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Ospidéal na hOllscoile, Gaillimh
GALWAY UNIVERSITY HOSPITALS

Portiuncula University Hospital


Mayo University Hospital

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Saolta
Grúpa Ollscoile Cúram Sláinte
University Health Care Group

Women's and Children's Directorate

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

Annual Clinical Report 2017

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Foreword - Dr Ethel Ryan

It gives me great pleasure to introduce the annual clinical report for 2017 for the Saolta Women's and Children's Directorate.

2017 was the year when we saw the establishment of the National Women and Infants Health Programme. One of the functions of this new programme is to lead the organisation and delivery of maternity, gynaecology and neonatal services in all 19 maternity and neonatal units throughout Ireland. This also includes implementing the Maternity Strategy to help strengthen the existing services currently delivered across primary, community and acute care settings. Minister Simon Harris launched the Implementation Plan for the National Maternity Strategy, 2016-2026 in October 2017. The plan sets out a series of detailed actions with specific time frames to help ensure delivery of all the recommendations.

2017 was also the year when we had Directors of Midwifery established in all maternity units in Saolta, which have been a great and very welcome asset in assisting with service delivery and helping with the Maternity Strategy Implementation.

Despite the ongoing challenges of staffing and budgetary / financial restraints, the Women's & Children's Directorate continues to strive for clinical excellence for the women and infants we serve. The annual report allows us to review our service delivery in a very transparent way between the 5 hospitals.

Finally, I would like to extend a very sincere thank you to all the contributors to the Saolta Women's and Children's annual report. Without all the maternity unit contributions it would not be possible. I would also like to say a huge thank you to Ms Niamh Thornbury, Saolta Directorate Support Manager and Ms Gemma Manning, Saolta Quality & Safety Co-ordinator for the Women's and Children's Directorate. They have managed to bring this report together from all five maternity sites.

This report serves as a huge credit to all those who work within the Directorate.

Ethel Ryan
Group Clinical Director
Women's & Children's Directorate
Consultant Neonatologist / Paediatrician
Saolta University Healthcare Group

Statistical Summary 2017

Dr Una Conway and Ms Marie Hession

In 2017, 2854 babies were delivered to 2798 women at University Hospital Galway. This is a decrease on previous years. The mode of delivery for the majority of women was normal vaginal delivery 47.2%. This rate of normal delivery is decreasing compared to recent previous years. The caesarean section rate was 33.8%, 10% rise in 10 years (28.7% - 33.8%).

The number of mothers who had one previous caesarean section has decreased from 410 to 359. The percentage of women in this group who attempted vaginal delivery was 48.5%, remaining the same as in the previous year attempting VBAC. Successful VBAC rate was 50% with the other 50% requiring caesarean section. There has been no change over 10 years in birth weights and parity.

	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Total Number of Mothers	1096	1702	2798
Total Number of Babies	1120	1734	2854
>24wks or >/= 500gms			

The trend of older mothers continues with 11.7% of mothers being 40 years of age or older and 0.8% being over 45 years. The multiple pregnancy rate has dropped compared to recent years. There appears to be a decline over 10 years in numbers of teenage pregnancies presenting for antenatal care, with 0.7% percentage remaining the same as the previous year.

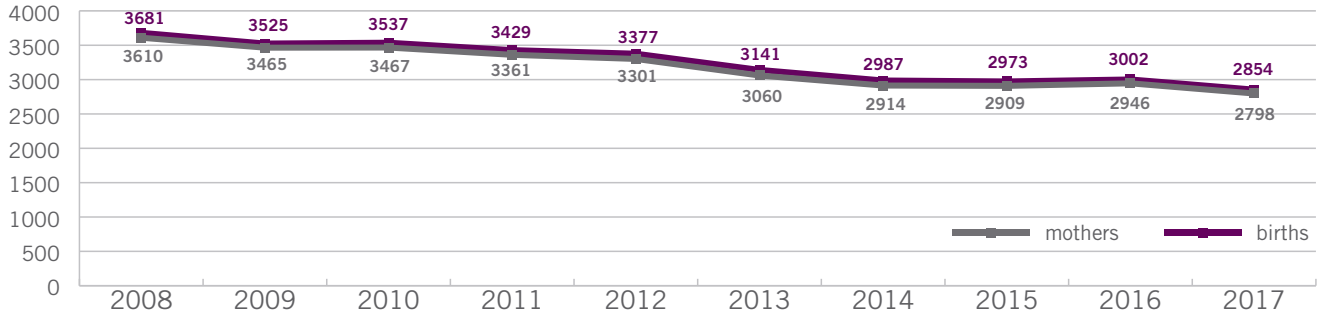
In 2017 in UHG, 0.7% of mothers were teenagers compared to 2.6% in 2008.

There has been a sharp increase in our induction rate 27.3% in 2008 and 33.7% in 2017 with a 42% induction of labour in primigravidas.

The caesarean section rate in Robson Group 2 – nulliparous singleton cephalic term induced or pre-labour caesarean section was high at 45.1%. This rate was 42.8% in 2016 and 37.6% in 2015.

The total perinatal mortality rate is marginally lower at 0.5% compared to 0.7% in 2008

No. Mothers/Births over last 10 years



Obstetric Outcomes (Mothers)	Primip	%	Multip	%	Total	%
Spontaneous Onset	504	46.0%	773	45.4%	1277	45.6%
Induction of Labour	460	42.0%	483	28.4%	943	33.7%
Epidural Rate	654	59.7%	668	39.2%	1322	47.2%
Episiotomy	456	41.6%	144	8.5%	600	21.4%
Caesarean Section	394	35.9%	551	32.4%	945	33.8%
Spontaneous Vaginal Delivery	294	26.8%	1028	60.4%	1322	47.2%
Forceps Delivery	140	12.8%	21	1.2%	161	5.8%
Ventouse Delivery	263	24.0%	100	5.9%	363	13.0%
Breech Delivery	3	0.3%	4	0.2%	7	0.3%
Total	n= 1096		n= 1702		n= 2798	

Multiple Pregnancies	Primip (1096)	%	Multip (1702)	%	Total	
Twins	24	2.2%	28	1.6%	52	1.9%
Triplets	0	0.0%	2	0.1%	2	0.1%

Onset (For Multiple Pregnancies)	Primip(24)	%	Multip(30)	%	Total	%
Induced	4	16.7%	2	6.7%	6	11.1%
Spontaneous	6	25.0%	6	20.0%	12	22.2%
No Labour	14	58.3%	22	73.3%	36	66.7%
Elective C.S.	7	29.2%	13	43.3%	20	37.0%
Emergency C.S.	13	54.2%	12	40.0%	25	46.3%

Multiple Births	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Twins	63	58	69	66	74	73	69	64	55	52
Triplets	4	1	1	1	1	4	2	1	1	2
Total	67	59	70	67	75	77	71	65	56	54

Perinatal Deaths	Primigravida	Multigravida	Total	%
Stillbirths	2	8	10	0.4%
Early Neonatal Deaths	2	2	4	0.1%

Perinatal Mortality	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Overall PMR per 1000 births	7.6	9.4	7.6	5.4	6.4	7.4	6.0	7.1	6.0	4.6
Corrected PMR per 1000 births	5.7	6.5	6.5	3.5	3.3	4.1	5.0	4.4	3.7	3.5

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Stillbirth Rate	0.5%	0.6%	0.5%	0.3%	0.4%	0.6%	0.5%	0.5%	0.4%	0.4%
Neonatal Death Rate	0.2%	0.3%	0.3%	0.2%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%
Total Rate	**0.7%**	**0.9%**	**0.8%**	**0.5%**	**0.6%**	**0.7%**	**0.6%**	**0.7%**	**0.6%**	**0.5%**

Parity		
0	1096	39.2%
1	967	34.6%
2	483	17.3%
3	169	6.0%
4	48	1.7%
5	21	0.8%
6	10	0.4%
7	2	0.1%
9	1	0.0%
10	1	0.0%

Parity	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0	41.4%	41.1%	43.2%	40.2%	37.9%	38.4%	39.7%	39.5%	39.3%	39.2%
1,2,3	54.5%	55.4%	53.6%	56.3%	58.5%	58.4%	57.3%	57.5%	57.7%	57.9%
4+	4.1%	3.6%	3.2%	3.6%	3.6%	3.1%	3.1%	3.0%	3.0%	3.0%

Age	Primigravida	%	Multigravida	%	Total	%
15-19yrs	18	1.6%	1	0.1%	19	0.7%
20-24yrs	99	9.0%	51	3.0%	150	5.4%
25-29yrs	172	15.7%	207	12.2%	379	13.5%
30-34yrs	375	34.2%	485	28.5%	860	30.7%
35-39yrs	323	29.5%	718	42.2%	1041	37.2%
40-44yrs	96	8.8%	231	13.6%	327	11.7%
45yrs>	13	1.2%	9	0.5%	22	0.8%
Total	1096	100.0%	1702	100.0%	2798	100%

Age @ Delivery	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
15-19yrs	2.5%	2.4%	2.2%	1.3%	1.5%	1.6%	1.1%	0.9%	0.7%	0.7%
20-24yrs	10.0%	9.3%	9.3%	8.2%	7.4%	6.9%	6.3%	6.9%	6.1%	5.4%
25-29yrs	21.8%	20.9%	20.9%	20.3%	18.4%	16.5%	15.4%	14.8%	14.1%	13.5%
30-34yrs	35.4%	34.6%	36.4%	36.5%	36.0%	35.9%	34.8%	33.6%	34.5%	30.7%
35-39yrs	25.2%	26.7%	25.3%	27.3%	29.5%	32.1%	32.0%	33.4%	34.1%	37.2%
40-44yrs	4.9%	5.9%	5.5%	6.0%	6.8%	6.5%	8.8%	9.8%	9.7%	11.7%
45yrs>	0.2%	0.3%	0.5%	0.3%	0.4%	0.6%	0.6%	0.7%	0.7%	0.8%

County Of Origin	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Galway County	58.2%	58.9%	56.9%	57.0%	56.3%	54.8%	53.8%	55.0%	56.5%	57.9%
Galway City	33.9%	32.8%	35.9%	35.9%	36.8%	38.9%	39.7%	37.7%	37.3%	36.0%
Mayo	2.3%	2.2%	2.3%	2.3%	3.4%	2.6%	2.3%	2.9%	2.1%	2.5%
Roscommon	1.2%	1.2%	1.3%	1.0%	2.0%	2.4%	1.0%	1.2%	0.9%	1.0%
Clare	4.1%	4.4%	3.2%	3.4%	1.0%	0.8%	2.7%	2.6%	2.5%	1.9%
Others	0.2%	0.5%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.7%	0.7%

Non National Births	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number	820	834	929	816	854	732	736	723	731	683
%	22.7%	23.7%	26.3%	23.8%	25.3%	23.3%	24.6%	24.3%	24.4%	24.4%

Gestation @ Delivery	Primigravida	%	Multigravida	%	Total	%
<28 weeks	3	0.3%	5	0.3%	8	0.3%
28 - 31+6	10	0.9%	9	0.5%	19	0.7%
32 - 36+6	70	6.4%	91	5.3%	161	5.8%
37 - 39+6	445	40.6%	925	54.3%	1370	49.0%
40 - 41+6	561	51.2%	669	39.3%	1230	44.0%
42weeks	7	0.6%	3	0.2%	10	0.4%
Total	**1096**	**100%**	**1702**	**100%**	**2798**	**100%**

Gestation @ Delivery	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<28 weeks	0.5%	0.6%	0.4%	0.4%	0.3%	0.6%	0.4%	0.4%	0.3%	0.3%
28 - 31+6	0.9%	0.9%	1.0%	0.8%	0.7%	0.9%	0.8%	0.9%	1.1%	0.7%
32 - 36+6	4.8%	5.1%	4.1%	4.9%	4.7%	4.6%	5.3%	5.3%	5.1%	5.8%
37 - 39+6	41.9%	41.8%	41.3%	42.8%	43.1%	47.0%	45.3%	45.2%	45.9%	49.0%
40 - 41+6	50.1%	50.3%	52.6%	50.4%	51.0%	46.5%	47.8%	47.9%	47.4%	44.0%
42 weeks	1.7%	1.2%	0.4%	0.7%	0.2%	0.4%	0.4%	0.3%	0.3%	0.4%
Not Answered	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Birth Weights	Primigravida	%	Multigravida	%	Total	%
< 1000gms	5	0.4%	5	0.3%	10	0.4%
1000-1499gms	8	0.7%	14	0.8%	22	0.8%
1500-1999gms	24	2.1%	24	1.4%	48	1.7%
2000-2499gms	45	4.0%	46	2.7%	91	3.2%
2500-2999gms	156	13.9%	161	9.3%	317	11.1%
3000-3499gms	407	36.3%	546	31.5%	953	33.4%
3500-3999gms	348	31.1%	612	35.3%	960	33.6%
4000-4499gms	110	9.8%	279	16.1%	389	13.6%
4500-4999gms	16	1.4%	46	2.7%	62	2.2%
5000-5499gms	1	0.1%	1	0.1%	2	0.1%
Total	**1120**	**100.0%**	**1734**	**100.0%**	**2854**	**100%**

Birth Weights	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<500gms	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
500-999gms	0.7%	0.5%	0.7%	0.6%	0.4%	0.6%	0.5%	0.5%	0.5%	0.4%
1000-1999gms	1.6%	2.0%	1.7%	1.7%	1.9%	2.8%	2.1%	2.5%	2.1%	2.5%
2000-2999gms	14.5%	13.9%	14.2%	14.2%	14.8%	15.0%	14.8%	13.7%	14.7%	14.3%
3000-3999gms	66.2%	68.5%	66.3%	68.3%	67.3%	66.4%	66.1%	67.8%	68.7%	67.0%
4000-4499gms	14.2%	13.9%	14.1%	14.1%	15.2%	13.1%	14.4%	13.1%	11.8%	13.6%
4500-5000gms	2.0%	2.4%	2.7%	2.5%	2.5%	1.9%	1.7%	2.2%	2.2%	2.2%
5000-5499gms	0.2%	0.3%	0.2%	0.4%	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%
>5500gms	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Number of Babies	**3681**	**3525**	**3537**	**3429**	**3377**	**3141**	**2987**	**2973**	**3002**	**2854**

Induction of Labour	Primigravida	%	Multigravida	%	Total	%
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%
2016	443	38.3%	455	25.4%	898	30.5%
2017	460	42.0%	483	28.4%	943	33.7%

Perineal Trauma	Primip n - 700	%	Multip n - 1153	%	Total n - 1853	%
Intact	23	3.3%	273	23.7%	296	16.0%
Episiotomy	449	64.1%	150	13.0%	599	32.3%
2nd Degree Tear	138	19.7%	389	33.7%	527	28.4%
1st Degree Tear	42	6.0%	203	17.6%	245	13.2%
3rd Degree Tear	21	3.0%	18	1.6%	39	2.1%
Other Laceration	27	3.9%	120	10.4%	147	7.9%
Total	**700**		**1153**		**1853**	

Incidence of Episiotomy	Primigravida	%	Multigravida	%	Total	%
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%
2016	440	58.4%	139	11.2%	579	28.8%
2017	449	64.1%	150	13.0%	599	32.3%

B.B.A.	Primigravida	%	Multigravida	%	Total	%
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%
2016	1	0.0%	11	0.4%	12	0.4%
2017	1	0.1%	7	0.4%	8	0.3%

3rd Stage Problems	Primip		Multip		Total	%
Primary PPH(1000mls)	58	5.3%	41	2.4%	99	3.5%
Manual Removal of Placenta	10	0.9%	11	0.6%	21	0.8%
Hysterectomy	0	0.0%	2	0.1%	2	0.1%
Total	**68**	**6.2%**	**52**	**3.1%**	**122**	**4.1%**

Shoulder Dystocia	Primip		Multip		Total	
Shoulder Dystocia	20	1.8%	15	0.9%	35	1.2%

Fetal Blood Sampling	n- 1120(babies)		n- 1734(babies)		n- 2854	
PH < 7.20	10	0.9%	6	0.3%	16	0.6%
PH 7.20-7.25	10	0.9%	4	0.2%	14	0.5%
PH > 7.25	106	9.5%	49	2.8%	155	5.4%

Cord Sampling	n-1120 (babies)		n- 1734(babies)		n- 2854(babies)	
Cord PH < 7.2	181	16.2%	169	9.7%	350	12.3%
Cord PH 7.2-7.25	77	6.9%	154	8.9%	231	8.1%
Cord PH > 7.25	463	41.3%	480	27.7%	943	33.0%
Total	**721**	**64.4%**	**803**	**46.3%**	**1524**	**53.4%**

Caesarean Sections 2017	Primip	%	Multip	%	Total	%
Elective Caesarean Sections	80	7.3%	354	20.8%	434	15.5%
Emergency Caesarean Sections	314	28.6%	197	11.6%	511	18.3%
Total	**394**	**35.9%**	**551**	**32.4%**	**945**	**33.8%**

Robson Groups 2017	n-945 CS	n-2798Women	
Group 1 - nullip singleton cephalic term spont labour	72	463	15.6%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	223	494	45.1%
Group 2a - nullip singleton cephalic term induced	174		35.2%
Group 2b - nullip singleton cephalic term pre-labour C.S.	49		9.9%
Group 3 - multip singleton cephalic term spont labour	18	629	2.9%
Group 4 - multip singleton cephalic term induced or pre-labour CS	61	478	12.8%
Group 4a - multip singleton cephalic term induced	26		5.4%
Group 4b - multip singleton cephalic term pre-labour C.S.	35		7.3%
Group 5 - previous CS singleton cephalic term	332	413	80.4%
Group 6 - all nulliparous breeches	53	54	98.1%
Group 7- all multiparous breeches	56	59	94.9%
Group 8 - all multiple pregnancies	45	54	83.3%
Group 9 - all abnormal lies	23	23	100%
Group 10 - all preterm singleton cephalic	62	131	47.3%
TOTAL	**945**	**2798**	**33.8%**

Total No. of Mothers who had 1 Previous Caesarean Section	359	
No. of Mothers who opted for an Elective Caesarean Section after 1 previous Caesarean Section	184	51.5%
No. of Mothers who went into Spontaneous/Induced Labour after 1 previous Caesarean Section	175	48.5%

Outcome for this category	S.V.D	59	33.7%
	Ventouse	18	10.3%
	Forceps	8	4.6%
	Total VBAC	**85**	**48.6%**
	Emergency C.S.	90	51.4%

Fetal Medicine Unit

Dr Geraldine Gaffney & Ms Annette Burke

In 2017, 11977 scans were performed in total between Fetal Medicine Unit (FMU) and Early Pregnancy Assessment Unit (EPAU). There were 9858 ultrasounds performed in FMU, of which 16 were gynae and 9842 were obstetric ultrasounds. There were 2119 EPAU scans. Currently, the vast majority of gynaecological scans are performed in the radiology department. The Early Pregnancy Assessment Unit (EPAU) provides a dedicated ultrasound service for women who experience complications during the first 13 weeks of pregnancy. Please see EPAU report for further detail.

The ultrasound examinations performed in the FMU included first trimester scans, detailed fetal anatomy scans at 20-22 weeks gestation, and referrals for assessment of fetal growth and wellbeing. In addition, there is a dedicated High Risk Clinic that accepts patients with either fetal or maternal problems during pregnancy. In 2017, 88.8% of patients booked to deliver at GUH received both a first trimester and an anomaly ultrasound scan. The unit is staffed with 4 sonographers, one clinical specialist radiographer and there are 3 fetal medicine consultants. There are 2 midwife sonographers undertaking their MSc in Ultrasound at present and we welcomed the arrival of Dr Mark Dempsey this year as an additional consultant in fetal medicine. We have 4 ultrasound machines in the maternity scan department.

In addition to weekly high risk fetal medicine clinics, there is a fortnightly diabetic clinic. Women attending these clinics all have first trimester and fetal anomaly scans. Follow on growth and wellbeing ultrasound scans are performed at 28, 32 and 36 weeks if they have pregestational diabetes or gestational diabetes on insulin or oral hypoglycaemic agents. Follow on ultrasound scans are preformed at 28 and 36 weeks if they have gestational diabetes on dietary treatment. In 2017, there were 292 diabetic patients of whom 20 had pregestational and 272 had gestational diabetes. There were 852 visits to the diabetic clinic.

Multiple pregnancies are generally seen in the high risk clinic. DCDA pregnancies are seen every 4 weeks and MCDA pregnancies every fortnight. More frequent visits may be necessary according to clinical indication. In 2017 we saw 73 sets of twins and 3 of triplets.

The ultrasound unit participates in ongoing research projects such as the EMERGE and PARROTT studies.

The EPAU service provides dedicated sessions four mornings per week for early pregnancy complications. There is one early pregnancy sonographer assigned to this service.

High Risk Fetal Medicine Clinic

In 2017 there were 856 visits to the high risk clinic. The reason for referral was either for fetal or maternal complications in pregnancy. The majority of patients were booked to deliver at Galway University Hospital. However, we saw 3 referrals from other hospitals in the Saolta Hospital Group. The services offered at this clinic included confirmation and management of fetal abnormality, monitoring of multiple pregnancies, prenatal non-invasive screening, invasive prenatal testing, monitoring of medical complication of pregnancy and monitoring of pregnancies where there were maternal antibodies to red blood cell antigens and fetal platelet alloimmune disease.

Fetal Abnormalities

During 2017 there were 71 pregnancies with one or more fetal malformations. Often the diagnosis of a fetal anomaly required further investigation by invasive methods for fetal karyotyping, and fetal MR. In addition pregnancies that will be complicated by neonatal problems are seen by a member of the neonatal team and may be referred to a tertiary centre that will be responsible for postnatal management, the management of fetal cardiac structural anomaly being a notable example. This referral pattern permits seamless transition after birth for the child with prenatally diagnosed problems and is very much welcomed by parents.

A list of the actual fetal abnormalities that were diagnosed is provided below. Other reasons for referral to the high risk clinic in addition to the diagnosis and management of fetal anomalies were prenatal screening for chromosomal abnormality, assessment of severe IUGR and non-invasive monitoring of pregnancies affected by either red cell or platelet iso- or alloimmunity.

Fetal Anomalies

The list and description of fetal abnormalities managed at the FMU during 2017 is outlined below:

LIST OF ABNORMALITIES

Cranial / CNS/ Neuro

- Mild ventriculomegly
- CNS. Abnormal cavum septum pellucidum
- Ventriculomegaly.
- Abnormal Cisterna Magna.
- Spina bifida (2)
- Holoprosencephaly
- Anencephaly
- Microcephaly

Cardiac

- Tetrology of Fallot (Trisomy 21)
- VSD & abnormal upper limbs/ IUFD at 29 weeks.
- Membranous VSD with bilateral SVC. Left SVC to coronary sinus.
- Double inlet left ventricle.
- Cardiac arrhythmia (2)
- TGA, VSD
- Cardiac abnormality in twin 1 of a MCDA pair
- VSD (3)
- VSD with hypoplastic aortic valve and hypoplastic ascending aorta
- Biventricular hypertrophy with tricuspid regurgitation

Abdominal

- Exomphalus. Trisomy 18

Renal

- Absent left kidney (2)
- Duplex kidney
- Hydronephrosis (2)
- Hydronephrosis & unilateral left kidney and hydro-ureter left side
- Bilateral hydronephrosis. Both kidneys appeared cystic.
- Multicystic kidney

Skeletal
- Short long bones, 1 had IUGR and one an IUFD (3)
- Talipes (3)
- Absent lower limbs
- Absent fingers on left hand
- Talipes (2)
- Polydactly
- Absent femur and fibula in both limbs and talipes (Holt-Oram)

Chromosomal
- Trisomy 21 (4)
- Trisomy 18 (3)
- Triploidy
- Deletion of chromosome 10
- Diaphragmatic hernia, echogenic kidneys, VSD. Trisomy 13
- Unbalanced translocation of chromosome 10
- Abnormal Karyotyping 47 XY + deletion of chromosome 9
- Turners Syndrome

Misc
- MCDA twins with TTTS
- Sickle cell disease on amnio
- Cleft lip
- Vasa praevia MCDA twins

There were 29 invasive procedures. Of these 28 were amniocentesis and 1 was a CVS. The cases of fetal aneuploidy detected were as follows:
- Normal N=15
- Trisomy 21 N=4
- Trisomy 18 N=4
- Trisomy 13 N=1
- Turner's syndromeN=1
- TriploidyN=1
- Translocation/DeletionN=3

We were very sorry to lose to retirement, our colleague Anne Keane (CNM III) this June. Anne led this unit for many years and was both a valued colleague and good friend to us all.

Anaesthesia Report

Dr Joseph F Costello

In 2017, 2,633 procedures were performed in theatre, of which 1,804 were elective and 829 were classified emergencies. This number includes all gynaecological and obstetric procedures for which anaesthesia care was provided.

243 procedures were performed in the labour ward theatre which neccesitated the presence of anaesthesia services (this number is included in the overall procedure number of 2,633).

There were 2854 deliveries to 2798 mothers in UHG in 2017.

Epidurals

- 1322 epidurals were peformed (47.2%) see Figure1.
- 654 pimigravidae (59.7 %) received an eipdural
- 668 multigravidae (39.2 %) received an epidural
- 30.7% of those primigravidae who had an epidural had a Ventouse delivery and 19.7 % had a forceps delivery
- 12.6 % of multigravidae who received an epidural had a Ventouse delivery while 2.8% had a forceps delivery
- 460 primigravidae were induced and 374 of this group (81.3%) received epidurals
- 504 primigravidae went into spontaneous labour and 321 of this group (63.7%) received an epidural
- 483 multigravidae were induced and 276 of this group, (57.1%) received an epidural
- 773 multigravidae went into spontaneous labour and 337 (43.6%) of this group received an epidural

Caesarean Deliveries

- 945 women (33.8 %) delivered by Caesarean Delivery (CD) (see statistical summary)
- 48 Caesarean Deliveries were performed under General Anaesthesia
- (5.1 % of all Caesarean Deliveries) see Figure 2

Post-Dural Puncture Headaches

There were 12 documented dural taps in 2017, giving a dural puncture rate of 0.9 %. 14 (1.1 %) women needed an epidural blood patch.

Mode of Anaesthesia for Elective C.S.

	Primip	Multip	Total	
Spinal	72	325	397	91.5%
Epidural	7	3	10	2.3%
Combined Spinal	0	22	22	5.1%
G.A.	1	4	5	1.2%
Total	**80**	**354**	**434**	**100%**

Mode of Anaesthesia for Emergency C.S.

	Primip	Multip	Total	
Spinal	107	127	234	45.8%
Epidural	134	28	162	31.7%
Combined Spinal	49	23	72	14.1%
G.A.	25	18	43	8.4%
Total	**315**	**196**	**511**	**100%**

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

	Primip	Multip	Total	
Spinal	7	0	7	58.3%
Epidural	1	1	2	16.7%
Combined Spinal	1	0	1	8.3%
G.A.	2	0	2	16.7%
Total	**11**	**1**	**12**	**100%**

Intensive Care/High Dependency Unit (ICU/HDU) Admissions in 2017

There was a total of 37 patients admitted to either ICU/HDU from the Obstetrical/Gynaecology service in 2017. 14 of these admissions were Obstetrical patients and 23 were Gynaecology patients.

There were 14 obstetrical admissions to ICU/HDU in UCHG in 2017 (0.5% of all deliveries).

- 8 patients were admitted to the ICU (0.3% of all deliveries).
- 6 cases of sepsis
- 1 patient suffering from massive Post-Partum Haemorrhage
- 1 patient admitted with a pulmonary embolism
- There were 6 obstetric admissions to HDU in 2017 (0.2% of all deliveries).
- 3 women were admitted with sepsis.
- 3 admissions were due to a post-partum haemorrhage

Post-Anaesthesia Care Unit (PACU) Admissions in 2017

There were 76 admissions to the Post Anaesthesia Care Unit in 2017. These ere all admissions from the Gynaecological Surgery service as Obstetrical care patients (either ante-natal or post-natal) do not fulfill admission criteria to PACU.

Summary of parturients needing Level 2 care on the labour ward in 2017

- 102 women needed level 1 or 2 care on the labour ward in 2017.

High risk Obstetric Anaesthesia Clinic

- 263 women were assessed in the high risk obstetric anaesthesia clinic in 2017.

Figure 1 – Overall trend in Epidural rates (numbers) since 2008

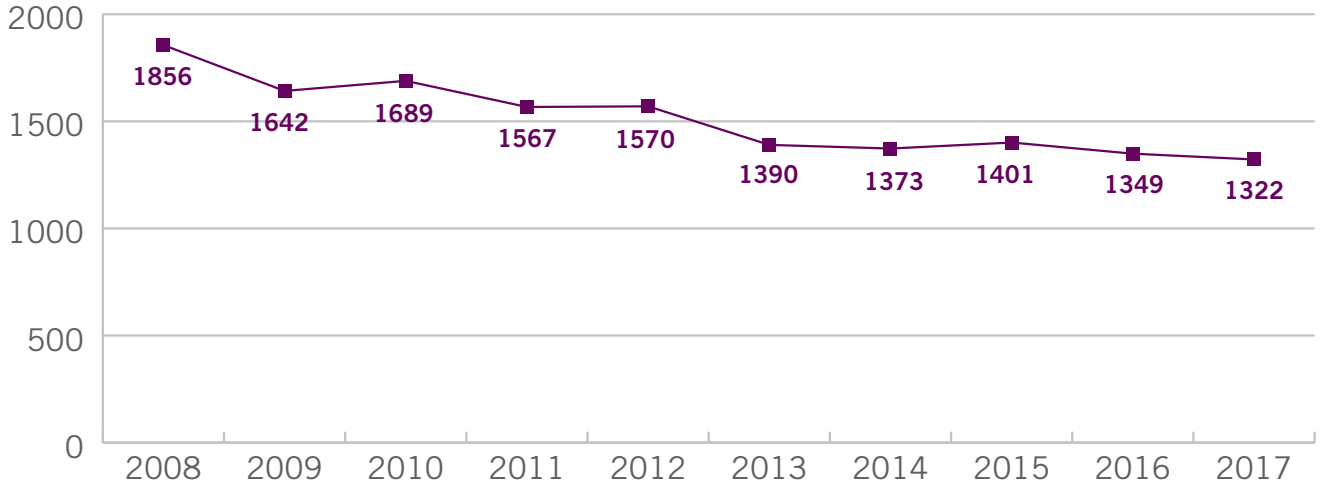
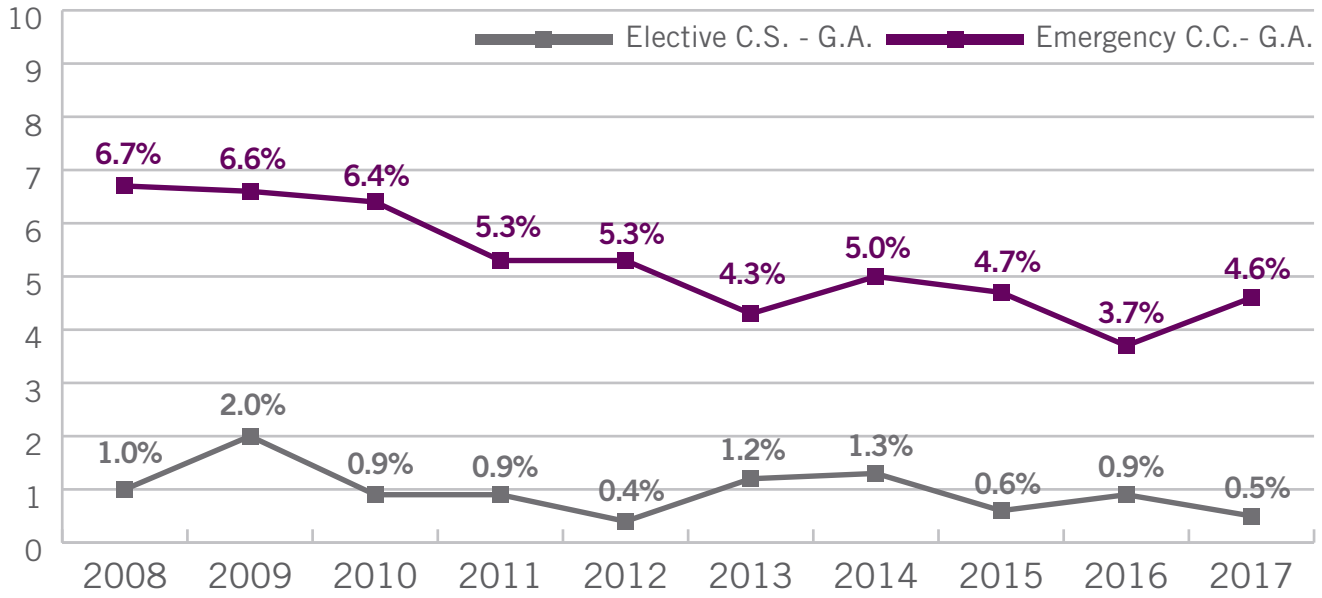


Figure 2 - Percentage of Elective/Emergency Caesarean Deliveries under General Anaesthesia



Neonatal Clinical Report

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

During the year 2017 a total of 2854 infants were born at GUH, of which 432 (15.1%) were admitted to the neonatal unit (Figure 1). In keeping with national trends, the delivery rate has declined year on year since reaching a peak in 2008 (Figure 2). Admissions to the neonatal unit, however, have remained high despite the falling birth rate. A number of factors, including increasing C-Section rates and higher numbers of late preterm infants, have contributed to the consistently high neonatal unit admission rates in recent years.

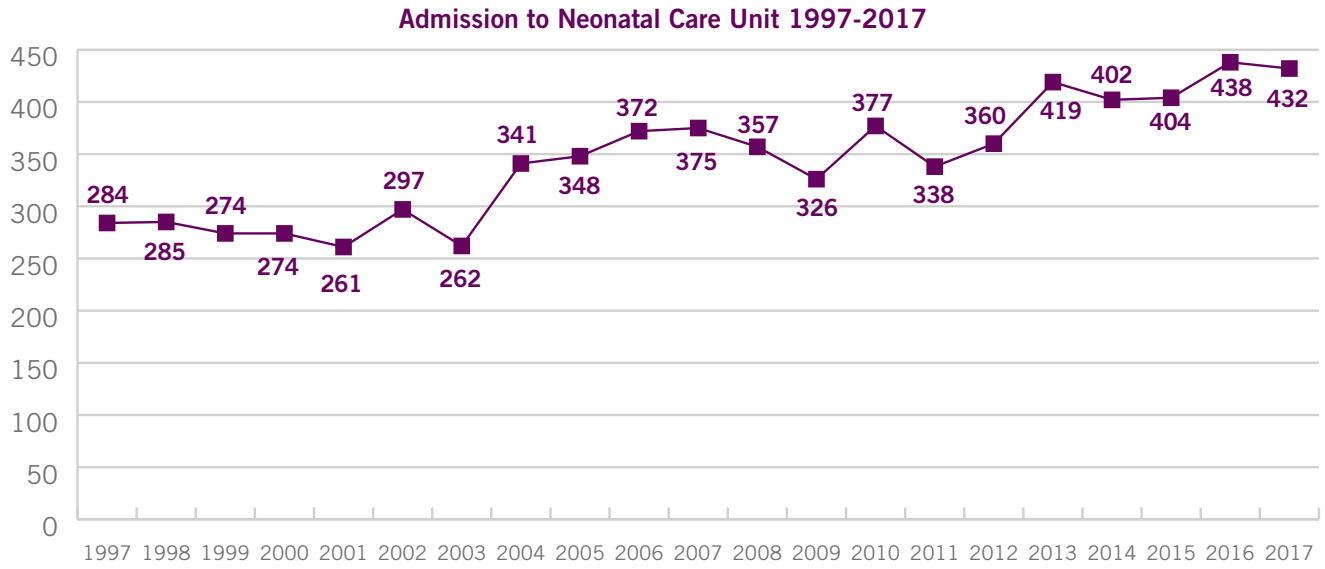
Fifty eight percent (250 infants) of the neonatal unit admissions in 2017 were > 37 Wks gestation, whereas 182 infants (42%) were premature. GUH is a Level 2 (Regional) Neonatal Unit and provides neonatal intensive care to infants > 27 Wks gestation. Of the premature infants 9 were ELBW (BW < 1000g) and 22 infants weighted between 1000g and 1500g at birth (VLBW). Ten of the premature infants were < 28 Wks gestation, 27 were born between 28 and 31+6 Wks gestation and 145 were born between 32 and 36+6 Wks gestation (Table 2).

One hundred and sixty four infants (38%) were admitted from the Labour Ward, 173 (40%) from Gynae Theatre and 75 (17.5%) from the Post Natal ward (Table 3). Twenty infants (4.5%) were transferred into the neonatal unit from outside hospitals. Compared with 2016 there was a 5% increase in admissions from Gynae Theatre, and 6.5% decrease in admissions from the Post Natal ward.

Consistent with previous reports prematurity, respiratory distress and evaluation for sepsis remain the commonest conditions requiring admission to the neonatal unit, accounting for 73% of all admissions in 2017.

There were 2 neonatal unit related deaths in 2017 (Details below)a. The 2017 overall neonatal unit related mortality rate (Number of deaths in neonatal unit per 1,000 live births) was 0.7 per 1000. A 2008 to 2017 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 2017.



1. BABY WEIGHTS ON ADMISSION 2017		
Weight	**n**	**%**
500-599gms	3	0.7%
600-699gms	0	0.0%
700-799gms	1	0.2%
800-899gms	1	0.2%
900-999gms	4	0.9%
1000-1249gms	9	2.2%
1250-1499gms	13	3.0%
1500-1749gms	23	5.3%
1750-1999gms	29	6.7%
2000-2249gms	41	9.5%
2250-2499gms	29	6.7%
2500-2999gms	63	14.6%
>3000gms	216	50.0%
Total	**432**	**100.0%**

2. GESTATION AGE OF NEONATAL UNIT ADMISSIONS 2017		
<28wks	10	2.3%
28-31+6wks	27	6.3%
32-36+6wks	145	33.5%
>37wks	250	57.9%
Total	**432**	**100.0%**

3. SOURCE OF ADMISSION		
Source of Admission	**2017**	**%**
Delivery Suite	164	38.0%
Theatre	173	40.0%
St. Angela's Ward	75	17.5%
Transfers in/ Readmitted	20	4.5%
Total	**432**	**100.0%**

4. SURVIVAL OF NEONATAL UNIT INFANTS 2017		
Weight	**Number**	**Deaths**
≤1000g	9	0
1001 - 1500g	22	1
1501 - 2500g	122	1
>2500g	279	0
Total	**432**	**2**

5. NEONATAL UNIT MORTALITY RATE 2016		
Total	2	0.7/1000
Excluding LCM	0	0/1000

6. GENERAL NEONATAL MORBIDITY	
IPPV	19
NCPAP	126
Respiratory Disorders: RDS/TTN	148
Meconium Aspiration	3
Pneumothorax	5
NEC	1
Perinatal Stress/HIE/Seizures	11
Haematology: Jaundice/HDN/NAIT	12
Transferred for Therapeutic Cooling	6

7. CONGENITAL ABNORMALITIES	
Down Syndrome	4
Pierre Robin Syndrome	2
Trisomy 18	2
Microcephaly	1
Unnamed Dysmorphic Syndrome	1

8. CARDIAC / CHD / SIGNIFICANT ECHO FINDINGS	
ASD / VSD/ PDA /PPHN	13
Bicuspid Aortic Valve	1
Tetralogy of Fallot (TOF)	1

9. NOTABLE SIGNIFICANT MALFORMATIONS / OTHER	
Cleft Lip & Cleft Palate	1
Bladder Exstrophy	1
CNS Abnormalities (Abn MRI Brain)	4
Spina Bifida	1
Orbital Protrusion	1
Imperforate Anus	1
Tracheoesophageal fistula (TOF)	1

10. NEONATAL SEPSIS 2017: 13 INFANTS HAD POSITIVE BLOOD CULTURES (NON-CONTAMINANT +BC)	
GBS	2
Listeria	1
Coagulase Negative Staphylococcus	10
Maternal TB	1

11. NEONATAL TRANSFERS	
NTP	17
Ambulance + NICU Nurse	13
Total	**30**

12. FINAL DIAGNOSIS 2017 (OFTEN MORE THAN 1)		
Reason for Neonatal Admission 2017	**Year**	**%**
Prematurity / Low Birth Weight / RDS	181	41.9%
Respiratory Distress / Grunting	78	18.1%
Sepsis at risk	57	13.2%
Other Fetal Reasons	56	13.0%
Hypoglycaemia / Poor Feeder	11	2.5%
Observation	10	2.3%
Low Saturations	9	2.1%
Low Apgars	7	1.6%
Low Cord PH	7	1.6%
Congenital Abnormality/ Special Care	9	2.0%
Social Reason	5	1.2%
Jaundice	2	0.5%
Total Admissions	**432**	**100%**

13. MORTALITY TABLE 2008-2017 INBORN INFANTS ≤ 1500G REPORTED TO THE VERMONT OXFORD NETWORK (INCLUDING CHROMOSOME ABNORMALITIES/SYNDROMES/ LETHAL CONGENITAL MALFORMATIONS)			
Gestation	**Number**	**Survival to 28 days**	**Survival to discharge**
23wks	3	1 (33%)	1 (33%)
24 wks	21	9 (43%)	8 (38%)
25 wks	24	15 (63%)	14 (58%)
26 wks	22	19 (86%)	18 (82%)
27 wks	37	33 (89%)	33 (89%)
28 wks	45	40 (89%)	40 (89%)
29 wks	68	67 (98.5%)	67 (98.5%)
30 wks	58	56 (96.5%)	56 (96.5%)
>30 wks	104	99 (95%)	99 (95%)
Total	**382**	**339 (89%)**	**336 (88%)**

14. SUMMARY NEONATAL UNIT DEATHS IN 2017			
Diagnosis	**GA**	**BW**	**Location of Death**
Trisomy 18	34+5/40	1160gms	GUH (DOL 66)
Hydrops Fetalis, Trisomy 21, Renal Tubular Dysgenesis	33+6/40	2500 gms	GUH (DOL 1)

15. NEONATAL UNIT RELATED DEATHS IN 2017

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

1. **Pregnancy:** Gestation 34+5/40, BW 1160gms, Female, Twin, Emergency LSCS for IUGR, Antenatal Steroids, Mother 46yo Para 4+0.
   Neonatal Course: Resuscitation with PPV. Apgars 7^{1} & 8^{5}. HMD and Surfactant treatment. Dysmorphic features. Congenital heart disease: AV canal defect with VSD. Genetic studies positive for Trisomy 18. Complicated neonatal course. Gradual decline in condition from DOL 40 onwards. Died in neonatal unit on DOL 66.
   Diagnosis: Trisomy 18 and Congenital Heart Disease.
   Postmortem: Declined.

2. **Pregnancy:** Gestation 33+6/40, BW 2500 gms, Female, Singleton, Emergency LSCS for Preterm Labour and severe Hydrops Fetalis, Antenatal Steroids,
   Mother 44yo Para 2+0.
   Neonatal Course: Extensive resuscitation with intubation and PPV. Apgars 2^{1} & 1^{5}. Dysmorphic features and severe hydropic infant. Pulmonary hypoplasia and progressive respiratory failure despite ET IPPV. Failed to respond to NICU care. Withdrawal of ICU care and infant died at 1.5hrs of age.
   Diagnosis: Trisomy 21, Renal Tubular Dysgenesis, Hypoplastic Bladder.
   Postmortem: Yes.

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 2017. Data are also included for paediatric activity in the Emergency Department (ED), all admissions to UHG up to 16 years old and the paediatric admissions to the Intensive Care Unit. In addition, activity for the paediatric ambulatory care unit (opened October 2017) is included, Oct – Dec inclusive.

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 have historically been admitted to surgical wards, those < 12 years are admitted to St Bernadette's. All children up to 14 years with an orthopaedic diagnosis are admitted to St Bernadette's. 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 (up to 16th birthday nationally); the age limit set at 14 is owing to capacity and staffing limitations on St Bernadette's ward. Neonates (0 to 4 weeks), for the most part, are admitted to the paediatric unit, rarely exceptions apply where neonates are admitted or re-admitted to the NICU.

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 Richard Malone in Information Services, UHG (via PAS system) with Intensive Care Unit activity obtained from the *Clinical Information System in ICU/HDU*. Comparative data, where available, are provided for preceding years. Admission data are broken down into those admitted to St Bernadette's and those admitted to 'other' wards within the hospital with regards to children up to 16 years old.

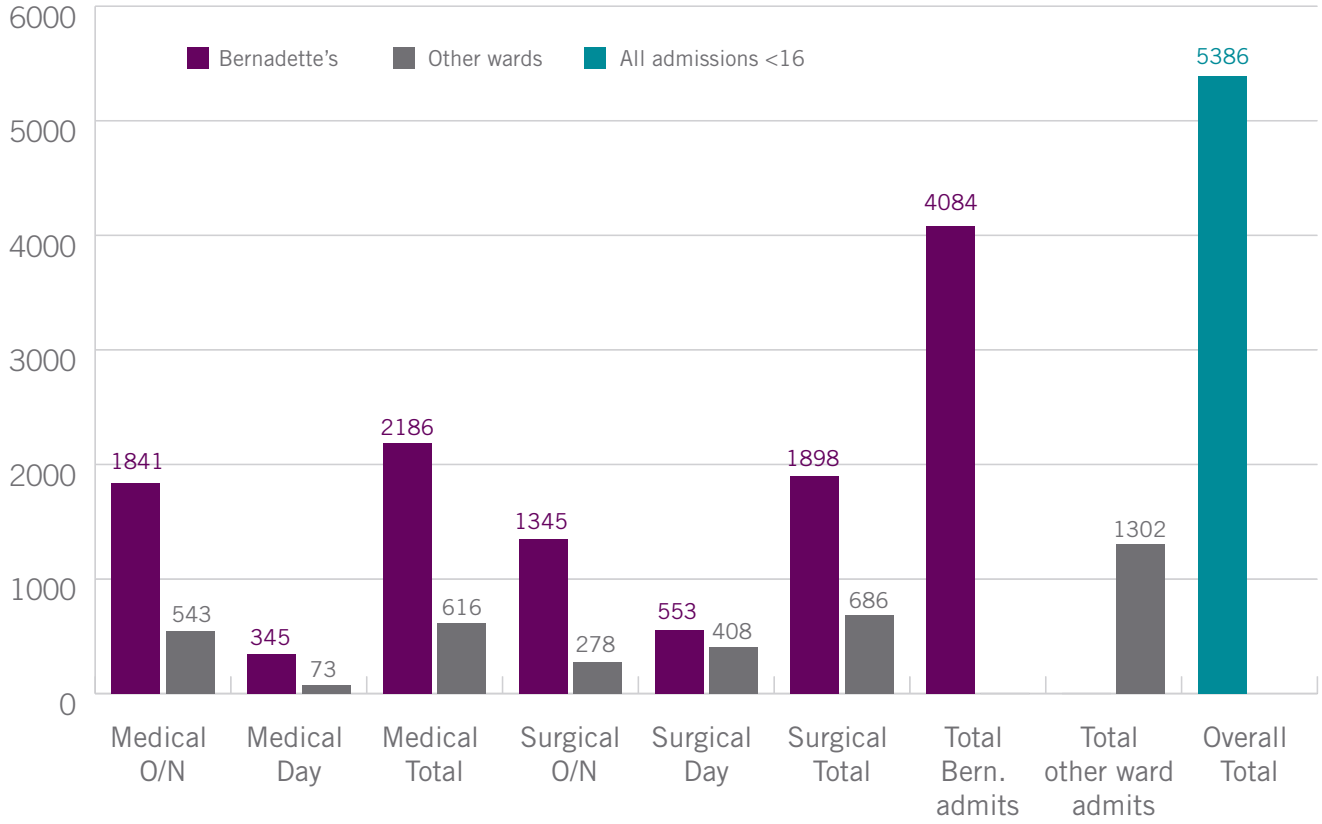
Patients with a chronic illness, e.g., IDDM, CF, cerebral palsy are looked after by the paediatric team up to the age of transitioning to adult care which typically occurs at age 18. For that reason, children up to age 18 may be admitted to St Bernadette's ward.

UHG Paediatric (up to 16 yrs) Admissions

Figure 1 outlines admissions to Bernadette's and 'other wards' within UHG; from January 1st to December 31st of 2017, a total of 5,386 children up to 16 years were admitted to UHG; c.15 admissions daily; a significant drop from 6,510 during 2016. The latter difference may be attributable to source data for the 2017 report. Data for the current report were retrieved via the PAS coding (UHG Information Services) system, coded as per admission data; the 2016 report was via HIPE, coded as per discharge data. Additionally, the opening of the Paediatric Ambulatory Unit in October 2017 may have contributed to approx 600 less children on St Bernadette's ward.

The bulk of paediatric admissions are overnight, average length of stay is typically 2.3 days.

Figure 1 – Paediatric Admissions to UHG, 2017



St Bernadette's

From January 1st to December 31st of 2017, a total of 4,084 (4,588 in 2016) children (up to 14 yrs) were admitted to St Bernadette's ward, c.11 admissions daily (see Figure 1 for breakdown as per medical and surgical cases). The admission number dropped in 2017 to the lowest number in the past 13 years possibly due to opening of the ambulatory unit in October 2017; admission average to St Bernadette's ward was 4,500 children over the past 13 years, peaking at 4,958 in 2007.

All surgical admissions to St Bernadette's encompass the specialties of general surgery, orthopaedics, plastic surgery, ENT, ophthalmology, urology and maxillofacial, see Figure 2 for breakdown of case activity, 1,898 cases (overnight and day cases) in 2017. As would be expected majority of general surgery admissions come via ED, whilst the majority of ENT admits are elective. Orthopaedic cases are approximate 50/50 split with elective/ED admits.

A total of 2,186 medical cases (overnight and day cases) were admitted to St Bernadette's ward a drop from 2,544 in 2016. The majority of paediatric admissions are via ED.

Other Wards

According to PAS, during 2017, c. 1,302 children (12 to 16 years) were admitted to other (adult) wards in UHG, an average of 3.5 per day. The majority of the latter were overnight 821, with 481 day cases.

Paediatric ED Activity

During 2017, there were **15,902 attendances** to the UHG Emergency Department up to 16 years of age (14,411 in 2016); c. 44 patients reviewed per day. Approximately **17% (2,746)** of patients presenting to the paediatric ED are admitted to UHG. This admission rate is in line with national average.

Paediatric Ambulatory Care Activity (Oct to Dec 2017)

The paediatric ambulatory care unit (located on St Bernadette's ward) received the first patients on October 1st, 2017.Clinical activity includes, IV infusions, phlebotomy, cannulation, clinical review, allergy procedures and sweat tests. From October 1st to December 31st, 580 patients were reviewed; approximately 200 patients per month. A more detailed report of coded activity will be available for 2018.

Fig 2. All Surgical Admissions, St Bernadette's 2017; Total 1,898

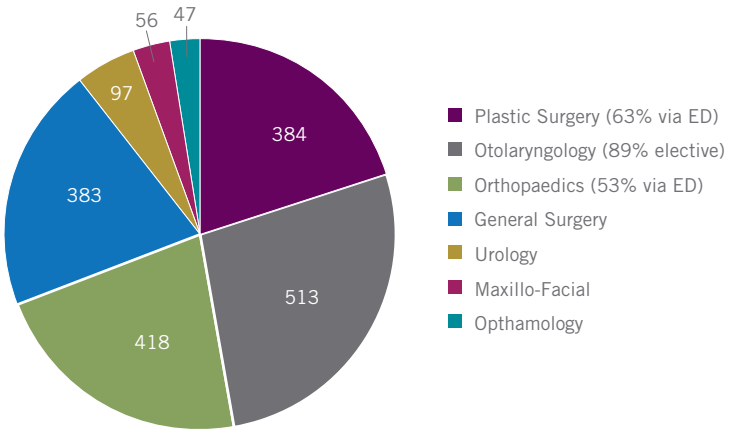
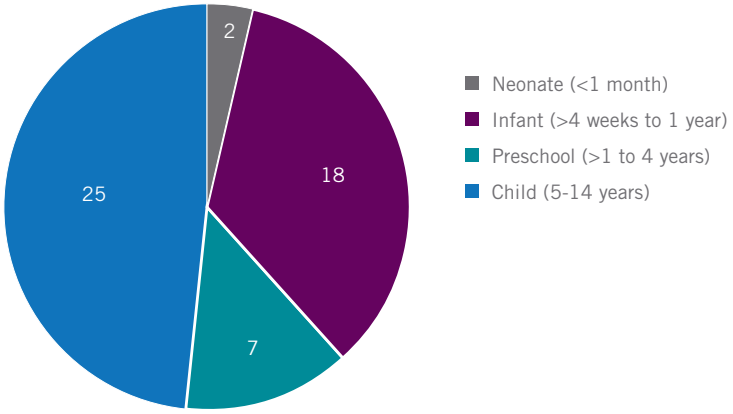


Fig 3. Paediatric Admissions 2017, Total 52



ICU admissions and Direct Transfers from St Bernadette's

There were **52 children** ≤ 14 years of age admitted to the UHG ICU during 2017 (same figure as 2016); majority of patients admitted from the ED to ICU. The age range for ICU admissions was 8 days to 14 years old; see Figure 3 for age breakdown. The average duration of stay was 1.16 days (range, 0.12 to 4.5 days), very similar to 2016.

The table outlines admission diagnoses and discharge destination. Respiratory causes remain the principle reason for ICU admission. The majority of children were discharged to St Bernadette's ward, 21 were transferred to tertiary units (20 Crumlin/Temple street, 1 Beaumont hospital); only 7/21 transfers were facilitated by the national retrieval service.

Admission Diagnosis	Number of admissions
Respiratory	19
Seizure/Status epilepticus	16
Sepsis	2
DKA	4
Other	3
Trauma related	2
Post surgery	3
Cardiac related	1
Decreased GCS	2
Meningitis	0
Total	**52**

Paediatric Discharge Destination	Discharge Location
Tertiary hospital (7 retrieval team)	21
St Bernadette's Ward (paediatrics)	31
Total	**52**

Paediatric Out-Patient Report

Dr. Mary Herzig

Introduction

This report presents the available data on medical paediatric out-patient clinical activity for year-end December 31, 2017. Out-patient procedures performed by nursing staff (e.g. sweat testing, phlebotomy, intravenous infusions, and Mantoux testing), are still not electronically captured and is therefore not reported in this document. These duties will be transferred to a paediatric day ward opening in 2018. The OPD facility was built in the 1950's and remains at maximum capacity. Clinical sessions for new staff are accommodated by reducing the number of existing clinics. This allows for an increase in the breadth of services available to children, but will not address the waiting lists. A new build is ultimately required to cater for the increasing referrals and complexity of patients referred to UHG.

The paediatric out-patient department runs 9-10 medical clinics per week accommodating 7 full and part-time paediatric consultants. There are additional clinics facilitated via the current OPD facility including urology, dermatology, and cardiology which are not included in this report. The following figures 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, disability, and allergy/ immunology clinics.

2017 DATA

Number of Patients

The total number of out-patients appointments offered to patients is similar to 2016 at n=6640. There were 1735 new (26%) and 4905 return (74%) appointments. There is no scope to increase this number due to infrastructure restrictions.

YEAR	NUMBER OF APPOINTMENTS
2006	5645
2007	6345
2008	6626
2009	6814
2010	6114
2011	5519
2012	5638
2013	5742
2014	5781
2015	6562
2016	6512
2017	6640

Non-Attendance

Historically the usual DNA rate was 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. This still seems to be working.

DNA RATES	NEW	RETURN
Historical until 2013	20%	30%
2014	7%	24%
(HSE Policy on DNA's introduced + text)		
2015	11%	29%
2016	13%	20%
2017	15%	15%

Overall the number of DNA's remains persistently high, however, extra patients (overbookings) 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. Consultants have prioritized new referrals over review patients in 2017 to reduce the number of patients waiting and their wait time. There is some improvement after this initiative, however, it is not sustainable in the longer term as new patients will also need to be enrolled in review clinics.

NUMBER OF PATIENTS ON PAEDIATRIC WAIT LIST TOTALS	
2013	432
2014	723 (+67%)
2015	1086 (+50%)
2016	1227 (+13%)
2017	1008 (-18%)

Raw numbers patients on Wait List (no appointment) and percent change year on year.

The wait time is addressed by running extra new patient only clinics in available slots where staff and facilities are available. These clinics are run by consultant staff 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. Despite best efforts, the number of long waiters (>12 months) continues to increase with new categories of waiting children up to 36 months.

Out-Patient Waiting List 2009-2016

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
2016	10.5 months
2017	7 months

Number of Long Waiters Year End: 2016

2016: 12-15 months n=124
2017:12-15 monthsn=140

2016: 15-18 monthsn=60
2017:15-18 monthsn=78

2016: 18-21 monthsn=11
2017:18-21 monthsn=39

2016:21-24 monthsn=0
2017:21-24 monthsn=21

2016:24-36 monthsn=0
2017:24-36 monthsn=14

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 2018 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 Academic Department

Professor Nicholas Allen

Introduction

The Academic Department of Paediatrics is part of NUI Galway Medical School, main office located in the Clinical Science Institute, adjacent to Galway University Hospital.
The academic team is comprised of Professor, Senior Lecturer, Lecturer, Tutors and Clinical Lecturers. Affiliated hospitals for teaching and clinical experience, are integrated with the Medical Academies of NUI Galway, situated in Mayo, Sligo, Letterkenny, and Portiuncula University Hospitals. The majority of paediatric medical students spend one semester of their penultimate medical year attending an academy.

REMIT OF THE PAEDIATRIC ACADEMIC DEPARTMENT

Undergraduate

With the assistance of the affiliated hospitals, it is the goal of the paediatric department to provide an informative, friendly and valuable learning experience. Students are exposed to a wealth of clinical cases during their attachments, with an emphasis of bedside teaching. Teaching is delivered via a variety of modes including bedside tutorials, hands on patient examination, out-patient interactions, interactive teaching sessions, podcasts, seminars, case presentations, problem based learning, and slide shows.
The curriculum is currently delivered in modular format with two modules, one in each semester. During semester one, students are introduced to basic concepts in the practice of paediatrics, whilst semester two introduces more application of knowledge, in-depth learning and case management. The availability of excellence in clinical exposure and teaching at the expansion into the affiliated hospital academies has enabled increased capacity with delivery of parallel programs at each site.

The assessment process has also undergone change aligned with the new curriculum. Summative assessment includes an MCQ at the end of module one and a written (modified essay questions) paper and OSCE at the end of module two. Formative assessment is an integral component of each semester. Competency-based assessment is also part of the curriculum with the introduction of Mini-CEXs. Students are encouraged to actively provide course feedback which is incorporated into curriculum development.

The opportunity for exposure to undergraduate research is provided outside the teaching curriculum. Undergraduates are also provided with the opportunity to present original research at national and international meetings.

NCHD education

Postgraduate education is provided on a daily basis with the assistance of the general paediatric team at University Hospital Galway, hands on consultant-led teaching (formal, bedside, supervised Handover). Educational activities include weekly paediatric case presentations, consultant–led lecture series and curriculum (study designs) journal club. The case presentation session is an opportunity to review cases with valuable learning points. In addition all NCHDs are educated in neonatal resuscitation. Monthly perinatal morbidity and mortality meetings are conducted in conjunction with obstetrics/gynaecology and pathology departments. NCHDs are encouraged to become involved in research projects during their period of attachment as well as to present at national/ international meetings. A specialised paediatric handbook (available electronically) is published by the academic paediatric department for use by paediatric NCHDs to assist with the learning experience.

Academic Staff

Chair: Professor NM Allen
Senior Lecturer: Dr E Moylett
Lecturer: Dr R Geoghegan
Tutor: Dr. Naveen Malik
Administration: Ms D Monroe

School of Medicine, Academy Lecturers

Dr Mona O'Boyle (Letterkenny)
Dr J Gleeson (Sligo)
Dr Shyam Pathak (Castlebar)
Dr Lucy Hurley (Portiuncula)

Clinical Lecturers: Galway University Hospital Galway

Dr D O'Donovan
Dr O Flanagan
Dr M Herzig
Dr E Ryan
Dr A Lyons

Mayo University Hospital, Honorary Clinical Lecturers

Dr (Honorary Prof) M O'Neill
Dr J Letshwiti
Dr H Stokes
Dr AT Elabbas

Portiuncula University Hospital, Honorary Clinical Lecturers

Dr P Cahill
Dr F Neenan
Dr R Cooke
Dr P Curran
Dr J Nelson

Sligo University Hospital, Honorary Clinical Lecturers

Dr H Greaney
Dr R Tummaluru
Dr D Gallagher
Dr G Harrison

Letterkenny University, Honorary Clinical Lecturers

Dr M Thomas
Dr B Power
Dr M Azam

Undergraduate Report

The external examiner for the paediatric examination in 2017 was Professor Jürgen Schwarze, Edward Clark Chair of Child Life and Health, Consultant Paediatrician and Immunologist, University of Edinburgh

Final Undergraduate Paediatric Results
A total of 189 students completed the 4MB3 course in 2017:

Result	%	(number of students)
First Class (H1)	4.21%	(8)
Second Class (H2)	42.1%	(80)
Pass	43.15%	(82)
Fails	10%	(19)

National Henry Hutchinson's intervarsity awards

Sabrina Sheridan 1st prize in Paediatrics (NUIG)

Postgraduate
MD Student: Dr Zakaria Barsoum: Thesis: Rotavirus gastroenteritis: Regional prevalent serotypes correlation with disease severity, nosocomial acquisition, co-infection with other viruses and the impact of vaccine in pre and post vaccination period in one region in Ireland. Supervisor: Dr. Edina Moylett.

Other Projects
Epilepsy and Human Stem Cell Models. PI, Nicholas Allen. Grant award - Child Health Foundation Temple Street.

RESEARCH/AUDIT
Peer Review Publications:
- Masnada S, Hedrich UBS, Gardella E, Schubert J, Kaiwar C, Klee EW, Lanpher BC, Gavrilova RH, Synofzik M, Bast T, Gorman K, King MD, Allen NM, et al. Clinical spectrum and genotype-phenotype associations of KCNA2-related encephalopathies. Brain. 2017;140(9):2337-2354.
- Forman EB, Gorman KM, Conroy J, Arthur N, Grant C, Ennis S, Allen NM, Lynch SA, King MD. Cost of exome sequencing in epileptic encephalopathy: is it 'worth it'? Arch Dis Child. 2017 Sep 22.
- Lumsden DE, King MD, Allen NM. Status dystonicus in childhood. Curr Opin Pediatr. 2017 Dec;29(6):674-682.
- Gorman KM, Forman E, Conroy J, Allen NM, Shahwan A, Lynch SA, Ennis S, King MD. Novel SMC1A variant and epilepsy of infancy with migrating focal seizures: Expansion of the phenotype. Epilepsia. 2017 Jul;58(7):1301-1302.
- McGovern M, Flanagan O, Lynch B, Lynch SA, Allen NM. Novel COL4A2 variant in a large pedigree: Consequences and dilemmas. Clin Genet. 2017 Oct;92(4):447-448.
- Ryan G, Cleary A, Keady D, Allen NM, Moylett E. 2015-2016 Influenza Season in an Irish Regional Paediatric Unit: Importance of Influenza Vaccination Highlighted. Ir Med J. 2017 Aug 8;110(7):609.
- Charlesworth JM, Power B, Moylett E. Safety netting versus overtreatment in paediatrics: viral infection or incomplete Kawasaki disease? BMJ Case Rep. 2017 Nov 8;2017. pii: bcr-2017-222323.
- Russell RA, Moylett E. In the setting of paediatric osteomyelitis do not be afraid to CAST an eye. BMJ Case Rep. 2017 Oct 4;2017. pii: bcr-2017-219683.
- Killeen H, Shiel A, Law M, O'Donovan D. The effect of personal factors and performance skills on the participation of young children with and without a history of preterm birth. Physical and Occupational Therapy. Physical & Occupational Therapy in Pediatrics. Dec 2017.
- McGovern M, Kernan R, O'Neill MB. Parental decisions regarding pre-hospital therapy and costing of the Emergency Department visit. IMJ 2017; 110(6):513-514.
- O'Neill MB, Sarani ZA, Nicholson AJ, Elbardy M, Deasy AM. A survey of clinical uncertainty from the Paediatric Basic Specialist Trainee perspective. IMJ 2017; 110(6).
- Ó Walsh, M Wynne, M O' Donnell, M C O'Hara, R Geoghegan. The Perceptions of Patients, their Parents and Healthcare Providers on the Transition of Young Adults with Type 1 Diabetes to Adult Services in the West of Ireland. Ir Med J July/ August 2018; 111;7; (787).

Research Audit Presentations/ Abstracts
Audit is a key component of clinical and research activity, some of which is presented to the hospital group, nationally or published in journals.

- A Cleary, G Ryan, D Keady, NM Allen, E Moylett. Paediatric Influenza Activity 2015-2016 Season: Clinical Presentation, Complications and Burden of Disease in A Hospital Based Setting. Irish Paediatric Association, Sept 2017.
- S. Culleton, A. M. Egan, B. Buckley, T. Tarmey, D. O'Donovan, P. Mayne, D. Sheppard. The effect of iodinated contrast administered during a CT pulmonary angiogram during pregnancy on neonatal thyroid function. Abstract & Presentation at European Society of Radiology 2017.
- Joyce JG, O'Dowd M, Ryan RS, Stokes HR, O'Neill MB. Left Frontal lobe abscess secondary to paranasal sinusitis .A case report. 8th Europaediatrics Congress. Bucharest, Romania. June 2017.
- NiChathasaigh C, Gorman I, Stokes HR, O'Neill MB. Lessons learnt from emergency department attendances of children in a general hospital. 8th Europaediatrics Congress. Bucharest, Romania. June 2017.
- Nabialek T, Burlacu M, Hussain M, O'Neill MB. The Quality of Standards utilised in published paediatric audits between 2007-2015. 8th Europaediatrics Congress. Bucharest, Romania. June 2017.

Other presentations/Abstracts (e.g. Case reports)
A Cleary, NM Allen. More than just "a touch of the flu": acute necrotizing encephalopathy of childhood. Poster presentation. Irish paediatric association, Sept 2017.

INVITED PRESENTATIONS
- Childhood Epilepsy: Overview and Update. Hospital Grand Rounds, 9.6.2017, Clinical Science Institute, GUH. Nicholas Allen.
- Seizures & Epilepsy: Overview of the new 2017 ILAE Classifications. Royal College of Physicians of Ireland, National Spring Study Day, RCPI, Dublin, 12.5.2017. Nicholas Allen.

Gynaecological Surgery Report 2017

Professor John J Morrison and Ms Shaijy Avarachan

The surgical procedures performed during 2017 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.

	2014	2015	2016	2017
LSCS	924	853	948	942
Laparoscopy	131	109	147	87
ERPC	238	184	140	173
Ectopic pregnancy	28	17	11	19
Hysteroscopy	551	602	585	649
Tubal ligation	45	25	16	6
Laparotomy	40	27	37	10
Wertheim's /Radical hysterectomy	2	2	9	2
Omentectomy	21	0	12	4
Abdominal hysterectomy +/- BSO	90	41	62	37
Myomectomy	7	5	19	15
TAH,BSO&PLND				20
TAH, BSO & omentectomy & appendicetomy +/- PLND				19
Vaginal hysterectomy	2	7	4	6
Vaginal hysterectomy & PFR	20	8	11	13
Pelvic floor repair	39	34	32	35
TCRE	18	9	10	25
Endometrial ablation	28	30	27	41
Cystoscopy	46	26	21	21
TVT	16	26	25	20
Sacrocolpopexy	0	0	4	1
Macroplastique collagen	0	0	4	2
Removal of TVT mesh	0	0	0	3
Vulvectomy	5	1	5	2
LLETZ	16	10	5	3
Bartholins	12	10	9	22
Vulval Biopsy	31	17	15	38
Laparoscopic Hysterectomy+/-BSO	19	30	35	29
LaparoscopicH /BSO/PLND				1
Lap Radical Hysterectomy / BSO/PLND				1

	2014	2015	2016	2017
Laparoscopic sacrocolpoplexy				2
Lap Hysterectomy & sacrocolpoplexy				4
Lap unilateral salpingo-oophorectomy				7
Laparoscopic cystectomy				8
3rd Degree tear repair	42	39	36	37
Lap dye hysteroscopy	132	97	117	120
Mirena insertion	131	148	96	165
Examination under anaesthetic	32	20	24	23
Cervical cerclage/suture	19	7	20	11
Removal of cervical suture				1
Manual removal of placenta	34	23	15	23
Instrumental /vacuum extraction delivery	66	39	35	92
Fenton's procedure	2	0	4	5
Caesarean hysterectomy	0	1	2	2
Ovarian debulking	28	12	20	34
Laparoscopic BSO			34	24
Excision of skin tag				6
Removal of drain				1
PPH Bakri balloon insertion				1
Removal of Mirena coil				10
Cervical smear under GA				1
Colpoclesis				6
Labiaplasth				2
Excision of labial cyst				1
Major	**1437**	**1376**	**1470**	**1349**
Minor	**1133**	**992**	**1047**	**1284**
Total	**2570**	**2368**	**2517**	**2633**
Elective Cases	**1873**	**1589**	**1803**	**1804**
Emergency Cases	**697**	**779**	**714**	**829**
Total	**2570**	**2368**	**2517**	**2633**

Urogynaecology Report

Dr Susmita Sarma

The urogynaecological service aims to continue to expand and provide a service to the women in the region. We continue to be 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.

Urodynamics:

In 2017, 78 appointments were sent and 67 urodynamic investigations were performed. The bulk of the referrals were from UHG with the remainder from Sligo General Hospital. The assistance of Mary Connolly HCA is greatly appreciated in the urodynamic clinic. Unfortunately due to sick leave, the urodynamic clinic was suspended from the end of October.

Total Urodynamic Investigations: 67

SOURCE OF REFERRALS:	
UHG clinic and consultants	48 (71.6%)
Sligo University Hospital	19 (28.4%)

DIAGNOSIS:	
Stress Urinary Incontinence:	26 (38.8%)
Mixed Urinary Incontinence:	7 (10.4%)
Normal	14 (20.8%)
Detrusor overactivity	14 (20.8%)
Voiding problems:	6 (8.9%)

SURGERY:	
Tension free vaginal tapes	18
Periurethral Macroplastique	2
Cystoscopy	30
Sacrospinous fixation	5
Colpocleisis	6
Laparoscopic sacrocolpopexy	6

Retropubic tapes are inserted for stress incontinence. Sodium hyaluronate continues to be used for painful bladder symptoms.

Colposcopy Clinic Report

Dr Michael O'Leary and Ms Maura Molloy

Team

Administration: Ger Dooley, Ann Keane and Caitriona O'Toole Curley.
Consultant: Dr Michael O'Leary (Lead Colposcopist) and Dr Katharine Astbury.
Nursing Midwifery: Pat Rogers (AMP), Maura Molloy (AMP), Assumpta Casserly SM, Marguerite Bourke SM.
Healthcare assistant: Karen McGinley

Activity

There were 3928 women attended Galway Colposcopy clinic in 2017, of these 1289 were first visits and 2639 were review appointments. A total of 1268 referrals to Colposcopy were received 239 with high grade smears, 445 with low grade smears and 584 had clinical indication for referral. Non attendance was 4 % amongst first visits and 9% for follow up appointments, the target for DNA set by Cervicalcheck is <10%. Reminders were issued by text message one week in advance of appointments. Referrals were received from counties Galway, Mayo, Roscommon, Clare, Westmeath, Offaly and Longford. Cervical screening was provided at the request of Neurology department for a small number of women prior to Lemtrada therapy for multiple sclerosis.

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 quarterly using gotomeeting software. Complex cases including glandular abnormalities, persistent disease and discrepancies between laboratory and clinical impression were discussed.

There were 374 LLETZ treatments performed, 96% of LLETZ treatments had CIN 1 or > (table 1). Cervicalcheck standards were met (>80% of excisions should have CIN on histology).

Cancer

There were 24 cases of cervical cancer seen at the colposcopy clinic in 2017. The ages of women presenting with cervical cancer ranged from 26 to 95 years, 2 were under 30, 14 were between 30 and 49 years and 8 were over 50 years (3 over 80 years). Of the cervix cancers diagnosed 13 were squamous cell carcinoma, 9 were adenocarcinoma, 1 was adenosquamous carcinoma and 1 small cell neuroendocrine carcinoma. Six of the cervix cancers were at stage 1A and their treatments included hysterectomy (4) and repeat LLETZ (2). Treatments for more advanced cervical cancer included, Radical hysterectomy (3), and 12 women were referred for chemo/radiotherapy.

Women seen with other types of cancer included 2 endometrial adenocarcinoma recurrences at vault and 2 squamous cell vulval cancers.

Service

Midwifery staff from Galway Colposcopy clinic continued a smear clinic at Portiuncula Hospital Ballinasloe on two Friday afternoons per month, 267 women attended in 2017. The outreach clinic saves women from the midland counties having to travel to and park at UHG for follow up smears.

Training

Ms Assumpta Casserly SM completed her Colposcopy training and having passed her examination was accredited as a colposcopist in 2017 by the British Society for Colposcopy and Cervical Pathology (BSCCP).

Equipment

Upgrading of equipment in 2017 included the installation of 3 new Mediscan imaging units and 3 new Atmos colposcopes. A Wisap cold coagulation device was purchased for ablative treatment of persistent CIN1 as an alternative to LLETZ treatment.

Reporting

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

Patient satisfaction survey

All women who attended Galway Colposcopy service (including outreach smear clinic at Portiuncula Hospital, Ballinasloe) in March and April 2017 were invited by Cervicalcheck to take part in a patient satisfaction survey. In total 255 women completed the survey; 54 of whom were visiting for the first time. Care received at the clinic was rated as excellent by 82% and as good by 16% and overall 96% of women said they'd recommend this clinic to a relative or friend. The survey was very positive with women showing appreciation for the screening programme; *Very good to have a system for this I appreciate it and for the clinic; Very grateful to have such a clinic available*. One of the women who responded to the survey commented, *This sort of medical procedure is not pleasant in any way however the staff and surroundings make up for it and make it as painless an experience as possible.*

Summary

Our colposcopy team both clinical and clerical delivered quality assured service to women and an overall high satisfaction rating was given by women attending the service. Numbers of women with high grade precancer seen in our Colposcopy clinic remain high and we continue to work to reduce the incidence of cervical cancer in the West of Ireland and midlands.

Histology Result	Diag. Biopsy (punch)	Excision	Total Biopies
Cervical Cancer	16	8	24
Adenocarcinoma in situ / CGIN	1	11	12
CIN3	142	178	320
CIN2	161	77	238
CIN1	546	82	637
CIN Uncertain Grade	2	0	2
VAIN3	1	0	1
VAIN2	7	0	7
VAIN1	18	0	18
VIN3	5	0	5
VIN2	2	0	2
VIN1	2	0	2
HPV / cervicitis only	251	6	257
No CIN / No HPV (normal)	209	12	221
Inadequate	11	0	11
Vaginal Cancer	0	0	0
Total	**1374**	**374**	**1748**

Obstetrics & Gynaecology Academic Report

Professor John J Morrison

Staff

- Professor John J Morrison
  Head of Department / Consultant
- Dr Geraldine Gaffney
  Senior Lecturer / Consultant
- Dr Michael O'Leary
  Clinical Lecturer / Consultant
- Dr Susmita Sarma, Consultant
- Dr Katharine Astbury, Consultant
- Dr Tom O'Gorman, Consultant
- Dr Nikhil Purandare, Consultant
- Dr Una Conway, Consultant
- Dr Mark Dempsey, Consultant

Clinical Lecturers/Tutors

- Dr Siobhan Carruthers (Galway)
- Dr Roger Derham (Galway)
- Dr Gillian Ryan (Galway)
- Dr Mehret Berne (Sligo)
- Dr Stephen Sludds (Letterkenny)
- Dr Fiona Kyne (Castlebar)
- Dr Evelyn Burke (Ballinasloe)

Clinical Teachers in Obstetrics and Gynaecology, affiliated hospitals

- Dr Edward Aboud, Letterkenny General Hospital, Co. Donegal
- Dr Ulrich Bartels, Mayo General Hospital, Castlebar, Co. Mayo
- Dr Marie Christine De Tavernier Portiuncula Hospital, Ballinasloe, Co. Galway
- Dr Hilary Ikele, Mayo General Hospital, Castlebar, Co. Mayo
- Dr Murshid Ismail, Sligo General Hospital, Sligo
- Dr Naveed Khawaja, Portiuncula Hospital, Ballinasloe, Co. Galway
- Dr Chris King, Letterkenny General Hospital, Co. Donegal
- Dr Heather Langan, Sligo General Hospital, Sligo
- Dr Murtada Mohammed, Mayo General Hospital, Castlebar, Co. Mayo
- Dr Maebh Ni Bhuinneain, Mayo General Hospital, Castlebar, Co. Mayo
- Dr Vimla Sharma, Sligo General Hospital, Sligo
- Dr Matt McKernan, Letterkenny General Hospital, Co. Donegal

External Examiner

The external examiner for the academic Department of Obstetrics & Gynaecology in 2017 was Professor Sean Daly, Trinity College Dublin.

Visiting Professor

Denis Crankshaw, Professor Emeritus, McMaster University, Hamilton, Ontario, Canada

Academic Administrator

Ms Breda Kelleher

Overview

The remit of the Academic Department of Obstetrics & Gynaecology includes undergraduate education, postgraduate education, research and the advance of clinical activity within the department. The undergraduate medical student teaching programme for Obstetrics & Gynaecology is carried out within the Department of Obstetrics & Gynaecology at University Hospital Galway and in the following affiliated hospital academies: Mayo General Hospital, Castlebar, Portiuncula Hospital, Ballinasloe, Sligo General Hospital and Letterkenny Hospital, Donegal. The undergraduate student numbers have increased significantly in recent years. This has resulted in the appointment of dedicated tutors in the affiliated academy sites.

There are a host of postgraduate medical activities ongoing within the Department of Obstetrics and Gynaecology and at GUH. An educational meeting is held in the department every Monday from 1:00pm to 2:00pm. This meeting is available for midwifery staff, postgraduate medical staff, and undergraduate medical students. On the first Monday of every month the subject of the meeting is caesarean section audit. The emergency caesarean sections for the previous month are considered and discussed. On the third Monday of the month, perinatal morbidity and mortality cases for the previous month are discussed. This is held in conjunction with the paediatric and pathology staff. On the fourth Monday of the month a research meeting is held for all staff. This research meeting is presented by internal members of staff and frequently external speakers are invited to present their research from other units. Every Wednesday morning at 8.00am, a case presentation/ literature review meeting is held for the Consultants, SpRs, Registrars and SHO's.

Formal one-day education meetings are held every year. The first of these is held in March, and involves a postgraduate educational weekend for all of the teachers in Obstetrics and Gynaecology. The speakers for the 2017 meetings are listed in the external speakers section below. Finally, the staff members in the Academic Department of Obstetrics & Gynaecology are very grateful to all the midwifery and medical staff who assist in recruitment of patients for ongoing research projects.

Publications

Crankshaw DJ, O'Brien YM, Crosby DA, Morrison JJ. Maternal body mass index and spontaneous contractility of human myometrium in pregnancy. J Perinatol. 2017 May; 37(5):492-497. doi: 10.1038/jp.2016.271. Epub 2017 Jan 26. PMID: 28125101

Crankshaw DJ, Crosby DA, Morrison JJ. Effects of the KIR7.1 Blocker VU590 on Spontaneous and Agonist-Induced Contractions of Human Pregnant Myometrium. Reprod Sci. 2017 Oct; 24(10):1402-1409. doi: 10.1177/1933719116687657. Epub 2017 Jan 10. PMID: 28071357

Crosby DA, Ahmed S, Razley A, Morrison JJ. Obstetric and neonatal characteristics of pregnancy and delivery for infant birthweight ≥5.0 kg. J Matern Fetal Neonatal Med. 2017 Dec; 30(24):2961-2965. doi: 10.1080/14767058.2016.1269318. Epub 2017 Jan 4. PMID: 27923280

Levine TA, Grunau RE, Segurado R, Daly S, Geary MP, Kennelly MM, O'Donoghue K, Hunter A, Morrison JJ, Burke G, Dicker P, Tully EC, Malone FD, Alderdice FA, McAuliffe FM. Pregnancy-specific stress, fetoplacental haemodynamics, and neonatal outcomes in women with small for gestational age pregnancies: a secondary analysis of the multicentre Prospective Observational Trial to Optimise Paediatric Health in Intrauterine Growth Restriction. BMJ Open. 2017 Jun 21; 7(6):e015326. doi: 10.1136 bmjopen-2016-015326. PMID: 28637734

Burke N, Burke G, Breathnach F, McAuliffe F, Morrison JJ, Turner M, Dornan S, Higgins JR, Cotter A, Geary M, McParland P, Daly S, Cody F, Dicker P, Tully E, Malone FD; Perinatal Ireland Research Consortium. Prediction of cesarean delivery in the term nulliparous woman: results from the prospective, multicenter Genesis study. Am J Obstet Gynecol. 2017 Jun; 216(6):598.e1-598.e11. doi: 10.1016/j.ajog.2017.02.017. Epub 2017 Feb 16. PMID: 28213060

Hehir MP, Breathnach FM, Hogan JL, Mcauliffe FM, Geary MP, Daly S, Higgins J, Hunter A, Morrison JJ, Burke G, Mahony R, Dicker P, Tully E, Malone FD. Prenatal prediction of significant intertwin birthweight discordance using standard second and third trimester sonographic parameters.
Acta Obstet Gynecol Scand. 2017 Apr;96(4):472-478. doi: 10.1111/aogs.13092. Epub 2017 Feb 13. PMID: 28052317

Monteith C, Flood K, Mullers S, Unterscheider J, Breathnach F, Daly S, Geary MP, Kennelly MM, McAuliffe FM, O'Donoghue K, Hunter A, Morrison JJ, Burke G, Dicker P, Tully EC, Malone FD. Evaluation of normalization of cerebro-placental ratio as a potential predictor for adverse outcome in SGA fetuses.
Am J Obstet Gynecol. 2017 Mar; 216(3):285.e1-285.e6. doi: 10.1016/j.ajog.2016.11.1008. Epub 2016 Nov 11. PMID: 27840142

Cecelia Mulcahy, Fionnuala Mone, Peter McParland, Fiona Cody, Fionnuala Breathnach, John J. Morrison, John Higgins, Sean Daly. Performance of routine first trimester sonographic evaluation of fetal anatomy: results of the multicentre test RCT. American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S83–S84

Cecelia Mulcahy, Fionnuala Mone, Peter McParland, Fionnuala Breathnach, Fiona Cody, John J. Morrison, John Higgins, Sean Daly. The impact of aspirin on 3D placental volumes and vascular flow indices in the first and second trimesters of pregnancy and correlation with uterine artery doppler: results of the test multicentre RCT. American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S84

Khadijah I. Ismail, Naomi Burke, Gerard Burke, Fionnuala Breathnach, Fionnuala McAuliffe, John J. Morrison, Michael Turner, Samina Dornan. Can we predict maternal and neonatal morbidity in nulliparous women who achieve a vaginal delivery? American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S92

Ann McHugh, Naomi Burke, Gerard Burke, Fionnuala M. Breathnach, Fionnuala M. McAuliffe, John J. Morrison, Michael J. Turner, Samina Dornan. The effect of excessive gestational weight gain on mode of delivery and intrapartum complications. American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S331–S332

James F. O'Mahony, Fionnuala Mone, Ella Tyrrell, Cecilia Mulcahy, Peter McParland, Fionnuala Breathnach, John J. Morrison, John Higgins. The cost effectiveness of a policy of universal aspirin versus aspirin indicated by a positive pre-eclampsia screening test.
American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S483

Niamh C. Murphy, Naomi Burke, Gerard Burke, Fionnuala M. Breathnach, Fionnuala M. McAuliffe, John J. Morrison, Michael J. Turner, Samina Dornan.
Can maternal head circumference contribute to the prenatal prediction of successful spontaneous vaginal delivery-results from the prospective multicenter GENESIS study?
American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S554

Daniel M. Galvin, Naomi Burke, Gerard Burke, Fionnuala Breathnach, Fionnuala McAuliffe, John J. Morrison, Michael Turner, Samina Dornan. Accuracy of prenatal detection of macrosomia >4,000g and outcomes in the absence of intervention: results of the prospective multicenter genesis study. American Journal of Obstetrics & Gynecology, Vol. 216, Issue 1, S68

Khalid A, Oduola O, Gaffney G. Maternal and perinatal outcome in low-risk singleton pregnancies with thin meconium at term.
BMFS, Amsterdam. April 2017

Raftery A, Gaffney G, Devane D. The Effect of the Antihypertensive Labetalol on Cardiotocographic Traces in Pregnancy JMSG, Galway, April 2017

Houston P, O Doherty K, Nicholson SM, Gaffney G. A survey of uptake and the factors which influence the uptake of the seasonal influenza vaccine in pregnancy. JOGS Kilkenny December 2017

Postgraduate Study Day Lectures

January 2017
Title: Thrombocalc: personalized postpartum venous thromboembolism risk assessment in a high-throughput environment
Speaker: Mr Brian Cleary, Chief Pharmacist, Rotunda Hospital, Dublin 1

February 2017
Title: Obstetric Care in Women with Congenital Heart Disease
Speakers: Dr Jennifer Donnelly, Consultant Obstetrician & Gynaecologist, Rotunda Hospital, Dublin 1

March 2017
Title: Why we need to talk to our patients about sex and how
Speakers: Dr Mary Rogan, General Practititioner, Annaghadown Medical Centre, Co Galway

May 2017
Title: Challenging cases in Adolescent Gynaecology
Speakers: Dr Venita Broderick, Consultant Obstetrician & Gynaecologist, National Maternity Hospital, Holles Street, Dublin 2

September 2017
Title: BioInnovate-Needs Led Innovation in Obstetrics and Gynaecology
Speakers: Mr Brendan Staunton and Mr Barry McCann, BioInnovate Ireland, NUI Galway

November 2017
Title: Targeted Anti-D administration: An Irish perspective
Speakers: Dr Ciara McCormick, Irish Specialist Registrar Training Scheme, Portiuncula Hospital, Ballinasloe, Co Galway

20th Annual Western Obstetrics and Gynaecology Society Postgraduate Meeting

March 2017
Theme: Education, Research and Clinical Practice

9.30 Introduction
Dr Geraldine Gaffney, NUI Galway
10.00 Advances in Gynaecology
Dr Donal O Brien, Consultant Obstetrician & Gynaecologist, National Maternity Hospital Dublin
11.00 Fetal Cardiology - delivering the service. Dr Caoimhe Lynch, Consultant Obstetrician, Coombe Women's Hospital Dublin
12.00 Maternity Service Audits - messages behind the numbers? Professor Richard Greene, Professor of Clinical Obstetrics, Cork University Maternity Hospital
13.00 Surgery in gynaecological cancer - where are we going? Dr Ruardhi Mc Veigh

Parent Education Report

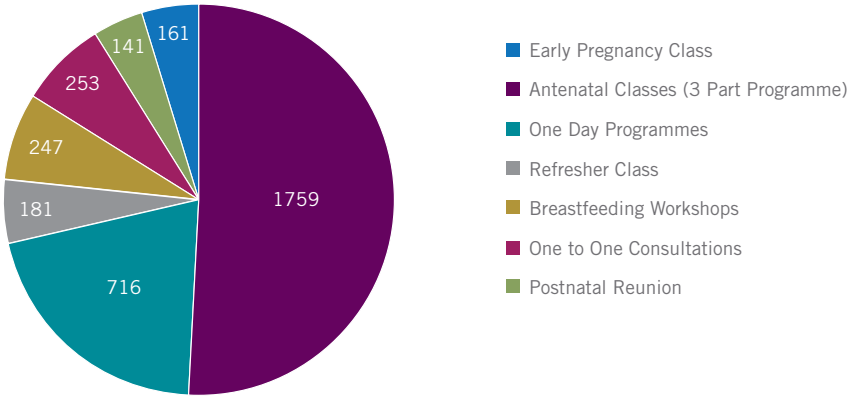
Ms Carmel Connolly

The Parent Education Department provide multidisciplinary education programmes to expectant parents and their families. 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 women and their partners to make informed choices based on the best evidence available.

2017 was a busy year as the demand for Antenatal Classes continues to grow. Waiting lists need careful management. One of the trends noted was that many partners are working abroad, this put extra pressure on the demand for One day Programmes to facilitate their attendance.24 one day programmes were facilitated in 2017. Another trend noted was the demand for Antenatal Breastfeeding workshops.

One to one support in the area of perinatal mental health continues to increase every year. Many of these women need repeat visits due to the complexity of their illness .This department works very closely with the social work Department in the management of these highly sensitive cases. Two Postnatal classes are facilitated weekly and postnatal re-union courses are held monthly. The Department also manages an on-line booking system www.uhgmaternity.com with the aid of 5hrs secretarial support per week.

Parent Education Attendees for 2017



2017 Actions to meet the population needs of the Maternity Strategy:

Actions	Progress
Train Midwife Educators in Hypnobirthing methods	**Status:** Achieved One midwife educated to Diploma level in Hypnobirthing methods
To increase in number of breastfeeding workshops	**Status:** Achieved
To improve how we communicate information to our expectant mothers by using LEAN tools to design a multidisciplinary web-based Information Portal which will be accessible 24/7 and available in different languages.	'An Beatha Nua', a new project team was established to review the current content management system which was scoped and analysed and a new application was designed. This will streamline the information and improve safety outcomes for the women. **Status:** Work in progress with proposed launch of Maternity Website in early 2018.
To reduce Parent Education waiting lists	**Status:** Achieved by providing Parent Information to >95% of women via one day Education Programmes

Promotion of Breastfeeding

- Promotion and support of Breastfeeding is a key component of Parent Education
- National Breastfeeding Week was celebrated with an Information Stand and additional Breastfeeding workshops
- Breastfeeding quizzes for staff and expectant mothers were held with sponsored prizes from the local businesses

Achievements

- The CMM11 in the Parent Education Department received a National HR Award
- Parent Education participated in the Breastfeeding OSCEs in NUI Galway
- Parent Education provided information for WhatsUpMum PowerPoint presentation which are shown in the Maternity Department
- Parent Education provided funding towards three new TV screens for educational use.
- Participated in a Focus Group regarding Patient Experience post caesarean section
- Assisted with the organisation of events for International Midwives Day
- Information regarding the Prevention of Infant Falls was added to all the Antenatal Education classes

Challenges

- Increased demand for all Parent Education courses resulting in longer waiting lists approx. 50 - 60 women monthly
- Capacity issues arising from the current venue size
- Recourses are being challenged to meet the high demand for these services

Antenatal Education Programmes 2017

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
Early Pregnancy Class	7	15	16	17	14	12	9	15	15	11	14	16	**161**
Antenatal Classes (3 part Programme)	212	162	132	128	154	126	137	147	138	150	124	149	**1759**
One Day Programmes	56	55	79	50	45	51	62	65	57	59	113	24	**716**
Refresher Class	9	18	18	14	16	15	12	15	16	18	14	16	**181**
Breastfeeding Workshops	43	12	28	47	41	18	5	10	10	10	4	19	**247**
One to One Consultations	22	20	21	12	22	23	29	25	15	17	30	17	**253**
Postnatal Reunion	12	13	14	12	10	12	14	12	10	12	10	10	**141**
Tours													**2170**

Activity	Number of Classes
Early Pregnancy Class	12
Antenatal Classes (3 part Programme)	36
One Day Programmes	26
Refresher Class	12
Breastfeeding Workshops	21
One to One Consultations	253
Postnatal Class (Ward Based)	104
Postnatal Reunion Class (Mum & Baby)	12
Tours	2170

Community Midwives

Ms Jennifer Duggan

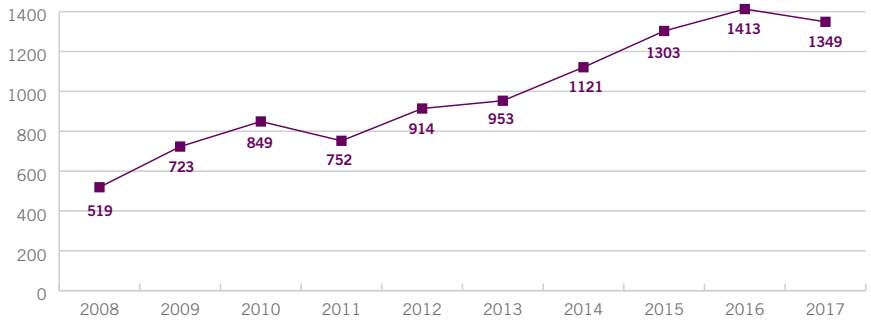
The Community Midwives facilitate midwife-led antenatal clinics in University Hospital Galway (UHG) and at 5 outreach clinics across Galway city and county. These clinics are located in Tuam, Oughterard, Doughiska, Athenry and Gort. The midwives also provide an Early Transfer Home (ETH) service for new mums and babies across Galway city, Claregalway and Oranmore.

The Community Midwives facilitate care and support for normal and low risk pregnancies, new mothers and babies and their families. Women availing of the Community Midwives service experience high levels of satisfaction with the care received. The Community Midwives pride themselves on empowering women, promoting normal birth and providing continuity of care convenient to the woman. The Community Midwives work in collaboration with the multidisciplinary team to ensure the woman receives the appropriate care should any complications arise.

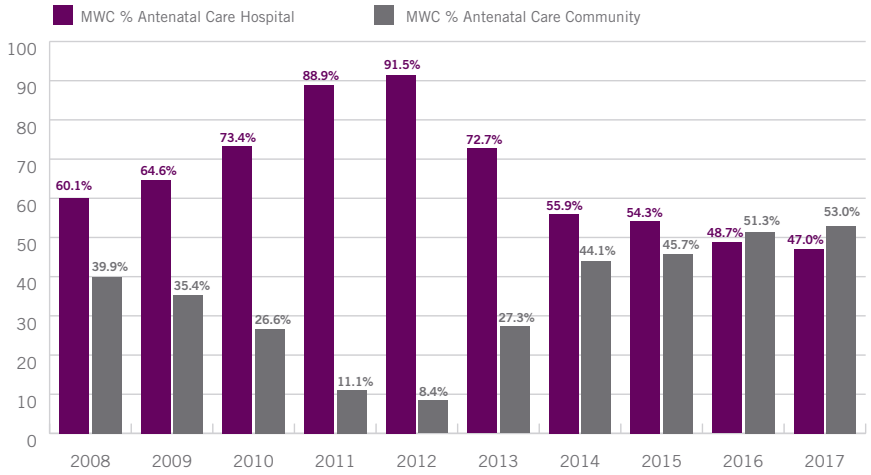
In 2017, the Community Midwives supported 1349 women through their pregnancy. This decrease (n=64) in attendees from 2016, is reflected in the reduction in the birth rate in UHG. However, the percentage of women attending the midwives clinic did increase by 0.2%.

Similarly, the ETH service also saw a reduction (n=46) in the women availing of the postnatal midwifery service. This decline is most likely affected by the rise in caesarean section rate and increasing complexity of pregnancy and birth.

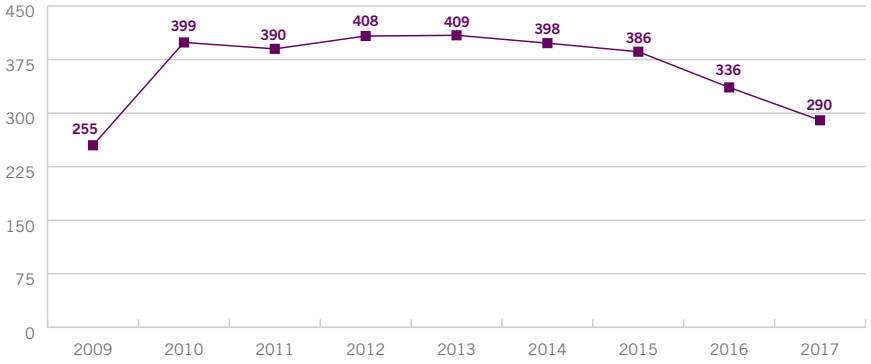
No. Women who attended Midwives Clinic



Midwives Clinic - Location Attended



No. Women Discharged with ETH



Postnatal ward (St. Angelas)

Ms Heather Helen

St Angela's ward consists of 30 maternal and infant beds. 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 including high risk patients, promoting and supporting breast feeding providing parenting support, education and teaching.

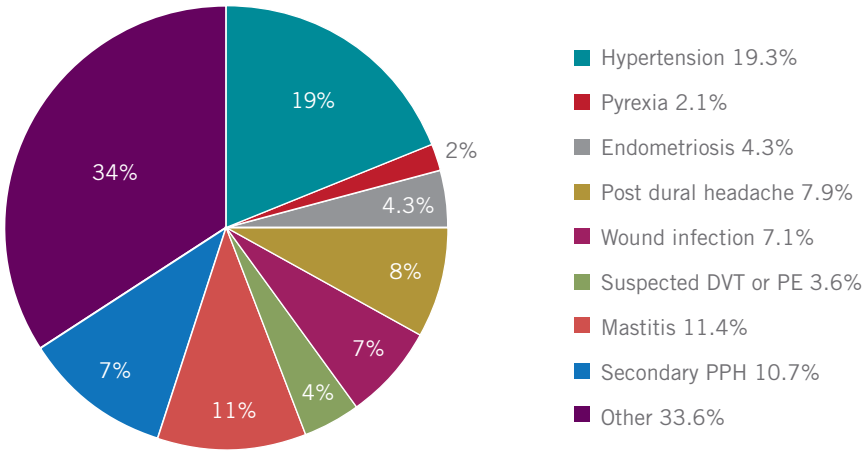
- In 2017 there were 2854 births to 2798 women and of these 33.8 % were delivered by caesarean section. The increasing caesarean rate has had an impact on the workload of the midwives as these patients are of a higher dependency and their stay in hospital is considerably longer.
- A combination of high 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.
- An epidural rate of 47.2 % adds to the high dependency workload post delivery
- In 2017 two midwives on the postnatal ward successfully completed their lactation consultant exams. The availability of extra lactation consultants on the ward is evident with 70% of women initiating breast feeding. In 2018 it is planned that the Lactation consultants will provide a five day postnatal Breastfeeding class on the ward.
- There is a focus on reducing our supplementation rates which stands at 22.6% in 2017 and this is being audited on a monthly basis.
- The development and implementation of an infant safety guideline is in progress which promotes safe sleep and focuses on infant safety within the unit. Posters are displayed at every beside visually outlining safe positioning of infant.
- Postnatal discharge class are held every Monday, Wednesday and Friday. In 2018 it is planned to extend these classes to 5 days a week. Currently there are breastfeeding and physiotherapy classes three days per week.
- The visiting policy is currently under review and a needs assessment was carried out of all our new mothers in 2017 with the findings to be released in 2018.
- Audits include: Monthly metrics. Breastfeeding and supplementation rates. Postnatal readmission rates. Fortnightly iv cannualation and catheter care audits. Three monthly HIQA audits.
- 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. The midwives on St Angela's Ward provide non-invasive testing for hyperbilirubinaemia in newborn infants Transcutaneous Bilirubin Meter (TCB) therefore reducing the number of infants who require Serum Billirubin Tests. As part of this initiative the staff of St Angela's and the Paediatric Out Patient Department developed a pathway for infants requiring follow-up investigations once discharged.
- All infants with CDH are referred for an ultrasound within 2 weeks as per national guidelines and are seen at a new Orthopaedic /Physiotherapy clinic for follow up.
- 63% of the Neonatal Newborn Bloodspot Screening (NNBS) are carried out on babies in the community by the PHN and The Early Transfer Home Team with the remaining 37% carried out prior to discharge. 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. Over the Christmas period all infants return to St Angela's for NNBS in 2017 22.5% of all births returned for screening.

Discharge planning

- All discharges to the PHN are forwarded electronically to PHN Liaison office and a hard copy is posted out to the G.P. The midwives on St Angela's ward and midwifery management work closely with health care professionals in the community and the multidisciplinary network.
- All OPD appointments including referrals for counselling de-briefing post delivery are arranged from the ward.
- There was a total of 140 postnatal readmissions in 2017, 19.3% of all re-admissions were for hypertension. 7.9% were post dural headaches and 7.1% were postnatal wound infections. 11.4% mastitis and 10.7% secondary PPH, the other consisted of UTI, Flu, Gall Bladder problem, Chest pain.

See below graph

Postnatal Re-Admissions 2017



Breastfeeding in UHG

Ms Claire Cellarius

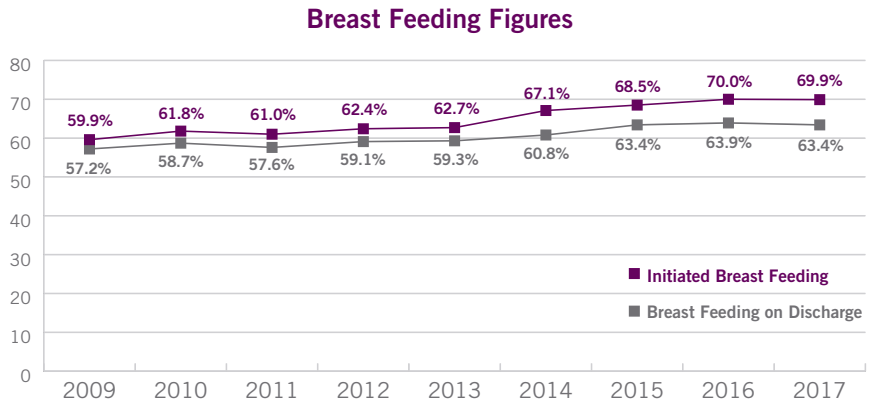
The publication of the HSE Breastfeeding Action Plan 2016-2021 is an important step to improve our national rates which currently lag behind other European countries at 56%. This 5 year strategic action plan is the current government policy on promoting, supporting and protecting breastfeeding in Ireland. Priority areas are: improving breastfeeding supports, enabling more mothers to breastfeed and enhancing health outcomes for children and mothers.

Breastfeeding provides natural immunity and protects baby from illness and infection. The evidence in relation to the benefits of breastfeeding is now stronger than ever and was highlighted in the recent publication of the Lancet series on breastfeeding (Victoria et al, Lancet, 2016)

Breastfeeding for any length of time is worthwhile and while rates in UHG are gradually improving we hope to support more mothers to breastfeed and to breastfeed for longer. In 2017 our breastfeeding initiation rate was 70% and 63% breastfeeding on discharge.

Studies show that these initial rates decline steeply within the first few weeks due to various reasons; insufficient milk supply, fatigue, difficulty with feeding technique, nipple pain, lack of freedom and return to work to name a few.

There are over 16 breastfeeding support groups in Galway which provide help to mums following discharge from hospital. UHG Maternity department is holding a drop in clinic once a week which offers skilled support to mothers experiencing feeding difficulties. In 2017 the overall attendance was 407 with 84 visiting before they delivered. The list and details of all these community support groups are available on www.breastfeeding.ie



Antenatal Ward (St Catherines)

Ms Eithne Gilligan and Ms Helen Byrnes

St. Catherines ward is an 18 bedded Antenatal ward. Staff provides care to complex high risk women who are admitted for close monitoring and observation during their pregnancy. The midwifery staff works closely with the multidisciplinary team inclusive of obstetricians, anaesthetic staff, social workers, physiotherapists, public health nurses, teen parent support services, medical and support staff.University Hospital Galway is a training hospital, both undergraduate and higher diploma midwifery students along with fourth year medical students.

Activities on the ward include:

- Formal process for improved communication i.e. daily safety pause, attendance by CMM at 8 am labour ward handover meeting, night report at 7am and 7pm daily
- communicating risk using the ISBAR tool.
- Quarterly ward meetings with midwifery team
- Audits including
  1. Monthly midwifery metrics including documentation, patient satisfaction, medication management, IMEWS.
  2. Fortnightly intravenous cannulation audits
  3. 3 monthly HIQA hygiene audits
  4. Regular hand hygiene audits
- Referral centre for high risk antenatal women within the Saolta group > 20wks gestation
- Antenatal education
- Induction of Labour.
- Outpatient assessment of women requiring infusion therapy during the week.
- Care of women at weekends requiring, daily CTG, bloods and blood pressure checks.
- Daily follow up on all outstanding laboratory results for discharged women
- Management of second trimester miscarriage up to 24 weeks gestation
- Provision of antenatal and postnatal Bereavement care to those who experience loss in pregnancy. This involves support with the bereavement services inclusive of the Bereavement midwife, the mortuary, pathologist, and the multidisciplinary team.

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 are triaged by the Consultants weekly

Antenatal clinics:

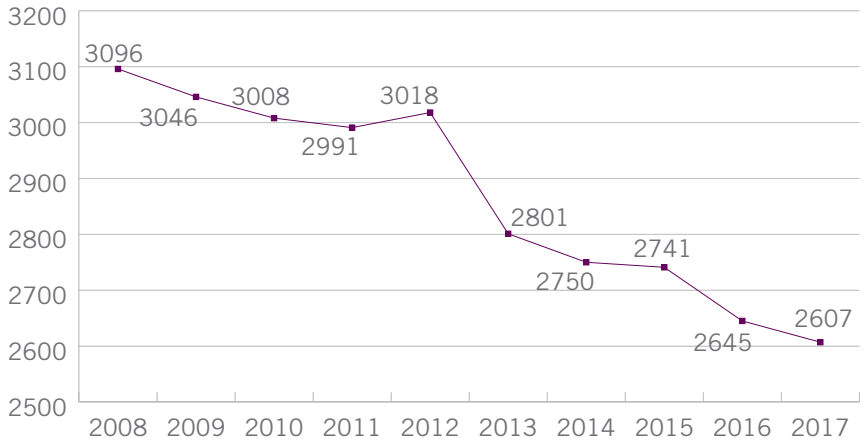
In 2017, 2607 women booked for antenatal care a decrease of 38 on the previous year (see table 1)

7 antenatal clinics are held in the Maternity Outpatients department weekly. 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.

Due to the change in the criteria for Screening for Gestational Diabetes all women aged 30 years and over, BMI of 25 and over and as part of the Emerge study have a routine glucose tolerance test taken at 24 weeks gestation, this has increase the activity in the antenatal clinics.

There are 2 extra booking clinics on Thursday and Friday. Midwives in the outpatients department take a detailed history and the necessary blood tests. The National Policy on Domestic Violence screening continues.

Table 1 First Antenatal Visits



High Risk Anaesthetic Clinic:

This clinic takes place each Wednesday morning with a Consultant Anaesthetist. Guidelines are in place which records the criteria and procedures for referral to this clinic. Referral to the Anaesthetic clinic is made by the medical staff of women with actual or anticipated anaesthetic problems or medical disorders in pregnancy. All patients attending this clinic have appointments scheduled via a specific referral system; this activity is recorded on the Patient Administration System (PAS).

Gynaecology, Gynaecology/ Oncology& Fertility clinics:

There are 8 gynaecology clinics held weekly in the outpatients department. The waiting time for an appointment for these clinics is 18-36 months; however the Gynaecology /Oncology patients are prioritised with earlier appointments at approximately 6 weeks. There were 3524 gynaecology review appointments and 2614 new attendees.

There are two fertility clinics per week; 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 Consultant and prioritised accordingly.

Midwives Clinics:

This continues to be a popular choice for women. If complications arise during pregnancy the midwife will refer the women to the obstetrician.

Gynaecology Ward (St Monicas)

Ms Louise Fitzpatrick

St Monicas ward is predominately a surgical ward and has a capacity of 15 inpatient beds with 4 additional trolleys for day case surgery. This ward specialises in early pregnancy, gynaecology and Gynae Oncology. It has high levels of clinical activity and significant patient turn over volumes with care ranging from major surgical cases to brief intervention. During 2017a successful training initiative was put in place to provide speciality training for all staff specific to management of early pregnancy. We work very closely with the early pregnancy department and have two designated appointment slots in their morning clinic, to accommodate scans for women that have been admitted overnight. This helps to decrease anxiety for women and improves the patients' journey among this vulnerable group. The philosophy of care on this ward is to provide holistic women centred care that is both efficient and accessible to all women.

St Monica's ward also work closely with the Post Anaesthetic Care Unit (PACU), patients may be referred to PACU for close observation following major surgeries, depending on co morbidities and acuity. There is a dedicated two-bed recovery area on the ward which helps staff monitor patients closer while maintaining privacy and dignity for the women. This allows staff to care for women receiving epidural analgesia, providing increased options for analgesia during the post-op period. During 2017 we also carried out some small changes on the ward providing TV's for patients, improving access to some of the rooms and upgraded the lighting.

We held an official opening for our designated bereavement room on St Monica's which was funded by a Design and Dignity grant from the Hospice Friendly Hospitals. This room, which has an ensuite and kitchenette facility, provides a designated space for end of life care or women experiencing first trimester early pregnancy loss.

Our Bereavement Specialist (Anne McKeown) also provides excellent advice and support for any woman wishing to avail of her service.

The continued support of the Clinical Nurse Specialist (Joanne Higgins) in Gynae Oncology services is an invaluable resource. She works directly with the patients and their families to help ease the patient's journey in difficult times. Joanne assists in providing a link for between Gynaecology and oncology services and is an excellent support and point of contact for women.

The majority of admissions are surgical patients, as highlighted below. Some of the Challenges facing St Monicas ward going forward are the waiting lists for women requiring Gynae oncology services due to limited time and access to the theatre in Maternity Unit. Occasionally additional time and theatre space are provided by the Main hospital which can lead to challenges with ward capacity and caseload.

St Monicas Admissions in 2017

Month	ED	ELECTIVE	NON ELECTIVE	Grand Total
2017-01	30	112	38	180
2017-02	23	105	27	155
2017-03	30	129	42	201
2017-04	18	126	42	186
2017-05	22	74	25	121
2017-06	23	112	49	184
2017-07	14	123	46	183
2017-08	24	122	56	202
2017-09	19	131	28	178
2017-10	14	131	30	175
2017-11	14	120	46	180
2017-12	22	86	40	148
Grand Total	**253**	**1,371**	**469**	**2,093**

Maternity Admissions

Ms Anne Marie Culkin

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

Referrals are received from consultant, 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 – Friday 8am – 5 pm

In order to alleviate the bottle neck that exists in Maternity Admissions during times of high levels of activity, MDAU accommodation will be used where appropriate.

7535 women were assessed in the department in 2017, 3626 were booked admissions and 3909 were acute presentations. This data is represented on the chart below. See diagram I

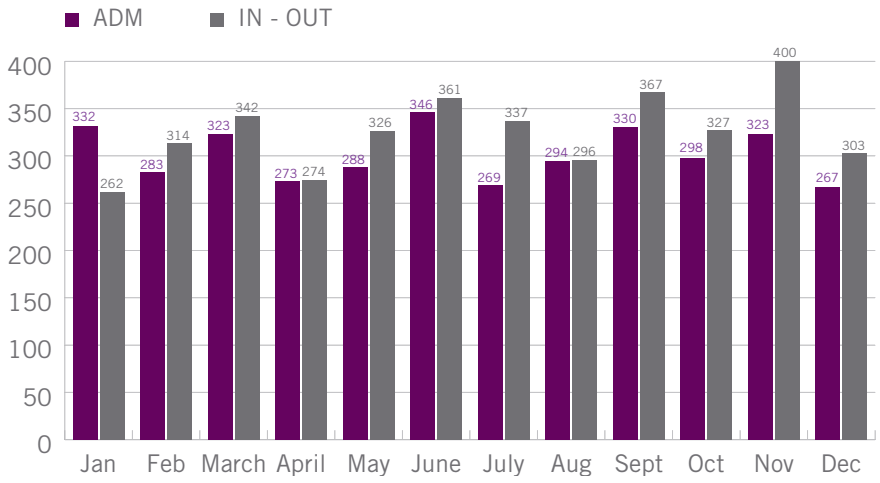
Early Pregnancy Assessment Unit (EPAU)

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 which includes a lead consultant, NCHD's, midwives, sonographers and a clerical officer, a bereavement counsellor is available on request. The unit is open four mornings a week providing women with scheduled appointments along with managing emergency referrals and inpatients referrals.

Staffs provide women with information and support in a sensitive and caring manner; explanations are supplemented with written information leaflets.

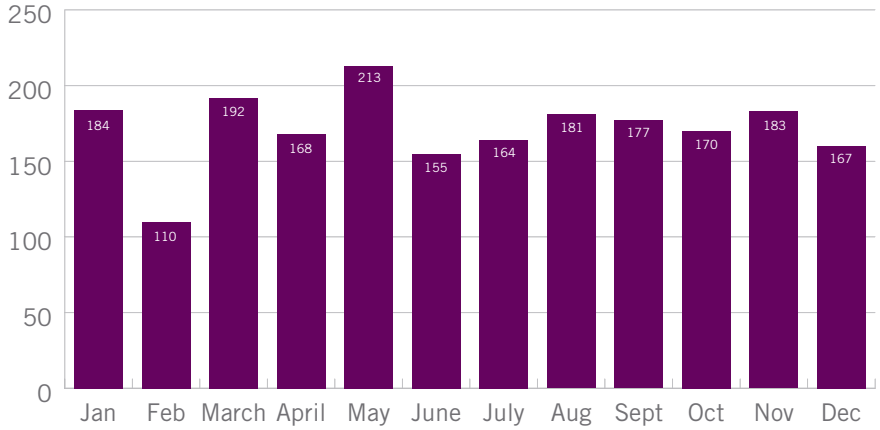
Referrals are accepted from
- GPs: Where there are complications of early pregnancy.
- If there is a previous history of two or more miscarriages, previous ectopic or previous molar pregnancy.
- Consultant and NCHDs. All referral are now by email or post.

Diagram I: 2017 Admissions and In - Out Numbers



2017	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
ADM	332	283	323	273	288	346	269	294	330	298	323	267
IN-OUT	262	314	342	274	326	361	337	296	367	327	400	303
TOTAL	594	597	665	547	614	707	606	590	697	625	623	570

Diagram II: Early Pregnancy Stats for 2017



2017	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	184	110	192	168	213	155	164	181	177	170	183	167

New Patients 1335 Review Patients 730 Total 2065

2065 women were reviewed in the EPAU in 2017. EPAU will be relocated to the wing beside St. Monica's Ward in the 4th quarter of 2018. The relocation will also mean the service will be extended to five mornings a week. See diagram II

Maternity Day Assessment Unit (MDAU)

The aim of the MDAU is to provide care to women who develop complications during pregnancy (from 13 weeks gestation) and up to six weeks postnatally. This care is provided on an outpatient basis, thus avoiding unnecessary stays in hospital. A Standard Operational Procedure is available for reference.

Conditions Managed in MDAU:

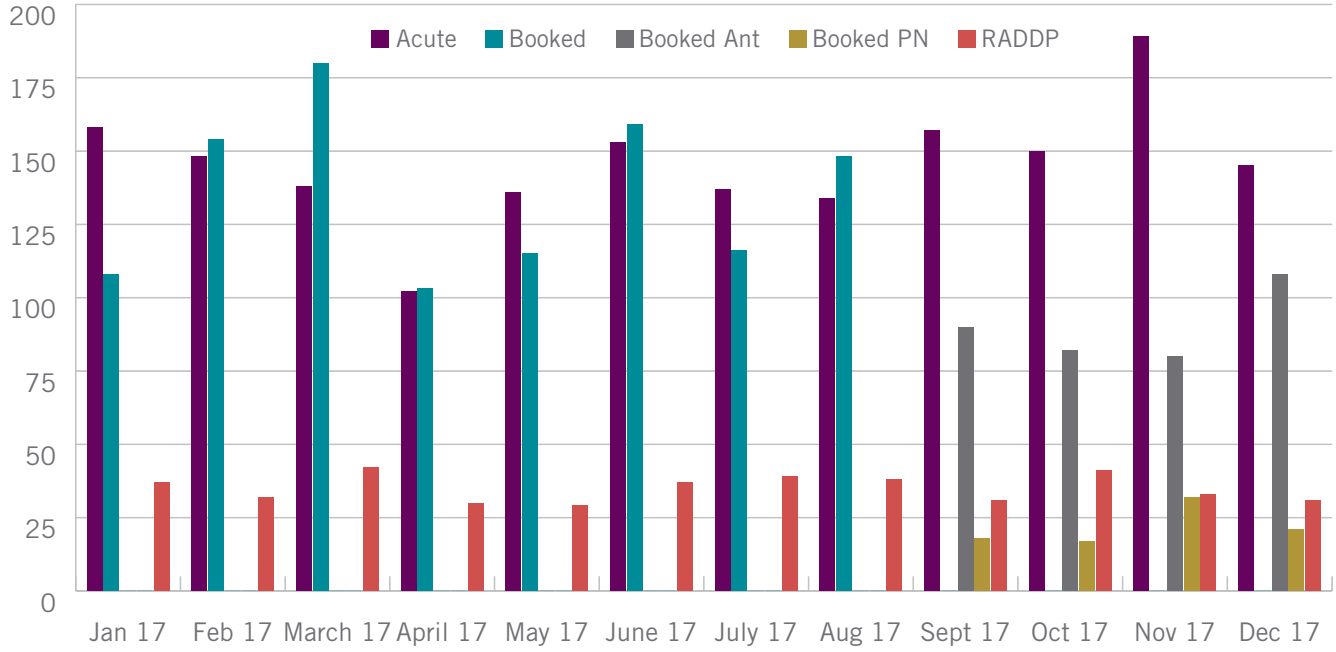
- Hypertension disorders of pregnancy: including mild and moderate hypertension and chronic hypertension controlled on medication.
- Fetal conditions: including reduced fetal movements, fetal growth restriction, and multiple pregnancy fetal assessment.
- Maternal Complications: including obstetric cholestasis, postnatal readmission, hyperemesis, venous thrombosis assessment.
- Drug Administration: IM Steroids, Routine Antenatal Anti-D Prophylaxis

- Women who attend the hospital acutely from 13 weeks gestation are referred to MDAU for assessment and plan of care.

Referrals are made using a specific referral form and sources of referral are as follows: Consultant obstetrician, Obstetric team on call, Fetal Assessment Staff, Community Midwives and Maternity Admissions.

Care is provided as per clinical care pathways and clinical guidelines for specific conditions as appropriate. Pathways are kept under periodic review in light of experience and developments in best practice, locally, nationally, and internationally. The following table displays the number of women seen in MDAU. These include Acute Referrals, Booked Postnatal referrals and Women booked for Routine Antenatal Anti-D Prophylaxis. See diagram III

2017 Maternity Day Assessment Unit (MDAU) Stat



2017	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
ACUTE	158	148	138	102	136	153	137	134	157	150	189	145
BOOKED	108	154	180	103	115	159	116	148				
BOOKED ANT									90	82	80	106
BOOKED PN									18	17	32	21
RADDP	37	32	42	30	29	37	39	38	31	41	33	31

Obstetrics & Gynaecology Physiotherapy

Ms Debbie Fallows

Introduction

Physiotherapy activity levels increased again varied with some increases and decreases. The birth rate dropped from 3002 (2016) to 2854 (2017). The ante natal referrals decreased by 8%, postnatal referrals increased by 4% and gynae clinic decreased by 20% when compared to 2016. As a result of this the patients referred to physiotherapy for pelvic floor dysfunction had variable waiting times from 7 to 11 months.

Individual Review: 1. Postnatal

- A total of 317 postnatal patients were referred to physiotherapy in 2017, representing an increase of 4% from 2016. The greatest increase was seen in patients referred with pelvic floor dysfunction.
- In addition, 648 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.
- 33 patients were treated following 3° or 4° perineal tears. This is a reduction from 42 in the previous year.

2. Antenatal

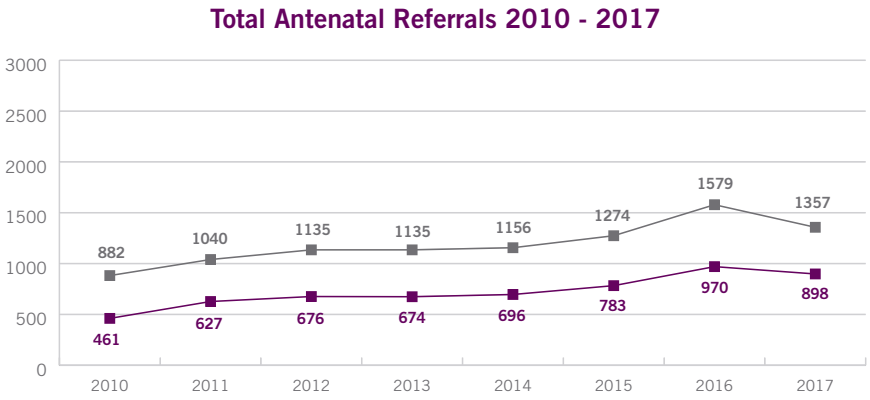
- A total of 898 antenatal patients were referred for physiotherapy in 2017, representing an decrease of 8% on 2016 rates. Antenatal referral rate has more than doubled over the last 6 years but this year saw the referral rate drop slightly on the previous year.
- To manage this increase in activity, we continually run a weekly exercise-based group sessions for patients with pelvic girdle pain.

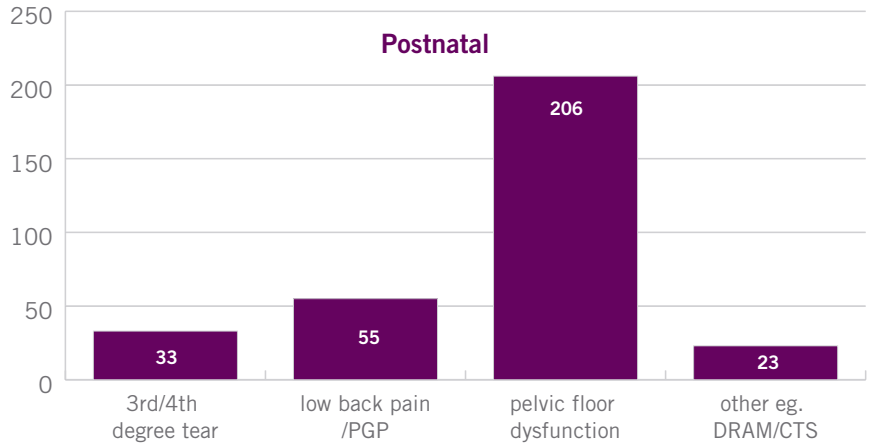
3. Gynaecology

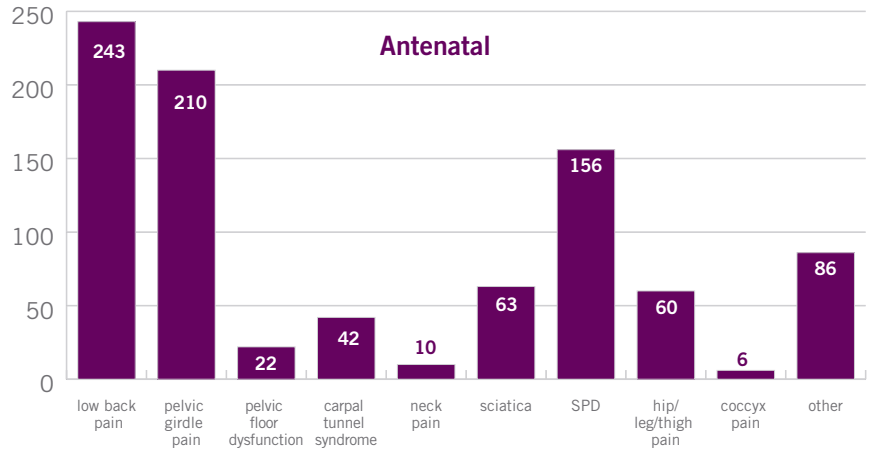
- A total of 242 patients were referred from gynaecology clinics in 2016 (20% more than 2015 figures). Of these 99 (40%) were seen by a physiotherapist directly from the Urogynaecology clinic.

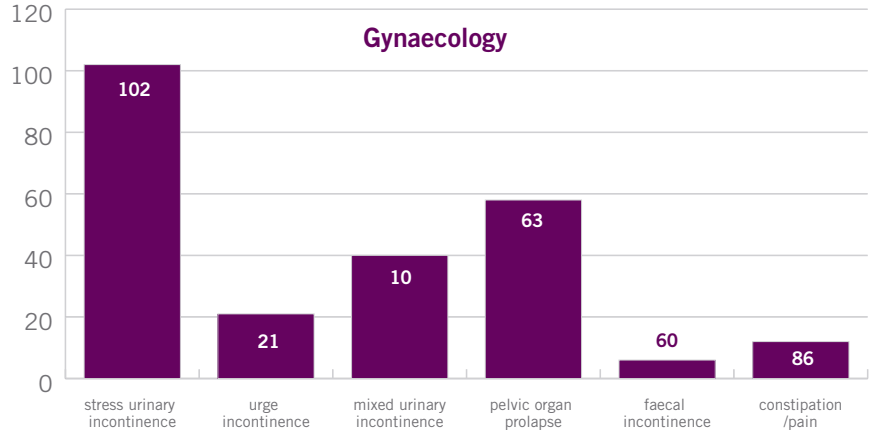
Group Education Sessions

Group Physiotherapy sessions	Numbers attending in 2017
Antenatal education session	1997
Early postnatal education sessions	475
Postnatal review session	153
Post gynae surgery session	171
Pelvic Girdle Pain Session	303









Paediatric Physiotherapy Report

Ms Aoife Mc Carthy

A total of 1284 patients were reviewed by the paediatric physiotherapy team in 2017, a 1% increase since 2016. Total number of referral increased to 467 in 2017, from 437 in 2016.

New referrals for inpatients have been consistently increasing over the last few years, 219 in 2017, 201 in 2016, 170 in 2015 and 160 in 2014.

Referrals for outpatient paediatric physiotherapy (n= 206) decreased in 2017. This is an emerging trend over the last few years.

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 consultation and follow up for newborns on St Angela's post-natal ward with musculoskeletal conditions.
- Inpatient service for all referrals on St Bernadette's Paediatric ward including Respiratory, Neurology, Orthopaedics, Neurodevelopmental delay and rheumatology issues. Inpatient outliner service for as required for paediatric patients on adults wards – eg ICU.
- 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.
- 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.
- 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 and Ms Ciara Egan, Orthopaedic Consultant

Staffing

The paediatric physiotherapy team consists of 2.5 WTEs; 1.0 WTE Clinical Specialist, 1.0 WTE Senior Physiotherapist and 0.5 Staff grade physiotherapist. Throughout 2017, there was approx 70% staffing in the paediatric physiotherapy service; this attributed to vacant WTE hours and planned/unplanned leave.

Nutrition & Dietetic Department Report

Ms Rachael Langan

Staffing

The dietetic service to Women & Children's Directorate includes a dietetic service to both inpatients and out-patients in Neonatalology, Obstetrics & Gynaecology and Paediatrics.

1. In-patients

- Maternity – Ms Mary Connolly/Alex Kilkelly
- Mary Connolly – Neonatal Dietitian
- Edel Barrett – Obs & Gynae

2. OPD Service

- Neonatal Follow up clinics x 2 per week
- General Paediatric outpatient clinic
- Three Paediatric Diabetes clinics per week, one multidisciplinary clinic and 2 Dietitian led clinics.
- Several CHOICE courses held throughout the year. These are structured education courses for children and adolescents with Type 1 Diabetes delivered by the Dietitian and Clinical nurse specialist.
- The Paediatric Diabetes Dietitian, as a member of the multidisciplinary team, provided comprehensive training to all children over 5 years and adolescents commencing insulin pump therapy.
- Weaning and Early Pregnancy Healthy Eating talk alternate weeks.
- Dietetic cover at the CF Adult and Paediatric clinics was impacted as limited maternity cover in place for the CF Dietitian.

Referrals

All inpatient referrals on St Bernadettes ward, Obs& Gynae and St Clares are accepted online via PAS system. There is a 'blanket referral system' on St Clare's. Consultant outpatient referrals for Dietetic assessment are accepted by referral.

There is a 'blanket referral system' for children and adolescents with Diabetes.

Challenges in 2017

- Difficult to maintain dietetic service level with reduced maternity leave cover.
- Meeting the increasing demands of medical specialties for dietetic support without a dedicated Paediatric dietetic resource in place. The current dietetic input of 0.3wte is unable to meet paediatric requirements for dietetic support.
- Difficulty in the transfer of patients from acute care to primary care Nutrition and Dietetic Service due to EIS Dietitian being on maternity leave resulting in increased demands on acute dietetic service.
- meeting the needs of the paediatric diabetes service is impossible within a 0.5wte post.

Achievements from 2017

Neonatology:

- Aided implementing the New National PN guidelines into the unit by acting as a 'champion' for same
- PN audit completed with ANP on Neonates for National PN steering committee
- Education sessions to the nursing and medical staff on the unit
- New Iron fortified Breast milk fortifier introduced and an audit commenced on same.
- Discharge formulas were evaluated and adjusted as required
- Participated in the Neonatal Dietitians Ireland group
- Participated in Neonatal monthly management meetings.
- Dietetic staff used the opportunity created by a number of approved leaves to gain experience in the neonatal and paediatric areas.
- Mary Connolly trained up and covered the neonatal service for 2017 and gained valuable experience in this area. Alex Kilkelly and Edel Barrett gained experience in paediatric CF and paediatrics.

Paediatric Diabetes:

- Active member of National Paediatric Diabetes Dietitians group.
- Group developed a comprehensive education resource in conjunction with National Diabetes Nurses group. This resource will be used to help provide a uniform service to this client group in all centres in the Republic of Ireland.
- Participated in monthly Paediatric Diabetes team meetings

Resource Development

Neonatology:

- Vitamin and Iron guideline was updated
- Developed a monograph for use of Galfer supplementation in the NICU with Miriam the Pharmacist

Obs&Gynae:

- Updated Healthy eating in Pregnancy leaflet for early pregnancy health eating session

Paediatric Diabetes:

- Updated Carbohydrate Counting education pack.
- Developed new diet-sheets in 'Exercise management' and 'Eating Out' and 'Parties and Sleepovers'.
- Contributed to new Insulin Pump Education book for patients developed in GUH.

Training / Education

In-house training

- Children First
- External training courses

Neonates:

- Parenteral Nutrition Launch
- Wyety Sumit Prague
- Neonatology study GUH
- Neonatal (NDI) meeting Cork
- Module 5 BDA

Paediatrics:

- Paediatric Interest Dietetic Group
- INDI Paediatric programme

Paediatric Diabetes:

- CHOICE structured education training for children and adolescents with Type 1 Diabetes - Train the trainer course, Dublin.
- Training on Minimed 640G insulin pump use, Dublin.
- Education evening on 'New Paradigms in Diabetes care, Galway.
- Diabetes Ireland Paediatric Diabetes Study Day: 'Optimising Type 1 and Type 2 Diabetes Care in Children and Young Adults, Dublin.

Medical Social Work Report

Ms Maeve Tonge

Referrals
All in-patient referrals are accepted online via PAS system. Out patients requiring Medical Social Work support are accepted on our referral cards.

Emergency Department
Medical 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 Medical 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
Medical Social Workers endeavour to provide active participation on Children's First Committee, Perinatal Mental Health Committee, Traveller Midwifery committee and the Peri-natal Bereavement Committee when staffing numbers permit.

Stress Control Programme
Medical Social workers are part of a team of hospital staff that provide a six week programme for patients and staff incorporating basics of a Cognitive Behavioural approach to managing the inevitable stress in our lives.

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 at any stage of this pregnancy e.g. unplanned pregnancy, or on diagnosis of fetal abnormally. Counselling is offered on all options within the relevant legal guidelines.

Perinatal Mental Health
- Medical Social workers are acutely aware of the increased recognition of the need for support for women experiencing a wide range of stressors in the ante natal and post natal stages. They have attended training in UL and a 2 day intensive master class in the area. This increased knowledge has improved understand and enabled provision of appropriate supports.

Child protection
- With the introduction of Mandatory reporting as part of Children's Frist, Medical Social Workers provide consultations for all hospital staff on concerns regarding child protection. We can assist staff members complete referrals to Tusla for further assessment. Medical Social Workers can liaise with Tusla to ensure child protection plans are known for unborn babies or children attending paediatrics. 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.

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
- 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
Maeve Tonge is the Senior on the WAC team with clinical work in Paediatrics and provides support and supervision to the team of Medical Social Workers and Teen Parent Programme staff. We have had many staff changes and we enjoyed working with Martina Kinnane and Hazel Greene who had excellent experience and expertise to offer the team and the woman and families we work with. Triona O'Toole remains a constant team member and we appreciate her contribution to our team.

Conclusion
We are a small team and working closely together, we endeavour to respond to diverse and sensitive need of the families we meet. As always we would like to acknowledge the support from our colleagues across the disciplines in Obstetrics & Gynaecology, Paediatrics and Neo-Natal departments.

Teen Parents Support Programme (TPSP)

Ms Aileen Davies

Services:
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..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. Support is offered on a one to one basis, through group activities and through referral to and liaison with other services.

Client group:
This service is open to all young parents living in Galway City and County.

Referrals:
The majority of referrals come from the outpatient clinic in the Maternity Unit and when young parents are inpatients before and after delivery. Referrals can also be made from outside agencies eg youth service, GPs, schools and self referrals.

The number of referrals made to the service in 2017 was 61.

We provide ongoing support for our young parents over a two year period so our caseload at any one time is 50 - 55 young parents and their children.

Team structure:
Our team is composed of A Programme leader (0.8WTE) one project worker (1WTE) and one project worker(0.6WTE) Our line Manager is Donal Gill Principal social worker and supervision is provided by the Senior Medical Social worker Maeve Tonge for the WAC team and Paediatrics.

Specific supports:
Individual antenatal classes are provided for the young parents if they wish to avail of them. The sessions are informal. Partners are welcome to attend. A tour of the labour ward is included.

Groups:
We also run Mother and baby groups and provide information sessions on parenting .ie feeding weaning, healthy eating. First aid etc.

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 University Hospital Galway, University Hospital Portiuncula, University Hospital Castlebar and University Hospital Sligo. 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 education and updating policy, guidelines, audit and clinical care pathways for the Saolta group.

1.1 Staff of Midwifery Practice Development Unit UHG

Practice Development Co-ordinator
- Margaret Coohill, UHG
- Deirdre Naughton UHP

Allocation Liaison Officer
- Claire Fuller

Clinical Placement Co-ordinators
- Carmel Cronolly (Ballinasloe)
- Frances Burke (Castlebar)
- Karlene Kearns (Sligo)
- Barbara Bradley (UHG)
- Mary Reidy (UHG)
- Aisling Joyce (UHG)

Administrator
- Geraldine Mc Hugh

Midwifery Clinical Skills Facilitator
- Heather Helen

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 2017, twelve students continued the eighteen month Higher Diploma in Midwifery programme at University Hospital Galway.

2.2 Bachelor of Midwifery Science (September 2017)

2017 Yr 1 Class: 22 midwifery students commenced the four year programme with clinical placement in UHG, Castlebar and Portiuncula and Sligo Maternity Hospitals.

2016 Yr 2 Class: 18 midwifery students continued with midwifery placements in all four sites and specialist placements in general theatres in UHG and Portiuncula Hospital. Medical and surgical wards were undertaken at UHG.

2015 Yr 3 Class: 20 midwifery students continued with midwifery, neonatal and mental health placements in GUH with some placements in Mayo, Portiuncula and Sligo University Hospitals. These students also had a clinical placement in the Midwife led service in the community and in UHG.

2014 Yr 4 Class: 18 midwifery students commenced internship with placements in UHG, Sligo, 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 UHG.
- Midwife Led Outreach Antenatal Clinics UHG.
- Midwife Led Early Discharge Home service at 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 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 and obstetricians. The aim of these workshops is to facilitate multi-professional training in fetal monitoring requirements.

3.2 Neonatal Resuscitation Provider Course:

Facilitated by neonatal resuscitation instructors for all staff on an ongoing basis.

3.3 Practical Obstetric Multi-professsional Training (PROMPT):

Facilitated by practice development team, clinical midwives and obstetricians.

The aim of these workshops is to facilitate multi-professional training in the management of obstetric emergencies.

3.4 Perineal Suturing Workshop:

Facilitated by the practice development team.

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

3.5 High Dependency Maternity Care Module:

This postgraduate (level 9) module, continued in 2017 for midwives. In 2017, the module continued to run in conjunction with 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.

Additional Study days provided in 2017: Neonatal and Midwifery Overview; Gynaecology and Women's Health; Bereavement and Neonatal Study Day.

3.6 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, audit and guidelines for the Saolta maternity hospital group.

3.7 Education Committee

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

Sexual Assault Treatment Unit (SATU)

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

Attendance re: Area
- There were 85 attendances at the Galway SATU, an increase of 10 (13%) from 2016
- 79 (93%) reported incidents took place within the Republic of Ireland
- 5 (6%) reported incidents took place outside the Republic of Ireland
- 1 (1%) incident locations were not reported

Attendance re: Month, Day and Time of Day
- May and July were the busiest months in 2017 with 20 (24%) patients presenting during this period
- Sunday was the busiest day, 22 (26%) patients presented on that day
- 73 (86%) incidents occurred between the hours of 20.00 – 07.59hrs

Type of Reported Sexual Crime, Assailant, Relationship to Assailant
- 64 (75%) were recent sexual assaults
- 78 (92%) cases involved a single assailant
- 6 (7%) cases involved multiple assailants
- 28 (30%) cases, the alleged assailant was a stranger

Gender, Age Profile, Referral Source
- 80 (94%) patients were female and 5 (6%) patients were male
- The mean age was 26 years of age, the youngest <14 years and the eldest was >55 years of age
- An Garda Síochána referred 57 (67%) patients; 7 (8%) patients self-referred and 21 (24%) patients were referred by others; RCC, GPs, ED, Mental Health Services and the acute hospital sector

Patients Reporting to An Garda Síochána/Time Frame from Incident to SATU
- 57 (67%) patients reported the incident to An Garda Síochána, of these;
- 46 (80%) reported within 7 days, of these;
- 38 (83%) reported within 72 hours and 29 (63%) of these reported within 24 hours

Patients who had a FCE without initially reporting to An Garda Síochána
- 28 (33%) patient had a FCE without initially reporting to An Garda Síochána of these;
- 1 (25%) patients made a formal complaint and the kits were released to An Garda Síochána

Psychological Support Worker in Attendance
- 53 (62%) patients had the opportunity to speak to a Psychological Support Worker at the first SATU visit. 20 (24%) patients did not have the opportunity to speak to a Psychological Support Worker as there was no volunteer available to attend SATU

Physical Trauma
- 38 (44%) patients had physical injuries, of these; 35 (41%) had superficial trauma
- 1 (1%) injury required follow-up in hospital and 2 (2%) were hospitalised due to injury

Alcohol and Drug Use
- 50 (58%) patients had consumed alcohol in the previous 24 hours of these;
- 36 (42%) patients had consumed >6 standard drinks of alcohol
- 8 (9%) patients had taken recreational drugs prior to the reported incident
- 7 (8%) patients were concerned that drugs were used to facilitate sexual assault
- 5 (6%) patients were unsure if drugs were used to facilitate sexual assault

Patient awareness of whether sexual assault had occurred
- 73 (86%) patients stated a sexual assault occurred
- 9 (11%) were unsure whether a sexual assault had occurred

Emergency Contraception (EC)
- 29 (36%) female patients presented within 120 hours of the incident
- 100% patients were given EC in the SATU

Sexually Transmitted Infection Prophylaxis and (STI) Screening
- 56 (66%) patients received Chlamydia prophylaxis
- 50 (59%) commenced Hepatitis B immunisation programme
- 5 (6%) patient received Post Exposure Prophylaxis (PEP) for HIV

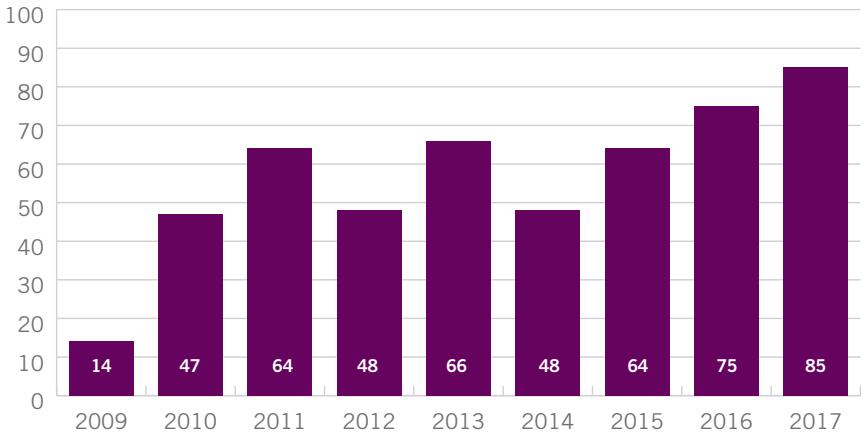
Follow-up Appointment for Sexual Health Screening
- 36 (42%) patients were given a follow-up appointment for STI screening
- 31 (67%) patient attended first follow-up appointment
- 20 (24%) attended for an appointment elsewhere
- 5 (6%) were SATU to SATU referrals

Outcome of Sexual Health Screening
- 4 (8%) patients had a positive result for Chlamydia
- 1 (50%) patient had a positive result for Candida

Referrals to the SATU
- 57 (67%) were referred by the Gardaí
- 7 (8%) were self referrals
- 10 (12%)were referred by a GP
- 2 (2%) was referred by the Rape Crisis Centre
- 2 (2%) SATU to SATU referrals
- 7 (8%) other source

Number of Attendances
- In 2017, there were 85 attendances at the Galway, SATU
- This shows an increase of 10 (13%) patients compared to 2016

Figure 1: Analysis of yearly attendances from 2009-2017



Child and Adolescent Sexual Assault Treatment Services (CASATS) Galway Executive Summary

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

Attendance at Galway CASATS

- There were 100 requests for SATU services in 2017
- There were 98 attendances at the CASATS, Galway. 2 patients changed their mind re: availing of the service and did not attend or cancelled scheduled appointments. These patients were supported by other agencies.
- In all 98 cases the alleged incident took place within the Republic of Ireland.

Attendance re: Month and Time of Day

- September was the busiest month with 19 (19.3%) of cases presenting in this month
- Thursday was the busiest day with 27 (27.5%) examined on that day
- 12 (12.2%) were seen out of hours (between 17.00-08.00 or over the weekend)

Type of Alleged Sexual Crime, Assailant, Relationship to Assailant

- In 8 (8%) cases multiple assailants were alleged to have been involved.
- In 14 (14.2%) cases the alleged perpetrator/s were under 13 years
- In 13 (13.2%) cases the alleged perpetrator/s were between 13-17 years
- In 31 (31.6%) cases an adult assailant was suspected of instigating sexual abuse.
- 31 (31.6%) cases involved adult male assailants, of whom 11 (35.5%) were the child's biological father.
- One case involved an adult female assailant.
- One case involved an adult male and an adult female assailant.

Gender, Age Profile, Referral Source

- 62 (63%) patients were female, 36 (37%) male
- The age mean was 5.7 years
- The youngest patient was less than 1 year old and the eldest 17 years old
- 58 (59%) were referred by An Garda Síochána, 33 (33%) were referred by social workers,4 (4%) were referred by a Hospital Consultant and 3(3%) were referred by a GP

Time Frame from Incident until Examination

- 19 (19.3%) presented within < 7days of alleged assault. 5 (26%) of those 19 cases had forensic sampling undertaken.
- Of the 19 patients presenting within < 7 days of assault, 9 (9%) were within < 72 hours with 3 (3%) of these cases presenting within 24 hours
- 2 (2%) cases presented between 7-28 days after most recent alleged sexual contact
- In 36 (36.7%) cases the allegation was of historical abuse i.e. >1 month
- An exact time frame was not specified in 41 (42%) cases

Support Worker in Attendance

- 81 (82.6%) patients had a CARI Child and Family Accompaniment Volunteer present

Sexually Transmitted Infection Prophylaxis and (STI) Screening

- 96 (98%) patients had an STI screen
- 16 (16%) patients commenced a Hepatitis B vaccination schedule
- 2 (2%) of patients received post coital contraception
- HIV PEPSE was not required by any CASATS patients in 2017

Child Assailants (defined as <13 years at time of alleged assault)

- 14 (14.2%) cases involved child assailants
- One female child assailant was reported. All other child assailants were male
- One case involved 2 child assailants

Teenage Assailants (defined as 13-17 years at time of alleged assault)

- 13 (13.2%) cases involved teenage assailants
- All teenage assailants were male
- 2 (3%) cases involved more than one teenage assailant
- One case involved both a child and teenage assailant

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

- In 31 (31.6%) cases adult males were suspected of instigating sexual abuse of whom 11 (35.5%) were the child's biological father
- One case involved an adult male and an adult female assailant
- In 41 (42%) cases the details of the assailant were unknown.
- In these cases there may not have been a definitive allegation of child sexual abuse, however, examination was deemed appropriate due to other factors e.g. disclosure made by a sibling, inappropriate sexualised behaviour etc.

Quality & Patient Safety Department

Ms Gemma Manning

Incidents and complaints are reported by all staff on the Incident Reporting Module on Q-Pulse computerised reporting system. Q-Pulse had been upgraded and all 7 hospitals within the Saolta Group are using the Q-Pulse system.

Saolta University Health Care Group can now access active documents from Q-Pulse Saolta live database without having to log into Q-Pulse. Web access to documents is available on all computer desktops, simply click on the Q-Pulse Documents icon on the desktop, enter the relevant keyword and search.

Similarly staff can report and incident or complaint on the Web reporting icon on the desktop, click on the relevant form and complete with all the required details click the submit button and the general incident/medication incident /complaint /positive feedback is saved/successfully submitted will be displayed on the screen.

There is a steady increase in reporting in the Womens & Childrens Directorate (table 1).

In compliance with the HSE Safety Incident Management Policy, Preliminary Assessment Reports (PARs) were completed by medical and midwifery staff. Recommendations from these Reports was presented to staff through "Just Take 5" which happens at handover at 8am in the morning and at the 12 midday "Safety Pause".

The Serious Incident Management Team (SIMT) meet monthly, it is a group wide multidisciplinary team meeting where serious incidents are presented and discussed and the appropriate monitoring and management approaches are decided.

Maternity Patient Safety Statements (MPSS) are collated and available on the hospital web site monthly. All Obstetric incidents reported to the National Incident Management System (NIMS) provide information for management and clinicians who provide maternity services in relation to a range of patient safety issues. The 5 Maternity hospitals within the Saolta Group share discuss and compare the MPSS's monthly at the Maternity Services Strategic Group (MSSG) meeting.

The Quality &Safety Improvement Bi Monthly Team meetings in W&C Directorate UHG has carried out the self assessment to the 8 themes of the National Standards for Safer Better Maternity Services and Quality Improvement Plans from the self assessment is ongoing.

The Local Maternity Services Implementation Group (LMSIG) in W&C UHG continuously review the recommendations for reports, internal and external, an implementation plan is ongoing, progress with this plan is recorded on the Maternity Services Strategic Group Database which is shared with the other maternity hospitals in the group. Progress reports are discussed at the MSSG monthly meetings.

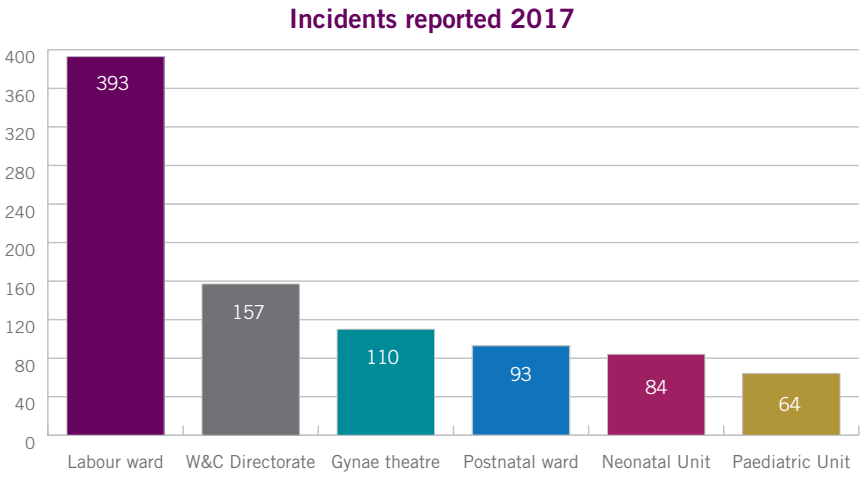
Womens & Childrens Directorate (W&C) has all policies, procedures and guidelines (PPG'S) on the document module of Q-Pulse; National Guidelines and W&C Group wide PPG's. Development, review, implementation and education of guidelines in W&C UHG is managed through the Midwifery Practice Development Unit. There are monthly PPG's team meetings in UHG where local guidelines are reviewed and discussed. This local group feeds into the Saolta Group PPG's meeting.

Clinical and non clinical audits carried out in the W&C Directorate UHG are uploaded onto the Audit and Quality Improvement Plan (QIP) modules of Q-Pulse.

Patient feedback throughout the department is collected on the Quality of Service Comment Cards and these cards continue to be a source of information for quality improvements. The analysis of the comment cards is presented at the Quality & Safety Improvement Team meeting and the non-conformance with the service from the patient's perception is highlighted and discussed and corrective actions identified to rectify the non-conformances and improve the service . Positive feedback is also presented and discussed at this meeting

"Quality & Safety of Service in this Department is Everyone's Business and Embraces all Aspects of Care"

Incidents reported 2017	1053
General Incidents	1023
Medication Incidents	30
Top 6 areas reporting	
Labour ward	393
W&C Directorate	157
Gynae theatre	110
Postnatal ward	93
Neonatal Unit	84
Paediatric Unit	64



Letterkenny University Hospital

Ms Evelyn Smith

Letterkenny University Hospital provides healthcare services to the people of Co. Donegal, serving a population of over 161,000 people. The catchment area incorporates patients residing in Co. Donegal, north of Laghey/Pettigo. It is a 320-bedded general hospital which provides a broad range of acute services on an inpatient, day case and outpatient basis. The hospital has a 35-bedded maternity unit with a 4-room labour ward and a decommissioned theatre and recovery area.

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 fifth annual report, detailing statistics, activity and outcomes for Maternity Services in Letterkenny University Hospital for the year 2017. The report also contains comparative data from 2008 to 2017. The publication of this report will serve as source of internal audit, providing us with an opportunity to reflect on the services we offer and the challenges we face.

In 2017, there were 1,651 mothers who delivered 1,670 babies, showing a slight decrease in numbers from 2016.

Developments 2017

- Further development of KPIs and Quality Assurance Reports
- KPI compliance with early dating scans
- Service audits completed
- IMEWS training
- Metrics
- Care Bundle audits
- PROMPT training
- Advanced CTG training
- Prescription for Healthy Pregnancy Alcohol Research Project – preparation for Phase 2
- Staff training in care of the critically-ill maternity patient
- National IT project
- Donegal Breastfeeding Forum
- Sepsis training
- Introduction of pilot breastfeeding volunteers
- Midwifery-led care - supported model - team of three Midwives

Challenges 2017

- 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.
- Recruitment of Midwives
- Recruitment of shift leaders

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 2017.

Letterkenny University Hospital

General Manager
Mr. Sean Murphy

Director of Midwifery
Mrs. Evelyn Smith

Assistant Director of Midwifery
Mrs. Marion Doogan

Consultant Obstetricians
Dr. Chris King
Dr. Eddie Aboud
Dr. Matthew McKernan
Dr. Dafalla Elamin

Consultant Paediatricians
Dr. Mathew Thomas
Dr. Bernadette Power
Dr. Asim Khan
Dr. Chettiyarammel Moosakutty
Dr. Kafil Shandani

CMMs Maternity
Ms Mary Lynch, CMM2
Ms Mary Doherty, CMM 2
Ms Raphael Dalton, CMM 2
Ms Geraldine Hanley, CMM 2 / Antenatal Education Co-ordinator
Ms Geraldine Gallagher, CMS Fetal Medicine
Ms Niamh McGarvey, CMS Fetal Medicine

CNMs NNU
Ms Rita Friel, CNM 2
Ms Kate Greenough, CNM 2

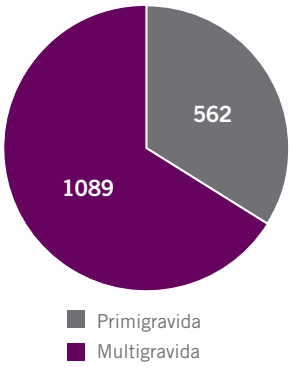
Staffing
Multidisciplinary Team
Obstetricians/Gynaecologists (WTE 4.0)
Registrars (WTE 6.0)
SHOs (WTE 6.0)
Director of Midwifery (WTE 1.0)
ADOM Service Manager (WTE 1.0)
CMM 3 (WTE 1.0, post vacant)
CMM 2 (WTE 5.0, allocation 3.4)
CMM 2 Antenatal Education/Clinic (WTE 0.8)
CMM 2 Fetal Assessment (WTE 2)
Staff Midwives Fetal Assessment (WTE 2.0)
Diabetic Clinics (WTE 0.5)
Staff Midwives (WTE 41)
CPC (WTE 0.5)
HCA (WTE 10.2)
Receptionist (WTE 2.6)
Allied Services

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

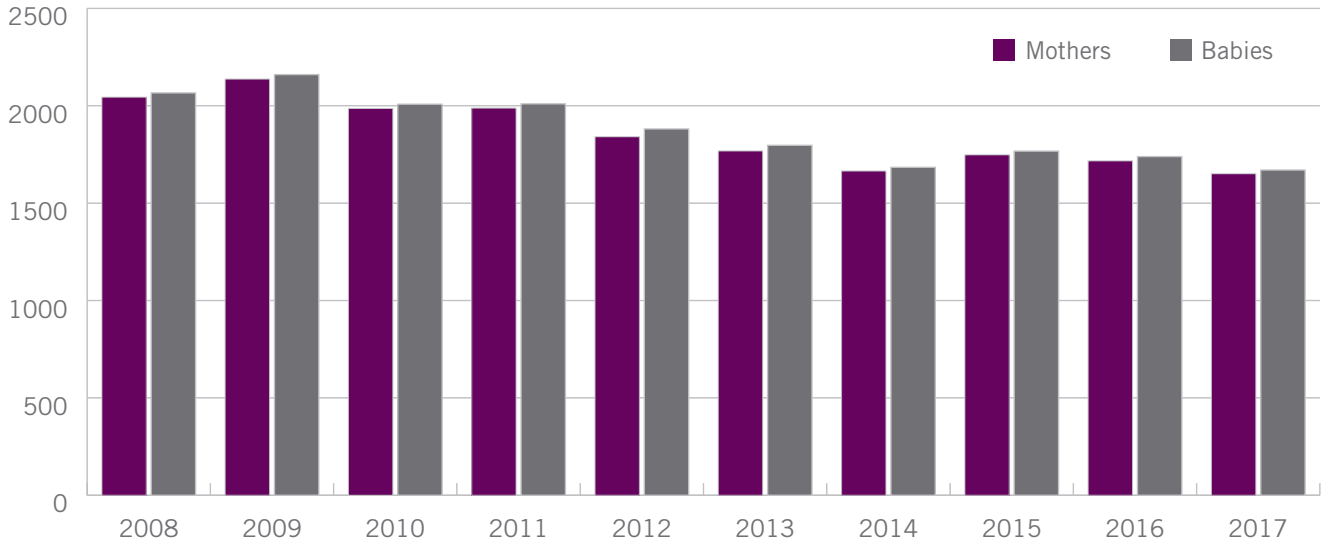
- Administration
- Ambulance
- Bed Management
- Chaplaincy
- Catering Department
- Central Supplies
- Clinical Practice Development
- Consumer Services
- Health Promotion Department
- Health and Safety Department
- Household Services
- Infection Control and Prevention
- Information Technology
- Laboratory Services
- Laundry Services
- Library
- Medical Records
- Occupational Health
- Portering Service
- Quality and Risk Department
- Radiology
- Security
- Technical Services
- Theatre Services

Statistical Summaries Report

	Primigravida	Multigravida	Total
Total Number of Mothers	562	1089	1651
Total number of Babies	566	1104	1670
>24 weeks or >/= 500g			



Total Number of Mothers & Babies over the last 10 years



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Number of Mothers	2,044	2,137	1,986	1,988	1,841	1,768	1,665	1,748	1,717	1,651
Total Number of Babies	2,066	2,160	2,008	2,010	1,881	1,797	1,684	1,767	1,739	1,670

Obstetric Outcomes (Mothers)	Primigravida	%	Multigravida	%	Total	%
	n = 562		n = 1089		n = 1651	
Spontaneous Onset	285	50.7%	574	52.7%	859	52.0%
Induction of Labour	195	34.7%	173	15.9%	368	22.3%
Augmentation	220	39.1%	160	14.7%	380	23.0%
No Analgesia	17	3.0%	67	6.2%	84	5.1%
Epidural Rate	206	36.7%	132	12.1%	338	20.5%
Episiotomy	190	33.8%	101	9.3%	291	17.6%
Caesarean Section	203	36.1%	295	27.1%	498	30.2%
Spontaneous Vaginal Delivery	235	41.8%	749	68.8%	984	59.6%
Forceps Delivery	1	0.2%	2	0.2%	3	0.2%
Ventouse Delivery	123	21.9%	43	3.9%	166	10.1%
Breech Delivery	0	0.0%	0	0.0%	0	0.0%

Obstetric Outcomes (Babies)	Primigravida	%	Multigravida	%	Total	%
Spontaneous Vaginal Delivery	235	41.5%	753	68.2%	988	59.2%
Forceps Delivery	1	0.2%	2	0.2%	3	0.2%
Ventouse Delivery	123	21.7%	41	3.7%	164	9.8%
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)	0	0.0%	0	0.0%	0	0.0%
Caesarean Section (Babies)	207	36.6%	308	27.9%	515	30.8%
Total	**566**	**100.0%**	**1104**	**100.0%**	**1670**	**100.0%**

Multiple Pregnancies 2017

	Primigravida	%	Multigravida	%	Total
Twins	4	0.7%	15	1.4%	19

Multiple Pregnancies by Year

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Twins	22	23	22	22	40	29	19	19	22	19
Total	**22**	**23**	**22**	**22**	**40**	**29**	**19**	**19**	**22**	**19**

Perinatal Deaths 2017

	Primigravida	Multigravida	Total	%
Stillbirths	1	1	2	0.12%
Early Neonatal Deaths	0	1	1	0.06%

Perinatal Mortality

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of Stillbirths	6	9	10	12	3	7	5	9	8	2
Number of Neonatal Deaths	7	7	4	2	7	4	1	4	2	1
Total Perinatal mortalities	**13**	**16**	**14**	**14**	**10**	**11**	**6**	**13**	**10**	**3**
Stillbirth rate (per 1,000)	2.9	4.2	5.0	6.0	1.6	3.9	3.0	5.1	4.6	1.2
Neonatal Death rate (per 1,000)	3.4	3.2	2.0	1.0	3.7	2.2	0.6	2.3	1.2	0.6
Overall PMR (per 1,000 births)	6.3	7.4	7.0	7.0	5.3	6.1	3.6	7.4	5.8	1.8

Age at Delivery 2017

Age at Delivery	Primigravida	%	Multigravida	%	Total	%
14-19 years	35	6.2%	3	0.3%	38	2.3%
20-24 years	100	17.8%	49	4.5%	149	9.0%
25-29 years	164	29.2%	217	19.9%	381	23.1%
30-34 years	166	29.5%	411	37.7%	577	34.9%
35-39 years	78	13.9%	349	32.0%	427	25.9%
40-44 years	17	3.0%	56	5.1%	73	4.4%
>45 years	2	0.4%	4	0.4%	6	0.4%
Total	**562**	**100.0%**	**1089**	**100.0%**	**1651**	**100.0%**

Parity	Number	%
Para 0	562	34.0%
Para 1	545	33.0%
Para 2	355	21.5%
Para 3	125	7.6%
Para 4	35	2.1%
Para 5	18	1.1%
Para 6	6	0.4%
Para 7	4	0.2%
Para 8	0	0.0%
Para 9	0	0.0%
Para 10	1	0.1%
Total	**1651**	**100.0%**

Age at Booking	2015	2016	2017
<14	0.1%	0.0%	0.0%
14-19	1.8%	2.0%	2.3%
20-24 years	10.8%	10.3%	9.0%
25-29 years	22.8%	22.0%	23.1%
30-34 years	36.7%	33.7%	34.9%
35-39 years	23.1%	27.2%	25.9%
40-44 years	4.5%	4.7%	4.4%
>45 Years	0.2%	0.2%	0.4%
Total	**100.0%**	**100.0%**	**100.0%**

Gestation at Delivery	Primigravida	%	Multigravida	%	Total	%
24-27+6 weeks	2	0.4%	1	0.1%	3	0.2%
28-31+6 weeks	3	0.5%	3	0.3%	6	0.4%
32-35+6 weeks	10	1.8%	28	2.6%	38	2.3%
36-39+6 weeks	83	14.8%	611	56.1%	694	42.0%
40-41+6 weeks	450	80.1%	432	39.7%	882	53.4%
>42 weeks	14	2.5%	14	1.3%	28	1.7%
Total	**562**	**100.0%**	**1089**	**100.0%**	**1651**	**100.0%**

Gestation at Delivery	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
24-27 weeks	13	11	11	7	12	11	6	9	9	3
28-31 weeks	11	11	11	8	16	9	6	8	12	6
32-35 weeks	45	47	39	40	31	40	35	35	32	38
36-39 weeks	387	402	379	370	390	364	284	345	317	694
40-41 weeks	1516	1607	1505	1514	1367	1297	1281	1311	1306	882
>42 weeks	74	63	46	53	31	49	53	40	41	28
Total	**2046**	**2141**	**1991**	**1992**	**1847**	**1770**	**1665**	**1748**	**1717**	**1651**

Birth Weights	Primigravida	%	Multigravida	%	Total	%
1000 - 1999g	9	1.6%	12	1.1%	21	1.3%
2000 - 2999g	79	14.0%	141	12.8%	220	13.2%
3000 - 3999g	419	74.0%	723	65.5%	1142	68.4%
4000 - 4499g	44	7.8%	181	16.4%	225	13.5%
4500 - 4999g	12	2.1%	41	3.7%	53	3.2%
5000 - 5499g	3	0.5%	1	0.1%	4	0.2%
Not Answered	0	0.0%	5	0.5%	5	0.3%
Total Number of Babies	**566**	**100.0%**	**1104**	**100.0%**	**1670**	**100.0%**

Birth Weights by Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
< 500g	7	2	3	3	4	1	0	1	1	0
500 - 999g	3	9	4	8	5	5	3	6	4	0
1000 - 1999g	26	23	27	20	32	34	19	18	28	21
2000 - 2999g	276	306	251	256	245	230	196	232	242	220
3000 - 3999g	1362	1419	1352	1360	1242	1211	1146	1197	1159	1142
4000 - 4499g	311	321	302	293	295	260	252	260	252	225
4500 - 4999g	62	62	52	57	50	51	54	46	43	53
5000 - 5499g	7	6	9	5	4	3	4	5	5	4
>5500g	0	1	0	0	1	1	2	0	0	0
Not Answered	14	15	13	12	9	3	8	2	5	5
Total Number of Babies	**2068**	**2164**	**2013**	**2014**	**1887**	**1799**	**1684**	**1767**	**1739**	**1670**

Induction of Labour	Primigravida	%	Multigravida	%	Total	%
2008	217		276		493	
2009	254		292		546	
2010	226		290		516	
2011	205		273		478	
2012	202		267		469	
2013	206		261		467	
2014	196	34.5%	254	23.2%	450	27.0%
2015	199	32.4%	264	23.3%	463	26.5%
2016	200	33.8%	252	22.4%	452	26.3%
2017	195	34.7%	173	15.9%	368	22.3%

Perineal Trauma	Total	%
Number of vaginal deliveries	1153	
Intact	358	31.0%
Episiotomy	291	25.2%
2nd Degree Tear	423	36.7%
1st Degree Tear	131	11.4%
3rd Degree Tear	20	1.7%
Other Laceration	150	13.0%

Note: Women may have had more than one type of perineal trauma.

Incidence of Episiotomy	Primigravida	%	Multigravida	%	Total	%
2008	252		103		355	
2009	264		96		360	
2010	246		102		348	
2011	221		98		319	
2012	212		115		327	
2013	234		129		363	
2014	216	57.3%	130	16.6%	346	29.9%
2015	222	58.3%	109	13.5%	331	27.9%
2016	214	59.6%	113	14.2%	327	28.4%
2017	190	52.9%	101	12.7%	291	25.2%

Note: Episiotomies are shown as a percentage of vaginal deliveries.

B.B.A.	Primigravida	%	Multigravida	%	Total	%
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	
2016	0		7		7	
2017	1	0.2%	6	0.5%	7	0.4%

3rd Stage Problems	Primigravida	%	Multigravida	%	Total	%
Primary PPH (500MLS)	20	3.6%	20	1.8%	40	2.4%
Manual Removal of Placenta	11	2.0%	14	1.3%	25	1.5%

	Primigravida	%	Multigravida	%	Total	%
Shoulder Dystocia	1	0.2%	8	0.7%	9	0.5%

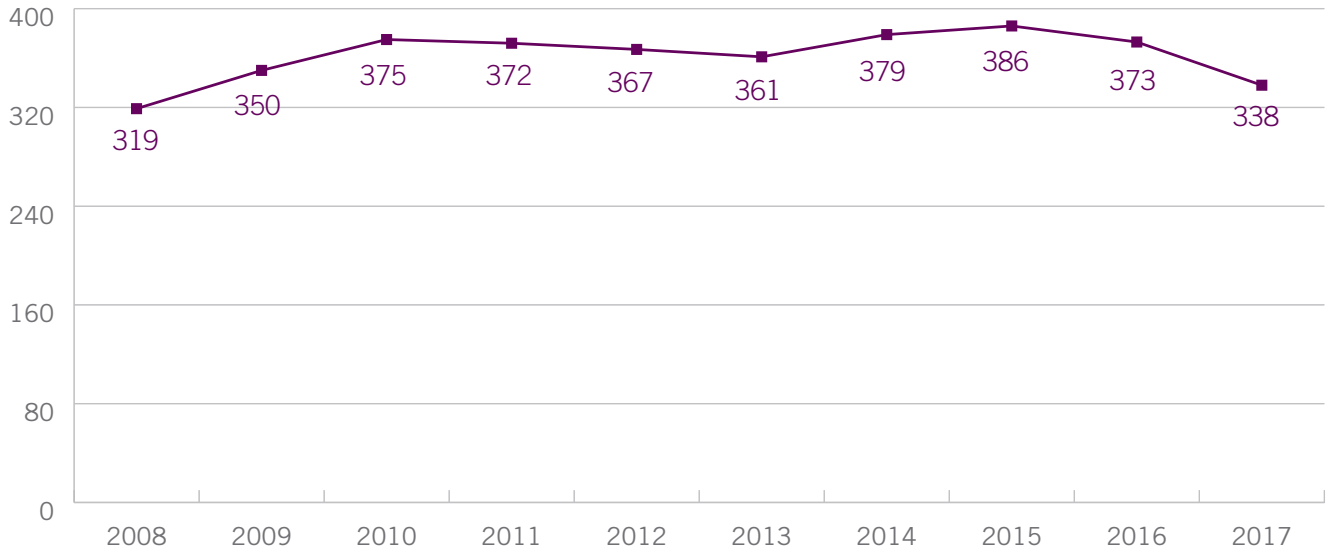
Mode of Anaesthesia for CS

	Primigravida	Multigravida	Total	%
Spinal	128	268	396	79.5%
Epidural	37	7	44	8.8%
Combined Spinal	18	8	26	5.2%
General Anaesthetic	20	12	32	6.4%
Total	**203**	**295**	**498**	**100.0%**

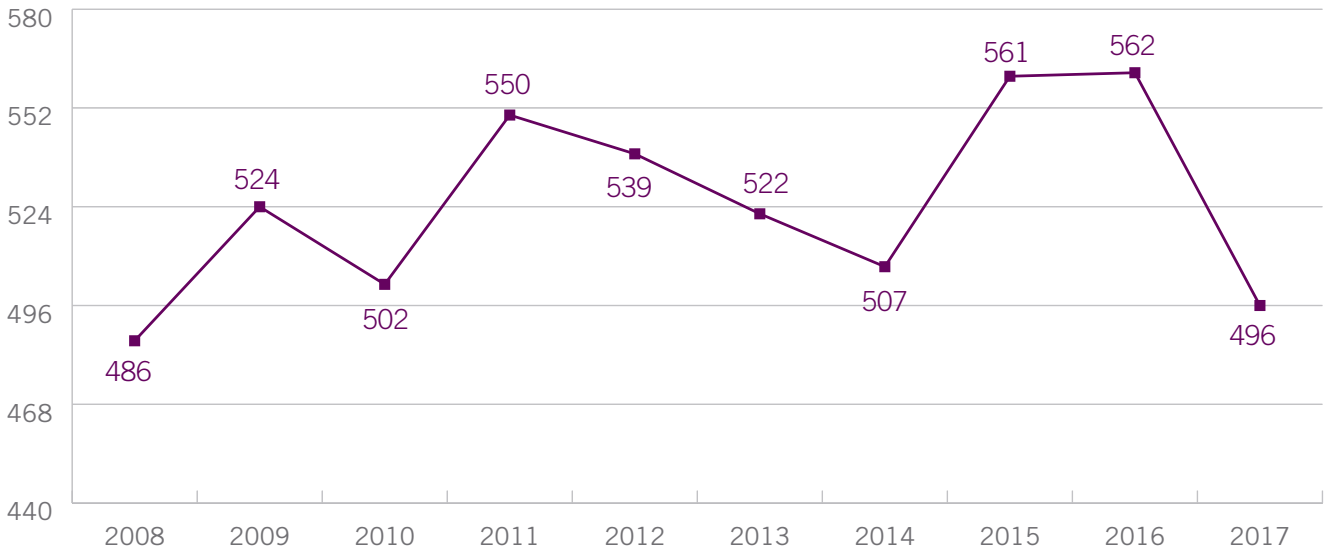
Mode of Anaesthesia for CS following unsuccessful attempt at instrumental delivery

	Primigravida	Multigravida	Total	%
Epidural	1	0	1	14.3%
Spinal	3	0	3	42.9%
Combined Spinal	1	1	2	28.6%
General Anaesthetic	1	0	1	14.3%
Total	**6**	**1**	**7**	**100.0%**

Number of Women who had Epidurals in Labour



Number of Women who had Caesarean Sections



Neonatal Unit

Ms Kate Greenough

The staff of the neonatal unit aim to provide high-quality, evidence-based care to neonates in a safe and friendly environment.

There were 1,670 babies born in Letterkenny University Hospital in 2017, of which 265 were admitted to the neonatal unit.

The unit has 10 cots in total, 2 of which are for intensive care and 8 for high dependency / special care. There is a room used for isolating babies when required and a parents' room is also available.

Infants are admitted from the labour ward, postnatal ward, theatre and other hospitals, or may have been born outside hospital.

Indications for Admission Include:

- Prematurity
- Hypoglycaemia
- Feeding issues
- Birth trauma
- Low Apgars
- IV fluid therapy
- IV antibiotic treatment
- Respiratory problems
- Sepsis
- Jaundice
- Acidosis
- Seizures
- Substance abuse
- Congenital malformations
- Social reasons

Treatments available in the neonatal unit include short-term ventilation, CPAP, low flow oxygen therapy, IV fluids, antibiotics, TPN and initiation of therapeutic cooling therapy.

- 33 babies required CPAP
- 9 babies were ventilated
- 11 babies had congenital malformations
- 16 babies were transferred to other hospitals
- 9 babies were transferred from tertiary centres for ongoing care
- Some care orders were invoked in the unit and we provided care for these babies prior to discharge.

Specialist Services on site include: audiology and ophthalmology screening, MRI scans and ultrasound facilities. The multidisciplinary teams include a paediatric dietician, the social work team, physiotherapists, radiographers, orthopaedic team and the paediatric link nurse. The staff in the neonatal unit liaise, when necessary, with specialist teams in Dublin. The transport team offer a valuable service, transferring a number of our babies for continuing care and investigations to Dublin hospitals. Communication with the public health nurse team plays an important role in discharge planning.

A staff member is trained to provide CPR training to parents when required.

The neonatal unit has a core staff of 14.5 WTE. This includes 2 CNMs and a combination of midwives, paediatric nurses and staff nurses with a wide variety of experience and qualifications.

In 2017, 2 staff 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 days
- Hand Hygiene and mandatory training
- Breastfeeding study days
- Study days relevant to the area of Neonatology
- Child First
- Equipment training updates

Since 2014, the neonatal unit has been involved in providing data for the Vermont Oxford Network database.

Gestational Age of Admissions

Gestational age	n	%
24 - 27+6 weeks	3	1.1%
28 - 31+6 weeks	13	4.9%
32 - 34+6 weeks	33	12.5%
35 - 36+6 weeks	35	13.2%
≥37 weeks	181	68.3%
Total	**265**	**100.0%**

Baby Weight on Admission to NICU / SCBU

Weight	n	%
500-999g	1	0.4%
1000-1499g	7	2.6%
1500-1999g	17	6.4%
2000-2499g	41	15.5%
2500-2999g	44	16.6%
3000-3499g	64	24.2%
3500-3999g	62	23.4%
4000-4499g	23	8.7%
≥4500g	6	2.3%
Total	**265**	**100.0%**

Fetal Assessment Unit and Early Pregnancy Clinic

Midwife-led Unit

Midwife Sonographers:
Ms Geraldine Gallagher, CMS
Ms Niamh McGarvey, CMS
Ms Louise Gallagher, RM
Ms 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 their MSc in diagnostic imaging ultrasound.

A total of 6,001 scans were performed in 2017, of which 1,631 were anomaly scans and 1,801 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 scans are scheduled to coincide with antenatal appointments for those with high-risk pregnancies, multiple pregnancies and known abnormalities.

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)
- Musculoskeletal malformations (skeletal dysplasia)
- GI malformations (exomphalus)
- Chromosomal abnormalities (Trisomy 21, Trisomy 18).

A total of 62 referrals were made to the National Maternity Hospital, Holles Street.

The Fetal Assessment Unit supports the Diabetic / Obstetric Clinic and carries out Glucose Tolerance Tests (GTTs) in pregnancy. A total of 1,201 GTTs were carried out, with 141 being positive.

Prophylactic Anti-D at 28 weeks was introduced by the team in July and is given at the same time as the Antenatal Clinic appointment. Uptake is excellent, with a total of 141 given from July to December.

As well as the Fetal Assessment Unit, a formal Early Pregnancy Clinic continues with a morning clinic from 11 a.m. - 1 p.m., Monday – Friday.

Obstetric Registrar-led Clinic

All scans are performed by Midwife Sonographers.

The total number of ultrasound scans performed in 2017 was 861.

This service provides ultrasound for women up to 12 weeks' gestation 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, i.e. early pregnancy loss or ectopic pregnancy.

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

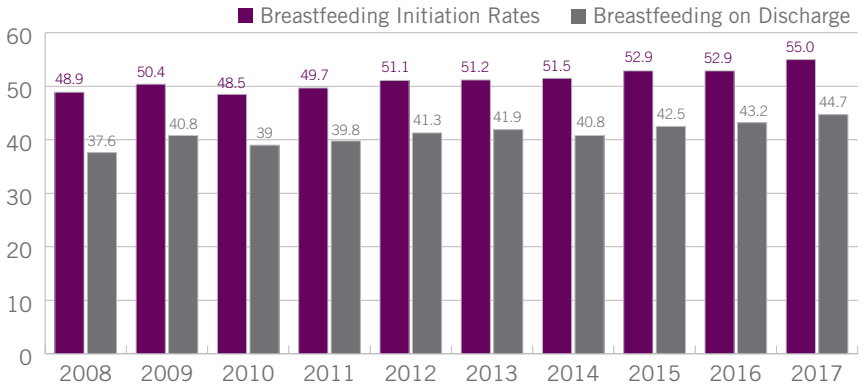
Postnatal Report

Ms Mary Lynch

Our postnatal unit consists of 25 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. The CMM and midwives are part of the multidisciplinary team which provides postnatal care, including supporting infant feeding, parenting support, education and teaching.

Breastfeeding on Discharge



The multidisciplinary team working as part of this ward includes 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 1,670 babies born in 2017, with a Caesarean section rate of 30.2%. 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. The Sepsis Predisposition and Recognition (Sepsis 3) form was introduced during 2017. Postnatal readmissions and postnatal day assessments are provided on the ward.

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.

We use the BiliChek monitor, which provides non-invasive testing for hyperbilirubinaemia in newborn infants. A large part of our responsibility involves metabolic screening tests on babies. In line with national guidelines, we 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 per 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 ensuring best practice and standards in promoting breastfeeding. All our staff have received 18 hours of breastfeeding training and regularly attend 4-8 hour updates. We facilitate rooming-in on the postnatal ward, with good breastfeeding outcomes. Our breastfeeding on discharge rate has increased to 45% for 2017.

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.

We also provide a 24-hour telephone advice helpline to all breastfeeding mothers and a weekly, hospital-based, drop-in clinic.

Introduction of a Breastfeeding Volunteer Programme to support mothers & staff at LUH

The need to have additional support for breastfeeding mothers was identified by the hospital breastfeeding committee in their action plan for 2016. Recognising the role of volunteer breastfeeding support, a plan was developed to introduce a breastfeeding volunteer programme. The plan was supported by the Director of Midwifery, hospital management, staff, La Leche League and Donegal Breastfeeding Forum. A project commenced in April, 2017, to provide support and information to breastfeeding mothers and this service is currently available 2 mornings per week. Qualitative information has been gathered from mothers, midwives and volunteers to evaluate the project.

Bereavement

- Butterfly Room design commissioned and work commenced.
- Training provided for Midwives in CNME “Perinatal Loss in Maternity Setting”
- Counselling offered post-delivery
- Chaplaincy service available
- Feileacain services available
- Cool Cot available

Perinatal Mental Health

- Counselling available
- MDT approach with Psychiatric Services
- Staff training in perinatal mental health

Antenatal Education Report

Ms Geraldine Hanley

The demand for Antenatal Education classes continued throughout 2017. The Antenatal Education Co-ordinator (CMM2) co-ordinates and facilitates antenatal and postnatal education programmes. The programme provides a woman-centred, multi-disciplinary approach, acknowledging pregnancy and birth as a normal life event. This is a comprehensive and interactive programme that aims to empower women and partners to make informed choices. Pregnant women, partners and students avail of the antenatal classes.

An increased demand for one-to-one consultations continued throughout 2017, particularly in the area of perinatal mental health, often requiring repeat visits or referral to Mental Health Services. The Antenatal Education service links closely with specialist services including Social Work Department, Pregnancy Counselling, Mental Health Services and the Fetal Assessment Unit.

The antenatal education programme continues to be held in an external venue at Donegal Women's Centre. The weekly hospital Breastfeeding Drop-in Clinic continued throughout 2017.

Achievements in Service Provision

- Provision of a comprehensive woman-centred antenatal education programme.
- Increased one-to-one antenatal education sessions to meet demand.
- Hypnobirthing training of midwife educator, offering women and their partners additional tools for childbirth and parenting preparation.
- Perinatal mental health training of midwife educator to further meet the demands of vulnerable women and their families.
- Promotion, protection and support of breastfeeding.

New Initiative: Blended Hypnobirthing

During 2017, the antenatal education co-ordinator trained as a hypnobirthing practitioner in the Judith Flood Method of Hypnobirthing. A blended hypnobirthing model was then incorporated into the antenatal education programme. One of the midwives involved in midwifery-led care also completed the training and it is hoped that more maternity staff will be offered education around the philosophies of hypnobirthing.

Breastfeeding Promotion and Supports Available

- Promotion, protection and support of breastfeeding is a key part of parent education; this continued throughout 2017, based on the WHO / UNICEF recommendations for breastfeeding.
- The hospital-based Drop-in Breastfeeding Support Clinic continues to run weekly, alongside a daily breastfeeding telephone helpline service.
- A 'Breastfeeding Peer Support Volunteer Programme' commenced in April, 2017. Two breastfeeding support volunteers from La Leche League were introduced to the postnatal ward, on a twice weekly basis. Qualitative feedback has been very positive.
- 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.
- Donegal Breastfeeding Forum Group continues to support breastfeeding locally.

Source of Referrals to Antenatal Classes

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

Multidisciplinary Collaboration

The Antenatal Education Co-ordinator works closely with the following groups:

- Donegal Parent Hub / Child and Family Health Initiative
- Teen Parent Support Programme (TPSP)
- Health Promotion Department
- Donegal Alcohol Forum
- Saolta Breastfeeding Forum
- Donegal Breastfeeding Forum

As a result of these collaborations, many other projects have been developed and highlighted, such as the Alcohol & Pregnancy Practice Change Initiative, 'Prescription for a Healthy Pregnancy', with phase two currently being planned.

Challenges

- While there were many achievements throughout the year, it is recognised that the service needs additional resourcing to provide optimum service.
- The allocated 19.5 hours per week doesn't allow for provision of other targeted classes such as Early Pregnancy classes, Twin Pregnancy Classes and Antenatal Breastfeeding Workshops.
- The availability of a mobile phone to communicate with specific service users would be of benefit. The teenage service users request to communicate by text message and the increasing number of service users who are deaf use phones or iPads to communicate during sessions.

2017 Attendance at Antenatal Education Sessions

ANTENATAL EDUCATION	CLIENTS	SUPPORT PARTNERS	TOTAL ATTENDANCE
Weekday Sessions	126	0	126
Evening Sessions	140	140	280
Refresher Sessions	80	40	120
Postnatal Reunions	38		38
Teenage Group Sessions	11	11	22
1:1 Antenatal Class Sessions	145	95	240
Tours of Maternity Unit	662	650	1312
Breastfeeding Drop-in Clinic	36	5	41
1:1 Antenatal Clinic Education	850	850	1700

Colposcopy Clinic Report

Staff Complement

Consultant Colposcopist
Dr Edward Aboud, Director of Colposcopy

Senior Registrars
Dr Sally Philip, Senior Registrar / Colposcopist
Dr. Farhat Shireen, Senior Registrar / Trainee Colposcopist

Nurse Colposcopists
Ms Regina McCabe
Ms Pat Hirrell

Healthcare Assistant
Ms Marjorie McHugh

Office Administrators
Ms Tanya Graham (Full-time)
Ms Susan Shields (0.5 WTE)

The Colposcopy Service at Letterkenny University Hospital is consultant-led. There are two Nurse Colposcopists, Ms Regina McCabe and Ms Pat Hirrell. All clinicians are British Society Colposcopy & Cervical Pathology (BSCCP) accredited Colposcopists.

Clinic Attendances

First-visit attendances showed an increase in 2017 on the previous year: 654 in 2017 compared to 619 in 2016. The clinic is contracted by the National Cervical Screening Programme (NCSP) to see 500 first visits per year. Patients are offered appointments within the recommended waiting times. We continually facilitate changing of appointments by offering times to suit work and other commitments.

Quality Assurance and MDTs

In 2017, we continued to hold CPC / MDT meetings at 3-monthly intervals to discuss complex cases requiring team discussion and management planning. These meetings are 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 adds greatly to diagnoses and patient management decisions.

The Colposcopy Service provision is based upon Quality Standards set out by the National Cancer Screening Service (NCSSP). The Colposcopy Unit, LUH, continually reviews practice against organisational standards such as system management, staffing, clinical and administrative management and governance structures.

Monthly, quarterly and annual audits of Quality Assurance Standards are submitted in the form of Colp 1 reports to CervicalCheck and to line management, LUH. These measured waiting times for new appointments, type of procedure and result of referral, histology outcomes and waiting time for results.

Summary

The Colposcopy team at Letterkenny University Hospital 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.

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.

Summary of Colposcopy Clinic Activity 2017

New Referrals		Follow Up / Treatment	
Attended	Did Not Attend	Attended	Did Not Attend
654	51	1133	214

Urodynamic Report

The Urodynamic Service continues to see pessary referrals for assessment and fittings of specialised silicone devices for prolapse and complex procidentia, however it is planned that specially-trained Senior Physiotherapists in Women's Health will start to see the non-complex cases in 2018.

The new Nexam Pro urodynamic machine was commissioned early in 2017. Configuration of reports and tracings has changed and they are now available in a very interpretable and professional format.

Urogynaecology patient numbers have reduced now, as new patients presenting with urinary symptoms are being seen in the Gynaecology outpatient clinics. It is proposed from January 2019 to discontinue the Urogynaecology afternoon clinics, allowing for an extra Gynaecology clinic per month to address the waiting list.

The service has been allocated a 0.5 WTE Health Care Assistant, which has been of great support for patients undergoing the more invasive urodynamic procedures.

Staff Complement

Consultant Lead
Dr. Edward Aboud

CNM2
Ms Lorna Baldrick

Office Administrator
Ms Martina Guthrie (0.5 WTE)

Healthcare Assistant
Ms Donna Black (0.5 WTE)

Urodynamics Unit Annual Stats 2017

2017	Number of Clinics	Ward Referrals	Uroflow CMG Studies	Attended Urogyn Clinic	Pessaries	DNA	Total Attended (excluding DNAs)
Jan	11	14	39	14	12	5	79
Feb	10	13	37	8	9	4	67
Mar (on leave)	7	6	16	7	8	2	37
Apr	11	20	39	8	15	5	82
May	15	19	32	16	15	5	82
Jun	10	14	26	8	10	3	58
Jul	13	15	44	8	17	4	84
Aug	13	28	39	6	17	4	90
Sep	11	18	29	(no clinic) 0	14	4	61
Oct	15	27	38	7	13	6	85
Nov	10	16	22	6	8	4	52
Dec	9	15	24	(no clinic) 0	15	4	54
Total	**135**	**205**	**385**	**88**	**153**	**50**	**831**

Mayo University Hospital

Ms Andrea McGrail and Ms Sile Gill

Introduction

Mayo University Hospital (MUH) 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 and 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 Departments have an excellent working relationship with the other departments in the hospital and have access to the huge bank of expertise, knowledge and skills that serve Mayo University Hospital.

We are constantly looking at ways to improve the service we provide to our women and in 2016 we commenced a pilot programme of hypnobirthing that is proving very popular with our women. In 2017, we introduced this as a regular part of our antenatal education classes. This service was nominated for a Saolta award. Unfortunately, we are still lacking some key posts in midwifery, audit, lactation, practice development, clinical skills and Advanced Midwife Practitioner roles but we are hopeful that these posts will be approved by our 2018 report.

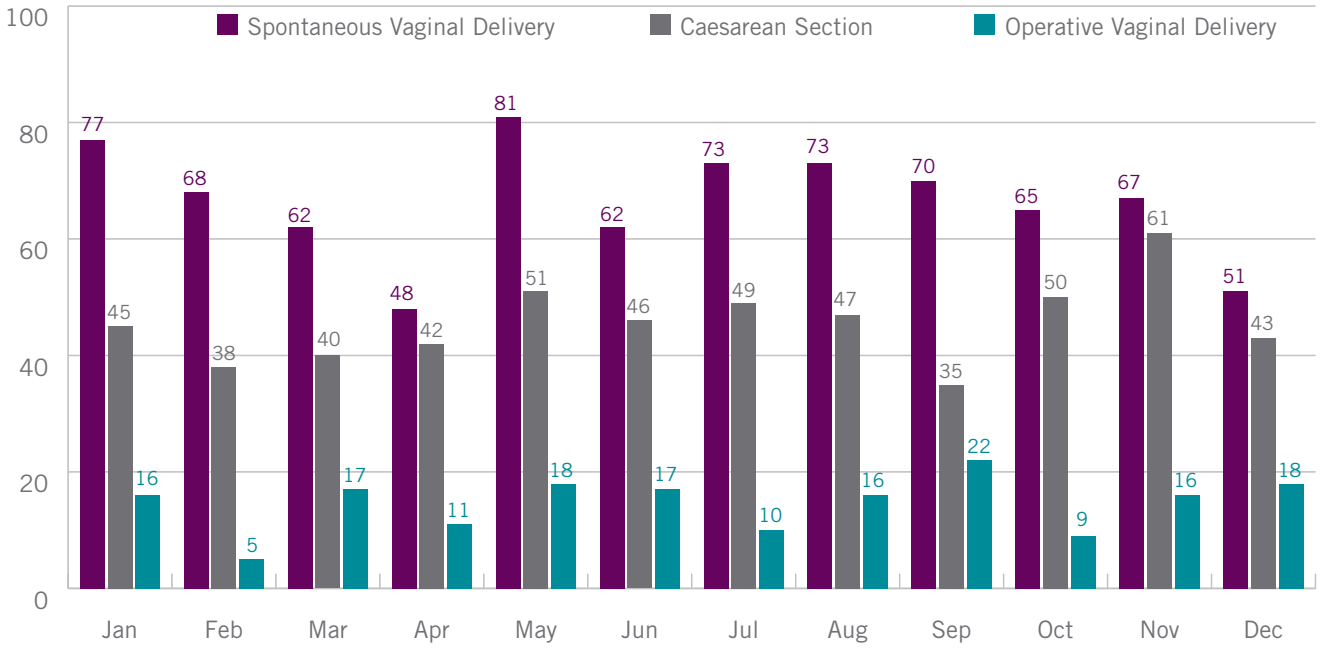
We continue to have a peer review safety meeting, Monday to Friday, in the Maternity Ward meeting room. This is attended by day / night staff, Obstetricians, Midwives and students. All cases in the previous 24 hours are discussed and also patients that were seen out of hours in ED or on the Labour Ward. The day's work is discussed and any high-risk patients, staffing issues or other concerns are addressed. Any women attending with a known fetal abnormality are mentioned so that all staff are familiar with their situation when they present in our department.

On Thursdays, we are joined by the Paediatric team and all babies that required SCBU admission in the previous week are discussed.

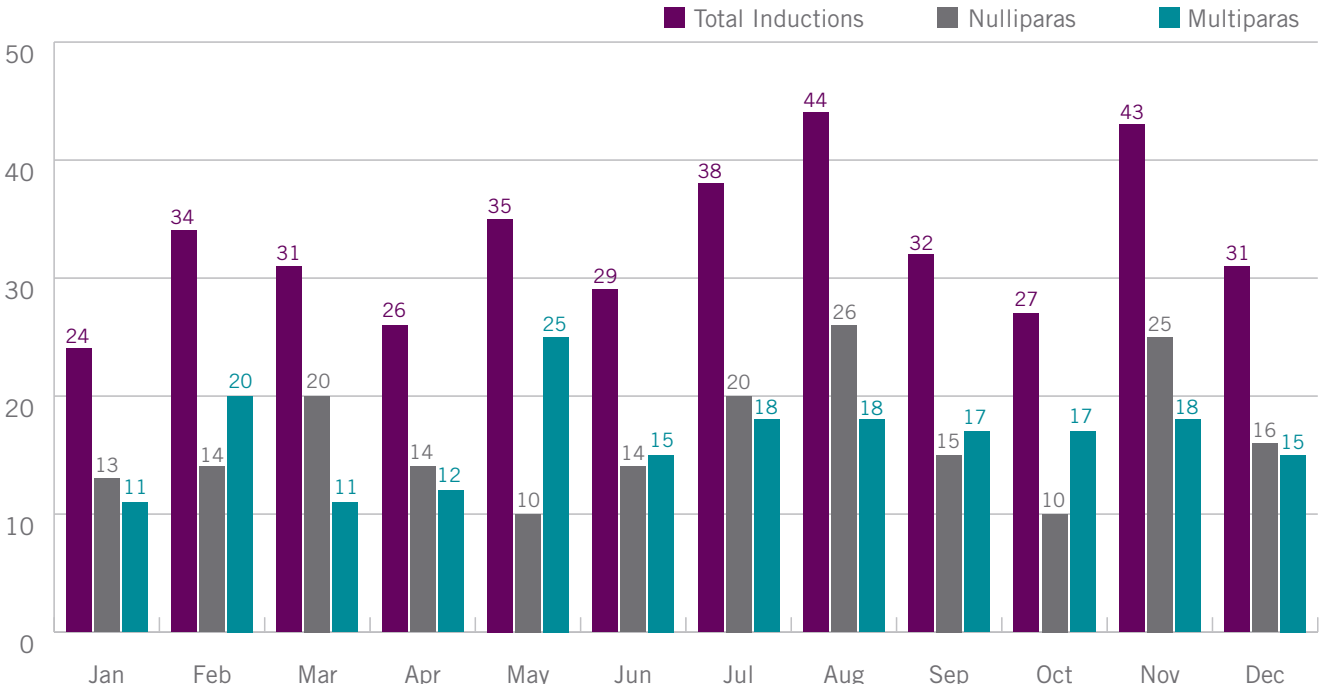
In 2017, 1,546 babies were delivered to 1,519 women at MUH, showing a slight decrease in numbers from 2016. The majority of these deliveries were vaginal deliveries. The rate of induction of labour was 25.9%. There was an overall CS rate of 35.9% which shows an increase from 2016 figures. We are concerned regarding the CS rate. There is a significant contribution to this rate from those who have had one previous delivery by CS. We continue to actively promote and encourage VBAC (Vaginal Birth After Caesarean).

Robson Groups	Number of Caesarean Sections	Number of Mothers Delivered	%
Group 1 - nullip singleton cephalic term spont labour	57	240	23.8%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	114	219	52.1%
Group 3 - multip singleton cephalic term spont labour	9	430	2.1%
Group 4 - multip singleton cephalic term induced or pre-labour CS	35	209	16.7%
Group 5 - previous CS singleton cephalic term	236	286	82.5%
Group 6 - all nulliparous breeches	26	26	100.0%
Group 7- all multiparous breeches	26	27	96.3%
Group 8 - all multiple pregnancies	19	26	73.1%
Group 9 - all abnormal lies	4	4	100.0%
Group 10 - all preterm singleton cephalic	21	52	40.4%
Total	**547**	**1519**	

Type of Delivery



Inductions of Labour



Obstetric & Gynaecological Surgery Report

Operation Category	
Obstetrical	770
Cervical	20
Uterine	224
Tubal & Ovarian	49
Vulval & vaginal	77
Urogynae	39
Total	**1179**

Obstetrical Operation	
Lower segment caesarean section	547
Caesarean section and Tubal ligation	3
Caesarean section and Bilateral Salpingectomy	29
ERPC	91
ERPC Post partum	1
Laparotomy for Ectopic	2
Laparoscopy Surgery for Ectopic	12
Perineal Repair postpartum in theatre	29
Manual Removal of Placenta	11
Operative vaginal Delivery in Theatre	45
Total	**770**

Cervical Operations	
Cervical smear	5
Colposcopy	3
LLETZ/NETZ/SWETZ/LEEP (in theatre)	5
Punch & Wedge Biopsy of Cervix	2
Cervical Polypectomy	2
Other	3
Total	**20**

Uterine Surgery	
Hysteroscopy and D&C	102
Endometrial Polypectomy	10
TCR Polyp	9
TCR Fibroid	1
TCR Endometrium	7
Hysteroscopic Morcellation Polyp	3
Endometrial Ablation	9
Total Abdominal Hysterectomy	10
Subtotal Abdominal Hysterectomy	2
Vaginal Hysterectomy	16
Intrauterine Coil Insertion	38
Intrauterine Coil Removal	16
Other	1
Total	**224**

Tubal And Ovarian Operations	
Laparoscopic Tubal ligation	3
Diagnostic laparoscopy	6
Laparoscopy and dye test	13
Unilateral Oophorectomy/Salpingooophorectomy (laparotomy)	11
Unilateral Oophorectomy/Salpingooophorectomy (laparoscopy)	4
Bilateral Oophorectomy (laparotomy)	1
Bilateral Oophorectomy (laparoscopy)	1
Ovarian cystectomy (laparotomy)	3
Ovarian cystectomy (laparoscopy)	1
Other Operative Laparoscopy	6
Total	**49**

Vulval And Vaginal Operations	
Vaginal Repair for Dyspareunia/ Vaginoplasty	4
Anterior and posterior Repair	18
Anterior Repair only	15
Posterior Repair only	10
Vault Prolapse/Enterocoele Repair	1
Excision of Vulval/Vagina Cyst	2
Bartholin's Cyst/Abscess	5
Vulval Biopsy	4
Vaginal wall Biopsy	2
Others	16
Total	**77**

Urogynaecology	
TVT	14
TVTO/TOT	1
Cystoscopy	22
Colpocleisis	1
Other	1
Total	**39**

Paediatric Report

Dr. Hilary Stokes

Paediatric Ward

The Paediatric Ward offers inpatient, day case assessment and elective review services to children up to their 15th birthday. While paediatric activity in the Emergency Department continues to rise steadily each year, the number of admissions to the paediatric ward demonstrates a decline in 2017.

7808 children aged up to 15th birthday attended the ED in 2017. This number represents the total, unselected caseload of children up to 15th birthday. The total number of admissions to the paediatric ward from this unselected care group and under the care of the paediatricians was 1336.

The data in this year's report includes those teenagers, aged 15 to 16 years, who were admitted under consultant physicians or surgeons and will, in future years, represent the adolescent cohort under the care of the paediatricians.

The paediatric ward is utilised by 4 Consultant Paediatricians, 4 Consultant Surgeons, 4 Orthopaedic Surgeons, Consultant Physicians, and weekly visiting services, namely Dental and ENT.

Total admissions in 2017 were 4469. Table 1 gives the breakdown by services with number of admissions, average length of stay (ALOS) and the number of day cases.

Table 1 – Paediatric Admissions

Paediatric Admissions	Episodes of Care	ALOS Days	Daycases (% of total daycases)*
Consultant Paed A	846	2.26	291 (27%)
Consultant Paed B	759	2.16	269 (25%)
Consultant Paed C	608	1.94	184 (17%)
Consultant Paed D	495	1.91	129 (12%)
General Surgery	387	2.12	145 (13%)
Orthopaedic Surgery	203	1.47	51 (5%)
Adult Medicine	72	2.34	2 (<1%)
Visiting Services	17	1	11 (1%)
Totals	**3387**		**1082 (100%)**

Table 2 - PDU Activity (PDU opened 22nd August, 2017)

Number of Children	Aug / Sept	Oct	Nov	Dec	Total
Scheduled	96	51	64	69	**280**
Unscheduled	106	97	143	129	**475**
% Discharged Home from PDU	71%	73%	81%	79%	

Table 3 - Clinic Provision by the Paediatric Service

Asthma 3/month	Constipation 2/month	Diabetes 2/month	Down Syndrome 1/month
Cystic Fibrosis 2/month	Complex care 2/month	Complex needs community (preschool & school-age) 2/month	Autism Assessment 4/month (Autism Forum for multidisciplinary discussion - monthly)
General Clinics 14/month	Outreach Ballina 5/month	Outreach Belmullet 1/month	

Paediatric Decision Unit

2017 has seen a significant change in the configuration of the paediatric ward, with the development of a Paediatric Decision Unit (PDU) within the footprint of the ward. Opened in late August 2017, this innovation sought to improve quality and safety, through efficient care delivery based on the accepted international model of care, and to address significant challenges to the safety and sustainability of existing patient services and the changing trends in children's admission to hospital.

The PDU provides a short-stay service for the assessment, observation and treatment of children and young people for up to 6 hours, with a consequent reduction in unnecessary overnight admissions. It has improved patient flow through the ED, and ensures that children and young people access care in an appropriate environment and in a timely manner. Service-user feedback is strongly positive.

There are 6 PDU beds, including one isolation cubicle. Within the 6-hour observation period, if it is likely that the child requires ongoing treatment in hospital, he or she will be transferred from the PDU to an inpatient bed.

Planned reviews and assessments form part of the daily activity, with a reduction in footfall onto the main paediatric ward.

Paediatric Outpatient Service

The Paediatric Department has a well-structured and functioning OPD, with 5 consultation rooms. Multidisciplinary clinics take place in the Safari Club. The Department provides outreach services to Ballina and Belmullet.

The clinic structure has developed along general and subspecialty lines. In total, there are 38 clinics per month. The clinics provided are outlined in Table 3.

A deficiency has been highlighted in the diabetes service, as there is an absence of a paediatric pump service. This is a departmental priority for 2018. There are 94 patients in the paediatric diabetic service, 4 aged under 5 years.

The diabetes service is supported by dietetic services and the adult clinical nurse specialist and advance nurse practitioner but the service requires dedicated paediatric dietetic and clinical nurse specialist input.

The Asthma Clinic is support by a clinical nurse specialist and all children have pulmonary function testing performed at the clinic once they are over 5 years. Table 4 provides a listing of the new and review attendances at the paediatric clinic in MUH only.

Autism assessments are not included in the OPD data sets. The autism forum provides a multidisciplinary 'grey case' discussion forum, independent of the autism clinic / ADOS assessments.

Also excluded from the outpatient activity data are the children with disability seen at the Early Intervention Community Pre-school-age Clinic, held in Enable Ireland HQ, Castlebar, on a monthly basis. 88 pre-school-age children with complex disability were seen at that clinic in 2017.

Table 4 - New and review attendances by Paediatric Consultant

Outpatient Clinics	New Patients	Review Patients
Consultant A	353	1471
Consultant B	343	1132
Consultant C	213	820
Consultant D	342	1371

ICU

Paediatric patients continue to be admitted to the adult ICU. Patient numbers are small, totalling 8 patients in 2017. The clinical conditions which necessitate admission include DKA, status epilepticus and pneumonia. The National Paediatric Retrieval Service team facilitates transfer of ventilated patients to a tertiary ICU and is operational 7 days per week, 08:00-16:00.

Emergency Department (ED)

Paediatric patients represent 21% of all ED attendances. Total paediatric attendances was 7808 in 2017. Our services see those children and adolescents with medical conditions as the first point of contact post-triage, which is at variance with surgical and medical services which see patients after initial assessment by the Emergency Medicine doctors. With the extension of paediatric services to 16, this will result in an increased workload for the paediatric services. The impact of this increased burden has not yet been assessed.

The non-separation of paediatric patients from adults in the ED continues to be a problem and is at variance with national recommendations. The introduction of the PDU has lessened but not eliminated this difficulty. The ED requires significant modification to its footprint to address the separation of children from adults.

Women's and Children's Directorate Academic Report

Professor Michael B. O'Neill

Introduction

Mayo University Hospital continues to provide 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. Special study modules in Paediatrics are available. 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 Paediatrics programme, 2 are Family Practice trainees and 1 is a stand-alone post). The Registrar complement is 7 (2 SpRs and 5 Registrars). The Department of Obstetrics has 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 in Paediatrics, on a daily basis. These structured handovers facilitate both patient care and educational components. Compulsory attendance with sign-in is required for all Consultants and NCHDs. In the Paediatric Service, the advent of the Paediatric Decision Unit has resulted in a change of name for the handover process and it is now called the Safety Round.

The Paediatric Educational timetable

Monday	Tuesday	Wednesday	Thursday	Friday
X ray conference 2/month	**Neonatology** 8.30-9.30 am Dr. Letshwiti Weekly	**Paediatrics** 8.30-9.30 am Dr. O'Neill Weekly	**Perinatal Meeting** 8.00-8.30 am Dr. Stokes/ O'Neill Weekly	**Journal Club / Community Topics** 9.30-10.00 am Dr. Stokes
Educational Handover Round 9.30-10.00 am All Consultants in attendance	**Educational Handover Round** 9.30-10.00 am All Consultants in attendance	**Educational Handover Round** 9.30-10.00 am All Consultants in attendance	**Educational Handover Round** 9.30-10.00 am All Consultants in attendance	**Educational Handover Round** 9.00-9.30 am All Consultants in attendance
Tutorial 1.00-2.00 pm Dr. Stokes (1/month)		**SpR Tutorial** 1.00-2.00 pm Dr. O'Neill (3/month)		**Clinical Slides** 12.30-1.00 pm Dr. O'Neill (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 8.00-9.15 am All Consultants in attendance	**Educational Handover Round** 8.00-9.00 am All Consultants in attendance	**Educational Handover Round** 8.00-9.00 am All Consultants in attendance	**Educational Handover Round** 8.00-9.00 am All Consultants in attendance	**Educational Handover Round** 8.00-9.15 am All Consultants in attendance
				Structured teaching for BST and SpR trainees 10.30-12.00 noon
			Obstetric Drills 3.30-4.00 pm	
		GP half-day release		

Academic Output for 2017

Obstetrics

Dr Meabh Ni Bhuinneain

1. MUH
   a. Chair of Medical Staff Committee to July 2017 and Hospital Management Team member
   b. Consultant member of Patient Family Experience steering team

2. National/Regional
   a. National Women and Infants Health Programme National Maternity Strategy Implementation Team member
   b. National Perinatal Epidemiology Centre - severe maternal morbidity group member
   c. School Board, School of Medicine, NUI Galway
   d. Steering committee member Esther alliance, HSE global health programme
   e. Institute of Obstetricians and Gynaecologists specialty training committee member
   f. Trainer - BST and HST
   g. National Specialty Director: BST Obstetrics and Gynaecology Programme

h. MUH/Mayo Medical Academy, NUI Galway Dean of Medical Education
i. Course director: Emergency obstetrics and newborn care - HSE West GP training program induction
j. Co-course director: NUI Galway Special Study Module - Medicine in the resource-poor setting
k. Health and Development invited trainer - emergency obstetrics and newborn care - HSE global health programme

National Presentations

1) Dr. M. Ni Bhuinneain. Oireachtas presentation on behalf of the Institute of Obstetricians and Gynaecologists, RCPI, to the Joint Oireachtas Committee on the Eighth Amendment of the Constitution.
2) Dr. M. Ni Bhuinneain. Invited speaker, Fall webinar series 2017, International Association of Medical Science Educators - Globalisation of education and global healthcare education - the European perspective.

Paediatrics

Professor Michael O'Neill

1. MUH

a. Member of Hospital Management Team

2. National/Regional

a. Associate Lead National Doctor Training and Practice for Saolta Group
b. Associate Dean, BST Paediatrics, RCPI
c. Trainer in Paediatrics BST and HST

3. Publications

a. Reviewer for IMJ

Dr. Hilary Stokes

1. MUH

a. Member Hospital Management Team
b. Associate Clinical Director, Women's and Children's Directorate
c. Stand Lead Paediatrics, Mayo Medical Academy
d. Trainer, BST and HST Paediatrics
e. ALSG child protection faculty member / course provider
f. Community Child Health Subgroup Committee.

Dr. Johannes B. Letshwiti

1. MUH

a. Paediatric Infection Prevention & Control Committe
b. Chair, Staff Engagement Forum
c. Member Protocols, Policies, Procedures & Guidelines Group
d. Paediatric Lead, Drugs & Therapeutics Committee
e. Member Breastfeeding Committee

Publications

1) O'Neill MB, Nabialek T, Kandamany N. Opportunity costs in paediatric training: the specialist registrars experience. Ir Med J. 2017 Aug 8;110(7):602.
2) O'Neill MB, Sarani ZA, Nicholson AJ, Elbadry M, Deasy AM. A survey of clinical uncertainty from the paediatric basic specialist trainee's perspective. Ir Med J. 2017 Jun 9;110(6):581.
3) McGovern M, Kernan R, O'Neill MB. Parental decision-making regarding pre-hospital therapy and costing of the Emergency Department visit. Ir Med J. 2017 Feb 10;110(2):513.
4) Letshwiti JB, Semberova J, Pichova K, Dempsey EM, Franklin OM, Miletin J. A conservative treatment of patent ductus arteriosus in very low birth weight infants. Early Human Dev. 2017 Jan; 104:45-49.

International Presentations

1) Ni Chathasaigh CM, Gorman I, Stokes HK, O'Neill MB. Lessons learnt from the Emergency Department attendances of children in a general hospital. 8th Europaediatrics Congress, Bucharest, Romania, June 2017.
2) Joyce JG, O'Dowd M, Ryan R, Stokes HK, O'Neill MB. Left frontal lobe abscess secondary to paranasal sinusitis: a case report. 8th Europaediatrics Congress,Bucharest, Romania. June 2017.
3) Nabialek T, Barlacu M, Hussain M, O'Neill MB. The quality of standards in published paediatric audits between 2007 and 2015. 8th Europaediatric Congress, Bucharest, Romania. June 2017.

National Presentations

1) Othman A, Kasha S, Sibartie S, Browne AM, Letshwiti JB. A rare case of congenital syphilis in a preterm male infant. IPA, Kilkenny. December 2017.
2) Lane C, Ul Hassan S, Waldron M, Letshwiti JB. Partial steroid response in a 12-year-old girl with nephrotic syndrome with normal renal biopsy. IPA, Kilkenny. December 2017.
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Colposcopy Service Report

There were 1437 appointments issued by the Colposcopy Clinic in 2017, of which 525 were first appointments. The DNA (Did-Not-Attend) rate was 8% for first visits and 13.8% for follow-up appointments. Our overall DNA rate was 11.6%. This rate is above the target set by Cervical Check at 10%. We are pleased that the text message reminder service which commenced 30th November, 2015, in the Colposcopy service in Mayo University Hospital has continued to prove successful for firsts visits to the service, however we are disappointed that our overall DNA rate is above the 10% target, despite a reminders by text message being sent to all patients prior to their appointments.

The waiting times for a colposcopy appointment at the clinic are 1 week in respect of urgent referral, 4 weeks for high-grade cell changes on smear results and within 8 weeks for low-grade cell changes on smear results. This is within the target standard set by Cervical Check.

The combined cytology and high-risk HPV test continues to be provided by Medlab Pathology to post-treatment women at six months and, if negative, they are discharged for follow-up by GP for 1 smear test in 12 months. The management of low-grade abnormalities continues with the combined cytology and high-risk HPV test. If negative, patients are discharged for routine recall as part of CervicalCheck Guidelines 2015. All this has helped greatly in the management of follow-up women and has led to a reduction in the number of review appointments at the Colposcopy Service. Women attending the Colposcopy Service are now more aware of HPV as a major cause of cervical cancer. All staff provided both verbal and written information to assist in educating and reassuring women, to encourage them to continue to attend colposcopy appointments when required and to have their cervical smear test preformed when due.

Histology services continue to be provided by Mayo University Hospital laboratory. A total of 288 biopsies were performed, of which 125 were LLETZ treatments and 160 diagnostic biopsies. 80% of the LLETZ treatments had CIN on histology, which meets the CervicalCheck standard (>80%).

Multidisciplinary team meetings between the clinical staff from the Colposcopy Service, Histology Laboratory and Medlab Laboratory were held regularly using GoToMeeting software. Monthly, quarterly and annual colposcopy activity reports were generated and submitted to CervicalCheck.

Training and ongoing professional development of both medical and nursing staff continues within the Colposcopy Service. One of the doctors achieved accreditation as a BSCCP Colposcopist while working in Mayo University Hospital in 2017 and has gone on to practice in the Rotunda Hospital, Dublin. Practice nurses from the primary care services continue to attend the Colposcopy Clinic as part of the cervical screening smear-takers course given by CervicalCheck. Quality cervical smear-taking training is central to an effective national screening programme. Ongoing clinical education continues to be provided to both the medical and the midwifery students who attend the Colposcopy Clinic as part of their professional training from UHG.

	Outcome (Histology result)	Biopsy type			Total Biopsies
		Diagnostic (Punch)	Excision	Other	
1	Cervical cancer	3	1	0	4
2	Adenocarcinoma in situ / CGIN	0	0	0	0
3	CIN3	7	56	0	63
4	CIN2	17	29	0	46
5	CIN1	44	22	0	66
6	CIN uncertain grade	1	0	0	1
7	VAIN3	0	0	0	0
8	VAIN2	0	0	0	0
9	VAIN1	0	0	0	0
10	VIN3	0	0	0	0
11	VIN2	0	0	0	0
12	VIN1	0	0	0	0
13	HPV / cervicitis only	24	8	0	32
14	No CIN / No HPV (normal)	64	9	3	76
15	Inadequate	0	0	0	0
16	Result not known	0	0	0	0
17	Other	0	0	0	0
	Total	**160**	**125**	**3**	**288**

Antenatal / Postnatal Report

Our Antenatal/Postnatal Unit consists of 26 beds.

The Midwives rotate to the Labour Ward, Antenatal and Postnatal. Midwifery team members working in Postnatal/Antenatal include CMM, Midwives, Student Midwives and HCAs trained in midwifery modules.

The Antenatal/Postnatal Ward provides a 24-hour service where staff endeavour to provide holistic and evidence-based care to mothers and newborn babies.

The unit is staffed by Midwives providing antenatal/postnatal care, breastfeeding and artificial feeding support, parenting support, education and teaching.

The multidisciplinary team working as part of the ward includes Obstetricians, Paediatricians, Physiotherapists, Social Workers, Antenatal Educators 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 and General Practitioners.

There were 1,519 mothers delivered and 1,546 babies born in 2017 with 547 caesarean sections. 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 and ISBAR tools are used in the provision of care.

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

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

A safety pause has been introduced, with a daily bedside handover of mother's and baby's care, and with the involvement of all Midwives. The safety pause is also used to communicate and highlight any high-risk issues and to ensure that all staff are alerted to the plans of care for individual mothers.

Staff are also allocated to various education sessions and are allocated jobs to ensure we have ongoing education and safe practice.

Safety huddles have been introduced, which involve a member of staff from each area in the department meeting at 11 a.m. daily to review activity in the unit and plan for the daily safety requirements in the Maternity Unit.

Department of Anaesthesia

Dr Ciara Canavan

Overview

The Department of Anaesthesia at Mayo University Hospital (MUH) provided anaesthesia services for 730 patients undergoing obstetric procedures and 250 patients undergoing gynaecology procedures in 2017.

Services Provided

The Department also provides a 24/7 epidural for labour analgesia service, pre-assessment of all patients for elective Caesarean section and a weekly High-Risk Antenatal Anaesthesia Clinic for all patients meeting OAA/AAGBI criteria for referral antenatally by the obstetric or midwifery teams.

Audit of the epidural service in 2017 revealed that patients had a good understanding of the risks and potential complications associated with epidurals and felt that informed consent had been given. The patients had gathered information from attending antenatal classes, from meeting the Anaesthetist at the Antenatal Clinic and on Delivery Suite and from information leaflets provided in the Delivery Suite. Any patient who experienced a complication of her epidural felt that she had been informed of that risk beforehand.

In 2017, 1519 mothers gave birth to 1546 babies. Of these, 442 (29.1% of all mothers or 36.2% of all mothers who laboured) had an epidural for labour; 547 (36.0%) had a Caesarean section of whom 212 were nulliparous and 335 were multiparous.

Operative Anaesthesia

General anaesthesia was provided for 36 women (6.6% of all Caesarean sections) and either spinal or epidural anaesthesia was provided for the remainder for Caesarean section delivery. The reasons for GA section included: failure of regional anaesthesia, no time to give a regional anaesthetic, bleeding disorder, patient request, antepartum haemhorrage and previous spinal surgery. Four patients required spinal anaesthesia for Caesarean section due to failure of epidural top-up.

Anaesthesia was also provided for suture of vaginal tear (26 patients), insertion of Bakri balloon (1 patient), instrumental delivery (46 patients), manual removal of placenta (16 patients), postpartum haemorrhage (11 patients), removal of cervical stitch (1 patient) and examination under anaesthesia (13 patients).

In total, 730 patients received anaesthesia care in the obstetric theatre in 2017, with 211 being outside of normal working hours.

Epidural analgesia was complicated by 14 recognised dural punctures (3%); 10 patients required a blood patch for post dural puncture headache.

Remifentanil PCA guidelines were reviewed and updated in 2016 and the technique was used for 2 patients who were unsuitable for epidural analgesia in 2017.

Epidural documentation was updated, customised for MUH use and added to the national maternity chart.

Early skin-to-skin, 'gentle Caesarean section' and improved family-centred practice in theatre is being practiced by the Obstetricians in suitable cases.

Fasting guidelines have been updated, and patient education and change to letters sent for admission have lead to reduced fasting times before elective Caesarean section.

Critical care admissions included 11 patients requiring HDU care in the ICU area. No patient required Level 3 ICU care. Reasons for admission included: suspected sepsis, hypotension, post partum haemorrhage, diabetic ketoacidosis, HELLP syndrome, suspected pulmonary embolus and respiratory distress.

Postnatal follow-up at 24 hours of all patients who receive anaesthesia care has allowed us to document complications and side effects, audit our practice and assess patient satisfaction since 2006.

Education

The Department is actively involved in teaching on the PROMPT course locally, continuing education with the midwifery competency module for management of epidurals on Delivery Suite and departmental education sessions on all aspects of obstetric anaesthesia care.

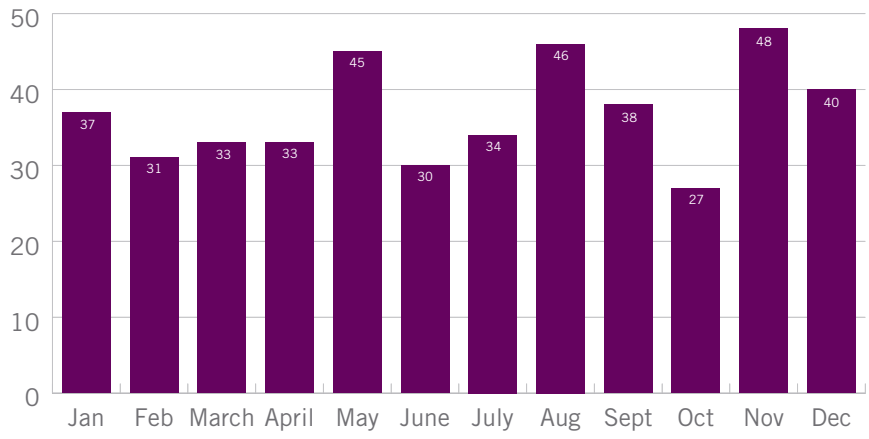
Aims for 2018

- To audit our updated fasting guidelines which reduce prolonged fasting for pregnant patients.
- To continue with our drive to promote 'family-centred Caesarean section' as the routine approach at MUH and to develop robust guidelines to back this up.
- To involve the midwives on Delivery Suite in the management of the epidural infusions, including rate adjustment and changing infusion bags.
- To audit general anaesthesia for emergency Caesarean section.

Aims to implement recommendations of National Maternity Strategy

- To increase our Consultant Anaesthetist staffing levels to allow for 24/7 Consultant cover for Delivery Suite.
- To continue to campaign for a dedicated Obstetric Emergency Theatre for urgent operative delivery during daytime hours.
- All senior staff to attend MOET course.

Labour Ward Epidurals



Antenatal Education Report

Ms Frances Burke and Ms Maura McKenna

Introduction

The Antenatal Education Service continues to support, educate and prepare women and families to be safe and prepared and to achieve the optimum outcome for their pregnancy.

It is a service that not only provides education but promotes wellbeing and links closely into the other maternity services. We work as part of the whole maternity care team.

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

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

Service Provision

The primary provision is block classes monthly for first-time parents. Following on from our pilot hypnobirthing service, we have rolled out a fifty-fifty model of classes in which fifty percent are hypnobirthing classes and fifty percent are regular classes for all attendees. These classes are given on Tuesdays and Thursdays. As the year progressed, more parents requested the hypnobirthing service.

Currently we are reaching sixty-six percent attendances of primigravida women, which includes younger parents. Partners' and support persons' attendance at classes is strongly encouraged.

Other classes provided include:
- Breastfeeding
- Twins
- One-to-one advocacy/ education/ supports.

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 women and families.

The increased demand for one-to-one sessions continued throughout 2017, often requiring repeat visits, with specific referrals from the Social Work Department, Fetal Assessment Unit and Mental Health Services. We saw a huge increase in the support of parents expecting babies with problems ranging from life-limiting conditions to birth defects. This area was a challenge to support with existing services and we welcome the Bereavement CNS post soon to be in place.

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

Young parents-to-be are contacted and offered one-to-one support. A contact number is given and follow-on antenatal classes.

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

Hypnobirthing

The Mongan method of hypnobirthing was introduced to fifty percent of the classes in 2017. This programme is in great demand and is currently being audited. Feedback and evaluation was extremely positive. It is hoped to introduce a more blended hypnobirthing for 2018.

Breastfeeding

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

Mayo University Hospital participates in the Baby Friendly Health Initiative (BFHI). In December, the Education Service participated in the review of BHFI and going forward we are working to support the new model being drafted. We continue to hold certified membership of the Baby Friendly Health Initiative for 2017.

The Education Service runs a stand-alone breastfeeding antenatal class where parents are helped to prepare for breastfeeding their babies. Attendance at this session has increased over the last year.

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 2017 was celebrated with a breast feeding awareness day for transition-year students. Information stands were available in the main foyer in the hospital for staff and members of the public. In the Education Service we supported mothers, babies and a colleague to attend Aras an Uachtarain for Mrs. Higgins' breastfeeding awareness event.

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
- Consultant referral
- Public Health Nurses
- Medical Social Work
- Teen Parent Support Programme
- Inpatient referral
- Diabetic Clinic

Since 2000, the Childbirth Education Service has forged links with the following groups:

- Mayo Traveller Support Group (MTSG)
- Road Safety Authority
- Specialist Nurses Group
- National Breastfeeding Coordinator
- Community end-of-life nursing team
- Public Health Nursing
- Centre of Nurse and Midwifery Education
- Western Region Drug and Alcohol Task Force

As a result of these collaborations, further projects such as the Annual MTSG Women's Health Morning, Safe Drinking in Pregnancy and Safe Driving in Pregnancy campaigns continue to be highlighted in 2017.

Conclusion

This service provides for the needs of all patients and their families using Mayo University Hospital maternity services. We constantly review the service we provide and make changes to meet patients' needs. We remain positive and committed to quality and excellence.

Attendance at Antenatal Classes

Class	Attendance
Hypnobirthing classes	179 women & partners
Regular antenatal classes	161 women & partners
Twins classes	10 families
Breastfeeding classes	181 women
One-to-one Sessions	141

Medical Social Work Department Report

Ms Ann Doherty

The Medical Social Work Department of Mayo University Hospital has provided practical and emotional support to the Women & Children's Health Division for the last 16 years. We work as part of the multidisciplinary teams covering Paediatrics, Antenatal, Maternity, Labour, and Gynaecology Units. A service is also provided to the parents of neonatal patients on the Special Care Baby Unit. We provide an outreach service in Ballina to antenatal patients referred by the Ballina antenatal team. We offer non-directive, three options counselling support to those who experience an unplanned pregnancy or to those whose pregnancy goes into difficulty. The Medical Social Work Department is in a position to respond compassionately to parents and families, enabling them to address any needs identified to support a safe discharge and to ensure that each woman, child and family referred is linked to the relevant supports, both within the hospital and in the community, to help them cope with any challenges they face. At times we provide crisis intervention, especially in the area of bereavement counselling for women who experience a miscarriage, stillbirth or neonatal death or where there is a concern in relation to child protection, for example.

Referrals

Our highest rates of referrals are from the antenatal Midwives and Antenatal Education. We also receive referrals from Consultants and their medical teams and CNM's on the Women's and Children's Wards. Self-referrals and referrals from GPs and other voluntary or statutory agencies are also welcomed.

Obstetrics and Gynaecology

As part of our support to women and children, we often provide individual counselling and practical advice around issues such as domestic violence, rape, teenage pregnancy, mental health and relationship issues or where there are drug or alcohol misuse concerns. Emotional support is also offered when a pregnancy is complicated by foetal anomaly and our referral rates in this area have risen. If a baby in Mayo University Hospital is diagnosed with a very severe foetal abnormality that is going to lead to death of the child at birth or very shortly afterwards, we offer non-directive counselling support throughout the pregnancy and advise of and liaise with supports in the community. When parents feel connected to a strong support system, it is easier to navigate the daily challenges inherent with having such a sad diagnosis.

Bereavement counselling and psychological support are provided to parents when a baby or child dies either through miscarriage, stillbirth or illness, neonatal death or termination. Bereavement support is also offered in relation to unresolved grief around a previous loss of a baby when a woman or couple present again with a healthy pregnancy. We are actively involved in running an annual Ecumenical Remembrance Service for families who lost children through miscarriage, still birth, termination or at any age. Approximately 300 people attend this service each year.

Our service offers comprehensive assessment of a patient's social, emotional, environmental and support needs and offers support around long-term care issues alongside counselling support where there is a diagnosis of serious or chronic illness.

In the last year, we have noticed that referrals of concealed pregnancy have reduced. A decrease in our teenage pregnancy referrals reflect a national reduction in the number of teenage pregnancies and an increase in the number of women referred who are over the age of 40 and who have conceived through IVF, and who are single. We have noted an increase in referrals to our service of high-priority cases which are highly complex in nature with multiple issues with elements of child protection, mental health and with significant other social stressors, e.g. addictions. In these cases, we are involved in case conferences, court presentation and professional workers' meetings, both in-house and in the community, and strategy meetings to facilitate safe discharge of our clients. As highlighted earlier, there is an increase in referrals for counselling support around foetal anomaly and a noted increase for women who seek counselling support in relation to their perceived experience of trauma in a previous pregnancy that is having an emotional impact on their current pregnancy.

Within the hospital setting, as part of the multidisciplinary teams we play a role in the co-ordination of patient discharge planning, working closely with colleagues on the Women's & Children's Wards, and in liaising with Community Services, advocating for supports on behalf of our patients. We work closely with Tusla, the Child and Family Agency. We often refer to them to ensure that couples with limited supports and experience with children receive follow-up through a Family Support Worker or perhaps for 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 and in our work in this area we discuss a plan of safety with women ensuring they are aware of the relevant community supports.

Working to enable clients to realise their rights involves putting services in place to meet rights such as the right to education, health care, housing, income and so on. 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 or personality disorder for example, or a past history of postnatal depression. We meet women of all ages from various socioeconomic and cultural backgrounds, undocumented women and women in direct provision, to name but a few. We provide crisis intervention, mediation and counselling for various personal and family difficulties.

Special Care Baby Unit

On the Special Care Baby Unit, we regularly support families whose baby is admitted either due to prematurity or health problems. We are aware of the impact of difficult diagnoses for families and counselling support is offered. In the last year, in empowering families to support each other when a baby is born with a diagnosis of Down Syndrome, we organised a 'meet and greet' day for such families which was hugely successful. This was run in liaison with Mayo University Hospital Antenatal Educators with whom we work closely.

Three Options Counselling

Within our Medical Social Work Department is a 3 options counselling service offering free counselling to women who find themselves faced with a crisis pregnancy. Post-termination counselling support is offered as part of our service. 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 have 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. 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.

Paediatrics

We work as part of the multi-disciplinary care team on the Paediatric Ward focusing on family-centred care. We offer crisis intervention and counselling to support families coping with life changes associated with illness and hospitalisation. Our Department offers advocacy and support with accessing community supports and services to enhance coping skills and participation in care, supporting attachment and bonding with caregivers and children.

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 complete initial assessments where a child protection concern is noted and we consult and liaise with hospital and community colleagues in relation to such cases. We 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.

We attend the Saolta Children First Implementation Committee meetings, as well as the hospital's committee on Children First. We are in the vanguard of promoting the E-module training for staff on Children First and preparing for the hospital's obligation under the Children First Act 2015.

Emergency Department

Our 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 Work team continues to provide support to the Masters in Social Work Programme by acting as practice Teachers and providing placement opportunities for 1st and 2nd year students from NUIG.

Committees

The Medical Social Worker for Women and Children is the Chairperson for the Committee for the role out of the National Standards for Bereavement Care following a Perinatal Loss in Mayo University Hospital. She formed subgroups of professionals from this main group to explore the development bereavement booklets relative to the type of loss experienced by parents ie early loss in pregnancy, miscarriage, stillbirth, fatal foetal abnormality, a late stage pregnancy loss, the loss of a baby post delivery and the death of a child. She liaised with key stake holder groups and held both one to one interviews with parents and professionals and facilitated focus groups to ensure the quality of the information produced held real meaning for parents who were bereaved. The aim was to provide quality literature that would act as a practical guide to parents and inform them of counselling supports, addressing the needs of parents as identified by bereaved parents. Our group has enhanced collaboration between CNME Mayo Roscommon & MUH in the development and provision of inter-professional education programmes to support professionals in the provision of bereavement care. Other developments from this group has been the use of the National Bereavement Symbol in the Maternity Departments and the Paediatric Ward. We have received a grant for Books of Rememberance that we hope will be available on these wards in the near future. The Medical Social Worker for Women and Children was involved in the development of a poster on our work to date which was presented at the Child and Family Nursing Conference and the National Forum for Bereavement Care following Pregnancy Loss. The Medical Social Worker is also a member of the End of Life, Hospice Friendly Hospitals Committee in Mayo University Hospital.

The Medical Social Worker for Women and Children is also the Chairperson for the Committee on the Development of Hospital Policy around Domestic Violence.

Information and guidance

Our Department offers support in relation to immigration issues and integration concerns. We are involved in research, training and policy development and liaison, advocacy and support in relation to accessing various services. We provide information regarding social welfare, entitlements, birth registration etc.

Conclusion

As always, we would like to acknowledge the support from our colleagues in Obstetrics & Gynaecology, Maternity, Labour, Special Care Baby Unit, the Antenatal Department and Paediatrics. We would particularly like to acknowledge the close working relationship with the Antenatal Educators who provide invaluable antenatal education to our more vulnerable clients. We would also like to acknowledge the close working interdisciplinary relationship with community services that enable a continuity of care for our clients from hospital to community.

Obstetric Ultrasound Report

Ms Maura McKenna

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 Friday, and covers all areas of pregnancy up to 12 weeks' gestation. The Perinatal Unit runs from 08.30 until 18.00 from Monday to Wednesday, and until 15.00 on Thursday and from 07.00 until 13.00 on Friday. There is also a satellite clinic every Tuesday from 08.30 to 17.00 in Ballina.

Both units are currently staffed by 3 trained midwife sonographers:
- Ms Siobhan Ryan
- Ms Aisling Gill
- Ms Maura McKenna

In addition, Dr. Israt covers 3 hours.

The above roles are inclusive of both reporting and counselling. This takes considerable time, especially when breaking bad news or telling parents their baby has an abnormality. The Department has no allocated secretarial support and the Midwifery Ultrasonographers deal with phone calls, queries and people calling in to the Department, scheduling appointments, making plans for diabetic women, women expecting twins and women with underlying medical conditions. We also undertake training, teaching and supervising ultrasound students. At present, Ms Elaine McGrath is undertaking the Certificate Training Programme in UCD.

All obstetric ultrasound examinations performed in the Department are done on Voluson E8 machines. Reports are generated through the Viewpoint reporting system in Early Pregnancy. The remaining scans are all manually reported and written on the machine and printed off. The Viewpoint reporting system has been approved so we are waiting for this system to be installed so that all obstetric scans can be reported through the Viewpoint system.

At present we have a manual system in place for appointments. All appointments are made by the Sonographers as no clerical support is in place within the Department. We are looking forward to an electronic appointment system.

There were 940 scans performed in the Early Pregnancy Unit.

There were 3,857 scans performed in the Perinatal Unit.

There were 695 scans performed in Ballina.

There were several scans approx. 20 to emergency calls in Labour Ward, Maternity, A&E and Gynae Ward.

This is a total of 5,512 scans performed by the obstetric ultrasound team.

Ultrasound examinations are performed both abdominally and vaginally.

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 24 weeks' gestation.

In 2017, there were 1,330 women who had a booking scan. There were approximately 1,300 routine second trimester ultrasound examinations performed. 125 were performed by Dr. Ni Bhuinneáin and her team. 37 were performed by out-of-hours Midwife Sonographers.

Every woman was offered a routine second trimester ultrasound appointment and the following is a list of reasons why the remaining women did not take up the offer:
- No reply from phone number
- Wrong phone number given
- Moved house or to a different country
- Moved care to a different hospital
- Had private ultrasound
- Did not wish to have a second trimester ultrasound
- Unfortunately some women suffered miscarriages between the visits

There are also referrals from Antenatal Clinics and referrals from Maternity and Labour Ward.

Increased surveillance is offered to women who have existing medical conditions, e.g. cardiac, epilepsy or thyroid conditions. Increased surveillance is also offered to women who have a BMI over 35, are of advanced maternal age, have a past history of pre-term delivery, have had a previous Caesarean section or have previously had a small baby.

Surveillance for diabetic women is practised as per the DIP study and these women are offered scans at 12 weeks, 22 weeks, 28 weeks, 32 weeks, 36 weeks and 38 weeks. These scans would include growth, biophysical profile and umbilical artery Doppler studies. In 2017, 98 diabetic mothers were seen, 3 of whom had Type 1 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 monochorionic diamniotic twin pregnancies, women are offered scans every 3 weeks up to 24 weeks and every 2 weeks to 34 weeks and weekly then until delivery. These twins have the added monitoring on middle cerebral artery Doppler's. In 2017, there were 27 sets of twins, which included 3 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 are very grateful for their unending support.

In 2017, we referred 53 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. Two women were referred to UHG and 2 to the Coombe Hospital for further investigations. These numbers do not include direct referrals made by Consultants.

Referral Criteria for the Early Pregnancy Unit

- Abdominal pain with positive pregnancy test
- PV bleeding
- Previous miscarriage x 2
- Previous ectopic pregnancy
- Previous molar pregnancy

The majority of referrals come via GP letter, which is triaged by Early Pregnancy Unit staff, and the patient is given an appropriate appointment. Women who have recurrent miscarriage, previous ectopic pregnancy or previous molar pregnancy can self-refer directly to the unit for an early reassurance ultrasound.

Inpatients with early pregnancy problems are referred by the Consultant on duty and the patient is seen on the morning of referral.

Early Pregnancy Statistics for 2017

No.		Jan		Feb		Mar		Apr		May		June		July		Aug		Sept		Oct		Nov		Dec		Total
		N	R	N	R	N	R	N	R	N	R	N	R	N	R	N	R	N	R	N	R	N	R	N	R	
1.	Total attendances in the EPU	56	43	42	41	38	31	42	49	65	44	39	30	51	31	62	12	44	36	23	29	34	28	37	33	
	Total no. 1																									**940**
2.	Total viable intrauterine pregnancies diagnosed	44		18		15		24		26		17		21		33		26		24		10		10		**268**
3.	Total complete miscarriages diagnosed	8		10		9		14		18		28		8		4		5		12		7		10		**133**
4.	Total incomplete miscarriages diagnosed	11		3		3		4		7		8		3		3		6		4		3		3		**58**
5.	Total missed miscarriages	14		12		15		9		13		6		7		5		10		5		4		8		**126**
	Medical	2		5		3		1		9		3		5		2		0		2		1		6		**39**
	Surgical	5		4		5		7		1		1		3		4		5		3		2		4		**44**
	Conservative	8		3		7		3		4		4		9		4		5		2		8		4		**61**
6.	Total ectopic pregnancies diagnosed	2		2		0		0		0		3		3		0		1		3		2		1		**17**
7.	Total pregnancies of unknown location diagnosed	8		16		8		3		8		3		17		7		9		1		2		3		**85**
8.	Total molar pregnancies diagnosed	0		0		0		1		0		0		0		0		0		0		0		0		**1**
9.	Total miscarriage misdiagnosis errors	0		0		0		0		0		0		0		0		0		0		0		0		**0**
10.	Total number of written complaints	0		0		0		0		0		0		0		0		0		0		0		0		**0**
11.	Total cis forms submitted in the first trimester	0		0		0		0		0		0		0		0		0		0		0		0		**0**
12.	No. of cases reported to CIS	0		0		0		0		0		0		0		0		0		0		0		0		**0**
13.	Total no. of pregnancies unknown viability	11		11		6		14		12		10		8		10		15		4		16		10		**127**
14.	Total no. of BHCG levels recorded	23		24		18		24		32		17		37		9		23		13		23		19		**262**

Antenatal and Gynaecology Outpatients

Antenatal clinics

The Maternity Outpatients Department continues to provide a safe and welcoming service to the women who attend. In 2017, we had a total of 6,696 antenatal appointments and 1,677 booking appointments to our service.

The maternity antenatal clinic starts with a visit at 12 weeks, where the woman has a one-to-one consultation with the Midwife. All aspects of the woman's pregnancy are discussed and advice is given. She will also have the booking scan at this visit. Depending on the complexity or normality of pregnancy, the Midwife will outline the woman's plan of care to her on this visit. If she needs to be referred earlier to see the Consultant, this is organised.

The clinics run Monday to Thursday, with one outreach clinic in Ballina on Tuesdays. Our aim is to introduce more outreach services and midwifery-led services, but this would require more midwifery staff to facilitate the changes required. The assisted model of care, where the midwives review suitable women, is in place at the consultant-led clinics. We are currently moving to the supported model of care, where the midwives will provide the antenatal care to the low-risk women.

We provide a diabetic antenatal clinic every Thursday morning and this consists of Midwives, Diabetic ANP, Endocrinologist and Obstetric Consultant. Women with a positive GTT and known diabetics are seen every two weeks and have regular ultrasound surveillance. There is an increasing number of women attending this clinic and, in 2017, 98 women with diabetes related to pregnancy were seen.

Gynaecology clinics

Three gynaecology clinics are held weekly in MUH and one outreach clinic in Ballina.

In 2017, we facilitated a total of 2,180 attendances at the gynaecology outpatients clinic. This included the cytology clinic, colposcopy and general gynaecology clinics.

All referral letters are triaged by a Consultant and prioritised into urgent, semi-urgent and routine. The gynaecology service is supported by the ambulatory gynaecology service and at triage those pathways of care are allocated as appropriate. There is no waiting list at present for the gynaecology clinic.

Ambulatory Gynaecological Unit Report

Ms Runagh Burke

Introduction

It has been another busy year for the Ambulatory Gynaecology Unit (AGU) at Mayo University Hospital. The total number of women attending the unit fell slightly. The unit continues to be the only operational ambulatory gynaecology 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. It is located on the first floor, adjacent to Surgical G Ward. During the past year, the AGU (including all services) has been staffed by three part-time midwives, one full-time colposcopy CNS and one part- time nurse. There is a total of one-full time clerical officer who registers all the women attending the services and one part-time clerical officer who is assigned to colposcopy services only.

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.

Clinics are undertaken by a specialist team of four consultants and their teams, Monday to Thursday. There are currently four ambulatory clinic sessions per week, one gynaecology outpatient clinic and two colposcopy clinics. The Early Pregnancy Unit (EPU) has a daily two-hour emergency morning service (Monday to Friday). On average, 8-10 patients are booked for each ambulatory gynaecology session.

Reasons for referral to the unit include:
- Heavy or irregular periods
- Fibroids or polyps
- Postmenopausal bleeding
- Infertility
- Bleeding between periods
- Removal or insertion of an intrauterine contraceptive device
- Vulval skin abnormalities

Service Provision

Diagnostic procedures performed include trans-vaginal scans; hysteroscopies; endometrial, cervical and vulval biopsy sampling; and blood investigations. Therapeutic interventions include insertion of intrauterine systems. A typical day will involve women of reproductive age and older attending the unit to be reviewed for the reasons outlined above. In the majority of cases, treatment options can be offered or, at the very least, the woman can be reassured in most instances that their symptoms are not serious. The catchment area of these referrals has widened during the last year, with an increased percentage of women attending and being referred from Co. Galway and Co. Roscommon. The ambulatory gynaecology clinics take place for one half-day but the other services like EPU and colposcopy are intertwined into the service provision of the entire unit and demand equally as much planning and time as the ambulatory clinics.

A total of 1230 women were seen in ambulatory gynaecology clinics in 2017, which comprised 864 new and 366 review patients (these figures are the women attending the Ambulatory Gynaecology Clinic sessions only).

The following were performed:
- 957 Trans-vaginal scans
- 111 Hysteroscopies
- 23 Operative hysteroscopies
- 375 Biopsies (including cervical polypectomies, endometrial and labial)
- 195 Mirena insertions
- 107 Mirena removals

New Procedures Introduced in 2017 to AGU

In February 2017, a new treatment was introduced to the unit, the TruClear Morcellator. This system provides a minimally invasive option for women suffering from uterine bleeding due to abnormalities such as polyps and fibroids, and enables the removal of tissue for analysis. Its advantages include an incisionless procedure, no electricity inside the uterus and minimal recovery time, as the majority of procedures can be done while the woman is awake. An operative hysteroscope is used to introduce the Morcellator device into the uterus.

Endometrial ablation and the Thermablate system we use is a thermal balloon device intended to ablate the endometrial lining of the uterus in women suffering from excessive uterine bleeding due to benign causes and for whom childbearing is complete.

In total, there were 23 operative procedures completed in the AGU in 2017. These are usually facilitated in one operative session per month. Total morcellating time of a polyp can be as little as 11 seconds, however we offer pre-meds to these women which takes longer initially but in general a woman attending for the procedure will have everything completed in two hours, which is significantly less time than attending for a traditional day case procedure.

Educational Advancements in the Unit

One of our Midwives is training as a Midwife Sonographer and has completed her Certificate in Ultrasound - early pregnancy and perinatal modules.

Challenges for the Service

- The mix of the three services is a challenge at times to waiting times for the women attending the unit, as certain clinics may run over their designated times.
- At present, women check in along the clinical corridor of our rather small unit. This is not ideal when on occasion poor news has to be given to women, especially within the EPU service. It is hoped that a new bereavement room will be made available within the unit and women will be able to register on a corridor adjacent to the unit.
- There is no direct Clinical Nurse Manager assigned to the unit and also contract cleaning outside of clinics times has not been sanctioned for the unit.
- The main challenge for the service at present is in obtaining extra clerical cover for the increased numbers of women attending the unit as whole.

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 of the AGU understand and recognise these feelings of fear and anxiety and deal with each woman in a sensitive and professional manner. The AGU provides a fast and efficient means to diagnosis and provides treatment for the women attending the clinic, in particular reducing hospital visits. Risks associated with general anaesthesia can be eliminated and also disruption to work and family life.

Women's Health & Paediatric Physiotherapy Report

Ms Fiona McGrath

Women's Health Physiotherapy Service

Women's Health physiotherapy is a specialist clinical area and all urogynaecological referrals from the county are treated in Mayo University Hospital. Referral levels remained consistent, with a total number of 360 referrals received for outpatient care in 2017.

The service is delivered by 0.8 WTE senior physiotherapist and 0.5 staff physiotherapist.

In 2017, there were significant waiting lists due to non-replacement of a physiotherapist in 2016. An initiative was taken by the Women's Health team within the department, with the aim of maintaining standards of care through the design and implementation of group education classes for women with various conditions and presenting symptoms, to help manage the waiting lists. In April 2017, there were 227 patients on the Women's Health physiotherapy outpatient waiting list, with a waiting time of 22 months for a physiotherapy assessment (sub-acute conditions). As a result of the implementation of the group classes, the waiting lists reduced by six months, with 159 patients removed from the lists.

In total, 522 new patients were seen and 1,200 interventions were delivered by the Physiotherapy Department in Mayo University Hospital.

Another initiative by the Women's Health physiotherapy team, which commenced in 2016 and became fully established through 2017, was the re-structuring of the postnatal education programme in the local Primary Care Centre. This is a two-part programme which addresses the health and wellbeing needs of new mothers in line with the National Maternity Strategy. Very positive feedback has been received on the content, timing and location of the programme. The focus for the future is to improve awareness of the classes and promote attendance at this very important postnatal education. At present, only approximately 10% of postnatal mothers attend these classes.

The physiotherapy service was unable to deliver on the antenatal education programme throughout 2017 and this is an area for development for the next year.

Paediatric Physiotherapy Service

This service is currently being delivered by 1 WTE staff physiotherapist.

The inpatient service includes:
- Paediatric Ward
- Special Care Baby Unit
- Maternity Ward
- Cystic Fibrosis service to inpatients (delivered by a Senior - CF and ICU)

The outpatient service includes:
- Follow-up on referrals from Maternity Ward and SCBU, e.g. foot anomalies (talipes calcanoevalgus / equinovarus), obstetric brachial plexus lesions, torticollis and developmental issues.
- Developmental delay referrals from consultants and public health nurses.
- Paediatric Normal Variance referrals across Co. Mayo.
- Physiotherapy referrals for all paediatric musculoskeletal and orthopaedic patients aged 0-12 years across Co. Mayo.
- Exercise testing / shuttle testing.
- CF outpatients, CF clinics and annual assessments to meet standards of international best practice.
- Asthma clinics.
- Liaison with PCCC paediatric services regarding transfer of appropriate infants and children to other services.

There were 398 referrals received for outpatient paediatric physiotherapy in 2017.

2017	New Patients Seen	Physiotherapy Treatments
Inpatient Paediatric	130	653
Outpatient Paediatric	393	984
CF Outpatients	103	105
Asthma Clinic	181	181

Special Care Baby Unit Report

Ms Joan Falsey

The aim of our Special Care Baby Unit (SCBU) is to provide care and compassion to our babies and their families in a safe and friendly environment. We know that the parents and family are the centre of the newborn's life, so we care for the parents as well as the babies by teaching them and supporting them in all aspects of caring for their newborn. Our dedicated staff is always available to answer questions and educate the parents.

Our unit provides high dependency care and some short-term intensive care prior to transfer of a baby to a tertiary centre. All our staff has completed the STABLE training so they are equipped to deal with the high level of care required when a very premature/ill baby is being transferred out.

We work closely with the multidisciplinary teams including Obstetrics, Radiology, Social Work Department, Dietetics and Physiotherapy.

SCBU Statistics 2017

SCBU Admissions by Gestational Age Group	
Less than 32 weeks	13
32 – 36 weeks	88
37 weeks and over	187
Total	**288**

SCBU Admissions by Source	
Theatre	113
Delivery Suite	72
Maternity Unit	84
Other hospital	16
Social admission	2
BBA	1
Total	**288**

SCBU Admissions by Birth Weight	
Less than 1500g	15
1501 – 2000g	22
2001g – 2500g	54
Over 2500g	197
Total	**288**

SCBU Admissions by Reason for Admission	
Prematurity	79
Respiratory	82
Infection related	42
Gastrointestinal (2 x bilious vomits)	2
Hypoglycaemia	16
Neurological (1 x active cooling to regional centre, 1 x seizure activity)	2
Cyanotic episodes	3
Low birth weight	18
Infant of insulin-dependent diabetic	7
Congenital abnormalities	8
Maternal Hepatitis B	1
Maternal HIV infection	1
Cardiac (1 x VSD)	1
Social reasons	2
Jaundice for phototherapy	7
Poor feeding	11
Drug dependent mother	1
Congenital syphilis	1
Meconium aspiration	1
Fractured humerus	1
Scalp trauma	1
APH	1
Total	**288**

Very Low Birth Weight (400–1,500g) Admissions to SCBU	
Born in MUH	3
Born in MUH & transferred to regional centre	2
Born in regional centre & transferred back to MUH	9
Total	**14**

Very Low Birth Weight Admissions to SCBU by Gestational Age Group	
25 – 26+6 weeks	1
27 – 28+6 weeks	3
29 – 31+6 weeks	5
32 weeks and over	5
Total	**14**

Neonatal Deaths

GESTATION	BIRTHWEIGHT	AGE	CONCLUSION	PLACE OF DEATH
39+2	2.025kg	9 days	Trisomy 18	At home, supported by Jack & Jill Foundation & Paediatric outreach team

Very Low Birth Weight Admissions to SCBU by Birth Weight	
501 – 750g	1
751 – 1000g	4
1001 – 1250g	4
1251 – 2500g	5
Total	**14**

Very Low Birth Weight Admissions to SCBU of Babies Born in Regional Centres, by Birth Weight	
501 – 750g	1
751 – 1000g	2
1001 – 1250g	3
1251 – 1500g	3
Total	**9**

Clinical Demographics of Very Low Birth Weight Infants	
Male	6
Female	8
Born in MUH	3
C/S	7
Antenatal steroids	10
Multiple gestation	4
Total	**14**

Neonatal Transfers to Regional Centres	
Transfers by National Neonatal Transport Team	6
Transfers by SCBU staff	2
Total	**8**

Neonatal Transfers from Regional Centres	
Transfers by National Neonatal Transport Team	0
Transfers by SCBU staff	20
Total	**20**

ROP Screening	
Eye checks in UHG	6
Eye checks in Dublin	2
Total	**8**

Cardiac Investigations	
Cardiac Echo in UHG	5
Cardiac Echo in Dublin	2
Total	**7**

List of Congenital Abnormalities

1. Trisomy 21 x 5
2. Trisomy 21 Mosaic x 1
3. Trisomy 18 x 1
4. Cleft palate x 1

Percentage of infants delivered admitted to SCBU: 18.6%

Quality & Patient Safety Department

Ms Grainne Guiry Lynskey

The Women's and Children's Directorate meetings continue on a monthly basis, where incidents, complaints, risk register material and service-user feedback are reviewed.

There was a total of 293 incidents reported from 1st January, 2017, to 31st December, 2017, pertaining to the Women's and Children's Directorate.

Serious Incidents are escalated to the SIMT (Serious Incident Management Team) meeting.

There were a total of 27 complaints recorded for 2017.

Portiuncula University Hospital

Ms Siobhan Canny, Ms Anne Regan and Ms Priscilla Neilan

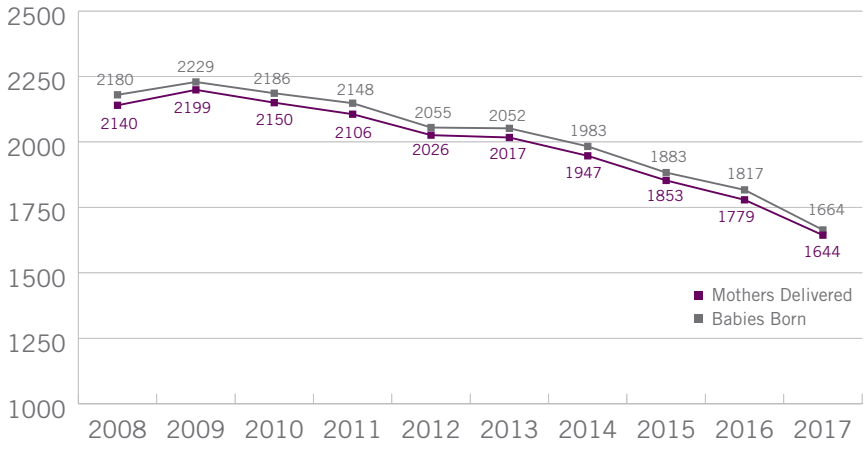
Introduction

Portiuncula's Women's & Children's Directorate team is pleased to present our clinical activity and service report for 2017. Throughout the year, we continued to build on the quality improvements set down in 2016. The additional role of midwifery practice development co-ordinator has enabled organisation and standardisation of policies, practices and guidelines, strengthening our commitment to better and safer care for women and their families. New service developments have meant more choice and support to women in their pregnancy. As always, we would like to acknowledge all of the staff who work in the department, and those who work alongside us, for their continued hard work, support and dedication in 2017.

Activity

2017 saw 1664 babies born to 1644 mothers, which is a reduction of 8.4% on the number of babies born in 2016. The percentage of first time mothers (31.9%) is slightly up on last year. The age profile shows a change, with the highest population (35.3%) being between 30-34 years of age and a reduction in our mothers over 40 (6.4%). We had a slight reduction in Caesarean section rate (35.4%) as most of our women achieved a vaginal birth (64.6%). Instrumental rate remains unchanged. There was a slight increase of 2% in the induction rate. There was a reduction of 1.5% in the rate of 3rd degree tears. The majority of births had a gestational age of 37-40/40. Portiuncula maternity unit cared for women from 13 different counties in 2017.

Births 2008 - 2017



Statistical Summary

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of Mothers	2140	2199	2150	2106	2026	2017	1947	1853	1779	1644
Number of Babies	2180	2229	2186	2148	2055	2052	1983	1883	1817	1664

	Primigravida	Multigravida	Total
Total Number of Mothers	524	1120	1644
Total Number of Babies	531	1133	1664
>24 weeks or >/= 500g			

Obstetric Outcomes (Mothers)	Primigravida	%	Multigravida	%	Total	%
	n=524		n=1120		n=1644	
Spontaneous Onset	260	49.6%	558	49.8%	818	49.8%
Induction of Labour	202	38.5%	254	22.7%	456	27.7%
Augmentation	19	3.6%	20	1.8%	39	2.4%
No Analgesia	13	2.5%	62	5.5%	75	4.6%
Epidural Rate	336	64.1%	392	35.0%	728	44.3%
Episiotomy	215	41.0%	124	11.1%	339	20.6%
Caesarean Section	188	35.9%	394	35.2%	582	35.4%
Spontaneous Vaginal Delivery	166	31.7%	653	58.3%	819	49.8%
Forceps Delivery	24	4.6%	2	0.2%	26	1.6%
Ventouse Delivery	146	27.9%	70	6.3%	216	13.1%
Breech Delivery	0	0.0%	1	0.1%	1	0.1%

Obstetric Outcomes (Babies)	Primigravida	%	Multigravida	%	Total	%
Spontaneous Vaginal Delivery	168	31.6%	657	58.0%	825	49.6%
Forceps Delivery	24	4.5%	2	0.2%	26	1.6%
Ventouse Delivery	146	27.5%	72	6.4%	218	13.1%
Breech Delivery (2nd Twin)	0	0.0%	1	0.1%	1	0.1%
Caesarean Section (Babies)	193	36.3%	401	35.4%	594	35.7%
Total	**531**	**100.0%**	**1133**	**100.0%**	**1664**	**100.0%**

Multiple Pregnancies	Primigravida	%	Multigravida	%	Total	%
Twins	7	1.3%	13	1.2%	20	1.2%

Multiple Pregnancies by year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Twins	40	30	36	42	29	35	36	30	38	20

Perinatal Deaths	Primigravida	Multigravida	Total	%
Stillbirths	3	6	9	0.54%
Early Neonatal Deaths	1	0	1	0.06%

Perinatal Mortality Rate	2014	2015	2016	2017
Stillbirth rate (per 1,000)	2.6	4.8	6.1	5.4
Neonatal Death rate (per 1,000)	1.5	2.1	1.1	0.6
Overall PMR per 1,000 births	4.1	6.9	7.2	6.0

Parity	Number	%
Para 0	528	32.1%
Para 1	590	35.9%
Para 2	336	20.4%
Para 3	122	7.4%
Para 4	42	2.6%
Para 5	15	0.9%
Para 6	5	0.3%
Para 7	4	0.2%
Para 8	1	0.1%
Para 9	0	0.0%
Para 10	1	0.1%
Total	**1644**	**100.0%**

Parity by year	2015	2016	2017
0	35.0%	31.4%	32.1%
1,2,3	62.0%	65.0%	63.7%
4+	3.0%	3.6%	4.1%

Age	Total	%
15-19 years	23	1.4%
20-24 years	136	8.3%
25-29 years	261	15.9%
30-34 years	580	35.3%
35-39 years	539	32.8%
>40 years	105	6.4%
Total	**1644**	**100.0%**

Age at Delivery	2015	2016	2017
15-19 years	2.1%	0.9%	1.4%
20-24 years	7.8%	7.8%	8.3%
25-29 years	17.0%	14.6%	15.9%
30-34 years	37.5%	30.9%	35.3%
35-39 years	29.9%	36.4%	32.8%
>40 years	5.7%	9.4%	6.4%
Total	**100.0%**	**100.0%**	**100.0%**

County of Origin	2015	2016	2017
Galway	33.9%	35.1%	35.8%
Roscommon	20.7%	21.7%	20.5%
Westmeath	20.5%	18.8%	20.3%
Offaly	15.4%	16.1%	15.2%
Tipperary	5.5%	5.2%	4.2%
Longford	1.3%	1.5%	1.8%
Clare	0.5%	0.6%	0.7%
Leitrim	0.5%	0.4%	0.5%
Mayo			0.3%
Laois			0.3%
Others	1.7%	0.5%	0.2%
Sligo			0.1%
Meath			0.1%
Dublin		0.1%	0.0%
Total	**100.0%**	**100.0%**	**100.0%**

Gestation at Delivery	Primigravida	%	Multigravida	%	Total	%
24-27 weeks	1	0.2%	0	0.0%	1	0.1%
28-31 weeks	1	0.2%	2	0.2%	3	0.2%
32-35 weeks	28	5.3%	45	4.0%	73	4.4%
36-39 weeks	332	63.4%	869	77.6%	1201	73.1%
40-41 weeks	162	30.9%	204	18.2%	366	22.3%
Total	**524**	**100.0%**	**1120**	**100.0%**	**1644**	**100.0%**

Gestation at Delivery	2016	2017
<24 weeks	2	0
24-27 weeks	1	1
28-31 weeks	5	3
32-35 weeks	81	73
36-39 weeks	1348	1201
40-41 weeks	342	366
Total	**1779**	**1644**

Birth Weights by Year	2014	2015	2016	2017
< 500g	6	12	3	0
500 - 999g	4	2	1	2
1000 - 1999g	23	19	26	15
2000 - 2999g	263	256	256	225
3000 - 3999g	1302	1247	1210	1130
4000 - 4499g	319	276	272	241
4500 - 4999g	59	61	46	46
5000 - 5499g	5	7	2	5
>5500g	2	3	1	0
Total Number of Babies	**1983**	**1883**	**1817**	**1664**

Birth Weights	Primigravida	%	Multigravida	%	Total	%
<1000g	0	0.0%	2	0.2%	2	0.1%
1000 - 1499g	0	0.0%	2	0.2%	2	0.1%
1500 - 1999g	4	0.8%	9	0.8%	13	0.8%
2000 - 2499g	13	2.4%	44	3.9%	57	3.4%
2500 - 2999g	72	13.6%	96	8.5%	168	10.1%
3000 - 3499g	152	28.6%	366	32.3%	518	31.1%
3500 - 3999g	216	40.7%	396	35.0%	612	36.8%
4000 - 4499g	62	11.7%	179	15.8%	241	14.5%
4500 - 4999g	10	1.9%	36	3.2%	46	2.8%
5000 - 5499g	2	0.4%	3	0.3%	5	0.3%
Total Number of Babies	**531**	**100.0%**	**1133**	**100.0%**	**1664**	**100.0%**

Induction of Labour	Primigravida	%	Multigravida	%	Total	%
2008	210	27.9%	216	15.5%	426	19.5%
2009	228	26.6%	238	17.7%	446	20.9%
2010	225	27.4%	217	16.3%	442	20.2%
2011	227	29.5%	200	14.9%	427	19.9%
2012	221	30.4%	240	18.4%	461	22.4%
2013	233	32.0%	279	22.0%	512	25.0%
2014	232	33.0%	256	21.0%	488	25.0%
2015	224	35.0%	260	21.0%	484	26.0%
2016	183	32.8%	274	22.4%	457	25.7%
2017	202	38.5%	254	22.7%	456	27.7%

Perineal Trauma*	Primigravida	%	Multigravida	%	Total	%
Number of vaginal deliveries	336		726		1062	
Intact	125	37.2%	221	30.4%	346	32.6%
Episiotomy	215	64.0%	124	17.1%	339	31.9%
2nd Degree Tear	78	23.2%	221	30.4%	299	28.2%
1st Degree Tear	22	6.5%	132	18.2%	154	14.5%
3rd Degree Tear	8	2.4%	5	0.7%	13	1.2%
Other Laceration	1	0.3%	1	0.1%	2	0.2%

*Women may have had more than one type of perineal trauma.

Incidence of Episiotomy	Primigravida	%	Multigravida	%	Total	%
2015	246	62.9%	104	13.3%	350	29.9%
2016	195	58.7%	120	15.2%	315	28.0%
2017	215	64.0%	124	17.1%	339	31.9%

B.B.A.	Primigravida	%	Multigravida	%	Total	%
2008	2	0.3%	3	0.2%	5	0.2%
2009	0	0.0%	6	0.5%	6	0.3%
2010	1	0.1%	8	0.6%	9	0.4%
2011	1	0.1%	1	0.1%	2	0.1%
2012	0	0.0%	5	0.4%	5	0.2%
2013	1	0.1%	7	0.5%	8	0.4%
2014	0	0.0%	5	0.4%	5	0.3%
2015	0	0.0%	7	0.6%	7	0.4%
2016	0	0.0%	3	0.2%	3	0.2%
2017	0	0.0%	5	0.4%	5	0.3%

	Total	%
Shoulder Dystocia	5	0.3%

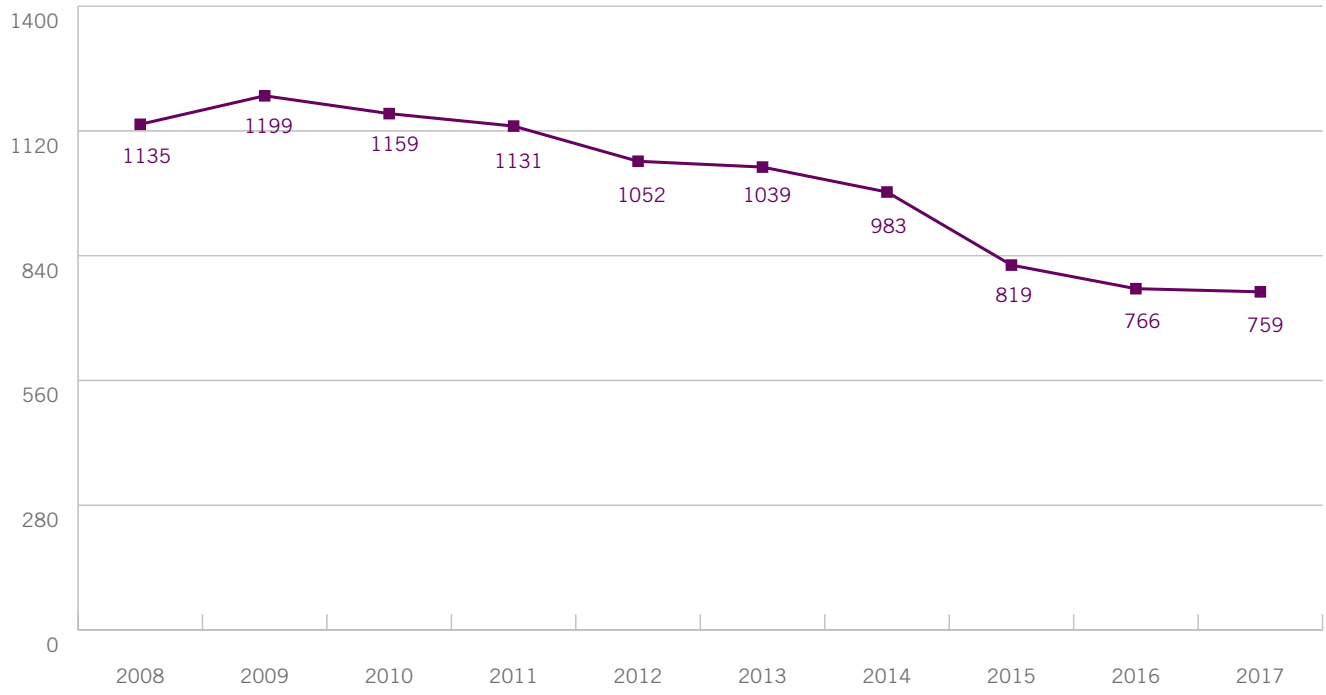
3rd Stage Problems	Total	%
Primary PPH (1000ml)	48	2.9%
Manual Removal of Placenta	24	1.5%

Robson Groups	n-CS	n-Women	%
Group 1 - nullip singleton cephalic term spont labour	50	245	20.4%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	100	229	43.7%
Group 3 - multip singleton cephalic term spont labour	17	442	3.8%
Group 4 - multip singleton cephalic term induced or pre-labour CS	43	251	17.1%
Group 5 - previous CS singleton cephalic term	270	329	82.1%
Group 6 - all nulliparous breeches	26	26	100.0%
Group 7- all multiparous breeches	31	33	93.9%
Group 8 - all multiple pregnancies	12	20	60.0%
Group 9 - all abnormal lies	8	8	100.0%
Group 10 - all preterm singleton cephalic	25	61	41.0%
TOTAL	**582**	**1644**	

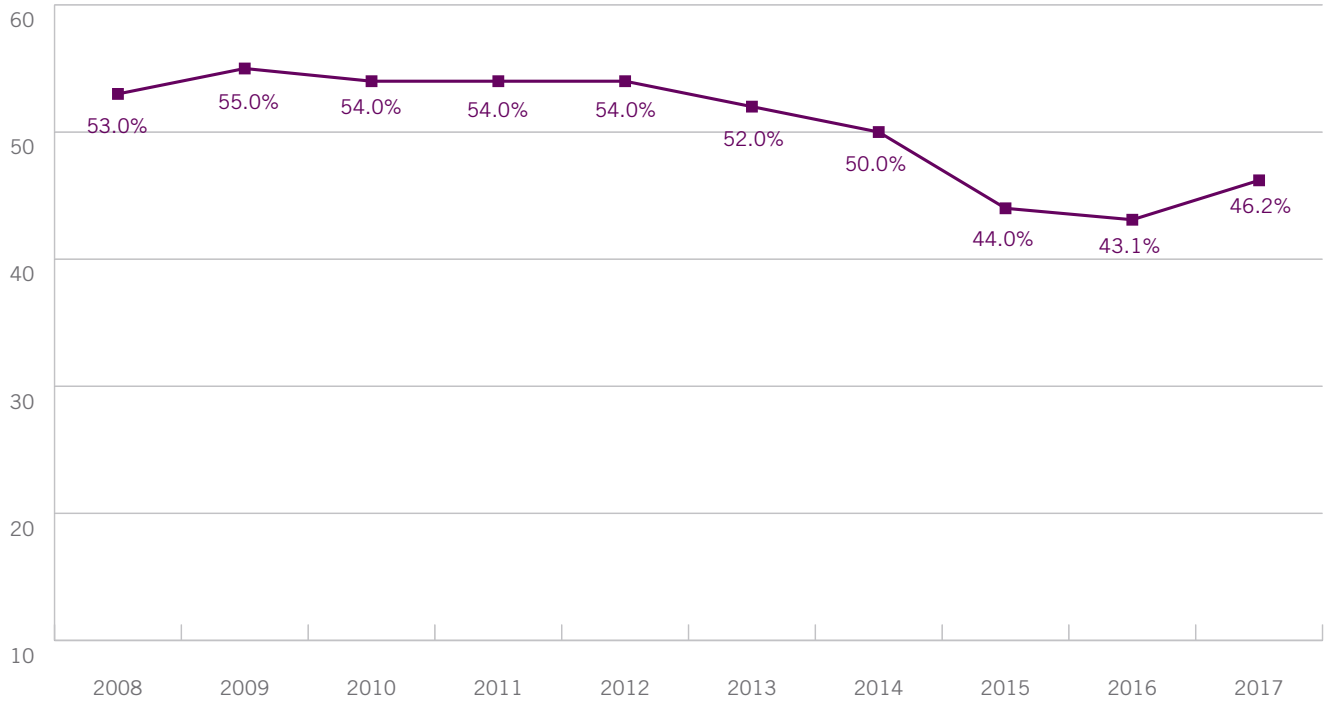
Outcome for women who went into Spontaneous/Induced Labour after 1 previous Caesarean Section

SVD	43
Ventouse	16
Forceps	0
Total VBAC	**59**

Number of Women who had Epidurals in Labour 2008-2017



Percentage of Women who had Epidurals in Labour 2008-2017



Professional Development

Fetal Monitoring Workshop

We continue to provide K2 training for all staff and run a CPD-accredited fetal monitoring workshop 4 times over the year which is attended by both obstetric and midwifery staff. This is facilitated by Clinical Midwife Managers and Practice Development. Weekly multidisciplinary CTG meetings are also well attended.

Neonatal Resuscitation Provider Course

This course is facilitated by our CMS in NRP and supported by groups of trainers and Paediatric Consultants and is run frequently to keep staff up to date. Fortnightly neonatal resuscitation scenarios are also run in the clinical area, which helps the multidisciplinary team to be immersed in a realistic neonatal resuscitation; this improves teamwork, communication and documentation. Debriefing sessions are carried out to provide purposeful feedback and learning.

Practical Obstetric Multi-professional Training (PROMPT)

Facilitated by both Obstetric and Midwifery and CPC staff, PROMPT training is carried out every quarter. This training promotes multidisciplinary training and learning, which in turn improves communication and teamwork.

Antenatal Routine Enquiry regarding Domestic Violence

An NMBI-accredited study day facilitated by outreach workers from women's shelters in Galway and Athlone was run on 2 days to educate staff in supporting women in relation to domestic abuse. The course was well attended by staff from the Maternity Services.

Bereavement Lecture Series

This educational initiative was introduced by the Perinatal Bereavement Group in Portiuncula in 2017. It is a multidisciplinary approach to staff education on topics pertaining specifically to perinatal bereavement. This session was well attended and this initiative will be continued in 2018.

Academic Achievements

- High-Dependency Maternity Care Module: 4 midwives completed the postgraduate (Level 9) module in high-dependency maternity care.
- Supporting Perinatal Mental Health: 2 midwives completed the module on Supporting Perinatal Mental Health.
- Bereavement and Loss: 1 midwife undertook a Masters in Perinatal Bereavement and Loss.
- Obstetric Ultrasound: 2 midwives undertook the Certificate in Early Pregnancy Ultrasound. 1 CMM and 1 Obstetric Registrar completed a Postgraduate Diploma in Obstetric Ultrasound.
- Examination of the Newborn: 1 CMM completed the module on examination of the newborn.
- Postgraduate Diploma in Healthcare Informatics: 1 CMM completed a Postgraduate Diploma in Healthcare Informatics
- NRP instructors course/ PROMPT train the trainer course: 2 Midwives completed the NRP instructor's course and 2 completed the PROMPT 'Train the Trainer' course.
- Hypnobirthing provider's course: 10 midwives were supported to complete a hypnobirthing provider's course.
- International Board-Certified Lactation Consultant: 2 midwives continued their completion of the IBCLC
- Laparoscopic skills: 1 SpR completed Basic Laparoscopic Skills with RCSI.
- Diploma in Leadership and Quality in Healthcare: 1 SpR completed a Diploma in Leadership and Quality in Healthcare.

Research/Presentations/Audits

- *'Audit of Primary Post-Partum Haemorrhage Management'* Donohue O, Mulkerins M, Naughton D, McCormack C and De Tavernier MC.
- *"Scarred For Life' Managing a pregnancy after a lower uterine segment Caesarean scar ectopic'* McCormack C, Donohue O, McConnell R and De Tavernier MC.
- *Targeted Anti-D administration - the first Irish perspective* McCormick C, Abbas M, Mulvany L and De Tavernier MC.
- *'A Study of patients' choice in management of missed miscarriage in Portiuncula University Hospital'* McConnell R and Abbas M.
- *Audit of the use of Aspirin in Pregnancy* Crosbie C and McCormick C
- *Audit of management of post-menopausal bleeding* Farrell J
- *Audit of management of hyperemesis* Kudryashova NH
- *Audit of completion of VTE checklists* McConnell R and Amjad R
- *Audit of management of ectopic pregnancies* McConnell R and Amjad R

New Initiatives

As recommended by the National Maternity Strategy 2016-2026, a supported care pathway (midwifery-led care) for low-risk women was developed. This allows women to have access to safe, high-quality care in a setting that meets their needs. The service commenced in Q4 of 2017. Following a booking visit, all mothers are risk-assessed and the most appropriate model of care is assigned to them. Referrals and reviews are made to the obstetric-led service on a needs basis, with care transferred in line with local guideline. Expansion of this service is envisioned for 2018.

Hypnobirthing uses a combination of techniques including breathing methods, positive thoughts/language, deep relaxation and visualisation and massage. These strategies work together to eliminate stress, fatigue and anxiety, leading to an easier, calmer and ultimately a more 'comfortable' birth experience. Hypnobirthing classes are offered in Portiuncula and this service commenced in September 2017. The aim was to provide a monthly class comprising eight couples however, because of positive feedback and demand from parents for 2018, we are looking at extending this service. Each couple also receives a Hypnobirthing Book and an MP3 link to allow them to practice relaxation. After each class, an evaluation is completed to audit the service.

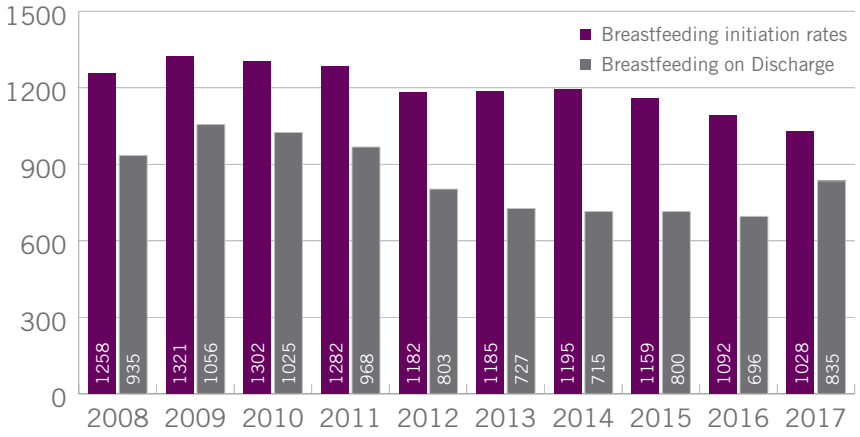
Birth after Caesarean (BAC) support is offered to all women who have had one previous Caesarean section. For 2017, 199 mothers were seen in the BAC Clinic. At booking clinic, mothers are identified and provided with an email address and informed of the support service. At 28-32 weeks' gestation, mothers are contacted to invite them, with a support person, to attend an education session on a one-to-one basis. During this session, the woman's previous birth experience is discussed and she has the opportunity to discuss questions or concerns. The risks and benefits of vaginal birth after Caearean and the importance of shared decision-making are discussed.

Breastfeeding Report

2017 saw an increase in our breastfeeding initiation rate from 59.6% to 61.8% (2.2%), thanks to the dedication of all the staff who work in and with the Maternity Services in Portiuncula. The rate of exclusive breastfeeding from birth to discharge increased to 42.5%. There was a slight decrease of 1.8% in the rate of any breastfeeding on discharge.

The skin-to-skin rate at birth declined from 82.3% to 80.9%. Education and supports have been put in place to ensure that all mothers and babies receive the optimum time for skin-to-skin and to improve rates.

Breastfeeding Rates



Two midwives successfully completed the International Board-Certified Lactation Consultants exam and are registered as International Board-Certified Lactation Consultants. The NMBI-accredited breastfeeding refresher course was run regularly throughout the year.

Lactation services available at Portiuncula include:

- Midwives and staff provide direct breastfeeding support in line with national policy
- In-house specialists support mothers with breastfeeding challenges
- Antenatal education
- Outpatient referrals from community supports, i.e. GP, Public Health Nurse and voluntary groups
- Telephone breastfeeding support system
- Breastfeeding support group
- Consultancy
- Advocacy

During National Breastfeeding Week 2017 (1st – 7th October), Portiuncula University Hospital (PUH) supported the HSE message "Every Breastfeed makes a Difference", and this year had a particular focus on "…and mothers matter too". An educational event was hosted on the 4th of October. Dr. Aine O'Connor, Lecturer in Nutrition at AIT, discussed the many positive benefits of breastfeeding to mothers and babies; Ms Mary Coen, Physiotherapist in women's pelvic health (PUH), provided fundamental information and advice on women's pelvic health; Ms Marie Finn, Medical Social Worker (PUH), emphasised the importance of the social context of breastfeeding; Dr. Deirdre Cleary, Clinical Psychologist with a special interest in infant mental health (Galway), provided insight into the inner lives of infants and toddlers and their primary relationships with caregivers; Deirdre discussed the concept of infant mental health and outlined the developing capacity of the infant, all in the context of dynamic social, emotional & cultural forces. The event was well received by the mothers, clinical staff and health promotion students from the Athlone Institute of Technology.

Perinatal Mortality

Dr. Marie Christine De Tavernier and Ms Priscilla Neilan

There were 4 neonatal deaths in Porticuncula in 2017 (one case of anencephaly and 3 extreme prematurity cases), as well as 9 cases of IUD, 8 of which occurred after 24 weeks.

This was a total of 13 cases, which gives a PNM rate of 7.8/1000 births and a corrected rate of 6.6/1000 births.

Neonatal deaths

One known case of anencephaly. Delivered at 35 weeks. 1.4 kg. Lived for 20 minutes. 3 cases of early neonatal death due to extreme prematurity at 20 weeks (lived for 55 minutes), 20 weeks (lived for 3 minutes) and 21 weeks (lived for 20 minutes). Comfort care was given to all babies.

Stillbirths diagnosed over 24 weeks

Diagnosis	Number
Congenital Malformation	1
Placental	3
Cord	4

Maternal Morbidities

Dr. Marie Christine De Tavernier, Ms Elaine Godfrey and Ms Priscilla Neilan

Diagnosis	Number
Major obstetric haemorrhage	11
Peripartum hysterectomy	1
Hypertension with proteinuria / eclampsia	6
Acute renal or liver dysfunction	4
Acute respiratory dysfunction	3
Pulmonary embolism	2
Pancreatitis	2
Hypoglycaemia	1
Sepsis	1

Fetal Assessment Unit

Dr. Marie Christine De Tavernier

Activity	
EPAU 1st visit	910
EPAU follow up	717
Total EPAU scans	1627
Anomaly scan with 1st trimester scan	379
Total Anomaly Scan	**868**
Total 2nd/3rd Trimester scans	**2035**
Total PAU scans	**2903**

Cases of Fetal Abnormality Referred for Opinion to Tertiary Centre

Cardiovascular System
Total of 7 which included the following:
- Left hypoplastic heart syndrome, TGA
- TGA/IVS
- AVSD - confirmed with incompetent right-sided AV valve (regurgitation), amniocentesis T21
- Congenital heartblock at 23/40 - Ix anti-Ro & La antibodies positive, pacemaker inserted
- Echogenic focus in heart - no other structural heart abnormalities
- Mild RV enlargement with mild tricuspid regurgitation.
- Abnormal 4CV and OFT - CWIUH

Renal
Total of 4 which included the following:
- Bilateral severe hydronephrosis, hydroureter
- Right severe hydronephrosis, hydroureter
- Left hydronephrosis
- Bilateral moderate hydronephrosis

Abdominal
- Duodenal atresia

Hydrops Fetalis
- Previous similar presentation in previous pregnancy – cause unknown / rare autosomal / recessive disorder, normal karyotype - consult geneticist – IUD

Rhesus Disease
- Quantification 9.13 IU/ml - conservative treatment. Postnatal treatment IV IG and Phototherapy

Others - The following cases were also referred for opinion to a tertiary unit
- TTTS - criteria for laser not met during F/U. Late miscarriage at 19/40
- Thickened NT 4.8mm: normal amniocentesis / outcome normal
- Micrognathia, polyhydramnios – confirmed
- Right talipes, small thorax, CM enlarged – NND in CWIU

Gestational Diabetic Outcomes Report

Dr. Marie Christine De Tavernier and Ms Priscilla Neilan

Onset of Labour	Total	Mode of Delivery	Number	%
ELLSCS	28 (21.5%)	ELLSCS	28	21.5%
EMLSCS	5 (3.8%)	EMLSCS	5	3.8%
IOL	66 (50.8%)	EMLSCS	16	12.3%
		Forceps	3	2.3%
		SVD	37	28.5%
		Ventouse	10	7.7%
SOL	31 (23.8%)	EMLSCS	13	10.0%
		SVD	16	12.3%
		Ventouse	2	1.5%

Overall Mode of Delivery	N	%	Total
LSCS	62	47.7%	
Forceps	3	2.3%	
SVD	53	40.8%	68 (52.3%)
Ventouse	12	9.2%	

Feeding	N	%
Breastfeeding	81	62.3%
Artificial Feeding	49	37.7%
SVD	53	40.8%
Ventouse	12	9.2%

The following data is from Oct – Dec 2017

Admissions (N=38)	N	%
Admitted to Ward	34	89.5%
Admitted to SCBU	4	10.5%

Gestation (N=38)	N	%
33+1 - 34/40	1	2.6%
34+1 - 35/40	1	2.6%
35+1 - 36/40	1	2.6%
36+1 - 37/40	2	5.3%
37+1 - 38/40	8	21.1%
38+1 - 39/40	8	21.1%
39+1 - 40/40	16	42.1%
40+/40	1	2.6%

Weight (N=38)	N	%
1500-2000 Kg	1	2.6%
2001-2500 Kg	2	5.3%
2501-3000 Kg	6	15.8%
3001-3500 Kg	8	21.1%
3501-4000Kg	16	42.1%
4001-4500 Kg	4	10.5%
4501-5000 Kg	1	2.6%

Women's Health and Paediatric Physiotherapy Report

Ms Róisín O Hanlon

The Women's Health physiotherapy service is provided in both the in- and outpatient setting, including ICU. The outpatient service is provided to consultant (in the main) and GP referrals from mainly Roscommon and East Galway, however we do cover a much wider catchment area if the specialist service is not available locally. We offer the following services:

Antenatal
- MSK physiotherapy for pelvic girdle pain, carpal tunnel syndrome, back pain and multiple musculoskeletal problems
- Antenatal classes (monthly)
- Continence care

Postnatal
- Postnatal classes (three times weekly)
- Perineal tears review, both as an inpatient and outpatient follow up, with outpatient appointments for 3rd and 4th degree tears within 2 weeks (as per national guidelines)
- Scar management: Caesarean and episiotomy
- Postnatal continence advice and treatment

Gynaecology
- Outpatient service for continence care – bladder and bowel assessment and treatment
- Sexual dysfunction, including dyspareunia and vaginismus
- Post-operative care for all urogynaecological patients

The service is provided by 0.8 WTE senior physiotherapist. This allocation is from the general staffing levels and not a physiotherapist appointed specifically for this service.

The demand on the service has increased over the past year, resulting in longer waiting lists. Referrals have remained consistently high and are increasing yearly.

Our senior physiotherapist has undertaken many courses and attended ICS 2017 in order to provide the most up-to-date, evidence-based service

As the catchment area for the maternity services is not defined, we provide both direct and indirect (e.g. advice) treatment to those referred to us. Some patients are referred on to their local services (where possible) to avoid them having to travel to Ballinasloe.

Paediatric physiotherapy is also provided to both in- and outpatients. Inpatient advice and treatment is delivered for conditions such as:
- Neonatal conditions: Erb's palsy, congenital talipes equinovarus, congenital talipes calcaneovarus, congenital neurological conditions
- Other neurological conditions
- Respiratory
- MSK and orthopaedics
- Oncology
- Complex chronic and life-limiting conditions, requiring managed discharges of patients who may have frequent readmissions

Neurodevelopmental care is provided to patients transferred from a tertiary centre and awaiting discharge home.

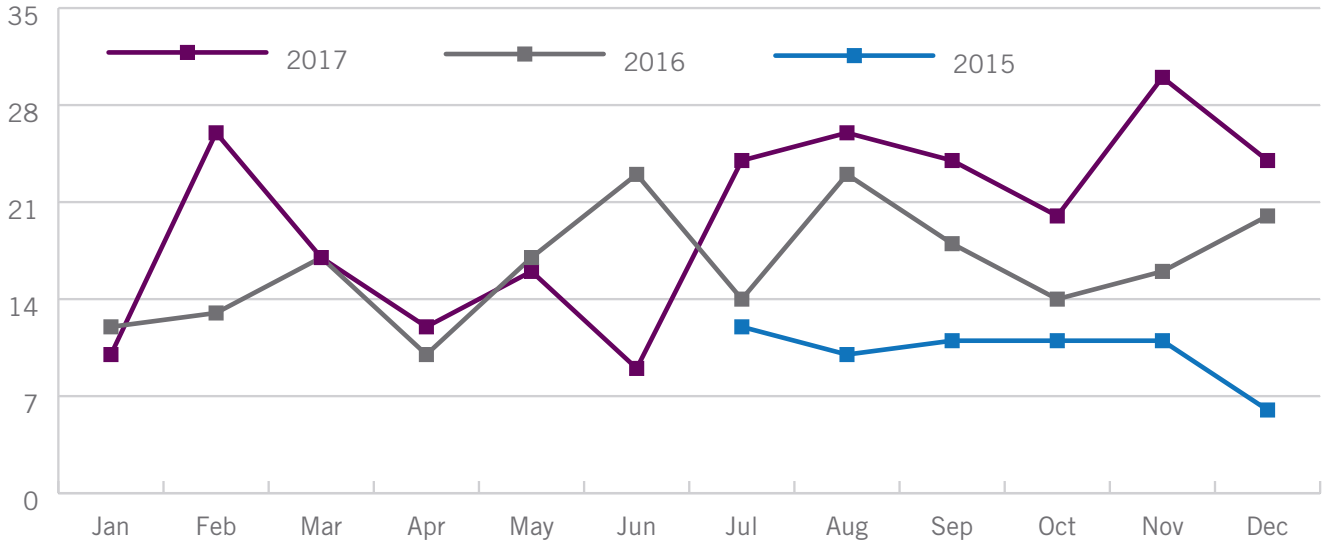
Outpatient physiotherapy is mainly confined to MSK and orthopaedic conditions, though there are a few children with respiratory conditions that are being followed through to adulthood.

We accept referrals from consultants and GPs, and we work closely with the PCCC service to ensure that children needing specialist neurological treatment and MDT care are referred on to the most suitable local service.

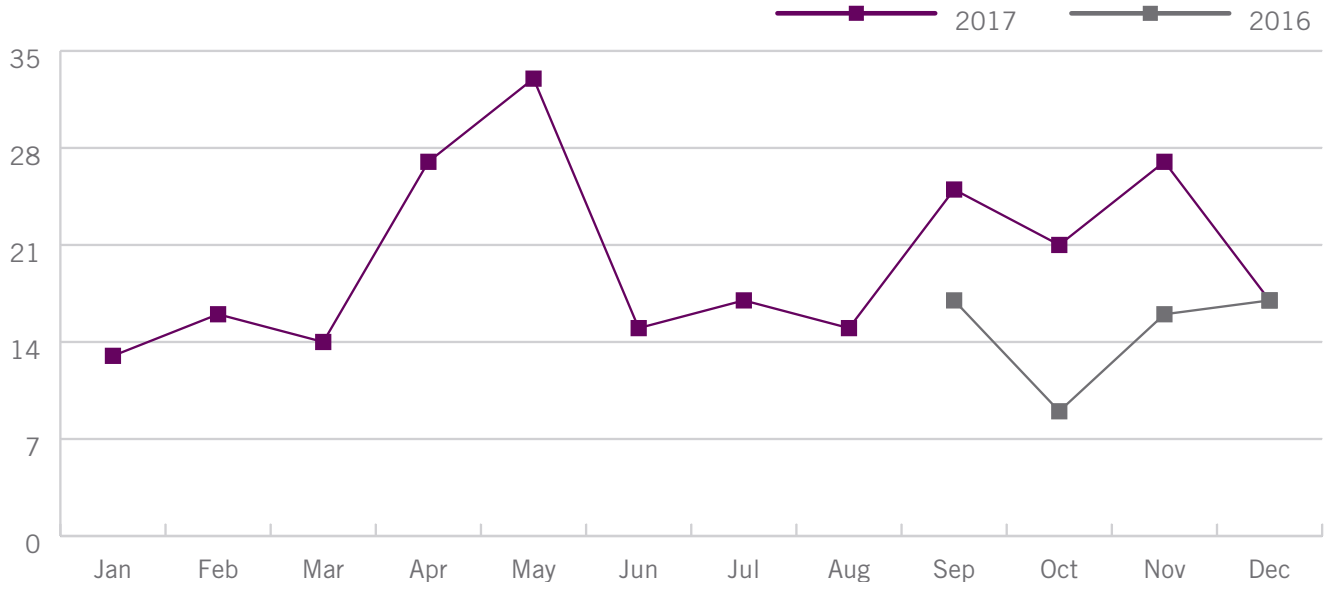
Paediatric physiotherapy is provided by 0.2 WTE senior physiotherapist from general staffing levels as we do not have a specific appointment. This service could benefit from specialist paediatric training to meet national standards.

At this time, we are unable to meet the recommendation of the national standard to assess all extremely premature babies and link them with relevant community services. This would be a plan for the coming year.

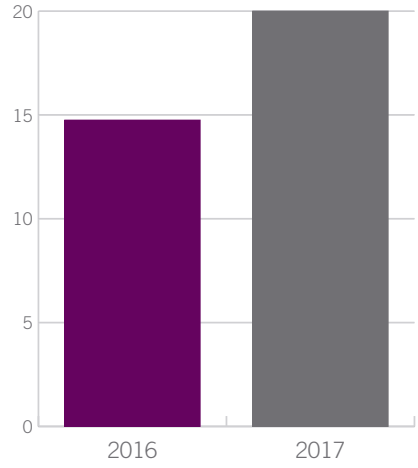
Continence Referrals



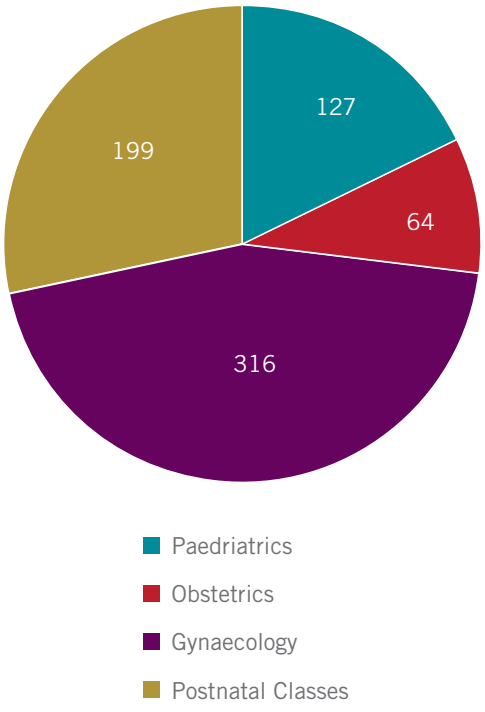
Maternity Related Outpatient Referrals



Average Number of Referrals Per Month



Inpatients 2017



Neonatal Clinical Report

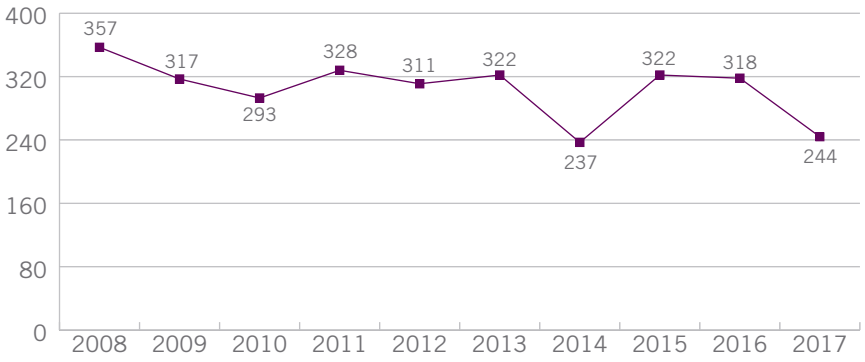
Dr Regina Cooke

During the year 2017, a total of 1667 infants were born at Portiuncula University Hospital. 244 infants were admitted to the NICU for neonatal care following birth. This represents 14.6% 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 (73.8%) admitted to the NICU were >37 weeks gestation. We aim to transfer mothers who require delivery of an infant <32weeks' gestation and <1.5 kg to a regional or tertiary centre antenatally. Occasionally, this is not possible. In 2017, 4 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 2017, 14 babies were transferred.

Admissions to NICU 2008 - 2017



Birth Weight of NICU (Inborn) Admissions

Weight	n	%
<1500g	1	0.6%
1501-2000g	14	5.7%
2001-2500g	48	19.7%
>2500g	181	74.2%
Total	**244**	**99.6%**

Gestational Age at Delivery of NICU (Inborn) Admissions 2017

Gestational age	n	%
<28 weeks	1	0.4%
28 - 31+6 weeks	3	1.2%
32 - 36+6 weeks	60	24.6%
>37 weeks	180	73.8%
Total	**244**	**100.0%**

Source of Admission (including Transfers In) 2017

Source	n	%
Postnatal	113	44.5%
Theatre	88	34.6%
Labour ward	43	16.9%
Other hospital	10	3.9%
Total	**254**	**100.0%**

Transfers out for Tertiary Services by Diagnosis

Reason for Transfer	n
RDS	4
Prematurity	3
Surgical	3
HIE / therapeutic hypothermia	2
Cardiac	1
Endocrine	1
Total	**14**

Transfers out for Tertiary Services by Destination

Destination	n
Coombe Women & Infants University Hospital	5
Our Lady's Children's Hospital, Crumlin	3
National Maternity Hospital, Holles Street	2
Rotunda Hospital	2
University Hospital Galway	1
Children's University Hospital, Temple Street	1
Total	**14**

Paediatric Unit Report

Dr. Frances Neenan and Ms Karen Leonard

Introduction

The Paediatric service in Portiuncula University Hospital (PUH) includes St. Therese's, a 23-bed acute paediatric unit, the emergency department (ED) and a four-day paediatric medical/ surgical day service. The age profile of patients is 0-16 years of age, both medical and surgical, in keeping with national recommendations. The following figures and tables give an overview of the paediatric clinical activity and are included for comparison purposes. Data supplied for this report was obtained from the Hospital Inpatient Enquiry (HIPE) system.

Over the last ten years, children's emergency admissions have risen significantly, with an average of over 85% coming via the emergency department. The workload is high in volume, with the level of dependency of care in paediatrics increasing because of the survival of patients with more complex medical conditions, higher technology needs and shared care models of care with the tertiary units and ICU, e.g. High flow (n=67). There has also evolved an earlier patient transfer for assessment and surgery with even earlier retrieval from the tertiary units.

St. Therese's Admission Information

Total paediatric admissions in 2017 were 3465. The majority of paediatric admissions are overnight, with the average admission rate of

Figure 1 - Admissions to Paediatric Ward by Medical or Surgical 2008-2017

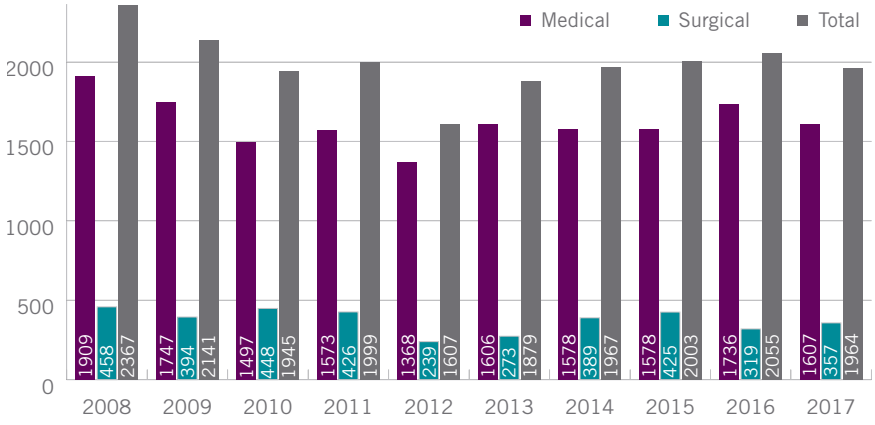


Figure 2 - Admissions to Paediatric Ward by Day Case/Inpatient 2008-2017

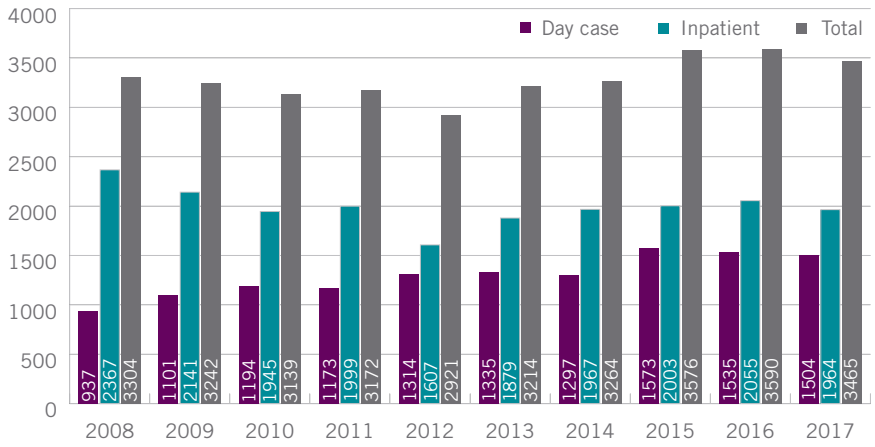


Figure 3 - Surgical Admissions by Specialty (Elective Admissions)

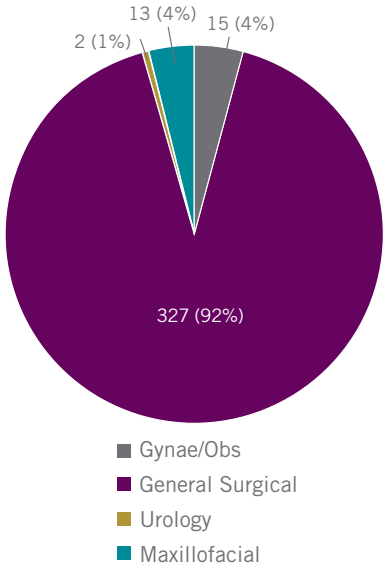
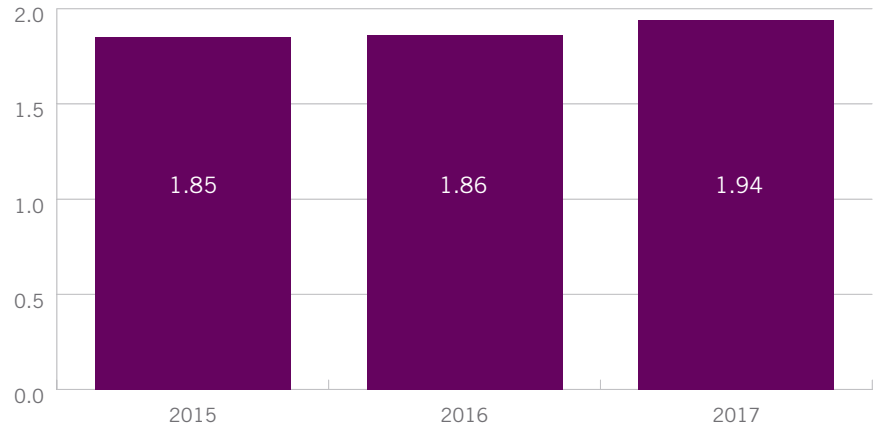


Figure 4 - Average Length of Stay



27% remaining high. The department recognises the need to develop proactive strategies to provide safe care and avoid unnecessary hospitalisation and is exploring an evidenced-based paediatric assessment unit/paediatric decision unit in line with the national Paediatric and Neonatal Clinical Care Programme. The graphs give a breakdown of admissions by services (Figure 1) and the number of day cases (Figure 2), including elective surgical admissions by service (Figure 3). There has been a slight reduction in the number of admissions to the Paediatric Unit this year (88 patients). This is in line with the slight decrease in the number of children (374) seen in the Emergency Department in 2017. There also does not appear to have been a significant change in the average length of stay (ALOS) typically 1.94 days (Figure 4).

Paediatric ED Activity

Paediatric patients continue to represent up to 25% of all patients seen in the ED. The number of children presenting to the emergency department in 2017 (6720) is comparable to previous years: 2014 (6441); 2015 (6681); with only a slight increase in 2016 (7094).

There are 5 paediatric nursing posts approved in ED to ensure that there is a paediatric nurse on every shift in ED, however currently only one remains in place. This is in keeping with the challenges faced nationally in recruiting and retaining Paediatric-trained staff in these posts.

ICU

There were 8 children between the ages of 3 weeks and 16 years admitted to ICU in PUH during 2017 (an increase of 3 versus 2016); all were admitted from ED to ICU, with 50% of patients in 2017 transferred to a tertiary PICU in Temple Street Hospital or Our Lady's Children Hospital Crumlin. The national retrieval transport team facilitated 3 of the 4 transfers.

Figures 7 and 8 outline the reasons for admission to ICU and age profile.

Outpatients

Portiuncula University Hospital provides a general paediatric outpatient service as well as specialist clinics in diabetes, respiratory, neurodevelopment and rapid access clinics. Outreach clinics are provided in Roscommon and Athlone. Increasingly, we are sharing care of patients with the tertiary centres for oncology, haematology, rheumatology and gastrointestinal problems. Figure 5 outlines activity provided through the day treatment services on the Paediatric Unit and outpatient activity for 2014-2017. Of note, these services overlap for some services.

The Diabetes Clinic is supported by dietetic services, the Clinical Nurse Specialist in Diabetes and a paediatric nurse. The Asthma Clinic is supported by a paediatric nurse.

Figure 5 - Paediatric ED Activity

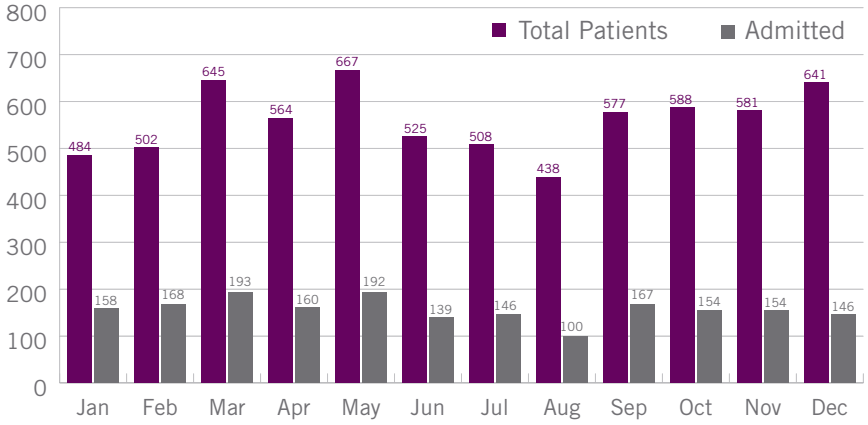


Figure 6 - OPD Attendance and Day Treatment Activity

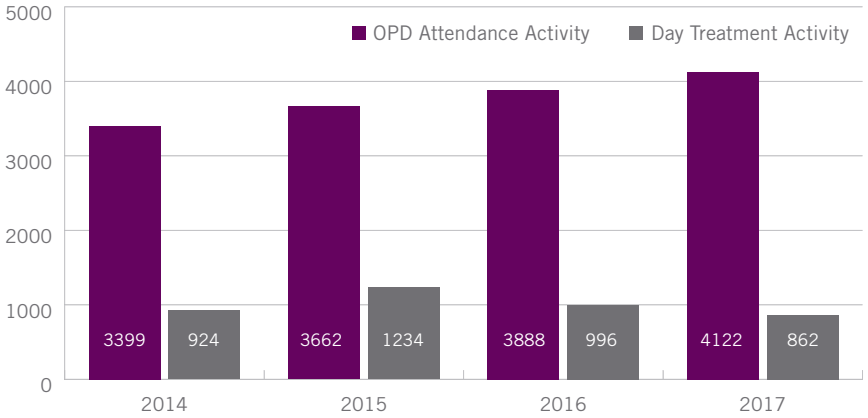


Figure 7 - ICU Admissions by Reason

Reason for Admission	N	Ventilated (N)	Transferred to Tertiary PICU (N)
Diabetic Ketoacidosis	2	0	0
Head Injury	1	0	0
Infection/Sepsis	2	2	2
Respiratory	3	1 plus 1 CPAP	2
Total	**8**	**4**	**4**

Figure 8 - ICU Admissions by Age

Category	2017	%
Neonate (<1 month)	1	12.5%
Infant (<1 year)	2	25.0%
Preschool (1-4 years)	2	25.0%
Child (5-16 years)	3	37.5%
	8	100.0%

Social Work Department

Ms Caroline McInerney Layng

The medical social worker is part of the multi disciplinary team delivering person centred care and support to the Maternity Ward, Ante-Natal Clinics, Early Pregnancy Unit and Paediatrics. The following complex issues impact on the health and wellbeing of women and their families, and require social work support, assessment and case management.

- Unplanned/concealed pregnancy
- Underage pregnancy
- Changing family structures and relationship difficulties
- Diverse cultures
- Domestic abuse
- Emotional and practical stressors including homelessness
- Bereavement support for those experiencing pregnancy loss
- Diagnosis of fatal foetal abnormality
- Child born with a disability/life limiting condition
- Child protection and welfare
- Addiction issues, substance abuse, mental health and self harm
- Neo natal withdrawal syndrome

Counselling, emotional support and practical information is provided to women and their families in order to promote a positive parenting experience. Assessment and identification of psychological and psycho-social needs is a key role in social work intervention from ante natal through to the post natal phase. The service is focused on and responsive to, women and their individual needs. Referrals are made to relevant health and social care services and community supports based on identified needs.

Bereavement Support

In line with the National Standards for Bereavement Care, the medical social worker as part of the specialist team plays a key role in supporting women and families experiencing pregnancy related loss. The medical social worker participates in the annual remembrance service, the perinatal bereavement group and the end of life committee, contributing to on-going training and development.

Early Ante Natal Classes/Engagement with Representative Group

During 2017 a multi-disciplinary committee was set up to develop early ante natal classes with an emphasis on promotion of health and well-being.

Activity Levels – Individuals Seen by Area

Maternity	Ante Natal	EPU	Crisis Pregnancy	Paediatrics	SCBU
215	100	13	72	37	13

The presentation from the medical social worker will include information on the following topics; parenting, self care, birth registration, post natal depression and community supports. The medical social worker also contributes to the Traveller Midwifery Group which promotes positive engagement and respect for different ethnic, social and cultural values.

Domestic Violence

An inter agency domestic violence working group implemented targeted education to maternity and ante natal areas. In line with national guidelines all women attending for ante natal care are screened for domestic abuse. Domestic abuse covers physical, psychological, financial and sexual abuse and research has found violence of this nature can escalate during pregnancy. Women identified at risk of domestic abuse are referred to the medical social worker for support, advice and safety planning. Links are maintained with local domestic violence services to support women and families at risk of abuse.

Child Protection and Welfare

The medical social worker has a key role in co-ordinating support and care for vulnerable/at risk groups including the identification, assessment, and monitoring of child protection and welfare concerns. Working in partnership with the Child and Family Agency, reports are prepared for strategy meetings, case conferences and the medical social worker attends court when required.

The medical social worker identifies potential risks which may impact on parenting ability. For example, women with substance abuse issues are particularly vulnerable and the medical social worker supports this group to ensure their engagement with ante natal, maternity, neo natal and child protection services.

PUH have an active local Children First Committee with representation from the Child and Family Agency, Gardai & health care professionals. Mandatory Reporting was introduced in December 2017 in line with the Children First Act 2015, which places a legal obligation on health care professionals to report child protection concerns. The role of medical social worker also includes supporting other professionals in making referrals to the Child and Family Agency.

Homelessness

A number of families were challenged in securing suitable accommodation, this was a trend noted during the year, consistent with the national housing and homeless crisis. The social work department are pro active in co-ordinating interagency responses with regular links to homeless services in the catchment area.

Professional Development/Clinical Social Work Placements

The social work department is committed to continuous professional development which is a requirement of CORU registration. During the year the social work team have attended relevant education and training to enhance knowledge, skills and competence, ensuring a high standard of professional practice to service users. The team provided two 14 week placements for students of the Masters in Social Work Programme in NUIG and UCC.

Conclusion

The annual report reflects the complexity of issues that impact on the health and wellbeing of women and their families. It highlights the crucial role of the medical social worker in providing integrated care in conjunction with the multi-disciplinary team. The co-operation of our colleagues in the community is vital and I would like to acknowledge their on-going support.

I would like to thank Marie Finn, medical social worker, who covers the maternity/antenatal department and all the social work team for their continued dedication and commitment in providing a quality, person centred service. Finally, I would like to acknowledge the support of our management team and the extended multi-disciplinary team.

Ballinasloe Crisis Pregnancy Support Service

Activity Levels

Individual Clients Seen	Appointments Attended	New Clients Seen
72	95	52

The service continued to respond to women presenting with a crisis pregnancy in 2017 with the majority of referrals from the maternity unit, ante natal clinics and the early pregnancy unit. The profile of clients attending the service is varied, with a wide ranging age group, different family structures and presenting social issues. Addiction, financial stressors, health complications and relationship issues continue to be the prevalent issues.

The service was promoted widely in the hospital through information stands and leaflets which are included in the information pack given to all new ante natal patients. The service also held an annual information campaign in June promoting awareness of the service. Sexual health literature was included in the range of information available and highlighted with staff and members of the public.

Our commitment to improving the service was marked by the repeat outreach promotion campaign. This initiative was carried out in late 2016/ early 2017, targeting GP practices, primary care centres and pharmacies. The campaign also provided the opportunity to advise community professionals of the expanded brief of the HSE SHCPP into sexual health promotion. The feedback received was very positive, indicating an increased awareness of the supports available to women experiencing a crisis pregnancy. Of note there were a number of direct referrals from GP's who are also encouraging women to self-refer via our crisis line. A small number were referred by GP's for post termination counselling.

The service also participated in the Athlone Institute of Technology Health Fair in February; once again this was an opportunity to show case the service, in particular with young people and other services on the day. We are keen to target college students who are a group which feature in our statistics.

The above promotional events are proactive in encouraging conversations on sexual health matters. The service has benefited from a member of staff participating in the sexual health foundation programme in 2016. The knowledge and information is utilised in such promotional events.

In September the service initiated local advertising via TV monitor in our local Credit Union. Similarly, service advertising runs daily on monitors in the hospital foyer and the emergency department waiting area.

Throughout the year team meetings were held to review service delivery and progress a number of quality improvement measures. The service amended the Non – National Client policy to incorporate guidelines on supporting asylum seekers travelling abroad for termination.

Service leaflets on the subjects of Pregnant Unsure and Having Chosen a Termination were reviewed and plans are in place to print in early 2018.

At the latter stage of the year, work progressed on developing a domestic violence working group, targeting maternity and ante natal health care professionals in the context of providing education. The service networked with domestic violence services in the catchment area and in service training was provided in December. Work was completed on developing a domestic violence routine ante natal enquiry which is now in operation at our ante natal clinics.

A local services directory was updated as part of our quality improvement plan. Additionally, the intake assessment form & repeat client template have been amended to capture partners attending our service. These are QIP's following on from the self assessment framework.

Meetings with homeless services continued on a monthly basis, targeting those at risk of becoming homeless. For a number of our clients securing suitable private rented accommodation was a trend noted during the year.

The Local Children First Committee (part of the Saolta Hospital Group) was active with monthly meetings, comprising representation from Tusla, Gardai & hospital professionals. This is an example of promoting effective inter agency networking and communications.

Roisin McHugh completed the Certificate in Crisis Pregnancy Counselling Skills in NUI Maynooth. There are now four members of the team who have completed this training.

A member of the team attended the Assisted Decision Making workshop in Portlaoise on 24th May 17.

In conclusion, the past year has been successful with continued provision of supports to women and significant others who present with a crisis pregnancy. Feedback has been positive and reflects the value of the support to services users and other key stakeholders. I would like to thank the HSE Sexual Health & Crisis Pregnancy Programme for their continued funding and support since 2003. I would also like to thank our own team here in Portiuncula hospital - the social work department, management, and the clinical staff in maternity, Ante Natal & EPU, who support us in providing a quality service.

Quality and Patient Safety

Ms Lisa Walsh

The Women's and Children's Directorate Department in Portiuncula University Hospital has continued to review and develop its quality and safety framework. Staff recognise that safety awareness helps all members of the team to be more proactive with regard to the challenges faced in providing safe, high quality care for mothers, babies and their young patients.

Regular multidisciplinary meetings are held within departments and in cross department settings throughout the week. These meetings in turn focus on many aspects of care delivery, and include: staff education and training; policy and procedure review; audit; incident review and risk management.

The National Standards for Safer Better Maternity Service were publised in 2016 and self assessment against these standards is in progress. With regard to the implementation of recommendations from Maternity Department Reviews, a local implementation board continues to meet regularly throughout the year. In addition, a working group was established in 2017, with membership inclusive of maternity and general managers and service users to discuss progression of the action plans associated with the recommendations of individual case reviews associated with the External Independent Clinical Review of the Maternity Services at Portiuncula Hospital (cases occurring 2008 – 2014). Self-assessment against the National Safer Better Healthcare Standards with regard to paediatrics and general wards taking gynaecological patients commenced in 2017, with a focus on Themes 1 (Person Centred Care and Support) and Theme 5 (Leadership, Governance and Management).

Service user feedback (complaints and compliments); clinical incidents and hazards are reported on the hospital group's quality information management system (Q-Pulse). All reported events are reviewed and discussed by the relevant line managers (Maternity; SCBU; Paediatrics and Gynaecology). The PUH WaC directorate meetings occur twice a month, on the 1st and 3rd Thursdays. At these meetings emerging trends and any serious reported events are discussed and follow-up plans agreed. These may include: review of local policies and procedures; staff development; level 1 review for further consideration/ determination of the need to escalate to the Saolta WaC directorate / Serious Incident Management Team. Furthermore, incidents are reporting on the State Claims Agency's National Incident Management System (NIMS), and those reported events that meet the HSE's criteria for a Serious Reportable Event (SRE) are flagged as such on the NIMS system, and also in the preliminary level reports that are compiled locally.

Staff information sessions are provided throughout the year with regard to: record keeping, incident recognition and reporting; risk assessment and developing and populating a risk register; open disclosure staff awareness training and practical skills workshops; and informed consent. Staff training on the use of Q-Pulse is provided on a quarterly basis by the contracted service for Q-Pulse administration and training (HCI).

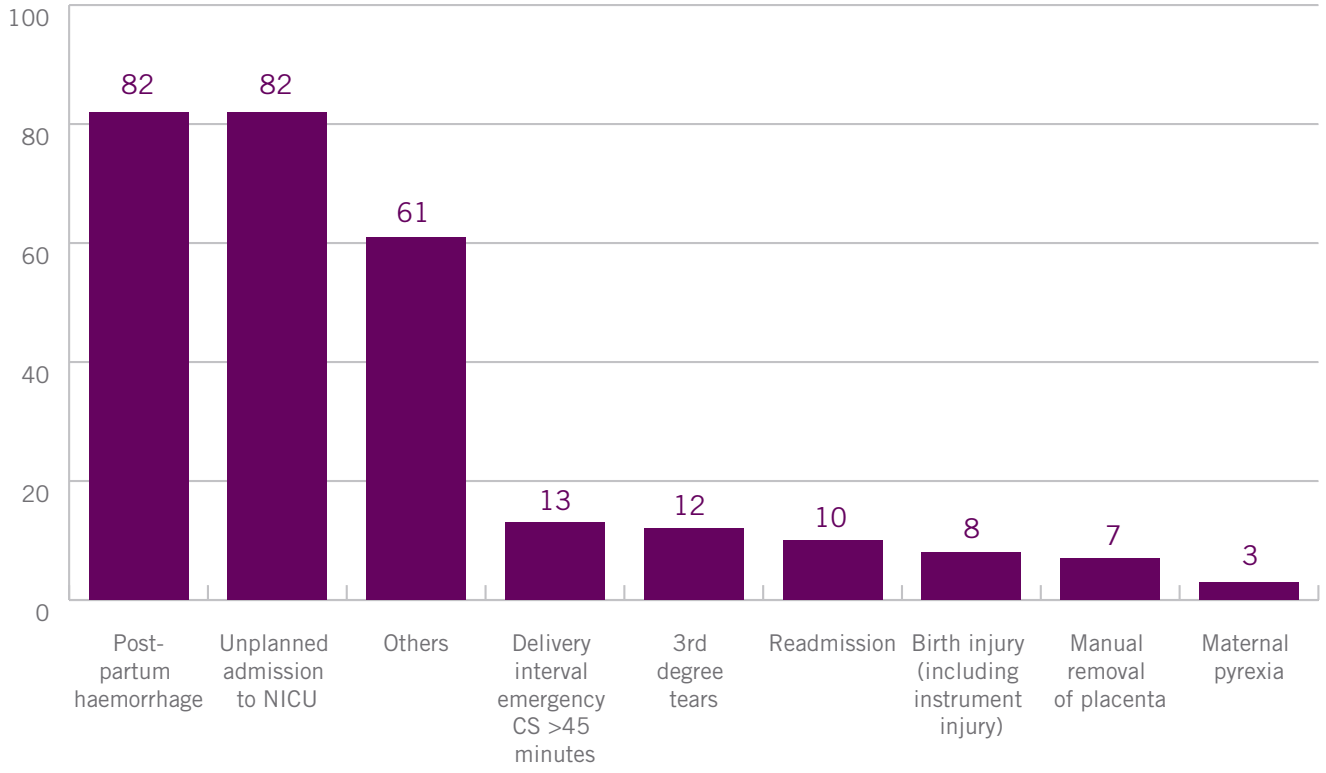
Local service user surveying is ongoing. Comment cards are available in the Maternity department, and a dedicated comment card was introduced for use in the SCBU in 2017. Reports are generated on a monthly basis and circulated to all relevant heads of department. Positive feedback is received with regard to the staff friendliness and professionalism. Negative feedback occasionally relates to staff approach, and otherwise relates to the fabric of the building. All feedback is used to assist in the department's quality improvement plans.

Formal complaints are managed in accordance with the HSE national complaints policy, and from January 2018 in place of the use of the Saolta Q-Pulse System, all formal complaints will be logged on the HSE's Complaints Module hosted by the State Claims Agency and their National Incident Management System (NIMS).

Incidents, Complaints & Positive Feedback	2014	2015	2016	2017
General Incidents	169	163	286	541
Medication Incidents	18	16	8	8
Total Incidents	**187**	**179**	**294**	**549**
Complaints	6	17	30	18
Postive Feedback	4	8	52	368

Note: Incidents include hazards and other non-clinical incidents.

Most Frequently Reported Perinatal Incidents 2017



Clinical Incidents* by Specialty	Number
Obstetrics	387
Gynaecology	22
Paediatrics	16
Total	**425**

*General and medication safety incidents

Complaints by Category	Number
Safe and effective care	6
Communication /information	7
Dignity and respect	1
Access	4
Total	**18**

Practice Development

Ms Deirdre Naughton and Ms Carmel Cronnolly

Staffing

- Clinical Placement Co-ordinator (CPC) (0.5 WTE since 2007) Ms Carmel Cronolly
- Midwifery Practice Development Co-ordinator (1 WTE since Sept 2017) Ms Deirdre Naughton

Goal of Midwifery Practice Development

The goal of Midwifery Practice Development in Portiuncula is to play a proactive role in empowering, motivating and supporting staff and students alike. The underlying drivers in this process are the application of specialist knowledge, implementation of best practice, and provision of support for practice-based education and continuing professional development. Supporting staff through access to education and research opportunities enhances their knowledge and promotes the use of current, evidence-based practice which helps provide a quality patient service.

The CPC is responsible for co-ordinating the clinical components of the Undergraduate B.Sc. Midwifery Programme, ensuring an optimal clinical learning environment. In 2017, we supported over forty-eight midwifery students in Portiuncula for their clinical maternity experience. Their placements included postnatal/ antenatal ward, labour ward, outpatients department, theatre and special care baby unit. In addition, we supported twelve undergraduate General Nursing students and three Public Health Nurse students during their maternity placement in PUH.

The clinical sites are audited for suitability for students in conjunction with NUIG and a new site has recently been approved for students: midwifery-led supported care antenatal clinics. We have strong partnership networks, promoting engagement and sustaining collaborative relationships with clinical staff and the School of Nursing and Midwifery, NUIG.

Return to Midwifery Programme

This is the first year for Portiuncula to provide clinical placement for 2 midwives undertaking the Return to Midwifery Practice Programme. We are delighted to support and encourage our colleagues back into the workforce in a structured and safe manner. This is a national initiative that is led by the CNME in Dublin. This enables the participants to develop the requisite knowledge, skills, attitudes and behaviours necessary to demonstrate the achievement of competence. Competence is defined as the ability of the registered midwife to practice safely and effectively, fulfilling her professional responsibility within her scope of practice. During the clinical component of the course, the competence of each participant is assessed using the Competence Assessment Tool developed by NMBI.

Policy Development

The challenge to provide up-to-date evidence to support practice and the wish to improve service through innovation provide the impetus for policy development. We work and liaise closely with practice development in University Hospital Galway in the development of clinical practice policies, guidelines and care pathways. We have established a local monthly midwifery policy, procedure, guideline and audit (PPGA) meeting. We also actively participate in the Group PPGA meeting which is held bimonthly. The purpose of our meetings is to facilitate consistency and evidence-based information through the standardisation of PUH midwifery policies, procedures, guidelines and audits. It is also to ensure quality and transparency through a multidisciplinary team approach, respectful of the diversity of opinion.

Audit

Audit of midwifery practice is an essential element in the provision of care to women in Porticunula University Hospital (PUH) in order to evaluate and review current practices. The midwifery practice development team performs clinical and non-clinical audits on an ongoing basis and they are fed back via the PPGA and Education Committee meetings

Education

An Education Committee meeting is held monthly. The purpose of these is to facilitate consistency and quality of education for staff in the Maternity Unit, PUH. We always aim to ensure that all staff are fully informed of all available training and staff development opportunities.

We have an annual plan for mandatory midwifery education including CTG training, PROMPT, NRP and Breastfeeding.

We provide ongoing ward-based education on new guidelines and initiatives.

We held a successful, well-attended study day in November entitled “Make Every Contact Count”.

We celebrated International Day of the Midwife by having a display of new initiatives in PUH including midwifery-led supported care antenatal clinic, hypnobirthing classes and implementation of the bereavement standards.

Sligo University Hospital

Ms Juliana Henry and Ms Madeleine Munnelly

The Sligo University Hospital (SUH) Maternity Department is committed to providing a high-quality, comprehensive service that offers choice, continuity of care and control, treating all women in their care with dignity and respect at all times. To ensure each mother, baby and indeed family receives the best care, we work in collaboration within the Department to deliver safe, evidence-based, high-quality care. We recognise and value the contribution of each staff member and endeavour to support them in their ongoing development.

SUH is a 281-bedded hospital with a catchment area of Sligo, Leitrim, South Donegal, West Cavan and Roscommon. The mainstream acute services provided by SUH include the following: 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 Galway University Hospitals.

A regional Rheumatology service is based at Our Lady's Hospital, Manorhamilton.

A full range of clinical and non-clinical support services are provided, including Theatres, CSSD, Pharmacy, Laboratory, Clerical / Administrative, Social Work and Therapies.

Services are provided on a regional basis at SUH in respect of ENT, Ophthalmology (including service to Longford), Neurology, Orthodontic, Paediatric Insulin and Pump Service, Rheumatology and Dermatology Services. A number of specialties provide outpatient clinics at community hospitals in our catchment area.

SUH Maternity Team

- 4 WTE Consultant Obstetrician / Gynaecologist
- 1 WTE Director of Midwifery
- 1 WTE Assistant Director of Midwifery / Nursing (vacant post)
- 1 WTE Clinical Midwife Manager 3
- 3 WTE Clinical Midwife Manager 2
- 4 WTE Clinical Midwife Manager 2 / Shift Leader
- 1 WTE Antenatal Education CMM2 / Lactation Consultant
- 4 WTE Clinical Midwife Specialist Sonographer (1 on long-term sick leave)
- 1 WTE Clinical Midwife Specialist Bereavement
- 0.5 WTE Maternity Clinical Placement Coordinator
- 1 WTE Advanced Midwife Practitioner
- 43 WTE Midwife
- 13 WTE NCHD
- 6 WTE Health Care Assistant
- 3 WTE Ward Clerk
- 3 WTE Medical Secretary
- A link Social Worker
- A Physiotherapist for maternity services (shared)
- A Psychiatric Liaison Officer (shared)

The Maternity Service in SUH is a multi-sited service provided over four floors from the multi-storey building since 1992. The site is accredited for General Practice training, Higher Specialist Training in General Paediatrics, and by the Irish Committee on Higher Medical Training for General Medicine training. It is a clinical placement site for pre-registration midwifery and nursing students, student public health nurses and for the Return to Midwifery Practice programme.

There were 1,312 births in 2017. The inpatient combined antenatal / postnatal ward on Level 4 works within a complement of 28 beds, a similar number of cots and a 2-bedded induction room. Separate and on the same level, the Delivery Suite has three birthing rooms, two pre-labour beds and an admission room. It 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. The Fetal Assessment Unit and Early Pregnancy Assessment Unit (EPAU) provide care Monday to Friday. The neonatal unit has 10 cots for babies >32 weeks' gestation. There is one community midwifery antenatal service.

SUH provides excellence in the care of women and babies through a range of maternity services:

- Early Pregnancy Assessment Unit
- Maternal and Fetal Assessment Unit
- Antenatal clinics in SUH (obstetric and midwifery)
- Outreach antenatal clinics (obstetric and midwifery)
- Antenatal education classes
- Antenatal breastfeeding education
- Antenatal care
- Intrapartum care
- Postnatal care
- Gynaecology outpatient clinic
- Gynaecology inpatient
- Gynaecology theatre
- Colposcopy services
- Postnatal breastfeeding clinics
- Maternity bereavement service

The two models of care in SUH are:

(1) Medical-led team care, with consultant-led antenatal care based in the acute hospital outpatient facility three times a week. There are weekly outreach antenatal clinics in Manorhamilton, Carrick-on-Shannon and Ballyshannon. Clinics are held in community hospital outpatient facilities, and are attended by medical and midwifery staff from SUH.

(2) In January, 2017, the midwifery-led model of care was expanded in line with the Maternity Strategy. The clinics are led by an Advanced Midwife Practitioner and run alongside the consultant-led clinics, which facilitates a bi-directional flow. These clinics facilitate women who are on the supported or assisted pathways of care. There is also one weekly, midwifery-managed, antenatal review clinic for low-risk women in SUH, which has been established for many years.

Antenatal Clinics

There are three antenatal consultant-led clinics per week and three consultant-led outreach clinics. There are 4 midwifery clinics per week in SUH and 1 outreach midwifery clinic (new service). The schedule of antenatal clinics is detailed below.

The service is accessed via GP referral to the obstetrics and gynaecology central booking office, irrespective of choice of clinic. Women who request to attend a particular outreach clinic will be facilitated or offered an outreach clinic based on home address. All referrals for antenatal services in SUH are divided equally amongst the consultant obstetricians. A letter advising women of their booking appointment details will be sent to the woman's contact address in advance of the appointment date.

Midwives Clinic

This clinic operates on a 'share of care' principle, in that care is shared between the mother's GP & midwives. Mothers are booked under a consultant initially and then attend the midwives clinic for subsequent antenatal visits.

Monday

- AM - Antenatal Clinic - medical-led
- AM – Midwives Clinic (led by Advanced Midwife Practitioner - combined supported and assisted clinic)
- PM - Midwives Clinic (supported pathway)

Tuesday

- AM - Antenatal Clinic - medical-led
- AM – Midwives Clinic (led by Advanced Midwife Practitioner, combined supported and assisted clinic)

Thursday

- AM - Antenatal Clinic - medical-led
- AM – Midwives Clinic (led by Advanced Midwife Practitioner, combined supported and assisted clinic)
- PM - Booking clinic for private patients and for women attending outreach Antenatal Clinic in St. Patrick's Hospital, Carrick-on-Shannon, Co. Leitrim.

Outreach Antenatal Clinics

- Ballyshannon – Sheil Hospital - Thursday PM - medical-led
- Manorhamilton - Our Lady's Hospital - Wednesday - medical-led
- Carrick on Shannon - St. Patrick's Hospital - Thursday AM - medical-led

Delivery Suite

3 delivery suites, a 2-bedded pre-labour area and one admission/assessment room.

Access: Self-referral / referral after telephone liaison / Obstetric Referral / GP referral

All women attending in suspected labour or out-of-hours can self-refer to the Delivery Suite. Following admission, midwives work in partnership with the woman and the obstetric team (if not low-risk) to provide evidence-based care. All women in labour receive one-to-one midwifery care based on best available evidence and informed consent of the woman. Out of hours and weekends, from 18 weeks of pregnancy, women with pregnancy-related concerns can self-refer to the Delivery Suite, be referred by their GP, or be referred after telephone liaison.

Regardless of the reason for presentation, all women will have a full maternal and fetal assessment performed. This may include interventions such as blood tests, CTG monitoring and ultrasound scanning. They are then referred to the most appropriate health care professional (HCP). A plan of care will be made in collaboration with the woman and the HCP. All activities are documented in the woman's notes and communicated to the relevant healthcare team. Women who are less than 32 weeks' gestation and whose delivery is considered a risk of pre-term delivery may, based on individual circumstances, be transferred to a tertiary centre.

Maternity Ward

The maternity ward is a 28-bedded unit which provides care to both antenatal & postnatal mothers & babies and a 2-bedded induction room. The ward comprises a six-bedded antenatal ward, 22 postnatal beds and cots and a breastfeeding room. Holistic care is provided to women from early pregnancy up to and following the birth of their baby.

Mothers undergoing induction of labour and Caesarean sections are also cared for on the ward. There is a multidisciplinary approach to care and the maternity staff work in close liaison with obstetricians, paediatric staff, medical physicians, physiotherapists, social workers, dieticians, clinical nurse specialists, radiology, general practitioners and public health nurses.

Bereavement Service

A bereavement service is provided to women and their families following pregnancy and perinatal loss. The service is co-ordinated by the Bereavement Support Midwife in collaboration with the multidisciplinary team. Anticipatory bereavement support is also provided for families whose baby is diagnosed with a fatal fetal abnormality. The service is accessed via referral by midwife/clinician or self-referral.

Key Achievements across the Service for 2017

- Nominated Maternity Hospital of the Year at CMG National Healthcare Awards
- Appointment of Bereavement Midwife, Ms Maria White
- Introduction of ISBAR stamps
- Introduction of Fresh Eyes in Labour Ward
- Change to visiting hours in Maternity Ward
- Introduction of RAADP
- Ms Roisin Lennon AMP accredited
- Introduction of swipe security cards for Maternity and Labour Ward
- Purchase of CTG monitors including one transport monitor
- First time breastfeeding mothers reviewed by Lactation Consultant
- Appointment of NRP co-ordinator

Staffing Achievements

- Appointment of four shift Leaders in Labour Ward: Ms Carole Munnelly, Ms Colette Coleman, Ms Lattricia Howley and Ms Colette Kivlehan
- Ms Roisin Lennon, AMP, presented poster "Prostin vs Propess for Induction of Labour" at International Intrapartum Conference in Stockholm, Sweden.
- Ms Roisin Lennon, AMP, published in Journal of Clinical Nursing "The experience of being a Registered Nurse/Midwife Prescriber in an acute service setting"

Education and Training

- Ms Marie Mulligan and Ms Cathy McNeela, Staff Midwives, completed module in Care of the Critically-Ill Woman, facilitated through NUIG
- Ms Mary Flatley and Ms Breeda Coggins, CMM2s, completed a course in Quality and Leadership in Midwifery in RCSI Institute of Leadership
- Ms Colette Kivlehan, Shift Leader, and Ms Mairead Beirne, Staff Midwife, commenced Quality Management in Healthcare facilitated through NUIG
- Ms Siobhan O'Dowd, Staff Midwife, completed Masters in Education
- Ms Marla Kennedy, CMM2, Ms Marita Keenan, Staff Midwife, and Ms Roisin Lennon, AMP, commenced Lactation Consultant training
- Four staff members completed Hypnobirthing training
- SUH became site for Intern Midwifery Students
- Approx 94% multidisciplinary staff trained in Neonatal Resuscitation
- Challenges in 2017 in providing on-site PROMPT training due to resignation of trainer
- Bereavement Training for Multidisciplinary staff

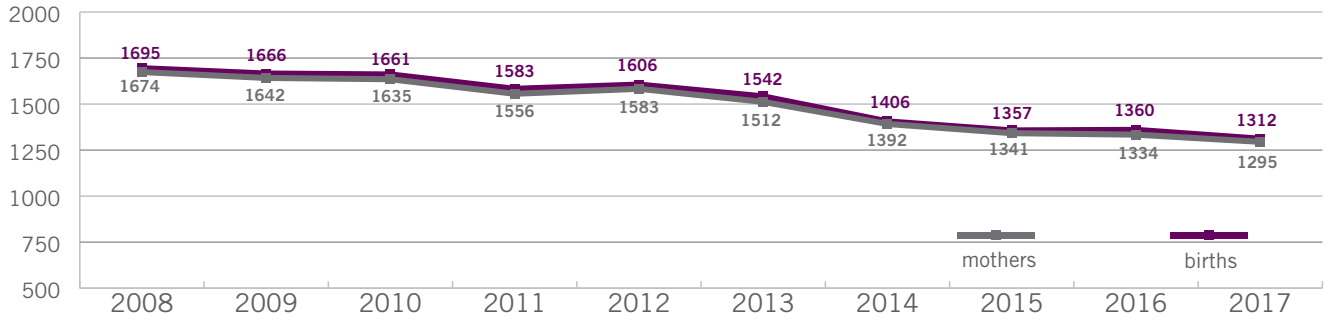
Statistical Summary

Ms Juliana Henry, Dr. Nirmala Kondaveeti, Ms Madeleine Munnelly and Ms Louise O'Malley

	Primigravida	Multigravida	Total
Total Number of Mothers	466	829	1,295
Total Number of Babies	469	843	1,312
>24wks or >/= 500g			

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of Mothers	1674	1642	1635	1556	1583	1512	1392	1341	1334	1295
Number of Babies	1695	1666	1661	1583	1606	1542	1406	1357	1360	1312

Number of Mothers & Babies over the last 10 years



Obstetric Outcomes (Babies)	Primigravida	%	Multigravida	%	Total	%
Spontaneous Vaginal Delivery	186	39.7%	570	67.6%	756	57.6%
Forceps Delivery	31	6.6%	14	1.7%	45	3.4%
Ventouse Delivery	72	15.4%	25	3.0%	97	7.4%
Breech Delivery (Singleton)	1	0.2%	0	0.0%	1	0.1%
Breech Delivery (1st Twin)	0	0.0%	1	0.1%	1	0.1%
Breech Delivery (2nd Twin)	1	0.2%	4	0.5%	5	0.4%
Caesarean Se ction (Babies)	178	38.0%	229	27.2%	407	31.0%
Total	**469**	**100.0%**	**843**	**100.0%**	**1312**	**100.0%**

Obstetric Outcomes (Mothers)	Primigravida	%	Multigravida	%	Total	%
	n=466		n=829		n=1295	
Spontaneous Onset	232	49.8%	396	47.8%	628	48.5%
Induction of Labour	156	33.5%	262	31.6%	418	32.3%
Augmentation					205	15.8%
No Analgesia					0	0.0%
Epidural Rate					490	37.8%
Episiotomy	128	27.5%	46	5.5%	174	13.4%
Caesarean Section	177	38.0%	222	26.8%	399	30.8%
Spontaneous Vaginal Delivery	184	39.5%	568	68.5%	752	58.1%
Forceps Delivery	31	6.7%	14	1.7%	45	3.5%
Ventouse Delivery	72	15.5%	25	3.0%	97	7.5%
Breech Delivery	2	0.4%	0	0.0%	2	0.2%

Multiple Pregnancies	Primigravida	%	Multigravida	%	Total
Twins	3	0.6%	14	1.7%	17

Multiple Pregnancies by year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Twins	19	23	24	25	23	26	13	16	27	17
Triplets	0	0	0	0	0	0	1	0	0	0
Total	**19**	**23**	**24**	**25**	**23**	**26**	**14**	**16**	**27**	**17**

Perinatal Deaths	Primigravida	Multigravida	Total	%
Stillbirths	2	3	5	0.38%
Early Neonatal Deaths	0	1	1	0.08%

Perinatal Mortality Rate	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Stillbirth rate (per 1,000)	2.4	3.6	5.4	3.2	3.7	1.3	3.6	3.7	6.6	3.8
Neonatal Death rate (per 1,000)	1.8	1.2	0.6	2.5	3.7	2.6	2.8	3.7	0.7	0.8
Overall PMR per 1,000 births	4.1	4.8	6.0	5.7	7.5	3.9	6.4	7.4	7.4	4.6

Parity	Number	%
Para 0	466	36.0%
Para 1	268	20.7%
Para 2	245	18.9%
Para 3	156	12.0%
Para 4	74	5.7%
Para 5	36	2.8%
Para 6	19	1.5%
Para 7	17	1.3%
Para 8	5	0.4%
Para 9	4	0.3%
Para 10	5	0.4%
Total	**1295**	**100.0%**

Parity by year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0	33.9%	31.4%	29.5%	31.0%	28.7%	29.3%	26.6%	29.1%	29.3%	36.0%
1,2,3	56.9%	59.6%	61.0%	59.0%	60.1%	59.2%	61.0%	59.6%	59.1%	51.7%
4+	9.2%	9.0%	9.5%	10.0%	11.2%	11.5%	12.4%	11.3%	11.6%	12.4%

Age @ Booking	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<15 years	0.2%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
15-19 years	3.1%	3.4%	2.7%	3.3%	2.4%	1.9%	2.8%	1.9%	2.1%	2.4%
20-24 years	12.1%	11.5%	10.9%	9.7%	10.2%	9.7%	8.3%	7.8%	9.0%	10.0%
25-29 years	25.6%	24.7%	23.9%	23.5%	22.7%	21.8%	19.2%	21.9%	18.5%	18.9%
30-34 years	33.5%	34.8%	33.7%	37.8%	35.2%	37.4%	36.4%	35.2%	35.3%	34.0%
35-39 years	21.8%	21.3%	23.7%	21.9%	24.4%	23.9%	27.7%	26.5%	29.0%	28.7%
>40 years	3.6%	4.2%	4.9%	3.7%	5.1%	5.3%	5.6%	6.5%	6.0%	6.0%

County of Origin	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Sligo	54.3%	58.1%	55.3%	56.5%	56.7%	55.4%	55.2%	55.2%	55.0%	54.40%
Donegal	10.5%	10.5%	11.5%	10.2%	10.6%	9.5%	10.8%	10.4%	11.8%	10.90%
Leitrim	22.1%	20.8%	19.5%	21.2%	19.5%	21.0%	19.6%	21.7%	20.5%	20.20%
Mayo	2.3%	1.6%	1.9%	2.4%	1.8%	2.7%	1.9%	2.1%	1.9%	2.50%
Roscommon	10.1%	8.3%	10.6%	8.4%	10.5%	10.6%	11.6%	10.0%	9.6%	11.10%
Cavan	0.5%	0.3%	0.5%	0.8%	0.5%	0.5%	0.6%	0.4%	0.9%	0.50%
Galway	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.00%
Longford	0.1%	0.2%	0.2%	0.0%	0.2%	0.1%	0.2%	0.0%	0.0%	0.20%
Dublin	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.00%
Others	0.0%	0.0%	0.5%	0.3%	0.2%	0.2%	0.0%	0.1%	0.1%	0.20%

Non-national Births	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number	106	114	72	62	66	82	72	79	109	97
%	6.3%	6.9%	4.4%	3.9%	4.1%	5.4%	5.0%	5.8%	8.0%	7.4%

Gestation at Delivery	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<24 weeks	2	0	6	8	3	3	2	2	1	1
24-27 weeks	3	5	5	2	3	1	5	6	2	1
28-31 weeks	6	6	5	4	3	4	5	2	4	3
32-35 weeks	36	38	39	25	31	37	36	53	64	65
36-39 weeks	687	684	681	668	716	674	646	646	629	602
40-41 weeks	879	833	869	832	810	796	685	611	606	603
>42 weeks	85	100	58	45	42	29	27	21	28	20
Total	**1698**	**1666**	**1663**	**1584**	**1608**	**1544**	**1406**	**1341**	**1334**	**1295**

Birth Weights by year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<2500g	63	53	74	45	46	71	50	54	71	56
2500 - 2999g	177	201	189	182	191	175	143	153	158	166
3000 - 3499g	549	516	547	470	535	484	470	467	464	387
3500 - 3999g	616	616	552	608	571	533	512	482	442	482
4000 - 4499g	243	229	251	238	219	231	206	160	194	187
>4500g	50	51	50	41	46	50	25	41	31	34
Total Number of Babies	**1698**	**1666**	**1663**	**1584**	**1608**	**1544**	**1406**	**1357**	**1360**	**1312**

Induction of Labour	Primigravida	%	Multigravida	%	Total	%
2008	202	29.3%	226	22.9%	428	25.5%
2009	164	26.0%	207	20.5%	371	22.6%
2010	168	28.7%	222	21.1%	390	23.9%
2011	243	25.0%	189	32.4%	432	27.7%
2012	168	29.4%	260	25.7%	428	27.0%
2013	167	30.9%	275	28.3%	442	29.2%
2014	165	35.6%	260	28.1%	425	30.5%
2015	158	33.8%	255	29.1%	413	30.8%
2016	160	32.9%	255	30.1%	415	31.1%
2017	156	33.5%	262	31.6%	418	32.3%

Perineal Trauma	Primigravida	%	Multigravida	%	Total	%
Number of vaginal deliveries	289		607		896	
Intact					216	24.1%
Episiotomy	128	44.3%	46	7.6%	174	19.4%
2nd Degree Tear					302	33.7%
1st Degree Tear					110	12.3%
3rd Degree Tear	6	2.1%	6	1.0%	12	1.3%
Other Laceration					82	9.2%
Total					896	100.0%

Incidence of Episiotomy	Primigravida	%	Multigravida	%	Total	%
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	20.4%
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%
2016	150	51.0%	67	10.8%	217	23.7%
2017	128	44.3%	46	7.6%	174	19.4%

B.B.A.	Primigravida	%	Multigravida	%	Total	%
2008	0	0.0%	6	0.4%	6	0.4%
2009	0	0.0%	3	0.3%	3	0.2%
2010	0	0.0%	7	0.7%	7	0.4%
2011	1	0.1%	2	0.1%	3	0.2%
2012	1	0.1%	7	0.5%	8	0.5%
2013	1	0.2%	6	0.6%	7	0.5%
2014	1	0.2%	8	0.6%	9	0.4%
2015	0	0.0%	6	0.7%	6	0.4%
2016	1	0.2%	8	0.9%	9	0.7%
2017	0	0.0%	10	1.2%	10	0.8%

3rd Stage Problems	Primigravida	%	Multigravida	%	Total	%
Primary PPH (1000ml)	55	11.8%	35	4.2%	90	6.9%
Manual Removal of Placenta	4	0.9%	11	1.3%	15	1.2%

	Primigravida	%	Multigravida	%	Total	%
Shoulder Dystocia	1	0.2%	5	0.6%	6	0.5%

Robson Groups	n-CS	n-Women	%
Group 1 - nullip singleton cephalic term spont labour	45	227	19.8%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	92	191	48.2%
Group 3 - multip singleton cephalic term spont labour	8	362	2.2%
Group 4 - multip singleton cephalic term induced or pre-labour CS	38	225	16.9%
Group 5 - previous CS singleton cephalic term	132	184	71.7%
Group 6 - all nulliparous breeches	31	32	96.9%
Group 7- all multiparous breeches	19	20	95.0%
Group 8 - all multiple pregnancies	8	17	47.1%
Group 9 - all abnormal lies	8	8	100.0%
Group 10 - all preterm singleton cephalic	18	29	62.1%
TOTAL	**399**	**1295**	

Total No. of Mothers who had 1 Previous Caesarean Section	**153**

Number of women who had VBAC after 1 previous Caesarean Section	**52**

Gynaecology

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. Care is carried out in the multidisciplinary setting our 'Productive Ward' 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 that 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 continual influx of medical boarding patients on the ward.

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 seven-day patient services sessions on a monthly basis, in our dedicated 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 a designated senior registrar on site for all EPAU sessions, to minimise the number of doctors this vulnerable group of patients has to have contact with and to ensure consistency of management with minimal confusion.

Colposcopy continues offer six clinic sessions on a monthly basis, with nurse smear clinics now fully functional. This clinic continues to be held in a specific-purpose area, in a private setting to the general outpatient area, which ensures ongoing privacy and sensitivity to these patients.

We provide one Mirena IUS insertion clinic on a monthly basis to allow patients from our outpatient service, whom we consider to be inappropriate for insertion in a General Practice setting, the opportunity to have their procedure without the need for day services, hence overall reducing our day services waiting times a little.

In 2017, 1048 new gynaecology outpatient referrals attended, with 3684 patients attending the service for review overall. There was a total of 1248 gynaecology ward attenders.

Gynaecological Surgery Report

LSCS	399
Balloon Ablation Uterine	2
Biopsy of Endometrium	1
Endoscopic-Laser Endometrial Ablation	1
Insertion of TOT	18
Suture of Vaginal Laceration	2
Vaginal Dilation	1
Cervix Cautery/Diathermy	1
Colposcopy	5
Cystectomy	1
D&C	241
ERPC	73
EUA Gynaecology	76
Fenton's Procedure	2
Hysterectomy Vaginal	3
Hysteroscopy	249
I&D, Bartholin's Abscess	3
Insertion of Mirena Coil	80
Laparoscopy	10
Laparoscopy Tubal Ligation	4
Laparotomy Exploratory	2
LLETZ	19
Lumbar Puncture	1
Omentectomy	2
Perineal Body Refashioning	2
Removal of Vaginal Pessary	3
Removal Retained Placenta	3
Repair 3rd Degree Tear	2
Repair Ant & Post	7
Repair of Episiotomy	2
Repair Pelvic Floor Prolapse	4
Shirodkar Suture	2
Smear	18
Vulval Biospy	13
Biopsy Cervix	5
Diagnostic Laparoscopy	12
Excision of Bartholin's Cyst	3
Hysterectomy Vaginal + Pelvic Floor Repair	6
Polypectomy Cervical	10
Punch Biopsy of Skin	1
Repair Vaginal Ant & Post	1
Repair Vaginal Anterior	3
Sterilisation Laparoscopic	1
Suturing of Wound	2
Wound Review	1
Cystoscopy	2
Laparoscopy & Dye	4
Laparoscopy +/- Laparotomy	1
Polypectomy (Other)	6
Tubal Ligation	5
Excision of Mole	1
Laparotomy NOC	2
Laparotomy	10
Cystoscopy Rigid	1
Excision of Lesion NOC	1
Pelvic Floor Repair +/- Vag Hyst	3
Repair Posterior	1
Diathermy Vulval Wart	1
Polypectomy Uterine via Hysteroscopy	1
Repair Vaginal Posterior	1
Hysterectomy TAH	10
Hysterectomy +/- BSO	3
I&D Haematoma	1
Biospy Cervix	2
Removal of Mirena Coil	24
Removal of IUCD	1
Removal Labial Cyst	1
Biopsy Vagina	3
Hysterectomy TAH + BSO	20
Excision Vaginal Cyst	4
Excision Vulval Cyst	1
Total Abdominal Hysterectomy with Salpingo-oophorectomy	1
Ovarian Cystectomy	2
Ectopic Pregnancy Salpingectomy	1
Oophorectomy	2
Salpingectomy	4
Salpingectomy, Laparoscopic	1
Bilateral Salpingectomy	1
Laparotomy Salpingectomy	1
Salpingo-oophorectomy	4

Obstetrics and Gynaecology Anaesthesia Report

Dr. Seamus Crowley and Ms Madeleine Munnelly

In 2017, there were a total of 1424 gynaecology procedures performed, including 356 procedures performed in the Day Services Unit. This included 399 Caesarean sections, of which 183 were elective and 216 emergency. A total of 32 general anaesthetics were administered for Caesarean Sections, 15 of which were conversions from regional anaesthesia to facilitate surgery. Labour ward activity included 1312 deliveries to 1295 mothers in this period. There were 418 (32.3%) inductions of labour and 490 (37.8%) epidurals performed during 2017. There were 97 ventouse deliveries, of which 77.3% had an epidural, and 45 forceps deliveries, of which 71.1% had an epidural.

ICU, HDU and CCU Admissions 2017

There were 16 maternity admissions to Intensive Care (including High Dependency Care) and CCU in 2017.

These are classified as:

- 1 PPH post MROP
- 3 Pre-Eclampsia
- 1 Eclamptic fit
- 1 PPH post El CS for Placenta Accreta
- 1 PPH and bowel resection
- 1 post Em CS for Cholestasis
- 1 intra abdominal haematoma day 18 post CS
- 1 post EUA for PPH and EBB balloon placement
- 1 PPH post Elective CS
- 1 PPH post SVD
- 1 PPH post Em CS Fibroid Uterus
- 1 post Em CS for Ruptured Uterus
- 1 Collapse post BBA twin delivery
- 1 Antenatal SVT

Admissions, once clinically well, were discharged to Maternity Ward.

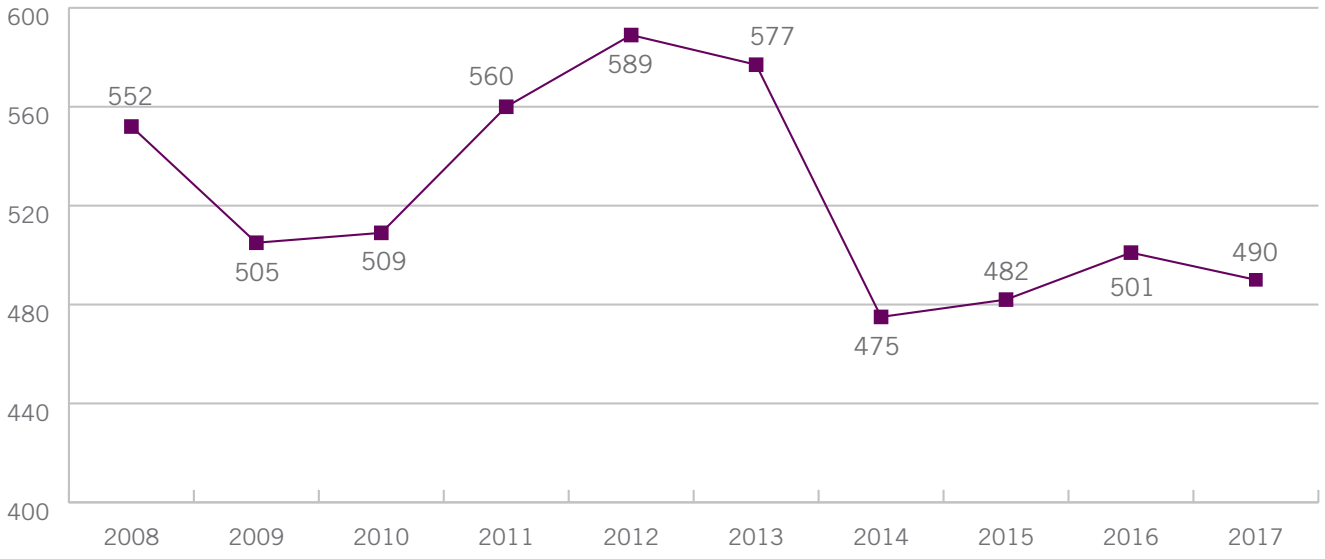
Developments in 2017

PROMPT training proved challenging during 2017 due to resignation of a trainer, with a total of 13 multidisciplinary staff trained.

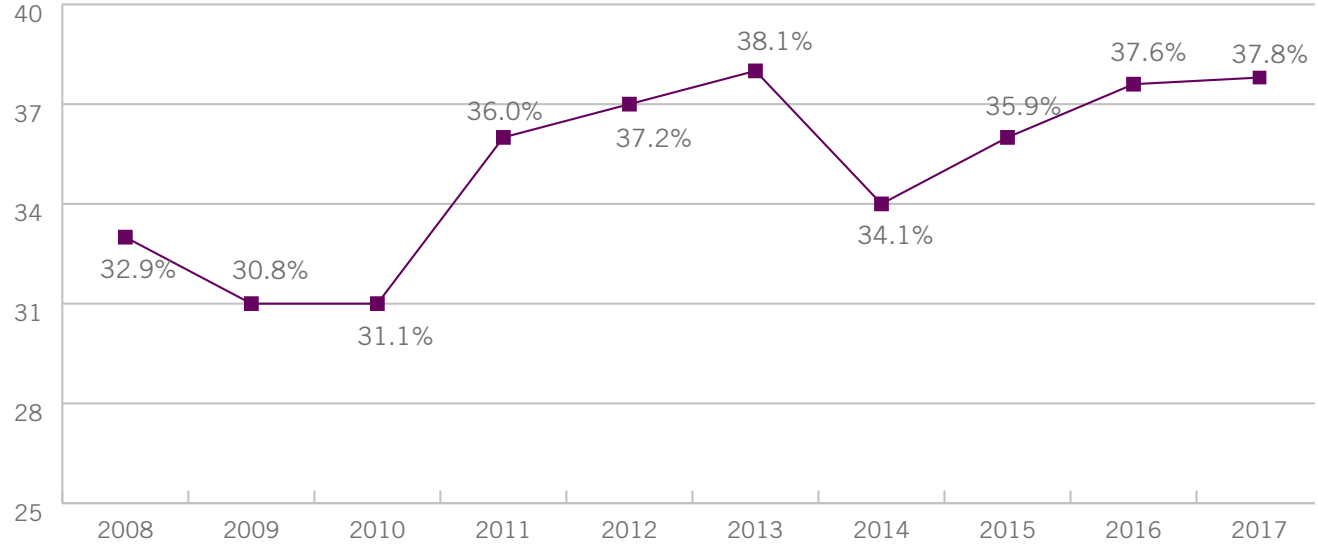
Pre-assessment Anaesthesia Clinic
119 women were assessed in the high-risk Anaesthetic Clinic in 2017.

Post-Dural Puncture Headaches
3 patients required blood patches for PDPH.

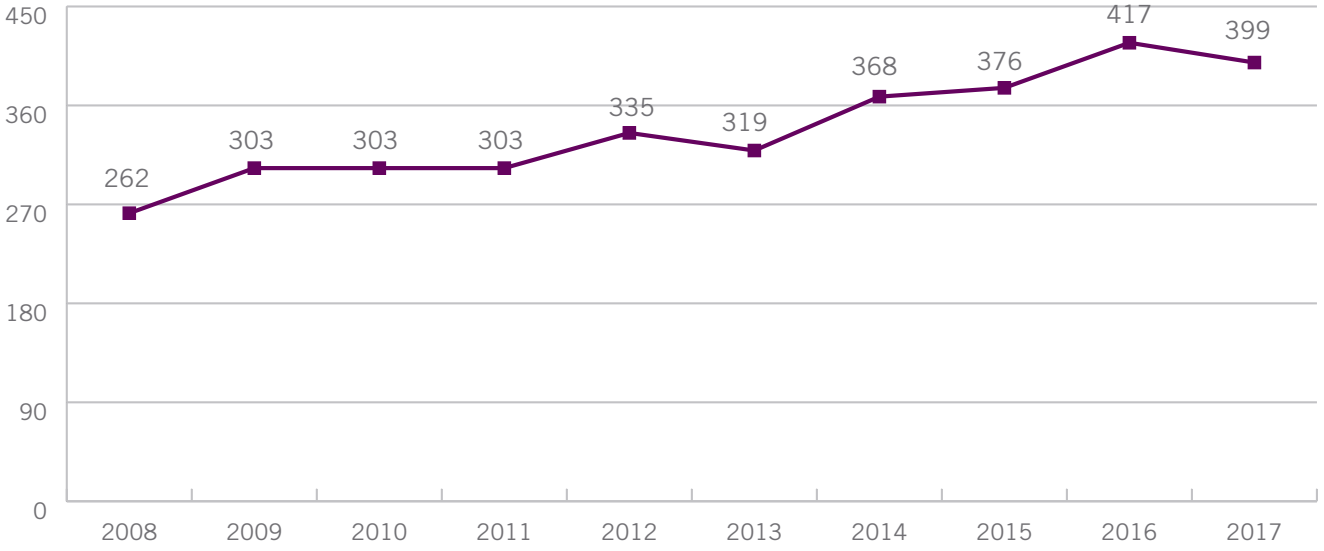
Number of Women who had Epidurals in Labour



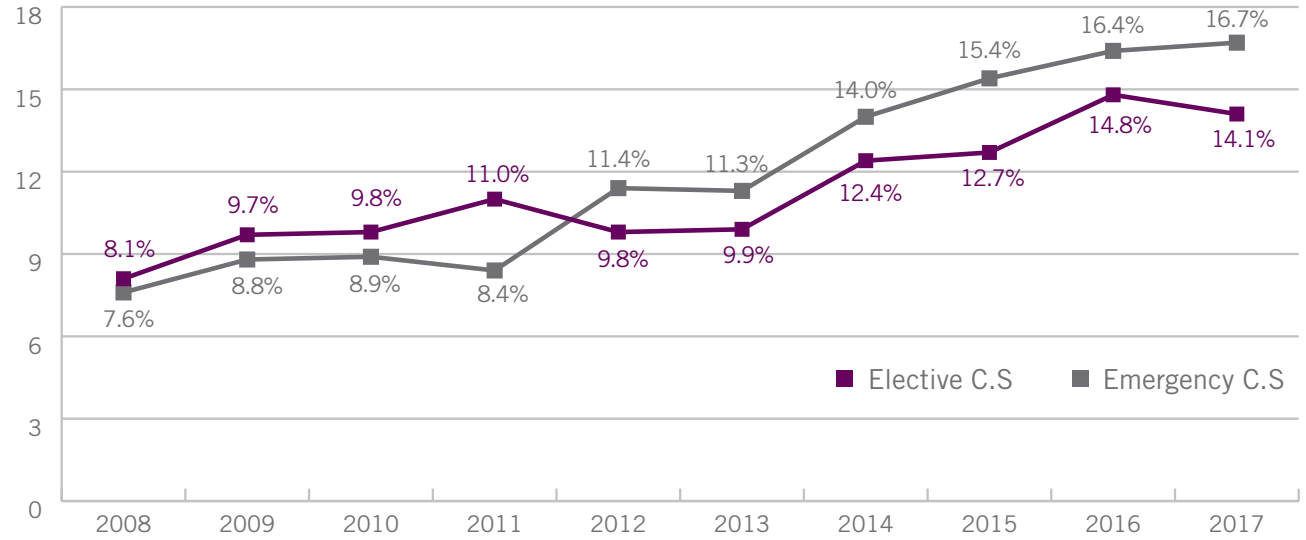
Percentage of Women who had Epidurals in Labour



Number of Women who had Caesarean Sections



Percentage of Women who had Elective and Emergency Caesarean Sections



Paediatric Report

Ms Bernie Clancy

Introduction

The following report includes clinical activity on the Paediatric Ward (inpatient and Day Unit) for the period January 1st to December 31st 2017. Data is also included for paediatric admissions from the Emergency Department (ED), paediatric admissions to the Intensive Care Unit (ICU) and admissions to Paediatric Ward by specialty.

The Paediatric speciality provides services to infants, children and adolescents (from birth to 16 years) and their families, complementing the primary care service. The specialty aspires to provide high-quality, family-centred care through a friendly, highly-skilled multidisciplinary staff, focused on the needs of the child and family in an environment that is safe, appropriate and child-centred. The combined Paediatric Ward and Day Unit is located on Level 7, SUH. The inpatient ward has a complement of 18 beds with escalation capacity of 22. The ward is staffed by CNM2 x 1 WTE, Staff Nurses x 22.5 WTE (RCN 20 WTE), HCA x 2.5 WTE, Play Specialist x 1.0 WTE and Ward Receptionist x 1.0 WTE. The ward is supported by 3.6 WTE CNS (1.0 WTE Paediatric Liaison Nurse, 2.0 WTE CNS/CNM Diabetes, 0.6 WTE CF/Asthma). There are 4 WTE Consultant Paediatricians.

The Paediatric Ward also provides facilities for children requiring specialised surgery, including ENT (regional centre), Ophthalmology, Orthopaedic, acute general surgical admissions, Dental and Dermatology. The ward also facilitates the pre-admission clinics to review children on the ward, one session per month, in collaboration with the Anaesthesia Department.

Our philosophy of care is to:
Recognise the child as unique.
Listen to the child to understand their perspectives, opinions and feelings.
Follow the Welfare of Children in Hospital Guidelines (2014).
Encourage family involvement in the child's care.
Provide support, teaching and assistance to parents and families.
Consider the child's age and social, psychological, physiological and cultural needs.
Maintain a safe, child-friendly environment.
Promote a healthy lifestyle.
Promote healthy living pre-conceptually to adulthood.

Overview of Paediatric Ward Activity 2017

The overall activity in 2017 for the combined Paediatric Ward and Paediatric Day Unit was 3,637 admissions. There was a total of 1,923 inpatients (1,243 medical and 680 surgical). There were 1,714 day cases (1,467 medical and 247 surgical). There were 37 transfers out to other hospitals and 11 transfers in from other hospitals. The bed occupancy rate was 96.3%, with over 100% at peak times, mainly attributed to the respiratory season in January, March, November and December. The average length of stay was 3.18 days. The elective surgical admissions by specialty included ENT 88.3%, General Surgery 1.6%, Ophthalmology 4.9% and Orthopaedics 5.2%. There were 1,457 children admitted via the ED.

We saw an increase in the number of oncology / haematology cases diagnosed in 2017 compared to previous years. This cohort of patients requires a high level of care and contributed to the increase in admissions, with frequent admissions. One of the most challenging aspects of 2017 was the increased presentation of Mental Health illnesses in the paediatric population, particularly the area of eating distress. Education and training were provided to staff to support the delivery of care to this cohort of patients.

I would like to thank all our staff for their support, hard work and commitment to the service in 2017. The child and family remain the focus for all staff in their daily work.

Paediatric Day Unit

The Paediatric Day Unit opened in November, 2016, providing a more structured and streamlined approach to managing paediatric day care. The establishment of a standalone day unit ensures that the assessment and administration of day care treatments are separate from the busy inpatient unit, thus minimising risks for these infants and children. Activity in the Day Unit represents planned care, interventions and investigations, which allows for increased efficiency in both the Day Unit and the Paediatric Ward.

The Day Unit facilitates shared care with tertiary hospitals, ensuring that children living in the north west region receive their care and treatment as close to home as possible, which is an underpinning concept from the national Model of Care for Paediatrics & Neonatology. Clinical audits and day unit questionnaire feedback in 2017 have shown that this initiative has benefited the children and their families, staff and SUH. Some comments from service users included "It has made a massive difference for the better on all our lives" and "We are delighted that the same care is available in our own home town ". Both the inpatient ward and the Day Unit address the needs of the oncology and free admission patients (often a single room is required so patients may be facilitated on the inpatient unit with input from staff on Day Unit and the CNS Paediatric Liaison).

The Paediatric Day Unit, SUH, delivered care and treatment to over 1,400 infants and children in 2017 (1,467 attendances). Some of these treatments include:

- Administration of biological agents (Infliximab & Tocilizumab)
- Administration of Enzyme Replacement Therapy (Vimizim)
- Administration of immunoglobulins
- Administration of biophosphinate medication (Pamindronate)
- Administration of blood and blood products (Prothromplex)
- Administration of Xolair (new for 2017)
- Radiological procedures (MCUG/ DMSA/MAG 3/CT /MRI)
- Procedures requiring sedation
- Phlebotomy / reviews / other investigations as appropriate.

ICU Admissions

There were 15 children admitted to ICU during 2017. Diagnoses included respiratory illnesses (8), including bronchiolitis, asthma and infection, DKA (1), septic shock (1), alcohol intoxication (1), seizure (1), near drowning (1), fall/abdominal trauma (1) and staphylococcal skin syndrome (1).

The majority of paediatric patients admitted to ICU are transferred to Paediatric ICU's (PICU). Of these 15 admissions, 9 were transferred to PICU (4 to Temple Street and 5 to Our Lady's Children's Hospital, Crumlin). 7 of those transferred were intubated and ventilated; 2 were not. Transferring children from SUH is achieved through providing a team of SUH staff and utilising the paediatric retrieval team where possible. The remaining 6 patients who were not transferred spent between 7 and 24 hours in ICU for monitoring purposes. Caring for the critically-ill child and transfer of these patients from SUH remains an ongoing challenge. I would like to thank the entire medical, nursing and support staff associated with ICU for their ongoing commitment and support in 2017. (Information was obtained from the ICU Clinical Information System with the support of Mr. Karl Milnes, Clinical Informatics Coordinator).

Quality Achievements in Paediatrics 2017

- Introduction of MRI under GA
- Introduction of Asthma Plan Packs
- Nursing Metrics
- PEWS (and audits) & ISBAR (introduction of ISBAR stickers in medical and nursing notes)
- Hygiene audits
- Ongoing development of policies, procedures and guidelines to support evidenced-based clinical practice.
- Introduction of care plans
- Implementation of pain assessment tools, notably a pain tool specifically for children with intellectual disability
- Day Unit audit /questionnaire
- All nursing staff engaging with continuing professional development completing online learning facilitated by HSELanD.
- Improving the clinical handover process - working with NMPDU and SUH handover committee to enhance our working environment and improve patient care (rollout 2018)
- Diabetes clinical audit highlighting improvements in HbA1C results since the introduction of insulin pump therapy.
- 100% compliance with Children First training (Paediatric staff)

MRI under General Anaesthetic

The 'MRI under GA' programme commenced in March, 2017, in line with progressing the Paediatric Day Unit. The MRI GA programme has been a successful collaborative effort between Paediatrics, Anaesthetics and Radiology. By year-end, a total of 11 children had their MRI under GA in SUH. Ongoing collaboration and communication with all members of the multi-professional team ensures that infants and children have their MRI in a timely fashion, facilitated by the pre-assessment clinic which is accommodated on the Paediatric Ward on a monthly basis. This 'MRI under GA' service complements the existing 'MRI under sedation' programme which is offered by the Paediatric specialty and is facilitated in the Paediatric Day Unit.

Asthma Working Group

The SUH Paediatric Asthma Working Group was set up in 2017, with medical, nursing and allied health professionals as its members. These included Dr. Gallagher (Consultant Paediatrician), Dr. Cunningham (Consultant in Emergency Medicine), Dr. Gleeson (Consultant Paediatrician, retired), Dr. Ahmed (Paediatric Registrar) and Dr. Roemmele / Dr. Ahmed (EM BST). Nursing representation included Ms. Annette Bruce (CNS Paediatric CF / Asthma), Staff Nurse Louise Rattigan (OPD) and Staff Nurse Elizabeth Barrins (Paediatric Ward). Ms Ruth Hodgins, Senior Clinical Pharmacist, and Mr. Derek Wynne, Senior Physiotherapist, completed the membership of the group.

The aims of the group were:

1. To review the management of children with mild or moderate asthma seen in ED/OPD and Paediatric Ward in SUH and discharged.
2. To develop initial management guidelines and discharge plans.
3. Education
4. To review management of paediatric asthma in the Paediatric Outpatient Department, SUH.

The group devised and implemented a patient-specific Asthma Plan Pack in an A5 coloured plastic folder (fits in a handbag) to be brought to every consultation. The contents include an asthma information booklet for parents and child, Asthma in School booklet, Asthma & Allergic Rhinitis booklet, Asthma and Sport booklet, a traffic light asthma plan to be discussed with doctor and nurse at each visit (includes flu vaccine advice) and a physiotherapy referral form. After physiotherapy, specific written instructions and advice are given and placed in the folder, along with any prescriptions. This compact folder has received very positive feedback from both parents and healthcare professionals.

Group recommendations for children with asthma on discharge from ED/ Paediatric Ward:

- Review inhaler technique
- Clear written discharge plan
- Asthma Plan Pack
- Education
- Traffic light plan
- Clear follow up plan (GP/OPD)
- Referral to CNS from ED/OPD if concerns
- Paediatric inpatients and their parents receive education from CNS
- Follow-on phone call 2-4 weeks post admission from Paediatric CF/ Asthma CNS, pre clinic appointment.

Cystic Fibrosis/Asthma CNS

2017 saw the existing Paediatric CF CNS, Ms Annette Bruce, expand her role to incorporate paediatric asthma patients. This role includes education and training for both staff and patients / parents on asthma and the new Asthma Plan Pack, a referral pathway to follow up discharged patients and follow-up phone calls after discharge. Parents can also contact the CNS with queries.

The role involved a variety of training and education in 2017, including Xolair education for medical and nursing staff on the Paediatric Ward, introduction of and training on Aerogen nebulisers, Trilogy training, involvement in Paediatric Acute Asthma IV Medication Guideline (in conjunction with pharmacy, particularly Ms Ruth Hodgins). Annette also has involvement with children with obstructive sleep apnoea.

From a cystic fibrosis point of view, Annette completed her Post Graduate Diploma in Respiratory Nursing (Level 9). Her poster "Using emoji's to promote exercise in children with cystic fibrosis" was displayed at the CF conference in Killarney and the ANAIL (Respiratory Nurses Association of

Ireland) conference, Athlone, and was submitted for the RCSI conference, Dublin, which was cancelled due to adverse weather conditions. The annual Paediatric CF Study Day coordinated by Annette and facilitated in the CNME Sligo/Leitrim is NMBI-accredited and awards 5 CEU points. The role of the CF CNS provides ongoing management and support for children and adolescents with cystic fibrosis and their families.

PEWS

PEWS training was completed by 98% of Paediatric nursing & medical staff in 2017, with ongoing training for all relevant disciplines. Ongoing monthly PEWS audits are carried out by S/N Nicola Waters, with action plans and education to ensure maintenance of standards. PEWS trainers from the Paediatric Ward are Ms Bernie Clancy, CNM2; Ms Nicola Waters, Staff Nurse; and Dr. Hilary Greaney, Consultant Paediatrician.

Sepsis

Mr. Declan Maye, Staff Nurse, took up the post of sepsis champion for the Paediatric Ward. He is responsible for training the nursing staff on the use of the paediatric sepsis form and other aspects of sepsis management. Sepsis training for NCHDs is delivered by one of the Consultant Paediatricians and a Registrar. The ADoN for sepsis in the Saolta Group has attended SUH and delivered teaching sessions on sepsis and use of the new sepsis form, which it is envisaged will be rolled out as a pilot in 2018. Staff in SUH are participating in the online sepsis education programme on HSELanD.

Nursing Metrics

The Paediatric Ward, SUH, continues to participate in Nursing Metrics. 2017 results show ongoing commitment to providing high standards of evidence-based care. CNM2 Bernie Clancy, ACNM2 Orla McDonagh, and Staff Nurse Michelle McTigue led the Nursing Metrics in Paediatrics in 2017. Support was provided by Ms Maeve Lee, NMPDU, SUH.

Care Plans

In collaboration with NMPDU, we successfully rolled out a suite of care plans and assessment documents for common paediatric conditions for use with paediatric inpatients. These include pre- and post-operative care, ENT surgical, tracheostomy care, respiratory conditions, gastroenteritis, intravenous infusions and neurovascular assessment. These are used in conjunction with the new paediatric admission and assessment document for general medical paediatric admissions and a separate surgical admission / assessment document. This improved documentation has supported paediatric nursing staff in delivering high standards of evidence-based care. Work is ongoing to develop more paediatric-specific care plans in 2018.

Training & Education

Key achievements in 2017

- Ms Bernie Clancy (CNM2) completed Post Graduate Diploma in Advanced Leadership (Nursing) (Level 9), RCSI.
- Ms Nicola Waters (Staff Nurse) conferred with Masters of Health Sciences (Level 9), NUIG.
- Ms Lorraine Beirne (Staff Nurse) completed Post Graduate Diploma in Palliative Care (Level 9), NUIG. This programme specifically addresses the needs of the child and family.
- Ms Annette Bruce (Paediatric CF CNS) completed Post Graduate Diploma in Respiratory Nursing (Level 9), RCSI.
- Ms Annette Bruce, poster presentation "Using emoji's to promote exercise in children with cystic fibrosis" at the CF conference in Killarney and the ANAIL (Respiratory Nurses Association of Ireland) conference, Athlone.
- MS Claire Maye (CNM2, Paediatric Diabetes) undertaking Post Graduate Diploma in Diabetes care (Level 9), UCD.
- Ms Claire Maye (CNM2, Paediatric Diabetes) prize-winner poster presentation "Paediatric Sepsis" at Post Graduate in Diabetes Nursing, Mater Hospital/Temple Street.
- Ms Anne Golden (Staff Nurse) completed Batchelor of Sciences Degree, University of West of Scotland.
- Ms Clare O' Sullivan (Staff Nurse) completed Patient Safety in the Healthcare Setting and Healthcare Risk Management (stand-alone modules), St Angela's College, Sligo.
- Ms Lorraine Williams, Mr Declan Maye, Ms Clare O'Sullivan and Ms Lorraine Beirne (Staff Nurses, Paediatric Ward) successfully completed APLS training facilitated in SUH.
- Ms Siobhan Dooney (Staff Nurse), Ms Pauline Wallace (Staff Nurse), Ms Orla McDonagh (ACNM2) and Ms Nicola Waters (Staff Nurse) completed Tracheostomy Training facilitated by Temple Street Children's University Hospital and implemented a 'Train the Trainer' system of education for all staff in Paediatric Ward.
- Ms Geraldine Sweeney (Play Specialist) The Importance of Supervision (stand-alone module), IT Sligo.
- Nursing representation (CNM2) on Senior Nurse Network Forum Group

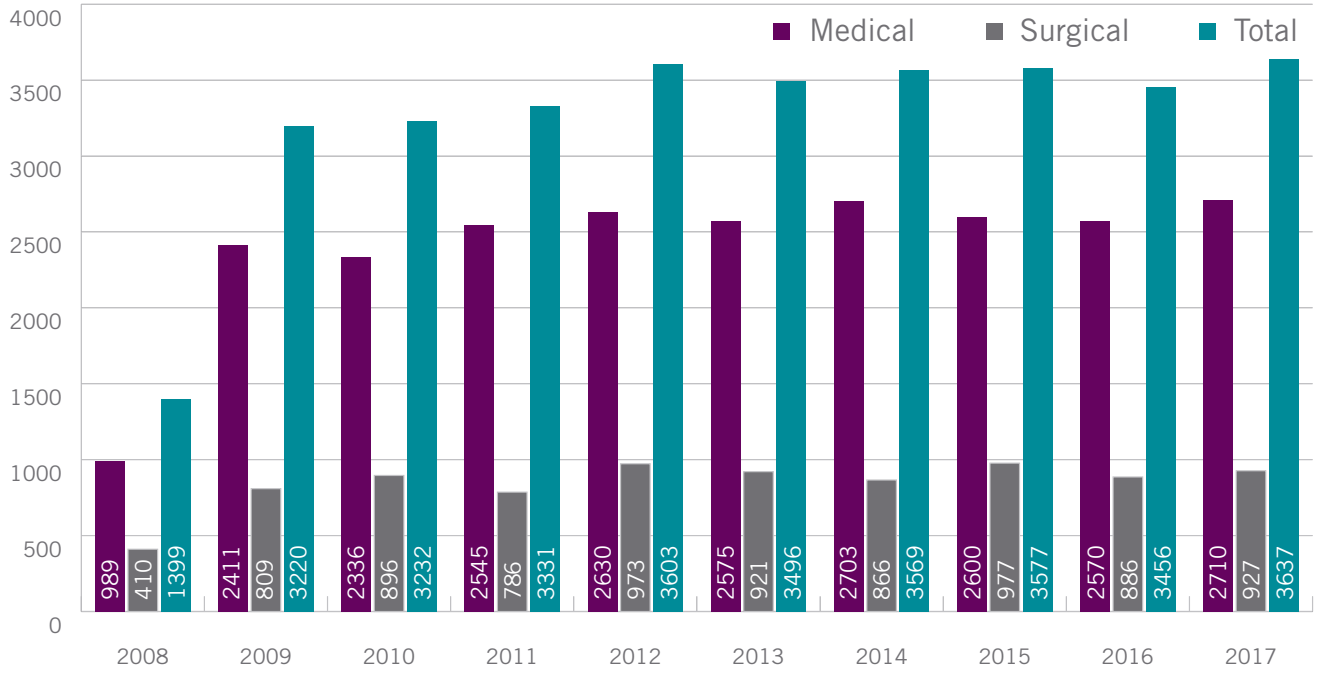
Service Provision - Education

Clinical placement site support to all education programmes Medical, Nursing and Allied Health Professionals.

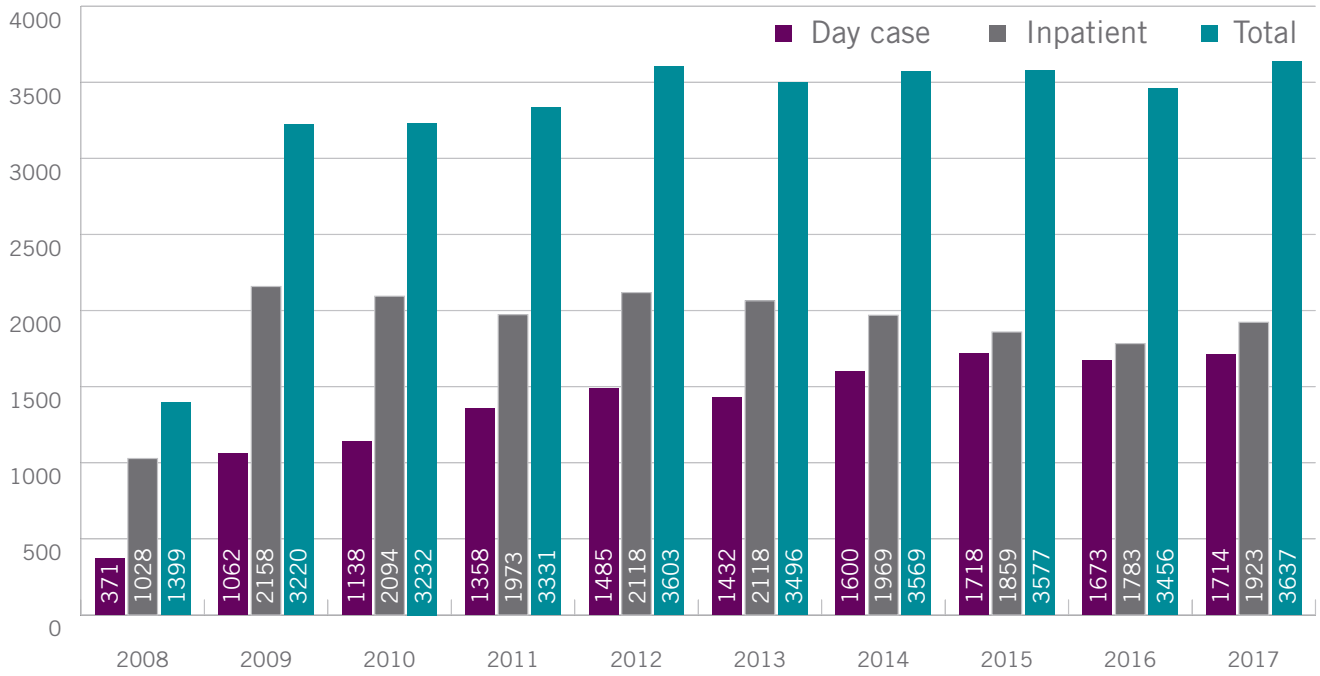
- Ongoing education and continuous professional development to medical and nursing staff
- Accreditation for Specialist Paediatric Registrar (SpR), General Practitioner Training (GPT) and The Irish Committee on Higher Medical Training (ICHMT)
- Clinical placement site for undergraduate nursing programmes, St. Angela's (affiliated to NUIG)
- Clinical attachment for medical students NUIG
- Staff supported by DON SUH to undertake post-graduate nursing programmes
- Clinical placement for EMT and Advanced Paramedic Training programmes, UCD
- Educational and skills training programmes locally in collaboration with the CNME, NMPDU and HSE Training & Development Unit
- Play Specialist service supports child care and social studies students from IT Sligo on placement throughout the year; they also support the Playwell Volunteer Programme in SUH.

Service planning and developing for the future of paediatrics in SUH is critical to ensure that the needs of children are met. This includes continuing to implement the Model of Care for Paediatrics & Neonatology through expansion of day care and the development of ambulatory care. The management of the critically-ill child remains a priority, focusing on training and education and the development of a HDU to optimise care for these children as a vision for the future.

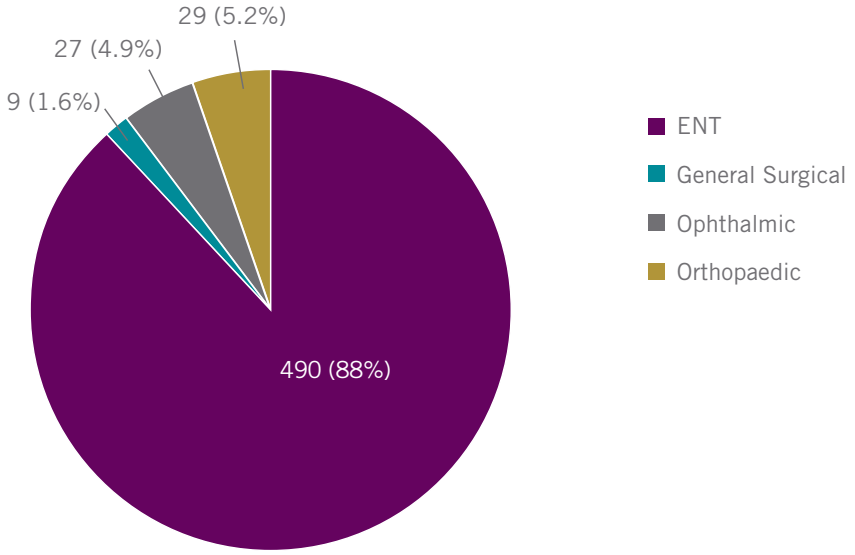
Admissions to Paediatric Ward by Medical or Surgical 2008-2017



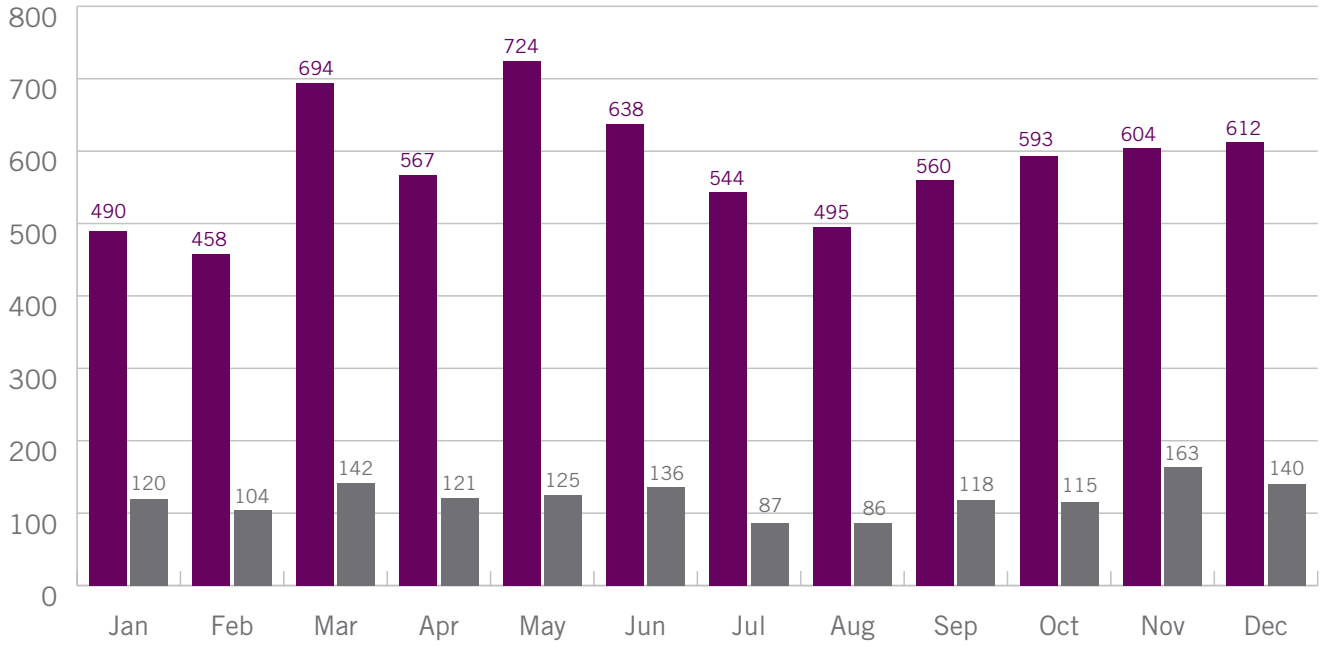
Admissions to Paediatric Ward by Day Case / Inpatient 2008-2017



2017 Surgical Admissions by Specialty (Elective Admissions)



2017 Surgical Admissions by Specialty (Elective Admissions)



Neonatal Unit

Ms Carmel Durkin and Ms Madeleine Munnelly

The Neonatal Intensive Care and Special Care Baby Unit provides holistic care to preterm and sick newborn infants who require specialist care immediately after birth and in the first weeks of life, through a team of skilled staff. The unit aspires to provide competent care in a safe, friendly environment, through a multidisciplinary approach which encompasses all aspects of neonatal care for babies and their families.

The primary objective of the neonatal unit is to provide the optimum care and treatment to all infants and their families in an environment which is appropriate for their medical, developmental and social needs. The unit comprises 2 intensive care cots, 4 high dependency cots and 4 special care cots. There is a single room which is often used for isolation purposes. The unit serves the population of Sligo, Leitrim, South Donegal, West Cavan and parts of Mayo and Roscommon. The unit is staffed by a CNM2 and a mix of neonatal-trained nurses, midwives and paediatric nurses, some with paediatric critical care training or experience. Neonatal staffing is an ongoing challenge.

The unit is supported by 5 paediatricians (1.0 WTE from the community setting) who have experience in Neonatology and one paediatric lead for Neonatology Services. The multidisciplinary team includes healthcare assistants, a clerical officer, a dietician, a paediatric physiotherapist with an interest in developmental care, a pharmacist, a paediatric cardiac technician and a paediatric liaison nurse. Ophthalmology, ENT referral, review and follow up are available for infants in Sligo University Hospital. There are also cardiac and cleft lip / palate satellite clinics periodically.

In 2017, there were 259 admissions to NICU and 19 day cases. Infants were admitted from Delivery Ward, Theatre, Maternity Ward, Emergency Department, Paediatric Ward and from tertiary neonatal and paediatric hospitals. In total, there were 43 transfers to and from tertiary units, 11 of which were facilitated by the NNTP. In September, 1 infant was transferred to Sweden for ECMO. 31 transfers were undertaken by our own staff.

An ethos of continuing professional development continues to be supported to ensure safe, quality, evidenced-based practice and currently all nurses working in the Neonatal Unit have certification for the STABLE course. Training is ongoing for developing the clinical skills of venepuncture and intravenous cannulation, with 41% of staff now proficient in venepuncture. Neonatal nurses attend high-risk deliveries when staffing levels and skill mix allow.

After many years of dedicated service and excellence in care, Ms Marie Kennedy CMM2 retired in March 2017. We wish to acknowledge her contribution to the development of neonatal services in Sligo University Hospital and NRP training for staff.

Challenges to the service include: unit design, storage facilities, lack of parent facilities, privacy, and long-term nursing staff shortages.

The quality of care delivered to infants and their parents can only be achieved thanks to the commitment, dedication and support of the multidisciplinary team.

Number of admissions to NICU / SCBU	259

Baby Weight on Admission to NICU / SCBU

Weight	n	%
<1500g	8	4.1%
1501-2000g	10	3.9%
2001-2500g	47	18.1%
>2500g	194	74.9%
Total	**259**	**96.9%**

Gestational Age at Delivery

Gestational age	n	%
<28 weeks	1	0.4%
28 - 31+6 weeks	9	3.5%
32 - 36+6 weeks	58	22.4%
>37 weeks	191	73.7%
Total	**259**	**100.0%**

Source of Admission

Source	n	%
Theatre	53	20.5%
Labour ward	72	27.8%
Postnatal	103	39.8%
Other hospital	14	5.4%
Paediatric ward	3	1.2%
Social Admission	13	5.0%
BBA	1	0.4%
Total	**259**	**1**

General Neonatal Morbidity

	n
IPPV	2
NCPAP	5
RDS / TTN	11
Meconium aspiration	1
Perinatal stress / HIE	2
Haematology: Jaundice / HDN / NAIT	6
NAS	2
Transferred for therapeutic cooling	2

Congenital Abnormalities

	n
Down Syndrome	2
Pierre Robin Syndrome	1
William Beuren Syndrome	1
Duchenne Muscular Dystrophy	1
TAPVR	1

Cardiac / CHD / Significant ECHO findings

	n
ASD / VSD / PDA	3
TAPVR	1
PPHN	1

Summary of Neonatal Deaths

Diagnosis	Gestation	Birth Weight	Age at Death	Place of Birth	Place of Death
Total Anomalous Pulmonary Venous Return	31+3	1700g	8 days	SUH	OLCHC
Multi-organ Failure due to FMH	36+3	2430g	1 day	SUH	NMH
Coroners Inquest	33 weeks	1400g		Home	SUH

Reason for Admission

Reason	n	%
Prematurity/ Low Birth Weight/ RDS	48	18.5%
Low Birth Weight >37wks	6	2.3%
Respiratory Distress / Grunting	16	6.2%
Sepsis / Suspected Sepsis	47	18.1%
Hypoglycaemia / Poor Feeder	16	6.2%
Congenital Abnormality / Special Care	8	3.1%
Neurological	4	1.5%
Gastrointestinal	8	3.1%
Infant of insulin-dependent diabetic	18	6.9%
Maternal Hepatitis B	2	0.8%
Cardiac	5	1.9%
Social Reason	13	5.0%
Dusky Cyanotic Episode	14	5.4%
Jaundice	6	2.3%
Pyrexia	1	0.4%
Other Fetal Reason	47	18.1%
Total	**259**	**100.0%**

Transfers out for Tertiary Services by Destination

	n
Our Lady's Children's Hospital, Crumlin	4
Children's University Hospital, Temple Street	8
National Maternity Hospital, Holles Street	5
Coombe Women & Infants University Hospital	1
Rotunda Hospital	1
Karolinsra Hospital, Sweden	1
Total	**20**

Transfers out for Tertiary Services by Diagnosis

	n
Prematurity / RDS	3
Cardiac	2
HIE / therapeutic hypothermia	2
Surgical	4
Meconium aspiration	1
Pneumothorax	1
Dysmorphic / congenital abnormality	2
Bronchiolitis	1
Endocrine	2
Haemotology	2
Total	**20**

Antenatal Education

Ms Catriona Moriarty

Antenatal Education 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 classes continued throughout 2017.

The philosophy of the Antenatal Education team is to promote and support normal childbirth by empowering women and their partners to make evidence-based, informed choices. Students are welcome at all classes.

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 antenatal education programme come from:

- Antenatal clinic
- Fetal assessment
- GPs/ practice nurses
- Public health nurses
- Physiotherapy department
- Social workers
- Health Promotion

Each programme is continually evaluated with assistance from Health Promotion staff and appropriate recommendations are 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.

Attendance at Antenatal Education Sessions

Antenatal Education	Clients	Support Partners	Total Attendance
Weekday Sessions	479	294	773
Refresher Sessions	85	30	115
Teenage Sessions	12	12	24
1:1 Antenatal Class Sessions	30	24	54
Tours of Maternity Unit	511	508	1019

Breastfeeding

Ms Catriona Moriarty

Promoting, supporting and protecting breastfeeding is an integral part of the care given to pregnant women, new mothers and their babies in Sligo University Hospital.

We continue to work towards fully implementing the 10 steps to successful breastfeeding recommended by WHO/ UNICEF.

In 2017, our breastfeeding initiation rate was 62.5% and breastfeeding on discharge from hospital was 54.5%, a welcome increase on last year. We continue to strive to increase our rates by providing education for both parents and staff. In addition to our antenatal classes, our breastfeeding preparation class is run in conjunction with Public Health Nursing and supported by Health Promotion. The classes are held monthly, both afternoon and evening, to provide more choice for our parents. Classes are not only attended by first time mothers, but also by mothers who did not breastfeed before or who experienced challenges in establishing breastfeeding previously. In 2017, a total of 231 mothers attended the classes, many accompanied by partners or support persons.

A postnatal breastfeeding clinic for mothers is run by Lactation Consultant Midwives and Public Health Nursing. It is held once weekly, by appointment. In 2017, 108 mothers attended the clinic by appointment. Some mothers had repeat clinic visits. Telephone support continued throughout 2017. Feedback to date has been very positive for this clinic. 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.

Sligo University Hospital is represented on the Breastfeeding Committee for Sligo /Leitrim which includes Midwives, Public Health Nursing, Health Promotion, GPs, neonatal staff and Lactation Consultants. This multidisciplinary team, which also includes a consumer and voluntary groups, meets quarterly and strives to increase the overall breastfeeding rates in our region.

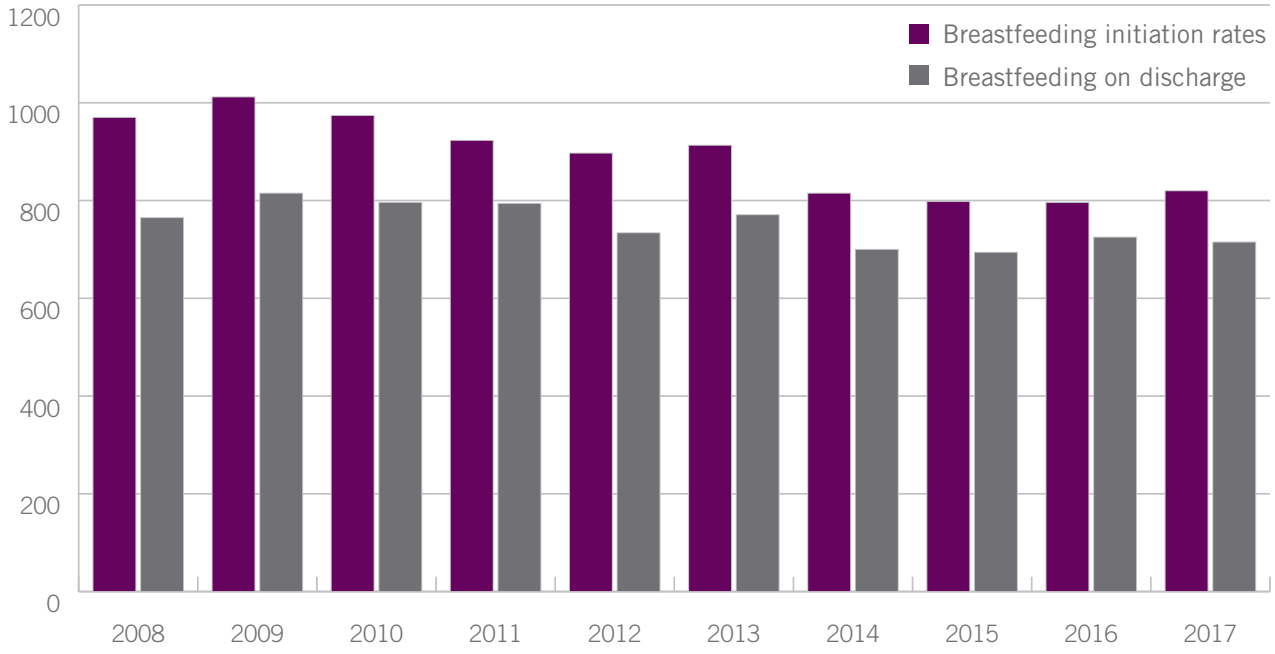
Training continued throughout 2017. Twenty hospital and community staff attended six-hour breastfeeding updates and training. Three midwives attended training for the Lactation Consultation exam in 2018.

National Breastfeeding Week 2017

Sligo University Hospital marked National Breastfeeding Week in 2017 with many events throughout the hospital and community. Information stands were placed in the main foyer of the hospital, antenatal clinics, classes and the Maternity Unit. The stands were very colourful and informative, with posters, leaflets and balloons printed with the message 'Breast is Best' and were supported by Midwives and Lactation Consultants. The stand in the main foyer of the hospital had baby vests with the benefits of breastfeeding printed on them. This generated great interest from the general public, who also took part in a quiz on the benefits. Quizzes were held for mums on the maternity ward and at antenatal clinics both within the hospital and the outreach clinics in the community, with prizes for the winners.

Colourful badges were worn again this year by staff to promote breastfeeding, with the logos 'Breast is Best', 'Breastfed is Best Fed' and 'Breastfeed - It's Natural'.

In association with the Saolta Breastfeeding Forum and with support from Health Promotion, a workshop was held again this year for transition year students, both boys and girls, from local schools. This initiative, which is held jointly by acute hospitals in the Saolta Group, receives very positive feedback each year. Where better to promote breastfeeding as the natural way to feed babies.



Colposcopy Service

Dr. Vimla Sharma and Ms Sinead Griffin

Team Members

Dr. Vimla Sharma, Consultant Obstetrician/Gynaecologist / Lead Colposcopist
Dr. Heather Langan, Consultant Obstetrician/Gynaecologist
Dr. Nirmala Kondaveeti, Consultant Obstetrician/Gynaecologist
Dr. Nadia Ibrahim, Consultant Obstetrician/Gynaecologist
Ms Sinead Griffin, Clinical Nurse Manager
Ms Jennifer Curley, RGN
Ms Mary Kinirons, RGN
Ms Cathriona McIntyre, RGN
Ms Patricia Murphy, Administrative Officer
Ms Monica Hopper, Administrative Officer

The Colposcopy Service at Sligo University Hospital (SUH) continues to follow CervicalCheck standards as set out in the Organisational and Clinical Guidance for Quality Assured Colposcopy Services. Referral waiting times, biopsy rates and rates of attendance are all within the parameters set by CervicalCheck. On average, four consultant-led colposcopy clinics are run per week and four nurse-led smear clinics are run per month. Timely diagnosis and treatment are key priorities of the service.

In total, 530 new patients were referred to the service and 901 patients attended for follow-up care. There were 140 LLETZ treatments performed under local anaesthetic and 15 performed under general anaesthetic. There was a slight increase of 3% in appointment cancellations. DNA rates were more or less the same.

A total of 9 cases of cancer were identified/ diagnosed. Squamous cell carcinoma of the cervix was identified in 4 cases; adenocarcinoma of the cervix was diagnosed in 3 cases; while 2 cases were diagnosed with endometrial adenocarcinoma. Prompt referrals were arranged to gynaecology oncology centres of excellence, in either Dublin or Galway, for further management.

Partnership Services

The service continued to work in partnership with Irisoft UK, which provides a patient management and audit software system known as Compuscope, and Medlab Pathology, Dublin, which provides cytology and high-risk HPV testing services. Multidisciplinary team meetings were held at one- to two-monthly intervals and were facilitated by Dr Clive Kilgallen, Consultant Histopathologist, SUH, and Dr Eibhlis O'Donovan, Consultant Histo- and Cytopathologist, Medlab Pathology.

Team Developments

Dr. Heather Langan and Dr. Nirmala Kondaveeti attended the British Society for Colposcopy and Cervical Pathology (BSCCP) annual conference held in Cardiff. Two consultants are BSCCP accredited trainers.

In February, 2017, Dr. Vimla Sharma, Ms Sinead Griffin, CNM, and Ms Jenny Curley, RGN, attended the Cervical HPV Study Day in Trinity College, Dublin. Ms Mary Kinirons, RGN, and Ms Jenny Curley, RGN, attended the NICCIA Study Day in the Rotunda in March, 2017. In October 2017, the IFPA Certificate in Contraception for Nurses & Midwives was completed by Ms Sinead Griffin, CNM, and the Online Basic Colposcopy Course was completed by Ms Jenny Curley, RGN, who also attended the CervicalCheck Update Study Day in November, 2017.

Reporting

Monthly, quarterly and annual reports of activity were generated and submitted to CervicalCheck.

Summary

In summary, it was another busy year for Sligo University Hospital Colposcopy Service. Colposcopy services were provided within the guidelines set by CervicalCheck. The overall performances of staff members have provided a strong basis for continued improvement in delivering a quality-assured service to women in the West of Ireland.

LLETZ Histology Results Jan-Dec 2017
LA and GA LLETZ

	Total Number	Percentage
CIN I	23	15.5%
CIN I + SMILE	1	
CIN II	43	27.8%
CIN III	63	44.5%
CIN III + SMILE	6	
AIS/cGIN	3	1.9%
Squamous cell carcinoma of cervix	4	2.6%
Adenocarcinoma of cervix	3	1.9%
Adenocarcinoma of endometrium	2	1.3%
Other (HPV + Inflammation)	5	3.2%
Negative	2	1.3%
Total	**155**	**100.0%**

Women's Health and Continence Physiotherapy Service

Ms Joanne Kilfeather

The Physiotherapy Women's Health and Continence Service encompasses both inpatient and outpatient physiotherapy care. The inpatient maternity ward service endeavours to offer physiotherapy advice and treatment to all postnatal mothers. We provide follow up outpatient physiotherapy for women who have sustained 3rd/4th degree tears and also when concerns of urinary incontinence have presented themselves. The outpatient service receives consultant and GP referrals for both obstetric and gynaecological patients. Referrals are primarily concerned with issues of pregnancy-related musculoskeletal pains, pelvic floor dysfunction, urinary continence and pelvic organ prolapse.

Antenatal Education

Physiotherapists provide two of the five antenatal classes in every block of classes attended by a first-time expectant mother. This service is run in conjunction with our midwifery colleagues.

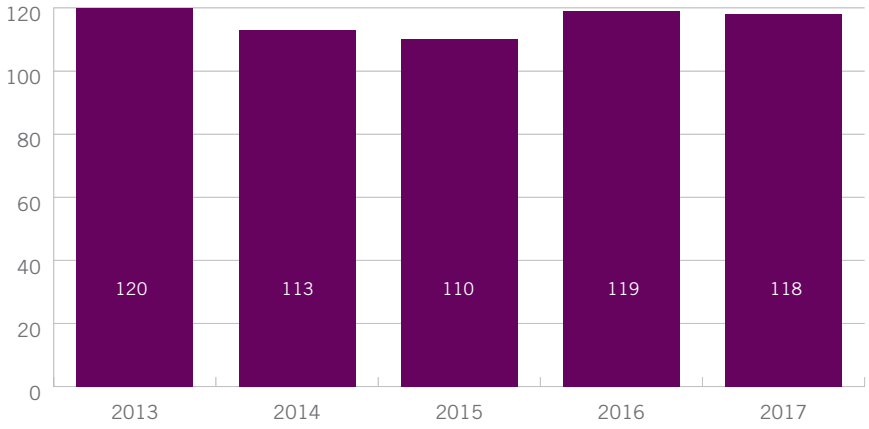
Initiatives

The physiotherapy antenatal classes are currently being restructured in response to questionnaire feedback from expectant mothers. The objective is to place a greater emphasis on physical wellbeing through exercise and heath in pregnancy. This reflects the recommendations from the RCPI Obesity and Pregnancy Guidelines 2013. The aim is for expectant mothers to develop a greater understanding of their bodies in pregnancy, addressing potential issues around fear avoidance behaviour for exercise in pregnancy, along with addressing common musculoskeletal pains and coping strategies through relaxation techniques.

	Number of New Patients	Number of Treatments
Inpatient Maternity Ward	867	1,046
Obstetric/Gynae Outpatients	118	174

Total Number of Day Classes	Total Number of Evening Classes
18	17

Physiotherapy Outpatient Treatments



Limitations

Inconsistencies in staffing levels due to unreplaced maternity leave for the initial 8 months of 2017 meant that the Women's Health and Continence Service was compromised, resulting in a reduction in available outpatient physiotherapy treatment slots. This issue has since been addressed, which has allowed a return to previous levels of patient activity but has also facilitated an opportunity to implement changes and developments in the service.

Paediatrics and Neonatal Physiotherapy

Ms Sheila Kiely, Mr. Derek Wynne and Ms Joanne Kilfeather

Paediatric Physiotherapy Outpatient Service

Outpatient paediatric physiotherapy is a consultant referral based service for the following conditions: developmental dysplasia of the hip, torticollis and plagiocephaly, congenital and positional talipes, obstetric brachial plexus palsy, rheumatology, congenital syndromes, neuro-developmental delay, asthma management / inhaler technique, musculoskeletal conditions; and a premature baby enhanced surveillance programme.

Paediatric Physiotherapy Inpatient Service

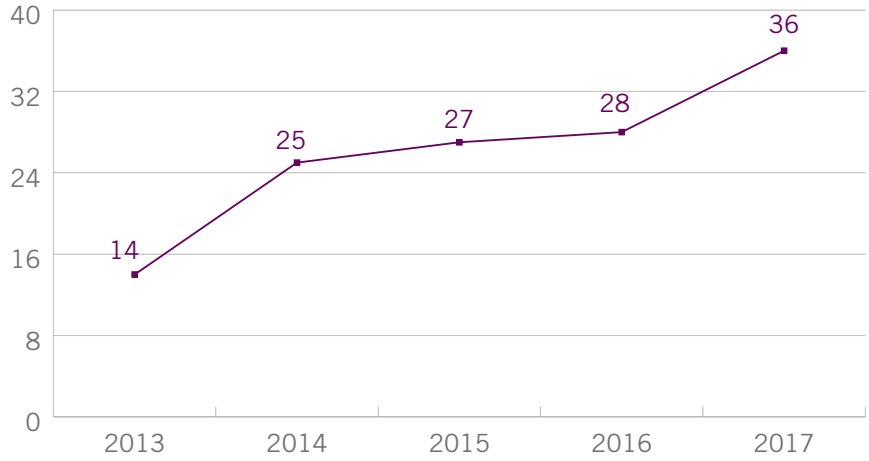
An inpatient physiotherapy service is available for all patients referred on the Paediatric Ward and the newly-opened Day Unit in the areas of respiratory, neurology, orthopaedic, neuro-developmental delay and musculoskeletal, in addition to the on-call physiotherapy service which is available 24/7 to this high-demand area.

Physiotherapy Service for Developmental Dysplasia of the Hip (DDH)

Internationally, the standard early treatment of neonates with developmental dysplasia of the hip is considered to be the application of a Pavlik hip abduction harness. In Sligo University Hospital, this treatment is provided exclusively by the Paediatric Physiotherapy Department. Patients from counties Sligo, Leitrim and Roscommon, and from south Donegal and north Mayo, avail of the DDH service in Sligo University Hospital.

	Number of New Patients	Number of Physiotherapy Treatments
Inpatient Paediatrics	226	456
Outpatient Paediatrics	182	1071
Neonatal Intensive Care	30	49
Development Dysplasia of the Hip	36	540

Figure 1 - Numbers of Babies referred for Pavlik Harness Treatment 2013 to 2017



Since the introduction of new DDH recommendations in SUH in September 2013, the numbers of babies requiring Pavlik harness treatment has increased significantly (see Figure 1). The provision of a Pavlik harness treatment service requires substantial physiotherapy input, from the initial application of the harness and parent education to weekly harness reviews and drop-in clinics for harness re-application on repeat scanning days.

In 2017, 36 babies were placed into Pavlik harness with an average of 15 treatment sessions (30-minute slots) required for each baby. To date, this service has placed an increased demand on physiotherapy resources and has impacted on the waiting times for non-urgent paediatric outpatient referrals.

North West Paediatric Insulin Pump Service

Ms Sinead Molloy and Ms Claire Maye

The NW paediatric pump service was established in 2015 at Sligo University Hospital (SUH), using a hub and spoke operational model with outreach to Letterkenny (LUH).

There were approximately 100 patients using the service in Sligo and Donegal in 2017. The service provides tangible benefits to the children of the north west with type 1 diabetes.

Pump starts were on hold from April 2017 and recommenced in October 2017 after the appointment of Dr Raafat Ibrahim, who travels from Portiuncula University Hospital 5 days per month for clinical governance of the service, as there is no paediatric endocrinologist at either SUH or LUH. Two children per month (alternating SUH/LUH) are now being started on insulin pumps by the team in SUH under Dr. Ibrahim.

Children from LUH attend SUH for pump assessment and commencement and stay with the paediatric diabetes service in SUH for 6 months post insulin pump start. These children and their families would otherwise be obliged to travel a minimum of four times per annum to tertiary centres in Dublin to seek care. Repatriation of established patients attending Dublin hospital has taken place. Some families choose to have shared care, as they have access to psychology services in Dublin hospitals as part of their diabetes management. This service needs to be developed in SUH / LUH. The North West Paediatric Insulin Pump Service has saved families in the NW region roughly 177,528km in travel annually (54,648km Sligo patients), as well as the economic cost of lost days at work, travel and subsistence outlays.

There has been a noted improvement in users' metabolic control for those using insulin pumps, and children and families report better quality of life. Overall mean HbA1c of our insulin pump cohort still stands at the internationally recommended target of 7.5%. This will be audited again in 2018. The rate reflects the increased ability of the multidisciplinary team to support patients and their families in the daily management of a difficult, burdensome, chronic disease. Admissions to hospital of established children with type 1 diabetes continue to be significantly reduced.

Early Pregnancy Assessment Unit / Fetal Assessment / Fetal Ultrasound

This unit was established in 2003 and comprises one main assessment area with two couches and 3 scan rooms. It is situated on Level 4 and operates on a Monday-to-Friday basis from 07:30 hours to 16:30 hours. The Early Pregnancy Unit (EPAU) provides assessment, support and advice to women who have possible problems in early pregnancy. It is run by 3 Clinical Midwife Specialists in Sonography and 2 Midwife Sonographers, and supported by the multidisciplinary team. The EPAU runs from 07:30 -10:00 hours, Monday to Friday. Women can access this service by GP or obstetric referral.

The Fetal Assessment Unit provides a service to antenatal women who require evaluation of both fetal and maternal wellbeing. The Fetal Assessment Unit operates from 08:00 hours to 16:30hours and women access the service through self-referral, GP referral or referral from ANC from 18 weeks of pregnancy. Women who are planned for an elective Caesarean section are pre-assessed in the Fetal Assessment Unit.

The Fetal Ultrasound Service was established in 1995 and is staffed by 3 CMS Sonographers who perform all routine and emergency pregnancy ultrasound scans within the speciality.

A total of 6,672 women attended the Fetal Assessment Unit / Early Pregnancy Unit in 2017, of whom 5,201 had scans performed.

RAMP Midwifery Care

Ms Roisin Lennon

Background to the Service

In January 2017, the low-risk, midwifery-led, antenatal clinic based in Sligo University Hospital (SUH) was expanded to facilitate a model of care for women meeting the criteria for supportive midwifery care. This was led by the then cAMP. At the same time, an assisted model of care for women who did not meet the criteria for supported care was introduced following a service needs analysis in 2016, steering group agreement, and agreement of the consultant obstetricians and the Director of Midwifery. It was supported by the recommendations of the National Maternity Strategy (DOH 2016).

Implementation of the Service

Women attending SUH for antenatal care were the starting point for these new models of care, with the aim of rolling out the service to the outreach clinics and community, once successfully implemented in the hospital setting. All women booking were to be seen by the consultant at booking and then referred to the different pathways with their agreement. Referral and recruitment to the pathways have steadily improved. The AMP antenatal clinic was held alongside the consultant-led antenatal clinic in order to facilitate decision-making and review, and to provide bi-directional flow. It also enabled ongoing supervision of the AMP whilst she completed the various aspects needed to register as a RAMP. The supported care clinics are supported by midwives, with the AMP providing leadership and professional support and management.

Outcomes and Findings

From the service needs analysis, it was predicted that approximately 50% of women attending SUH antenatal clinic would meet the criteria for the supported and assisted care pathways. On review of the 2017 figures and the first full year of the service, this figure was not achieved; however 11% were cared for on the supported care pathway and 18% by the AMP (Graph 1). Initially there were more meeting the supported care criteria but by the end of the year this had changed to about 75% RAMP care. Many supported pathway women opted to attend the morning clinic with the AMP providing this care. Unfortunately outpatient space problems meant that there was no capacity to run a midwife clinic at the morning clinics, however all women opting for midwifery-led care were accommodated and seen at the AMP clinic. As the year passed and the women became more familiar with the service and the care pathways, those that met the criteria for supported care were being reviewed at the midwives clinic.

Table 1 - RAMP Supported Care Pathway Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Age >18 y/o/ and <40 y/o	Age <18 y/o and >40 y/o
Booking BP <140 mm Hg and diastolic <90 mm Hg	Booking BP >140 mm Hg and diastolic >90 mm Hg
BMI at booking <30	BMI at booking >30
Para 4 or less	≥ Para 5
No underlying medical problems	Underlying medical problems
No current history of illegal substance abuse or alcohol abuse	Current history of illegal substance or alcohol misuse/abuse
No history of complex surgery	History of complex surgery
No uterine scarring	Uterine scarring
Singleton pregnancy	Multiple pregnancy
No pre-existing renal disease	Pre-existing renal disease
No pre-existing hepatic disease	Pre-existing hepatic disease
No PET/HELLP in previous pregnancies	Previous history of PET/HELLP
No history of DVT/PE	History of DVT/PE
No fetal abnormality detected	Fetal abnormality detected
No previous history of baby >4.5 kgs	History of baby >4.5 kgs
No previous baby <37 weeks	History of pre-term birth <37 weeks
No underlying malignancy	Underlying malignancy
Referred by obstetric consultant for midwife-managed care	Women who request not to have midwifery-managed care

Graph 1 - SUH Care Pathways 2017

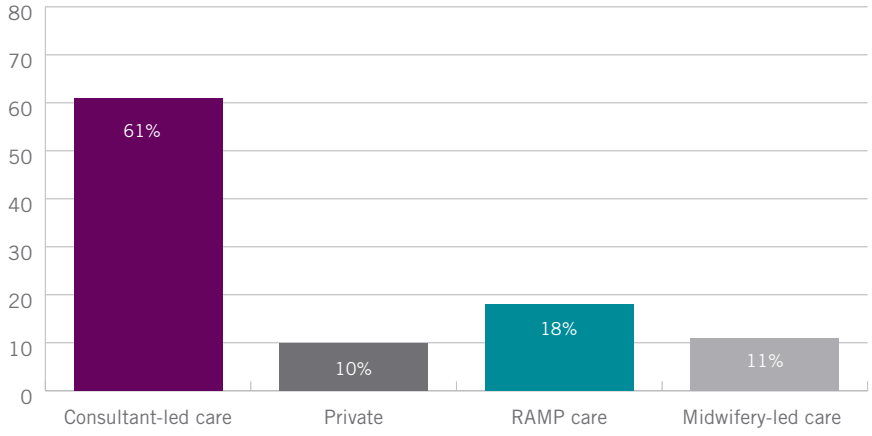
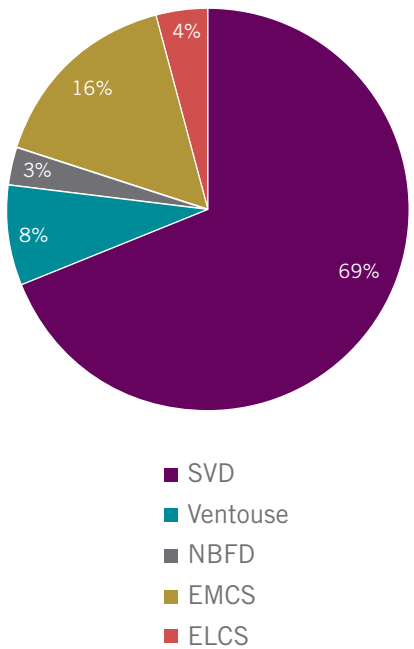


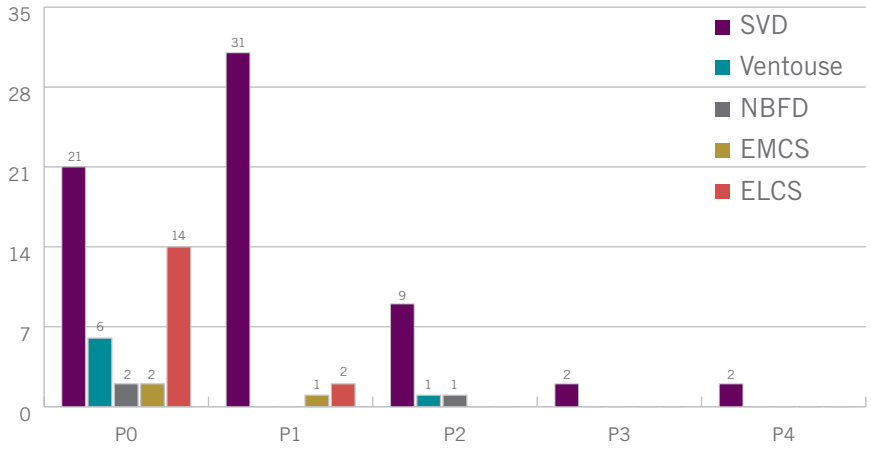
Table 2 - RAMP Managed Care (Assisted Pathway) Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria	Caseload Management
Age->16 and <45 y/o	Age <16 and >45 y/o	Women will be referred by the consultant obstetrician at booking. Care will be managed as per RAMP policy no 2,3,5,6,8,9 CLN-OGCP 250 CLN-LW-006 CLN-OGCP-034 CLN-OGCP-LW-004. Health Service Executive (2014), *National Consent Policy*, HSE, Dublin. Health Service Executive (2015), *Assisted Decision Making (Capacity) Act*, HSE, Dublin.
Booking BP <140 mm Hg and diastolic <90 mm Hg	Booking BP >140 mm Hg and diastolic >90 mm Hg	
BMI >18 and <36	BMI <18 and >36	
Previous lower segment uterine scarring - see VBAC inclusion criteria	Uterine scarring not from lower segment CS	
Singleton pregnancy	Multiple pregnancy	
No current history of illegal substance abuse or alcohol abuse	Current history of illegal substance or alcohol misuse/abuse	
Stable medical disorders. Collaborate with consultant obstetrician.	Unstable medical conditions	
Gestational Diabetes Mellitus (GDM) - diet controlled	GDM - on medication or poorly controlled	
Previous uncomplicated Group B Strep	Previous complicated Group B Strep	
No fetal abnormality detected	Fetal abnormality detected	
No underlying malignancy detected	Underlying malignancy detected	
Referral from midwife-managed care for ongoing care from 39 weeks	Any complications arising from pregnancy at any gestation requiring obstetric decision-making	
Referral from midwife-managed care if term SROM expectant management	SROM with IMEWs >0 or meconium liquor	
Care can be given in accordance with RAMP policies 1-10	RAMP decides outwith scope of practice to provide care or unable to give care based on RAMP policies 1-9	
Referred by consultant obstetrician for RAMP care	Women who request not to be cared for by the RAMP	

Graph 2 - Mode of Birth – Midwifery Managed Care - 2017



Graph 3 - Parity and Mode of Birth – Midwifery Managed Care - 2017



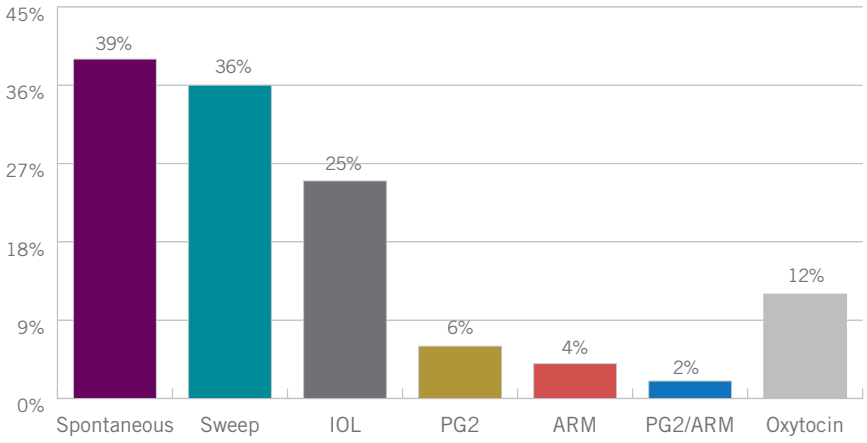
Supported Care

In total, 94 women were cared for on the supported care pathway. This amounted to 11% of all women attending Sligo for their antenatal care. A higher number were seen antenatally (numbers not captured) but were referred to either the AMP or the obstetric team, due to no longer fulfilling the inclusion criteria. An overview of parity and mode of birth are shown in Graph 2 and Graph 3.

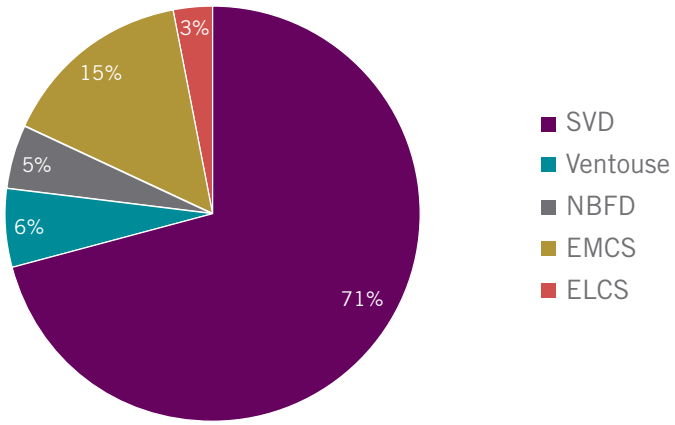
AMP Care

In total, 155 women were cared for by the AMP. This amounted to 18% of all women attending Sligo for their antenatal care. Around 50% of those receiving care had either a history of depression or anxiety or had reported their previous birth as being traumatic, despite appearing on paper to be normal when the notes were reviewed with them. Approximately 35% of women had a raised BMI, 2% had gestational diabetes mellitus (GDM) (diet controlled) and 7% wished to have a vaginal birth after a previous caesarean section. The rest of the women had stable medical conditions or a history of group B strep, with around 10% being referred at term by the midwives for an ongoing plan of care. The AMP provided shared care with the consultant obstetrician for 3% of women. One woman had slight polyhydramnios at 39 weeks, 2 had slightly abnormal liver function tests but no cholestasis and the other 2 had rising blood pressures but normal bloods at term. Care was planned in collaboration with the consultant for these women. Another 5% of women were referred back to the consultant team for various reasons including breech at 39 weeks, pre-eclampsia, cholestasis and GDM on medication. An overview of onset of labour, parity and mode of birth are shown in Graphs 4, 5 and 6. Graph 7 shows the mode of birth for the three care pathways in SUH.

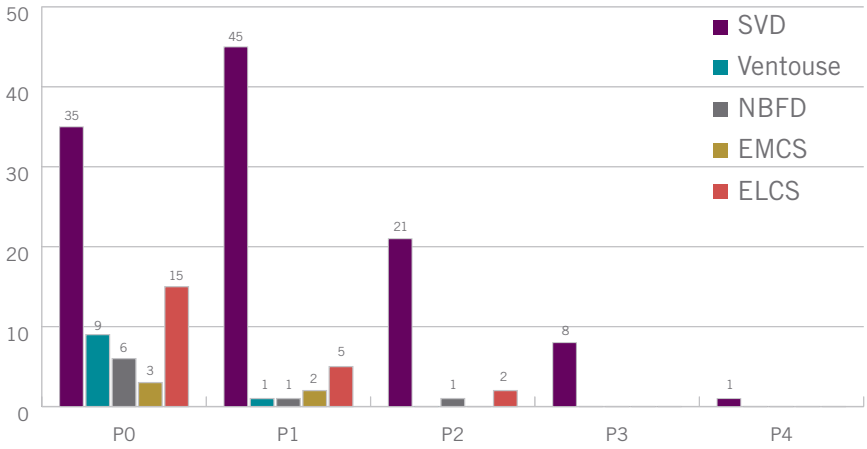
Graph 4 - Onset of labour - AMP - 2017



Graph 5 - Mode of Birth - AMP Care - 2017



Graph 6 - Parity and Mode of Birth - AMP Care - 2017

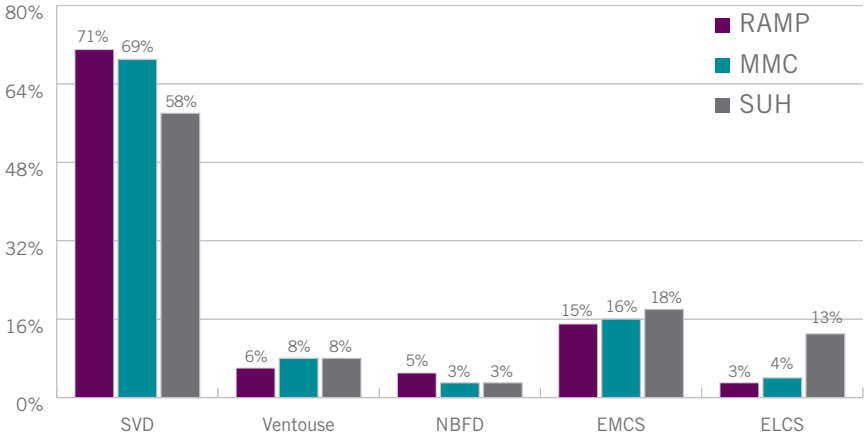


Overall in SUH, 32% of labours are induced for a variety of reasons. Prostaglandin induction only amounts to 13%, with 7% having an artificial rupture of membranes (ARM) and 28% having a combination of prostaglandins and/or ARM and oxytocin. There are no figures for how many sweeps are performed. For those who had AMP care, 36% had a sweep and progressed with no other intervention in labour; 39% laboured spontaneously and had no other intervention.
There were various reasons for the emergency Caesarean sections. These are shown in Graph 7. There were 4 P0 who due to the baby being in an occipitoposterior (OP) position required a CS birth as the head remained high despite getting to 9/10 cm.

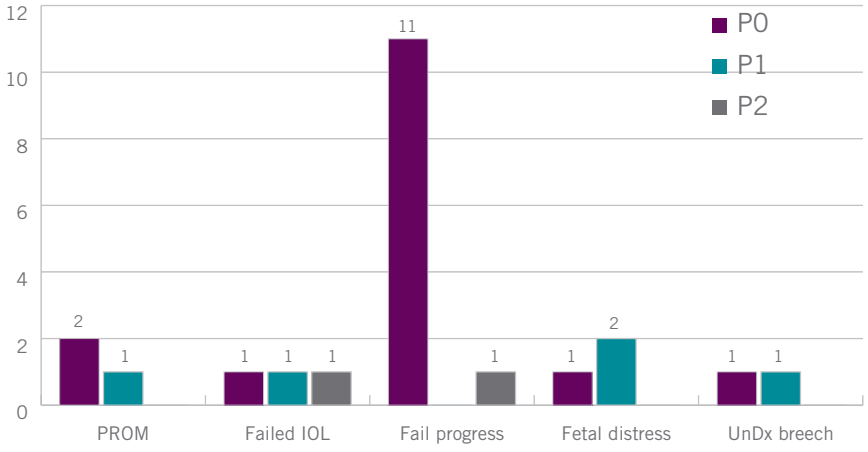
VBAC

11 women (7%) opted for AMP care as their aim was for a VBAC. 7 of these had a normal birth and 1 had a forceps birth (80% VBAC rate). 2 laboured spontaneously and 3 women had a sweep and then laboured with no other intervention. One woman had a spontaneous rupture of membranes (SROM) and required oxytocin augmentation, with another woman having an ARM induction. One woman requested a repeat elective section at 38 weeks as she was anxious and nervous about labour and requiring a CS. The other woman had a vaginal examination at 40 weeks and 41 weeks. The cervix remained closed so induction was not possible and she had a planned repeat CS at 41 weeks. The last woman was transferred to consultant care just before her due date with borderline low platelets. She had an ARM induction and progressed to 5cm within 90 minutes but was complaining of scar tenderness and had a CS.

Graph 7 - Comparison of Mode of Birth based on Care Pathway 2017



Graph 8 - Emergency CS RAMP Care 2017



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