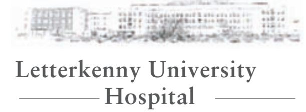

Women's and Children's Directorate

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

Annual Clinical Report 2016

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Foreword – Dr. Ethel Ryan

As the new Saolta Women's & Children's Clinical Director I am delighted to present you with the Annual Clinical report for 2016 for the Women's and Children's Directorate.

The Saolta Healthcare group has been up and running for 4 years now and it is really great to see such a huge level of commitment from each maternity unit in reporting the data in a timely fashion, allowing us to look at the level of activity across the Group to see how we can optimise care and services for our women and infants.

2016 saw the release of the 'Maternity Strategy 2016-2026,Creating A Better Future Together'; a 10 year plan looking at improving the delivery of safe, standardised and high quality care to all women and infants across Ireland. Different aspects of the Maternity Strategy are already in place in each maternity unit but we have a lot of work to do together to standardise care across the group.

Meeting the requirements of the Maternity Strategy will be done locally in conjunction with the National Womens and Infants Health Programme, going forward. As part of the implementation of the Maternity Strategy, 2016 saw the appointment of the Directors of Midwifery in each of the maternity units in the Saolta group which has certainly gone part of the way in helping us achieve our strategy goals.

Like many other hospital groups, the Saolta Women's and Children's directorate struggles to balance staffing, infrastructural and financial difficulties whilst trying to delivery an excellent service to its women and infants. Implementation of the Maternity Strategy will be an integral part in dealing with some of these daily challenges and we look forward to working closely with this new office.

Finally, I would like to thank all the contributors to the Saolta Annual Report, without you 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 W&C directorate, who managed to bring this report together from all 5 sites.

To paraphrase Mahatma Ghandi; 'The future depends on what we do in the present'.

Dr. Ethel Ryan

Saolta Clinical Director,
W&C Directorate

Consultant Neonatologist /
Paediatrician
Saolta University Healthcare Group
Galway

Statistical Summaries

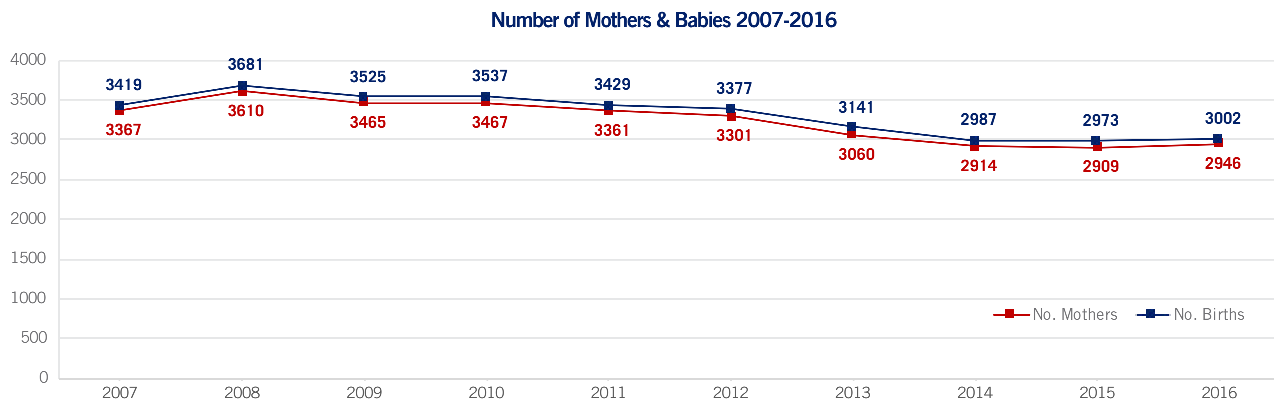
Dr. Una Conway and Ms. Marie Hession

In 2016, 3002 babies were delivered to 2946 women at GUH. There continues to be a slight increase from recent previous years. The mode of delivery for the majority of women was normal vaginal delivery at 49.4%. The caesarean section rate was 32%.

The number of mothers who had had one previous caesarean section had risen slightly to 410. The percentage of women in this group who attempted vaginal delivery decreased to 48.5% from 52% in the previous year attempting VBAC. Successful VBAC rate was 50% with the other 50% requiring caesarean section. This is a decline from the previous year where the successful VBAC rate was 64%.

There has been no change over 10 years in birthweights and parity. The trend of older mothers continues with 10.4% of mothers being 40 years of age or older and 0.7% being over 45 years. There appears to be a decline over 10 years in numbers of teenage pregnancies presenting for antenatal care. In 2016 in GUH, 0.7% of mothers were teenagers compared to 2.6% in 2007.

	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Total Number of Mothers	1157	1789	2946
Total Number of Babies	1186	1816	3002
>24wks or >/= 500gms			



OBSTETRIC OUTCOMES (MOTHERS)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous Onset	562	48.6%	870	48.6%	1432	48.6%
Induction of Labour	443	38.3%	455	25.4%	898	30.5%
Epidural Rate	730	63.1%	619	34.6%	1349	45.8%
Episiotomy	440	38.0%	139	7.8%	579	28.8%
Caesarean Section	404	34.9%	544	30.4%	948	32.2%
Spontaneous Vaginal Delivery	332	28.7%	1122	62.7%	1454	49.4%
Forceps Delivery	126	10.9%	20	1.1%	146	5.0%
Ventouse Delivery	290	25.1%	100	5.6%	390	13.2%
Breech Delivery	5	0.4%	3	0.2%	8	0.3%
Total	**n= 1157**		**n= 1789**		**n= 2946**	

MULTIPLE PREGNANCIES	PRIMIP	%	MULTIP	%	TOTAL	%
Twins	27	2.3%	28	1.6%	55	1.9%
Triplets	1	0.1%	0	0.0%	1	0.0%
Total	**28**	**2.4%**	**28**	**1.6%**	**56**	**1.9%**

ONSET (FOR MULTIPLE PREGNANCIES)	PRIMIP(28)	%	MULTIP(28)	%	TOTAL	%
Induced	5	17.9%	7	25.0%	12	21.4%
Spontaneous	10	35.7%	8	28.6%	18	32.1%
No Labour	13	23.2%	13	23.2%	26	46.4%
Elective C.S.	6	21.4%	6	21.4%	12	21.4%
Emergency C.S.	13	46.4%	11	39.3%	24	42.9%

MULTIPLE BIRTHS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Twins	48	63	58	69	66	74	73	69	64	55
Triplets	2	4	1	1	1	1	4	2	1	1
Total	**50**	**67**	**59**	**70**	**67**	**75**	**77**	**71**	**65**	**56**

PERINATAL DEATHS	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Stillbirths	4	7	11	0.4%
Early Neonatal Deaths	1	6	7	0.2%
Late Neonatal Deaths	1	2	3	0.1%

PERINATAL MORTALITY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Corrected PMR per 1,000 births	3.5	5.7	6.5	6.5	3.5	3.3	5.2	5.4	4.7	4.6

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Stillbirth Rate	0.5%	0.5%	0.6%	0.5%	0.3%	0.4%	0.6%	0.5%	0.5%	0.4%
Neonatal Death Rate	0.1%	0.2%	0.3%	0.3%	0.2%	0.2%	0.1%	0.0%	0.2%	0.2%
Total Rate	**0.6%**	**0.7%**	**0.9%**	**0.8%**	**0.5%**	**0.6%**	**0.7%**	**0.6%**	**0.7%**	**0.6%**

PARITY	NUMBER	PERCENTAGE
Para 0	1157	39.3%
Para 1	1026	24.8%
Para 2	537	18.2%
Para 3	137	4.7%
Para 4	48	1.6%
Para 5	24	0.8%
Para 6	7	0.2%
Para 7	4	0.1%
Para 8	2	0.1%
Para 9	3	0.1%
Para 11	1	0.0%

PARITY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	40.2%	41.4%	41.1%	43.2%	40.2%	37.9%	38.4%	39.7%	39.5%	39.3%
1,2,3	55.6%	54.5%	55.4%	53.6%	56.3%	58.5%	58.4%	57.3%	57.5%	57.7%
4+	4.2%	4.1%	3.6%	3.2%	3.6%	3.6%	3.1%	3.1%	3.0%	3.0%

AGE	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
15-19yrs	21	1.8%	0	0.0%	21	0.7%
20-24yrs	114	9.9%	66	3.7%	180	6.1%
25-29yrs	208	18.0%	207	11.6%	415	14.1%
30-34yrs	458	39.6%	559	31.2%	1017	34.5%
35-39yrs	282	24.4%	724	40.5%	1006	34.1%
40-44yrs	70	6.1%	217	12.1%	287	9.7%
45yrs>	4	0.3%	16	0.9%	20	0.7%
Total	**1157**	**100.0%**	**1789**	**100.0%**	**2946**	**100%**

AGE AT DELIVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
15-19yrs	2.6%	2.5%	2.4%	2.2%	1.3%	1.5%	1.6%	1.1%	0.9%	0.7%
20-24yrs	10.7%	10.0%	9.3%	9.3%	8.2%	7.4%	6.9%	6.3%	6.9%	6.1%
25-29yrs	21.0%	21.8%	20.9%	20.9%	20.3%	18.4%	16.5%	15.4%	14.8%	14.1%
30-34yrs	34.7%	35.4%	34.6%	36.4%	36.5%	36.0%	35.9%	34.8%	33.6%	34.5%
35-39yrs	25.3%	25.2%	26.7%	25.3%	27.3%	29.5%	32.1%	32.0%	33.4%	34.1%
40-44yrs	5.4%	4.9%	5.9%	5.5%	6.0%	6.8%	6.5%	8.8%	9.8%	9.7%
45yrs>	0.3%	0.2%	0.3%	0.5%	0.3%	0.4%	0.6%	0.6%	0.7%	0.7%

COUNTY OF ORIGIN	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Galway County	56.6%	58.2%	58.9%	56.9%	57.0%	56.3%	54.8%	53.8%	55.0%	56.5%
Galway City	34.4%	33.9%	32.8%	35.9%	35.9%	36.8%	38.9%	39.7%	37.7%	37.3%
Mayo	2.4%	2.3%	2.2%	2.3%	2.3%	3.4%	2.6%	2.3%	2.9%	2.1%
Roscommon	2.0%	1.2%	1.2%	1.3%	1.0%	2.0%	2.4%	1.0%	1.2%	0.9%
Clare	4.2%	4.1%	4.4%	3.2%	3.4%	1.0%	0.8%	2.7%	2.6%	2.5%
Others	0.4%	0.2%	0.5%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.7%

NON NATIONAL BIRTHS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number	675	820	834	929	816	854	732	736	723	731
%	20%	22.7%	23.7%	26.3%	23.8%	25.3%	23.3%	24.6%	24.3%	24.4%

GESTATION AT DELIVERY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<28 weeks	5	0.4%	3	0.2%	8	0.3%
28 - 31+6	14	1.2%	18	1.0%	32	1.1%
32 - 36+6	68	5.9%	81	4.5%	149	5.1%
37 - 39+6	416	36.0%	937	52.4%	1353	45.9%
40 - 41+6	651	56.3%	744	41.6%	1395	47.4%
42 weeks	3	0.3%	6	0.3%	9	0.3%
Total	**1157**	**100%**	**1789**	**100%**	**2946**	**100%**

GESTATION AT DELIVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<28 weeks	0.5%	0.5%	0.6%	0.4%	0.4%	0.3%	0.6%	0.4%	0.4%	0.3%
28 - 31+6	0.7%	0.9%	0.9%	1.0%	0.8%	0.7%	0.9%	0.8%	0.9%	1.1%
32 - 36+6	4.5%	4.8%	5.1%	4.1%	4.9%	4.7%	4.6%	5.3%	5.3%	5.1%
37 - 39+6	42.1%	41.9%	41.8%	41.3%	42.8%	43.1%	47.0%	45.3%	45.2%	45.9%
40 - 41+6	50.2%	50.1%	50.3%	52.6%	50.4%	51.0%	46.5%	47.8%	47.9%	47.4%
42 weeks	1.9%	1.7%	1.2%	0.4%	0.7%	0.2%	0.4%	0.4%	0.3%	0.3%
Not Answered	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

BIRTH WEIGHTS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
< 1000gms	6	0.5%	8	0.4%	14	0.5%
1000-1499gms	20	1.7%	11	0.6%	31	1.0%
1500-1999gms	15	1.3%	18	1.0%	33	1.1%
2000-2499gms	50	4.2%	47	2.6%	97	3.2%
2500-2999gms	165	13.9%	178	9.8%	343	11.4%
3000-3499gms	392	33.1%	570	31.4%	962	32.0%
3500-3999gms	399	33.6%	701	38.6%	1100	36.6%
4000-4499gms	118	9.9%	235	12.9%	353	11.8%
4500-4999gms	20	1.7%	45	2.5%	65	2.2%
5000-5499gms	1	0.1%	3	0.2%	4	0.1%
Total	**1186**	**100.0%**	**1816**	**100.0%**	**3002**	**100%**

BIRTH WEIGHTS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<500gms	0.1%	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
500-999gms	0.6%	0.7%	0.5%	0.7%	0.6%	0.4%	0.6%	0.5%	0.5%	0.5%
1000-1999gms	1.4%	1.6%	2.0%	1.7%	1.7%	1.9%	2.8%	2.1%	2.5%	2.1%
2000-2999gms	13.4%	14.5%	13.9%	14.2%	14.2%	14.8%	15.0%	14.8%	13.7%	14.7%
3000-3999gms	67.1%	66.2%	68.5%	66.3%	68.3%	67.3%	66.4%	66.1%	67.8%	68.7%
4000-4499gms	14.5%	14.2%	13.9%	14.1%	14.1%	15.2%	13.1%	14.4%	13.1%	11.8%
4500-5000gms	2.6%	2.0%	2.4%	2.7%	2.5%	2.5%	1.9%	1.7%	2.2%	2.2%
5000-5499gms	0.2%	0.2%	0.3%	0.2%	0.4%	0.2%	0.1%	0.2%	0.2%	0.1%
>5500gms	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Number of Babies	**3419**	**3681**	**3525**	**3537**	**3429**	**3377**	**3141**	**2987**	**2973**	**3002**

INDUCTION OF LABOUR	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2007	398	29.4%	494	24.5%	892	26.5%
2008	482	32.3%	499	23.5%	981	27.1%
2009	446	33.3%	475	23.3%	921	26.6%
2010	483	32.3%	452	23.0%	935	27.0%
2011	429	31.8%	443	22.0%	872	25.9%
2012	439	35.1%	504	24.6%	943	28.6%
2013	418	35.0%	429	22.8%	847	27.7%
2014	431	37.3%	425	24.2%	856	29.4%
2015	432	37.6%	436	24.8%	868	29.8%
2016	443	38.3%	455	25.4%	898	30.5%

PERINEAL TRAUMA	PRIMIP n - 753	%	MULTIP n - 1245	%	TOTAL n - 1998	%
Intact	39	5.2%	275	22.1%	314	15.7%
Episiotomy	440	58.4%	139	11.2%	579	29.0%
2nd Degree Tear	152	20.2%	436	35.0%	588	29.4%
1st Degree Tear	58	7.7%	268	21.5%	326	16.3%
3rd Degree Tear	16	2.1%	27	2.2%	43	2.2%
Other Laceration	48	6.4%	100	8.0%	148	7.4%
Total	**753**	**100.0%**	**1245**	**100.0%**	**1998**	**100.0%**

INCIDENCE OF EPISIOTOMY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2007	627	64.6%	305	20.5%	932	37.9%
2008	602	58.4%	222	14.4%	824	32.0%
2009	520	52.0%	168	11.2%	688	27.6%
2010	546	53.3%	175	12.0%	721	29.0%
2011	495	53.8%	153	10.5%	648	27.2%
2012	457	51.5%	183	12.1%	640	26.7%
2013	430	55.3%	141	10.7%	571	27.3%
2014	433	55.5%	126	10.4%	559	28.1%
2015	452	57.3%	155	12.2%	607	29.5%
2016	440	58.4%	139	11.2%	579	28.8%

B.B.A.	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2007	1	0.0%	8	0.2%	9	0.3%
2008	0	0.0%	15	0.4%	15	0.4%
2009	3	0.1%	8	0.2%	11	0.3%
2010	3	0.1%	6	0.2%	9	0.3%
2011	2	0.1%	11	0.3%	13	0.4%
2012	0	0.0%	5	0.2%	5	0.2%
2013	1	0.0%	12	0.4%	13	0.5%
2014	1	0.0%	5	0.2%	6	0.2%
2015	1	0.0%	12	0.4%	13	0.4%
2016	1	0.0%	11	0.4%	12	0.4%

3RD STAGE PROBLEMS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
Primary PPH(1000mls)	52	4.5%	32	1.2%	84	2.9%
Manual Removal of Placenta	11	1.0%	18	1.0%	29	1.0%
Total	**1157**		**1789**		**2946**	

	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
Shoulder Dystocia	14	1.2%	13	0.7%	27	0.9%

FETAL BLOOD SAMPLING	n- 1087 (babies)		n- 1439 (babies)		n-2526	
PH < 7.20	8	0.7%	5	0.3%	13	0.5%
PH 7.20-7.25	26	2.4%	11	0.8%	37	1.5%
PH > 7.25	161	14.8%	48	3.3%	209	8.3%

CORD SAMPLING	n-1186 (babies)		n- 1816 (babies)		n- 3002 (babies)	
Cord PH < 7.2	227	19.1%	145	8.0%	372	12.4%
Cord PH 7.2-7.25	166	14.0%	129	7.1%	295	9.8%
Cord PH > 7.25	515	43.4%	529	29.1%	1044	34.8%
Total	**908**	**76.6%**	**803**	**44.2%**	**1711**	**57.0%**

CAESAREAN SECTIONS	PRIMIP	%	MULTIP	%	TOTAL	%
Elective Caesarean Sections	87	7.5%	365	20.4%	452	15.3%
Emergency Caesarean Sections	317	27.4%	179	10.0%	496	16.8%
Total	**404**	**34.9%**	**544**	**30.4%**	**948**	**32.2%**

ROBSON GROUPS	n-948 CS	n-2946 Women	%
Group 1 - nullip singleton cephalic term spont labour	74	514	14.4%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	200	467	42.8%
Group 2a - nullip singleton cephalic term induced	150		32.1%
Group 2b - nullip singleton cephalic term pre-labour C.S.	50		10.7%
Group 3 - multip singleton cephalic term spont labour	9	712	1.3%
Group 4 - multip singleton cephalic term induced or pre-labour CS	58	455	12.7%
Group 4a - multip singleton cephalic term induced	14		3.1%
Group 4b - multip singleton cephalic term pre-labour C.S.	44		9.7%
Group 5 - previous CS singleton cephalic term	367	463	79.3%
Group 6 - all nulliparous breeches	71	77	93.4%
Group 7- all multiparous breeches	46	49	93.9%
Group 8 - all multiple pregnancies	36	56	64.3%
Group 9 - all abnormal lies	18	18	100%
Group 10 - all preterm singleton cephalic	69	135	51%
Total	**948**	**2946**	

Total No. of Mothers who had 1 Previous Caesarean Section		410	
No. of Mothers who opted for an Elective Caesarean Section after 1 previous Caesarean Section		211	51.5%
No. of Mothers who went into Spontaneous/Induced Labour after 1 previous Caesarean Section		199	48.5%

Outcome for this category	S.V.D	68	34.2%
	Ventouse	19	9.5%
	Forceps	12	6.0%
	Total VBAC	**99**	**49.7%**
	Emergency C.S.	**100**	**50.3%**

Fetal Medicine Unit / Ultrasound Department Report

Professor John J Morrison and Ms. Anne Keane

There were in total 12039 scans performed during 2016. In the Fetal Assessment Unit there were 9929 scans performed of which 9903 were obstetric based, and there were a total of 26 gynaecological scans performed. In the Early Pregnancy Assessment Unit (EPAU) there were 2110 scans performed. The vast majority of ultrasound scans performed in the FMU were therefore done for obstetric reasons as the majority of the gynaecological scans are performed in the department of radiology at Galway University Hospital. The ultrasound assessments performed in the FMU included routine first trimester scans, detailed fetal anatomy scans at 20-22 weeks gestation, referral cases from other consultant clinics and other hospitals, and referrals for assessment of fetal wellbeing. The aim during 2016 was that everyone who booked in a timely way would receive first trimester scan, and a detailed anatomy scan.

There are weekly high risk fetal medicine clinics held, in addition to the Diabetic Clinic/Endocrine Clinic which is held on a fortnightly basis. Multiple pregnancies are generally seen in the high risk clinic, and the Fetal Medicine Unit also has served as a centre centre for Perinatal Ireland Research Studies.

Apart from the Fetal Medicine Unit/ Ultrasound Department the EPAU service provides dedicated sessions four mornings per week. The sonographers attached to the FMU overlap with this personnel providing service in the FMU to a great extent. The EPAU provides ultrasound for women in early pregnancy with bleeding or other complications.

High Risk Fetal Medicine Clinic

During the year 2016 there were 856 attendances at the high risk clinics. The attendances were for complications in pregnancy pertaining to women booked in Galway University Hospital and also included referrals from outside hospitals in the Saolta Hospital Group. The reason for attendances included suspicion or confirmation of fetal abnormality, multiple pregnancies, prenatal non-invasive screening, invasive prenatal testing, medical complication of pregnancy, maternal antibodies to red blood cell antigens, and platelet alloimmune disease.

Fetal Abnormalities

During 2016 there were 71 pregnancies with one or a number of fetal malformations diagnosed leading to further testing or management options. The list of the actual fetal abnormalities is provided below. The remaining attendances were for the purposes of detailed fetal anatomy scanning, nuchal translucency measurements/combined testing, growth and doppler assessment, ultrasound assessment in the presence of alloimmune antibodies, and a history of previous affected pregnancies.

FETAL ABNORMALITIES
THE LIST AND DESCRIPTION OF FETAL ABNORMALITIES MANAGED AT THE FMU DURING 2016 IS OUTLINED BELOW:

Malformation	N
Cardiovascular malformations	
Transposition of the great vessels, hypoplastic heart, arrhythmia, coarctation of Aorta, Bi ventricular dysfunction, VSD, large inlet VSD and Primum septum, AVSD.	N = 12
Central Nervous system malformations	
Spina bifida, anencephaly, cystic hygroma, encephalocoele, ventricular megaly, Colpocephaly, holoprosencephaly, abscent cavum septum, small cerebellum, Abscent vermis.	N = 25
Renal tract malformations	
Polycystic kidneys, multicystic kidneys, dysplastic kidneys, Potters sequence, Absent kidney, and dilated renal tracts.	N = 12
Gastrointestinal malformations	
Exomphalus, dilated bowel, and abdominal cysts.	N = 7
Thoracic malformations	
Diaphragmatic hernia, CAM lesion.	N = 3
Musculoskeletal malformations	
Limb abnormalities, short/long bones, talipes equinovarus.	N = 11
Other head and neck malformations	
Cleft lip/palate	N = 5

In addition to above there were a total of 39 invasive procedures which included 34 procedures of amniocentesis, and 5 CVS procedures. The cases of fetal Aneupolidy detected were as follows:

Condition	N
Trisomy 21	N = 6
Trisomy 18	N = 2
Trisomy 13	N = 1
Turner's syndrome	N = 2
Triploidy	N = 2
Translocation/Deletion	N = 2

Multiple Pregnancy

The majority of care for multiple pregnancies is based in the FMU. During the year 2016 there were 99 women who had multiple gestation seen in FMU, who had in total 481 scans.

During the calendar year 2016 N = 55 of these sets of twins delivered, and one set of triplets.

Diabetic/Endocrine Clinic

There were 945 visits to the Diabetic/ Endocrine clinic, of which the vast majority were for women with diabetes mellitus. There were N = 329 women with gestational diabetes seen during 2016 and 19 women with type I diabetes.

Anaesthesia Report

Dr. Joseph F Costello

In 2016, 2,588 procedures were performed in the gyanaecology/ labour ward theatres, of which 1874 were elective and 714 were emergencies. This number includes all gynaecological and obstetric procedures for which anaesthesia care was provided.

There were 3002 deliveries to 2946 mothers in UHG in 2016.

Epidurals:

- 1349 epidurals were peformed (45.8%) see Figure1.
- 730 pimigravidae (63.1 %) received an eipdural
- 619 multigravidae (34.6 %) received an epidural
- 21 % of those primigravidae who had an epidural had a Ventouse delivery and 9.6 % had a forceps delivery
- 4.3 % of multigravidae who received an epidural had a Ventouse delivery while 0.7 % had a forceps delivery
- 443 primigravidae were induced and 347 of this group (78.2%) received epidurals
- 562 primigravidae went into spontaneous labour and 377 of this group (67.1%) received an epidural
- 455 multigravidae were induced and of this group, 283 (62.2%) received an epidural
- 870 multigravidae went into spontaneous labour and 333 (38.3 %) of this group received an epidural

Caesarean Deliveries:

- 948 women (32.2 %) delivered by Caesarean Delivery (CD) (see statistical summary)
- 44 Caesarean Deliveries were performed under General Anaesthesia (4.6 % of all Caesarean Deliveries) see Figure 2

Post-Dural Puncture Headaches

There were 14 documented dural taps in 2016, giving a dural puncture rate of 1.0 %.

7 (50 %) of these women needed an epidural blood patch and two needed a second blood patch.

MODE OF ANAESTHESIA FOR ELECTIVE C.S.				
	Primip	Multip	Total	
Spinal	78	335	413	91.4%
Epidural	0	3	3	0.7%
Combined Spinal	5	22	27	6.0%
G.A.	4	5	9	2.0%
Total	**87**	**365**	**452**	**100.0%**

MODE OF ANAESTHESIA FOR EMERGENCY C.S.				
	Primip	Multip	Total	
Spinal	109	117	226	45.6%
Epidural	146	35	181	36.5%
Combined Spinal	36	18	54	10.9%
G.A.	26	9	35	7.1%
Total	**317**	**179**	**496**	**100.0%**

MODE OF ANAESTHESIA FOR C.S. FOLLOWING UNSUCCESSFUL ATTEMPT AT INSTRUMENTAL DELIVERY				
	Primip	Multip	Total	
Epidural	6	2	8	61.5%
Spinal	0	0	0	0.0%
Combined Spinal	2	1	3	23.1%
G.A.	1	1	2	15.4%
Total	**9**	**4**	**13**	**100.0%**

Intensive Care Unit (ICU)/High Dependency Unit (HDU)/ Post Anaesthesia Care Unit (PACU) Admissions 2016

75 patients were admitted to the Post Anaesthesia Care Unit (PACU) after gynaecologic surgery in 2016 (9.3% of total PACU admissions). Parturients and emergency cases cannot be admitted to PACU as per Hospital protocol.

There were 7 patients admitted to the Intensive Care Unit (ICU) after gynaecologic surgery (0.87% of total ICU admissions) and 11 women were admitted to the High Dependency Unit (HDU) after gynaecologic surgery (1.9% of total HDU admissions).

In 2016, there were 6 Obstetric related admissions to the ICU (0.72% of total ICU admissions).

- 2 admissions after massive post-partum haemorrhage.
- 2 admissions with respiratory failure (Influenza)
- 1 patient admitted with uropsepsis.
- 1 patient admitted with pancreatitis post –delivery.

In 2016, there were 4 Obstetric related admissions to the HDU (0.70% of total HDU admissions).

- 1 patient admitted with a pulmonary embolus.
- 1 patient admitted after an anaphylactic drug reaction.
- 1 pateint admitted after an appendicectomy 5 days post-caesarean delivery.
- 1 patient with sepsis post-delivery.

There were no cases of maternal mortality in UHG in 2016.

Summary of parturients requiring Level 2 Care/Monitored care on the labour ward in 2015

106 women required level 1 or 2 care on the labour ward in 2016 (3.4 % of mothers).

High Risk Obstetric Anaesthesia Clinic

203 women were assessed in the in the Obstetric Anaesthesia Clinic in 2016.

Figure 1: Overall trend in Epidural rates (numbers) since 2007

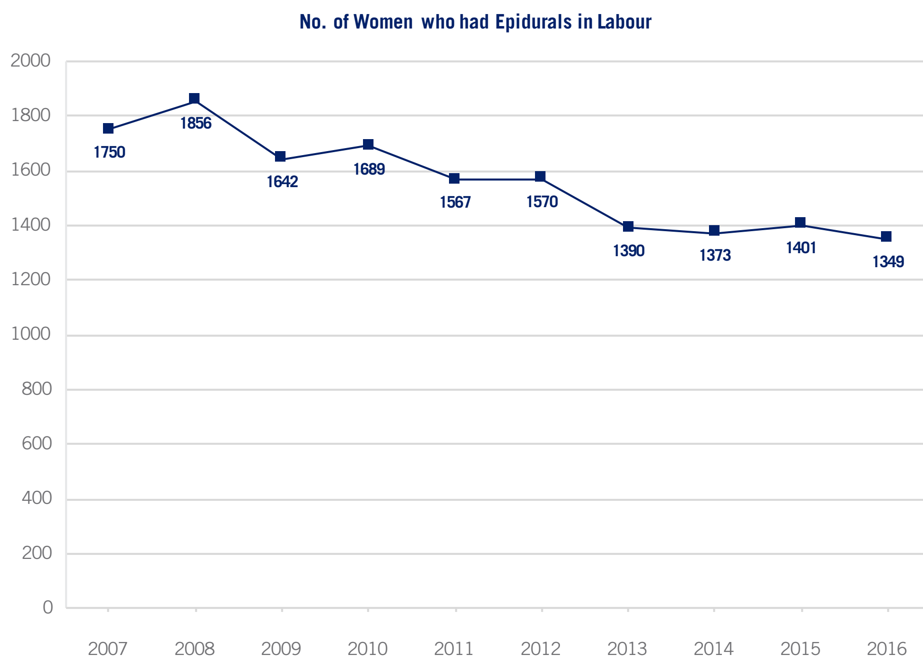
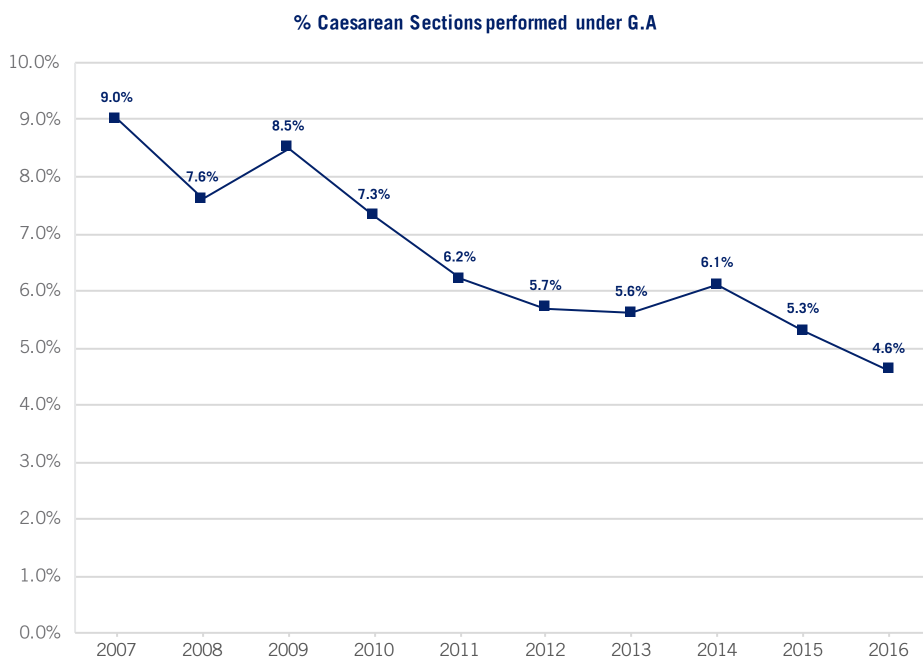


Figure 2: Percentage of Caesarean Deliveries performed under General Anaesthesia since 2007



Neonatal Clinical Report

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

During the year 2016 a total of 3002 infants were born at GUH, of which 438 (14.5%) were admitted to the neonatal unit (Figure 1). This was the highest number of neonatal unit admissions on record, with a 10% increase in premature infants (175 vs 160) and a 9% increase in infants > 37wks gestation (263 vs 241) compared to 2015 (Figure 2).

One hundred and sixty infants (37%) were admitted from the Labour Ward, 152 (35%) from Gynae Theatre and 102 (24%) from the Post Natal ward (Table 3). Twenty one infants (3.5%) were transferred into the neonatal unit from outside hospitals and 2 infants (0.5%) were admitted from home.

Sixty percent (263) of the neonatal unit admissions were > 37 weeks gestation, whereas 175 infants (40%) were premature. Of the premature infants 10 were ELBW (BW < 1000g) and 34 infants weighted between 1000g and 1500g at birth (VLBW). Twelve of the premature infants were < 28 Wks gestation, 41 were born between 28 and 31+6 Wks gestation and 122 were born between 32 and 36+6 Wks gestation (Table 2).

Figure 1: Admission to Neonatal Care Unit 2007-2016

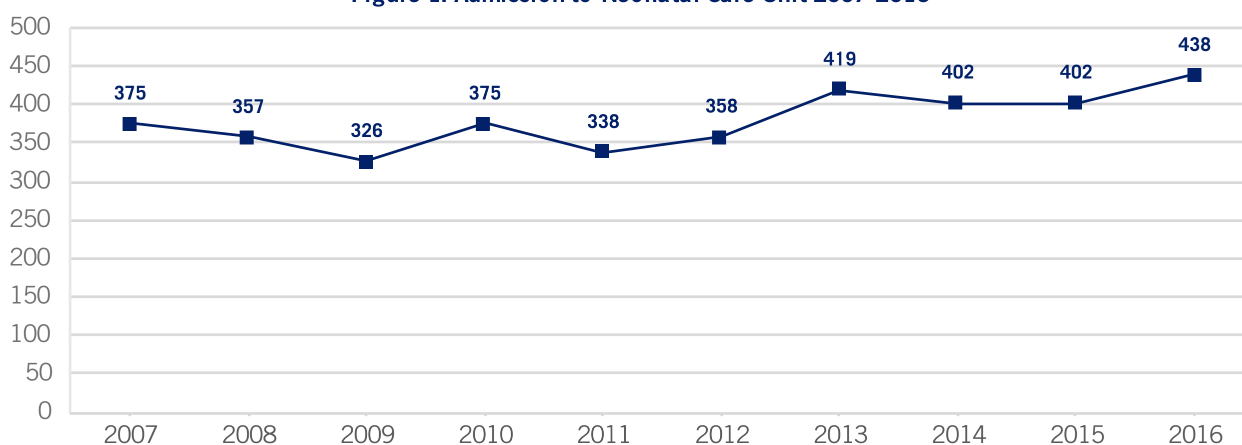
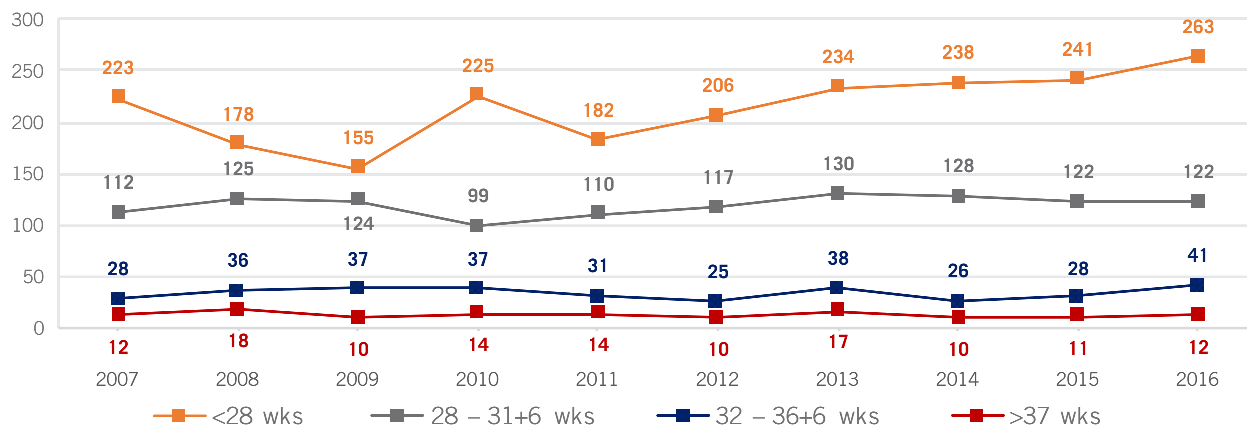


Figure 2: Distribution of Premature Infants admitted to Neonatal Unit 2007-2016



Consistent with previous reports prematurity, respiratory distress and evaluation for sepsis remain the commonest conditions requiring admission to the neonatal unit, accounting for 67% of all admissions in 2016.

There were 6 neonatal unit related deaths in 2016 (Details below). The 2016 overall neonatal unit related neonatal mortality rate (Number of deaths in neonatal unit per 1,000 live births) was 2 per 1000. When the rate was corrected to exclude lethal abnormalities (LCM) and ELBW infants (<1000 gms) the figure is 0.33 per 1000. A 2008 to 2016 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 2016.

1. BABY WEIGHTS ON ADMISSION 2016

Weight	n	%
<500gms	0	0.0%
500-599gms	1	0.2%
600-699gms	2	0.5%
700-799gms	2	0.5%
800-899gms	3	0.7%
900-999gms	2	0.5%
1000-1249gms	23	5.3%
1250-1499gms	11	2.5%
1500-1749gms	18	4.1%
1750-1999gms	21	4.8%
2000-2249gms	37	8.4%
2250-2499gms	30	6.8%
2500-2999gms	66	15.1%
>3000gms	222	50.7%
Total	**438**	**100.0%**

2. GESTATION AGE OF NEONATAL UNIT ADMISSIONS IN 2016

<28wks	12	2.7%
28-31+6wks	41	9.4%
32-36+6wks	122	27.9%
>37wks	263	60.0%
Total	**438**	**100.0%**

3. SOURCE OF ADMISSION 2016

	2016	%
Delivery Suite	161	37%
Theatre	152	35%
St. Angela's Ward	102	24%
Transfers in	20	3.5%
Other	3	0.5%
Total	**438**	**100.0%**

4. SURVIVAL OF NEONATAL UNIT INFANTS 2016

Weight	Number	Death
≤1000g	10	3
1001 - 1500g	34	1
1501 - 2500g	106	1
>2500g	288	1
Total	**438**	**6**

5. NEONATAL UNIT MORTALITY RATE 2016

Total	6	2/1000
Excluding LCM	4	1.3/1000
Excluding LCM and ≤1000g	1	0.3/1000
>2500g	288	1

6. GENERAL NEONATAL MORBIDITY

IPPV	20
NCPAP	96
RDS/TTN	160
Meconium Aspiration	2
Neonatal Seizures	2
Mild Perinatal Stress/HIE	14
Haematology: Jaundice/HDN/NAIT	19
Transferred for Therapeutic Cooling	5

7. CONGENITAL ABNORMALITIES

Down Syndrome	11
Pierre Robin Syndrome	1
Unnamed Dysmorphic Syndrome	4
FAS	1
Col 4A2 gene mutation	1
Chromosome deletions (2 and14)	2
Digeorge syndrome	1
Total	**21**

8. CARDIAC / CHD / SIGNIFICANT ECHO FINDINGS

ASD / VSD/ PDA	19
Hypoplastic Left Heart Syndrome	1
Transposition of the Great Arteries (TGA)	2
Tetralogy of Fallot (TOF)	1

9. NOTABLE SIGNIFICANT MALFORMATIONS / OTHER

G6PD Deficiency	1
Cleft Lip and Cleft Palate	3
Bladder Exstrophy	1
Cystic Dysplastic Kidneys	1
Omphalocele	1
Duodenal Atresia	1
Pyloric Stenosis	1
Tracheoesophageal fistula (TOF)	3

10. NEONATAL SEPSIS 2016: 13 INFANTS HAD POSITIVE BLOOD CULTURES

GBS	2
E. Coli	1
Staphylococcus Aureus	2
Coagulase Negative Staphylococcus	7
Mixed Growth	1

11. FINAL DIAGNOSIS 2016 (OFTEN MORE THAN 1)

Reason for Admission	Year	%
Prematurity / Low Birth Weight / RDS	170	38.8%
Low Birth Weight > 37wks	12	2.7%
Low Saturations	14	3.2%
Respiratory Distress / Grunting	81	18.5%
Sepsis at Risk	41	9.4%
Pyrexia	4	0.9%
Social Reason	6	1.4%
Low Apgars	12	2.7%
Congenital Abnormality	9	2.1%
Jaundice	12	2.7%
Hypoglycaemia	10	2.3%
Other Reason	67	15.3%

12. MORTALITY TABLE 2008-2016 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	2	0 (0%)	0 (0%)
24 wks	20	8 (40%)	7 (35%)
25 wks	24	15 (63%)	14 (58%)
26 wks	21	18 (86%)	17 (81%)
27 wks	34	30 (88%)	30 (88%)
28 wks	44	39 (89%)	39 (89%)
29 wks	59	58 (98%)	58 (98%)
30 wks	55	53 (96%)	53 (96%)
>30 wks	91	88 (97%)	88 (97%)
Total	**350**	**309 (88%)**	**306 (87%)**

13. SUMMARY NEONATAL UNIT DEATHS IN 2016			
Diagnosis	**GA**	**BW**	**Location of Death**
Extreme prematurity and hypoxic-ischaemic brain injury	$25^{+3}/40$	735 gms	NICU (DOL 96)
Extreme prematurity and IUGR	$26^{+5}/40$	585 gms	Coombe Hospital NICU
Extreme prematurity and Volvulus with acute small bowel obstruction and perforation secondary to congenital bands	$28^{+1}/40$	875 gms	TSH ICU
IUGR, Digeorge Syndrome and Coarctation of proximal descending aorta.	$38^{+6}/40$	2380 gms	OLHC
Chromosome 2 deletion with multiple congenital abnormalities	$32^{+4}/40$	1290 gms	GUH
Lethal Congenital Heart Abnormality	40 /40	3420 gms	GUH

Paediatric Report
In-Patient Clinical Activity

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 2016. 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.

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 Neonatal Intensive Care Unit (see separate NICU report).

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

Admission Information

The majority of data for this report were obtained from the Hospital In-Patient Enquiry (HIPE) system with Intensive Care Unit activity obtained from the *Clinical Information System in ICU/HDU*, ED data kindly provided by Josephine Mitchell. Comparative data, where available, are provided for preceding years. The majority of paediatric patients reviewed in the designated paediatric ED area have a medical complaint (95%). All children presenting to the ED of UHG up to 16 years regardless of complaint are now reviewed in the designated paediatric ED area (since mid 2016). 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.

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

UHG Paediatric (up to 16 yrs) Admissions

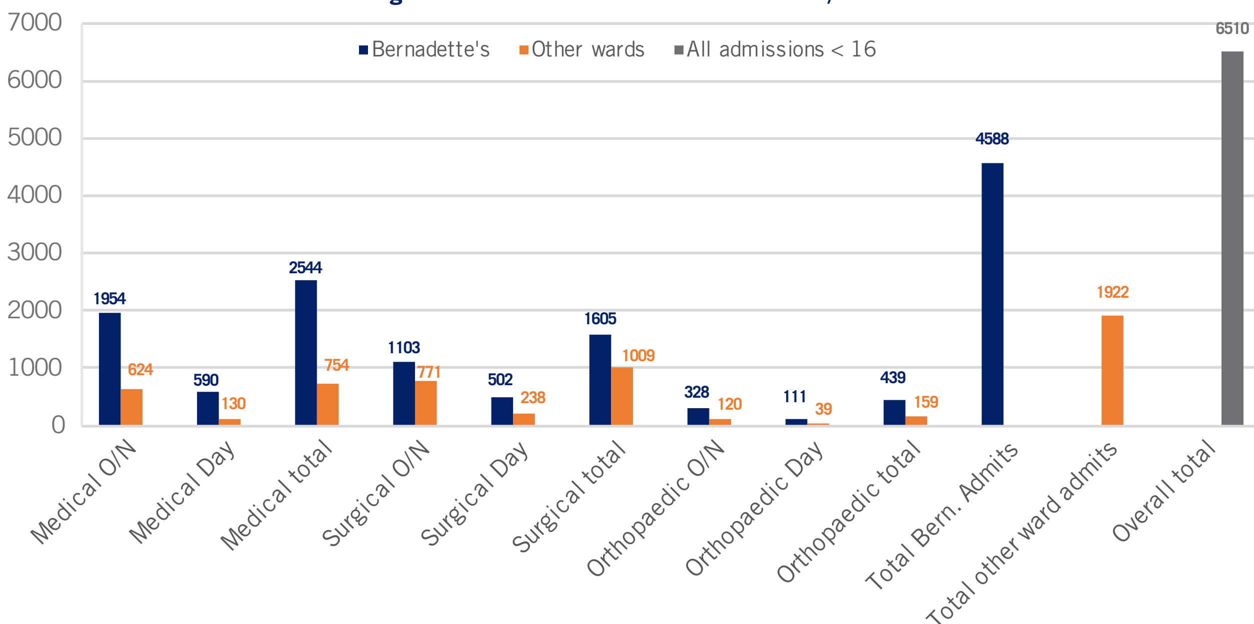
Figure 1 outlines admissions to Bernadette's and other wards within UHG; from January 1st to December 31st of 2016, a total of 6,510 children up to 16 years were admitted to UHG; c.18 admissions daily; total number similar to 2015 (6,864).

The bulk of paediatric admissions are overnight, average length of stay is typically 2.3 days. During 2016, **1,922 children** (up to 16 years) were admitted to **other (adult) wards** in UHG, an average of **5 per day**. The majority of the latter were overnight; 1,515 overnight with 407 day cases.

St Bernadette's

From January 1st to December 31st of 2016, a total of 4,588 children (up to 16 yrs) were admitted to St Bernadette's ward, c.13 admissions daily (see Figure 1 for breakdown). The

Figure 1 – Paediatric Admissions to UHG, 2016



admission number has been consistent over the past 11 yrs, (average 4,496; range, 4,242-4,958). Day cases on St Bernadette's totalled 1,203 (approx 3 per day). It is anticipated that a proportion of that activity will be transferred to the ambulatory care area in 2018.

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, 2,044 cases (overnight and day cases) in 2016.

A total of 2,544 medical cases (overnight and day cases) were admitted to St Bernadette's ward during 2016.

Paediatric ED Activity

During 2016, there were **14,411 attendances** to the UHG Emergency Department up to 16 years of age (See Figure 3 for comparison with prior years); children up to 16 years account for c.23% of total UHG ED activity (63,887 all ED attendances in 2016).

Children presenting to the ED up to 14 years of age with non surgical/ non trauma complaints are reviewed by paediatric staff and trainees. On average 35 children up to 14 years of age are seen per day; during 2016 there were on average, 1,065 monthly attendances; range, 903 to 1,196.

ICU admissions and Direct Transfers from St Bernadette's

There were **52 children** ≤ 14 years of age admitted to the UHG ICU during 2016 (decrease from 62 admits during 2015); majority of patients admitted from the ED to ICU, only 4 from St Bernadette's ward. The age range for ICU admissions was 7 days to 14 years old; see Figure 4 for age breakdown. The average duration of stay was 1.1 days (range, 0.14 to 4.66 days).

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, 17 were transferred to tertiary units; only 4/17 transfers were facilitated by the national retrieval service.

In total, only 19 children (0.4% of total admitted) were transferred directly from the paediatric unit to a tertiary centre during 2016; 15 to OLCHC, 3 CUH, Temple Street and 1 to Tallaght hospital.

Figure 2 – All surgical admissions, St Bernedette's 2016. Total 2014

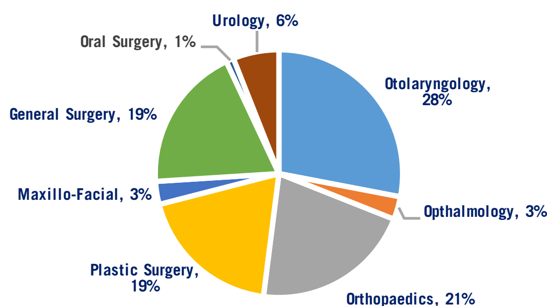


Figure 3 – Paediatric ED Attendances by Year

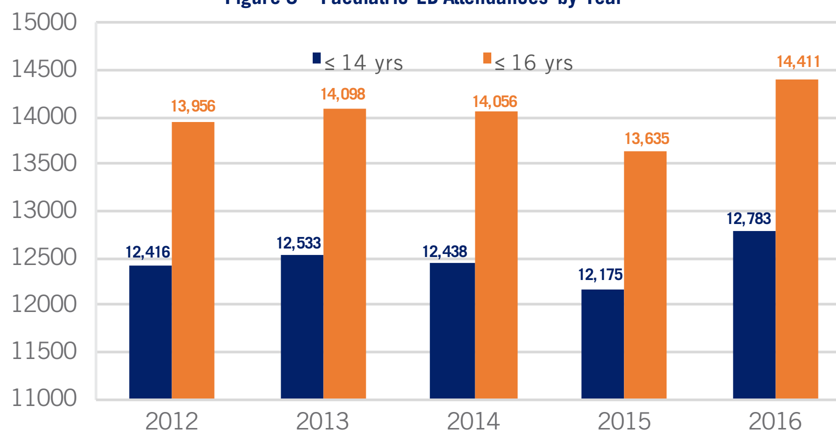
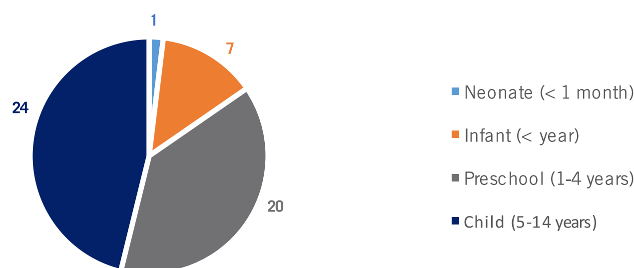


Figure 4 – Paediatric ICU Admissions (52), 2016



Admission Diagnosis	Number
Respiratory	21
Seizure related	8
Sepsis	5
DKA	4
Other	4
Trauma	4
Post Surgery	3
Cardiac	1
Decreased GCS	1
Meningitis	1

Discharge Destination	Number
St Bernadette's Ward	31
OLCHC (Crumlin)	9
Children's University Hospital, Temple St	8
St Finbarr's Ward (Orthopaedics)	3
Neonatal ICU	1

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, 2016. 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. Plans are in progress to transfer these duties to a paediatric day ward which is currently being refurbished and developed. It is hoped this will be running in 2017. 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, and allergy/immunology clinics.

2016 DATA

Number of Patients

The total number of out-patients appointments offered to patients is similar to 2015 (n=6562) at 6512. There were 1816 new (28%) and 4696 return (72%) appointments.

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

Non-Attendance

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

DNA Rates	%	Return
Historical until 2013	20%	30%
2014	7%	24%
(HSE Policy on DNA's introduced + text)		
2015	11%	29%
2016	13%	20%

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

Waiting List

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

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

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

The average wait time is addressed by running extra clinics in available slots where staff and facilities are available. These clinics are run by consultant staff for new patients 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. Note also that the number of long waiters is increasing rapidly.

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

Number of Long Waiters Year End 2016	
12-15 months	n=124
15-18 months	n=60
18-21 months	n=11

Increasing and continuing effort needs to be made to increase the number of out-patient sessions with appropriate capital and staff resources due to the expanding paediatric department. Priorities for 2016 include:

1. Opening of functioning Day Ward within existing space to alleviate pressure on OPD and ward

2. Planning for capital expansion of existing OPD facilities to cater for new specialities and the increasing demand for appointments.

Paediatric Academic Department, NUI Galway

Professor Nicholas Allen

INTRODUCTION

The academic Department of Paediatrics is part of NUI Galway Medical School, located in the Clinical Sciences Institute. The academic team is comprised of Professor, Senior Lecturer, Lecturer, Tutors and Clinical Lecturers. Medical Academies of NUI Galway are situated in affiliated teaching hospitals (Mayo General Hospital, Sligo General Hospital, Letterkenny General Hospital and Portiuncula Hospital Ballinasloe). The majority of paediatric students spend one semester of their fourth medical year attending an Academy.

REMIT OF THE PAEDIATRIC ACADEMIC DEPARTMENT

Undergraduate

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 modalities including bedside tutorials, hands on patient examination, out-patient interactions, interactive sessions, seminars, case presentations, webcasts, problem based learning, and slide shows.
The curriculum is currently delivered in modular format (two modules), one in each semester. During semester one, students are introduced to basic concepts in the practice of paediatrics, whilst semester two introduces knowledge application, in-depth learning and case management. The availability of excellence in clinical exposure and teaching in the affiliated hospital Academies has enabled delivery of parallel programs at each site.

The assessment process includes summative assessments: MCQ exam at the end of module one and a written (modified essay questions) paper and clinical skills OSCE at the end of module two. Formative assessment is an integral component of each semester. Students provide course feedback, incorporated into curriculum development.

The opportunity for exposure to undergraduate research is facilitated via competitive HRB sponsored summer student programme, outside the teaching curriculum, with an opportunity to present at national and international meetings.

Postgraduate

At GUH, postgraduate NCHD education is provided on a daily basis with the assistance of the general paediatric team and hands on consultant led teaching. Educational activities include weekly paediatric case presentations, consultant–led lecture series and journal club meetings. The case presentation session is an opportunity to review cases with valuable learning points. The annual Western Region Education Network (WREN) Paediatric meeting for the various hospitals of Saolta was held in Galway.
All NCHDs complete the Neonatal Resuscitation Paediatrics (NRP) course instructed locally. Monthly perinatal morbidity and mortality meetings are conducted in conjunction with the obstetrics-gynaecology and pathology departments. Postgraduates are encouraged to become involved in research projects during their placements and present at national/international meetings. A specialised paediatric handbook is published by the academic paediatric department for use by paediatric NCHDs to assist with the learning experience. This has been incorporated into an online App which can be downloaded for free on NCHD and students.

ACADEMIC STAFF

Chair: Professor N Allen (Commenced 2016)
Senior Lecturer: Dr. E Moylett
Lecturer: Dr. R Geoghegan

Clinical Lecturers

Galway University Hospital Galway
Dr. D O'Donovan
Dr. O Flanagan
Dr. M Herzig
Dr. E Ryan
Dr. A Lyons

Administration: Ms. D Monroe

School of Medicine, Academy Lecturers
Dr. M O'Boyle (Letterkenny)
Dr. J Gleeson (Sligo)
Dr. S Pathak (Castlebar)
Dr. A Flaherty (Portiuncula)

Mayo General Hospital, Honorary Clinical Lecturers
Dr. M O'Neill
Dr. H Stokes

Portiuncula Hospital, Honorary Clinical Lecturers
Dr. P Cahill
Dr. F Neenan
Dr. R Cooke
Dr. P Curran
Dr. J Nelson

Sligo General Hospital, Honorary Clinical Lecturers
Dr. H Greaney
Dr. R Tummaluru
Dr. D Gallagher

Letterkenny Hospital, Honorary Clinical Lecturers
Dr. M Thomas
Dr. B Power
Dr. A Khan

Undergraduate Academic Performance
The external examiner for undergraduate paediatric examination and curriculum review (2016) was Professor Jürgen Schwarze, Edward Clark Chair of Child Life and Health, Consultant Paediatrician and Immunologist, University of Edinburgh.

A total of 224 students completed the 4MB3 course.

FINAL PAEDIATRIC RESULTS 2015-2016:		
First Class (H1)	3.9%	(9)
Second Class (H2)	39.7%	(91)
Pass	54.1%	(124)
Fails	2.2%	(5)

NATIONAL HENRY HUTCHINSON'S INTERVARSITY AWARDS (PAEDIATRICS):

Clarissa Ern Hui fang 1st prize (NUIG)
Sean Brennan 2nd prize (NUIG)

RESEARCH/AUDIT

Publications

- Perrem LM, Fanshawe TR, Sharif F, O'Neill MB. A national physician survey of diagnostic error in paediatrics. Eur J Pediatr 2016; 175(10):1387-92.
- Hehir, L, Moylett, E. A Case of Colonic Atresia with the Passage of Meconium in Galway University Hospital; A Case Report. Ir J Med Sci June 2016.
- McKnight K, Baggot R, Moylett E. IgA Nephropathy Masquerading as Post Streptococcal Glomerulonephritisin a 10-Year-Old Boy. Ir J Med Sci June 2016.
- Fallon A, Van der Putten D, Dring C, Moylett EH, Fealy G, Devane D. Baby-led compared with scheduled (or mixed) breastfeeding for successful breastfeeding. Cochrane Database Syst Rev 2016 Sep 28;9:CD009067.
- Allen NM, Conroy J, Deonna T, et al. Atypical Benign Partial Epilepsy of Childhood: Acquired Lexical Semantic and Autistic Spectrum Disorder. Epilepsy and Behaviour Case Reports 2016;6:42-8.
- Allen NM, Conroy J, Lynch B, Gorman K, O'Halloran E, Shahwan A, Lynch SA, Lynch B, Ennis S, King MD. Novel European SLC1A4 Variant: Infantile Spasms and Population Ancestry Analysis. J Hum Genet 2016;61(8):761-4.
- Allen NM, Hacohen Y, Palace J, Beeson D, Vincent A, Jungbluth H. Salbutamol-responsive fetal acetylcholine receptor inactivation syndrome. Neurology 2016 Feb 16;86(7):692-4.
- Allen NM, Jungbluth H. Lyme Neuroborreliosis: A Potentially Preventable Cause of Stroke. J Pediatr. 2016 Mar;170:334-e1.
- Allen NM, Conroy J, Shahwan A, Lynch B, Correa RG, Pena SD, McCreary D, Magalhães TR, Ennis S, Lynch SA, King MD. Unexplained early onset epileptic encephalopathy: Exome screening and phenotype expansion. Epilepsia 2016 Jan;57(1):e12-7.
- Allen NM, Conroy J, Gorman KM, Shahwan A, Ennis S, Lynch SA, King MD NAPB - a novel SNARE-associated protein for early-onset epileptic encephalopathy. Clin Genet 2016 Feb;89(2):E1-3.

Research / Audit Presentations

Galway University Hospital

A Cleary, G Ryan, D Keady, NM Allen, E Moylett. Paediatric Influenza Activity 2015-2016: Clinical Presentation, Complications and Burden of Disease in A Hospital Based Setting.. Irish Paediatric Association, Dublin, Sept 2017.

A Cleary, NM Allen. More than just “a touch of the flu”: acute necrotizing encephalopathy of childhood. Poster. Irish Paediatric Association, Sept 2017.

Teh JW, Pereira R, Hanahoe B, Moylett E. The Imprudent Utilisation of Blood Cultures in the Paediatric Setting when Discharging Patients from the Emergency Department. IPA, Dublin, Sept 2016.

M Murphy, D Townley, E Moylett. Necrotizing VZV Retinopathy in an Immune Competent Paediatric Patient: Retinal Detachment and Unilateral Visual Loss.

M Crealey, S Alamin, V Tormey, E Moylett. Clinical Presentation of Cashew Nut Allergy in a Paediatric Cohort Attending an Allergy Clinic in the West of Ireland.

Sheehan J, Coleman K and Moylett E. Smart Phone App Development and Implementation for a Paediatric Department: 1 Year Retrospective Analysis.

M Crealey, S Alamin, V Tormey, E Moylett. Clinical Presentation of Cashew Nut Allergy in a Paediatric Cohort Attending an Allergy Clinic in the West of Ireland. European Academy of Allergy and Clinical Immunology, Vienna June 2016.

An Audit of Oral Fluid Challenge Management in Paediatric ED. E Umana, E Moylett.

Mayo University Hospital

Brennan J, O'Neill R, Branagan A, O'Neill MB, McGowan D. The use of immature neutrophils in the diagnosis of early onset neonatal sepsis. Irish Paediatric Association, Dublin Sept 2016.

Gorman I, O'Neill MB. Paediatric Emergency Department Attendance in an Irish Peripheral Hospital. Irish Paediatric Association. Dublin Sept 2016.

Branagan A,Bergin N, Gorman I, O'Neill MB. Parental Opinions of Childhood Infections and Antibiotic use. Irish Paediatric Association Dublin Sept 2016

RESEARCH STUDENTS

Undergraduate

Jia Wei Teh and Richard Pereira (Summer 2016): The Imprudent Utilisation of Blood Cultures in the Paediatric Setting when Discharging Patients from the Emergency Department.

Postgraduate

MD Student: Dr. Zakaria Barsoum: 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. Edina Moylett.
Masters: Dr. Rema Buzied, MSc: Parental Knowledge and Satisfaction with Type 1 Diabetes in the Paediatric Setting. Edina Moylett.

OTHER PROJECTS

Epilepsy and Human Stem Cell Models. PI, Nicholas Allen. Seed Grant Award, Children's Fund for Health, Dublin.

INVITED PRESENTATIONS

ICGP, Winter Meeting, Athlone, November 2016. Edina Moylett

Paediatric Meeting, Food Allergy Update, Wexford, 2016. Edina Moylett

Lighthouse: Beyond the Genome: Providing Individual Services and Care in Epilepsy Meeting: Roundwood, CO. Laois, Sept 2016. Nicholas Allen

Childhood Epilepsy: Overview and Update. Western Region Education Network. 27th Paediatric Annual Meeting. Ardilaun Hotel, Galway Ireland. April 15th 2016. Nicholas Allen.

Epilepsy Update: Autism and Epilepsy Day. Epilepsy Ireland. Connaught Hotel. March 2016. Nicholas Allen.

Paediatricians: Where do we come from and where are we going? JD Kennedy Research Day: Memorial Guest Lecture. 8th Oct 2016, NUI Galway. Nicholas Allen

Gynaecological Surgery Report

Professor John J Morrison and Ms. Shaijy Avarachan

The surgical procedures performed during 2016 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.

	2013	2014	2015	2016
LSCS	969	924	853	948
Laparoscopy	138	131	109	147
ERPC	241	238	184	140
Ectopic pregnancy	20	28	17	11
Hysteroscopy	552	551	602	585
Tubal ligation	18	45	25	16
Laparotomy	40	40	27	37
Wertheim’s /Radical hysterectomy	3	2	2	9
Omentectomy	0	21	0	0
Node sampling	0	0	3	0
Abdominal hysterectomy ¬+/- BSO	44	90	41	62
Myomectomy	19	7	5	19
Vaginal hysterectomy	4	2	7	4
Vaginal hysterectomy and PFR	22	20	8	11
Pelvic floor repair	30	39	34	32
TCRE	14	18	9	10
Endometrial ablation	25	28	30	27
Cystoscopy	23	46	26	21
TVT/TOT	13	16	26	27
Division of TVT	0	0	3	0
Sacrocolpopexy	0	0	0	4
Macroplastique collagen	2	0	0	3
Revision of vaginal mesh	0	0	0	0
Vulvectomy	3	5	1	5
LLETZ	18	16	10	5
Bartholins	15	12	10	9
Vulval Biopsy	14	31	17	15
Laparoscopic Hysterectomy	16	19	30	35
3rd Degree tear repair	40	42	39	36
Lap dye hysteroscopy	142	132	97	117
Mirena insertion	160	131	148	96
Examination under anaesthetic	36	32	20	24
Cervical cerclage/suture	12	19	7	20
Manual removal of placenta	17	34	23	15
Instrumental /vacuum extraction delivery	73	66	39	35
Fenton’s procedure	0	2	0	4
Caesarean hysterectomy	0	0	1	2
Ovarian debulking	9	28	12	20
Laparoscopic BSO				34
Major	1556	1437	1376	1470
Minor	1029	1133	992	1047
Total	**2585**	**2570**	**2368**	**2517**
Elective cases	1807	1873	1589	1803
Emergency cases	778	697	779	714
Total	**2585**	**2570**	**2368**	**2517**

Infertility Service Report

Dr. Una Conway and Ms. Jenny Cloherty

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

The public infertility clinic in the Maternity OPD is now run by Dr. Una Conway, and at the end of 2015 a new appointment of Dr. Nikil Purandare joined the faculty. Dr. Purandare completed his subspecialty training in the Rotunda Hospital, HARI clinic. With two full time consultants the capacity of the Fertility Out-Patients Clinic has increased by 50%. The outpatient fertility clinic can initiate ovulation induction treatments using clomiphene citrate and where appropriate refers patients GFC for further management. Dr. Conway and Dr. Purandare, along with Dr. Eithne Lowe OBGYN provide supervision of patients undergoing treatment in Galway Fertility Clinic.

Initial assessments for couples and individuals are arranged in the OPD, including Laparoscopic and Hysteroscopic surgery as necessary in the gynaecology theatre at UHG. Endocrinology, Urology, Virology, and Biochemistry support is often necessary with colleagues in those departments.

Andrology diagnoses are carried out in the Galway Fertility Clinic (GFC), whose laboratory performed 1023 semen assessments in 2016. This was a significant increase of 42% on the 2015 total of 717 assessments, primarily due to being the only laboratory in the Saolta area offering a comprehensive semen assessment according to WHO 2010 criteria. Following investigations, a personalised fertility treatment plan is drawn up for each patient. In 2016 almost 700 couples (both private and public patients) attended for investigation diagnoses. GFC specialises in all aspects of assisted human reproduction treatments including ultrasound monitored ovulation induction, intrauterine insemination, in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI). It is fully patient funded, and offers reduced price treatments to patients with a medical card.

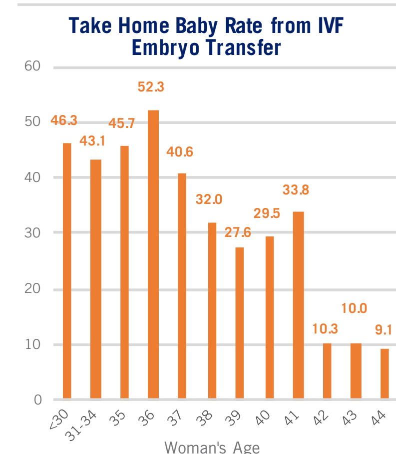
Over the last few years the service saw an increase in patient referrals for single women seeking fertility advice and treatment. GFC can offer treatment involving the use of donor sperm, either by IUI or IVF, under highly regulated guidelines from the EU and HPRA. The clinic has also been granted a licence to freeze eggs for these women, particularly when there is a medical indication. This service started in 2016, and during the first year 10 women have successfully completed egg banking in Galway.

In 2016, GFC completed 643 IVF/ICSI/FER cycles. There were 338 intrauterine insemination procedures and of these 67 involved the use of donor sperm. All donor sperm are imported from Denmark, as there is no donor sperm bank in Ireland.

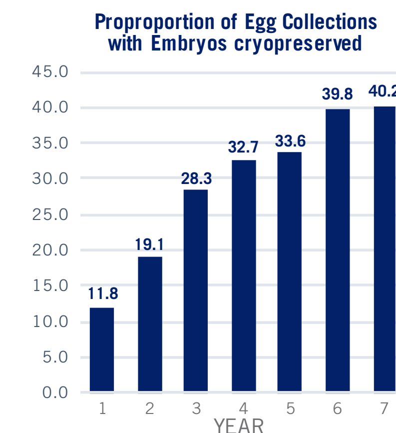
GFC, in conjunction with the Department of Urology, provides sperm extraction from testicular biopsy samples with 21 procedures performed in 2016, with subsequent cryopreservation, for use in future ICSI treatments. GFC offers a long-term semen cryopreservation service to men undergoing chemotherapy and radiotherapy, it also offers this service to men about to start long-term contraindicated medication.

During 2015, 250 babies were born following treatment in GFC, including 35 sets of twins and 2 sets of triplets. The risk of multiple pregnancies has been greatly reduced over the last few years with the increased implementation of an elective single embryo transfer policy. This number includes only pregnancies following embryo transfer (fresh IVF or Frozen embryos), and IUI treatments. Pregnancies following simple ovulation induction treatments are additional to this number.

The attached graph shows the take home baby rates from one fresh transfer, stratified by female age, which is the most important indicator of success.



The cumulative pregnancy rate per cycle of IVF is increasing significantly over the last few years, with over 40% of all cycles resulting in additional embryos being cryopreserved for future treatment. The second graph shows the increase in the proportion of IVF cycles which have additional good quality embryos to cryopreserve. Over the years the technology available in the IVF laboratory has improved, and with the investment in Time Lapse incubation in particular in GFC, the quality of embryos is increasing year on year, leading to an increase in cumulative pregnancy rates for patients.



Urogynaecology Report

Dr. Susmita Sarma

The urogynaecological service continues to expand and develop despite the ongoing shortage of a specialist urodynamics nurse/ midwife. The inability to provide any continence advice or indeed assistance to postnatal and gynaecological women suffering from urinary retention has been highlighted on several occasions. This year saw the reintroduction of sacrocolpopexies to the urogynaecological service in UHG. I am delighted that we are now able to offer a laparoscopic approach to women who need this procedure. I am indebted to Dr. Aoife O'Neill, Consultant Obstetrician Gynaecologist Coombe Women and Children's Hospital, Dublin who has generously given up her time to facilitate mentoring for this procedure. 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. Special thanks are given to Debbie Fellowes and Rachel Clarke, Physiotherapists for their invaluable help.

Urodynamics

In 2016, 126 appointments were sent and 88 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.

Total Urodynamic Investigations: 88

SOURCE OF REFERRALS	
UHG clinic and consultants	70 (79%)
Sligo General Hospital	18 (20.4%)

DIAGNOSIS	
Stress Urinary Incontinence	43 (48.8%)
Mixed Urinary Incontinence	10 (19.3%)
Normal	13 (14.7%)
Detrusor overactivity	19 (21.5%)
Voiding problems	3 (3.4%)

SURGERY	
Tension free vaginal tapes	27
Periurethral Macroplastique	3
Cystoscopy	36
Sacrospinous fixation	2
Colpocleisis	1
Laparoscopic sacrocolpopexy	4

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 (RAMP), Maura Molloy (RAMP), Rachael Comer (CNS), Assumpta Casserly SM, Marguerite Bourke SM.
Healthcare assistant: Karen McGinley

Activity

There were 4036 women attended Galway Colposcopy clinic in 2016, of these 1419 were first visits and 2617 were review appointments. A total of 1309 referrals to Colposcopy were received 811 with abnormal smears and 498 had clinical indication for referral. Non attendance was 4 % amongst first visits and 10% 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. During summer 2016 additional referrals were received from the Limerick as the Limerick Colposcopy were unable to see patients within the recommended waiting times. 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 was a drop in LLETZ treatments (448 v 468 in 2015), 96% of LLETZ treatments had CIN 1 or more (table 1). Cervicalcheck standards were met (>80% of excisions should have CIN on histology). Increased referrals led to an increase in punch biopsies (n=1340 v 1167 in 2015).

HISTOLOGY RESULT	DIAG. BIOPSY (PUNCH)	EXCISION	OTHER eg polyp	2010
Cervical Cancer	15	7	0	22
Adenocarcinoma in situ / CGIN	7	9	0	16
CIN3	96	192	0	288
CIN2	191	118	0	309
CIN1	535	102	0	637
CIN Uncertain Grade	3	0	1	4
VAIN3	4	0	0	4
VAIN2	5	0	0	5
VAIN1	10	1	0	11
HPV / cervicitis only	260	8	2	270
No CIN / No HPV (normal)	200	9	23	232
Inadequate	7	0	0	7
Vaginal Cancer	1	0	0	1
Other	6	0	0	6
Total	**1340**	**446**	**36**	**1822**

Cancer

There were 25 cases of cervical cancer seen at the colposcopy clinic in 2016. The ages of women presenting with cervical cancer ranged from 28 to 75 years but the majority 80% (n=20) were between 30 and 44 years and 20% (n=5) were over 45 years. Two women had cervical cancer diagnosed at age 75, 1 adenocarcinoma and 1 squamous cell carcinoma. There was a big increase in adenocarcinoma of cervix, n=11 (1 of endometrial origin), and 1 adenosquamous carcinoma. There were 13 squamous cell cervix cancers. Treatments for cervical cancer included, repeat LLETZ excision (2 women), Hysterectomy (11), of whom 3 were referred for chemoradiotherapy, a total 14 women were referred for radiotherapy and one woman transferred to St James's Hospital and had Trachelectomy with adjuvant chemoradiotherapy. Of referrals to radiotherapy, 3 had hysterectomy and 1 had trachelectomy pre radiotherapy, the other 10 had advanced disease and were referred to radiotherapy on diagnosis.

Other cancers seen included 2 endometrial adenocarcinoma and 1 vulval cancer.

Service

Midwifery staff from Galway Colposcopy clinic continued a smear clinic at Portiuncula Hospital Ballinasloe on two Friday afternoons per month, 325 women attended in 2016. The outreach clinic saves women from the midland counties having to travel to and park at UHG for follow up smears.

Reporting

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

Summary

The Colposcopy team both clinical and clerical delivered quality assured service to women in the West of Ireland and Midlands. Local and National guidelines were adhered to. Patient satisfaction with the service at the Colposcopy clinic and outreach clinic is high and we are grateful to Portiuncula Hospital for their continued support. The large amount of high grade precancer that is being detected and treated in our Colposcopy clinic will help reduce the incidence of cervical cancer in Irish women. However we continue to see a significant number of cervix cancers in young women and this highlights the limitations of screening including failure to attend for screening and failure to detect changes on smears. The Colposcopy team support the efforts of public health personnel in encouraging first year secondary school girls to avail of the HPV vaccine.

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

Ms. Annmarie McGarry, Ms. Maeve Geraghty, Dr. Andrea Holmes, Dr. Joanne Nelson, Dr. Roger Derham, Ms. Claire Mahon

Attendance re: Galway, Mayo and Roscommon

- There were 75 new attendances at the SATU Galway in 2016
- In 74 (99%) of cases the incident took place within the Republic of Ireland

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

- October was the busiest month, with 10 (13%) patients presenting during this month
- Sunday was the day most frequently reported as being the day the incident occurred with 18 (24%) patients disclosing that the incident occurred on this day
- 75% of incidents were reported as occurring between the hours of 21:00-08:59

Type of Sexual Crime, Assailant, Relationship to Assailant

- 60 (80%) reported that the incident occurred within <7days
- 8 (11%) occurred between >7 days and <1 month
- 7 (9%) occurred >1 month previously
- 65 (87%) patients reported a single assailant was involved, 6 (8%) reported multiple assailants
- 9 (12%) patients reported the assailant was a stranger and for 4 (5%) patients the number of assailants was unknown

Gender, Age Profile, Referral Source

- 71 attendees (95%) were female
- 4 attendees (5%) were male
- The mean age was 25.5 years, the youngest patients were 14, the eldest patient was > 50 years (the minimum age criteria is 14 years)
- 54 (72%) patients were referred by An Garda Síochána, 13 (17%) self referred, 4 (5%) were referred by their GP, 2 (3%) were referred by the RCC and 2 (3%) were referred by another source

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

54 (72%) patients reported the incident to An Garda Síochána, of these:

- 48 (64%) attended SATU < 7days, of these,
- 38 (79%) were within < 72 hours, with
- 30 (62%) of the group presenting within 24 hours of the incident

Support Worker in Attendance

- 58 cases (77%) had a Support Worker from the RCC in attendance

Physical Trauma

- 28 (37%) patients had physical trauma, of these 26 (35%) patients had superficial injuries, 1 (1.5%) patient attended the ED with minor trauma and 1 (1.5%) patient attended the ED with major trauma

Alcohol and Drug Use

- 55 (73%) patients had consumed alcohol in the previous 12 hours, of these, 49 (65%) patients had consumed > 4 units of alcohol
- 6 (8%) patients had taken illegal drugs
- In 3 (4%) cases, the patient reported having taken both alcohol and illegal drugs
- 25 (33.3%) patients were concerned that drugs had been used to facilitate sexual assault
- 7 (9%) patients were unsure if a sexual assault had occurred

Emergency Contraception (EC)

- 58 (77%) female patients were seen within 7 days of the incident, of these 24 (41%) patients were given PCC

Sexually Transmitted Infection Prophylaxis and (STI) Screening

- 56 (75%) patients received Chlamydia prophylaxis
- 49 (62%) had Hepatitis B immunisation programme commenced
- 2 (3%) received PEPSE for HIV
- All patients were offered screening for STI's and 33 (44%) patients of patients attended Galway SATU for follow up
- There was one positive STI screen in 2016: Chlamydia infection was detected

Attendance At Galway CASATS 2016

Attendance At Galway CASATS

- There were 77 requests for SATU services in 2016
- There were 73 attendances at the CASATS, Galway. 4 patients changed their mind re: availing of the service and did not attend or cancelled scheduled appointments. These patients were supported by other agencies (TÚSLA).
- In all 73 cases the alleged incident took place within the Republic of Ireland.

Attendance re: Month and Time of Day

- October was the busiest month with 15 (21%) of cases presenting in this month
- Thursday was the busiest day with 28 (38.5%) examined on that day
- 13 (18%) were seen out of hours (between 17.00-08.00 or over the weekend)

Type of Alleged Sexual Crime, Assailant, Relationship to Assailant

- In 5 (7%) cases multiple assailants were alleged to have been involved.
- In 5 (7%) cases the alleged perpetrator/s were under 13 years
- In 11 (15%) cases the alleged perpetrator/s were between 13-17 years
- In 39 (55%) cases an adult assailant was suspected of instigating sexual abuse.
- 35 (49%) cases involved adult male assailants, of whom 14 (39%) were the child's biological father.

- 3 (4%) cases involved adult female assailants.
- One case involved an adult male and an adult female assailant

Gender, Age Profile, Referral Source

- 56 (77%) patients were female, 17 (23%) male
- The age mean was 6.9 years, the youngest 1 year old and the eldest 17 years old
- 33 (45%) were referred by An Garda Síochána, 21 (29%) were referred by social workers, 13 (18%) were referred by a Hospital Consultant and
- 6 (8%) were referred by a GP

Time Frame from Incident until Examination

- 18 (24.5%) presented within < 7days of alleged assault. 13 (72%) of those 18 cases had forensic sampling undertaken.
- Of the 18 patients presenting within < 7 days of assault, 12 (16.5%) were within < 72 hours with 4 (5.5%) of these cases presenting within 24 hours
- 10 (13.5%) cases presented between 7-28 days after most recent alleged sexual contact
- In 17 (23%) cases the allegation was of historical abuse i.e. >1 month
- An exact time frame was not specified in 28 (39%) cases

Support Worker in Attendance

- 63 (86%) patients had a CARI Child and Family Accompaniment Volunteer present

Sexually Transmitted Infection Prophylaxis and (STI) Screening

- 64 (87.5%) patients had an STI screen
- 6 (8%) patients commenced a Hepatitis B vaccination schedule
- Post coital contraception or HIV PEPSE were not required by any CASATS patients in 2016

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

- 5 (7%) cases involved child assailants
- One female child assailant was reported. All other child assailants were male
- 2 (3%) cases involved 2 child assailants

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

- 11 (15%) cases involved teenage assailants
- All teenage assailants were male
- 2 (3%) cases involved more than one teenage assailant

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

- In 39 (55%) cases adult males were suspected of instigating sexual abuse of whom 14 (39%) were the child's biological father
- One case involved an adult male and an adult female assailant

Parent Education

Ms. Carmel Connolly

Parent Education activity levels increased dramatically again in 2016.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. The Team facilitates both Antenatal and Postnatal education programmes using a multidisciplinary approach. While our Antenatal and Postnatal programmes offer a wide range of classes (see fig 1.0) there has been a growing demand for one to one consultations especially in the area of Perinatal Mental health which often require repeat visits .To address this need a member of the team successfully completed the level 9 module in 'Perinatal Mental Health' at University of Limerick.

Fig 1.0

CLASS	NUMBER OF CLASSES	TOTAL ATTENDEES
Early Pregnancy Class	12	176
Refresher Class	12	143
Tuesday Evening Couples Classes	36	534
Wednesday Morning Couples Classes	36	521
Thursday Morning Couples Classes	36	464
Wednesday Womens Only Classes	26	617
Postnatal Class	180	1354
Postnatal Reunion Class	12	181
One Day Programme	29	779
Labour Ward Tours	686	3058
Antenatal Breastfeeding Workshops (40% of total primip initiation group)	19	257
One to One Sessions		**10-25 per month, many requiring repeat visits**

Achievements

- Provision of Antenatal and Postnatal Education Programmes to expectant women and their partners.
- Individualised Education and support provided when a need is identified.
- All of the women on the Waiting List were offered a one day programme.
- Participation at the International Day of the Midwife. Staff were invited to 30 minute Lunchtime Mindfulness sessions, and Family Planning updates were facilitated during the morning.
- 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.
- Participation in the Examination of Midwifery Students in Breastfeeding Osces at NUIG.

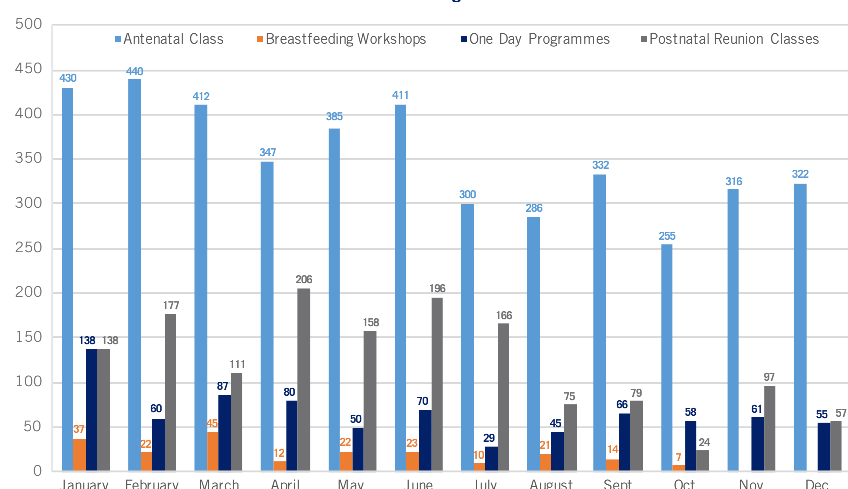
Challenges

While there were many challenges throughout the year such as the growing demand for classes and reduced room capacity, the main challenge was the loss of a member of staff in July due to redeployment. In order to meet the needs of the service, priority was given to the women who had booked their Antenatal Education programmes six months in advance on the on-line booking system. Consequently, this resulted in the reduction in the number of postnatal classes from five to two per week. It also resulted in the reduction in availability of Antenatal Breastfeeding Workshops in the latter part of the year. Waiting Lists were managed by offering one day programmes.

When the NATIONAL MATERNITY STRATEGY 2016 – 2026 was launched, section 5.6.2.1 (ANTENATAL EDUCATION) stated that "a comprehensive antenatal education programme benefits women and their partners". Antenatal education needs to be interactive and participative, providing education in small groups in local communities.

Actions needed going forward to meet the population needs of the Maternity Strategy:

- A bigger venue to meet the needs of the women and their partners
- Midwife educators to train in Hypnobirthing methods to provide additional tools for women and their partners in preparation for labour and parenthood
- Increase the number of Breastfeeding Workshops
- Communicate information to our Service Users in an electronic format. This format would be accessible 24/7 on the Saolta/www.uhgmaternity.com website with the facility to translate information into the five most common languages as cited in the Maternity Strategy.



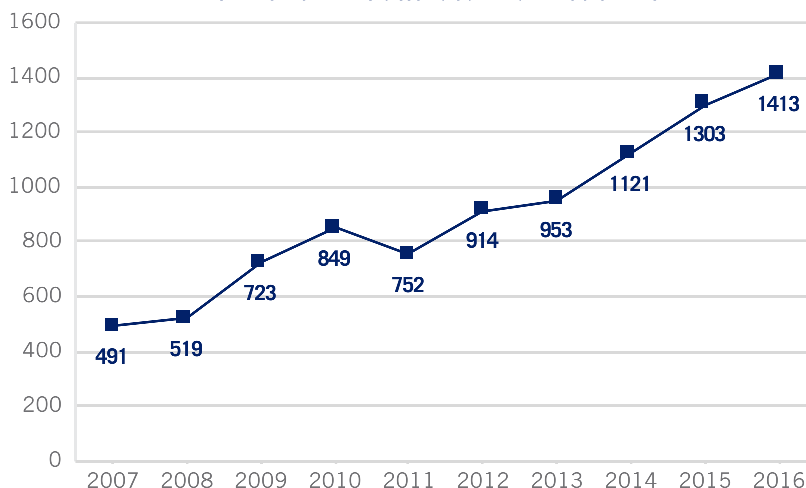
Community Midwives

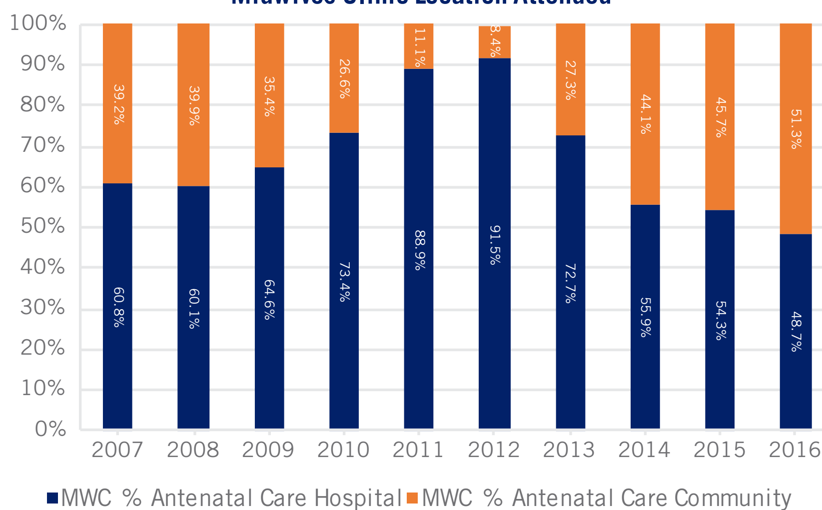
Ms. Jennifer Duggan

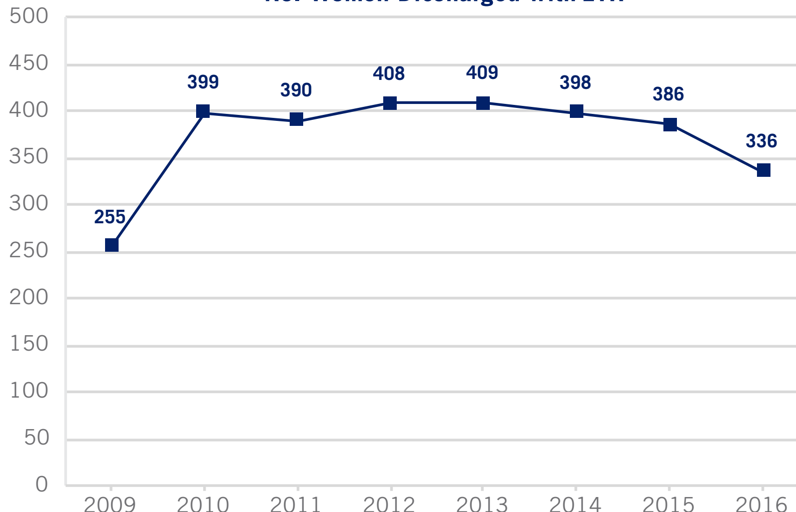
The Community Midwives facilitate midwife-led antenatal clinics in University Hospital Galway (UHG) and at 5 outreach clinics across Galway city and county. These clinics are located in Tuam, Oughterard, Doughiska, Athenry and Gort. The midwives also provide an Early Transfer Home (ETH) service for new 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 2016, the Community Midwives ante natal clinic cared for 48% of the women delivered at UHG. Almost half of these women were seen at outreach clinics, reducing the population attending the maternity department. The ETH service facilitated 336 women and their babies with postnatal care in their own homes until day 5.







Postnatal ward (St. Angelas)

Ms. Heather Helen

Our postnatal ward consists of 30 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, supporting infant feeding, providing parenting support, education and teaching. Other team members working in the unit providing care include Obstetricians, Paediatricians, Physiotherapists, Lactation Consultant, Early Discharge Team, Social Workers, Teen Parent Project officers, Newborn Hearing Screening and PHN Liaison Officers.

A combination of high risk pregnancies, complicated deliveries and a rising caesarean section rate increases the number of women requiring a higher level of care in the postnatal period. The Midwifery staff working on the ward require a high level of knowledge and clinical skills to provide a competent safe standard of care to women and their infants. In the recent year the number of midwives on the ward that are performing venopuncture and IV cannulation has increased which improves the quality of care provided to the women.

Some of the midwifery staff have completed and are in the process of completing their lactation consultancy exams. The benefits to the women and the infants of having more lactation consultants on the ward are evident with 63.9% women breast feeding on discharge and 45.9% of these women exclusively breast feeding. These personnel are also a great resource for staff on the ward. The development and implementation of an infant safety guideline is in progress which promotes safe sleep and focuses on infant safety within the unit.

Environmentally, we are continuing improvements throughout the ward. In 2016 upgrading of the ward included alteration to include the safe storage and access of all medication.

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 invasive Serum Billirubin Tests. As a new initiative the staff of St Angela's and the Paediatric Out Patient Department developed a pathway for infants requiring follow-up investigations once discharged.

When possible Neonatal Newborn Bloodspot Screening (NNBS) was carried out on of babies prior to discharge with the remaining number referred to the community. There is a close link with the newborn screening laboratory in Temple Street Hospital and St Angela's postnatal ward in the follow up of additional neonatal screening if required. Newborn Hearing Screening is available throughout the seven days per week, with of babies receiving screening prior to discharge home.

On discharge from the ward a summary of care is generated by the midwifery staff and forwarded electronically to the PHN's and a hard copy is posted out to the G.P. The midwives on St Angela's ward and midwifery management work closely with health care professionals in the community. A committee of relevant stakeholders within University Hospital Galway and Primary Care Team meet at regular intervals to provide a link between the PHN and Hospital setting.

Breastfeeding Report

Ms. Claire Cellarius

The National Infant Feeding Policy for Maternity and Neonatal Services (revised July 2015) was implemented and communicated to all staff who have contact with pregnant women and mothers. All staff have ready access to this policy which is available on Q-pulse. A mother's/parent's summary of this policy is also displayed in patient areas throughout the unit.

Our hospital midwives are working hard to promote, protect and offer best practice for breastfeeding to mothers and families.

Thanks to their efforts our breastfeeding rates have increased again this year with our Initiation rate increasing from 67.6% to 69.9%. Exclusive breastfeeding rate from birth to discharge is also up from 44.8% to 46.3%.

Staff training continues on a monthly basis with an NMBI accredited breastfeeding refresher course for staff midwives and Public Health Nurses. Our three sponsored staff midwives completed the IBCLC exam in 2016 thus increasing our support for breastfeeding mothers in our Maternity department.

Our Breastfeeding drop in clinic is held every Tuesday afternoon and continues to provide practical help and support to new mums. The attendance rates have increased with Antenatal women also gaining valuable knowledge about breastfeeding. Other lactation services include referrals from Public Health Nurses and GPs as well as our telephone breastfeeding support.

As part of National Breastfeeding Awareness week in October 2016 we invited Transition Year students from four secondary schools in Galway for an information session about the importance and benefits of breastfeeding.

It was a fun, interactive learning event where the students also got to meet and ask questions to a new breastfeeding mother. This initiative was a combined project undertaken by the Saolta Hospitals Breastfeeding forum.

St Catherine's Antenatal Ward Report

Ms. Eithne Gilligan and Ms. Helen Byrnes

St Catherine's antenatal ward staff endeavours to provide holistic evidence based individualised care. It comprising of 18 beds to provide care to complex high risk women who are admitted for close monitoring and observation. The midwifery staff work closely with the multidisciplinary team which includes obstetricians, anaesthetic staff, social workers, physiotherapists, public health nurses, teen parent support services, medical and support staff.

As University Hospital Galway is a training hospital, both undergraduate and higher diploma midwifery students gain valuable experience while on placement on this ward under the supervision and preceptorship of qualified midwives. Forth year medical students also attend for placement under the supervision of midwifery and medical staff.

Ward activity includes:

- 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 minuted ward meetings with midwifery team
- Audits including
  - » Monthly midwifery metrics including documentation, patient satisfaction, medication management, IMEWS.
  - » Fortnightly intravenous cannulation audits
  - » 3 monthly HIQA hygiene audits
  - » Regular hand hygiene audits
- Referral centre for high risk antenatal women within the Saolta group > 20wks gestation
- Antenatal education
- Daily antenatal assessment including care of women in early labour and admitted for induction of labour.
- Outpatient assessment of women requiring infusion therapy during the week. At weekends all women requiring daily CTG, bloods and blood pressure checks attend for care.
- 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 close liaison with the bereavement officer, the mortuary, pathologist, and the multidisciplinary team. Diverse cultural and spiritual needs are tended to in a sympathetic and compassionate manner. The renovated bereavement room provides a comfortable, private family centred space for provision of such care.

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 2016, 2645 women booked for antenatal care a decrease of 96 on the previous year (see table 1)
6 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 all women age of 30 years and over have a routine glucose tolerance test this has greatly increase the activity in the antenatal clinics.

One booking in clinic was introduced for one Consultant Obstetrician and Gynaecologist. This clinic is carried out by the midwives in the outpatients department at this visit a detailed history is taken by the midwives and necessary blood tests taken. The National Policy on Domestic Violence screening continues.

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. Referral to the clinic is made by completing an Antenatal Anaesthetic referral card, during the patient's antenatal visit. All patients attending this clinic have appointments scheduled via a specific referral system, this activity is recorded on the Patient Administration System (PAS) in the hospital .

Gynaecology, Gynaecology / Oncology and Fertility Clinics

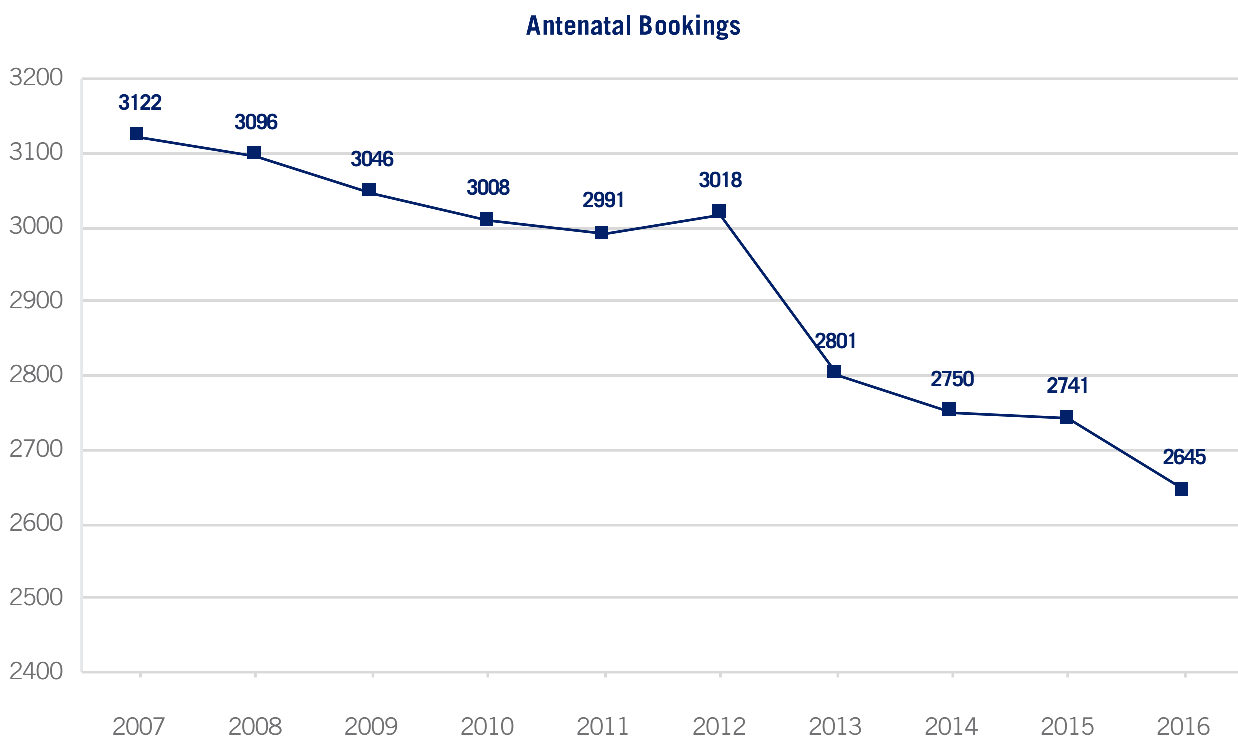
8 gynaecology clinics are held weekly in the outpatients department. We offer a broad range of services for patients presenting with gynaecology problems. The waiting time for an appointment for these clinics is 18-36 months; however the Gynaecology /Oncology patients are prioritised with earlier appointments at approximately 6 weeks. There were 5,788 gynaecology review appointments and 2,304 new attendees.

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

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.

Table 1 First Antenatal Visits



Challenges

- Increasing numbers of newly diagnosed gestational diabetics
- Compliance to the National Standards for Safer Better Maternity Services (2016)

St Monica's Gynaecology Ward Report

Ms. Anne Marie Grealish

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

St .Monicas was awarded a 'Design and Dignity' grant from the Hospice Friendly Hospitals to enable refurbishment of rooms to a designated bereavement room. This project is almost complete and will be officially opened in early 2017 to provide a designated space for women experiencing first trimester early pregnancy loss and end of life care.

The continued support of the Clinical Nurse Specialist (Joanne Higgins) in Gynae Oncology services is an invaluable resource. CNS works directly with the patients and their families to help ease the patient's journey during difficult times. A gynaecology study day was held recently, speakers included experts in the field of early pregnancy and general gynaecology, this study day was very well attended and evaluated.

The patient pathway for gynaecology and early pregnancy care out of hours has been improved. Now all women attending the hospital out of hours present to the Emergency Department where their demographics and attendance to the hospital is recorded immediately on the Patient Administration System; women are then triaged and a plan of care made by the Obstetrics and Gynaecology team.

Conservative and first line treatment of miscarriage in early pregnancy now demonstrates a reduction in the number of women that require ERPCs.

One of the challenges facing St. Monicas ward is the waiting list for women requiring gynaecology oncology service. There is limited access to the theatre in the Maternity Unit, occasionally additional time and theatre space is provided in the main hospital theatre's this can lead to increased ward capacity and caseload. Epidurals are now more frequently administered to these women and is now the preferred first line post operative analgesia. Patients may be referred to the PACU (Post Anaesthetic Care Unit) following major surgeries depending on co morbidities and acuity.

Maternity Admissions

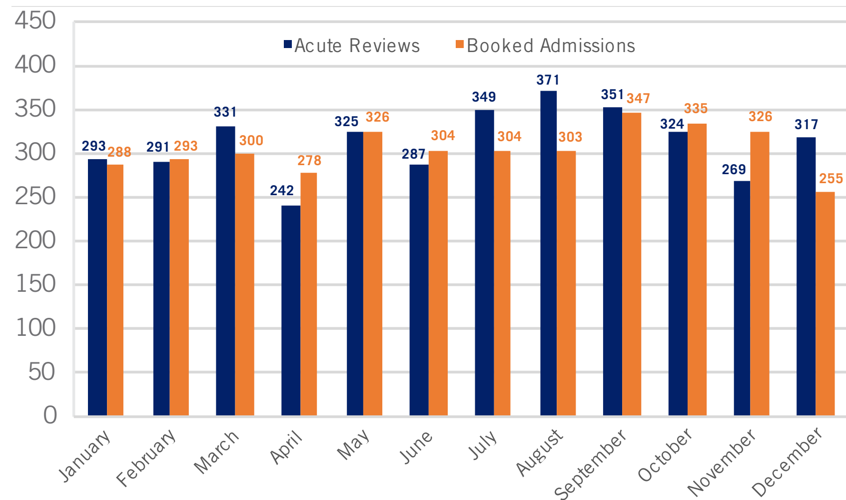
Ms. Claire Fuller and Ms. Annette Burke

The admissions department for obstetrics and gynaecology facilitates elective admissions and emergency reviews. This department underwent many changes in 2016 in conjunction with the opening of the Maternity Day Assessment Unit. The clinical space was reduced to one room four mornings per week which created many challenges in dealing with the large numbers of women attending both electively and acutely each morning. To alleviate this, the pathway for women attending the hospital for elective LSCS was changed following multidisciplinary agreement. Women now have consent for LSCS discussed and signed in the ANC and pre medications are prescribed prior to admission allowing for direct admission to the postnatal ward on the morning of surgery. This provides women with a more streamlined admission procedure and they are prepared earlier for theatre on the day. Communication between the maternity unit and the admissions department has been enhanced by the attendance of the CMM2 or the midwife in charge at the 8am multidisciplinary meeting in the labour ward each morning. This provides a forum to discuss the numbers of women due to attend and attempt to streamline their admission procedure and reduce waiting times for these women.

All midwifery staff completed training in venepuncture and cannulation, speculum examination and preceptorship training in 2016. Medical students and student midwives from both the undergraduate and Higher Diploma groups gain valuable experience in the department while working under the close supervision of qualified staff.

Referrals are received from consultants, NCHD's, GP's, Public Health Nurse's, Midwives Clinic and many women self refer. The department is open 5 days per week, Monday to Friday 08.00am-17.00pm.

7409 women were seen in the department in 2016, 3659 women were booked admissions and 3750 presented acutely, this data is represented on the chart on the top right of this page.



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 inpatient referrals.

Staff 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.
- Consultants and NCHDs

2110 women were reviewed in the EPAU in 2016, an increase from the previous year of 74 women.

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

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

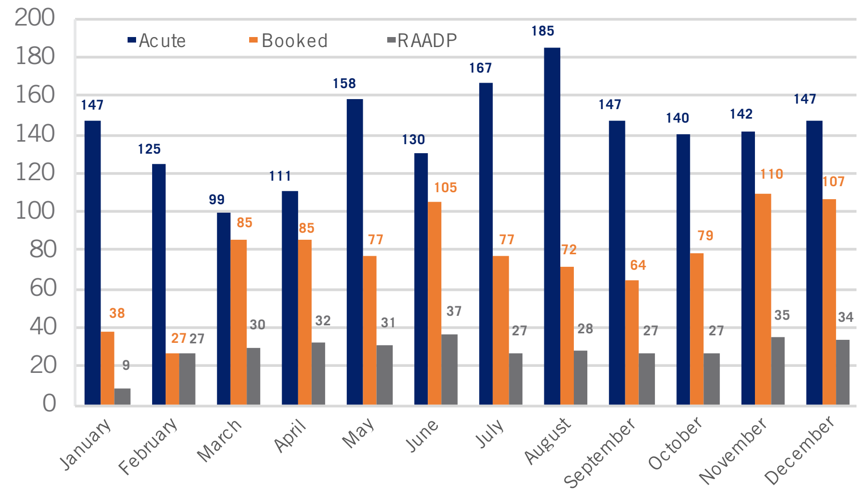
MATERNITY DAY ASSESSMENT UNIT (MDAU)

MDAU opened in January 2016. The aim of the MDAU is to provide care to women who develop potential complications during pregnancy (from 16 weeks gestation) and up to six weeks postnatally. This care is provided on an outpatient basis, thus avoiding unnecessary stays in hospital.

Conditions Managed in MDAU:
- Hypertensive disorders of pregnancy: including mild and moderate hypertension and chronic hypertension controlled on medication.
- Fetal conditions and Fetal Monitoring: 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 16 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.

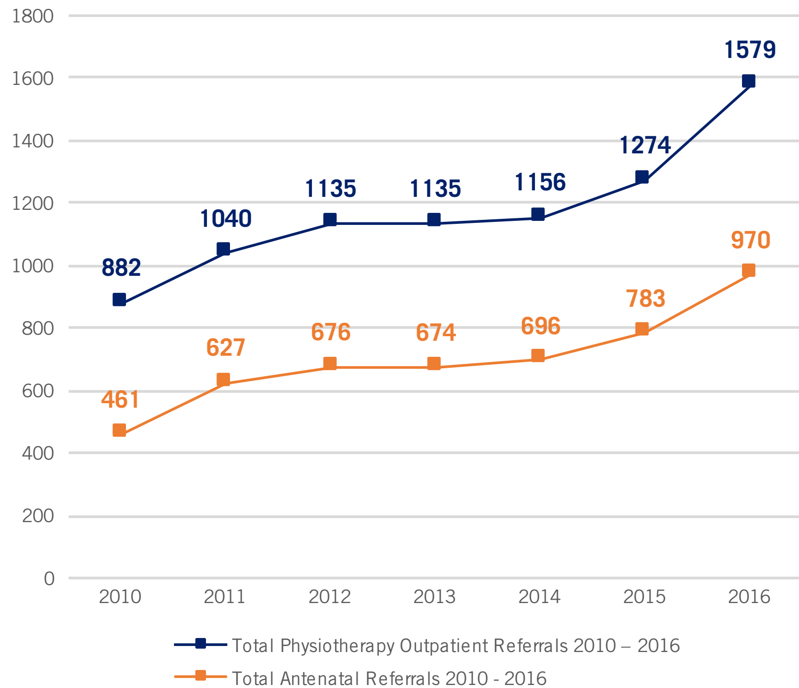
Care is provided as per clinical care pathways and clinical guidelines for specific conditions as appropriate. Pathways are kept under periodic review in light of experience and developments in best practice, locally, nationally and internationally. The following table displays the numbers of women seen in MDAU during its first year in operation. These include booked referrals, acute referrals and women booked for Routine Antenatal Anti-D Prophylaxis.



Physiotherapy Department in Obstetrics and Gynaecology

Ms. Debbie Fallows

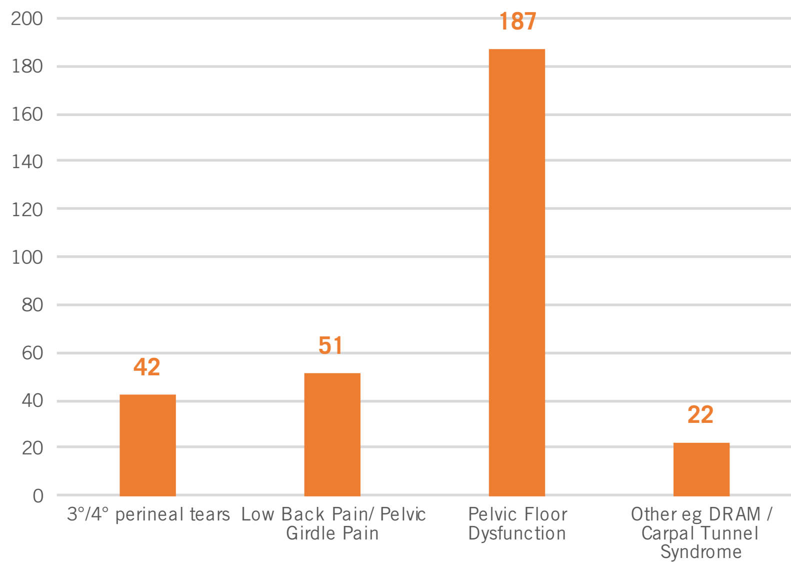
Introduction
Physiotherapy activity levels increased again in 2016. In spite of a stable birth rate, antenatal musculoskeletal referrals increased by 24%, postnatal referrals by 22% and referrals from gynae clinics also increased by 26% on 2015 figures. As a result of these increases, patients referred to physiotherapy with pelvic floor dysfunction will now wait up to 12 months for initial physiotherapy assessment.



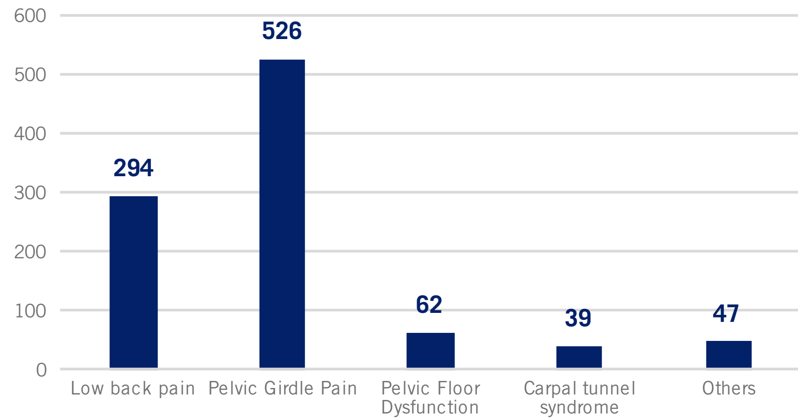
Individual Review

1. Postnatal

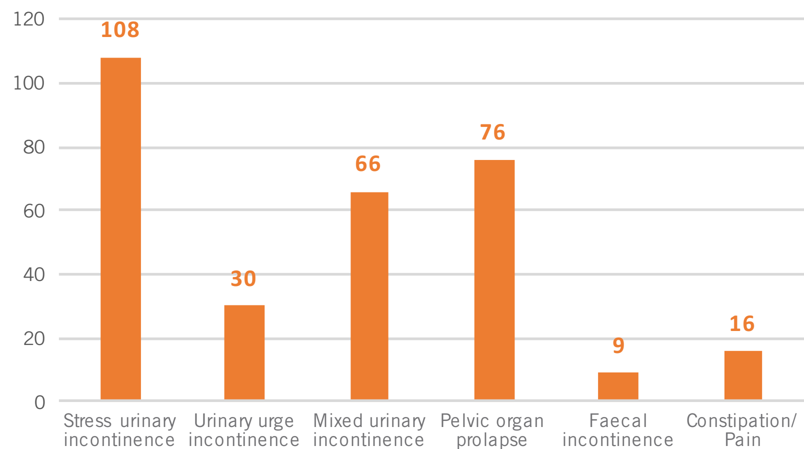
- A total of 304 postnatal outpatients were referred to physiotherapy in 2016, representing an increase of 22% on 2015 rates. The greatest increase was seen in patients referred with pelvic floor dysfunction including urinary / faecal incontinence and pelvic organ prolapse.
- In addition, 755 inpatient postpartum mothers were reviewed and monitored individually following instrumental delivery and /or baby weight >4kgs. These patients represent those at greatest risk of
- 42 patients were treated following 3° or 4° perineal tears.



2. Antenatal
- A total of 970 antenatal patients were referred for physiotherapy in 2016, representing an increase of 24% on 2015 rates. Antenatal referral rate has more than doubled over the last 6 years.
- To manage this increase in activity, weekly exercise-based group sessions are taking place for patients with pelvic girdle pain.
- Urogynaecology clinic.



3. Gynaecology
- A total of 305 patients were referred from gynaecology clinics in 2016 (26% more than 2015 figures). Of these 91(30%) were seen by a physiotherapist directly from the Urogynaecology clinic.



Group Education Sessions

HISTOLOGY RESULT	DIAG. BIOPSY (PUNCH)
Antenatal education session	2501
Early postnatal education sessions	741
Postnatal review session	91
Post gynae surgery session	189
Pelvic Girdle Pain Session	307

Paediatric Physiotherapy Report

Ms. Breda Cunningham and Ms. Aoife McCarthy

A total of 1228 patients were reviewed by the paediatric physiotherapy team in 2016. There was 3% reduction in the number of physiotherapy referrals received in comparison with 2015; 437 in 2016 versus 454 in 2015. However, inpatient referrals represented a larger proportion of referrals and increased by 18% in 2016. This is a consistent trend over the last 3 years (106 in 2014, 170 in 2015 and 201 in 2016). Paediatric orthopaedics moved to St Bernadette's Ward in 2016 and is likely to account for some of these figures.

Referrals for outpatient physiotherapy (n= 236) decreased in 2016. This is an emerging trend over the last few years. This likely due improved linkage and joint working between GUH and PCCC within the paediatric care pathways.

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 0-16 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.
- Ongoing joint working and liaison with colleagues in locally and nationally in paediatric services to ensure patients receive high quality care in a timely manner. This includes regular contact and liaison with colleagues locally in the Saolta Group (Early Intervention Services, PCCC etc) and nationally in specialist children's centres.
- All physiotherapy interventions are carried out in a child friendly environment, suitable to assess movements and optimise patient assessment.
- 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.

Initiatives

- In August 2016, a pilot physiotherapy led Normal Variance clinic was re-started. This was a successful clinic ran in previous years, aimed to reduce Mr. Curtin' orthopaedic paediatric waiting list. In one month, Mr. Curtin's waiting list was reduced by 14%. 26 patients were reviewed and 77% of patients were discharged from the waiting list and required no further investigation. Unfortunately the project was unable to continue due to absence of clerical support.

Staffing

- In May 2016, Aoife McCarthy, Senior Physiotherapist came into post. This post of senior paediatric physiotherapist was vacant from September 2015 to May 2016.
- Due to parental leave and uncovered maternity leave, the paediatric physiotherapy team staffing was reduced by approx 20% each month 2016

Medical Social Work Report

Ms. Maeve Tonge, Senior Medical Social Worker

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

OBSTETRICS AND GYNAECOLOGY

Support and Counselling
- Crisis intervention, mediation and counselling for various personal and family difficulties.
- Counselling and support for women at the time of diagnosis of serious illness.
- Antenatal support for parents following diagnosis of fetal abnormality.
- Identification and support for women with anxiety, low mood, depression in ante natal or postnatal stage.
- Bereavement counselling and support for parents and family members following a pregnancy loss including stillbirth, miscarriage, neonatal death and termination of pregnancy.
- Referral and liaison with services and patients linked with drugs services and or mental health services.

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

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

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

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

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

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

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

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

Team
Maeve Tonge is the senior on the WAC team with clinical work in Paediatrics and provides support and supervision to the team. We have had many staff changes and Jenny Wren now works on the Medical Team, Gillian O'Toole worked with us for a number of months on a temporary contract and is now working in Jigsaw. We appreciated her input while she was here in particular facilitating a 'wellness in pregnancy group' for some women experiencing anxiety in pregnancy. We are delighted that Martina Kinanne joined us during the year from Tusla Children and Family agency in Galway County. We are grateful for her expertise and warmth.

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

Clinical Report for TPSP Galway

Ms. Aileen Davies

TEEN PARENTS SUPPORT PROGRAMME (TPSP) GALWAY

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, GP's schools and self referrals.

The number of referrals made to the service in 2016 was 52.

We provide ongoing support for our young parents over a two year period so our caseload at any one time is 40-50 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 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.

We also run Mother and baby groups and provide information sessions on parenting .i.e. feeding weaning, healthy eating, first aid.

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

Ms. Margaret Coohill and Ms. Anne Fallon

1. INTRODUCTION

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

1.1 Staff of Midwifery Practice Development Unit UHG

PRACTICE DEVELOPMENT CO-ORDINATOR
Margaret Coohill
CLINICAL PLACEMENT CO-ORDINATORS
Carmel Cronolly (Ballinasloe)
Frances Burke (Castlebar)
Karlene Kearns (Sligo)
Barbara Bradley (UHG)
Mary Reidy (UHG)
Aisling Joyce (UHG)
CLINICAL PLACEMENT CO-ORDINATORS
Anne Marie Culkin
Claire Fuller
ADMINISTRATOR
Geraldine Mc Hugh
MIDWIFERY CLINICAL SKILLS FACILITATOR

Deirdre Naughton

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

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

2. MIDWIFERY EDUCATION

2.1 The Higher Diploma in Midwifery
In September 2016, thirteen students commenced the eighteen month Higher Diploma in Midwifery programme at University Hospital Galway.

2.2 Bachelor of Midwifery Science (September 2016)
2016 Yr 1 Class: 23 midwifery students commenced the four year programme with clinical placement in UHG, Castlebar and Portiuncula and Sligo Maternity Hospitals.

2015 Yr 2 Class: 21 midwifery students continued with midwifery placements in all four sites and specialist placements in gynaecology and general theatres in UHG and Portiuncula Hospital. Medical and surgical wards were undertaken at UHG.

2014 Yr 3 Class: 18 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 services in UHG and the community.

2013 Yr 4 Class: 18 midwifery students commenced internship with placements in UHG, Castlebar and Portiuncula Maternity Units.

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

2.4 Community midwifery placements
These placements are achieved by allocation of students to:
- The Midwife Led Antenatal Clinic UHG.
- Midwife Led Outreach Antenatal Clinics UHG.
- Midwife Led Early Discharge Home service at UHG.
- Teenage Pregnancy Project, UHG.

2.5 Assessment Process for Student Midwives
Theoretical and clinical assessments are ongoing throughout the academic year. Theoretical modules are assessed using a variety of methods: course work, examination, MCQ's, poster presentations, role play and OSCE's.

Clinical practice is assessed by achieving clinical competencies, as outlined by An Bord Altranais agus Cnáimhseachais na hÉireann and the School of Nursing and Midwifery NUI Galway. Clinical competencies are assessed by midwives/ preceptors, in collaboration with the clinical placement co-ordinators and link lecturers as appropriate.

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

3. PROFESSIONAL DEVELOPMENT COURSES

3.1 Fetal Monitoring Workshops
Facilitated by practice development team and clinical midwives. The aim of these workshops is to facilitate multi-professional training in fetal monitoring requirements.

3.2 Neonatal Resuscitation Provider Course
Facilitated by neonatal instructors for all staff on an ongoing basis.

3.3 Practical Obstetric Multi-professional 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 repair.

3.5 High Dependency Maternity Care Module
This postgraduate (level 9) module, continued in 2016 for midwives. In 2016, 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 2016: CTG Masterclass, Neonatal Midwifery Overview; Gynaecology and Women's Health and Bereavement.

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 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.

Obstetrics and Gynaecology Academic Report 2015 and 2016

Professor John J Morrison

STAFF

Professor John J Morrison
Head of Department / Consultant

Dr. Geraldine Gaffney
Senior Lecturer / Consultant

Dr. Declan Egan
Clinical Lecturer / Consultant

Dr. Michael O'Leary
Clinical Lecturer / Consultant

Dr. Susmita Sarma
Consultant

Dr. Katharine Astbury
Consultant

Dr. Una Conway
Consultant

Clinical Tutors

Dr. Siobhan Carruthers
Clinical Lecturer/Tutor (Galway)

Dr. Emma Kilgarriff *(Galway)*

Dr. Mehret Berne
Clinical Tutor (Sligo)

Dr. Stephen Sludds
Clinical Tutor (Letterkenny)

Dr. Fiona Kyne
Clinical Tutor (Castlebar)

Dr. Karen Given
Clinical Tutor (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. Michael J Brassil
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. Mohammed
Mayo General Hospital, Castlebar, Co. Mayo

Dr. John Monaghan
Portiuncula Hospital, Ballinasloe, Co. Galway

Dr. Maebh Ni Bhuinneain
Mayo General Hospital, Castlebar, Co. Mayo

Dr. Nandini Ravikumar
Letterkenny General Hospital, Co. Donegal

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 and Gynaecology in 2015 was:

Mr. Andrew Prentice BSc MA MD FRCOG FHEA
Senior Lecturer/ Attachment Director
Consultant Obstetrician and Gynaecologist
University of Cambridge
Cambridge CB2 1TN
UK

PhD Student

Ms. Eva Sweeney

Perinatal Ireland Research Midwife Sonographer

Ms. Edel Varden

Academic Administrator

Ms. Breda Kelleher

Visiting Professor

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

External Examiner

The external examiner for the academic Department of Obstetrics and Gynaecology in 2016 was:

Professor Sean Daly
Trinity College Dublin and Coombe University Hospital
Dolphin's Barn
Dublin 8

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 and Gynaecology includes undergraduate education, postgraduate education, research and the advance of clinical activity within the department. The undergraduate medical student teaching programme for Obstetrics and Gynaecology is carried out within the Department of Obstetrics and 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 2015 and 2016 meetings are listed in the external speakers section below. Finally, the staff members in the Academic Department of Obstetrics and Gynaecology are very grateful to all the midwifery and medical staff who assist in recruitment of patients for ongoing research projects.

ORIGINAL PEER REVIEWED PAPERS 2015

1. Barry SC, Walsh CA, Burke AL, McParland P, McAuliffe FM, **Morrison JJ.**
   Natural history of fetal trisomy 13 after prenatal diagnosis
   Am J Med Genet A. 2015 Jan;167A(1):147-50. doi: 10.1002/ajmg.a.36824.
   PMID: 25339456

2. Crankshaw DJ, O'Brien YM, Crosby DA, **Morrison JJ.**
   Maternal age and contractility of human myometrium in pregnancy
   Reprod Sci. 2015 Oct;22(10):1229-35. doi: 10.1177/1933719115572483.
   PMID: 25759369

3. Cody F, Unterscheider J, Daly S, Geary MP, Kennelly MM, McAuliffe FM, O'Donoghue K, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully EC, Malone FD.
   The effect of maternal obesity on sonographic fetal weight estimation and perinatal outcome in pregnancies complicated by fetal growth restriction
   J Clin Ultrasound. doi: 10.1002/jcu.22273. Epub 2015 Jul 14.
   PMID: 26179577

4. Hession P, Walsh J, **Gaffney G.** *Two cases of primary hyperparahyroidism in pregnancy.*
   BMJ Case report 2015, Jan 27. PMD 24469844.

5. Corcoran S, Breathnach F, Burke G, McAuliffe F, Geary M, Daly S, Higgins J, Hunter A, **Morrison JJ**, Higgins S, Mahony R, Dicker P, Tully E, Malone FD.
   Dichorionic twin ultrasound surveillance: sonography every 4 weeks significantly underperforms sonography every 2 weeks: results of the prospective multicenter ESPRiT study
   Am J Obstet Gynecol. 2015 Oct;213(4):551.e1-5. doi: 10.1016/j.ajog.2015.07.049.
   PMID: 26259909

6. Martin CM1, **Astbury K**, Kehoe L, O'Crowley JB, O'Toole S, O'Leary JJ.
   The use of MYBL2 as a novel candidate biomarker of cervical cancer.
   Methods Mol Biol. 2015;1249:241-51. doi: 10.1007/978-1-4939-2013-6_18.

7. Halling C, Malone FD, Breathnach FM, Stewart MC, McAuliffe FM, **Morrison JJ**, Dicker P, Manning F, Corcoran JD; Perinatal Ireland Research Consortium.
   Neuro-developmental outcome of a large cohort of growth discordant twins.
   Eur J Pediatr. doi: 10.1007/s00431-015-2648-8. Epub 2015 Oct 21.
   PMID: 26490567

8. Hehir MP, **Morrison JJ.**
   Paeoniflorin, a novel heat-shock protein inducing compound, and human myometrial contractility in vitro
   J Obstet Gynaecol Res. doi: 10.1111/jog.12895. Epub 2015 Dec 8.
   PMID: 26643660

9. Sweeney EM, Dockery P, Crankshaw DJ, O'Brien YM, Walsh JM, **Morrison JJ.**
   Human uterine lower segment myometrial cell and nuclear volume at term: influence of maternal age.
   J Anat 2015 225; 6; 625-33.

ORIGINAL PEER REVIEWED PAPERS 2016

1. 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. doi: 10.1016/j.ajog.2016.11.1008. Epub 2016 Nov 11.
   PubMed PMID: 27840142.

2. **Morrison JJ**, Crosby DA, Crankshaw DJ.
   In vitro contractile effects of agents used in the clinical management of postpartum haemorrhage.
   Eur J Pharmacol. 2016 Oct 15;789:328-33. doi: 10.1016/j.ejphar.2016.07.025.
   PubMed PMID: 27423315.

3. Hehir MP, Breathnach FM, McAuliffe FM, Geary MP, Daly S, Higgins J, Hunter A, **Morrison JJ**, Burke G, Higgins S, Mahony R, Dicker P, Tully EC, Malone FD.
   Gestational hypertensive disease in twin pregnancy: Influence on outcomes in a large national prospective cohort.
   Aust N Z J Obstet Gynaecol. 2016 Oct;56(5):466-470. doi: 10.1111/ajo.12483.
   PubMed PMID: 27302243

4. O'Sullivan EP, Avalos G, O'Reilly MW, Dennedy MC, **Gaffney G**, Dunne F; Atlantic DIP collaborators.
   Erratum to: Atlantic Diabetes in Pregnancy (DIP): the prevalence and outcomes of gestational diabetes mellitus using new diagnostic criteria.
   Diabetologia. 2016 Apr;59(4):873. doi: 10.1007/s00125-016-3888-5.
   PubMed PMID: 26857831

5. Hehir MP, **Morrison JJ.**
   Paeoniflorin, a novel heat-shock protein inducingcompound, and human myometrial contractility in vitro.
   J Obstet Gynaecol Res.2016 Mar;42(3):302-6. doi: 10.1111/jog.12895.
   PubMed PMID: 26643660.

6. Halling C, Malone FD, Breathnach FM, Stewart MC, McAuliffe FM, **Morrison JJ**, Dicker P, Manning F, Corcoran JD; Perinatal Ireland Research Consortium.
   Neuro-developmental outcome of a large cohort of growth discordant twins.
   Eur J Pediatr. 2016 Mar;175(3):381-9. doi: 10.1007/s00431-015-2648-8.
   PubMed PMID: 26490567.

7. Cody F, Unterscheider J, Daly S, Geary MP, Kennelly MM, McAuliffe FM, O'Donoghue K, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully EC, Malone FD.
   The effect of maternal obesity

on sonographic fetal weight estimation and perinatal outcome in pregnancies complicated by fetal growth restriction. *J Clin Ultrasound*. 2016 Jan;44(1):34-9. doi: 10.1002/jcu.22273. PubMed PMID: 26179577

8. Setyonugroho W, Kelly M, Kennedy KM, Flynn E, Geoghegan R, Murphy R, **Morrison J**, Hayes P, Kropmans T. The effect of language on the assessment of communication skills using a standardised measurement in OSCEs. *17th Ottawa Conference and the Australian and New Zealand Association for Health Professional Educators (ANZAHPE) Conference*, Perth, Australia; March 2016

SELECTION OF PAPERS PRESENTED/PUBLISHED ABSTRACTS

1. A stereological study of the vasculature of term human myometrium: the effect of maternal BMI, age and parity. Eva M. Sweeney , **John J. Morrison**, Denis J. Crankshaw , Yvonne O'Brien, Peter Dockery. Anatomical Society Winter Meeting 2015, Cambridge UK.

2. The anatomy of the human myometrium: A stereological approach. Peter Dockery, Eva Marie Sweeney, Crankshaw J Denis and **Morrison J John**. April 2015 The FASEB Journal vol. 30 no. 1 Supplement 1045.4 Presented at Experimental Biology, San Diego, USA.

3. A stereological study of the Extracellular Matrix in Human Myometrium at term. Laura McCann 3 Eva M. Sweeney 5, **John J. Morrison** 2, Denis J. Crankshaw 4, Yvonne O'Brien 2, Peter Dockery 1 Anatomical Society Summer Meeting 2015, Brighton, UK.

4. Kent E, Breathnach F, Burke G, McAuliffe F, Geary M, Daly S, Higgins J, Hunter A, **Morrison JJ**, Higgins S, Mahony R, Dicker P, Manning F, Tully E, Malone F. Perinatal outcome in twins discordant for umbilical arterial doppler abnormalities (2015). Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

5. Crosby D, Ahmed S, Razley A, **Morrison JJ**. Obstetric and neonatal characteristics of pregnancy and delivery for infant birthweight >+5 kg (2015). Presented at Junior Obstetrics and Gynaecology Society Meeting, RCPI, Dublin.

6. Hehir M, Breathnach F, McAuliffe F, Geary M, Daly S, Higgins J, Dornan J, **Morrison JJ**, Burke G, Higgins S, Dicker P, Mahony R, Malone F. Gestational hypertensive disease in twin pregnancy: influence on outcomes in a large national prospective cohort. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

7. Corcoran S, Unterscheider J, Daly S, Geary M, Kennelly M, McAuliffe F, O'Donoghue K, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. Fetal growth restriction co-existing with gestational diabetes – impact on perinatal outcome: results of the multicenter PORTO study. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

8. O'Connor H, Unterscheider J, Daly S, Geary M, Kennelly M, McAuliffe F, O'Donoghue K, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. Comparison of asymmetric versus symmetric IUGR – results from a national prospective trail. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

9. Anglim B, Walsh J, Daly S, Unterscheider J, Geary M, O'Donoghue K, Kennelly M, McAuliffe F, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. Cardiovascular Doppler assessments in IUGR: are they associated with adverse perinatal outcome? Results from the multicenter prospective PORTO study. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

10. Hehir M, Unterscheider J, Daly S, Geary M, O'Donoghue K, Kennelly M, McAuliffe F, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. The influence of growth restriction on mode of delivery: results from a multi-center prospective cohort. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

11. Regan C, Unterscheider J, Daly S, Geary M, O'Donoghue K, Kennelly M, McAuliffe F, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. The effect of maternal cigarette smoking on pregnancy outcome in FGR. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

12. Monteith C, Mullers S, Unterscheider J, Flood K, Breathnach F, Daly S, Geary M, Kennelly M, McAuliffe F, O'Donoghue K, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F.Is a normalizing cerebro-placental ration (CPR) a potential predictor for adverse outcome in intrauterine growth restriction: results of the multicenter PORTO study. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

13. Corcoran S, Breathnach F, Burke G, McAuliffe F, Geary M, Daly S, Higgins J, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. Dischorionic twin ultrasound surveillance – four-weekly significantly underperforms two-weekly ultrasound: results of the prospective multicenter ESPRIT study. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

14. Flood K, Unterscheider J, Daly S, Geary M, Kennelly M, McAuliffe F, O'Donoghue K, Hunter A, **Morrison JJ**, Burke G, Dicker P, Tully E, Malone F. The role of brainsparing in the prediction of adverse outcomes in IUGR foetuses: results of the multicenter PORTO study. Presented at SMFM, 35th Annual The Pregnancy Meeting: Am J Obstet Gynecol 2015, Vol 212; Issue 1, Suppl S1-S456.

POSTGRADUATE STUDY DAY LECTURES

January 2015

Title:
Physiological or not? The use of Early Warning Systems in obstetrics

Speaker:
Dr. Patrick Maguire, UCD Research Fellow, Coombe Women and Infants University Hospital, Dublin

February 2015

Title:
Severe unexplained epilepsy of infancy: Moving towards an explanation

Speaker:
Dr. Nicholas Allen, Paediatric Neurology Fellow, Evelina Children's Hospital, London

March 2015

Title:
Oxytocin use in Ireland

Speaker:
Ms. Mary Godfrey, Clinical Risk Advisor, Clinical Indemnity Scheme, State Claims Agency, Dublin

November 2015

Title:
The pros and cons of an ambulatory gynaecology service

Speaker:
Dr. Meabh Ní Bhuinneáin, Obstetrics and Gynaecology Consultant, Mayo General Hospital, Castlebar, Co Mayo

April 2016

Title:
Birth injury litigation, the most common causes of complaint

Speaker:
Mr. Michael Boylan, Partner
Augustus Cullen Law, 18 Bow Street, Smithfield, Dublin 7

May 2016

Title:
Multidisciplinary Management of Pierre Robin Sequence

Speakers:
Mr. David Orr, Consultant Paediatric Plastic Surgeon
Laura Duggan, Cleft Coordinator
Our Lady's Children's Hospital Crumlin

18TH ANNUAL WESTERN OBSTETRICS AND GYNAECOLOGY SOCIETY POSTGRADUATE MEETING

March 2015

Theme: Education, Research and Clinical Practice

Title:
RCOG Council and the Irish Consultant

Speaker:
Professor John Morrison, Department of Obstetrics and Gynaecology, NUI Galway/Galway University Hospital

Title:
Severe Maternal Morbidity: What Lies Beneath?

Speaker:
Dr. Bridgette Byrne, Consultant Obstetrician and Gynaecologist, Coombe Women's Hospital, Dublin

Title:
Laparoscopic Approach to Urogynaecology

Speaker:
Dr. Aoife O Neill, Consultant Urogynaecologist,
Coombe Women's Hospital, Dublin

Title:
21 years of the Galway Fertility Unit

Speaker:
Dr. Declan Egan, Consultant Obstetrician and Gynaecologist, Galway University Hospital

19TH ANNUAL WESTERN OBSTETRICS AND GYNAECOLOGY SOCIETY POSTGRADUATE MEETING

March 2016

Theme: Education, Research and Clinical Practice

Title:
Critical care in obstetrics – what it is and why do we need it

Speaker:
Professor Fionnuala McAuliffe
National Maternity Hospital, Holles Street, Dublin

Title:
EPAU and the development of a diagnostic Gynae service

Speaker:
Dr. Tom O'Gorman
Consultant Obstetrician Gynaecologist, University Hospital Galway

Title:
Male Infertility: Quality or Quantity?

Speaker:
Dr. Nikhil Purandare
Consultant Obstetrician Gynaecologist and Reproductive Medicine Subspecialist,
University Hospital Galway

Title:
The Establishment of a National GTD Service

Speaker:
Dr. John Coulter
Gynaecological Oncologist,
Cork University Hospital

UNDERGRADUATE STUDENT AWARDS

Henry Hutchinson Stewart Medical Scholarship 2015

Eléin Thompson, 1st prize in Obstetrics and Gynaecology

Henry Hutchinson Stewart Medical Scholarship 2016

Aisling Hennebry, 3rd prize in Obstetrics and Gynaecology

Quality and Safety Womens and Children's Directorate UHG

Ms. Gemma Manning

There is an active approach to incident and complaint reporting within the Womens and Childrens Directorate (W&C) in UHG. The aim is to encourage a positive approach from the whole service towards incident and complaint reporting with a view to progressing quality of care and enhancing patient safety and satisfaction.

Incidents and complaints are reported via the Q-Pulse computerised system. Q-Pulse had been upgraded and all 7 hospitals within the Saolta Group are interphased and now use the Q-Pulse system.

All incidents and complaints reported on Q-Pulse in the W&C Directorate UHG are reviewed forthnightly by the local directorate team and are managed by the various members of the multidisciplinary team, the National Incident Management System (NIMS) are informed when required. Serious incidents are escalated to the Serious Incident Management Team (SIMT) meeting which is held monthly and actions are agreed by the multidisciplinary team.

W&C Directorate have all policies, procedures and gulidelines (PPG'S) on the document module of Q-Pulse; National Guidelines , W&C Group wide PPG's and Local/site specific PPG's.

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

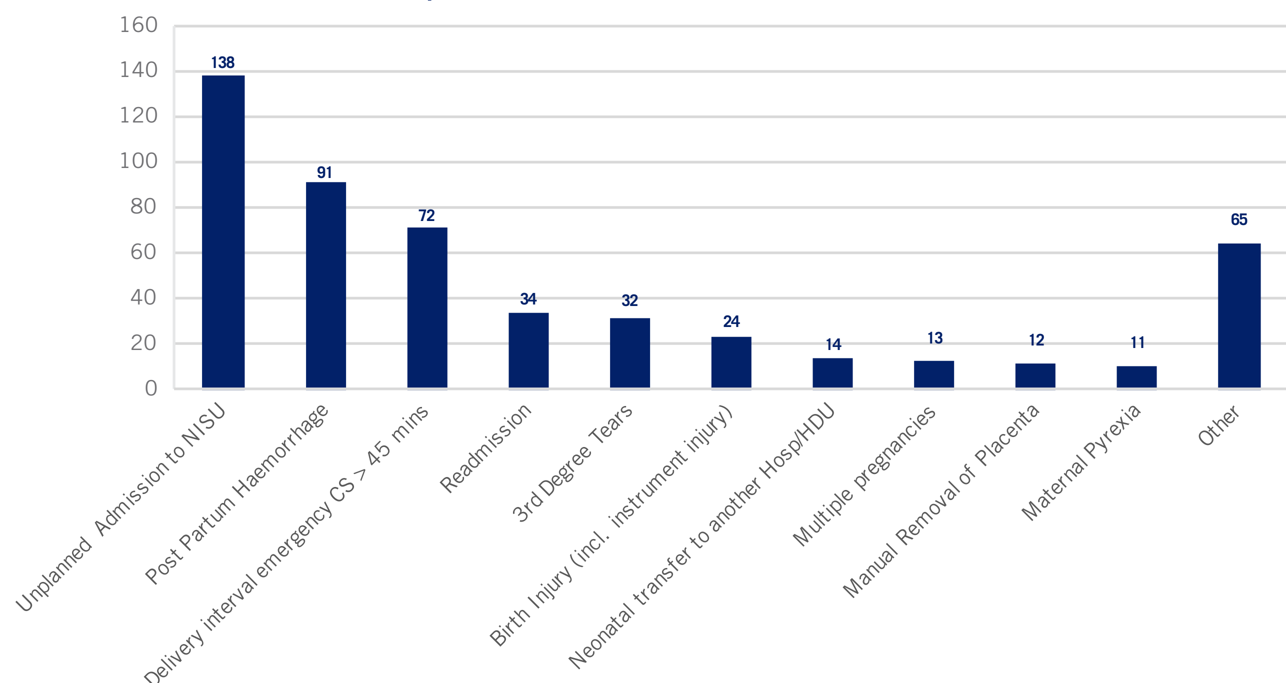
Local induction for NCHDs and the PROMPT multidisciplinary staff training course that is held every second month includes an information session on the use of Q-Pulse for incident and complaint reporting.

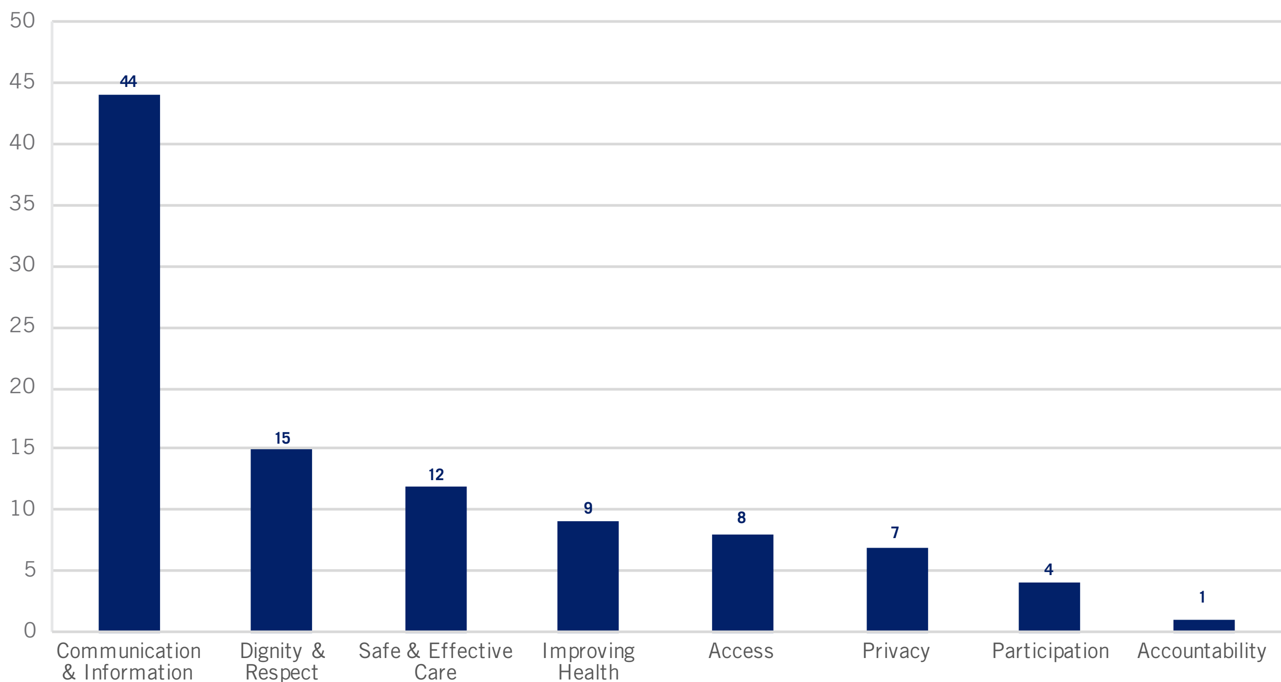
Positive feedback from our services users is also reported on the Q-Pulse system and the department Quality of Service comment cards.

Incident reporting has incresed significantly due to education and the introdution of electoinic reporting system in 2013.

GENERAL INCIDENTS, MEDICATION INCIDENTS AND COMPLAINTS REPORTED IN 2016	
General Incidents	889
Medication Incidents	27
Total	**916**
Complaints	69
Total	**985**

GENERAL INCIDENTS, MEDICATION INCIDENTS AND COMPLAINTS REPORTED IN 2013	
General Incidents	546
Medication Incidents	13
Total	**559**
Complaints	34
Total	**593**





Womens and Childrens Directorate UHG follow the " Your Service Your Say" policy and are proactive in our approach to dealing with complaints received. Poor communication was a common trend in complaints received and reviewed, this was more frequently an issue then poor quality of care.

ONGOING CHALLENGES:

- To continue to improve incident reporting through ongoing education and training for all members of the multidisciplinary team.
- To ensure all members of the multidisciplinary team are familiar with the:
  - » HSE's Safety Incident Management Policy
  - » HSE's Guidelines for the Systems Analysis Investigation of Incidents
  - » National Guidelines on Open Disclosure "Communicating with Service Users and their families following adverse events in healthcare'
- National Standards for Safer Better Maternity Service were publised in 2016 and the Quality and Safety Improvement team W&C directorate UHG commenced the process of self assessment to the new standards.

UHG Business Manager's Report

Ms. Bernie O'Malley

The Women's and Children's Directorate at University Hospital Galway comprises the Obstetric Gynaecology and Colposcopy service and the Neonatal and Paediatric Services.

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

Financial Report for the Women's and Children's Directorate at UHG

Allocated budget 2016:

€24,662,4533

Total spending for 2016:

€24,826,2487

This amounted to an overspend of €164,034 for the year:

Breakdown of costs

Pay

Allocated Budget: €20,828,442

Total spend on pay: €20,598,465

This amounted to an underspend of €229,977 on pay.

The main saving on pay was for the Midwifery and Nursing budget pay from which there was a saving of €204,494 on the allocated amount. This saving was mainly due to the delay/difficulty in filling posts through the NRS which in itself carries a significant risk to the quality and safety of patient care.

Non-Pay

Allocated Budget: €3,834,011

Total spend on non-pay: €4,228,022

This amounted to an overspend of €394,011 on non-pay.

The main area of overspending for non-pay was on the cleaning budget which had an overspend of €174,544.

There was also an overspend in maintenance costs of €75,418 on the allocated budget.

This can be attributed to a major refurbishment of a space on the Gynaecology ward to provide a dedicated bereavement room. This was done in conjunction with Hospice Ireland who provided fifty percent of the funding.

Agency costs

Included in non-pay is a total of €92,471 for Agency staff costs.

While this was an overspend of €50,618 on the allocated budget, it represented a huge reduction in the agency costs on the previous year.

This reduction can be attributed in part to the discharge home of some high-dependency children from the paediatric ward whose care was provided in part by agency nurses.

Two consultant posts which were vacant due to retirements and previously filled through an agency were also filled on a permanent basis in January 2016.

New Developments within the Directorate in 2016

Provision of a Bereavement Room on St Monica's Ward.

In conjunction with Hospice Ireland, a state-of-the-art bereavement room was developed on St Monica's Ward.

Paediatric Ambulatory Care area developed.

Work commenced on three rooms adjacent to the Paediatric Outpatient Department to set up a Paediatric Ambulatory Care area. This service will alleviate the need for admission to the ward for many children who will be cared for in this area. This in turn will free up inpatient beds thus and improving patient flow and reduce waiting lists.

HIQA National Standards for Safer Better Maternity Services.

In December 2016, the Directorate team in conjunction with the clinical staff on the ground commenced a self-assessment against the new National Standards for Safer Better Maternity Services which were just published. This work will continue into 2017.

Letterkenny University Hospital

Ms. Evelyn Smith

Letterkenny University Hospital provides healthcare services to the people of County Donegal, serving a population of over 161,000 people. The catchment area incorporates patients residing in County Donegal, north of Laghey/Pettigo. It is a 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 fourth annual report, detailing statistics, activity and outcomes for Maternity Services in Letterkenny University Hospital for the year 2016. The report also contains comparative data from 2007 to 2016. The publication of this report will serve as a source of internal audit, providing us with an opportunity to reflect on the services we offer and the challenges we face.

In 2016, there were 1,717 mothers who delivered 1,739 babies, showing a slight decrease in numbers from 2015.

Developments 2016

- 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

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.

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 2016.

Letterkenny University Hospital

General Manager
Mr. Sean Murphy

Director of Midwifery
Mrs. Evelyn Smith

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. Sami Elkashif

CMMs Maternity

Ms. Mary Lynch	CMM2
Ms. Mary Doherty	CMM2
Ms. Raphael Dalton	CMM2
Ms. Marion Doogan	CMM2
Ms. Geraldine Hanley	CMM2 / Antenatal Education Co-ordinator
Ms. Geraldine Gallagher	CMS Fetal Medicine
Ms. Niamh McGarvey	CMS Fetal Medicine

CNMs NNU

Ms. Rita Friel	CNM2
Ms. Kate Greenough	CNM2

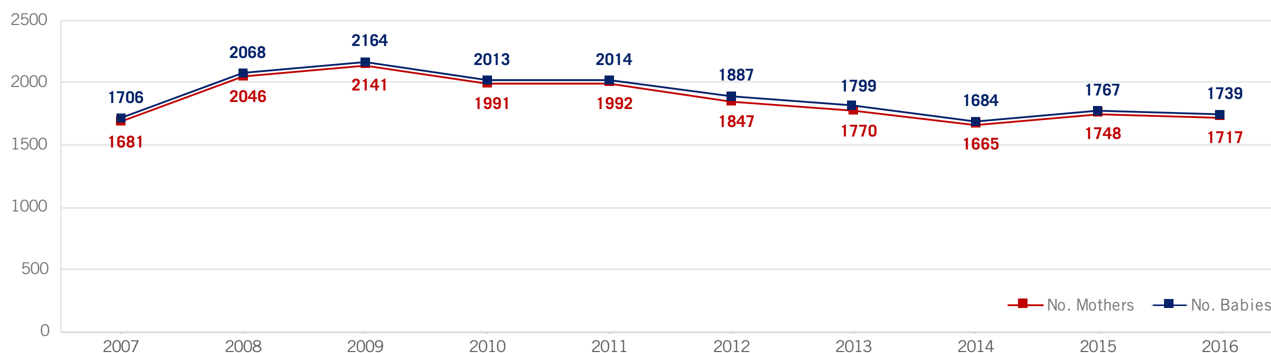
Staffing
Multidisciplinary Team
Obstetricians/Gynaecologists (WTE 4.0)
Registrars (WTE 6.0)
SHOs (WTE 6.0)
Director of Midwifery (WTE 1.0)
ADOM/Service Manager (WTE 1.0, post vacant)
CMM3 (WTE 1.0, post vacant)
CMM2 (WTE 5.0, allocation 3.4)
CMM2 Antenatal Education/Clinic (WTE 0.8)
CMM2 Fetal Assessment (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	592	1125	1717
Total Number of Babies	602	1137	1739
>24wks or >/= 500g			



OBSTETRIC OUTCOMES (MOTHERS)	PRIMIP	%	MULTIP	%	TOTAL	%
	n= 592		n= 1125		n= 1717	
Spontaneous Onset	316	53.4%	603	53.6%	919	53.5%
Induction of Labour	200	33.8%	252	22.4%	452	26.3%
Augmentation	216	36.5%	146	13.0%	362	21.1%
No Analgesia	12	2.0%	62	5.5%	74	4.3%
Epidural Rate	233	39.4%	140	12.4%	373	21.7%
Episiotomy	214	36.1%	113	10.0%	327	19.0%
Caesarean Section	214	36.1%	348	30.9%	562	32.7%
Spontaneous Vaginal Delivery	244	41.2%	710	63.1%	954	55.6%
Forceps Delivery	3	0.5%	0	0.0%	3	0.2%
Ventouse Delivery	130	22.0%	65	5.8%	195	11.4%
Breech Delivery	1	0.2%	2	0.2%	3	0.2%

OBSTETRIC OUTCOMES (BABIES)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous Vaginal Delivery	244	40.5%	710	62.4%	954	54.9%
Forceps Delivery	3	0.5%	0	0.0%	3	0.2%
Ventouse Delivery	130	21.6%	65	5.7%	195	11.2%
Breech Delivery (Singleton)	1	0.2%	2	0.2%	3	0.2%
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)	224	37.2%	360	31.7%	584	33.6%
Total	**602**	**100.0%**	**1137**	**100.0%**	**1739**	**100.0%**

MULTIPLE PREGNANCIES	PRIMIP	%	MULTIP	%	TOTAL	%
Twins	10	1.7%	12	1.1%	22	1.9%

MULTIPLE PREGNANCIES	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Twins	23	22	23	22	22	40	29	19	19	22
Triplets	1	0	0	0	0	0	0	0	0	0
Total	24	22	23	22	22	40	29	19	19	22

PERINATAL DEATHS	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Stillbirths	2	6	8	0.46%
Early Neonatal Deaths	0	2	2	0.12%

PERINATAL MORTALITY RATE	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of Stillbirths	12	6	9	10	12	3	7	5	9	8
Number of Early Neonatal Deaths	6	7	7	4	2	7	4	1	4	2
Total Perinatal Mortalities	**18**	**13**	**16**	**14**	**14**	**10**	**11**	**6**	**13**	**10**
Stillbirth rate (per 1,000)	7.1	2.9	4.2	5.0	6.0	1.6	3.9	3.0	5.1	4.6
Early Neonatal Death rate (per 1,000)	3.5	3.4	3.2	2.0	1.0	3.7	2.2	0.6	2.3	1.2
Overall PMR (per 1,000 births)	10.6	6.3	7.4	7.0	7.0	5.3	6.1	3.6	7.4	5.8

PARITY	NUMBER	%
Para 0	593	34.5%
Para 1	571	33.3%
Para 2	340	19.8%
Para 3	127	7.4%
Para 4	51	3.0%
Para 5	25	1.5%
Para 6	5	0.3%
Para 7	3	0.2%
Para 8	0	0.0%
Para 9	2	0.1%
Para 10	0	0.0%
Total	**1717**	**100.0%**

AGE	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
14-19 years	32	5.4%	2	0.2%	34	2.0%
20-24 years	101	17.1%	75	6.7%	176	10.3%
25-29 years	163	27.5%	214	19.0%	377	22.0%
30-34 years	186	31.4%	393	34.9%	579	33.7%
35-39 years	94	15.9%	373	33.2%	467	27.2%
40-44 years	15	2.5%	65	5.8%	80	4.7%
>45 years	1	0.2%	3	0.3%	4	0.2%
Total	**592**	**100.0%**	**1125**	**100.0%**	**1717**	**100.0%**

AGE AT BOOKING	2015	2016
<14	0.1%	0.0%
14-19	1.8%	2.0%
20-24 years	10.8%	10.3%
25-29 years	22.8%	22.0%
30-34 years	36.7%	33.7%
35-39 years	23.1%	27.2%
40-44 years	4.5%	4.7%
45> Years	0.2%	0.2%

GESTATION AT DELIVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<28 weeks	0	0	0	0	0	0	0	0	0	0
28 - 31+6	8	13	11	11	7	12	11	6	9	9
32 - 36+6	8	11	11	11	8	16	9	6	8	12
37 - 39+6	45	45	47	39	40	31	40	35	35	32
40 - 41+6	305	387	402	379	370	390	364	284	345	317
42 weeks	1250	1516	1607	1505	1514	1367	1297	1281	1311	1306
Not Answered	65	74	63	46	53	31	49	53	40	41
Total	**1681**	**2046**	**2141**	**1991**	**1992**	**1847**	**1770**	**1665**	**1748**	**1717**

BIRTH WEIGHTS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<500g	0	0.0%	1	0.1%	1	0.1%
500 - 999g	1	0.2%	3	0.3%	4	0.2%
1000 - 1999g	16	2.7%	12	1.1%	28	1.6%
2000 - 2999g	110	18.3%	132	11.6%	242	13.9%
3000 - 3999g	399	66.3%	760	66.8%	1159	66.6%
4000 - 4499g	67	11.1%	185	16.3%	252	14.5%
4500 - 4999g	6	1.0%	37	3.3%	43	2.5%
5000 - 5499g	1	0.2%	4	0.4%	5	0.3%
Not Answered	2	0.3%	3	0.3%	5	0.3%
Total Number of Babies	**602**	**100.0%**	**1137**	**100.0%**	**1739**	**100.0%**

BIRTH WEIGHTS BY YEAR	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
< 500g	3	7	2	3	3	4	1	0	1	1
500 - 999g	6	3	9	4	8	5	5	3	6	4
1000 - 1999g	17	26	23	27	20	32	34	19	18	28
2000 - 2999g	236	276	306	251	256	245	230	196	232	242
3000 - 3999g	1141	1362	1419	1352	1360	1242	1211	1146	1197	1159
4000 - 4499g	232	311	321	302	293	295	260	252	260	252
4500 - 4999g	42	62	62	52	57	50	51	54	46	43
5000 - 5499g	5	7	6	9	5	4	3	4	5	5
>5500g	1	0	1	0	0	1	1	2	0	0
Not Answered	23	14	15	13	12	9	3	8	2	5
Total Number of Babies	**1706**	**2068**	**2164**	**2013**	**2014**	**1887**	**1799**	**1684**	**1767**	**1739**

INDUCTION OF LABOUR	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2007	168		213		381	
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%

PERINEAL TRAUMA	TOTAL	%
Number of vaginal deliveries	1155	
Intact	427	37.0%
Episiotomy	327	28.3%
2nd Degree Tear	272	23.5%
1st Degree Tear	123	10.6%
3rd Degree Tear	30	2.6%
Other Laceration	123	10.6%

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

INCIDENCE OF EPISIOTOMY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2007	187		53		240	
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	56.6%	113	14.5%	327	28.3%

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

B.B.A.	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
2007	1	6	7
2008	0	3	3
2009	0	5	5
2010	1	6	7
2011	1	4	5
2012	3	4	7
2013	0	3	3
2014	1	4	5
2015	1	4	5
2016	0	7	7

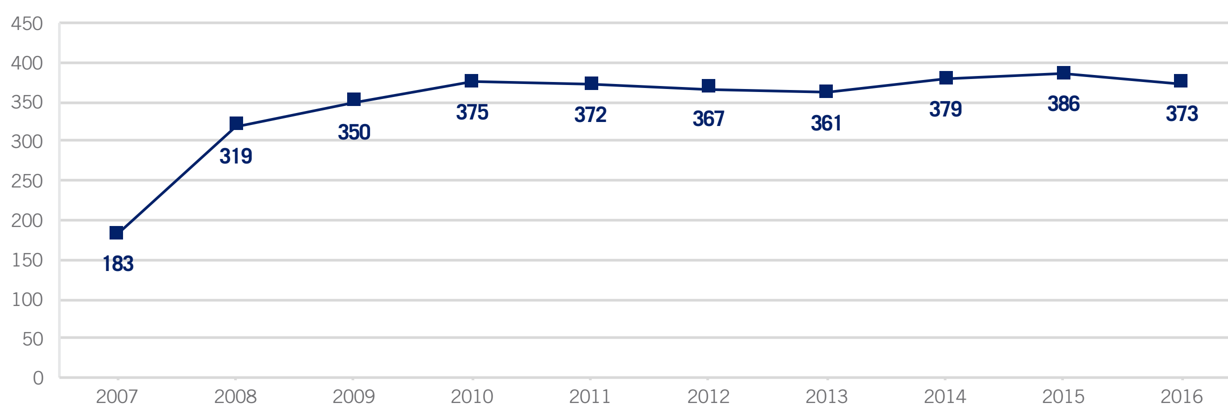
3RD STAGE PROBLEMS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
Primary PPH (500mls)	15	2.5%	18	1.6%	33	1.9%
Manual Removal of Placenta	12	2.0%	20	1.8%	32	1.9%

	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
Shoulder Dystocia	5	0.8%	10	0.9%	15	0.9%

MODE OF ANAESTHESIA FOR ELECTIVE CS				
	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Spinal	37	203	**240**	94.5%
Combined Spinal	0	4	**4**	1.6%
General Anaesthetic	5	5	**10**	3.9%
Total	**42**	**212**	**254**	**100.0%**

MODE OF ANAESTHESIA FOR EMERGENCY CS				
	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Spinal	94	103	**197**	64.0%
Epidural	40	12	**52**	16.9%
Combined Spinal	16	8	**24**	7.8%
General Anaesthetic	18	13	**31**	10.1%
Other	3	1	**4**	1.3%
Total	**171**	**137**	**308**	**100.0%**

MODE OF ANAESTHESIA FOR CS FOLLOWING UNSUCCESSFUL ATTEMPT AT INSTRUMENTAL DELIVERY				
	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Epidural	5	0	**5**	62.5%
Spinal	3	0	**3**	37.5%
Total	**8**	**0**	**8**	**100.0%**


Number of Women who had Epidurals in Labour
450
400
350
300
250
200
150
100
50
0
183
319
350
375
372
367
361
379
386
373
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

Neonatal Unit

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

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

There were 1,739 babies born in Letterkenny University Hospital during 2016, of which 363 babies were admitted to the Neonatal Unit.

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

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

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

Additional Specialist Services include audiology and ophthalmology screening. MRI, Cat scans and ultrasound facilities are available on site. The multidisciplinary team includes paediatric dietician, social work team, physiotherapists and the paediatric link nurse. The team in the Neonatal Unit liaises with specialists in Dublin, such as the cleft lip nurse specialist, as required. Public Health Nurses play an important part in post discharge care and are communicated with regularly.

Indications for Admission Include:

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

During 2016, 21 infants were transferred to other hospitals and 19 babies were transferred back in to the Unit.

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

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

In 2016, two nurses attended the Key Principles of High Dependency and Special Care Nursing course which is accredited by Trinity College Dublin.

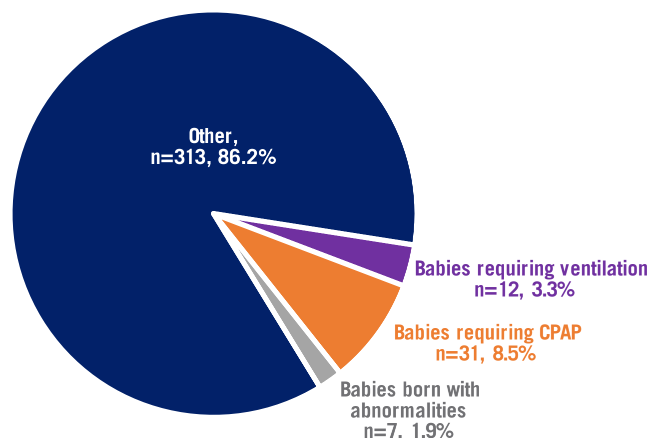
Other training includes:

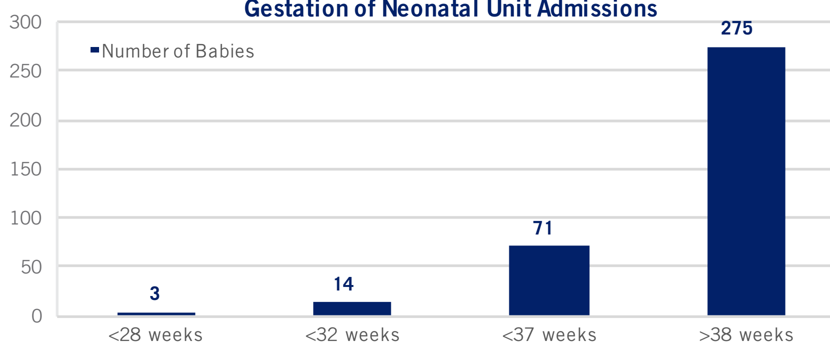
- NRP training
- STABLE study day
- Hand Hygiene and Mandatory Training
- Breastfeeding Study Days
- Study days relevant to the area of Neonatology
- Equipment Training Updates

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

BIRTH WEIGHTS OF NEONATAL UNIT ADMISSIONS

WEIGHT	NUMBER OF BABIES
500g-1.0kg	2
1.0kg-1.5kg	12
1.5kg-2.0kg	24
2.0kg-2.5kg	35
2.5kg – 3.0kg	50
3.0kg-3.5kg	103
3.5kg- 4.0kg	87
4.0kg-4.5kg	42
>4.5kg	8





Postnatal Report

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

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

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

There were 1,739 babies born in 2016, with a Caesarean section rate of 32.7%. This impacts on the ward, as these women require a higher level of care in the postnatal period. Midwifery staff are required to have a high level of evidence-based knowledge and clinical skills to provide a competent, safe standard of care. The IMEWS observation tool is used in the provision of care. We also regularly accommodate overflow of antenatal and postnatal readmissons.

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

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

A large part of our responsibility involves metabolic screening tests on babies. As part of 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 a week.

In 2016, Postnatal staff participated in a National Sepsis Audit for Maternity.

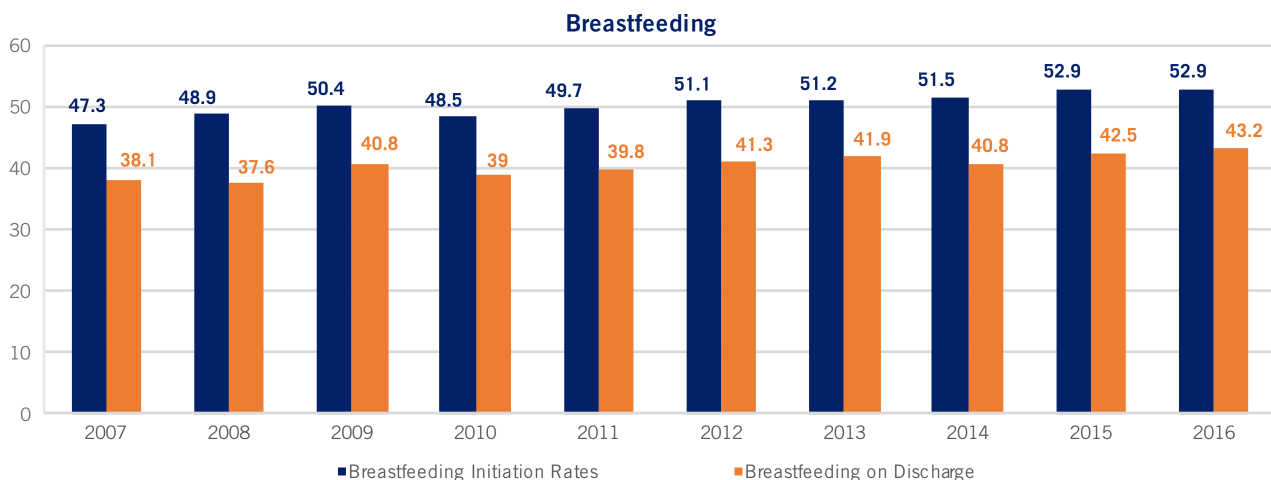
Funding has been obtained for a Butterfly Room and it is hoped that this will be completed in 2018.

Breastfeeding/Lactation

Promotion and support for breastfeeding is a key component of care throughout the unit and staff from the Maternity Unit are part of Donegal Breastfeeding Programme and the Saolta Breastfeeding Forum.

Breastfeeding and skin-to-skin contact are supported by midwives and student midwives. All our staff have received 18 hours of training and regularly attend 4-8 hour updates. We facilitate rooming-in on the postnatal ward with good breastfeeding outcomes.

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



Antenatal Education Report

Ms. Geraldine Hanley

The demand for Antenatal Education classes continued throughout 2016. The Antenatal Education Co-ordinator (CMM2) provides and co-ordinates antenatal and postnatal education programmes for families. Pregnant women, partners and students availed of the antenatal classes. The increased demand for one-to-one sessions continued throughout 2016, often necessitating repeat visits, with specific referrals from the Social Work Department, Fetal Assessment Unit and Mental Health Services. Additional tours of the unit, with partners, were organised to facilitate the prospective parents. The weekly Breastfeeding Drop-in Clinic continued throughout 2016.

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

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

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

Breastfeeding Promotion and Supports Available

A Donegal Breastfeeding Forum Group has been active in supporting breastfeeding locally and a Saolta Group Breastfeeding Forum continues to meet to support each other.

Antenatal and postnatal breastfeeding support continued throughout 2016, with a hospital-based 'drop-in' Breastfeeding Support Clinic continuing to run weekly, alongside a daily breastfeeding telephone helpline service. We also welcomed two breastfeeding volunteers from La Leche League to our Maternity Unit, on a twice-weekly basis.

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

Source of Referrals to Antenatal Classes

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

Other Antenatal Education Co-ordinator initiative involvement

- Donegal Parent Hub / Child and Family Health Initiative
- Teen Parent Support Programme
- Alcohol and Pregnancy Practice Change Initiative 'Prescription for a Healthy Pregnancy'
- Saolta Group Breastfeeding Forum
- Donegal Breastfeeding Forum

2016 ATTENDANCE AT ANTENATAL EDUCATION SESSIONS AT LUH

Antenatal Education	Clients	Support Partners	Total Attendance
Weekday Sessions Primips	187	0	187
Refresher Sessions	74	15	89
Evening Sessions / Support Partners	187	187	374
Postnatal Reunion Sessions	53		53
Teenage Group Sessions	7	7	14
Teenage 1-1 Sessions	6 x 2 (12) sessions	6 x 2 (12) sessions	24
1-1 Antenatal Class Sessions	36 x 2 (72) sessions	26 x 2 (52) sessions	24
1-1 Education Sessions (Antenatal Clinic)	1000	—	1000
Breastfeeding Drop-in Clinic	40	8	48
Tours of Maternity Unit			42 Tours

TOTAL NUMBERS ATTENDING IN 2016

Overall Client Attendance at Antenatal Classes	865
Postnatal Reunion Attendance	53
1-1 Antenatal Class Sessions	162
Breastfeeding Drop-in Clinic	48
Teenagers	38

Colposcopy Clinic Report

Staff Complement

Consultant Colposcopist

Dr. Edward Aboud, Director of Colposcopy
Dr. Sally Philip

Nurse Colposcopists

Ms. Regina McCabe
Ms. Pat Hirrell

Health Care Assistants

Ms. Marjorie McHugh
Ms. Donna Black (0.5 WTE)

Office Administrators

Ms. Linda Shiels
Ms. Tanya Graham (0.5 WTE)

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

Clinic Attendances

First visit attendances showed an increase in 2016 on the previous year: 619 in 2016 compared to 543 first visits in 2015. 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.

HPV Triage / New Management Pathway

Since the introduction of the reflex HPV test for women in 2015, the management of women with a cytology result of LSIL or ASCUS increased the volume coming through the Colposcopy Clinics. HPV triage continued to aid in the earlier detection of high-grade pre-cancerous lesions in women with low-grade cytological abnormalities. The Colposcopy visit evaluates whether triage-positive women have already-established CIN or whether the positive HPV test represents what is likely to be a harmless transient infection. Another change since the introduction of HPV testing relates to women post treatment. Under the new patient management pathway guidelines, women who have a normal (NAD/ASCUS) smear test and a negative HPV test at the first follow-up visit to Colposcopy post treatment are discharged to have a follow-up smear with their GP in one year. This has reduced the need for women to undergo further Colposcopy and has enabled an earlier discharge to primary care when found to be HPV negative.

Quality Assurance and MDTs

In 2016, 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. With the aid of GoToMeeting teleconferencing, this facilitates live discussion and review of colposcopy / cytology / histology correlation which add 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 line management, LUH. These measured waiting times for new appointments, type of procedure and result of referral, histology outcomes and waiting time for results.

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

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.

Attendance Status	New	Follow up / Treatment	Total
Attended	619	1,157	1,776
Cancelled by patient or clinic	242	799	1,041
DNAs	52	237	289
Total appointments made	**913**	**2,193**	**3,106**
Percentage DNAs	5.7%	10.8%	9.3%

Fetal Assessment 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 an MSc in diagnostic imaging ultrasound.

A total of 5,367 scans were performed in 2016, of which 1,770 were anomaly scans and 1,770 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 LLETZ treatment have cervical length measured at 12 weeks' gestation.

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

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

Abnormalities

There were a total of 61 referrals to the National Maternity Hospital, Holles St.

Cardiovascular system: 17 referrals sent
4 routine for history
13 suspected abnormality, of which 3 were normal and 10 were abnormal:
- 2 Tetralogy of Fallot
- 2 Double outlet right ventricle
- 3 Coarctations
- 3 Hypoplastic left heart syndrome

Central Nervous System: 5 referrals sent
3 Ventriculomegaly
2 Anencephaly

Gastrointestinal System: 2 referrals sent
1 Gastroschesis
1 Bowel obstruction

Genito-Urinary System: 4 referrals sent
1 Multicystic kidney
1 Unilateral kidney
1 Hydronephrosis
1 Potters

Musculoskeletal System: 2 referrals sent
1 Lethal thanatophoric skeletal dysplasia
1 ? non lethal not confimed post delivery

Suspected Chromosomal Abnormalities: 20 referrals sent
(12 suspected at dating from thickened nuchal
8 suspected at anomaly due to obvious structural abnormality or soft markers)

9 confirmed:
- 6 Trisomy 21
- 1 Trisomy 9
- 1 Kleinfelter
- 1 Turners

3 late miscarriage before tests were carried out
8 apparently NAD

Twin Referrals: 3 referrals sent
1 Twin Reversed Arterial Transfusion (TRAP) (Acardiac twin)
1 Twin-to-twin transfusion syndrome
1 Monozygotic DCDA twins with fetal hydrops

Facial Abnormalities: 1 referrals sent
1 Cleft lip and palate

Other referrals: 7 referrals sent
1 Chest lesion
1 CMV
1 Antibodies
2 Oligohydramnios due to ? SROM
2 Short femur lengths

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

Obstetric Registrar-led Clinic

All scans are performed by Midwife Sonographers.

Total number of ultrasound scans performed in 2016: 846.

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

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

Fetal Assessment is supportive to the Glucose Tolerance Testing (GTT) in pregnancy and the Diabetic / Obstetric Clinic. There were a total of 1,177 GTT's carried out, with 187 positive. 854 women attended the Diabetic / Obstetric clinic, with 142 attending the pre-conception clinics.

EARLY PREGNANCY ASSESSMENT CLINIC SCANS 2016							
Month	**Total**	**PV Bleed Pain**	**Re-scan**	**? Ectopic**	**Prev. Misc**	**Other**	**Pain**
Jan	83	17	42	—	10	6	8
Feb	84	16	51	—	13	2	2
Mar	71	17	31	—	9	6	8
Apr	74	16	39	—	11	7	1
May	71	22	26	3	13	6	1
Jun	55	13	23	—	16	2	1
Jul	58	13	24	0	12	4	5
Aug	73	11	42	—	16	1	3
Sep	59	14	18	0	10	13	4
Oct	79	5	37	0	10	19	8
Nov	77	8	45	0	6	9	9
Dec	62	13	34	0	7	7	1
Total	**846**	**165**	**412**	**3**	**133**	**82**	**51**

Urodynamics Report

The Urodynamics Service has seen an overall increase in client numbers since 2015, particularly in relation to clients referred for pessary fittings and ward referrals.

The increase in ward referrals can be attributed to the temporary loss of the urology service, which has resulted in increased ward-related urology inpatient needs.

The increase in the numbers of pessary referrals for assessment and fittings of specialised silicone devices and inpatients for complex prolapse management can possibly be attributed to the problem of patients who require pelvic floor repair and/or hysterectomy for prolapse not having their operative procedure due to lack of access to post-op Gynaecology beds and reductions in theatre lists. The complications as a result of this can be urinary obstruction and retention.

A number of Urodynamic procedural clinics in November and December 2016 had to be cancelled as a result of machine breakdown. The Dantec G2 machine had been in operation since 2006 so it served the hospital well. The new Nexam Pro was commissioned early 2017. All clinics would have resulted in cancellations but for the support of the CNS in Urology allowing access to the equipment on a shared basis.

Urogynaecology numbers have reduced due to no new patients being seen for assessment. The waiting list had increased to 18 months so now all new patients are divided between the four Gynaecology Consultants.

Month	Number of Clinics	Ward Referrals	Uroflow CMG Studies	Attended Urogyn Clinic	Pessaries	DNA	Total Attended (excluding DNAs)
Jan	8	9	22	10	6	6	47
Feb	14	15	34	10	8	2	67
Mar	13	26	30	10	10	6	76
Apr	14	41	40	8	13	5	102
May	14	30	37	10	10	4	87
Jun	13	29	32	8	11	4	80
Jul	9	22	26	0	11	4	59
Aug	12	15	30	10	12	4	67
Sep	13	12	34	10	14	3	70
Oct	13	15	39	10	13	3	77
Nov	12	18	17	0	15	5	50
Dec	9	16	16	15	15	6	62
Total	**144**	**248**	**357**	**101**	**138**	**52**	**844**

Urogynae clinic - no cover Jul/Nov
Machine failure Nov/Dec

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 and 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 within the hospital and have access to the huge bank of expertise, knowledge and skills that serve Mayo University Hospital.

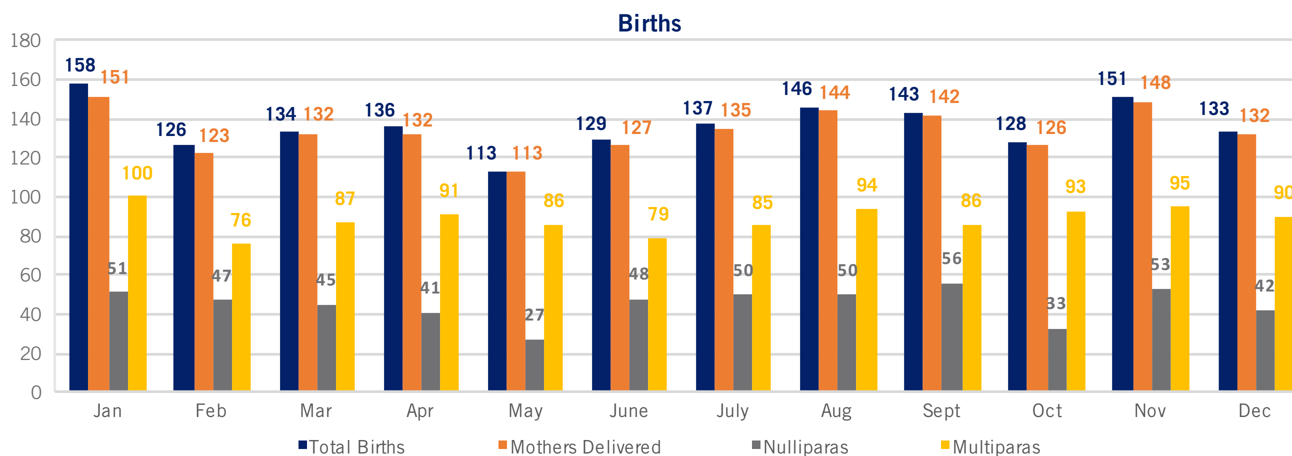
We are constantly looking at ways to improve the service we provide and in 2016 we commenced a pilot program of hypnobirthing that is proving very popular with our women. We also have a Midwife trained in smoking cessation and hopefully we will have figures of success rates in smoking cessation in our 2017 report. We are in the process of appointing a bereavement midwife which will be a huge asset. 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 2017 report.

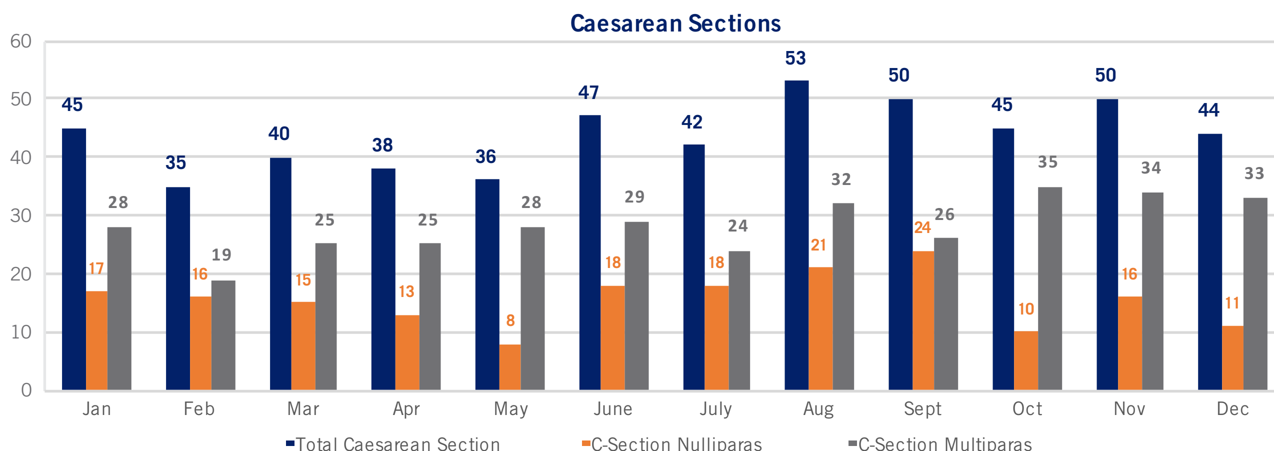
We continue to have a peer review safety meeting, Monday to Friday, in the Maternity Ward meeting room. This is attended by day / night staff, Obstetricians, Midwives and students. All cases in the previous 24 hours are discussed and also patients that were seen out of hours in ED or on the Labour Ward. The day's work is discussed and any high-risk patients, staffing issues or other concerns 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.

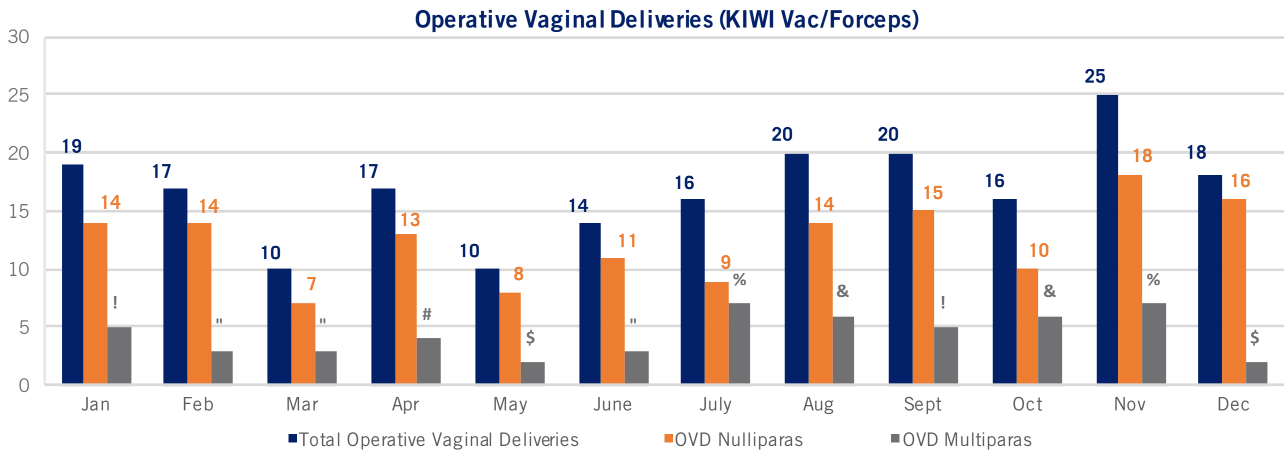
In 2016, 1,634 babies were delivered to 1,605 women at MUH, showing a slight increase in numbers from 2015.

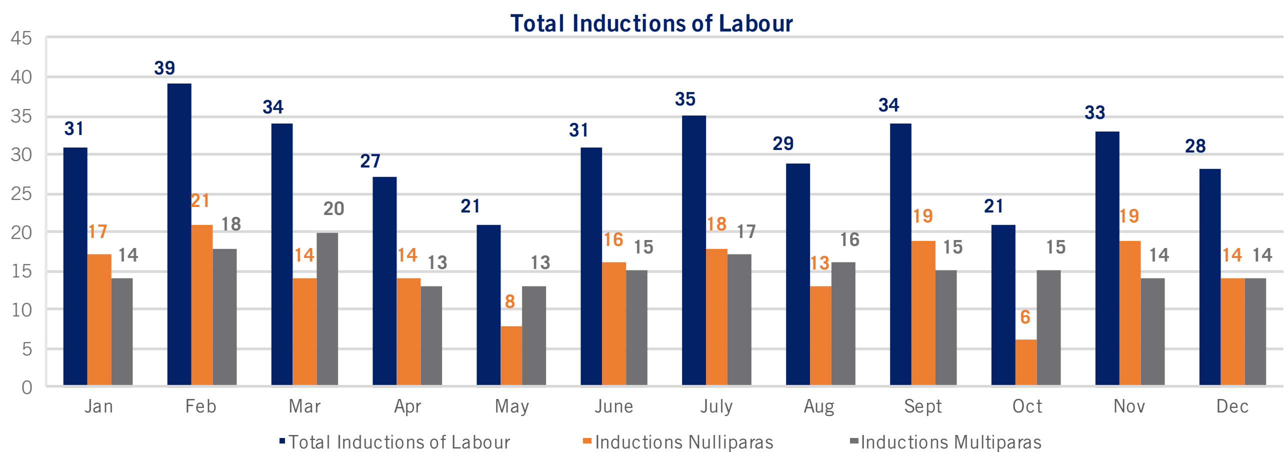
- The majority of these deliveries (1,080) were vaginal deliveries.
- There was an overall CS rate of 32.7% which is a slight decrease from the 2015 rate.
- The remainder were delivered by assisted vaginal delivery or, very rarely, by vaginal breech delivery for a second twin.
- Induction of labour rate was 22.6%.
- Epidural rate was 29.8%.
- General Anaesthetic CS rate 2.12%

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.









Total Mothers Delivered >500g		1605
Multiple Pregnancies		30
Total Births > 500g		1634
Perinatal mortality rate – adjusted (per 1,000 total births)		0
In utero transfer- admitted		1
In utero transfer- sent out		18
Total combined rate (per 1,000 total mothers delivered) of major obstetric events for the following four obstetric metrics » Eclampsia » Uterine rupture » Peripartum hysterectomy » Pulmonary embolism		1.2
Rate of instrumental delivery per total mothers delivered	12.6%	(202)
Rate of nulliparas with instrumental delivery	27.4%	(149)
Rate of multiparas with instrumental delivery	5.0%	(53)
Rate of induction of labour per total mothers delivered	22.6%	(363)
Rate of nulliparas with induction of labour	33.0%	(179)
Rate of multiparas with induction of labour	17.3%	(184)
Rate of Caesarean section per total mothers delivered	32.7%	(525)
Rate of nulliparas with Caesarean section	34.4%	(187)
Rate of multiparas with Caesarean section	31.8%	(338)

Obstetric Surgical Report

Dr. Hilary Ikele

PROCEDURES	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Bilateral salpingectomy during CS	3				2							1	**6**
Blood patch			1			1	1	1	2	1	1		**8**
Diagnostic laparoscopy					1								**1**
Elective Caesarean Sections	19	18	20	15	21	21	15	25	16	22	20	13	**225**
Emergency Caesarean Sections	26	17	20	23	15	26	27	28	34	23	30	31	**300**
ERPC	9	8	12	8	9	6	7	10	10	10	6	4	**99**
EUA	2		1	1			1	1	3	3	1	3	**16**
EUA plus suturing of vaginal wall	2	1	1			2		1	2	1	1	1	**12**
Failed instrumental delivery	1				1	1		1	1	1	1	1	**8**
Insertion of Bakri balloon							1						**1**
Foetal blood sampling			1										**1**
Insertion of cervical suture			1										**1**
Instrumental delivery	2	3	1	1	3	2	1	1	2	4	9	1	**30**
Laparatomy salpingo-oophorectomy												1	**1**
Laparoscopic salpingectomy ectopic	2	3	2	2	3		1		1	2	2		**18**
Laparotomy post CS			1										**1**
Laparotomy cystectomy						1							**1**
Manual removal of placenta	2	1	1	1	1	1	3	1	1	2	4	3	**21**
PPH			1			1	1	1	3	2	2	2	**13**
Ovarian cystectomy during CS			1										**1**
Sepsis screening	1												**1**
Suturing of 1st degree tear									1		1		**2**
Suturing of 2nd degree tear		2					2			1	2		**7**
Suturing of 3rd degree tear		2		5	1					1	2		**11**
Suturing of 4th degree tear											1		**1**
Suturing of episiotomy		1			1	1			1	1	3		**8**
Suturing of labial tear												1	**1**
Suturing of perineal tear				1		1	1		1	2			**6**
Trans abdominal scan							1						**1**
Tubal ligation		3	1		3		1				1	1	**10**
Unilateral salpingectomy during CS	1			1	1								**3**
Cancellations	1										1		**2**
General cases					1		1	1					**3**
Spinal	34	26	36	29	30	40	35	43	36	38	39	33	**419**
Epidural	14	11	5	14	19	10	9	9	10	17	14	9	**141**
GA	12	11	18	11	16	8	11	12	15	14	14	9	**151**
Sedation							1						**1**
Failed spinal - GA							1		2			2	**5**
Local			1			1		1	4		1		**8**
Epidural + spinal							1		1				**2**
Epidural - GA		2	1						1		2	2	**8**
GA CS	1	2	3	1	1	2	2	3	6	2	5	6	**34**
Procedures after 5	21	16	23	18	15	24	19	23	27	23	28	19	**256**
Total Number of Patients	60	52	62	55	55	59	58	65	69	68	71	55	**729**
Total Number of Procedures	71	59	64	60	61	62	62	68	79	79	87	65	**815**

Gynaecological Surgery Report

Dr. Hilary Ikele, Mr. Paul Dorian and Ms. Elaine Finnegan

In Mayo University Hospital, Theatre 2 is allocated to Obstetrics and Gynaecology. One Clinical Nurse Manager is in charge of this theatre, with four core Theatre Staff Nurses. There are four Consultant Obstetricians, each allocated a day for surgical procedures, Monday through Thursday, with an emergency list only on Fridays and weekends. All theatre staff are competent in obstetric and gynaecological procedures for out-of-hours purposes.

PROCEDURES	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Application of Floseal to cervix		1											**1**
Anterior pelvic floor repair	2	1			1	1		1					**6**
Anterior / posterior colporrhagy	2	2	2	5		1	2	2	2	1	1	1	**21**
Posterior repair					1								**1**
Bartholins cyst						1			1				**2**
Breast examination					1								**1**
Cautery to endometrium / cervix								1					**1**
Colonoscopy					1								**1**
Cone biopsy			1										**1**
Colposcopy					1			1	1				**3**
Cystoscopy (rigid)						4							**4**
Cystoscopy	2		2	4	3	1	3		3	3	1		**22**
Cervical biopsy / polypectomy / fibroid	1			1	1	1		2	1				**7**
Cervical smear		1	1	1			2	1		1			**7**
D&C		1	2					1				2	**6**
Diagnostic laparoscopy		1		2		1	2		1				**7**
Dissection of vaginal septum							1						**1**
Drainage of retroperitoneal cyst				1									**1**
EUA	2	6	9	10	6	2	1	5	6		5	1	**53**
Endometrial sampling		1											**1**
Endometrial biopsy / polypectomy	1			1		2		1		1	2		**8**
Excision of vaginal mesh			1										**1**
Excision and drainage of labial abscess		1			1								**2**
Excision of urethral caruncle												1	**1**
Evacuation of vaginal haematoma												1	**1**
Hysteroscopy	2	2	4	3	3	4	6	7	2	1	3	3	**40**
Hysteroscopy and currettage		5	11	1	2	7	5	8	4	8	2	3	**56**
Insertion of Mirena coil	2	2	2	5	2	5	3	3	5	8	5	1	**43**
Insertion of ring pessary			2				1						**3**
Insertion of TVT										3			**3**
I&D of vulval abscess											1		**1**
LLETZ	1	1	1		1		1	1					**6**
Laparotomy	1	1		3	1		1	1			1		**9**
» right salpingo-oophorectomy											1		**1**
» bilateral fimbrial end removal							1						**1**
» excision of left torted / ovarian cyst	1				1			1					**3**
Le Fort procedure									1				**1**
Removal of Mirena coil	3	1		4		2	2	3	4	6	3	1	**29**
Removal of foreign body from vagina		1											**1**
Removal of pessary ring			1				1		2				**4**
Right ovarian drilling		1											**1**
Laparoscopic drainage of cyst				1								1	**2**
Laparoscopic retrieval of Mirena coil								1					**1**
Laparoscopic adhesionalysis			1							1			**2**
Laparoscopy and dye		2				1	2						**5**

PROCEDURES	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Laparoscopic deroofing of left ovarian cyst						1							**1**
Laparoscopic tubal ligation					1	1	1			1			**4**
Laparoscopic oophorectomy								1		1			**2**
Laparoscopic cystectomy					3							2	**5**
Laparoscopic left ovarian cystectomy						2							**2**
Laparoscopic salpingectomy					1	1		1					**3**
Laparoscopic salpingo-oophorectomy (unilateral)			2			1				1			**4**
Laparoscopic salpingo-oophorectomy							2						**2**
Laporoscopic bilateral salpingectomy						1							**1**
Labioplasty						1							**1**
Perineorrhaphy											1		**1**
Pipelle biopsy								1					**1**
Refashioning of episiotomy				1									**1**
Sacrospinous fixation of vault	1						2		1			1	**5**
Suturing of postcoital tear					1								**1**
Suturing of vaginal wall tear								3				1	**4**
Subtotal abdominal hysterectomy		1	1		1		1						**4**
Thermablation					2	2		1		1	1	1	**8**
TAH		1				1							**2**
TAH & BSO	1		1	1							1	1	**5**
TVS		2		1			2	1					**6**
TCRE		3	2	3	2			1	2		1		**14**
TCRP		1	5	1	1	2	2	1			2		**15**
TVT	1	1		2	1	4	3		2		1		**15**
Urethral bulking					2								**2**
Vaginal hysterectomy	1		1	3	2			1	2	1			**11**
Vaginal ultrasound		1											**1**
Vaginal wall polypectomy				1									**1**
Vulval biopsies					1			1	1				**3**
GAs	10	20	27	34	26	27	23	23	23	19	23	12	**267**
Spinal	1	1	1	1	2			2	1	1		1	**11**
No of procedures	35	62	80	90	72	77	70	77	65	58	55	34	**775**

Paediatric Report

Dr. Michael B O'Neill

Paediatric Ward
With the advent of 2016 and the planned age extension for Paediatric Services, there are increased challenges for the Paediatric Department at Mayo University Hospital. The data in this year's report includes those teenagers who were admitted under Consultant Physicians and will in future years be admitted under the Paediatric Service.

The Paediatric Ward is utilised by 4 Consultant Paediatricians, 4 Consultant Surgeons, 4 Orthopaedic Surgeons, Consultant Physicians and, infrequently, visiting services, namely Dental and ENT.

Total admissions in 2016 were 3,364. Table 1 gives the breakdown by services with number of admissions, average length of stay (ALOS) and the number of day cases.

The Paediatric Ward defines day cases as those children who require more than 6 hours attendance to complete their care requirements. The introduction of the ward review system, which is consultant-led, facilitates the assessment of children on the Paediatric Ward whose care requirements are less than 6 hours and these children are listed in the outpatient data sets. All children for ward review are pre-booked and are given a specific time. This planned intervention has resulted in less congestion on the ward.

The length of hospitalisation of children continues to be of concern. It is generally accepted that children who are admitted for less than a day could potentially avoid hospitalisation through the use of proactive strategies which include the development of evidence-based Paediatric Decision Units whose primary goal is the avoidance of hospitalisation while not compromising care or patient safety. The Department has committed to enacting a PDU in MUH for 2017. This will require modification within the Paediatric Ward to provide the service and engagement with key stakeholders to minimise resistance and enable the development of algorithms of care. Table 2 outlines the length of stay for a cohort of 2,395 patients admitted under the care of the Consultant Paediatricians in 2016. The percentage of admissions that were at the 0- to 1-day LOS was almost 55%, indicating a potential opportunity to reduce admissions by 25%.

While the PDU will enable a reduction in hospitalisation, there continues to be a cohort of children and adolescents with complex medical needs who require extended hospitalisations. Some of these children have life-limiting conditions.

Table 1 - Admissions by Services with ALOS and Day Cases

PAEDIATRIC ADMISSIONS	EPISODES OF CARE		ALOS (DAYS)	DAY CASES
Consultant Paed A	648	(19.26%)	2.05	189
Consultant Paed B	775	(23.04%)	2.44	253
Consultant Paed C	469	(13.94%)	1.96	94
Consultant Paed D	804	(23.90%)	3.03	266
General Surgery	443	(13.17%)	2.53	159
Orthopaedic Surgery	183	(5.44%)	1.6	34
Adult Medicine	40	(1.19%)	3.8	—
Visiting Services	2	(0.06%)		12
Totals	**3364**	**(100.00%)**		**1007**

Table 2 - Length of Stay Data for a Paediatric Cohort of 2,395 Patients Assessed in 2016

DAYS IN HOSPITAL	NUMBER OF PATIENTS	PERCENTAGE OF TOTAL	ALOS (DAYS)
1	1,303	54.41%	1
2	505	21.09%	2
3	252	10.52%	3
4	129	5.39%	4
5	63	2.63%	5
6-27	137	5.72%	8.05
28-107	6	0.24%	55
Total	**2,395**	**100.00%**	

The Paediatric Services continue to be involved in the Paediatric Oncology Shared Care Network which is centralised in Our Lady's Children's Hospital, Crumlin. These children have direct access to the ward to facilitate speedier care, which is protocol-defined.

The Paediatric Unit introduced the Paediatric Early Warning Score in 2016. This is now incorporated into the care plan of children. A full review of the impact of this intervention is not as yet available.

Those children and adolescents with Cystic Fibrosis are seen in the CF Centre and no longer attend on the Paediatric Ward for their care requirements. This has resulted in enhanced privacy for children and adolescents with CF and their families. The CF Centre is also used for day assessments, day treatments and outpatient CF physiotherapy. Shuttle testing takes place within the CF unit.

The placement of adolescents with eating disorders on the Paediatric Ward without a dedicated CAMHS is problematic. This reflects a deficiency in the treatment services that are available to these children, adolescents and their families, both locally and nationally.

Intensive Care Admissions

The Paediatric Services continue to use adult ICU for paediatric patients who are critically ill. Nineteen paediatric patients were admitted to the ICU in 2016.

Outpatient Department

The Paediatric Department has a well-structured and functioning OPD with 5 consultation rooms. There are clinics occurring in the Safari Club which are multidisciplinary in nature. The Department provides outreach services to Ballina and Belmullet.

The clinic structure has development along general and subspecialty clinics. In total, there are 37 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. The provision of a pump service has been highlighted and this is a departmental priority for 2017.

The Diabetes Clinic is supported by dietetic services and the adult Clinical Nurse Specialist and Advanced 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. 103 were undertaken in 2016. The autism forum provides a multidisciplinary assessment forum, independent of the ADOS assessments.

ICU

Paediatric patients continue to be admitted to the adult ICU. The numbers are small: 23 patients in 2016. The clinical conditions which necessitate admission include DKA, Status Epilepticus, Severe Coup and Stridor and Pneumonia.

Emergency Department (ED)

Paediatric patients represent 21% of all attendances in the ED. Total attendances were 8,576 for 2016. With the extension of Paediatric Services to 16, this will result in an increased workload for the Paediatric Services. 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. 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 will lessen but not eliminate this difficulty. The ED requires significant modification to its footprint to address the separation of children from adults.

Table 3 - Clinic Provision by the Paediatric Service

Asthma 3/month	Constipation 2/month	Diabetes 2/month	Down Syndrome 2/Month
Cystic Fibrosis 2/month	Complex care 2/month	Multidisciplinary at Safari Club 2/month	Autism Assessment 4/month
General Clinics 14/month	Outreach Ballina 5/month	Outreach Belmullet 1/month	Autism Forum for multidisciplinary discussion

Table 4 - New and Review Attendances by Paediatric Consultants, MUH

OUTPATIENT CLINICS	NEW PATIENTS	REVIEW PATIENTS	ALOS (DAYS)
First Class (H1)	3.9%	(9)	1
Second Class (H2)	39.7%	(91)	2
Pass	54.1%	(124)	3
Fails	2.2%	(5)	4

Special Care Baby Unit Report

Ms. Joan Falsey

The aim of our Special Care Baby Unit 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 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 2016

SCBU ADMISSIONS BY GESTATIONAL AGE GROUP	
Less than 32 weeks	12
32 – 36 weeks	76
37 weeks and over	215
Total	**303**

SCBU ADMISSIONS BY SOURCE	
Theatre	84
Delivery Suite	77
Maternity Unit	119
Other hospital	16
Paediatric Ward	1
Social admission	4
BBA	2
Total	**303**

SCBU ADMISSIONS BY BIRTH WEIGHT	
Less than 1500g	8
1501 – 2000g	23
2001 – 2500g	47
Over 2500g	225
Total	**303**

REASONS FOR ADMISSION TO SCBU	
Prematurity	97
Respiratory	71
Infection-related	47
Gastrointestinal (2 x bilious vomits, 2 x PR bleeding)	4
Hypoglycaemia	20
Neurological (1 x HIE Grade 2 confirmed, 1 x subgaleal bleed confirmed by CT, 1 x subgaleal bleed on clinical findings)	3
Cyanotic episodes	3
Low birth weight	6
Infant of insulin-dependent diabetic	4
Congenital abnormalities	9
From paediatric ward (3 month RSV)	1
Maternal Hepatitis B	1
Cardiac (2 x suspected but not confirmed, 1 x truncus areteriosus, 1 x hypoplastic left ventricle)	4
Social reasons	4
Jaundice for phototherapy	17
Poor feeding	12
Total	**303**

VERY LOW BIRTH WEIGHT (400g–1500g) ADMISSIONS TO SCBU BY SOURCE	
Born in MUH	1
Born in MUH and transferred to Regional Centre	1
Born in Regional Centre and transferred back to MUH	5
Total	**7**

VERY LOW BIRTH WEIGHT ADMISSIONS TO SCBU BY GESTATIONAL AGE GROUP	
22 to 24+6 weeks	1
25 to 26+6 weeks	2
27 to 28+6 weeks	1
29 to 31+6 weeks S	2
32 weeks and over	1
Total	**7**

VERY LOW BIRTH WEIGHT ADMISSIONS TO SCBU BY BIRTH WEIGHT	
501 – 750g	1
751 – 1000g	1
1001 – 1250g	2
1251 – 2500g	3
Total	**7**
Of the above 7 babies, 5 were born in Regional Centres following in utero transfer from MUH.	

VERY LOW BIRTH WEIGHT ADMISSIONS TO SCBU OF BABIES BORN IN REGIONAL CENTRES BY BIRTH WEIGHT	
501 – 750g	1
751 – 1000g	1
1001 – 1250g	2
1251 – 1500g	1
Total	**5**

NEONATAL DEATHS					
GESTATION	BIRTH WEIGHT (kg)	AGE AT DEATH	CONCLUSION	PLACE OF BIRTH	PLACE OF DEATH
26+2	1.000	8 days	Prematurity	MUH	National Maternity Hospital
40+5	1.860	10 days	Trisomy 18	MUH	SCBU
36+3	2.240	9 days	Trisomy 13	MUH	SCBU
Total 3	**2 in SCBU**				

CLINICAL DEMOGRAPHICS OF VERY LOW BIRTH WIGHT INFANTS	
Male	3
Female	4
Irish/British	7
Born in MUH	2
C/S	5
Antenatal steroids	7
Multiple gestation	2
Total	**7**

CLINICAL DEMOGRAPHICS OF VERY LOW BIRTH WEIGHT INFANTS	
Transfers by National Neonatal Transport Team	10
Transfers by SCBU staff	8
Total	**18**

NEONATAL TRANSFERS TO REGIONAL CENTRES	
Transfers by National Neonatal Transport Team	10
Transfers by SCBU staff	8
Total	**18**

NEONATAL TRANSFERS FROM REGIONAL CENTRES	
Transfers by National Neonatal Transport Team	0
Transfers by SCBU staff	14
Total	**14**

ROP SCREENING	
Eye checks in UHG	10
Eye checks in Dublin (1 review)	1
Total	**11**

CARDIAC INVESTIGATIONS	
Cardiac Echo in UHG	8
Cardiac Echo in Dublin (1 review)	1
Total	**9**

List of Congenital Abnormalities

1. Trisomy 21 x2
2. Trisomy 18 x 1
3. Trisomy 13 x1
4. Truncus arteriosus x 1
5. Cleft palate x 3
6. Hypoplasia left ventricle x 1

Percentage of infants delivered admitted to SCBU: 18.5%

Robson 10 Group Classification

Dr. Meabh Ní Bhuinneain

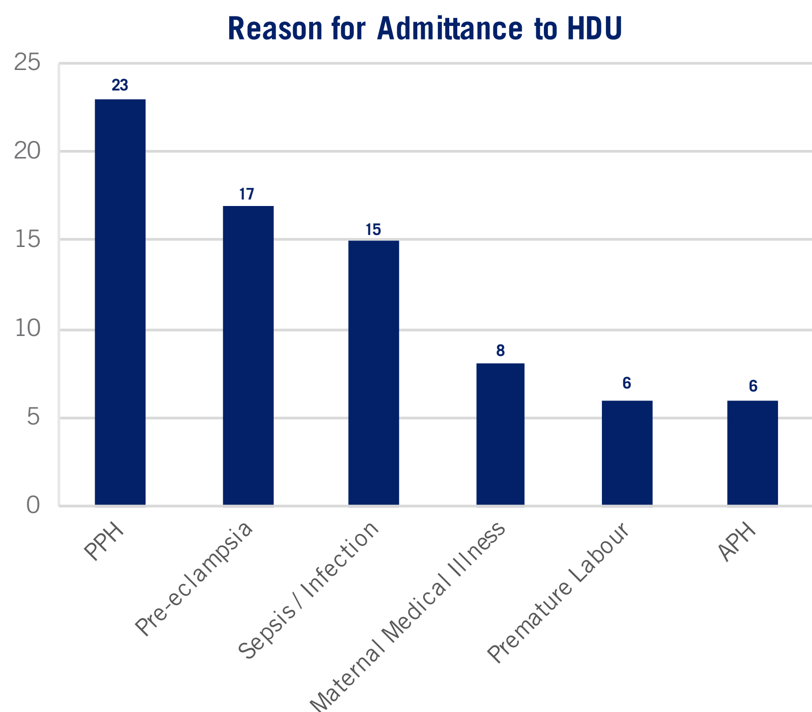
1	Nulliparous, Single, Cephalic, >37 weeks, in spontaneous labour	313	69	22.0%
2	Nulliparous, Single, Cephalic, >37 weeks, induced or Caesarean before labour	180	92	51.1%
3	Multiparous (excluding previous C/S), Single, Cephalic, >37 weeks, in spontaneous labour	493	12	2.4%
4	Multiparous (excluding previous C/S), Single, Cephalic, >37 weeks, induced or C/S before labour	201	39	19.4%
5	Previous C/S, Single, Cephalic, >37 weeks	308	245	79.5%
6	All Nulliparous Breeches	18	17	94.4%
7	All Multiparous Breeches including previous C/S	23	21	91.3%
8	All Multiple Pregnancies including previous C/S	30	17	56.7%
9	All Abnormalities including previous C/S	3	3	100.0%
10	All Single, Cephalic, <36 weeks (including previous C/S)	36	10	27.8%
		1605	**525**	**32.7%**

High Dependency Unit, Delivery Suite

Ms. Sile Gill

The Delivery Suite contains a High Dependency Unit, which is in reality our fourth delivery room. During 2016, we cared for a number of women who required High Dependency Care who had complicated pregnancies, e.g.

- Maternal medical illness, i.e. diabetes, PE.
- Sepsis / infection
- Postpartum haemorrhage / antepartum haemorrhage
- Premature labour
- Pre-eclamsia
- Hypertension



Colposcopy Service Report

There were 1147 attendances at the Colposcopy Clinic in 2016, of which 387 were first attendances. The DNA (Did-Not-Attend) rate was 4.5% amongst first visits and for follow-up appointments 10.8%. Our overall DNA rate was 9.1%. This rate is below the target set by CervicalCheck at <10%. We are very pleased that the text message reminder service which was commenced 30th November 2015 in the Colposcopy Service in Mayo University Hospital has proven to be successful. This continues to have a positive impact on attendance and also the patients are most grateful for the reminder as otherwise they may have forgotten their appointment.

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. These are within the target standard set by CervicalCheck.

The combined Cytology and High-Risk HPV test continues to be provided by Med Lab 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 follow up of low-grade abnormalities continues with 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 provide 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 performed when due.

Histology services continue to be provided by Mayo University Hospital laboratory. There was a total of 408 biopsies performed, of which were 189 LLETZ excisional treatments and 219 were diagnostic biopsies. 80% of the excisional LLETZ treatments had CIN on the histology, which meets CervicalCheck standard (>80%).

Multipdisciplinary team meetings between the clinical staff from the Colposcopy service, Histology Laboratory and Med Lab Laboratory were held regularly using the 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 who commenced her Colposcopy training in 2016 in the Colposcopy Clinic in Mayo University Hospital has been successful in obtaining her accreditation as a BSCCP Colposcopist. She went on to practice in the Rotunda Hospital, Dublin, later in the year. Practice nurses from the primary care services continue to attend the Colposcopy Clinic as part of their cervical screening smear-takers course given by CervicalCheck. Quality cervical smeartaking training is central to an effective national screening programme. Ongoing clinical education continues to be provided to both medical and midwifery students who attend the Colposcopy Clinic as part of their professional training from UHG.

	OUTCOME	BIOPSY TYPE			TOTAL BIOPSIES
	(HISTOLOGY RESULT)	DIAGNOSTIC (PUNCH)	EXCISION	OTHER	TOTAL
1	Cervical Cancer	3	1	0	**4**
2	Adenocarcinoma in situ / CGIN	0	3	0	**3**
3	CIN3	17	79	1	**97**
4	CIN2	24	49	0	**73**
5	CIN1	66	28	0	**94**
6	CIN Uncertain Grade	0	0	0	**0**
7	VAIN3	0	0	0	**0**
8	VAIN2	1	0	0	**1**
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	41	8	0	**49**
14	No CIN / No HPV (normal)	56	21	8	**85**
15	Inadequate	2	0	0	**2**
16	Result not known	0	0	0	**0**
17	Other	0	0	0	**0**
18	**Total**	**210**	**189**	**9**	**408**

Department of Anaesthesia

Dr. Ciara Canavan

Overview

The Department of Anaesthesia at Mayo University Hospital provided anaesthesia services for 729 patients undergoing 815 Obstetric procedures and 282 patients undergoing Gynaecology procedures in 2016.

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 2016 revealed high levels of patient satisfaction and consistent attendance at the patient's bedside within the target of 30 minutes from the time that the request for epidural was made.

In 2016, 1605 mothers gave birth to 1634 babies. Of these, 479 (29.8% of all mothers or 34% of all mothers who laboured) had an epidural for labour, which is a slight decrease on previous years; 525 (32.7%) had a Caesarean Section, of whom 187 were nulliparous and 338 were multiparous; 225 (43%) were elective and 300 (57%) were emergencies.

Operative Anaesthesia

General anaesthesia was provided for 34 women (6.5% 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, placenta praevia, antepartum haemorrhage and previous spinal surgery. Two patients required spinal anaesthesia for Caesarean Section due to failure of epidural top-up.

Anaesthesia was also provided for suture of vaginal tear, insertion of Bakri balloon, cervical suture, instrumental delivery, examination under anaesthesia, evacuation of haematoma, manual removal of placenta, postpartum haemorrhage, salpingectomy and ovarian cystectomy during Caesarean Section.

Epidural analgesia was complicated by 12 recognised dural punctures (2.5%); 8 patients required a blood patch for post dural puncture headache. Other complications included 1.6% requiring several attempts or needing a second anaesthetist to attempt placement, 3.3% requiring resiting as not working, 2 patients with paraesthesia 24 hours post epidural, 1 patient with an inadvertently high block.

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

Critical care admissions included 4 patients requiring HDU care in the ICU area. These are discussed further elsewhere in this report.

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 2017

To incorporate the anaesthesia and epidural record into the ObTraceVue electronic database or the new national programme once it is rolled out.

To review our epidural charts and update the MUH modification for the National Maternity Chart.

To update our fasting guidelines to reduce prolonged fasting for pregnant patients.

To be part of the "skin-to-skin" initiative and reduce separation time of mother and baby in theatre.

Antenatal and Gynaecology Outpatients

Ms. Melanie Brady and Ms. Mona Curry

Antenatal Clinics

The Maternity Outpatients Department continues to provide a safe and welcoming service to the women who attend. In 2016, we had a total of 6,832 visits 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 given. She will also have the booking scan at the 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.

Our clinics run Monday to Thursday, with one outreach clinic in Ballina. Our aim is to introduce more outreach services and midwifery-led services, but this would require more midwifery staff to facilitate the changes required.

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 2016, 177 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 2016, we facilitated a total of 1,957 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. Our gynaecology service is supported by our 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.

We have worked hard to achieve our level of new-to-review patient ratio as you can see from the figures below.

New Patients: 857

Review Patients: 1,100

DNA Patients: 333

Women's and Children's Directorate Academic Report

Dr. Michael B O'Neill

Introduction

Mayo University Hospital continues to provide both undergraduate and postgraduate medical education in Women's Health and Paediatrics. Undergraduate medical students from NUIG attend the Mayo Medical Academy, based in Castlebar, for one year and during that time are attached to the Paediatric and Women's Health rotation for a four-week period each. The Department of Paediatrics and Women's Health offers rotations to students from UCD as well. These rotations are typically for a one-week period as part of the student's external rotation. Both departments also accept, on an individual request basis, medical students from German universities, which number 2 to 3 students in each department per quarter.

At a postgraduate level, the Department of Paediatrics has 6 SHOs (of whom 3 are Basic Specialist Trainees from the National Paediatric Program, 2 are General Practice trainees and 1 is a stand-alone post). The Registrar complement is 6 (2 Specialist Paediatric Registrars and 4 Registrars). The Department of Women's Health consists of 6 SHOs (of whom 2 are Basic Specialist Trainees and 4 are General Practice trainees). There are 6 Registrars (2 Specialist Registrars and 4 Registrars) and 1 associate specialist.

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

ACADEMIC OUTPUT FOR 2016

Department of Women's Health

Educational and Professional Roles of the Department of Women's Health

Dr. Meabh Ní Bhuinneain

1. Dean for Medical Education, Mayo Medical Academy, NUI Galway at Mayo University Hospital
2. National Specialty Director, Basic Specialist Training, Obstetrics (Ireland)
3. Higher Specialist Trainer, Women's Health
4. Clinical Lead, Esther Alliance Accreditation. The Esther Alliance is the global health North-South partnership with a special focus on maternal and newborn health. Mayo University Hospital partners with Londiani District Hospital, Kenya, and the Friends of Londiani. MUH is only the third Irish hospital to receive such accreditation.
5. Contributed work – National Maternity Strategy, Creating a Better Future Together 2016 DOH

Dr. Hilary Ikele

1. Member Institute of Obstetrics and Gynaecology Executive Council
2. Higher Specialist Trainer, Women's Health
3. College examiner – Institute of Obstetrics and Gynaecology, RCPI

Dr. Ulrich Bartels

1. Clinical Lead for Colposcopy, MUH
2. Department Head for Women's Health
3. Higher Specialist Trainer, Women's Health

Dr. Kamal El-Mahi

1. Achieved entry into the Specialist Register, Obstetrics and Gynaecology Division, Irish Medical Council.

National Presentation

Dr. Meabh Ní Bhuinnean: Invited speaker - 1st ESTHER Ireland Partnership Forum 2016: Partnership and Innovation.

International Presentation

Dr. Murtada Mohammmed: International invited speaker – Omdurman Maternity Hospital (35,000 deliveries per annum): Post Partum Haemorrhage Management.

Publication

Patient Satisfaction and Acceptability: A Journey through an Ambulatory Gynaecology Clinic in the West of Ireland. I Uzochukwu, C Burke, M Ni Bhuinneain. IMJ June 2016 Vol 109 Number 6

Department of Paediatrics

Educational and Professional Roles of the Department of Paediatrics

Dr. Michael O'Neill

1. Irish representative to European Academy of Paediatrics (until June 2016)
2. National Specialty Director for Basic Specialist Training Paediatrics Ireland
3. Board member, Faculty of Paediatrics, RCPI
4. Higher Specialty Trainer, Paediatrics
5. Associate Clinical Director, MUH, Saolta Women's and Children's Directorate

Dr. Hilary Stokes

1. Strand Lead, Paediatrics, MUH
2. Department Head of Paediatrics, MUH
3. ALSG Child Protection Faculty Member/Course Provider
4. Community Child Health Subgroup Committee, Faculty of Paediatrics
5. 5) Higher Specialty Trainer, Paediatrics, RCPI

National Presentations 2016

1. Brennan J, O'Neill R, Branagan A, **O'Neill MB**, McGowan D. The use of immature neutrophils in the diagnosis of early onset neonatal sepsis. Irish Paediatric Association, Dublin Sept 2016.
2. Gorman I, **O'Neill MB.** Paediatric Emergency Department Attendance in an Irish Peripheral Hospital. Irish Paediatric Association. Dublin Sept 2016.
3. Branagan A, Bergin N, Gorman I, **O'Neill MB.** Parental Opinions of Childhood Infections and Antibiotic use. Irish Paediatric Association. Dublin Sept 2016.

Publications

1. Perrem LM, Fanshawe TR, Sharif F, Pluddemann A, **O'Neill MB.** A National Physician Survey of Diagnostic Error in Paediatrics. Eur J Pediatr 2016 (doi:10,1007/s0043-0016-2772-0) online.

THE PAEDIATRIC EDUCATIONAL TIMETABLE				
MONDAY	**TUESDAY**	**WEDNESDAY**	**THURSDAY**	**FRIDAY**
X ray conference 2/month	**Neonatology** Dr. Kumar 8.15-9.00 am Weekly/ Resuscitation drills in the ED	**Paediatrics** Dr. O'Neill 8.00-9.00 am Weekly	**Perinatal Meeting** Dr. Stokes/O'Neill 8.00-8.30 am Weekly	**Journal Club / Community Topics** Dr. Stokes 9.30-10.00 am
Educational Handover Round 9.05-10.00 am All Consultants in attendance	**Educational Handover Round** 9.05-10.00 am All Consultants in attendance	**Educational Handover Round** 9.05-10.00 am All Consultants in attendance	**Educational Handover Round** 9.05-10.00 am All Consultants in attendance	**Educational Handover Round** 9.05-9.30 am All Consultants in attendance.
Tutorial 1-2 pm Dr. Stokes (1/month)		**SPR Tutorial** 1-2 pm Dr. O'Neill (3/month)		**Clinical Slides** 12.30-1.00 pm Dr. O'Neill (2/month)
	GP half day release weekly (mandatory)			**BST day release** 8 per year SpR day release 8 per year (mandatory)

THE DEPARTMENT OF WOMEN'S HEALTH EDUCATIONAL TIMETABLE				
MONDAY	**TUESDAY**	**WEDNESDAY**	**THURSDAY**	**FRIDAY**
Educational Handover Round and weekend case review 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	**Joint Obstetrics and Paediatrics perinatal meeting** **Educational Handover Round** 8.00-9.00 am All Consultants in attendance	**Gynae oncology MDT alternate with Consultant Balint Group** **Educational Handover Round** 8.00-9.15 am All Consultants in attendance
				Structured teaching for BST, HST and GP trainees 10.30-12 noon
			Interprofessional training in obstetric emergencies 15.30-16.00 pm Dr. Ni Bhuinneain	
		GP half-day release		

Antenatal Education Report

Ms. Frances Burke and Ms. Maura McKenna

Introduction

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

It is a service that provides education, promotes wellbeing and links into the other maternity services.

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

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

Service Provision

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

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

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

Other classes provided include:

- Breastfeeding
- Twins
- Early pregnancy
- Pilot Hypnobirthing
- One-to-one advocacy/education/support.

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 2016, often requiring repeat visits, with specific referrals from the Social Work Department, the Fetal Assessment Unit and Mental Health Services.

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 antenatal classes are provided.

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

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

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

New Initiative: Hypnobirthing

Three Midwives were trained in The Mongan Method of Hypnobirthing in Spring 2016. Both midwife educators were part of this training and started to plan an introduction to this programme within the antenatal education programme.

Two pilot classes were held in 2016, with eleven couples attending. Feedback and evaluation were extremely positive.

Ten training sessions for staff were held within the Maternity Department, offering staff education around all the philosophies of Hypnobirthing. It is hoped to introduce more Hypnobirthing in 2017.

Breastfeeding

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

The Education Service runs a standalone 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 to all the Saolta Hospitals.

National Breastfeeding Awareness Week 2016 was celebrated with a breastfeeding awareness day for transition year students. Information stands were available in the lecture hall and in the main foyer in the hospital for staff and members of the public.

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

Sources of Referrals to Antenatal Classes:

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

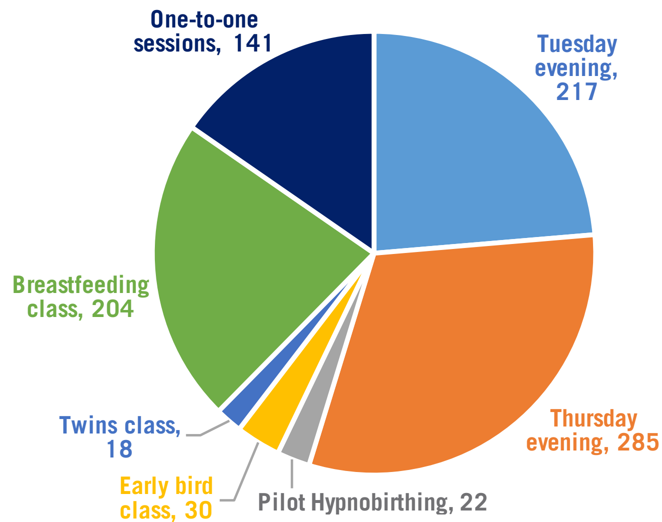
Since 2000, the Childbirth Education Service has forged links with the Mayo Traveller Support Group, the Road Safety Authority, the Specialist Nurses Group and Western Region Drug and Alcohol Task Agency.

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 have been highlighted in 2016.

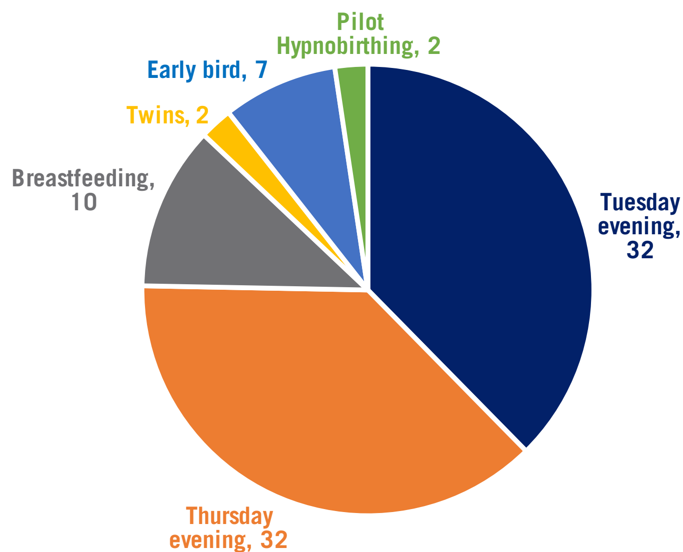
Conclusion

This service is patient-led and strives to meet the needs of all the families using Mayo University Hospital's maternity services. Both educators are constantly reviewing the service and changing the delivery of the education programme to offer the best service possible.

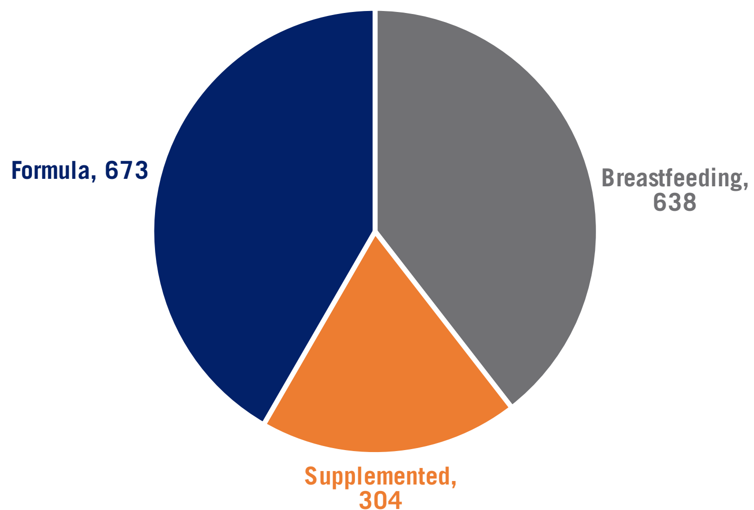
CLASS	ATTENDANCE
Tuesday evening	217
Thursday evening	285
Pilot Hypnobirthing	22
Early bird class	30
Twins class	18
Breastfeeding class	204
One-to-one sessions	141



NUMBER OF CLASSES HELD 2016	
Tuesday evening	32
Thursday evening	32
Breastfeeding	10
Twins	2
Early bird	7
Pilot Hypnobirthing	2
One-to-one sessions	141



BREASTFEEDING FIGURES ON DISCHARGE 2016	
Breastfeeding	638
Supplemented	304
Formula	673



Antenatal / Postnatal Unit Report

The Antenatal / Postnatal Unit consists of 26 beds.

The Midwives rotate to the Labour Ward, Antenatal and Postnatal. Midwifery team members working in the Antenatal / Postnatal Unit 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 on the Unit 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 1,605 mothers delivered and 1,634 babies born in 2016, with a Caesarean section rate of 32.7%. 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.

1. Diabetic mothers
2. Group B Strep
3. PROM
4. Metabolic screening
5. Newborn screening
6. EWS for at-risk babies
7. Screening for early detection of congenital heart disease in newborn infants.

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

Ambulatory Gynaecology 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 that were seen in 2016 was up by 16% on the previous year. 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 has been staffed by two part-time Midwives and two part-time Nurses. There is a total of one full time and one part-time Clerical Officer assigned to the Unit. The above staff WTE also partake in servicing EPU and Colposcopy (with the addition of a Colposcopy CNS solely assigned to that area.)

The One Stop Clinic

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

Clinics are undertaken by a specialist team of four Consultants and their teams, Monday- Thursday. There are currently four ambulatory clinic sessions per week, one gynaecology outpatient clinic and two colposcopy clinics. EPU has a daily two-hour emergency morning service (Monday - 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 1299 women were seen in ambulatory gynaecology clinics last year, being made up of new and review appointments.

Educational Advancements in the Unit

One of the Midwives working in the Unit completed an online Certificate in Clinical Exercise through TCD in 2016. This course was funded by the CNME. The area of exercise prescription is growing in importance, with more emphasis being placed on preventative health in dealing with many of the chronic health conditions in society at present. Overall emphasis is placed on the importance of physical activity for the women attending the Unit as a whole and 'making every contact count' also includes brief interventional advice for women that smoke.

In addition, one of our Staff Nurses completed a local course on Sexual Health over a period of 8 months. It is hoped for 2017 that we will have one of our current Midwives training in sonography through UCD.

Challenges for the Service

- Meeting waiting list times for appointments to the Unit has been an issue for Consultants on occasions throughout the year.
- 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.
- There were 270 woman who did not attend their appointments during 2016, i.e. a 20% DNA rate. Our colleagues in the Colposcopy Service introduced a texting reminder service last year which resulted in a fall of over 50% in their DNA rates. This is something that other clinics in the hospital are campaigning for and we hope this will be part of our service in 2017.
- At present, women check in along the clinical corridor of our rather small unit. This is not ideal, when on occasions 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 clinic times has not been sanctioned for the Unit.

Initiatives for 2017

One of our Consultants has made a strong business case for the introduction of a procedure whereby endometrial polyps can be removed in our setting - traditionally these cases had to be referred to theatre in an outpatient capacity. This is called a Truclear Moscillator and we will be only the second unit in the country to offer this service for woman if funding is approved.

Conclusion

In 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 diagnose and provide 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.

ATTENDANCE	NUMBERS
Trans-vaginal scans	1082
Hysteroscopies	150
Operative hysteroscopies	3
Biopsies (including cervical polypectomies, endometrial and labial)	395
Mirena insertions	177
Mirena removals	106

	NUMBER OF NEW PATIENTS IN 2016	NUMBER OF REVIEW PATIENTS IN 2016
	939	360

Medical Social Work Department

Ms. Ann Doherty

The Medical Social Work Department of Mayo University Hospital has provided practical and emotional support to the Women and Children's Health Division for the last 14 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 CNMs 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 rate in this area has 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, stillbirth, 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 reflects 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 that 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, 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 and 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 like 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 the Public Health Nurse and Adult Mental Health Services, particularly when a woman has a history of mental health issues, e.g. depression or personality disorder, 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 multidisciplinary 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 newborn 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's and Children's Directorate have a 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 roll-out of the National Standards for Bereavement Care following a Perinatal Loss. She 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 the Obstetrics and Gynaecology, Paediatrics and Neonatal Departments. We would particularly like to acknowledge the close working relationship with the Antenatal Educators who provide invaluable support in supporting our more vulnerable clients.

Women's Health and Paediatric Physiotherapy Report

Ms. Fiona McGrath

Women's Health Physiotherapy Service

Women's Health physiotherapy is a specialist clinical area and urogynaecological referrals from across the county are treated in Mayo University Hospital.

Throughout 2016, there was a significant pressure on the Physiotherapy Service, as the hospital was unable to recruit a Senior Physiotherapist to cover planned leave. This has led to significant delays in providing physiotherapy follow-up for routine ante- and postnatal care.

Despite this, 280 new outpatients were assessed and 1,002 outpatient treatments provided.

Referral levels remained consistent, with a total of 420 referrals received for outpatient care. There was an increase in the number of referrals for antenatal pelvic girdle pain.

There was a limited service provided to the Maternity Ward and the focus of care was on those patients at greatest risk of complications due to pelvic floor trauma. In October 2016, a new postnatal physiotherapy service commenced in the Primary Care Centre in Castlebar, led by physiotherapy, and there has been very positive feedback on this service.

The Physiotherapy Service was unable to deliver on the antenatal education programme throughout 2016.

Paediatric Physiotherapy Service

The inpatient service includes:

- Paediatric ward
- Special Care Baby Unit
- Maternity babies
- Cystic Fibrosis service to inpatients

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.
- A service for all paediatric normal variance referrals across Co. Mayo.
- Physiotherapy referrals for all paediatric musculoskeletal and orthopaedic referrals 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.
- Attendance at the Asthma Clinics.
- Liaison with PCCC paediatric services regarding transfer of appropriate infants and children to other services.

There were 414 referrals received for outpatient paediatric physiotherapy in 2016:

	NEW PATIENTS SEEN	PHYSIOTHERAPY TREATMENTS
Inpatient ward	245	980
CF outpatients	143	281
Asthma Clinic	213	214
Outpatients	417	1177

Quality and Patient Safety Department

Ms. Grainne Guiry

The Women's and Children's Directorate, Mayo University Hospital, meet on a monthly basis to review incidents, complaints, risk register material and service user feedback.

If internal reviews are required, a Preliminary Assessment Report is completed for review, using the Saolta template.

Recommendations from reviews are reviewed at these meetings and action plans are agreed.

Serious incidents are escalated to SIMT (Serious Incident Management Team) meetings which are held on a monthly basis and actions are agreed.

Number of Incidents Reported in 2016

There were a total of **1,364** incidents reported from 1st January, 2016, to 31st December 2016. Of that number, **168** pertained to Maternity Services and **50** to Paediatrics.

Local Management of Complaints

Complaints from service users are dealt with by the Quality and Patient Safety Department, following the HSE complaints management process.

There were a total of **13** complaints recorded at Mayo University Hospital in 2016 pertaining to the Women's and Children's Directorate. The complaints are broken into the following categories: access, dignity and respect, communication, safe and effective care, accountability, participation and privacy.

Frequency with which these categories were raised in complaints in 2016

Communication: 10
Safe and effective care: 6
Accountability: 2
Dignity and respect: 2
Participation: 1
Privacy: 1

Obstetric Ultrasound Report

Ms. Aisling Gill

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

The Early Pregnancy Unit runs from 08.30 until 10.30, Monday to Thursday, and 08.30 to 12.30 on Friday and covers all areas of pregnancy up to 12 weeks' gestation. The Perinatal Unit runs from 08.30 until 18.00, Monday and Tuesday, and until 15.00 on Wednesday and Thursday and until 12.00 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

WTE 1.85
WTE 0.5 training line

The above roles are inclusive of both reporting and counselling. This takes considerable time, especially when breaking bad news or telling parents that 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 821 scans performed in the Early Pregnancy Unit.

There were 3,792 scans performed in the Perinatal Unit.

There were 761 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 5,394 scans performed by the obstetric ultrasound team.

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

The following is a list of ultrasound examinations performed:
- Booking/dating scans
- Cervical length scans
- Second trimester detailed routine anatomy scans
- Growth scans
- Biophysical profiles
- Doppler studies
- Fetal wellbeing
- Multiple pregnancies

All women who present for booking are offered a dating scan before 14 weeks gestation and a second scan is usually offered before 28 weeks gestation. This later appointment offers better views of the cranium and cardiac structures. (Note: 20-week scans are offered in countries where termination before 24 weeks is an option). In 2016, there were 1,560 women who had a booking scan. There were approximately 1,300 routine second trimester ultrasound examinations performed. 177 of these second trimester routine ultrasounds were performed by Dr. Kamal el Mahi. Approximately 30 were performed by Dr. Ni Bhuinneáin. 78 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 were 128 private maternity mothers which leaves 1477 out of 1605 mothers delivering in the public service.

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, have a past history of pre-term delivery or have previously had small babies.

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 2016, there were 183 women monitored under the diabetic criteria – these included 177 women who had gestational diabetes, 4 women who had Type 1 Diabetes and 2 women who had Type 2 Diabetes.

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

For monocorionic diamniotic twin pregnancies, women are offered scans every 3 weeks up to 24 weeks 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 2016, there were 30 sets of twins, which included 9 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.

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 UNIT ACTIVITY 2016	by Runagh Burke
Total attendances to Early Pregnancy Unit	**821**
Total viable intrauterine pregnancies diagnosed	**398**
Total complete miscarriages diagnosed	**125**
Total incomplete miscarriages diagnosed	**75**
Total missed miscarriages diagnosed	**107**
Total ectopic pregnancies diagnosed	**19**
Total pregnancies of unknown location diagnosed	**79**
Total molar pregnancies diagnosed	**3**
Total number of pregnancies of unknown viability	**148**
Total number of BHCG bloods recorded	**205**

Portiuncula University Hospital

Introduction
The Women's and Children's Clinical Directorate team in Portiuncula is pleased to present an overview of the clinical activity and services provided on the site in 2016. Through 2016, we have worked as a team to progress a number of quality initiatives and to strengthen the governance arrangement within our team, on this site as well as in the wider Saolta Group. Our achievements include establishing a Women's and Children's Clinical Directorate team on site, a Policies, Procedures, Guidelines and Audit Group and strengthening our approach to identifying, reporting reviewing and managing clinical risk.

We would like to acknowledge all of the staff who work in the Women's and Children's Clinical Directorate, and those who work with us, for their support, continued hard work and commitment to the service throughout 2016.

Statistical Summary

Ms. Aisling Dixon, Dr. Marie-Christine De Tavernier, Ms. Siobhan Canny

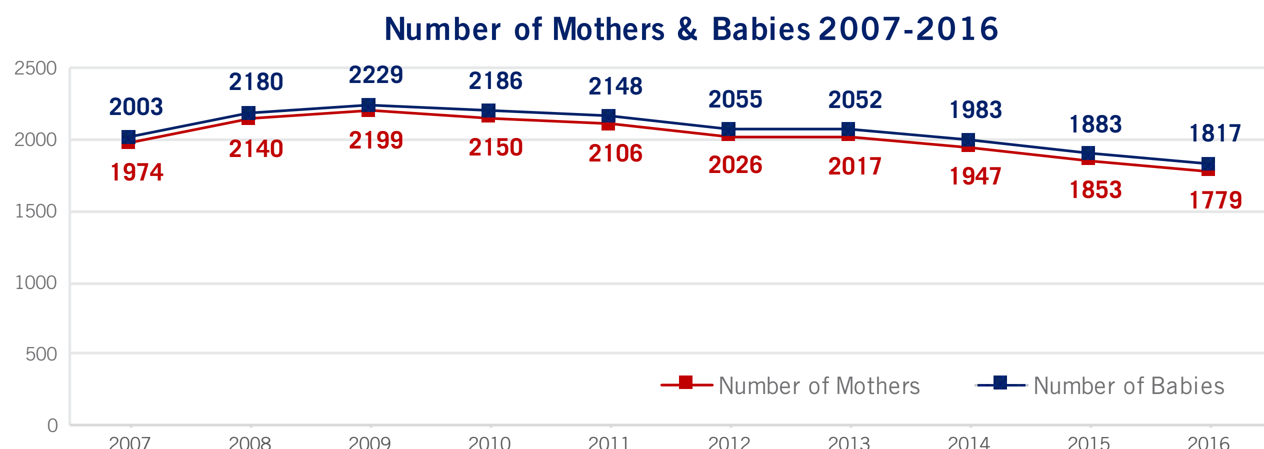
Activity
There were 1,817 babies delivered to 1,779 mothers in 2016. This rate identifies a continued annual reduction in births since a peak in 2009; this is in line with national trends.

The majority of the women attending are white Caucasian, with 31.4% of them having their first baby and a further 38.8% having their second. The induction of labour rate remains unchanged. The age profile remains relatively unchanged, with approximately 10% being over 40 years of age and 67.3% ranging from 30 to 39 years of age.

The mode of delivery for the majority (63.1%) was vaginal birth; the CS rate, however, remains high at 36.9%. A number of quality initiatives were commenced in 2016 to consider the rate of CS delivery and to work on achieving a rate that is optimal for clinical outcome. In 2016, we saw a rise in the number of twins delivered in the unit, with 38 sets recorded. The induction of labour rate remains unchanged and the incidence of third degree tear was 2.7%.

The gestational age for 95% of births was term (37 to 42 weeks). This is due to the requirement to transfer potential premature deliveries to sites with Level 1 NICUs. The birth weight for the majority of births was between 3 to 4.5 kg. The PNM rate remains relatively unchanged from previous years at 7.2 per 1,000 births; in 2016 we had 11 stillbirths and 2 early neonatal deaths. These cases, as well as the maternal morbidity, are discussed later in the report.

	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Total Number of Mothers	558	1221	1779
Total Number of Babies	576	1241	1817
>24wks or >/= 500g			



OBSTETRIC OUTCOMES (MOTHERS)	PRIMIP n= 558	%	MULTIP n= 1221	%	TOTAL n= 1779	%
Spontaneous Onset	285	51.1%	611	50.0%	896	50.4%
Induction of Labour	183	32.8%	274	22.4%	457	25.7%
Augmentation	115	20.6%	52	4.3%	167	9.4%
No Analgesia	11	2.0%	67	5.5%	78	4.4%
Epidural Rate	326	58.4%	440	36.0%	766	43.1%
Episiotomy	195	34.9%	120	9.8%	315	17.7%
Caesarean Section	226	40.5%	430	35.2%	656	36.9%
Spontaneous Vaginal Delivery	155	27.8%	704	57.7%	859	48.3%
Forceps Delivery	27	4.8%	6	0.5%	33	1.9%
Ventouse Delivery	150	26.9%	81	6.6%	231	13.0%
Breech Delivery	0	0.0%	0	0.0%	0	0.0%

OBSTETRIC OUTCOMES (BABIES)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous Vaginal Delivery	157	27.3%	707	57.0%	864	47.6%
Forceps Delivery	27	4.7%	6	0.5%	33	1.8%
Ventouse Delivery	150	26.0%	81	6.5%	231	12.7%
Breech Delivery (Singleton)	0	0.0%	0	0.0%	0	0.0%
Breech Delivery (1st Twin)	0	0.0%	0	0.0%	0	0.0%
Breech Delivery (2nd Twin)	1	0.2%	5	0.4%	6	0.3%
Caesarean Section (Babies)	241	41.8%	442	35.6%	683	37.6%
Total	**n= 576**		**n= 1241**		**n= 1817**	

MULTIPLE PREGNANCIES	PRIMIP	%	MULTIP	%	TOTAL	%
Twins	18	3.2%	20	1.6%	38	47.6%

MULTIPLE BIRTHS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Twins	29	40	30	36	42	29	35	36	30	38

PERINATAL DEATHS	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Stillbirths	5	6	11	0.61%
Early Neonatal Deaths	1	1	2	0.11%

PERINATAL MORTALITY RATE	2015	2016
Stillbirth rate (per 1,000)	4.8	6.1
Early Neonatal Death rate (per 1,000)	2.1	1.1
Overall PMR per 1,000 births	6.9	7.2

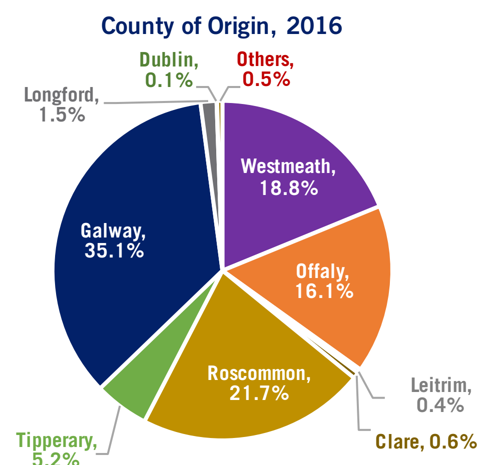
PARITY	NUMBER	PERCENTAGE
Para 0	558	31.4%
Para 1	691	38.8%
Para 2	355	20.0%
Para 3	111	6.2%
Para 4	36	2.0%
Para 5	13	0.7%
Para 6	7	0.4%
Para 7	4	0.2%
Para 8	2	0.1%
Para 9	0	0.0%
Para 10	1	0.1%
Para 11	1	0.1%
Total	**1779**	**100.0%**

PARITY BY YEAR	2015	2016
0	35.0%	31.4%
1,2,3	62.0%	65.0%
4+	3.0%	3.6%

AGE AT DELIVERY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
15-19 years	15	2.7%	1	0.1%	16	0.9%
20-24 years	81	14.5%	58	4.8%	139	7.8%
25-29 years	103	18.5%	156	12.8%	259	14.6%
30-34 years	205	36.7%	345	28.3%	550	30.9%
35-39 years	131	23.5%	517	42.3%	648	36.4%
>40 years	23	4.1%	144	11.8%	167	9.4%
Total	**558**	**100.0%**	**1221**	**100.0%**	**1779**	**100.0%**

AGE AT DELIVERY	2015	2016
<15 years	0.0%	0.0%
15-19 years	2.1%	0.9%
20-24 years	7.8%	7.8%
25-29 years	17.0%	14.6%
30-34 years	37.5%	30.9%
35-39 years	29.9%	36.4%
>40 years	5.7%	9.4%

COUNTY OF ORIGIN	2015	2016
Westmeath	20.5%	18.8%
Offaly	15.4%	16.1%
Leitrim	0.5%	0.4%
Clare	0.5%	0.6%
Roscommon	20.7%	21.7%
Tipperary	5.5%	5.2%
Galway	33.9%	35.1%
Longford	1.3%	1.5%
Dublin	0.0%	0.1%
Others	1.7%	0.5%
Total	**100.0%**	**100.0%**



ETHNIC ORIGIN	2016
Caucasian	97.2%
Asian	1.1%
Afro Carribean	0.1%
Oriental	0.3%
Mediterranean	0.6%
African	0.6%
Total	**100.0%**

GESTATION AT DELIVERY	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<24 weeks	2	0.4%	0	0.0%	2	0.1%
24-27 weeks	1	0.2%	0	0.0%	1	0.1%
28-31 weeks	1	0.2%	4	0.3%	5	0.3%
32-35 weeks	36	6.5%	45	3.7%	81	4.6%
36-39 weeks	373	66.8%	975	79.9%	1348	75.8%
40-41 weeks	145	26.0%	197	16.1%	342	19.2%
>42 weeks	0	0.0%	0	0.0%	0	0.0%
Total	**558**	**100%**	**1221**	**100%**	**1779**	**100%**

BIRTH WEIGHTS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
<1000g	3	0.5%	1	0.1%	4	0.2%
1000 - 1999g	11	1.9%	15	1.2%	26	1.4%
2000 - 2999g	113	19.6%	143	11.5%	256	14.1%
3000 - 3999g	384	66.7%	826	66.6%	1210	66.6%
4000 - 4499g	54	9.4%	218	17.6%	272	15.0%
4500 - 4999g	11	1.9%	35	2.8%	46	2.5%
5000 - 5499g	0	0.0%	2	0.2%	2	0.1%
>5500g	0	0.0%	1	0.1%	1	0.1%
Total	**576**	**100.0%**	**1241**	**100.0%**	**1817**	**100.0%**

BIRTH WEIGHTS	2015	2016
< 500g	12	3
500 - 999g	2	1
1000 - 1999g	19	26
2000 - 2999g	256	256
3000 - 3999g	1247	1210
4000 - 4499g	276	272
4500 - 4999g	61	46
5000 - 5499g	7	2
>5500g	3	1
Total	**1883**	**1817**

INDUCTION OF LABOUR	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
2015	224	35.0%	260	21.0%	484	26.0%
2016	183	32.8%	274	22.4%	457	25.7%

INCIDENCE OF EPISIOTOMY	PRIMIP	%	MULTIP	%	TOTAL	%
2016	195	58.7%	120	15.2%	315	28.0%

PERINEAL TRAUMA	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
Intact	34	10.2%	298	37.7%	332	29.6%
Episiotomy	195	58.7%	120	15.2%	315	28.0%
2nd Degree Tear	70	21.1%	204	25.8%	274	24.4%
1st Degree Tear	20	6.0%	156	19.7%	176	15.7%
3rd Degree Tear	15	4.5%	15	1.9%	30	2.7%
Other Laceration		0.0%	1	0.1%	1	0.1%
Total*	**334**		**794**		**1128**	

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

ROBSON GROUPS	n- CS	n-Women	%
Group 1 - nullip singleton cephalic term spont labour	62	285	21.8%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	109	214	50.9%
Group 3 - multip singleton cephalic term spont labour	18	490	3.7%
Group 4 - multip singleton cephalic term induced or pre-labour CS	49	271	18.1%
Group 5 - previous CS singleton cephalic term	305	370	82.4%
Group 6 - all nulliparous breeches	27	30	90.0%
Group 7- all multiparous breeches	29	31	93.5%
Group 8 - all multiple pregnancies	26	38	68.4%
Group 9 - all abnormal lies	5	5	100.0%
Group 10 - all preterm singleton cephalic	26	45	57.8%
Total	**656**	**1779**	

B.B.A.	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
2007	0	12	12
2008	2	3	5
2009	0	6	6
2010	1	8	9
2011	1	1	2
2012	0	5	5
2013	1	7	8
2014	0	5	5
2015	0	7	7
2016	0	3	3

3RD STAGE PROBLEMS	PRIMIGRAVIDA	%	MULTIGRAVIDA	%	TOTAL	%
Primary PPH (1000ml)					18	1.0%
Manual Removal of Placenta	14	2.5%	29	2.4%	43	2.4%

	TOTAL	%
Shoulder Dystocia	4	0.2%

BREASTFEEDING AND SKIN TO SKIN	2016
Breastfeeding Initiation Rates	59.6%
Breastfeeding on Discharge	52.0%
Skin to skin for 60 mins from birth	82.3% of live births

Professional Development

Ms. Anne Murray

Birth after Caesarean (BAC)

The OptiBIRTH Study was completed in Portiuncula University Hospital in April 2016. Parents found that having professional support and access to advice during pregnancy helped to strengthen their confidence in their ability to birth safely.

The hospital decided to continue offering an opportunity to women who have had one previous Caesarean Section to meet with a Midwife at 28 weeks to have a risk benefit discussion regarding their mode of delivery. This is called the "Birth after Caesarean" (BAC) clinic. We plan to build on this initiative and increase the numbers of women attending in 2017.

Neonatal Resuscitation

Neonatal resuscitation training is provided by Ms. Anne Murray, Clinical Midwife Specialist, and continues to be a major element of ongoing, mandatory, in-house training. It is provided for all staff caring for neonates. Due to the maternity review, demand increased hugely.

To date, the percentages of staff trained in neonatal resuscitation are as follows:

MIDWIVES	N.C.H.D.s
(98.2% in date)	(100% in date)
SCBU STAFF	**CONSULTANTS**
(80% in date)	(100% in date)

Impromptu neonatal resuscitation drills were conducted on a weekly basis during the year and included medical, midwifery and nursing staff. In addition, PROMPT was carried out three times during the year; NRP was incorporated into each PROMPT session.

Awards

Ms. Anne Murray, Clinical Midwife Specialist, received the INMO Coleman Research Award for 2016. She was also awarded 2nd prize in the British Journal of Midwifery Awards. Anne received the prize in the Midwifery Research Category for research conducted at Portiuncula University Hospital. The title of her research was *"Neonatal Pulse Oxygen Saturation Levels and Heart Rate for the first ten minutes of life following Delayed Umbilical Cord Clamping"*. Anne received the award at the University of Manchester.

Anne presented her research at the 35th Annual International Nursing and Midwifery Research and Education Conference (RCSI) in 2016 and at the OptiBIRTH Conference.

Diabetic Clinic

Dr. Marie-Christine De Tavernier

The Diabetic Clinic is held weekly on Tuesday mornings. It is managed by Dr. Aaron Liew, Endocrinologist; Dr. Marie-Christine De Tavernier, Consultant Obstetrician and Gynaecologist; Ms. Hilda Clarke, Clinical Nurse Specialist in Diabetes; the Midwife team in the antenatal outpatients; and the Sonographer team in the Fetal Assessment Unit. We cared for 165 patients during 2016: 1 patient with Type 1 DM, 3 patients with Type 2 and 161 patients with gestational diabetes.

Breastfeeding Report

Ms. Mary Mahon

Education and Training
Three Midwives successfully completed the International Board Certified Lactation Consultant exam and are now registered as International Board Certified Lactation Consultants. We are continuing to provide in-house education and training for staff in the hospital.

Lactation Services Provided by Portiuncula:
- Midwives and nursing staff provide direct breastfeeding support in line with national policy
- In-house specialist support to 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

National Breastfeeding Week
In 2016, Portiuncula University Hospital hosted a number of events to highlight the importance of breastfeeding to the health of our society. The week began on 3rd October, with a presentation to transition year students by guest speaker, Ms. Sue Jameson. Adolescence is a formative time when health-related behaviours are learned that usually persist into adulthood. Sue's presentations were very informative, with lively interaction and time to ask and answer questions. The evaluation forms completed by attendees demonstrate the success of the event and highlight a need to extend the project.

On 4th October, PUH hosted a 'Movie and popcorn' afternoon. 'The Milky Way', a groundbreaking documentary that encourages healthcare providers to empower women to trust themselves, their bodies and their babies, was shown to staff and students.

On 5th October, PUH hosted a coffee morning for mothers with their babies and in the afternoon an antenatal breastfeeding information session was hosted for pregnant women and their partners. The resources available in Portiuncula and on www.breastfeeding.ie were highlighted.

Early Pregnancy Unit Report

Dr. Marie-Christine De Tavernier and Ms. Collette Conneely

	TOTAL
Total number of scans	4,416
Number of cases	1,590
Multiple pregnancies	Twins – 46; Triplets – 2 (one delivered in Galway and the other resulted in a live singleton)
Early pregnancy scans	1,577
Total miscarriages	498 - a further 16 cases were outside of the first trimester (14+0)
Anatomy scans	737
Growth / fetal wellbeing scans	2,134

The list and description of fetal anomalies diagnosed/referred on at the Fetal Assessment Unit during 2016 is outlined below (13 cases)
- CNS malformation: case of Dandy-Walker malformation
- Thoracic malformations: 2 cases of CCAM
- CVS malformations: transposition of the great arteries, tricuspid regurgitation with poor biventricular function
- Gastro-intestinal malformation: case of omphalocoele
- Renal tract malformations: Potter Syndrome, ureterocoele/hydronephrosis, left duplex kidney
- Musculo-skeletal malformation: case of short long bones
- Cleft lip and palate: 1 case
- Pierre Robin Sequence: 2 cases, one case confirmed as Stickler Syndrome
- 2 cases of Rhesus Disease needed referral for rising anti-D titers; both required IUT during their antenatal course
- Prenatal karyotype results were abnormal in 5 cases:
  - Trisomy 13: 2 cases
  - Trisomy 18: 2 cases
  - Trisomy 21: 1 case

Neonatal Clinical Report

Dr. Regina Cooke

During the year 2016, a total of 1817 infants were born at Portiuncula University Hospital. 311 infants were admitted to the NICU for neonatal care following birth. This represents 17% of babies born at the hospital. In addition, 7 infants were admitted for ongoing care following initial care in a regional or tertiary unit.

The majority of infants (74.5%) 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 2016, 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 2015, 16 babies were transferred.

GESTATIONAL AGE OF NICU ADMISSIONS

	N	%
28 to 31+6 weeks	4	1.2 %
32 to 36+6 weeks	76	24.3 %
>37 weeks	231	74.5 %
Total	**311**	**100.0%**

SOURCE OF ADMISSION

	N	%
Delivery Suite	87	27.4%
Theatre	118	37.1%
Postnatal Ward	106	33.3%
Tertiary Unit	7	2.2%
Total	**318**	**100.0%**

TRANSFERS OUT FOR TERTIARY SERVICES BY DIAGNOSIS

REASON FOR TRANSFER	N
Prematurity / RDS	3
Cardiac	5
Surgical	4
Respiratory Distress	2
Endocrine	2
Total	**16**

TRANSFERS OUT FOR TERTIARY SERVICES BY DESTINATION

	N
Galway University Hospital	1
OLCHC	11
CUH, Temple Street	1
CW&IUH	1
Rotunda	2
Total	**16**

BIRTH WEIGHT OF NICU ADMISSIONS

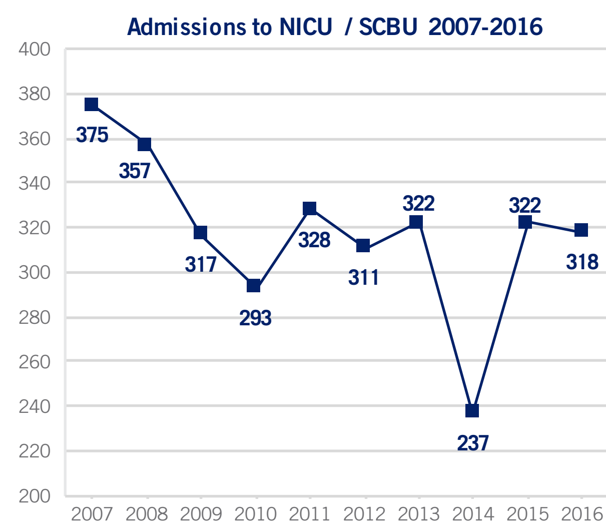
BIRTH WEIGHT	N	%
<1500g	4	1.3%
1500-2000g	19	6.1%
2000-2500g	63	20.3%
>2500g	225	72.3%
Total	**311**	**100.0%**

SUMMARY OF NEONATAL DEATHS

DIAGNOSIS	GESTATION	WEIGHT	LOCATION OF DEATH
Hypoplastic Left Heart	37/40	3.3kg	OLCHC
Extreme Prematurity	22/40	0.560kg	PUH
Trisomy 13	32/40	1.5kg	PUH

DISCHARGE DIAGNOSIS 2016

REASON FOR NEONATAL ADMISSION	N	%
Prematurity / LBW / RDS	58	18.6%
Low Birth Weight >37 weeks	26	8.4%
Dusky / Cyanotic Episodes	12	3.9%
Respiratory Distress / Grunting	59	19.0%
Hypoglycaemia	14	4.5%
Infant of IDDM mum	33	10.6%
Social	12	3.9%
Sepsis / suspected sepsis	23	7.4%
Jaundice	25	8.0%
Poor feeding / vomiting	7	2.3%
Other	42	13.5%
Total	**311**	**100.0%**



Paediatric Unit Report

Dr. Frances Neenan and Ms. Karen Leonard

Introduction

The Paediatric Service consists of St. Therese's 23-bedded Acute Paediatric Ward, the Emergency Department, a four-day Paediatric Day Service and a Paediatric Outpatient Service. The age profile of patients seen is 0-16 years. The following figures and tables give an overview of the paediatric clinical activity in Portiuncula Hospital for the period January 1st to December 31st 2016. Figures from previous years are included for comparison purposes. Data supplied for this report was obtained from the Hospital Inpatient Enquiry system.

Admission Information

Overall there was another slight increase in the number of admissions to the Paediatric Unit this year (52 patients). This was despite an extra 402 paediatric patients having been seen in the Emergency Department in 2016. There has been a 6% increase in admissions to St. Therese's Ward in 2016 compared to 2010 (see Figure 1).

The 'average length of stay' figure is static compared to 2015, with an overall decrease since 2013 of 7.8% (see Figure 2).

ED Attendances

The busiest month for ED attendances in 2016 was May. The quietest month was August (68% variation). Overall there is a 29% increase in attendances in 2016 compared to 2010 (see Figure 3).

The age profile of patients presenting to the ED can be seen in Figure 4.

ICU

Critically ill children are admitted to our adult ICU for stabilisation. Five children between the ages of 2 and 12 years were admitted to the adult ICU in 2016. This is in contrast to 12 children admitted in 2015. Two children were later transferred in 2016 to a tertiary PICU.

The children (N=5) were admitted to ICU for the following reasons: Respiratory =2, Diabetic Ketoacidosis=1, Post Surgery=1, Neurology=1.

Only one child needed intubation and ventilation following admission.

Paediatric Outpatient Services

Portiuncula University Hospital provides a general paediatric outpatient service as well as specialist clinics in diabetes, respiratory, neurodevelopment and rapid access clinics. Specialist Paediatric Dermatology clinic figures are not included. Outreach clinics are provided in Roscommon and Athlone. Figure 5 outlines the increase in numbers attending outpatients.

Outpatient Services are also provided on our Paediatric Unit in the Paediatric Day Ward. Services provided include phlebotomy, weight checks, medical education (e.g. anapen training), and medical and surgical reviews.

Increasingly, we are sharing care of patients attending tertiary centres for oncology, haematology, rheumatology and gastrointestinal problems. Currently approximately ten patients need regular admission for blood checks, reviews and therapeutic infusions, reflecting the increased complexity of patients being cared for.

Figure 6 shows the number of patients using this facility 2010-2016.

Figure 1: Inpatient Admissions to St Therese's Paediatric Ward 2010-2016

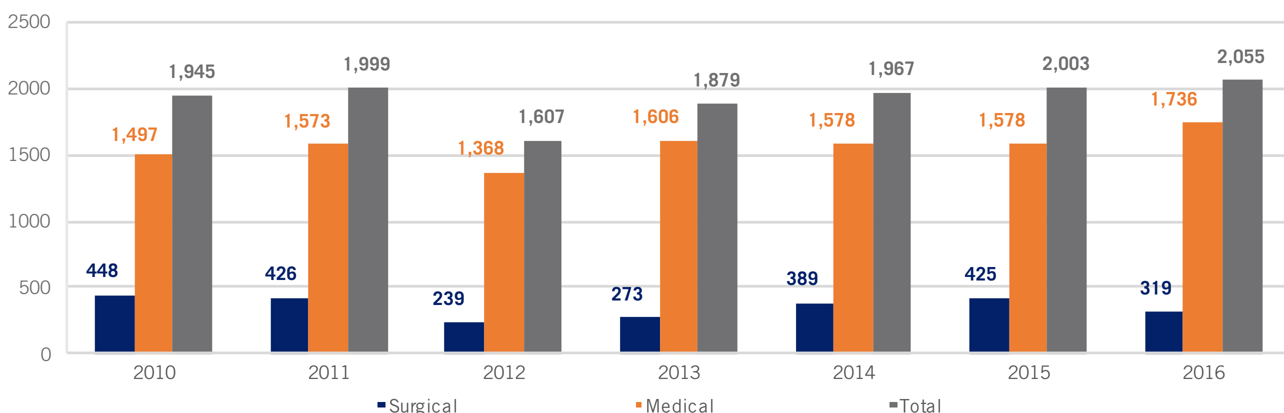


Figure 2: Average Length of Stay (St Therese's) for Inpatient Discharges

YEAR	DISCHARGES	SUM (LENGTH OF STAY)	AVERAGE LOS
2016	2,063	3,902	1.89
2015	2,017	3,760	1.86
2014	1,981	4,196	2.12
2013	1,890	3,866	2.05

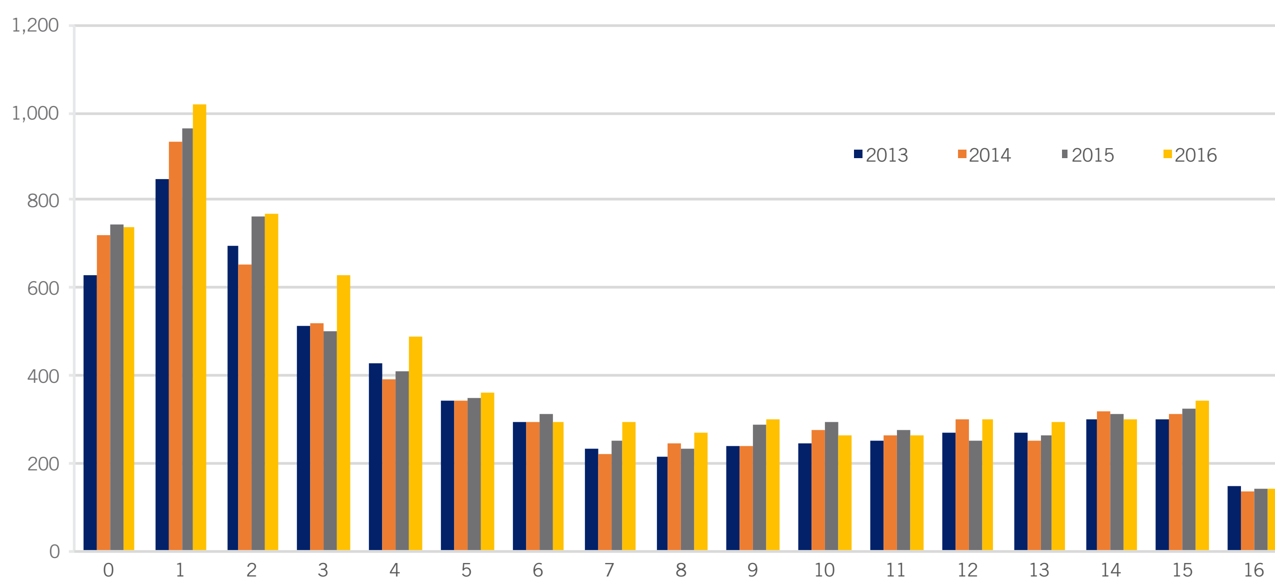
Figure 3: ED Attendances (Paediatrics) 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Jan	398	509	467	510	535	503	592
Feb	424	451	549	487	567	563	574
Mar	521	580	554	483	596	653	612
Apr	476	518	450	626	567	607	628
May	548	481	542	560	535	604	667
Jun	468	479	475	517	551	500	533
Jul	407	370	387	480	465	399	475
Aug	364	393	389	433	371	454	396
Sep	412	474	482	383	485	485	537
Oct	403	406	484	471	449	493	566
Nov	434	402	437	491	483	560	586
Dec	379	416	571	513	547	544	601
Total	**5,234**	**5,479**	**5,787**	**5,954**	**6,151**	**6,365**	**6,767**

Figure 3: ED Attendances (Paediatrics) 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Jan	398	509	467	510	535	503	592
Feb	424	451	549	487	567	563	574
Mar	521	580	554	483	596	653	612
Apr	476	518	450	626	567	607	628
May	548	481	542	560	535	604	667
Jun	468	479	475	517	551	500	533
Jul	407	370	387	480	465	399	475
Aug	364	393	389	433	371	454	396
Sep	412	474	482	383	485	485	537
Oct	403	406	484	471	449	493	566
Nov	434	402	437	491	483	560	586
Dec	379	416	571	513	547	544	601
Total	**5,234**	**5,479**	**5,787**	**5,954**	**6,151**	**6,365**	**6,767**

Figure 4: ED Attendances by Age (2013-2016)



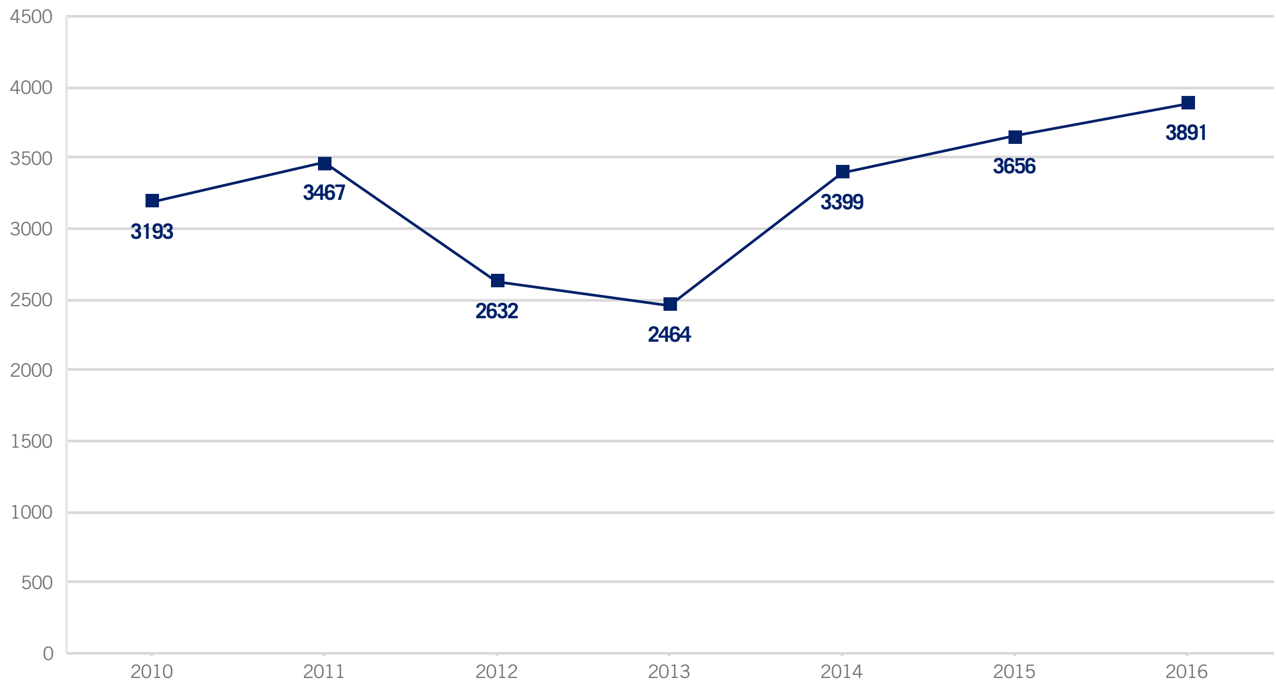


Figure 5: Paediatric Outpatient Attendances 2010 - 2016
4500
4000
3500
3000
2500
2000
1500
1000
500
0
3193
3467
2632
2464
3399
3656
3891
2010
2011
2012
2013
2014
2015
2016

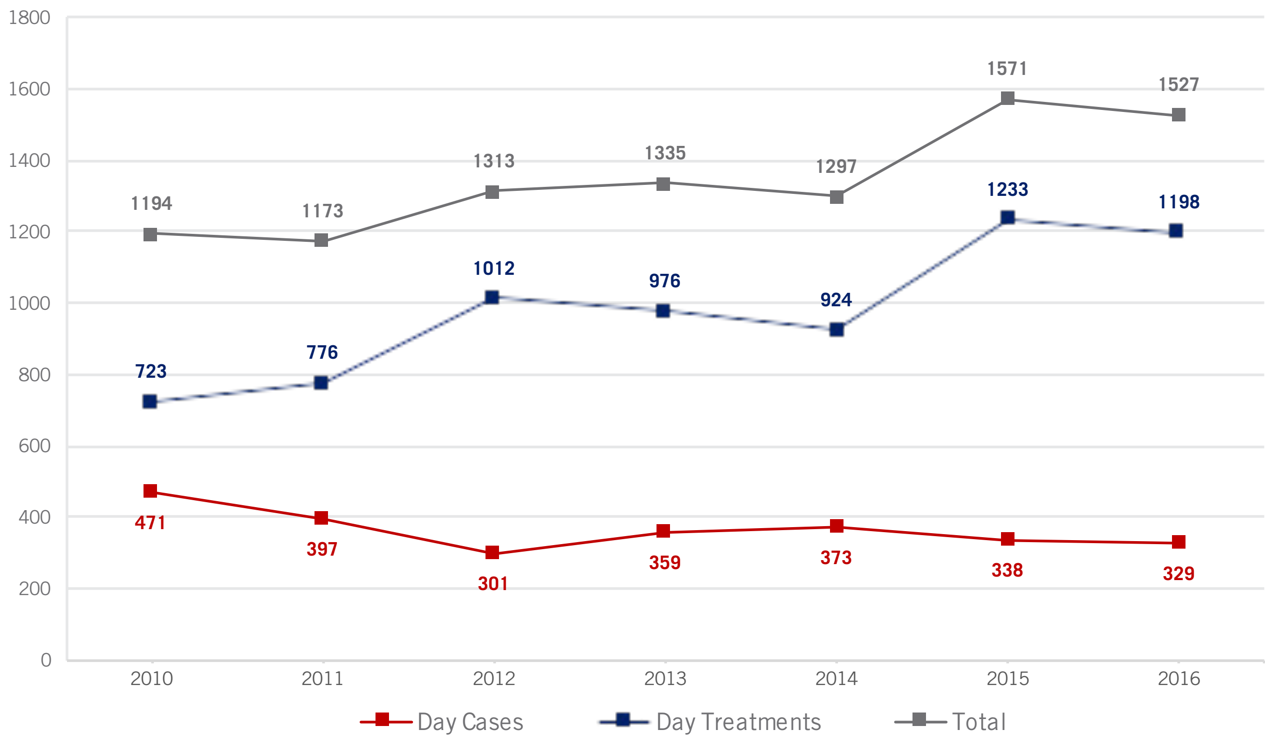


Figure 6: Paediatric Day Ward Attendances 2010-2016
1800
1600
1400
1200
1000
800
600
400
200
0
1194
1173
1313
1335
1297
1571
1527
723
776
1012
976
924
1233
1198
471
397
301
359
373
338
329
2010
2011
2012
2013
2014
2015
2016
Day Cases
Day Treatments
Total

Social Work Department

Ms. Caroline McInerney Layng

ACTIVITY LEVELS – INDIVIDUALS SEEN BY AREA					
Maternity	Antenatal	EPU	Crisis Pregnancy	Paediatrics	SCBU
211	105	10	44	50	19

The Medical Social Work Service is an integral part of the multidisciplinary team delivering patient-centred care in the maternity area, which also extends to Antenatal Clinics, Early Pregnancy Unit, SCBU and Paediatric Department. Ongoing supportive counselling is provided to women/couples to promote positive parenting and ensure psycho-social issues are addressed at an early stage.

The Social Worker plays a key role in the provision of counselling, support and advocacy to women and their families dealing with a wide range of complex issues as follows:

- Child protection and welfare
- Crisis/unplanned pregnancy
- Concealed pregnancy
- Underage/teenage pregnancy
- Lifestyle issues such as substance abuse
- Mental health and postnatal depression
- Neonatal withdrawal syndrome
- Relationship difficulties
- Domestic abuse
- Changing family structures
- Stressors including financial, unemployment and accommodation
- Bereavement support for those experiencing pregnancy loss
- Children born with a disability/life-limiting condition
- Fatal foetal abnormality

The social work team is committed to promoting a culture of continuous improvement through professional development, which is a requirement of CORU registration.

Team members participated in the Perinatal Bereavement Group and contributed to ongoing training and development in this area. The Department attended National Maternity and Neonatal Hospice Friendly Hospitals Network meetings, which include representation from 19 maternity hospitals. This is a national network for healthcare staff who work in the area of pregnancy loss and infant death.

The Maternity Social Worker also participated in the annual remembrance service held in February.

The activity levels and profile of service users reflect the diversity of work in the maternity and antenatal settings. I would like to thank my team members for their continued dedication and commitment. I would like to acknowledge the co-operation of the management team, Maternity clinical staff, Antenatal and EPU, SCBU, Paediatrics and the Pastoral Care Team, who have supported us in providing a quality, patient-centred service.

Ballinasloe Crisis Pregnancy Support Service

Ms. Caroline McInerney Layng

Ballinasloe Crisis Pregnancy Support Service is now 13 years in existence. The service aims to promote positive outcomes for women by providing counselling, support and information on all options, i.e. parenting, adoption and termination. Women and their partners are encouraged to access the service at an early stage in the pregnancy. This is achieved by the availability of the service in the hospital and community. The service is extensively advertised and promoted in both settings. An early appointment system and prioritisation of crisis referrals is a key feature of the service.

The service covers a rural catchment area of counties Galway, Roscommon, Longford, Westmeath, Offaly and North Tipperary.

In 2016, the majority of cases were referred within the hospital setting from the Early Pregnancy Unit, Antenatal Clinics and the Maternity Department. While there is a noted decline in the overall figures, with less women experiencing pregnancy as a crisis, 44 women availed of the service. In a significant number of those who presented for antenatal care, the women concerned had already made a decision to continue with the pregnancy. Our experience indicates that many have ambivalent feelings around the pregnancy and benefit from ongoing support in preparation for parenthood.

There is a continued trend of self-referrals through the crisis line, who attend for once-off appointments. Some will have sourced information on clinics abroad via the internet but recognise the value of supportive counselling in facilitating their decision-making. This is encouraging and evidence that the advertising campaign is positively received.

A number of women contacted the service for post-abortion counselling, which was a positive trend, as this service was poorly attended in the past. It is interesting to note that those presenting benefitted from a number of sessions to help them come to terms with their experience. The feedback from this group was very positive and reinforces the benefit of emotional support and counselling.

Apart from direct counselling and support services provided, the past year was productive with completion of self-assessment standards, quality improvement plans and continuous professional development. The self-assessment framework proved beneficial in evaluating practice and procedures and identifying areas for improvement. A number of quality improvement plans will be progressed in the year ahead.

In the area of professional development, Ms. Teresa Barrett completed a Foundation Programme in Sexual Health Promotion. A new team member, Ms. Roisin McHugh, commenced the certificate in Crisis Pregnancy at NUI Maynooth. This training enhances the service in terms of expertise and knowledge on crisis pregnancy and sexual health matters.

Another positive development in early 2016 was our participation in the annual sexual health awareness campaigns in GMIT and NUIG. These events provided an opportunity to showcase our service as well as interacting with students on the subject of crisis pregnancy and sexual health.

The service was also promoted in the hospital with an information day in April. This event was positively received and facilitated conversations with the public and staff members. Sexual health material was also available on display, in line with the broader ethos of the service.

During the year, the service developed leaflets in Polish, arising from a need identified in the self-assessment process. This development was positively noted by GPs, practice nurses and pharmacists during the outreach awareness campaign reactivated in the latter part of the year.

The service held a workshop with trainee GPs in Ballinasloe on 8th November. The purpose of this workshop was to raise awareness of the supports available and educate doctors in dealing sensitively with crisis pregnancies.

In summary, I would like to thank the HSE Crisis Pregnancy Programme for their continued funding and support throughout the year. I would also like to thank our own team here in Portiuncula University Hospital - the Social Work Department, management, and the clinical staff in Maternity, Antenatal and EPU - who have supported us in providing a quality service to women experiencing crisis pregnancy.

Quality and 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 structures. 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 patients.

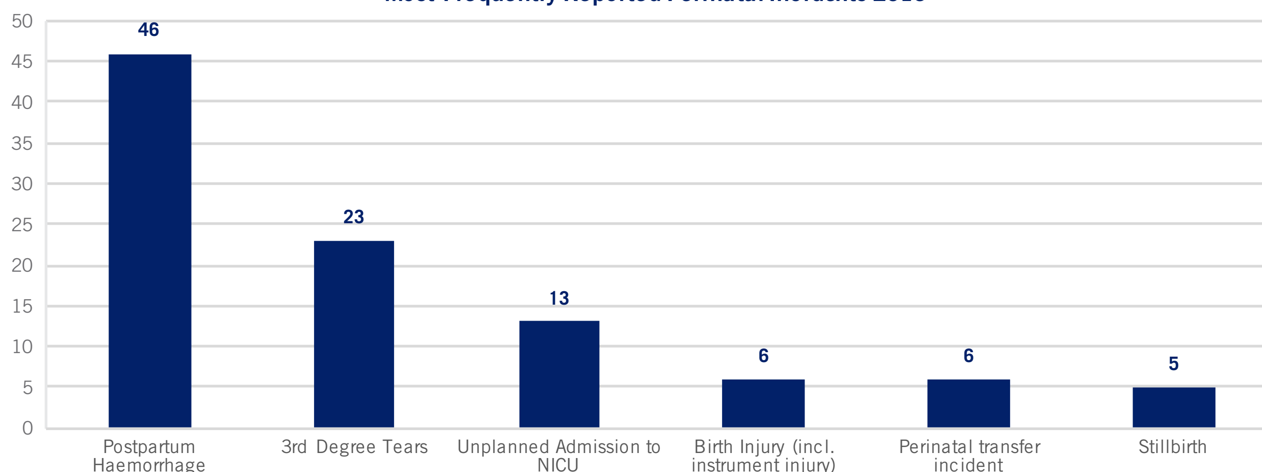
Regular multidisciplinary meetings are held throughout the week. These meetings focus on many aspects of care delivery and include: staff education and training; policy and procedure review; audit; incident review and risk management.

Service user feedback (complaints and compliments) and incidents are reported on the hospital's quality information management system (Q-Pulse). Close liaison occurs between the Associate Clinical Director, Director of Midwifery and Assistant Director of Midwifery regarding reported events, which are reviewed and any required actions agreed. These may include: review of local policies and procedures; staff development; level one review for further consideration / determination of the need to escalate to the Saolta W&C Directorate / Serious Incident Management Team. Furthermore, incidents are reporting on the State Claims Agency's National Incident Management System (NIMS) and to the HSE's National Incident Management Team in the event that the criteria for a Serious Reportable Event (SRE) have been met, in accordance with HSE policy.

Staff information sessions are regularly provided with regard to: record keeping, incident recognition and reporting; risk assessment and developing and populating a risk register; open disclosure staff awareness training and workshops; and informed consent. Staff training on the use of Q-Pulse is provided on a monthly basis.

Service user surveying is ongoing. 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.

INCIDENTS, COMPLAINTS AND POSITIVE FEEDBACK 2014-2016	2014	2015	2016
General Incidents	155	171	271
Medication Incidents	16	19	8
Total Incidents	**171**	**190**	**279**
Complaints	6	19	28
Positive Feedback	4	9	52



SPECIALTY	N
Obstetrics	337
Gynaecology	11
Paediatrics	11
Total	**359**

COMPLAINTS BY CATEGORY	N
Safe and effective care	8
Communication / information	16
Dignity and respect	2
Access	2
Total	**28**

Women's Health and Paediatric Physiotherapy Report

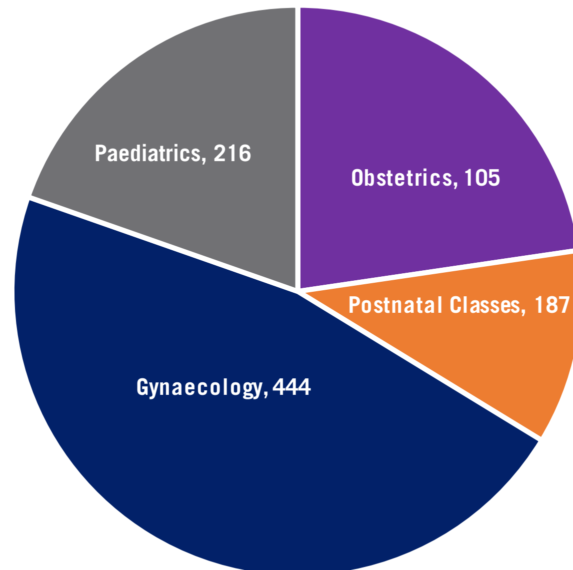
Ms. Róisín O'Hanlon

The Women's Health Physiotherapy Service is provided in both the in- and outpatient setting, including ICU. Changes were made in service delivery in 2016 to ensure that the recommendations of the National Maternity Strategy were initiated. By the end of the year, the following services were being offered:

- Perinatal MSK physiotherapy for pelvic girdle pain, carpal tunnel syndrome, back pain and other musculoskeletal problems
- Antenatal classes (twice monthly)
- Postnatal classes (three times weekly)
- Perineal tears review
- Treatment for incontinence
- Post-operative care for all gynaecological surgery patients

We accept GP and Consultant referrals for this cohort of patients. As the catchment area for 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 to avoid them having to travel to Ballinasloe.

Unfortunately, there is an increasing demand for this service and the outpatient waiting list is growing despite reorganisation of the service.



Paediatric physiotherapy is also provided as both in- and outpatients. Inpatient advice and treatment is delivered for conditions such as:

- Neonatal conditions: Erb's palsy, congenital talipes equino varus, congenital talipes calcaneovarus, congenital neurological conditions
- Respiratory
- MSK

Outpatient physiotherapy is mainly confined to MSK conditions, though there are a few children with respiratory conditions who 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.

Sligo University Hospital

Mission Statement

Sligo University Hospital is committed to the delivery of a high-quality, patient-centered service in a safe, equitable and efficient manner. We recognise and value the contribution of each staff member and endeavour to support them in their ongoing development.

Sligo University Hospital (SUH) provides acute inpatient, day care and outpatient services on a range of highly specialised services extending to 250,000 people in Sligo, Leitrim, Donegal, North Roscommon, West Cavan and East Mayo. The hospital has 281 operative inpatient beds and a further 50 day case beds, supported by a multidisciplinary workforce of 1,541 people. The mainstream acute services provided by SUH cover the following specialties:

Emergency Medicine, Surgery, ENT, Ophthalmology, Orthopaedics, Paediatrics, Obstetrics/Gynaecology, Medicine, Cardiology, Diabetology, Dermatology, Gastroenterology, Geriatrics, Respiratory Medicine (including adult CF patients), Rheumatology, Nephrology (consultant sessions from Letterkenny University Hospital), Neurology, Oncology, Palliative Medicine, Haematology, Microbiology, Orthodontics, Pathology, Anaesthesia, Intensive Care Medicine, Pain Service and Radiology. In addition, services in Immunology and Radiation Oncology are provided from University Hospital Galway.

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, with support provided to Letterkenny University Hospital in respect of ENT, Ophthalmology, Neurology, Rheumatology and Orthodontic Services. A number of specialties provide outpatient clinics at community hospitals in the catchment area.

Maternity Unit

The Obstetrics and Gynaecology specialty provides a maternity service to women and their families, spanning pregnancy, birth and the postnatal period.

The specialty aspires to provide a high-quality, comprehensive service that offers choice, continuity of care and control through a skilled, multidisciplinary staff.

The Maternity Service is provided from the multi-storey building since 1992, over four floors. There were 1,360 births in 2016. 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 (three delivery beds and two pre-labour beds) provides care for admission, antenatal assessment, induction of labour (high-risk or overflow) and care in labour and delivery. Operative deliveries are carried out in the main theatre suite on Level 8. All women attending in suspected labour or out of hours are assessed and triaged in Delivery.

Women who are less than 32 weeks gestation who are at risk of preterm delivery are transferred to a tertiary centre, if appropriate. The care in the Delivery Suite is consultant-led and midwifery-managed.

There are 3.0 WTE Consultant Obstetrician/Gynaecologists, supported by 5 Obstetric Registrars and 6 Senior House Officers, two of whom are GP trainees. Maternity Services is a training site for Midwifery, Nursing, Medical and Paramedical students. Midwifery training is supported by a Midwifery Placement Coordinator and a part-time Clinical Skills Facilitator who supports ongoing multidisciplinary training across the service.

The midwifery team on the antenatal/postnatal ward consists of 2 CMM 2s, 15 WTE Midwives and three Healthcare Assistants. There is household cover from 08.00 hrs to 16.00 hrs and on-call out-of-hours cover from 16:00 hrs to 08:00 hrs. Midwives work closely with the multidisciplinary team to provide holistic, women-centered care. The midwifery team in the Delivery Suite consists of 1 CMM2, 15.6 WTE Midwives and 3 Health Care Assistants shared with NICU. There is household cover from 08.00 hrs to 12.30 hrs and on-call from 16:00 hrs to 08:00 hrs.

Key Achievements Across the Service for 2016

Quality Initiatives

- Introduction of CTG proforma stickers
- Introduction of PPH proforma
- Midwifery Training Passport - highly commended by NMBI
- Safe Site Surgery checklist adapted for Maternity
- Maternity services were the recipient of the HPH international award for "Supporting Smoking Cessation in Pregnancy - An Observational Study"
- The Antenatal Clinic Staff Midwives were a short-listed for the Clinical Team of the Year at the Irish Healthcare Centre awards
- The Antenatal Clinic Lean Project, "Great Expectations", was short-listed for the Healthcare Department Initiative at the Irish Healthcare Centre awards
- Maternity Services undertook CBAS training (Caring Behaviours Assurance System)
- Local Maternity Implementation Group was re-established in December 2016
- Skin-to-Skin following elective LSCS was introduced
- Colposcopy attained Cervical Check target - 500 new patient referrals 2016
- Implementation of VTE prophylaxis in accordance with Clinical Practice Guideline No. 20

Staffing Achievements

- Appointment of Director of Midwifery
- Dr. Vimla Sharma awarded a Fellowship from RCPI
- Ms. Roisin Lennon, cAMP, prize-winner poster presentation "Prostin vs Propess for IOL" at Midwifery Conference in the Coombe Women and Infants University Hospital, Dublin
- Ms. Roisin Lennon, cAMP, conferred with a Masters in Advanced Midwifery Practice from National University of Ireland Galway
- Ms. Maria White and Ms. Rosin Mellet, Staff Midwives, completed a Postgraduate Diploma in Bereavement Studies from RSCI and Irish Hospice Foundation

Education and Training

- BSc Midwifery Students commenced placement in January 2016
- Maternity Services received a site visit from the Nursing and Midwifery Board of Ireland in July 2016
- Ms. Leanne Smith, Staff Midwife, and Ms. Lynn Cunningham, Staff Nurse, Neonatal Unit, qualified as Lactation Consultants
- Six midwifery and medical staff attended a CTG masterclass facilitated by Professor Edwin Chandraharan
- Ms. Gabrielle Clarke and Ms. Therese Smyth, Staff Midwives, completed a module in Care of the Critically-Ill Woman, facilitated through NUIG
- Ms. Juliana Henry, Director of Midwifery, and Ms. Louise O'Malley, CMM3, completed a course in Quality and Leadership in Midwifery in the RCSI Institute of Leadership.

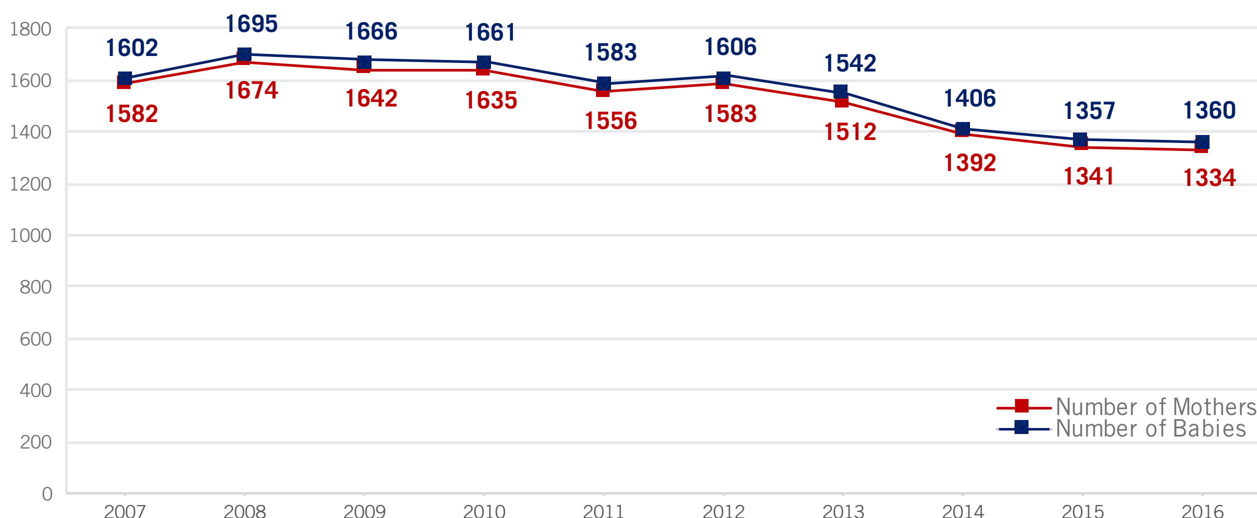
A midwifery-managed antenatal review clinic for low-risk women in SUH is well established for many years. Antenatal clinic facilities for consultant-led care and midwifery-managed antenatal review care are shared with the general hospital services in the Outpatient Department of the hospital, with outreach consultant-led clinics in community hospital facilities at the Sheil Hospital, Ballyshannon, St. Patrick's Hospital, Carrick-on-Shannon, and Our Lady's Hospital, Manorhamilton. Midwives from the hospital attend all in-house and outreach antenatal clinics.

Group antenatal education programmes are provided through a standardised multidisciplinary education package designed in collaboration with the PHN service (PCCC) and delivered in the local primary care centre by hospital staff and in other community settings throughout the region by the local public health nurse.

Statistical Summaries

Ms. Juliana Henry, Dr. Nirmala Kondaveeti, Ms. Madeleine Munnelly and Ms. Louise O'Malley

	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL
Total Number of Mothers	486	848	1334
Total Number of Babies	500	860	1360
>24 weeks or >/= 500g			



OBSTETRIC OUTCOMES (MOTHERS)	PRIMIP n=486	%	MULTIP n=848	%	TOTAL n=1334	%
Spontaneous Onset	240	49.4%	395	47.6%	635	47.6%
Induction of Labour	160	32.9%	255	30.1%	415	31.1%
Augmentation					229	17.2%
No Analgesia						0.0%
Epidural Rate					501	37.6%
Episiotomy	150	30.9%	67	7.9%	217	16.3%
Caesarean Section	192	39.5%	225	26.5%	417	31.3%
Spontaneous Vaginal Delivery	166	34.2%	568	67.0%	734	55.0%
Forceps Delivery	32	6.6%	15	1.8%	47	3.5%
Ventouse Delivery	96	19.8%	40	4.7%	136	10.2%
Breech Delivery	1	0.2%	3	0.4%	4	0.3%

OBSTETRIC OUTCOMES (BABIES)	PRIMIP	%	MULTIP	%	TOTAL	%
Spontaneous Vaginal Delivery	167	33.4%	567	65.9%	734	54.0%
Forceps Delivery	33	6.6%	18	2.1%	51	3.8%
Ventouse Delivery	97	19.4%	41	4.8%	138	10.1%
Breech Delivery (Singleton)	0	0.0%	1	0.1%	1	0.1%
Breech Delivery (1st Twin)	0	0.0%	0	0.0%	0	0.0%
Breech Delivery (2nd Twin)	1	0.2%	3	0.3%	4	0.3%
Caesarean Section (Babies)	202	40.4%	230	26.7%	434	31.9%
Total	**n=500**		**n=860**		**n=1360**	

MULTIPLE PREGNANCIES	PRIMIP	%	MULTIP	%	TOTAL	%
Twins	15	3.1%	12	1.4%	27	
Triplets	0	0.0%	0	0.0%	0	

MULTIPLE PREGNANCIES	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Twins	20	19	23	24	25	23	26	13	16	27
Triplets	0	0	0	0	0	0	0	1	0	0
Total	**20**	**19**	**23**	**24**	**25**	**23**	**26**	**14**	**16**	**27**

PARITY	NUMBER	PERCENTAGE
Para 0	391	29.3%
Para 1	378	28.3%
Para 2	276	20.7%
Para 3	134	10.0%
Para 4	81	6.1%
Para 5	37	2.8%
Para 6	18	1.3%
Para 7	10	0.7%
Para 8	2	0.1%
Para 9	1	0.1%
Para 10	6	0.4%
Total	**1334**	**100.0%**

PERINATAL DEATHS	PRIMIGRAVIDA	MULTIGRAVIDA	TOTAL	%
Stillbirths	2	7	9	0.66%
Early Neonatal Deaths	0	1	1	0.07%

PERINATAL MORTALITY RATE	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Stillbirth rate (per 1,000)	3.1	2.4	3.6	5.4	3.2	3.7	1.3	3.6	3.7	6.6
Early Neonatal Death rate (per 1,000)	3.1	1.8	1.2	0.6	2.5	3.7	2.6	2.8	3.7	0.7
Overall PMR per 1,000 births	**6.2**	**4.1**	**4.8**	**6.0**	**5.7**	**7.5**	**3.9**	**6.4**	**7.4**	**7.4**

PARITY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	32.7%	33.9%	31.4%	29.5%	31.0%	28.7%	29.3%	26.6%	29.1%	29.3%
1,2,3	58.7%	56.9%	59.6%	61.0%	59.0%	60.1%	59.2%	61.0%	59.6%	59.1%
4+	8.6%	9.2%	9.0%	9.5%	10.0%	11.2%	11.5%	12.4%	11.3%	11.6%

AGE AT BOOKING	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<15 years	0.2%	0.2%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
15-19 years	4.6%	3.1%	3.4%	2.7%	3.3%	2.4%	1.9%	2.8%	1.9%	2.1%
20-24 years	14.0%	12.1%	11.5%	10.9%	9.7%	10.2%	9.7%	8.3%	7.8%	9.0%
25-29 years	23.2%	25.6%	24.7%	23.9%	23.5%	22.7%	21.8%	19.2%	21.9%	18.5%
30-34 years	32.5%	33.5%	34.8%	33.7%	37.8%	35.2%	37.4%	36.4%	35.2%	35.3%
35-39 years	21.3%	21.8%	21.3%	23.7%	21.9%	24.4%	23.9%	27.7%	26.5%	29.0%
>40 years	4.1%	3.6%	4.2%	4.9%	3.7%	5.1%	5.3%	5.6%	6.5%	6.0%

COUNTY OF ORIGIN	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sligo	56.3%	54.3%	58.1%	55.3%	56.5%	56.7%	55.4%	55.2%	55.2%	55.0%
Donegal	10.9%	10.5%	10.5%	11.5%	10.2%	10.6%	9.5%	10.8%	10.4%	11.8%
Leitrim	22.5%	22.1%	20.8%	19.5%	21.2%	19.5%	21.0%	19.6%	21.7%	20.5%
Mayo	1.8%	2.3%	1.6%	1.9%	2.4%	1.8%	2.7%	1.9%	2.1%	1.9%
Roscommon	7.8%	10.1%	8.3%	10.6%	8.4%	10.5%	10.6%	11.6%	10.0%	9.6%
Cavan	0.3%	0.5%	0.3%	0.5%	0.8%	0.5%	0.5%	0.6%	0.4%	0.9%
Galway	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%
Longford	0.3%	0.1%	0.2%	0.2%	0.0%	0.2%	0.1%	0.2%	0.0%	0.0%
Dublin	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%
Others	0.1%	0.0%	0.0%	0.5%	0.3%	0.2%	0.2%	0.0%	0.1%	0.1%

NON-NATIONAL BIRTHS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number	99	106	114	72	62	66	82	72	79	109
%	6.2%	6.3%	6.9%	4.4%	3.9%	4.1%	5.4%	5.0%	5.8%	8.0%

GESTATION AT DELIVERY	TOTAL	%
<24 weeks	1	0.1%
24-27 weeks	2	0.1%
28-31 weeks	4	0.3%
32-35 weeks	64	4.8%
36-39 weeks	629	47.2%
40-41 weeks	606	45.4%
>42 weeks	28	2.1%
Total	**1334**	**100.0%**

GESTATION AT DELIVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<24 weeks	2	2	0	6	8	3	3	2	2	1
24-27 weeks	3	3	5	5	2	3	1	5	6	2
28-31 weeks	5	6	6	5	4	3	4	5	2	4
32-36 weeks	33	36	38	39	25	31	37	36	53	64
37-39 weeks	656	687	684	681	668	716	674	646	646	629
40-41 weeks	837	879	833	869	832	810	796	685	611	606
>42 weeks	67	85	100	58	45	42	29	27	21	28
Total	**1,603**	**1,698**	**1,666**	**1,663**	**1,584**	**1,608**	**1,544**	**1,406**	**1,341**	**1334**

BIRTH WEIGHTS BY YEAR	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<2500g	75	63	53	74	45	46	71	50	54	71
2500-2999g	181	177	201	189	182	191	175	143	153	158
3000-3499g	525	549	516	547	470	535	484	470	467	464
3500-3999g	555	616	616	552	608	571	533	512	482	442
4000-4499g	221	243	229	251	238	219	231	206	160	194
>4500g	46	50	51	50	41	46	50	25	41	31
Total Number of Babies	**1603**	**1698**	**1666**	**1663**	**1584**	**1608**	**1544**	**1406**	**1357**	**1360**

INDUCTION OF LABOUR	PRIMIP	%	MULTIP	%	TOTAL	%
2007	151	24.3%	241	25.2%	392	24.8%
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%

PERINEAL TRAUMA	PRIMIP	%	MULTIP	%	TOTAL	%
Number of vaginal deliveries	294		623		917	
Intact					215	23.4%
Episiotomy	150	51.0%	67	10.8%	217	23.7%
2nd Degree Tear					249	27.2%
1st Degree Tear					119	13.0%
3rd Degree Tear	7	2.4%	3	0.5%	10	1.1%
Other Laceration					107	11.7%
Total					**917**	**100.0%**

INCIDENCE OF EPISIOTOMY	PRIMIP	%	MULTIP	%	TOTAL	%
2007	197	42.7%	81	9.9%	278	21.6%
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%

B.B.A.	PRIMIP	%	MULTIP	%	TOTAL	%
2007	0	0.0%	4	0.4%	4	0.3%
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%

3RD STAGE PROBLEMS	PRIMIP	%	MULTIP	%	TOTAL	%
Primary PPH (1000ml)	23	4.7%	32	3.8%	55	4.1%
Manual Removal of Placenta	7	1.4%	13	1.5%	20	1.5%

	PRIMIP	%	MULTIP	%	TOTAL	%
Shoulder Dystocia	3	0.6%	12	1.4%	15	1.1%

ROBSON GROUPS	n-CS	n-Women	%
Group 1 - nullip singleton cephalic term spont labour	52	247	21.1%
Group 2 - nullip singleton cephalic term induced or pre-labour CS	94	194	48.5%
Group 3 - multip singleton cephalic term spont labour	9	351	2.6%
Group 4 - multip singleton cephalic term induced or pre-labour CS	38	252	15.1%
Group 5 - previous CS singleton cephalic term	131	181	72.4%
Group 6 - all nulliparous breeches	27	27	100.0%
Group 7- all multiparous breeches	25	26	96.2%
Group 8 - all multiple pregnancies	17	27	63.0%
Group 9 - all abnormal lies	8	8	100.0%
Group 10 - all preterm singleton cephalic	16	21	76.2%
Total	**417**	**1334**	

Total No. of Mothers who had 1 Previous Caesarean Section		149	
	Total VBAC	**55**	

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 of 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 the addition of a designated senior Registrar being onsite for all our EPAU sessions, to minimise the number of doctors this vulnerable group of patients have to have contact with and ensure consistency of management with minimal confusion.

Colposcopy continues offer 6 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 2016, 933 new gynaecology outpatient referrals attended, with 3550 patients attending the service for review overall. There was a total of 1425 gynaecology ward attenders.

Gynaecological Surgery Report

	N
LSCS	417
Colposcopy	2
Cystectomy	1
D&C	225
ERPC	67
EUA Gynae	64
Fentons Procedure	3
Hysterectomy Vaginal	4
Hysterectomy, Subtotal	1
Hysteroscopy	234
I&D, Bartholins Abscess	2
Insertion of Mirena Coil	66
Laparoscopy	8
Laparoscopy Tubal Ligation	3
LLETZ	23
Omentectomy	4
Perineal body re-fashioning	2
Removal Retained Placenta	2
Repair Ant & Post	11
Repair of Episiotomy	2
Repair Pelvic Floor Prolapse	3
Shirodkar Suture	3
Smear	11
Vulval Biospy	8
Biopsy Cervix	3
Biopsy of Perineum (closed)	1
Diagnostic Laparoscopy	19
Excision of Bartholins Cyst	2
Hysterectomy Vaginal + Pelvic Floor Repair	4
Polypectomy – Simple	2
Polypectomy Cervical	13
Repair Vaginal Anterior	3
Sterilisation Laparoscopic	1
Cystoscopy	2
Laparoscopy & Dye	5

	N
Laparoscopy +/-Laparotomy	5
Polypectomy (Other)	2
Tubal Ligation	2
Laparotomy	12
Cystoscopy Rigid	1
Excision of Skin-Tags	1
Excision of Lesion NOC	3
Hysterectomy Vaginal +/- Pelvic Floor Repair	1
Pelvic Floor Repair +/- Vag Hyst	3
Repair Posterior	4
Excision of Anal Polyp	1
I&D Abscess	1
Hysterectomy TAH	14
Trans-Obturator Tape TOT	26
Removal of Mirena Coil	20
Labial Excision	1
Labial Resection	1
Removal Labial Cyst	1
Biopsy Vagina	2
Hysterectomy TAH + BSO	29
Insertion of IUCD	1
Removal of IUCD	1
Excision Vulval Cyst	1
Ectopic Pregnancy Salpingectomy	1
Oophorectomy	3
Salpingectomy	1
Bilateral Salpingectomy	1
Laparotomy ?Salpingectomy	1
Salpingo-oophorectomy	2
Marsup Barth Gland	2
Open endometrial ablation	1
Appendicectomy	1
Blood Patch for PDPH	2
Cervix Cautery/Diathermy	2

Obstetrics and Gynaecology Anaesthesia Report

Dr. Seamus Crowley

In 2016, there were a total of 1378 gynaecology procedures performed in main theatres and 310 procedures performed in our Day Services Unit. This included 417 caesarean sections, of which 198 were elective and 219 emergency. A total of 54 general anaesthetics were administered for Caesarean Sections, 18 of which were conversions from regional anaesthesia to facilitate surgery. Labour ward activity included 1360 deliveries to 1334 mothers in this period. There were 415 (31.1%) inductions of labour and 501 (37.6%) epidurals performed during 2016. There were 136 ventouse deliveries, of which 77.2% had an epidural, and 47 forceps deliveries, of which 76.6% had an epidural.

ANAESTHESIA FOR CS		
	NUMBER	%
Elective	198	47.5%
Emergency	219	52.5%
Spinal	295	70.7%
Epidural top-up	68	16.3%
General Anaesthetic	*54	*12.9%
Total CS	**417**	100.0%

* 18 of 54 were conversions from regional anaesthesia to facilitate Caesarean Section surgery.

ICU and HDU admissions 2016

There were 18 maternity admissions to Intensive Care (including High Dependency Care) in 2016.

These are classified as:

- 3 Pre-Eclampsia
- 1 Eclamptic fit
- 1 Cardiomyopathy
- 1 Massive PPH day 20
- 1 Pulmonary Embolus 5 weeks postnatally
- 1 Laparatomy post CS
- 1 Uterine Torsion post CS
- 1 PPH post MROP
- 1 Hypertensive crisis post SVD
- 1 PPH post cervical tear
- 1 PPH post elective CS Twin Pregnancy
- 1 Post Anaesthetic incident PEA
- 1 PPH post CS
- 1 Severe Headaches antenatally
- 1 Aspiration Pneumonia
- 1 Readmission with acute episode of confusion

Admissions, once clinically well, were discharged to Maternity and Gynaecology Wards, with one transfer to Coronary Care.

Developments in 2016

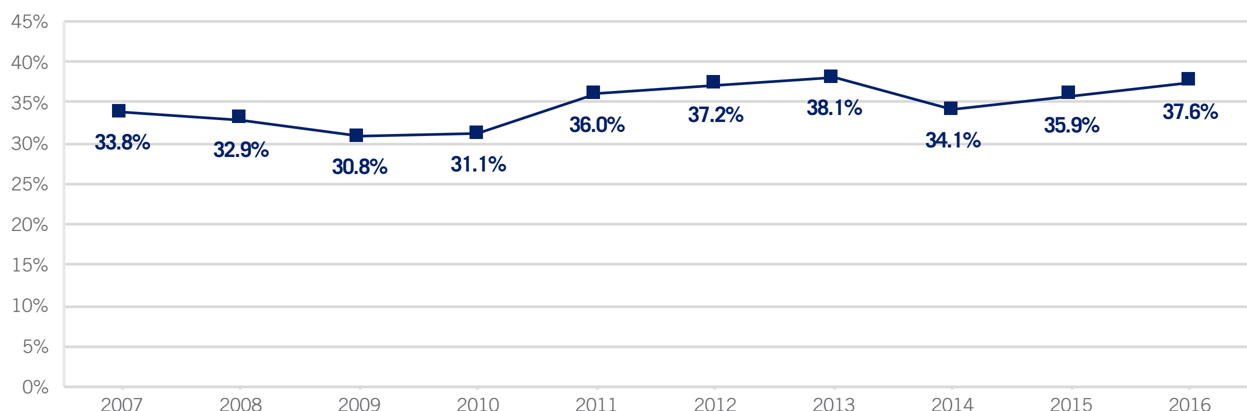
PROMPT courses continued throughout the year, with a total of 33 multidisciplinary staff trained.

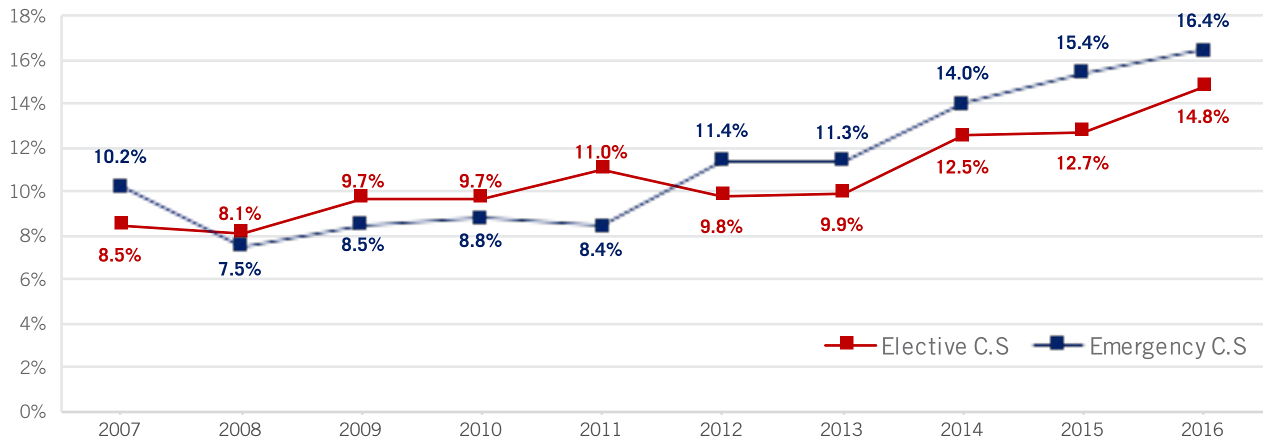
Pre-assessment Anaesthesia Clinic

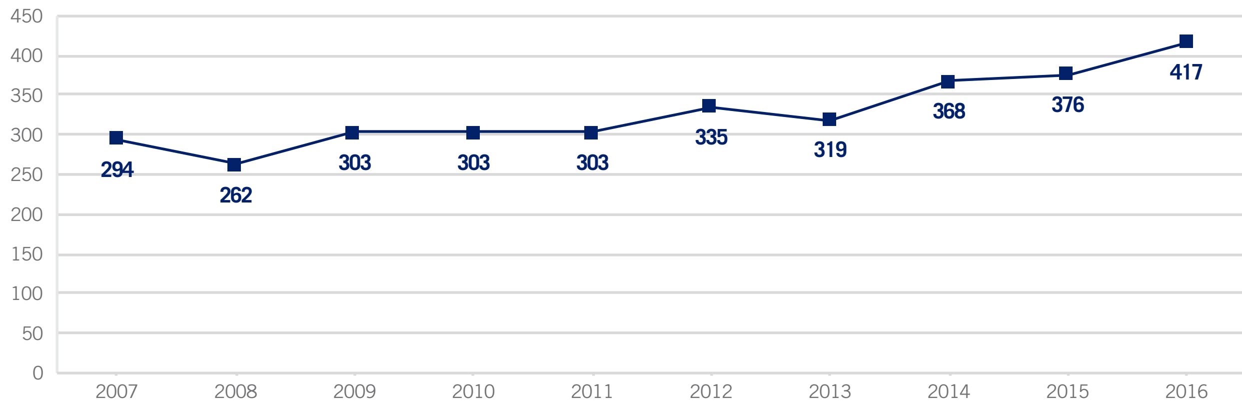
100 women were assessed in the high-risk Anaesthetic Clinic in 2016.

Post-Dural Puncture Headaches

2 patients required blood patches for PDPH.




Percentage of Women who had Elective and Emergency Caesarean Sections
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Elective C.S
Emergency C.S
8.5%
8.1%
9.7%
9.7%
11.0%
9.8%
9.9%
12.5%
12.7%
14.8%
10.2%
7.5%
8.5%
8.8%
8.4%
11.4%
11.3%
14.0%
15.4%
16.4%


Number of Women who had Caesarean Sections
450
400
350
300
250
200
150
100
50
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
294
262
303
303
303
335
319
368
376
417

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 2016.

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. In order to further facilitate this, two Antenatal Educators and two Labour Ward Midwives will undertake hypnobirthing training in 2017. This in turn will be offered to all prospective parents who wish to avail of it. Students are welcome at all classes.

An audit of expectant mothers and their partners was undertaken in 2016 to see if the tour of the labour ward class should be continued or alternatively if a virtual tour of the labour should be offered. The outcome by a majority was to continue the actual tour of the labour ward and the maternity unit.

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
- Self-referrals

Each programme is continually evaluated and appropriate recommendations implemented to meet the needs of prospective parents. The antenatal education committee meets biannually with representation from Maternity, Physiotherapy, Social Care, Public Health Nursing, Health Promotion, General Practice Nursing and Consumers.

Four staff attended the six-day course on “Preparation for Birth and Parenthood” which is run by the Centre of Midwifery Education in CUMH.

ATTENDANCE AT ANTENATAL EDUCATION SESSIONS			
ANTENATAL EDUCATION	CLIENTS	SUPPORT PARTNERS	TOTAL ATTENDANCE
Weekday Sessions	570	282	852
Refresher Sessions	82	35	117
Teenage Sessions	20	15	35
1:1 Antenatal Class Sessions	8	16	24
Tours of Maternity Unit	628	625	1253

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 2016, our breastfeeding initiation rate was 62.6% and breastfeeding on discharge from hospital was 53.3% - 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. It was held in the evenings initially. In 2016, the classes were held monthly and next year we hope to have both afternoon and evening classes due to increased demand and popularity, and 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 2016, a total of 231 mothers attended the classes, many accompanied by partners or support persons.

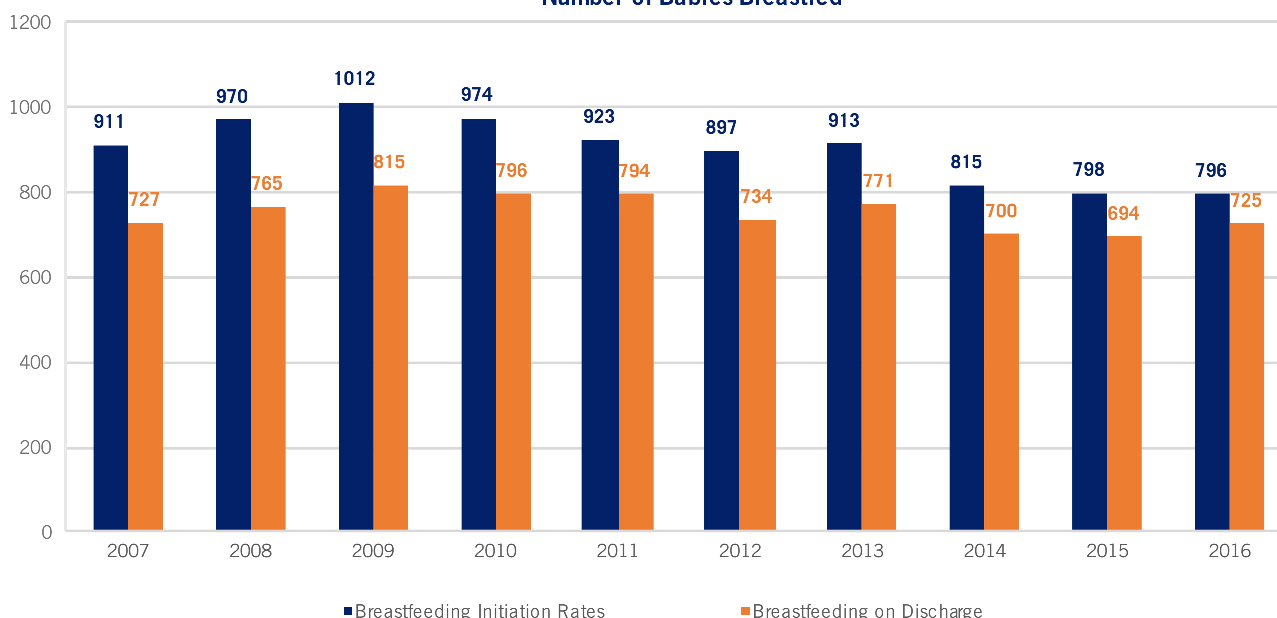
A postnatal breastfeeding clinic for mothers is run by a Lactation Consultant/Midwife and a Public Health Nurse. It is held once weekly by appointment. In 2016, 115 mothers attended the clinic by appointment. Some mothers had repeat clinic visits. Telephone support continued throughout 2016. Feedback 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 within the area.

National Breastfeeding Week 2016 was marked with many events throughout the region. A quiz was held at all antenatal clinics, supported by information and advice from the Midwives. In association with the Saolta Breastfeeding Forum and with support from Health Promotion, the Sligo University Hospital Lactation Consultant and Midwives offered a breastfeeding workshop for TY students. This workshop was well attended by students from the secondary schools in Sligo town and the feedback was very positive. Practical sessions on breastfeeding were held at ward level and a Breastfeeding Quiz was held for maternity and neonatal staff. Health Promotion provided badges for staff to promote breastfeeding with the logo 'Breast is Best'. The badges were very colourful and were worn by all staff involved with pregnant women and postnatal mothers and their families.

Sligo University Hospital is represented on the Breastfeeding Committee for Sligo /Leitrim. This is a multidisciplinary team, including consumer involvement and voluntary groups, which meets quarterly and strives to increase the overall breastfeeding rates in our region.

In 2016, two of our staff qualified as Lactation Consultants. Training continued throughout 2016. Twenty hospital and community staff attended two six-hour breastfeeding updates and training was provided by two Lactation Consultants for 14 Peer Support Leaders.



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
Ms. Sinead Griffin, Clinical Nurse Manager
Ms. Jennifer Curley, RGN
Ms. Mary Kinirons, RGN
Ms. Patricia Murphy, Clerical Officer
Ms. Monica Hopper, Clerical Officer

The Colposcopy Service at Sligo University Hospital (SUH) continues to 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.

In total, 534 new patients were referred to the service, thereby surpassing the CervicalCheck target for new patient referrals in SUH. 45% of all referrals were for low-grade smear abnormalities with a concurrent HPV positive test result in keeping with the introduction of HPV testing in the community in 2015.

Of the 534 new referrals, 516 patients attended during 2016, up 10% on the 2015 figure. 906 patients attended for follow-up care. There were 147 LLETZ treatments performed under local anaesthetic and 25 performed under general anaesthetic. Total attendances were up by 2% to 1,569. The number of LLETZ treatments increased by 4%, whilst the number of review patients decreased by 4%.

There was a moderate increase of 7% in appointment cancellations, however this was offset by a reduction of 6% in the numbers of patients who did not attend (DNA) their colposcopy clinic appointment. Historically, our service has one of the lowest DNA rates nationally.

Eight cases of cervical cancer were identified: 7 invasive squamous cell carcinomas of the cervix and 1 invasive clear cell adenocarcinoma of the vagina. Prompt onward referral was arranged to Gynaecological Oncology centres of excellence in either Dublin or Galway.

Nurse-led Smear Clinic

There was a decrease of 26% in the numbers of patients attending our nurse-led smear clinic, which is due in part to earlier discharge of patients for follow up in the community per the CervicalCheck HPV triage protocol and the management of women post treatment protocol.

The introduction of a text reminder system has continued to have a positive impact, further reducing the numbers of patients who do not attend the clinic by 20%. There was also a dramatic decrease of 59% in the numbers of patients contacting the service to reschedule appointments. Both of these reductions can be attributed to the efforts of staff members to facilitate patients who contact the service to reschedule appointments.

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. Sharma attended the British Society for Colposcopy and Cervical Pathology (BSCCP) annual conference held in Bradford. Two Consultants are BSCCP accredited trainers. Ms. M. Kinirons, RGN, undertook smeartaker training and Ms. S. Griffin, A/CNM 2, commenced training to become a BSCCP-accredited Nurse Colposcopist.

As colposcopy is such a specialised area, time was allocated for each team member to learn about the various protocols and procedures which govern the service. Ms. S. Griffin and Ms. J. Curley attended the annual colposcopy clinic forum held in Dublin in November and hosted by Dr. Grainne Flannelly, CervicalCheck Programme Director, and Ms. Linda Maher, Colposcopy Co-ordinator.

Audit

Ms. S. Griffin and Dr. M. Kamaruzaman, Obstetric/Gynaecology Registrar, continued work on an audit to elucidate the reasons why patients underwent LLETZ treatments under GA. An audit tool was used which identified two main reasons, namely clinical indication or patient preference. Work is currently ongoing on this audit.

Summary

We had another busy and successful year at the SUH Colposcopy Service. A strong desire exists among all staff members to maintain high standards and to work towards continuous improvement in the quality of evidence-based and patient-centred care we provide to all women attending our service.

LLETZ HISTOLOGY RESULTS JAN-DEC 2016
LA AND GA LLETZ ONLY

Type	Total Number	Percentage
CIN I	33	19%
CIN II	43	25%
CIN III	75	44%
AIS/cGIN	6	3%
Microinvasive	1	1%
Invasive and squamous cell carcinoma	6	3%
HPV	3	2%
Others (inflammation, HPV, all other results)	5	3%
Total	**172**	**100%**

Neonatal Unit

Ms. Carmel Durkin

The Neonatal Intensive Care Unit at Sligo University Hospital is a 10-bedded unit comprising 2 intensive care cots, 4 high-dependency cots and 4 special care cots. There is one single room which is often used for isolation purposes. 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. The unit is supported by 5 paediatricians (1.0 WTE to community setting) and a multidisciplinary team which includes healthcare assistants, 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. The Unit serves the population of Sligo, Leitrim, South Donegal, West Cavan and parts of Mayo and Roscommon.

In 2016, there were 304 admissions to NICU, which included 15 day cases. Infants were admitted from delivery ward, theatre, maternity, paediatric ward, emergency department and tertiary maternity and paediatric hospitals. In total, there were 32 transfers to and from tertiary centres (17 transferred out and 15 accepted and admitted), which included 3 paediatric infants requiring stabilisation and critical care prior to transfer out. The 17 transferred out were facilitated by NNTP and 1 by national paediatric transport team; the remaining 12 were carried out by NICU nursing staff. Of the 14 transfers, 9 were by NICU nursing staff with infants returning from tertiary centres for ongoing neonatal management. In addition, 6 infants were admitted to the Paediatric Ward for the following reasons: to support safe care in incidences of staff shortages, periods of escalation secondary to the unit operating at full capacity and infection control reasons.

In 2016, a member of our nursing team qualified as an International Board-certified Lactation Consultant (IBCLC). The value of the qualification, along with the specialised knowledge it brings, has been clearly visible within the unit, with the focus on promoting and supporting mothers to initiate and establish breastfeeding. Hospital-grade breastfeeding pumps are offered to mothers on discharge home, free of charge, to support breastfeeding mothers whose infants are admitted to the Neonatal Unit. While it is encouraging to see an increase in our breastfeeding rates, the provision of a full-time, dedicated lactation consultant would further increase the percentage of neonates receiving breast milk and thus improve outcomes for high-risk infants.

An ethos of continuing professional development continues to be supported and during 2016 many of our nursing and medical staff attended the STABLE course and neonatal study days, and continued to develop the clinical skill of venepuncture and intravenous cannulation. Plans for appointment of a CNS in the post of Bereavement Midwife is welcome and will be an additional support to bereaved families and staff in providing end-of-life care. Neonatal nurses attend high-risk deliveries when staffing levels and skill-mix allow. Challenges include: unit design, storage facilities, lack of parent facilities and staffing levels to deal with time-critical neonatal emergencies and transfers. 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.

Fetal Assessment / Early Pregnancy Assessment Unit

The Fetal Assessment Unit, which includes early pregnancy assessment, is based on Level 4 during core hours, while care for women who present in early pregnancy for emergency assessment is provided in the Female Surgical / Gynaecology inpatient ward on Level 6.

The Fetal Assessment Unit provides a service to antenatal women who require evaluation of both fetal and maternal wellbeing. Assessment, support and advice are also provided for women who have possible problems in early pregnancy. The service is midwife-led and provided by 3 Clinical Midwife Specialists who have H.Dip/MSc in diagnostic imaging ultrasound and a Staff Midwife certified in first trimester scanning. They are supported by the multidisciplinary team. Facilities consist of 2 assessment couches and 3 ultrasound scan rooms.

A total of 6,848 women attended the Fetal Assessment Unit/Early Pregnancy Unit in 2016, of whom 5,016 had scans performed.

Service currently provided:

- The Assessment Unit operates 5 days per week, from 07.30 – 17.00hrs.
- Evaluation of fetal wellbeing through appropriate ultrasound scanning. All pregnant women are offered an anomaly scan between 18 and 22 weeks gestation. Serial scanning is provided for women with high-risk pregnancies; their appointments are scheduled to combine with their antenatal / diabetic clinic.
- Day-case facility for antenatal patients requiring: Electronic Fetal Monitoring, blood pressure monitoring, blood series including Glucose Tolerance tests.
- Non-labouring patients presenting for admission are assessed in this area.
- The Early Pregnancy Assessment Clinic operates formally between 07.30 and 10.00hrs, however, in an effort to reduce unnecessary admissions to the gynaecology area, women with early pregnancy problems are regularly seen outside these hours.

North West Paediatric Insulin Pump Service

Dr. Orla Neylon and Ms. Sinead Molloy

The NW paediatric pump service was established in 2015 at Sligo University Hospital, using a hub and spoke operational model with outreach to Letterkenny. There are approximately 100 patients currently using the service, 33 in Sligo and approximately 64 in Donegal. Establishment of this facility initially involved a small increase in staff numbers but is already displaying tangible benefits to the children and families of the region, who 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, as well as local commencement of new pump patients, has saved families in the NW region roughly 177,528km in travel annually (54,648km Sligo patients; 122,880km Donegal patients), as well as the economic cost of lost days at work, travel and subsistence outlays. Improvement in users' metabolic control is also being demonstrated, with preliminary data now available from the Sligo cohort of patients. Cross-sectional analysis of HbA1c of the entire patient cohort in our datasystem (n=84) showed a significant improvement of mean HbA1c to 7.9% in October 2016, compared to the overall mean population HbA1c recorded at previous audits (8.9% in 2009 and 8.6% in 2013). Overall mean HbA1c of our insulin pump cohort currently stands at the internationally recommended target of 7.5%. This 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 patients have also significantly reduced, as displayed by the following HIPE data which examines admission rates for severe hypoglycaemia, diabetic ketoacidosis (DKA) and admission for stabilisation of uncontrolled diabetes:

YEAR	DKA	POORLY CONTROLLED	HYPOGLYCAEMIA	HYPERGLYCAEMIA AND ILLNESS
2007	9	12	3	1
2008	2	10	2	—
2009	5	3	3	—
2010	2	6	0	0
2015	1 (Pt from UK)	0	3	0
2016	2	2 LUH patients	1	6 (Only 2 patients. I patient admitted 5 times while omitting insulin, needed admission for place of safety)

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