	0.14%	7	0.62%	8	0.43%

COMPLICATION	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Shoulder Dystocia	24	10	12	13	10	14	13	7	10	6

3RD STAGE PROBLEMS	TOTAL	%
Primary PPH (1000ml)	27	1.45%
Manual Removal Of Placenta	26	1.40%

Figure 1 - County of Residence



PARITY	N	%
Para 0	644	34.75%
Para 1	679	36.64%
Para 2	352	18.99%
Para 3	117	6.32%
Para 4	42	2.27%
Para 5	9	0.49%
Para 6	8	0.44%
Para 7	1	0.05%
Para 8	1	0.05%
Total	1853	100.00%

AGE AT DELIVERY	15-19YRS	20-24YRS	25-29YRS	30-34YRS	35-39YRS	40-44YRS	45+YRS
N	39	145	315	694	554	102	4
%	2.10%	7.82%	16.99%	37.45%	29.89%	5.50%	0.21%

### Portiuncula University Hospital

GESTATION AT DELIVERY	PRIMIGRAVIDA	% OF OVERALL PRIMIGRAVIDAS	MULTIGRAVIDA	% OF OVERALL MULTIGRAVIDAS	TOTAL	% OF OVERALL BIRTHS
<28 Weeks	1	0.16%	1	0.09%	2	0.10%
28 - 31+6 Weeks	4	0.62%	2	0.03%	6	0.32%
32 - 36+6 Weeks	29	4.51%	59	4.89%	88	4.75%
37 - 40+6 Weeks	433	67.34%	921	76.20%	1354	73.08%
41 weeks	176	27.37%	227	18.79%	403	21.75%
Total	643	100%	1210	100%	1853	100%

# Professional Development

Continued professional development is a critical component of ensuring quality clinical practice. Engagement by staff in professional development opportunities is encouraged and supported.

### Mandatory training for midwifery and obstetric staff includes:

- K2 perinatal training
- Fetal monitoring training
- IMEWS
- ISBAR
- PROMPT training
- Sepsis training
- Neonatal Resuscitation

### Additional courses undertaken by midwifery staff:

- Maternity High Dependency Module in NUIG (two midwives)
- Certificate in Quality Improvement through Midwifery Leadership (1 CMM)
- Postgraduate Diploma in Healthcare Informatics (1 CMM)
- MSc in Obstetric Ultrasound (1CMM).

### Academic achievements:

Ms Anne Murray (CMS Neonatal Resuscitation) was invited to present at the RCSI 35th Annual International Nursing and Midwifery Research and Education Conference 2016.

Ms Collette Conneely (CMS ultrasound) presented her poster entitled "Scar Ectopic: A Waiting Game" at the British Medical Ultrasound Society (BMUS) annual conference in Cardiff.

### **Quality and Risk Initiatives**

This has been a particularly challenging year for our maternity services particularly due to an ongoing maternity review. Reviews and auditing are part of an ever-changing healthcare setting and we must embrace, learn and take the positives from them so as to improve our practice and service. We welcome any recommendations that may follow and are ready to implement any changes needed within current resources. A number of quality initiatives have already commenced:

### **Staffing Improvements**

In order to ensure senior midwifery presence in the labour ward across 24 hours, five additional CMM2 posts were secured. Two additional CMM1 posts were also secured to cover the mixed antenatal and postnatal ward, thus providing additional managerial support to staff. Further positions of Clinical Facilitator and Practice Development Co-ordinator as well as a bereavement midwife will be welcome additions in the coming year. The need for a CMS in Gestational Diabetes has also been identified and will be progressed via the service plan.

### **OptiBIRTH**

(Prepared by Anne Murray)

An increasing caesarean section rate is noted and also highlighted nationally. To help address this, a weekly caesarean section review was commenced and this is attended by the obstetric and midwifery team. Portiuncula University Hospital participated in the OptiBIRTH study from February 2014. The feedback was very optimistic from mothers who attended the education. Parents found that having professional support and access to advice during pregnancy helped to strengthen their confidence in their ability to birth safely. Due to demand from patients and a rising caesarean section rate, we are considering the continuation of this specialised education for mothers with a previous caesarean delivery.

### **Safety Pause**

The introduction of the "Safety Pause" every day between the maternity staff, CMMs and the obstetric staff on call ensures safe handover practices, communication of current activity and identification of possible high risk issues. It also facilitates forward planning with adjoining units (SCBU, ICU and Theatre) which are contacted regarding possible pending risk cases and to get an update on their unit's activity. A proposal to carry out the Safety Pause twice a day is being considered for 2016.

### **Medication Management**

The maternity floor was the pilot area for swipe card access for drug trolleys and drug storage units. This successful initiative was extended to other wards in the hospital.

Following the establishment of a local drugs and therapeutics committee, one of the CMMs is preparing to become a nurse prescriber.

### Improved Maternal Assessment Initiatives

The Venous Thrombo Embolism (VTE) risk assessment form was introduced.

The unit introduced the additional placement of a blood gas analyser in the labour ward.

### **Nursing Documentation**

In order to facilitate improvement and consistency in maternal documentation, the use of CTG stickers in maternal notes was commenced along with a Vaginal Examination (VE) stamp template to ensure clarity of reported findings. The additional use of the ISBAR stickers provides a structure to communicate necessary findings to appropriate disciplines.

### **Multidisciplinary Review**

As a unit, we continued to engage in professional multidisciplinary team meetings, which strengthen and improve our service. Perinatal meetings are held on a monthly basis between the Midwifery, Obstetric and Paediatric team, and Risk Management meetings are held monthly. The Local Obstetrics and Gynaecology Implementation Board meets every six weeks.

The Perinatal Bereavement Group meets every two months with representatives from community support groups.

Women and Children Care Directorate link up with the other members of the Saolta Group on a monthly basis and review KPIs.

Policy Procedures and Guidelines meetings review the new policies, both local and national, to review, monitor and plan implementation of current and additional guidelines.

The Regional Traveller Health Group, which includes members of the travelling community, meets biannually which facilitates welcome feedback in relation to the obstetric services.

#### Refurbishment

### The Maternity Unit

In 2015, the Labour Ward underwent significant upgrading, re-configuration and refurbishment, including a number of patient rooms. The refurbishment involved full upgrading of all four labour wards, floors, walls and ceilings, nurses' station, baby resuscitation, installation of a patient toilet and shower area and a patient admission room.

The refurbishment of patient rooms included the installation of piped medical gases in all rooms and in addition a new clinical room for the storage and dispensing of drugs.

### The Special Care Baby Unit

In 2015, the Special Care Baby Unit underwent refurbishment including the development of a cleaning storage area, floor covering replaced throughout, replacement of all ceiling tiles, replacement of lighting, deep clean of all duct work, removal of blinds, painting of unit, refurbishment of dirty utility and the upgrading of the hand hygiene sink at department entrance.

#### **Antenatal Clinics**

In 2015, 2,184 women were booked for antenatal care under the care of the four consultant-led antenatal clinics. Each week, four clinics are operated in the hospital and three outreach clinics were run in Loughrea, Roscommon

and Athlone. No additional resources were provided for the clinics in Athlone and Roscommon and consequently Roscommon clinic was suspended.

#### **Parentcraft**

Free antenatal classes are offered to all mothers and their partners attending Portiuncula maternity services. These include an early class between 16 and 28 weeks given over 2 hours by a midwife and physiotherapist. The following topics are covered: antenatal medical care; care of self during pregnancy; physical and psychological changes in pregnancy; nutrition; exercise; common complaints during pregnancy and their management; and relaxation. A second class is run after 28 weeks with the midwife and covers: signs of labour; pain relief; breathing control in labour; the stages of labour and postnatal care. Classes are booked through the Physiotherapy Department.

### Diabetic Clinic

Dr. Marie-Christine De Tavernier

The diabetic clinic is held every Tuesday morning. It is managed by Professor Firth / Dr. Liew, Consultant in Endocrinology and Diabetes; Ms Hilda Clarke, Clinical Nurse Specialist in Diabetes Mellitus; Dr. Marie-Christine De Tavernier, Consultant Obstetrician and Gynaecologist; and the Midwife Sonographers.

There were, in total, 162 patients attending the service. The patients who attended were categorised as follows:

- Type 1 Diabetes = 7 cases
- Type 2 Diabetes = 5 cases
- Gestational Diabetes = 150 cases

# Breastfeeding Report

Ms Mary Mahon

Portiuncula University Hospital was successful in Baby Friendly Hospital Initiative (BFHI) re-accreditation in 2015, by demonstrating to external auditors that the 64 criteria required were in place. The hospital was first accredited in 2004, then in 2009 and again in 2015. The BFHI is a global campaign by the World Health Organisation and the United Nations Children's Fund (UNICEF) which recognises that implementing best practice in the maternity service is crucial to the success of programmes to promote breastfeeding. The success of this initiative is credited to the dedication and hard work of the multidisciplinary team who recognise the importance of breastfeeding. Mothers who cannot breastfeed or who make an informed choice not to breastfeed are equally supported in their infant feeding choice, and staff are supported to provide high standards of care.

 The National Infant Feeding Policy for Maternity and Neonatal Services (2012), revised 2015, was implemented

- Maternal Infant Skin-to-Skin Contact post caesarean delivery was acknowledged as routine best practice for well mothers and infants. The journey and the success of this project was published on HSELanD.
- We aligned BFHI standards with the Healthy Ireland Initiative and began addressing health inequalities by training Community Health Workers to discuss the importance of breastfeeding with pregnant traveller women (2% of traveller women breastfeed vs 59% of the general population).
- Education and training is provided to all staff, clinical and non-clinical, appropriate to their role. This includes short information sessions, a one-day refresher program and a two-day breastfeeding management course.
- Education was extended out to the community; the two-day breastfeeding program (based on the 20-hour UNICEF program) was delivered in the community to public health nurses.

### Lactation Services Provided by Portiuncula:

- Midwives and nursing staff provide direct breastfeeding support in line with National Policy.
- All employees, clinical and non clinical, recognise their role in supporting breastfeeding mothers.
- In-house specialist support to mothers with breastfeeding challenges.
- Antenatal education.
- Outpatient referrals from community supports, i.e. GP, Public Health Nurse & voluntary groups.
- Telephone breastfeeding support system.
- Breastfeeding support group.
- Consultancy.
- Advocacy.
- The CMS in Lactation became a member of the National BFHI Committee in 2015 and chairs the sub-committee on Governance.
- The CMS in Lactation became a member of the BFHI assessment team in 2015.

# Early Pregnancy Unit Report

Dr. Marie-Christine De Tavernier, Ms Collette Conneely and Ms Patricia Casserly

There were in total 4644 ultrasound scans performed in the Pregnancy Assessment Unit.

The ultrasound assessments performed included:

- Early pregnancy assessments scan: 1943 cases
- Detailed anatomy scans: 612 cases
- Assessments of fetal wellbeing: 2089

During 2015, there were 30 sets of twins delivered. These patients were all followed up in the unit as per national guidelines.

The Pregnancy Assessment Unit also provides ultrasound assessments for the weekly diabetic clinic.

During 2015, 14 fetal abnormalities were diagnosed. These were all referred for assessment at a Fetal Medicine Unit. The abnormalities are outlined below:

- CNS malformation: 3 cases (encephalocoele, spina bifida, ventriculomegaly)
- Cleft lip and palate: 1 case
- Cystic hygroma: 2 cases
- Renal tract malformation: 1 case (LUTO)
- Gastro-intestinal malformation: 1 case (gastroschisis)
- Ovarian cyst: 1 case
- Aneuploidy: 4 cases (Trisomy 18 2 cases, Trisomy 21 2 cases, Triploidy – 1 case)

# Maternal Morbidity

Dr. Marie-Christine De Tavernier & Ms Priscilla Neilan

### Postpartum Haemorrhage > 2 litres

- Uterine Atony: 4 cases
- Placenta Praevia: 2 cases
- Uterine inversion: 1 case
- PET requiring MgSO4: 10 cases
- Infection: Sepsis: 3 cases
- Acute Pancreatitis: 1 case

### Cardiomyopathy: 2 cases

### Pregnancy problems 1st and 2nd trimester:

- Ruptured Ectopic Pregnancies with EBL > 1.5l: 3 cases
- Late miscarriage at 17 weeks requiring massive transfusion: 1 case

# Perinatal Mortality Report

Dr. Marie-Christine De Tavernier & Ms Priscilla Neilan

### Stillbirth: (9 cases)

Congenital Malformation present:

- 37/40 Trisomy 18
- 38/40 Trisomy 21 (TOP twin 2, twin 1 alive)
- 37/40 Hydrocephalus
- 36/40 Triploidy

### No Congenital Malformation present:

- 23/40 0.62kg
- 31/40 1.12kg
- 34/40 2.070kg
- 39/40 3.6kg
- 39/40 2.205kg (Transferred homebirth)

### **Neonatal Death: (6 cases)**

### Early:

- Diaphragmatic Hernia at 41/40
- Transposition Great Arteries 40/40
- Extreme Prematurity at 24/40
- Multiple Congenital Abnormalities with normal Karyotype at 39/40

#### Late:

- Trisomy 18 delivered at 38/40
- Hypoplastic Left Heart at 40/40

# Neonatal Clinical Report

Dr Regina Cooke

During the year 2015, a total of 1883 infants were born at Portiuncula University Hospital. 307 infants were admitted to the NICU for neonatal care following birth. This represents 16.3% of babies born at the hospital. In addition, 10 infants were admitted for ongoing care following initial care in a regional or tertiary unit.

The majority of infants (74%) admitted to the NICU were >37 weeks gestation. We aim to transfer mothers who require delivery of an infant <32 weeks gestation and <1.5 kg to a regional or tertiary centre antenatally. Occasionally, this is not possible. In 2015, 6 infants <32 weeks gestation were born at our hospital.

Each year, a number of babies are transferred from our unit to tertiary paediatric or neonatal services after birth for specialised care. In 2015, 18 babies were transferred.

The 2015 overall NICU mortality rate (number of deaths in NICU per 1000 live births with inclusion of tertiary centre deaths) was 3/1000. When lethal congenital malformations were excluded the rate was 0.5/1,000.

### Gestational Age of NICU Admissions 2015

GESTATION AT DELIVERY	N	%
<28 weeks	0	
28-31+6 weeks	6	2%
32-36+6 weeks	74	24%
>37 weeks	227	74%
Total	307	

### Source of Admission 2015

SOURCE OF ADMISSION	N	%
Delivery Suite	83	26%
Theatre	118	37%
Post natal ward	106	34%
Tertiary Unit	10	3%
Total	317	

### Transfers out for Tertiary Services (Diagnosis) (1)

REASON FOR TRANSFER	
Prematurity / RDS	2
Cardiac	1
HIE/Therapeutic Hypothermia	1
Surgical	4
Sepsis	2
PPHN	1
Pneumothorax	1
Dysmorphic/Congenital Abn	2
Cong Diaphragmatic Hernia	1
Social	1
Endocrine	1
Thrombus	1
Total	18

### **Transfers out for Tertiary Services (Destination) (2)**

Galway University Hospital	1
OLCHC	7
CUH, Temple Street	1
NMH, Holles St	1
CWH	5
Rotunda	3
Total	18

### Birth Weight of NICU Admissions 2015

BIRTH WT.	N	%
<1000g	0	
<1500g	5	1.6%
1500-2000g	15	4.9%
2000-2500g	51	16.6%
>2500g	236	76.8%
TOTAL	307	

### **Summary of Neonatal Deaths 2015**

DIAGNOSIS	GESTATION	WEIGHT	LOCATION OF DEATH
Multiple congenital abnormalities with normal karyotype	39/40	2.015 kg	OLCHC
Edwards Syndrome	38/40	2.09 kg	OLCHC
Transposition of Great Arteries	39/40	3.020 kg	PHB
Hypoplastic Left Heart	39/40	3.58 kg	HOME
Congenital Diaphragmatic Hernia	41/40	3.4kg	OLCHC
Arthrogryposis	24/40		PHB

### **Discharge Diagnosis 2015**

REASON FOR NEONATAL ADMISSION	N	%
Prematurity/LBW/RDS	96	30%
Low Birth Weight >37 weeks	17	5.3%
Dusky/Cyanotic Episodes	2	0.6%
Respiratory Distress/ Grunting	35	11%
Hypoglycaemia	19	6%
Infant of IDDM mum	26	8.2%
Social	8	2.5%
Sepsis/suspected sepsis	20	6.3%
Jaundice	15	4.7%
Poor feeding / vomiting	9	2.8%
Jaundice	15	4.7%
Other	55	17.3%
Total	317	100%

# Paediatric Unit Report

Dr. Frances Neenan, Ms Karen Leonard and Ms Priscilla Neilan

#### Introduction

The Paediatric service includes St. Therese's 23-bedded Acute Paediatric Unit, Emergency Department (ED), a four-day Paediatric Day Service and a Paediatric Outpatient Service. The age profile of patients seen is 0-16 years. The following figures and tables give an overview of the paediatric clinical activity in Portiuncula University Hospital for the period January 1st-December 31st 2015. Figures from previous years are included for comparison purposes. Data supplied for this report was obtained from the Hospital Inpatient Enquiry (HIPE) system.

#### **Admission Information**

Overall there was a slight increase in the number of admissions to the Paediatric Unit this year (38 patients). This was despite an extra 240 children having been seen in the ED department. (See Figure 1). The average length of stay of paediatric patients continues to decrease to 1.86 days. (See Figure 2).

#### **ED Attendances**

There is a 38% difference between attendances during our busiest month, March, and our quietest month, August. March, for the second year in a row, has the highest number of ED attendances. (See Figure 3). The age profile of patients presenting to the ED can be seen in Figure 4.

Figure 1 - Total Admissions to St. Therese's Paediatric Ward 2009-2015

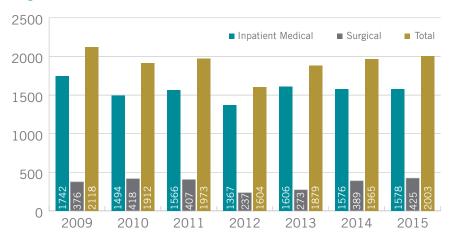


Figure 2 - Average Length of Stay for Inpatient Discharges

	DISCHARGES	SUM (LENGTH OF STAY)	AVERAGE LOS
2015	2017	3760	1.86
2014	1981	4196	2.12
2013	1890	3866	2.05

Figure 3 - ED Attendances 2009-2015

MONTH	2009	2010	2011	2012	2013	2014	2015
January	389	408	523	478	527	550	527
February	412	437	469	563	503	580	575
March	608	547	613	584	503	622	683
April	492	504	537	469	662	597	636
May	490	572	507	569	592	574	641
June	461	473	497	494	535	569	525
July	406	425	399	413	497	495	422
August	388	380	416	415	463	386	488
September	424	453	504	513	411	522	510
October	525	431	437	508	500	478	529
November	414	456	429	454	523	502	584
December	460	392	429	592	530	566	561
Total	5469	5478	5760	6052	6246	6441	6681

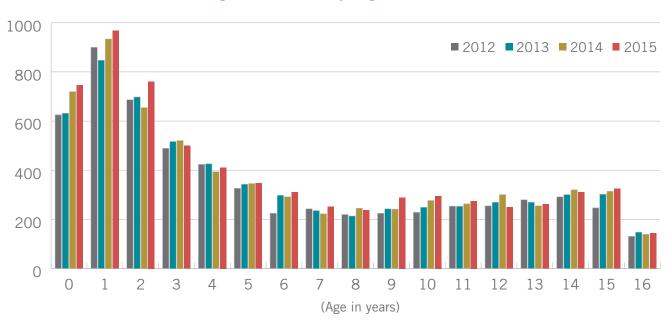


Figure 4 - Admissions per age (2012-2015)

### ICU

Critically ill children are admitted to our adult ICU for stabilisation, with 6 children in 2015 transferred to a tertiary PICU. A total of 12 children between the ages of 3 weeks and 16 years were admitted to the adult ICU. The following table (Figure 5) outlines the reasons for admission to ICU.

Figure 5 - ICU Admissions 2015

REASON FOR ADMISSION	N	VENTILATED (N)	TRANSFERRED TO TERTIARY PICU (N)
Diabetic Ketoacidosis	2	0	0
Post Surgery	2	0	0
Infection	3	2	3
Overdose	2	0	0
Respiratory	1	1	1
Oncology	1	1	1
Spleen tear	1	0	1
Total	12	4	6

# Paediatric Outpatient Services

800

0

2009

2010

Portiuncula University Hospital provides a general paediatric outpatient service as well as specialist diabetes clinics, respiratory clinics, neurodevelopment clinics and our most recent addition of rapid access clinics. Outreach clinics are provided in Athlone and Roscommon. Figure 6 outlines the increase in numbers of patients attending outpatients.

Outpatient services are also provided in our Paediatric Unit in a Day Assessment Area. These services include phlebotomy, weight check, medical education and medical and surgical reviews.

Figure 7 shows the 30% increase in number of patients using this facility between 2009-2015.

3880 3395 3200 3286 2400 1600

Figure 6 - Paediatric Outpatients Attendances 2009-2015



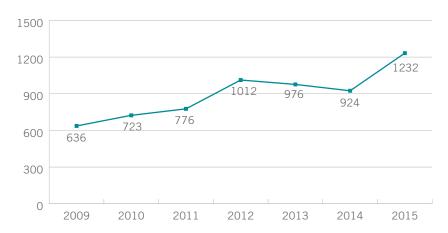
2012

2013

2014

2015

2011



# Social Work Department

Ms Caroline McInerney Layng

#### **Medical Social Work Service**

The medical social work service is an integral part of the multidisciplinary team, delivering patient-centred care in the maternity area, which also extends to antenatal clinics, Early Pregnancy Unit, SCBU and Paediatric Department. Ongoing supportive counselling is provided to women/couples to promote positive parenting and ensure psycho-social issues are addressed at an early stage.

The social worker attached to the Maternity Department plays a key role in the provision of counselling, support and advocacy to women and their families dealing with a wide range of complex issues as follows:

- Crisis/unplanned pregnancy
- Concealed pregnancy
- Relationship difficulties
- Domestic abuse
- Changing family structures
- Stressors including financial, unemployment, accommodation
- Bereavement support for those experiencing pregnancy loss
- Lifestyle issues such as substance abuse
- Mental health and postnatal depression
- Underage/teenage pregnancy
- Children born with a disability/life-limiting condition
- Neonatal withdrawal syndrome
- Fatal foetal abnormality

### Activity Levels - Individuals Seen by Area

MATERNITY	ANTE NATAL	EPU	CRISIS PREGNANCY	PAEDIATRICS	SCBU
203	133	15	74	49	17

### **Bereavement Support**

The social work service plays a central role in the bereavement team, offering support and counselling to parents and their families following pregnancy loss. This is in line with a recommendation of the HIQA report published 9th October 2013, following the Savita Halappanavar case. Additionally, the social work team continues to contribute to the annual remembrance service held in the hospital.

Our department was instrumental in making an application for funding under the Dignity and Design Grant for the refurbishment of the family room, which will substantially improve facilities for bereaved families. Participation on the Perinatal Bereavement Group also included a submission in response to the National Standards on Bereavement Care in Pregnancy Loss.

The department attended a number of Maternity & Neonatal Hospice Friendly Hospitals Network meetings, which includes representation from 19 maternity hospitals. This is a national network for healthcare staff who work in the area of pregnancy loss and infant death.

#### **Child Protection & Welfare**

Child protection and welfare referrals are prioritised by the social work team for early identification, intensive support and timely assessment. Our department maintains close working relationships with Tusla, the Child and Family Agency. This involves attending inter- agency meetings, preparation of reports and, in some instances, court attendance. I would like to acknowledge the ongoing support from Tusla, HSE and voluntary organisations in assisting us in supporting at risk children and their families.

### Continuous Professional Development

In line with clinical best practice, the Department is committed to continuous professional development which is a requirement of CORU registration. Members of the Department attended various internal and external training. Caroline McInerney Layng completed a course on Ethics in End of Life Care in UCC. Teresa Barrett completed the Certificate in Crisis Pregnancy Counselling at NUI Maynooth.

A 14-week clinical social work placement was offered to a Masters student from NUIG who had the opportunity to attend master classes on the topic of crisis pregnancy at NUI Maynooth.

Portiuncula University Hospital

# Ballinasloe Crisis Pregnancy Support Service

Crisis pregnancy helpline contact details: Locall 1850 200 600

BCPSS has operated from the Social Work Department since 2003 and is funded by the HSE Crisis Pregnancy and Sexual Health Programme.

The service provides non-judgemental, non-directive counselling and information on all options including parenting, adoption and abortion. This support is available to those presenting with an unplanned pregnancy, both in the hospital setting and an outreach service attached to a local GP practice. Additionally, the service offers postabortion counselling as part of a range of state-funded post-abortion services.

During 2015, the vast majority of referrals were received in the hospital setting, from the Early Pregnancy Unit, Ante Natal Clinics and Maternity Department. In a significant number

of cases, the women presenting had already made a decision to continue with the pregnancy, however our experience is that they have ambivalent feelings around the pregnancy and require ongoing support to prepare for parenting and the adjustment to change.

In the first quarter of 2015, we embarked on a process of self-assessment against the National Standards for Crisis Pregnancy and Post-Abortion Counselling. These standards have been adapted from the HIQA National Standards for Safer Better Healthcare. It is anticipated that the implementation of this process will improve the overall quality of services provided to this cohort.

Other positive developments during 2015 included the launch of our new service leaflet in the main hospital reception area in April. The new leaflet

is more appealing to a generic audience and will assist in promoting awareness of the service. Already we have noted the advertising has been positively received and there is an increased awareness of the psychological support available to women and couples experiencing crisis pregnancy.

In closing, the table at the outset of this report highlights both the diversity and value of the social work service in Portiuncula University Hospital. I would like to thank my team members for their continued dedication and commitment. Our work is further enhanced by the committed team of health care professionals. I would like to acknowledge the co-operation of the management team, maternity clinical staff, Antenatal & EPU, SCBU, Paeds and the Pastoral Care Team, who have supported us in providing a quality, patient-centred service.

# Quality and Safety

Ms Lisa Walsh

The Women's and Children's Directorate's departments in PUH continue to review and develop their quality and safety structures.

The staff working within the department recognises that safety awareness helps all teams to be more proactive about the challenges faced in providing safe, high-quality care for patients. On foot of this, regular multidisciplinary meetings are held throughout the week and these focus on many aspects of care delivery including: staff education and training; audit; policy & procedure review; risk management and incident review.

The staff readily recognises the need to engage in ongoing education and training, and that a valuable aspect of this concerns review of reported incidents. Incidents and complaints are reported using the Group's Quality Information Management System, Q-Pulse. The reported incidents are reviewed at the local multidisciplinary

meetings and any required actions agreed. Details required for Preliminary Reports for submission to the Saolta Group SIMT and reporting on the State Claims Agency's NIMS system and to the HSE as Serious Reportable Events (SREs) are also determined at these meetings.

Incident reporting rates on Q-Pulse for 2014 and 2015 are as follows:

	2014	2015
General Incidents:	170	163
Medical Incidents:	18	16
Complaints:	6	17
Positive Feedback:	4	8

Staff training on the use of the Group's Q-Pulse system is made available on a monthly basis, and in-house staff information sessions on incident reporting and risk management are made available at regular intervals throughout the year.

Service user surveying in the maternity department is ongoing. Reports are generated on a monthly basis and circulated to all relevant heads of department. In the main, positive feedback is received with regard to the staff's professionalism and dedication to their work. Indication is given of definite satisfaction with the services provided here in Portiuncula, most especially the friendliness, efficiency and professionalism of staff, and the majority of the rankings were rated as 'good' or 'exceptional'.

Feedback is also received with regard to areas for improvement. In the main, these relate to the fabric of the building, noise levels and visiting arrangements. This feedback is used to assist in quality improvement plans regarding: prioritisation of the hospital building upgrade; staff education and training; and service developments.

# Sligo University Hospital

#### **Mission Statement**

Sligo University Hospital is committed to the delivery of a high-quality, patient-centered service in a safe, equitable and efficient manner. We recognise and value the contribution of each staff member and endeavour to support them in their ongoing development.

Sligo University Hospital provides acute inpatient, day care and outpatient services on a range of highly specialised services extending to 250,000 people in Sligo, Leitrim, Donegal, North Roscommon, West Cavan and East Mayo. The hospital has 279 operative inpatient beds and a further 52 day case beds, supported by a multidisciplinary workforce of 1,691 people.

The mainstream acute services provided by SUH cover the following specialties:

Emergency Medicine, Surgery, ENT, Ophthalmology, Orthopaedics, Paediatrics, Obstetrics/Gynaecology, Medicine, Cardiology, Diabetology, Dermatology, Gastroenterology, Geriatrics, Respiratory Medicine (including Adult CF Patients), Rheumatology, Nephrology (consultant sessions from Letterkenny University Hospital), Neurology, Oncology, Palliative Medicine, Haematology, Microbiology, Oral and Maxillofacial Surgery, Orthodontics, Pathology, Anaesthesia, Intensive Care Medicine, Pain Service and Radiology. In addition, services in Immunology and Radiation Oncology are provided from University Hospital Galway, with supplementary consultant in Radiation Oncology services provided from St Luke's Hospital, Dublin.

A regional Rheumatology service is based at Our Lady's Hospital, Manorhamilton.

A full range of clinical and nonclinical support services are provided, including Theatres, CSSD, Pharmacy, Laboratory, Clerical / Administrative, Social Work and Therapies.

Services are provided on a regional basis with support provided to Letterkenny University Hospital and Longford in respect of ENT, Ophthalmology, Neurology and Dermatology services. A number of specialties provide outpatient clinics at Community Hospitals in the catchment area.

### **Maternity Unit**

The Obstetrics & Gynaecology Specialty provides a maternity service to women and their families spanning pregnancy, birth and the post-natal period.

The specialty aspires to provide a high-quality, comprehensive service that offers choice, continuity of care and control through a skilled, multidisciplinary staff.

The Maternity Service is provided from the multi-storey building since 1992, over four floors. There were 1,357 births in 2015. The inpatient combined antenatal/ postnatal ward on Level 4 works within a complement of 28 beds, a similar number of cots and a twobedded Induction Room. Separate and on the same level, the Delivery Suite (three delivery beds and two pre-labour beds) provides care for admission, antenatal assessment, induction of labour (high-risk or overflow) and care in labour and delivery. Operative deliveries are carried out in the main theatre suite on Level 8. There are 3.0 WTE Consultant Obstetrician/ Gynaecologists supported by 5 Obstetric Registrars and 6 Senior House Officers, two of whom are GP trainees. The Maternity Service is a training site for Midwifery, Nursing, Medical and Paramedic students. Midwifery training is supported by a Midwifery Placement Coordinator. In 2015, a Clinical Skills Facilitator joined the team to support ongoing multidisciplinary training across the

Key achievements across the service in 2015:

- Introduction of hand-held National Maternity Healthcare Record
- Bedside storage of mother and baby healthcare records during hospital stay
- Introduction of skin-to-skin following Caesarean Section in Theatre

- Introduction of Propess pessary for induction of Labour
- Introduction of multidisciplinary team handover
- Internal rotation across the service to support full scope of Midwifery
- PROMPT training for multidisciplinary staff commenced
- Approval and appointment of Quality Assurance Officer

In 2015, our Antenatal Education Coordinator qualified as a Lactation Consultant and three hospital midwives and one neonatal nurse commenced the course. Five midwives completed a High Dependency in Maternity Care module facilitated through NUIG. One midwife commenced a Preparation for Birth and Parenthood programme facilitated by the Centre for Midwifery Education in CUMH. A CMM 2 and CMM 3 commenced the Quality and Leadership in Midwifery course in the RCSI Institute of Leadership.

In 2015, two midwives commenced a post-graduate MSc in Bereavement Studies, to support the introduction of a bereavement team in the Maternity Service. As a service, other initiatives that we introduced to improve the standard of care around pregnancy and perinatal loss are:

- Introduction of Feileacain stickers
- Introduction of End-of-Life symbol and cards
- Keepsake quilts
- Small remains carrier

As part of the Slan mortuary refurbishment project, the opening of the Butterfly viewing room, dedicated to babies and children.

The main model of care in SUH is medical-led team care, with consultant-led antenatal care based in the acute hospital outpatient facility and weekly outreach antenatal clinics in Manorhamilton, Co Leitrim; Carrick-on-Shannon, Co Leitrim, on the Roscommon border; and Ballyshannon, Co.Donegal. Clinics are held in community hospital OPD facilities, are attended by medical and midwifery staff and facilitate the maternity IT system.

A midwifery-managed antenatal review clinic for low-risk women in SUH is well established for many years and audited positively. It is planned to expand this service to two peripheral antenatal clinics in 2016.

In 2015, a LEAN project looking at patient flow in the antenatal clinics was completed. This was facilitated by two staff from the Nursing Practice Development Unit. The goal of the project was to ensure that expectant mothers would have a streamlined, timely, safe and efficient antenatal clinic experience, which would exemplify woman-centered care as professed in our mission statement. Meetings with key stakeholders, analysis of clinic

data and implementation of changes were followed by a review and a Patient Satisfaction Questionnaire. The changes contributed to a quality patient experience, as evidenced by questionnaire results.

- Shorter waiting time
- Perceived system to be fairer
- Liked having choice re appointment times when available.

Implementation of the changes has now been extended to all antenatal and gynaecology clinics in SUH.

The project was shortlisted in the Irish Healthcare Centre Awards in two categories:

- Healthcare Department Initiative
- Clinical Team of the Year

Group antenatal education programmes are provided through a standardised multidisciplinary education package designed in collaboration with the PHN service (PCCC) and delivered in the local Primary Care Centre by hospital staff and in other community settings throughout the region by the local Public Health Nurse.

### Neonatal Unit

Ms Marie Kennedy

The Neonatal Intensive Care Unit at Sligo University Hospital is a tenbedded unit adjacent to the Delivery and Maternity Unit, with a bed complement of 2 intensive care cots, 4 HDU cots and 4 special care cots. The unit is staffed by neonatal intensive care and paediatric trained staff and is supported by four Paediatricians (1.0 WTE to community setting). In 2015, there were 305 admissions to the unit. There were 42 transfers to and from the tertiary centres, 22 transferred by the NNTP team and 20 by NICU nursing staff.

The staff from the unit, where possible, attend high-risk deliveries in Labour Ward, Theatre and the Paediatric Unit when babies less than 28 days require ventilation and transfer

to the national paediatric centres. The unit is supported by a paediatric Physiotherapist who has a special interest in neonatal developmental care, a Consultant Opthalmologist, a Dietitian who is supported by the national neonatal Dietitian and a paediatric-trained Cardiac Technician. This in-house specialist support minimises the transfer of neonates for these specialist services.

The staff have embraced the extended nursing roles of IV cannulation and blood sampling. One staff member is currently undertaking a Lactation Consultant course. Breastfeeding is encouraged with all babies, but particularly with the premature and small-for-dates. Breast pumps are available for mothers free of charge

while expressing milk at home. Mothers are facilitated with rooming-in with their babies prior to discharge, helping to make the transition to home a little easier. Going forward, it is planned to facilitate the training of all parents in resuscitation prior to discharge. Two NRP instructors have responsibility for training both nursing and medical staff.

Appropriate staffing levels and skill mix remained a challenge throughout the year, with staff working extra hours to meet basic levels per shift. This has negatively affected the service by causing a drop in mandatory training levels, a delay in the retrieval of neonates from tertiary centres and the unavailability of NICU staff to attend high risk deliveries.

# Statistical Summary

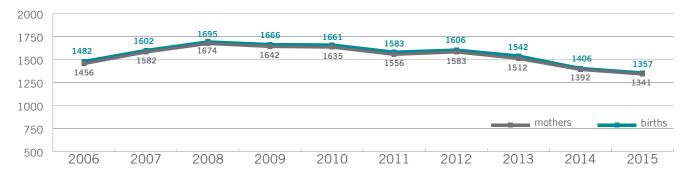
Dr Vimla Sharma, Ms Louise O'Malley & Ms Madeleine Munnelly

In 2015, 1,357 babies were born to 1,341 mothers. This is the lowest number that have delivered at SUH since 2006. The majority of these deliveries were normal vaginal deliveries, accounting for 59.0%, and 28% of mothers were delivered by Caesarean Section. 55% of women delivered were from Sligo county. In 2015, 7.0% of all women delivered were aged 40 years or older, compared to 5.1% in 2006. The episiotomy rate

	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Total Number of Mothers	466	875	1,341
Total Number of Babies	471	886	1,357
>24wks or >/= 500gms			

for 2015 was 14.5%. The perinatal mortality rate was 7.4 per 1,000 births.

Data collection on Robson Classification of Caesarean Sections commenced in September, 2015. For the three months from September to December, 2015, 60% of women who attempted VBAC were successful (6 of 10).



OBSTETRIC OUTCOMES (BABIES)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous Vaginal Delivery	191	40.6%	603	68.1%	794	58.5%
Forceps Delivery	30	6.4%	9	1.0%	39	2.9%
Ventouse Delivery	98	20.8%	36	4.1%	134	9.9%
Breech Delivery(Singleton)	0	0.0%	0	0.0%	0	0.0%
Breech Delivery (1st Twin)	0	0.0%	0	0.0%	0	0.0%
Breech Delivery (2nd Twin)	1	0.2%	1	0.1%	2	0.1%
Caesarean Section(babies)	151	32.1%	237	26.7%	388	28.6%
Total	471	100.0%	886	100.0%	1,357	100.0%

OBSTETRIC OUTCOMES (MOTHERS)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous	256	54.9%	434	49.6%	691	51.5%
Induction of Labour	158	33.9%	255	29.1%	413	30.8%
Episiotomy	141	30.3%	53	6.1%	194	14.5%
Caesarean Section	147	31.5%	229	26.2%	376	28.0%
Spontaneous Vaginal Delivery	191	41.0%	600	68.6%	791	59.0%
Forceps Delivery	30	6.4%	9	1.0%	39	2.9%
Ventouse Delivery	98	21.0%	36	4.1%	134	10.0%
Breech Delivery	1	0.2%	1	0.1%	2	0.1%
Augmentation						0.0%
Epidural Rate					482	35.9%
Total	n= 466		n= 875		n= 1341	

MULTIPLE PREGNANCIES	PRIMIPS	%	MULTIPS	%	TOTAL	
Twins	5	1.1%	11	1.3%	16	1.2%
Triplets	0		0		0	

Dublin

Others

0.1%

0.5%

0.1%

0.1%

0.1%

0.0%

0.1%

0.0%

0.0%

0.5%

0.1%

0.3%

0.0%

0.2%

0.1%

0.2%

0.1%

0.0%

0.0%

0.1%

### Sligo University Hospital

MULTIPLE BIRTHS	2006	2007	2008	2009	2010	201	L 20	12 2	2013	2014	2015
Twins	23	20	19	23	24	25	5	23	26	13	16
Triplets	1	0	0	0	0	(	)	0	0	1	0
Total	24	20	19	23	24	25	5	23	26	14	16
PERINATAL DEATHS		PRII	MIGRAVID	DA N	IULTIGR <i>A</i>	VIDA		тот	AL		%
Stillbirths				1		4			5		0.4%
Early Neonatal Deaths				1		4			5		0.4%
PERINATAL MORTALIT	Υ	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth rate (per 1,00	0)	4.0	3.1	2.4	3.6	5.4	3.2	3.7	1.3	3.6	3.7
Neonatal Death rate (pe	er 1,000)	1.3	3.1	1.8	1.2	0.6	2.5	3.7	2.6	2.8	3.7
Overall PMR per 1,000	births	5.4	6.2	4.1	4.8	6.0	5.7	7.5	3.9	6.4	7.4
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Stillbirth Rate		0.4%	0.3%	0.2%	0.4%	0.5%	0.3%	0.4%	0.1%	0.4%	0.4%
Neonatal Death Rate		0.1%	0.3%	0.2%	0.1%	0.1%	0.3%	0.4%	0.3%	0.3%	0.4%
Total Rate		0.5%	0.6%	0.4%	0.5%	0.6%	0.6%	0.7%	0.4%	0.6%	0.7%
AGE @ DELIVERY	2006	2007	2008	2009	2010	201	L 20	12 2	2013	2014	2015
15-19yrs	4.5%	2.8%	3.3%	2.7%	2.2%	2.5%	6 2.	1% 2	2.0%	1.9%	1.5%
20-24yrs	13.5%	13.5%	11.2%	11.9%	9.9%	9.0%	6 9.	1% 8	8.6%	8.3%	7.7%
25-29yrs	21.3%	21.8%	24.3%	23.2%	22.8%	21.4%			2.3%	18.2%	19.3%
30-34yrs	32.8%	34.5%	33.3%	35.0%	34.6%	36.7%			5.7%	35.1%	36.7%
35-39yrs	22.8%	21.9%	23.6%	22.5%	24.4%	25.6%			5.7%	29.5%	27.7%
40>	5.1%	5.6%	4.3%	4.8%	6.1%	4.8%	6.0	0% !	5.7%	7.1%	7.0%
AGE @ BOOKING	2006	2007	2008	2009	2010	201	L 20	12 2	2013	2014	2015
<15	0.2%	0.2%	0.2%	0.0%	0.2%	0.1%	6 0.0	0% (	0.0%	0.0%	0.1%
15-19	5.0%	4.6%	3.1%	3.4%	2.7%	3.3%	6 2.4	4%	1.9%	2.8%	1.9%
20-24	14.6%	14.0%	12.1%	11.5%	10.9%	9.7%			9.7%	8.3%	7.8%
25-29	23.8%	23.2%	25.6%	24.7%	23.9%	23.5%			1.8%	19.2%	21.9%
30-34	31.3%	32.5%	33.5%	34.8%	33.7%	37.8%			7.4%	36.4%	35.2%
35-39	20.1%	21.3%	21.8%	21.3%	23.7%	21.9%			3.9%	27.7%	26.5%
40>	5.1%	4.1%	3.6%	4.2%	4.9%	3.7%	5.	1% !	5.3%	5.6%	6.5%
COUNTY OF ORIGIN	2006	2007	2008	2009	2010	201			2013	2014	2015
Sligo	55.5%	56.3%	54.3%	58.1%	55.3%	56.5%			5.4%	55.2%	55.2%
Donegal	13.3%	10.9%	10.5%	10.5%	11.5%	10.2%			9.5%	10.8%	10.4%
Leitrim	18.7%	22.5%	22.1%	20.8%	19.5%	21.2%			1.0%	19.6%	21.7%
Mayo	2.3%	1.8%	2.3%	1.6%	1.9%	2.4%			2.7%	1.9%	2.1%
Roscommon	8.6%	7.8%	10.1%	8.3%	10.6%	8.4%			0.6%	11.6%	10.0%
Cavan	0.8%	0.3%	0.5%	0.3%	0.5%	0.8%			0.5%	0.6%	0.4%
Galway	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%			0.0%	0.0%	0.1%
Longford	0.30%	0.3%	0.1%	0.2%	0.2%	0.0%	0.2	2% (	0.1%	0.2%	0.0%

### Sligo University Hospital

NON NATIONAL BIRTHS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number	76	99	106	114	72	62	66	82	72	79
%	5.2%	6.2%	6.3%	6.9%	4.4%	3.9%	4.1%	5.4%	5.0%	5.8%
GESTATION @ DELIVERY							T	OTAL		%
<24 weeks								2		0.1%
24-27								6		0.4%
28-31								2		0.1%
32-35								53		4.0%
36-39								646		48.2%
40-41								611		45.6%
42>								21		1.6%
Total							1	,341		100.0%
GESTATION @ DELIVERY	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<24 weeks	3	2	2	0	6	8	3	3	2	2
24-27	0	3	3	5	5	2	3	1	5	6
28-31	8	5	6	6	5	4	3	4	5	2
32-35	41	33	36	38	39	25	31	37	36	53
36-39	567	656	687	684	681	668	716	674	646	646
40-41	774	837	879	833	869	832	810	796	685	611
42>	90	67	85	100	58	45	42	29	27	21
Total	1,483	1,603	1,698	1,666	1,663	1,584	1,608	1,544	1,406	1,341
BIRTH WEIGHTS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
< 2500 gms	56	75	63	53	74	45	46	71	50	54
2500 - 2999 gms	155	181	177	201	189	182	191	175	143	153
3000 - 3499 gms	448	525	549	516	547	470	535	484	470	467
3500 - 3999 gms	557	555	616	616	552	608	571	533	512	482
4000 - 4999 gms	219	221	243	229	251	238	219	231	206	160
4500 > gms	48	46	50	51	50	41	46	50	25	41
Total Number of Babies	1,483	1,603	1,698	1,666	1,663	1,584	1,608	1,544	1,406	1,357
INDUCTION OF LABOUR	PR	IMIGRAVI	DA	%	MULTIGR	AVIDA	%	6 T	OTAL	%
2006		1	34	23.5%		163	18.4%	0	297	20.4%
2007		1	51	24.3%		241	25.2%	0	392	24.8%
2008		2	202	29.3%		226	22.9%	0	428	25.5%
2009		1	64	26.0%		207	20.5%	0	371	22.6%
2010		1	68	28.7%		221	21.1%	0	390	23.9%
2011		2	243	25.0%		189	32.4%	0	432	27.7%
2012		1	68	29.4%		260	25.7%	/ 0	428	27.0%
2013		1	67	30.9%		275	28.3%	/ D	442	29.2%
2014		1	64	35.9%		260	28.1%	0	425	30.5%

158

33.8%

255

29.1%

413

30.8%

2015

### Sligo University Hospital

PERINEAL TRAUMA	PRIMIP n - 319	%	MULTIP n - 646	%	TOTAL n - 965	%
Intact					198	20.5%
Episiotomy	141	44.2%	53	8.2%	194	20.1%
2nd Degree Tear					314	32.5%
1st Degree Tear					111	11.5%
3rd Degree Tear	13	4.1%	5	0.8%	18	1.9%
Other Laceration					130	13.5%
Total					965	100.0%

3RD STAGE PROBLEMS	PRIMIP		MULTIP		TOTAL	%
Primary PPH (1000mls)	5	1.1%	22	2.5%	27	2.0%
Manual Removal of Placenta	6	1.3%	17	1.9%	23	1.7%

B.B.A.	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2006	0	0.0%	3	0.3%	3	0.2%
2007	0	0.0%	4	0.4%	4	0.2%
2008	0	0.0%	4	0.4%	4	0.2%
2009	0	0.0%	3	0.3%	3	0.2%
2010	0	0.0%	7	0.7%	7	0.4%
2011	1	0.1%	1	0.1%	2	0.1%
2012	1	0.1%	5	0.5%	6	0.4%
2013	1	0.2%	4	0.4%	5	0.3%
2014	0	0.0%	6	0.6%	6	0.4%
2015	0	0.0%	6	0.7%	6	0.4%

	PRIMIP		MULTIP		TOTAL	
Shoulder Dystocia	1	0.2%	8	0.9%	9	0.7%

INCIDENCE OF EPISIOTOMY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2006	190	43.9%	101	13.9%	291	25.0%
2007	197	42.7%	81	9.9%	278	21.7%
2008	227	39.5%	77	9.2%	304	21.5%
2009	199	39.1%	85	10.2%	284	21.2%
2010	218	45.3%	82	9.6%	300	22.5%
2011	180	40.5%	82	10.1%	262	20.9%
2012	182	49.3%	72	8.2%	254	20.3%
2013	158	41.0%	74	9.2%	232	19.4%
2014	126	41.3%	54	7.5%	180	17.6%
2015	141	44.2%	53	8.2%	194	20.1%

# Gynaecology

Dr Heather Langan

The speciality this year has continued to provide a Gynaecology service to women of all ages with continued focus on conditions specific to the female population. Multidisciplinary team care is provided in a "Productive Ward" setting which incorporates both general surgery and gynaecology patients. Our productive ward status has allowed us to maximise efficiency whilst providing effective care in a sensitive manner, taking into account the physical, social, psychological and spiritual needs of our diverse patient group.

The gynaecology service continues to provide 12 outpatient clinics in Sligo on a monthly basis, together with 12 combined gynaecology/antenatal clinics in our peripheral locations of Manorhamilton, Carrick-on-Shannon and Ballyshannon, again on monthly basis. We endeavour to ensure all of these clinics give a consultant-provided service to maximise our patient experience and ensure clinics are at their most efficient.

The inpatient gynaecology service continues to be incorporated within the general surgical inpatient ward, with 10 notional gynaecology beds out of the 28 beds on the ward. This continues to provide us with significant challenges in terms of staffing levels, skill mix and access to these notional beds being restricted due to the increasing level of medical patients on the ward. This, together with significant norovirus outbreaks, has restricted the inpatient operative work at times but despite this our figures this year have been consistent with last year.

We have designated, where possible, an emergency gynaecology bed to be held at all times, to allow our very emergent gynaecology patients (for example, suspected ruptured ectopic pregnancies or incomplete miscarriage patients with significant bleeding) rapid access to the ward, with subsequent timely access to theatre when required. This has improved the patient journey in this very vulnerable and high risk group of individuals.

We continue to provide 7 gynaecology day case sessions on a monthly basis, in our day services unit, with operation numbers being similar to last year.

The hospital has continued to expand and develop the pre-assessment clinic for all elective surgical admissions, with us now having access for our patients to the direct theatre admission area (adjacent to our theatre) for rapid, same-day admission to theatre directly from this area. This has improved theatre late starts and overruns, in addition to allowing the inpatient ward time to facilitate timely discharges in order to ensure availability of a post-operative bed.

We continue to provide an early pregnancy assessment service, with the addition of a designated senior registrar being onsite for all our EPAU sessions, to minimise the number of doctors this vulnerable group of patients have to have contact with and to ensure consistency of management with minimal confusion.

Colposcopy continues offer 6 clinic sessions per month with nurse smear clinics now fully functional. This clinic continues to be held in a specific purpose area in the day services unit. This setting and environment supports privacy and sensitivity to these patients.

We provide one Mirena intra-uterine system insertion clinic monthly. The referrals to this clinic are assessed as inappropriate for insertion in a General Practice setting. This clinic allows these patients the opportunity to have their procedure in a clinic setting and does not impact on our day services waiting list.

In 2015, 929 new gynaecology outpatient referrals attended, with 2,388 patients attending the service for review overall. There were a total of 1,279 gynaecology ward attenders.

### **Gynaecological Surgery Report**

any market and a market y	
LSCS	376
Laparoscopy	11
ERPC	96
Hysteroscopy/D&C +/- Mirena/LLETZ	255
Laparatomy +/- Salpingectomy	52
Vaginal Hysterectomy +/- PFR	21
Ovarian Cystectomy	5
Laproscopic Salpingo Oophrectomy	9
TAH +/- BSO	41
LLETZ	14
TOT	24
Cervical Cerclage	8
Repair 3rd degree tear	8
Laparoscopy & dye	4
Laparoscopic TL	5
Cervical Polypectomy/ Diathermy	4
Vulval Biopsy	7
Cervical Biopsy/Cautery	4
I&D Bartholins	6

Sligo University Hospital

# Obstetrics and Gynaecology Anaesthesia Report

Dr Justin Lane

In 2015, there were a total of 921 procedures in main theatres and 310 through our day service unit. 376 of these cases were Caesarean Sections, of which 170 were elective and 206 were emergency. 37 general anaesthetics were administered for Caesarean Section. Categories were not recorded in 2015 theatre logs.

Labour Ward activity included 1,357 deliveries to 1,341 mothers in this period. There were 414 inductions of labour carried out. Epidurals were inserted in 482 mothers.

Assisted deliveries included 100 ventouse in which an epidural was in place and 27 forceps in which an epidural was in place.

	CAESAREAN SECTIONS	PERCENTAGE
Total	376	100
Elective	170	45.2
Emergency	206	54.8
Regional	339	90.1
General Anaesthesia	37	9.9

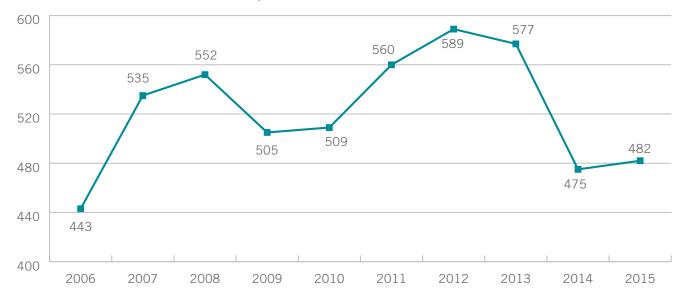
### ICU and HDU admissions 2015

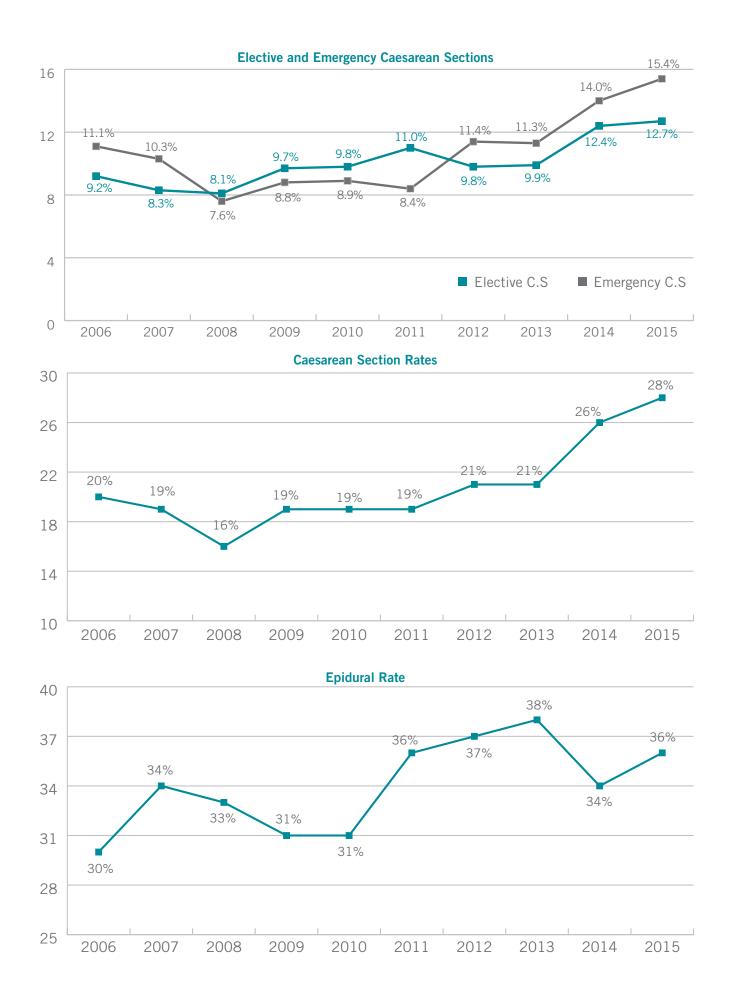
Intensive care (including high-dependency care) admissions totalled 12 for maternity cases in 2015 (this included 2 ectopics). All admissions, once clinically well, were discharged to maternity and gynaecology wards.

### **Developments in 2015**

The first PROMPT courses were held in SUH this year. The Pain Relief in Labour booklet was reviewed and updated.

### Epidurals in Labour 2006-2015





### **Antenatal Education**

Parentcraft programmes are provided through a standardised, multidisciplinary, education package designed in collaboration with the maternity services, public health nursing, physiotherapy and health promotion. The demand for parentcraft classes continued throughout 2015.

Classes which aim to support prospective parents in making informed choices consist of:

- 1. Classes for couples, delivered in the local primary care centre.
- 2. Community classes throughout the region.
- 3. Young parent classes.
- 4. Refresher classes.
- 5. One-to-one classes
- 6. Breastfeeding preparation class.
- 7. Tour of the labour ward and maternity unit.

Referrals to the antenatal education programme come from:

- Antenatal clinic
- Fetal assessment
- GPs/ practice nurses
- Public health nurses
- Physiotherapy department
- Social workers
- Self referrals

Each programme is continually evaluated and appropriate recommendations implemented to meet the needs of prospective parents. The antenatal education committee meets biannually, with representation from Maternity, Physiotherapy, Social Care, Public Health Nursing, Health Promotion, General Practice Nursing and Consumers.

#### Ms Catriona Moriarty & Ms Marita Keenan

Thirty-one staff attended a one-day introduction to "Preparation for Birth and Parenthood" facilitation course. A six-day "Preparation for Birth and Parenthood" course run by the Centre of Midwifery Education in CUMH was completed by staff across the professions including Midwife, PHNs and Physiotherapist involved in delivery of antenatal classes.

ANTENATAL EDUCATION	CLIENTS	SUPPORT PARTNERS	TOTAL ATTENDANCE
Weekday Sessions	518	175	693
Refresher Sessions	83	40	123
Teenage Sessions	12	12	24
1-1 Antenatal Class Sessions	22	18	40
Tours of Maternity Unit	618	614	1232

# Colposcopy Service

#### **Team Members**

Dr. Vimla Sharma, Consultant
Obstetrician/Gynaecologist, Lead
Colposcopist
Dr. Heather Langan, Consultant
Obstetrician/Gynaecologist
Dr. Nirmala Kondaveeti, Consultant
Obstetrician/Gynaecologist
Dr. Clive Kilgannon, Consultant
Histopathologist
Ms Sinead Griffin, Clinical Nurse
Manager
Ms Jennifer Curley, RGN
Ms Mary Kinirons, RGN
Ms Patricia Murphy, Clerical Officer
Ms Monica Hopper, Clerical Officer

The colposcopy service at Sligo University Hospital (SUH) continues to excel at meeting the criteria for referral waiting times, biopsy rates and rates of attendance as set out in the Organisational and Clinical Guidance for Quality Assured Colposcopy Services published by CervicalCheck. Timely diagnosis and treatment are key provisions of the service. In total, 470 new patients attended the service and 942 patients attended for follow-up care. There were 136 LLETZ treatments performed under local anaesthetic and 27 performed under general anaesthetic. Total attendances for 2015 were 1,552, including LLETZ treatments. See table below.

The ultimate objective of the cervical screening programme is the reduction of cervical cancer incidence and mortality. Six cases of cervical cancer were identified (3 microinvasive scc, 2 invasive scc and 1 adenocarcinoma). Of the six women diagnosed with cervical cancer and referred onward to gynae/oncology centres in either Dublin or Galway, four re-attended SUH for follow-up care.

#### **HPV** Triage

A major development during 2015 was the nationwide introduction of HPV triage in the community during the month of May, with the aim of earlier detection of high grade CIN lesions in women with low grade cytological abnormalities. This policy also has the advantage of greater reassurance for women with a low risk of developing CIN or cervical cancer, thereby reducing the need for unnecessary repeat smear testing. HPV triage led to a minor increase in new patient referrals locally (n 39), which was more noticeable in the latter half of 2015. It is expected that this increase will be more fully realised in the 2016 figures. Follow up attendances were largely unaffected (up 4).

The service provides four consultant-led colposcopy clinics per week and, on average, four nurse-led smear clinics per month. The introduction of a text reminder system in 2014 has continued to impact positively on the numbers of patients attending the nurse-led smear clinic, as have the efforts of staff members to facilitate patients who contact the service to reschedule appointments. It is hoped that text reminders will be rolled out during 2016 to women attending the colposcopy service.

### Partnership Services

The service continued to work in partnership with Medlab Pathology Dublin, who provide cytology and high risk HPV testing services, and Irisoft UK, who provide the clinic with a patient management and audit software system known as Compuscope. Multidisciplinary team meetings were held at 1-2 monthly intervals via GoToMeeting software, facilitated by Dr Clive Kilgallen, Consultant Histopathologist, SUH, and Medlab Pathology.

Dr. Vimla Sharma & Ms Sinead Griffin

### **Team Developments**

We welcomed two new staff members to the team during 2015, namely Ms Mary Kinirons, RGN, and Ms Monica Hopper, Clerical Officer. As colposcopy is such a specialised area, allocating time for training on the Compuscope software and becoming familiar with the various protocols and procedures which govern the service were given priority.

Ms Sinead Griffin and Ms Mary Kinirons attended the annual colposcopy clinic forum which was held in Dublin in November and hosted by Dr. Grainne Flannelly, CervicalCheck Programme Director, and Ms. Linda Maher, Colposcopy Co-ordinator. This forum provides

### **LLETZ Histology Results Jan-Dec 2015**

NEOPLASTIC RESULTS	NON NEOPLASTIC RESULTS	LOCAL ANAESTHETIC	GENERAL ANAESTHETIC
	HPV	2	1
	Inflammation	3	3
	Normal	1	1
	Other	2	0
CINI		27	3
CIN II		30	1
CIN III		65	15
SCC		1	
AIS/cGIN		1	2
SMILE		2	1
Invasive		2	
TOTAL		136	27

### Sligo University Hospital

an opportunity for staff working in the 15 accredited colposcopy clinics nationwide to come together to exchange ideas and discover how clinics are measuring up against the national standards.

#### **Audit**

One area identified for improvement in an audit performed by CervicalCheck in September 2013 to August 2014 was the number of patients undergoing general anaesthesia for LLETZ treatment, which was 22% against the national standard of 20%, however an SUH audit undertaken in June 2015 found that there appeared to be clear clinical indications for choosing general anaesthetic. 31% of this cohort of patients underwent the procedure due to patient anxiety. An audit tool has since been introduced to aid the timely

identification of these patients in order to offer them further counselling, with the aim of reducing this figure. According to the 2015 figures, 17% of patients underwent LLETZ treatment under general anaesthetic, thereby achieving the CervicalCheck target of less than 20%. A second audit using a different timeframe is currently underway to measure the anticipated improvement in our performance.

### **Summary**

In summary, it was another busy year for Sligo University Hospital colposcopy services. Colposcopy services were provided within the guidelines set by CervicalCheck. The overall performance of staff members has provided a strong basis for continued improvement in delivering a quality assured service to women in the West of Ireland.

# **Breastfeeding**

Sligo University Hospital participates in the Baby Friendly Hospital Initiative (BFHI). Promoting, supporting and protecting breastfeeding is an integral part of the care given to the pregnant woman, new mothers and their babies. In 2015, our breastfeeding initiation rate was 58.8% and breastfeeding on discharge from hospital was 51.1 %. We continue to strive to increase our rates by providing education for both parents and staff. In addition to our parentcraft classes, our breastfeeding preparation class is run in conjunction with public health nursing and is supported by health promotion. It is held in the evenings. Initially this class was held every second month but due to increased demand and popularity it was increased to monthly last year. It is attended not only by first-time mothers but also by mothers who did not breastfeed before or who experienced challenges in establishing breastfeeding previously. In 2015, 188 mothers attended the classes, many accompanied by partners or support persons.

A postnatal breastfeeding clinic for mothers is run by a lactation consultant/midwife and a public health nurse. It is held weekly by appointment. In 2015, 108 mothers attended the clinic by appointment. Twenty-one of these mothers had repeat clinic visits. Telephone support continued throughout 2015. Feedback to date has been very positive for this clinic. An audit of the clinic has been completed but not reported on as yet. The clinic is complemented by local breastfeeding support run by voluntary groups and health professionals.

On discharge from hospital, all breastfeeding mothers are given contact details of support services within the hospital and community care area and of breastfeeding support groups in the area.

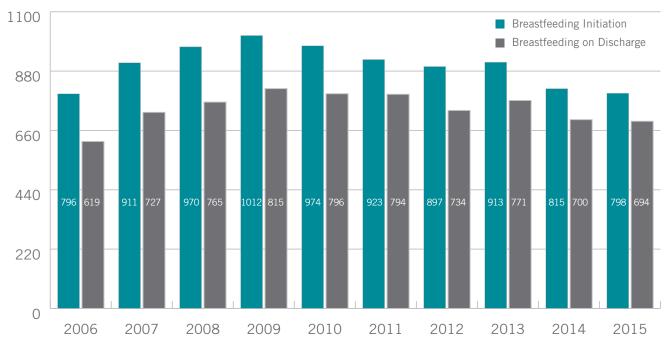
National Breastfeeding Week was marked with information stands in local shopping centres, with Midwives on hand to provide information and to promote breastfeeding awareness. Sligo University Hospital maternity

#### Ms Catriona Moriarty & Ms Marita Keenan

and neonatal staff are represented on the Breastfeeding Committee for Sligo /Leitrim. This is a multidisciplinary team which includes consumer involvement and voluntary groups, and which meets quarterly with the aim of increasing the overall breastfeeding rates in our region.

Through our links with the Saolta Breastfeeding Forum, staff are actively involved in completing BFHI online training. In 2015, our Antenatal Education Coordinator qualified as a Lactation Consultant and three hospital midwives and one neonatal nurse commenced the course. Twenty-eight hospital midwives and neonatal nurses completed a Breastfeeding Awareness tutorial on line with the Unicef UK Baby Friendly Initiative. Thirty-four hospital and community staff attended two sixhour breastfeeding updates and eighteen hospital midwives and community public health nurses completed a twoday Breastfeeding Training Programme adapted from the UNICEF 20-hour programme.

### **Number of Babies Breastfed**



Sligo University Hospital

# Fetal Assessment / Early Pregnancy Assessment Unit

The Fetal Assessment Unit, which includes early pregnancy assessment, is based on Level 4 during core hours, while care for women who present in early pregnancy for emergency assessment is provided in the Female Surgical / Gynaecology inpatient ward on Level 6.

The Fetal Assessment Unit provides a service to antenatal women who require evaluation of both fetal and maternal wellbeing. Assessment, support, and advice are also provided for women who have possible problems in early pregnancy. The service is midwife-led and provided by three Clinical Midwife Specialists who have a H.Dip/MSc in diagnostic imaging ultrasound and a Staff Midwife certified in first trimester scanning. They are supported by the multidisciplinary team. Facilities consist of two assessment couches and three ultrasound scan rooms.

A total of 6,260 attended the Fetal Assessment Unit/Early Pregnancy Unit, of which 4,096 had scans performed (an increase of 9.5%).

In Q3 2015, the Radiology Department in SUH ceased to perform obstetric scans, leading to a further increase in activity in the Fetal Assessment Unit.

#### Service currently provided:

- The Assessment Unit operates five days per week, from 07.30 – 17.00hrs.
- Evaluation of fetal wellbeing through appropriate ultrasound scanning. All pregnant women are offered an anomaly scan between 18-22 weeks gestation. Serial scanning provided for women with high risk pregnancies; their appointments are scheduled to coincide with their antenatal / diabetic clinic visit.

- Day-case facility for antenatal patients requiring: Electronic Fetal Monitoring, blood pressure monitoring, blood series including Glucose Tolerance tests.
- Non-labouring patients presenting for admission are assessed in this area.
- The Early Pregnancy Assessment Clinic operates formally between 07.30 – 10.00hrs, however in an effort to reduce unnecessary admissions to the Gynaecology area, women with early pregnancy problems are regularly seen outside these hours.

It was intended to introduce an early dating scan for all pregnant women between 10 and 12 weeks gestation in 2015, however this could not be realised due to unplanned increased activity, challenges in the current limited facility and the available staffing resource.











