Auckland District Health Board Maternity Quality and Safety Programme

Annual Report 2013 – 2014

A report to the Ministry of Health provided by ADHB in fulfilment of requirements of the MQSP Crown Funding Agreement

INDEX

Foreword

In our2013/2014 Maternity Quality and Safety Programme (MQSP) Annual Report for National Women's Hospital at Auckland District Health Board we are pleased to report on the progress made by our service as part of its on-going commitment to providing high quality care to the women and families that we serve. The Ministry of Health launched the Maternity Quality and Safety Programme, in 2011 as part of its Maternity Quality Initiative; this included the launch of the national maternity standards and clinical indicators.

This second MQSP Annual Report sets out how National Women's performs against the maternity standards and describes some of the achievements of the Clinical Governance and quality assurance activities taking place within women's Health.

During the course of the last year of clinical governance structure has strengthened and matured. In that process we have strengthened the voice of the consumer. We have streamlined our care pathways, in particular around the care of the prolonged gestation and small for gestational age baby. We have achieved as strong functional working relationship with our Regional partners, in particular Waitemata DHB with whom we have a formal collaboration project. We are optimistic that over the course of the next year we will see the outcome of the work we are doing together to be better designed pathways to care for the women in our region so that all women are supported to achieve the birth that is optimal for them. We are proud of our achievements over the past year. These achievements could not have been achieved without the dedication and commitment of all of the multidisciplinary staff, both employed and private who strive to provide high quality care to women and their whanau.

Susan Fleming
Director, National Women's Health

Maggie O'Brien
Midwifery Director, National Women's Health

Introduction

Our Vision:

Excellence in Women's Health through empowerment and partnership.

Our Mission:

Evidence informed practice and effective communication within a woman-centred service delivering the best possible outcomes for all pregnant women cared for and babies born in our district.

Purpose:

The Auckland District Health Board (ADHB) Maternity Quality and Safety Programme (MQSP) aims to provide a maternity service that delivers excellent quality and safety for the women, babies, family, whānau and service providers living and working in Auckland and further afield.

This Annual Maternity Quality and Safety Report details the implementation and outcomes of Auckland DHB's Maternity Quality & Safety Programme (MQSP) in 2013/2014, as required under section 2.2c of the Maternity Quality & Safety Programme Crown Funding Agreement (CFA) Variation (Schedule B42):

Background:

Alignment with New Zealand Maternity Standards

This Annual Report has been developed to meet the expectations of the New Zealand Maternity Standards (as set out below). The Maternity Standards Group audited the maternity service against the indicators of the standards.

Expectations of the New Zealand Maternity Standards:	
Standard One: Maternity services provide safe, high-quality services that are nationally consistent and achieve optimal health outcomes for mothers and babies.	
1.	Report on implementation of findings and recommendations from multidisciplinary meetings
2.	Produce an annual maternity report
3.	Demonstrate that consumer representatives are involved in the audit of maternity services at Auckland DHB
4.	Plan, provide and report on appropriate and accessible maternity services to meet the needs of the Auckland region
5.	Identify and report on the groups of women within their population who are accessing maternity services, and whether they have additional health and social needs
Standard Two: Maternity services ensure a women-centred approach that acknowledges pregnancy and childbirth as a normal life stage.	
6.	Demonstrate in the annual maternity report how Auckland DHB have responded to consumer feedback on whether services are culturally safe and appropriate
7.	Report on the proportion of women accessing continuity of care from a Lead Maternity Carer (LMC) for primary maternity care
Standard Three: All women have access to a nationally consistent, comprehensive range of maternity services that are funded and provided appropriately to ensure there are no financial barriers to access for eligible women.	
8	Report on implementation of the Maternity Referral Guidelines processes for transfer of clinical responsibility

Report

1. Section One: Summary of ADHB MQSP Objectives and National Priorities

Alignment of ADHB MQSP Objectives with National Priorities
Objective one: Implement a clinical governance framework to support and monitor the implementation of quality and safety improvements.
Action: During 2013 the clinical governance framework to support and monitor the implementation of quality and safety improvements was fully embedded. The framework has been structured to enable an on-going, systematic review by multidisciplinary teams who are aligned to specific clinical areas and/or responsibilities. The work stream flows up through the clinical governance structure from level four to the level two leadership team and the respective group's membership work together to identify and implement potential improvements to maternity services at each level. The level four Clinical Governance Groups (CGGs) address directly the issues relevant to the clinical areas they are aligned to; they are accountable to and report up to the level three Maternity and Gynaecology CGGs. The chairpersons of the level four CGGs form part of the membership of the maternity and gynaecology level three groups. The level three CGGs are currently chaired by the Clinical Director Obstetrics, the Clinical Director of Midwifery and the Clinical Director of Gynaecology. They are accountable/report to the level two CGG which in turn provides broad oversight and direction for the clinical governance of the Women's Health service reporting to the level one Clinical Board. In order to support the MQSP within Women's Health a Clinical Governance administrator was appointed in 2012 and in August 2013 a Clinical Governance coordinator selected. The data intelligence teams continue to incorporate the MQSP reporting into their work load and the clinical and consumer liaison roles remain essential links to improving and planning the service. This year to further progress quality improvements a senior medical officer has been appointed as Lead Clinician, Acute Services, in Women's Health.

Alignment of ADHB MQSP Objectives with National Priorities

Objective two: Ensure a complete Clinical Leadership Structure is established

Action:

During 2013 a single point of accountability and grouping of services proposal was made within Auckland DHB and consequently a decision was made to move to a single point of accountability structure.

The principles of the single point of accountability model are that a clinician will have ultimate responsibility for the operational, financial and quality performance of each directorate. This significant clinical leadership role was designed to ensure improved alignment of portfolios, optimal use of resources and ultimately accountable for the overall performance of each Directorate.

The Director of our service is the previous Medical Director of Women's Health, who chairs the level 2 Clinical Governance Group. A strategy is underway to develop a divisional structure beneath the Director which follows the single point of accountability philosophy. This new structure will provide the framework for further refinement of the clinical governance structures.

Objective three: Improve timely access to antenatal care (NMMG priority)

Action:

ADHB has endeavoured to implement a range of options to ensure timely access to antenatal care by the following projects;

- Increased use of media/communication tools
- Increased number of midwives within the walk in referral centre services.
- Increased liaison with GP services

Objective four: Implement a partial electronic medical record.

Action:

A partial electronic medical record (EMR) system has been established and clinical information is presented in a consistent format via Healthware whilst written information has a timely pathway to scanning on to the EMR.

Alignment of ADHB MQSP Objectives with National Priorities
Objective five: Improve communication between care givers.
Action: The EMR has improved communication to LMC's, GP's and ADHB clinicians. • Electronic messages direct to GP's and LMC's via fax/Healthlink. • VPN and terminal server access to clinical information off site. • Electronic discharge summaries.
Objective six: Strengthen our multidisciplinary quality framework for review of adverse outcomes, complaints, morbidity and mortality data.
Action: During 2013 the review pathways for adverse outcomes/complaints and morbidity/mortality data began to take further shape with the refinement of established routes and the formation of new processes to link to the clinical governance structure. During 2014 this has included the new Monitoring and Triage (MoTiF) group and Rapid Multidisciplinary Review Process (RAMP) group.
Objective seven: Increase consumer representation within our service (NMMG priority)
Action: The level two and three clinical governance groups now include a variety of consumer representation; this includes Maori and Pacific representatives, consumer representation, a private obstetrician, LMC representation and a General Practitioner. These representatives are paid a meeting attendance fee in line with Auckland DHB policy. A wide range of participants is deemed essential to reflect the tertiary nature of activity performed within National Women's and this wide consultation is also sought for Policy changes and Improvement projects to ensure a full range of perspectives are considered for the service. The overarching collaboration group looking at combining clinical services between WDHB and ADHB will also involve consumer representation.

Alignment of ADHB MQSP Objectives with National Priorities
Objective eight: Assess and better understand maternity needs of our population.
Action: For the past 12 months we have been involved in a collaborative project with Waitemata DHB (WDHB) to evaluate and if necessary redesign the way we deliver maternity care to our combined populations. A formal project, using the consulting group, Health Partners, is now underway. This project involves a comprehensive evaluation of population needs, including those of our Maori and Pacific populations. The output from this project (mid 2015) will be a recommendation for service reconfiguration to better meet the needs of our population.
Objective nine: To continue to produce a high quality annual clinical report.
Action: National Women's has a reputation for providing a detailed analysis of maternity outcome data and plotting this against international benchmarking at its Annual Clinical Report day.

2. Section Two: Statistical information and analysis

2.1. Birth numbers by facility

Birthing facilities in the Auckland District Health Board (DHB) region include the tertiary facility at Auckland City Hospital (ACH) (7223 birthing mothers in 2013) and a primary birthing unit at Birthcare (BC) Auckland (354 birthing mothers in 2013).

Women who live in the Auckland DHB area do not all choose to deliver at ACH.

Of women who birthed at ACH in 2013, 68percent were Auckland DHB residents. The remainder were from Waitemata (15 percent), Counties Manukau (15 percent), and 2.0percent were from elsewhere.

Table 1: Demographics of women birthing at ACH and Birthcare (2013)

	Birth at Birthcare n= 398		**Birth at NW N=7223**	
	n	**%**	**n**	**%**
Parity				
Nullipara	126	31.7	3441	47.6
Multipara	237	59.5	3782	52.4
Age				
<21	8	2.0	254	3.5
21-25	28	7.0	790	10.9
26-30	100	25.1	1874	25.9
31-35	133	33.4	2525	35.0
36-40	76	19.1	1463	20.3
>40	9	2.3	317	4.3
Ethnicity				
NZ European	149	37.4	2548	35.3
Māori	45	11.3	532	7.4
Pacific	39	9.8	904	12.5
Other Asian	32	8.0	1576	21.8
Indian	8	2.0	620	8.6
Other European	71	17.8	776	10.7
Other	10	2.5	267	3.7
DHB of Domicile				
Auckland DHB	223	56.0	4937	68.4
Counties Manukau DHB	42	10.6	1079	14.9
Waitemata DHB	89	22.4	1057	14.6
North Island Other			86	1.2
Northland			38	0.5
South Island			12	0.2
Overseas			11	0.2

Figure 1: Maternal age among European, Maori, Pacific, Other Asian and Indian ethnicities (2013)

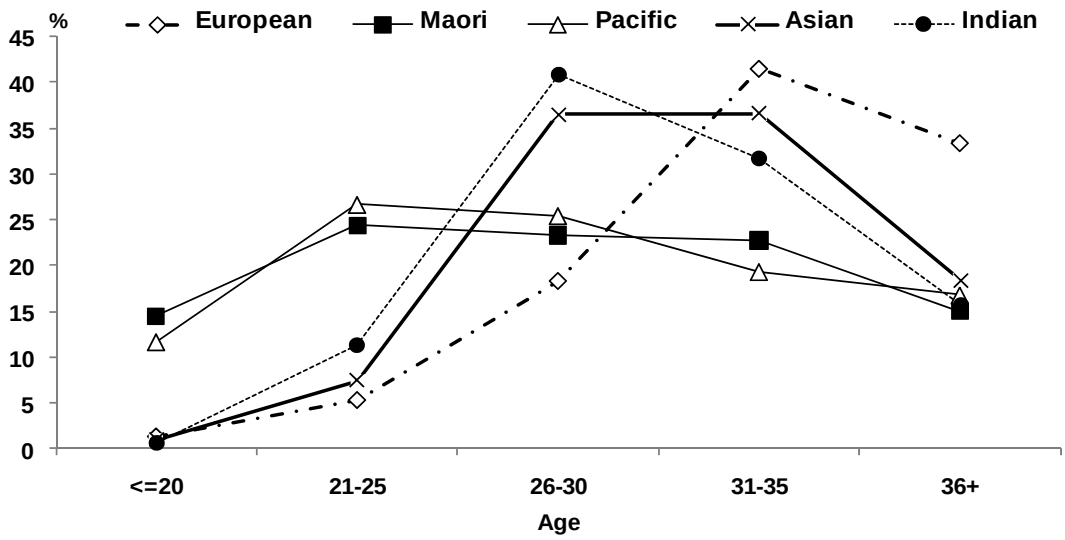
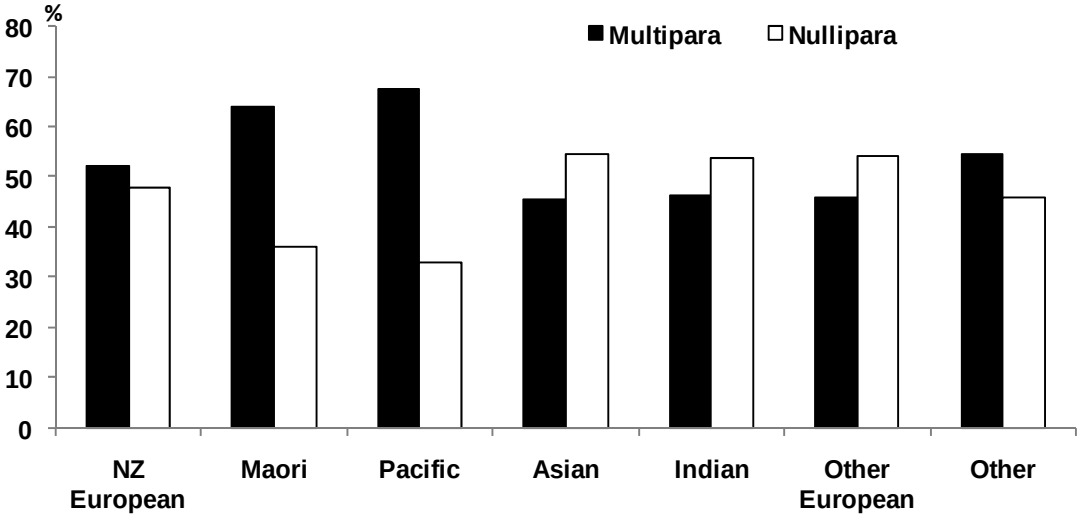


Figure 2: Parity distribution by maternal ethnicity (2013)



2.2. Demographic characteristics of women birthing in Auckland City Hospital

Demographic information about the women birthing in ACH are shown in the tables below. Maori and Pacific women are over represented in deprivation with over half (51%) of Pacific women being in Q5 and a third (33.2%) of Maori women compared with a fifth of all women. More than 50% of the women accessing Community Midwives are also deprived (Q5).

Table 2: LMC and socio economic deprivation (NZ Dep06) (2013)

	Independent midwife		Private obstetrician		General practitioner		NW community		NW diabetes		NW medical		Other DHB		Unbooked	
	n=	3446	n=	1862	n=	17	n=	1336	n=	201	n=	300	n=	33	n=	28
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1	183	5.3	235	12.6	0	0.0	29	2.2	6	3.0	14	4.7	1	3.0	0	2.7
2	344	10.0	339	18.2	0	0.0	62	4.6	10	5.0	23	7.7	1	3.0	1	3.6
3	340	9.9	301	16.2	2	11.8	99	7.4	16	8.0	19	6.3	3	9.1	1	3.571
4	301	8.7	198	10.6	1	5.9	95	7.1	16	8.0	18	6.0	1	3.0	2	7.1
5	358	10.4	214	11.5	1	5.9	70	5.2	11	5.5	26	8.7	1	3.0	2	7.1
6	456	13.2	172	9.2	2	11.8	170	12.7	17	8.5	38	12.7	4	12.1	6	21.4
7	378	11.0	136	7.3	1	5.9	133	10.0	29	14.4	32	10.7	3	9.1	0	0.0
8	470	13.6	127	6.8	4	23.5	203	15.2	40	19.9	50	16.7	5	15.2	6	21.4
9	274	8.0	64	3.4	3	17.6	135	10.1	24	11.9	26	8.7	7	21.2	0	0.0
10	341	9.9	75	4.0	3	17.6	340	25.4	32	15.9	46	15.3	6	18.2	9	32.1

Table 3: LMC and ethnicity (2013)

	Total	NZ European		Maori		Pacific		Other Asian		Indian		Other European		Other	
	N	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Total	7223	2548	35.3	532	7.4	904	12.5	1576	21.8	620	8.6	776	10.7	267	3.7
Independent Midwife	3446	1206	35.0	229	6.6	329	9.5	879	25.5	293	8.5	401	11.6	109	3.2
Private Obstetrician	1862	1030	55.3	54	2.9	28	1.5	350	18.8	88	4.7	268	14.4	44	2.4
General Practitioner	17	2	11.8	0	0.0	3	17.6	12	70.6	0	0.0	0	0.0	0	0.0
NW Community	1336	169	12.6	151	11.3	417	31.2	264	19.8	168	12.6	68	5.1	99	7.4
NW Diabetes	201	24	11.9	22	10.9	61	30.3	34	16.9	41	20.4	12	6.0	7	3.5
NW Medical	300	101	33.7	55	18.3	46	15.3	35	11.7	29	9.7	27	9.0	7	2.3
Other DHB	33	14	42.4	13	39.4	4	12.1	2	6.1	0	0.0	0	0.0	0	0.0
Unbooked	28	2	7.1	8	28.6	16	57.1	0	0.0	1	3.6	0	0.0	1	3.6

2.3. Characteristics of providers of maternity services in ADHB facilities and timing of booking

The providers of services are mostly private clinician's (73%) with about two thirds (47.7% of total) of these being self-employed midwives and one third (25.8% of total) obstetricians.

DHB staff provided midwifery care for 19%, with specialist services making up most of the remainder at 7%. Half a percent did not book with a provider.

The women who chose a private obstetrician as their LMC tended to be older, more affluent and European. In the group of women who were cared for by National Women's (NW)LMC there is a greater proportion of younger women who are of Maori or Pacific ethnicity.

Table 4: LMC at birth among mothers birthing at ACH (2013)

	N=7223	
	n	%
Independent Midwife	3446	47.7
Private Obstetrician	1862	25.8
General Practitioner	17	0.2
NW Community Midwifery	1336	18.5
NW Diabetic	201	2.8
NW Medical/High risk	300	4.2
Other DHB – transfer	33	0.5
Unbooked – no LMC	28	0.4

Table 5: Births at Auckland City Hospital by LMC and age(2013)

	Total	**<=20**		**21-25**		**26-30**		**31-35**		**36-40**		**>40**	
	N	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Total	7223	254	3.5	790	10.9	1874	25.9	2525	35.0	1463	20.3	317	4.4
Independent Midwife	3446	94	2.7	400	11.6	1017	29.5	1256	36.4	597	17.3	82	2.4
Private Obstetrician	1862	5	0.3	38	2.0	336	18.0	758	40.7	571	30.7	154	8.3
General Practitioner	17	0	0.0	4	23.5	1	5.9	9	52.9	3	17.6	0	0.0
NW Community	1336	125	9.4	285	21.3	370	27.7	326	24.4	194	14.5	36	2.7
NW Diabetes	201	2	1.0	13	6.5	53	26.4	69	34.3	44	21.9	20	10.0
NW Medical	300	20	6.7	37	12.3	80	26.7	93	31.0	47	15.7	23	7.7
Other DHB	33	5	15.2	5	15.2	10	30.3	8	24.2	4	12.1	1	3.0
Unbooked	28	3	10.7	8	28.6	7	25.0	6	21.4	3	10.7	1	3.6

The Auckland population appears to be similar to the New Zealand population in relation to timing of booking with a self-employed LMC in 2013 with marginally more women booking earlier than the national average.

Just under two thirds (64.3%) were booked in the first trimester, just under one third (31.0%) booked during the second trimester with the remaining 4.1% booking in the third trimester.

Table 6: Trimester at booking for Auckland DHB residents compared to NZ among women booked with self-employed LMC (excluding women booked with hospital LMC services or not booked).

	Total NZ (excluding unknown) n=62403-7081=55322		ADHB DHB of residence n=6708-1628=5080	
Trimester at registration	**n**	**%**	**n**	**%**
1	35136	63.5	3267	64.3
2	17102	30.9	1575	31.0
3	2573	4.7	206	4.1
postnatal	511	0.9	32	0.6

Unknown assumed as booked with hospital LMC: (n=7081 (11.3%) of total; n=1628 (24.3%) of ADHB residents

Data source: National Maternity Collection, Ministry of Health, 2014.

Table 7: Smoking status of women at booking

Smoking Status	**Smoking at booking**		**Smoking at birth**	
	n=	**7223**	**n=**	**7223**
	n	**%**	**n**	**%**
Yes	415	5.7	325	4.5
No	6799	94.1	6883	95.3
Missing data	9	0.1	15	0.2

Table 8: Smoking rates at booking by ethnicity

		Smoking at booking		**Not currently smoking**		**Missing data**	
	N	**n**	**%**	**n**	**%**	**n**	**%**
Ethnicity							
NZ European	2548	93	3.6	2453	96.3	2	0.1
Maori	532	172	32.3	358	67.3	2	0.4
Pacific	904	120	13.3	780	86.3	4	0.4
Asian	1576	11	0.7	1565	99.3	0	0.0
Indian	620	4	0.6	616	99.4	0	0.0
Other European	776	10	1.3	766	98.7	0	0.0
Other	267	5	1.9	261	97.8	1	0.4

Table 9: Smoking rates at booking by LMC at birth

	Independent midwife	**Private Obstetrician**	**GP**	**NW Community**	**NW High Risk**	**Other DHB**
	n= 3446	**n= 1862**	**n= 17**	**n= 1336**	**n= 501**	**n= 33**
	n %	**n %**	**n %**	**n %**	**n %**	**n %**
Smoking at booking	158 4.6	12 0.6	0 0.0	170 12.7	54 10.8	10 30.3
Not smoking	3285 95.3	1850 99.4	17 100.0	1163 87.1	0 0.0	21 63.6
Missing data	3 0.1	0 0.0	0 0.0	3 0.2	447 89.2	2 6.1

2.4. Summary of maternity outcomes

The following summary statistics are reported in ADHB's Annual Clinical Report, published in August each year. Below are data for women giving birth at Auckland City Hospital during 2013. A total of 7,223 women gave birth to 7,377 babies in 2013. The number of birthing women at National Women's has been fairly constant around 7,500 since peaking around 9000 during mid-1990s. In 2013 there were 151 women with multiple pregnancies. The following figures show the outcomes for women and babies who have birthed at ADHB.

The following tables provide data on mode of birth. Caesarean sections now account for 34.7% of births, with 16.9% of these elective.

Figure 3: Mode of birth (2002-2013)

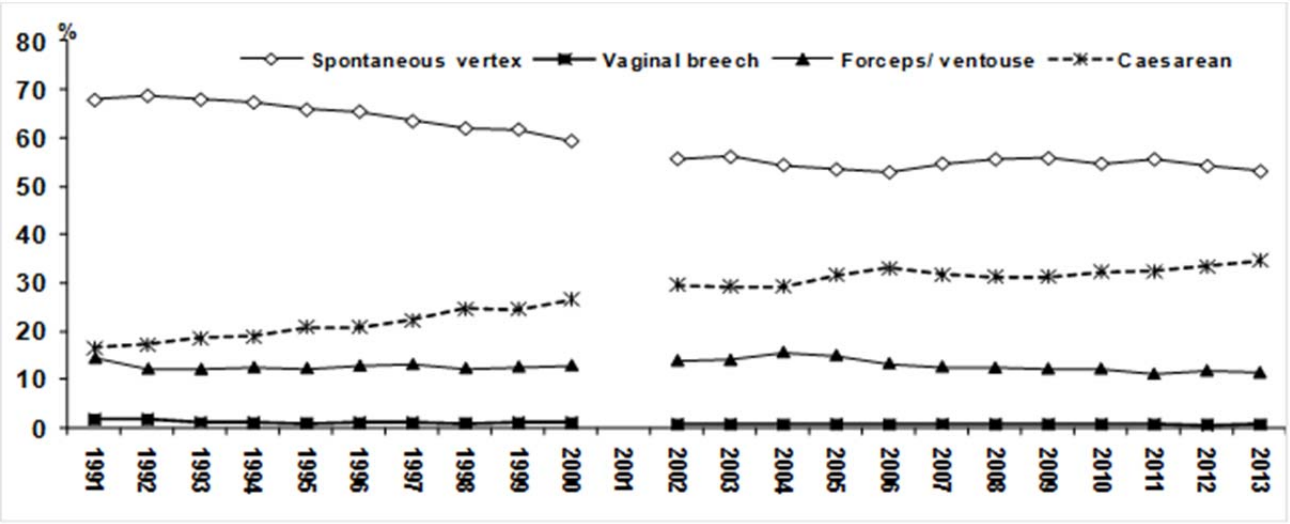


Table 10: Mode of birth by ethnicity NWH 2013

	NZ European n=2548		Maori n=532		Pacific n=904		Other Asian n=1576		Indian n=620		Other European n=776		Other n=267	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Spontaneous vertex	1203	47.2	337	63.3	639	70.7	883	56.0	285	46.0	351	45.2	139	52.1
Vaginal breech	20	0.8	8	1.5	2	0.2	9	0.6	6	1.0	4	0.5	4	1.5
Forceps	109	4.3	9	1.7	20	2.2	54	3.4	39	6.3	47	6.1	12	4.5
Ventouse	185	7.3	26	4.9	20	2.2	143	9.1	62	10.0	80	10.3	21	7.9
CS elective	584	22.9	65	12.2	81	9.0	232	14.7	69	11.1	161	20.7	35	13.1
CS emergency	447	17.5	87	16.4	142	15.7	255	16.2	159	25.6	133	17.1	56	21.0

Table 11: Mode of birth by ethnicity (nullipara) NWH 2013

	NZ European n=1218		Maori n=192		Pacific n=296		Other Asian n=860		Indian n=333		Other European n=420		Other n=122	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Spontaneous vertex	480	39.4	93	48.4	189	63.9	401	46.6	128	38.4	144	34.3	47	38.5
Vaginal breech	11	0.9	2	1.0	0	0.0	4	0.5	4	1.2	1	0.2	0	0.0
Forceps	85	7.0	6	3.1	14	4.7	46	5.3	31	9.3	38	9.0	11	9.0
Ventouse	150	12.3	20	10.4	15	5.1	121	14.1	48	14.4	72	17.1	14	11.5
CS elective	184	15.1	13	6.8	15	5.1	92	10.7	16	4.8	62	14.8	13	10.7
CS emergency	308	25.3	58	30.2	63	21.3	196	22.8	106	31.8	103	24.5	37	30.3

Table 12: Mode of birth by ethnicity (multipara) NWH 2013

	NZ European n=1330		Maori n=340		Pacific n=608		Other Asian n=716		Indian n=287		Other European n=356		Other n=145	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Spontaneous vertex	723	54.4	244	71.8	450	74.0	482	67.3	157	54.7	207	58.1	92	63.4
Vaginal breech	9	0.7	6	1.8	2	0.3	5	0.7	2	0.7	3	0.8	4	2.8
Forceps	24	1.8	3	0.9	6	1.0	8	1.1	8	2.8	9	2.5	1	0.7
Ventouse	35	2.6	6	1.8	5	0.8	22	3.1	14	4.9	8	2.2	7	4.8
CS elective	400	30.1	52	15.3	66	10.9	140	19.6	53	18.5	99	27.8	22	15.2
CS emergency	139	10.5	29	8.5	79	13.0	59	8.2	53	18.5	30	8.4	19	13.1

Table 13: Maternal postpartum outcomes 2013

	Birthing mothers	n	%
PPH >1000mls	7223	701	9.7
SVB	3890	272	7.0
Instrumental vaginal birth	827	102	12.3
Caesarean section	2506	327	13.0
Episiotomy among vaginal births	4717	1200	25.4
Third/ fourth degree tears among vaginal births	4717	138	2.9
Postpartum blood transfusions	7223	196	2.7

Figure 4: Postpartum haemorrhage and transfusion rate (2013)

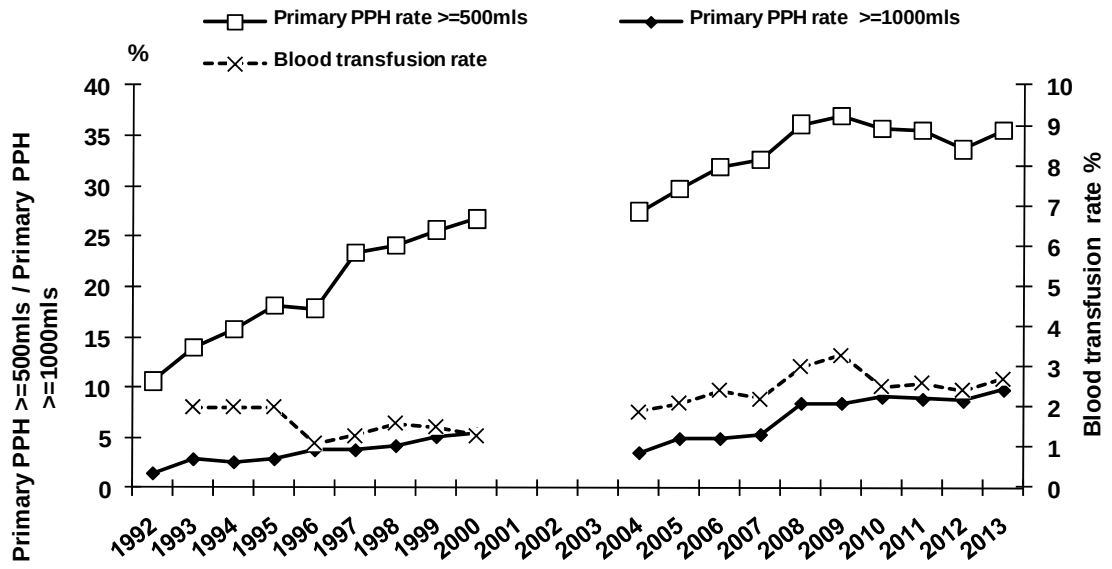
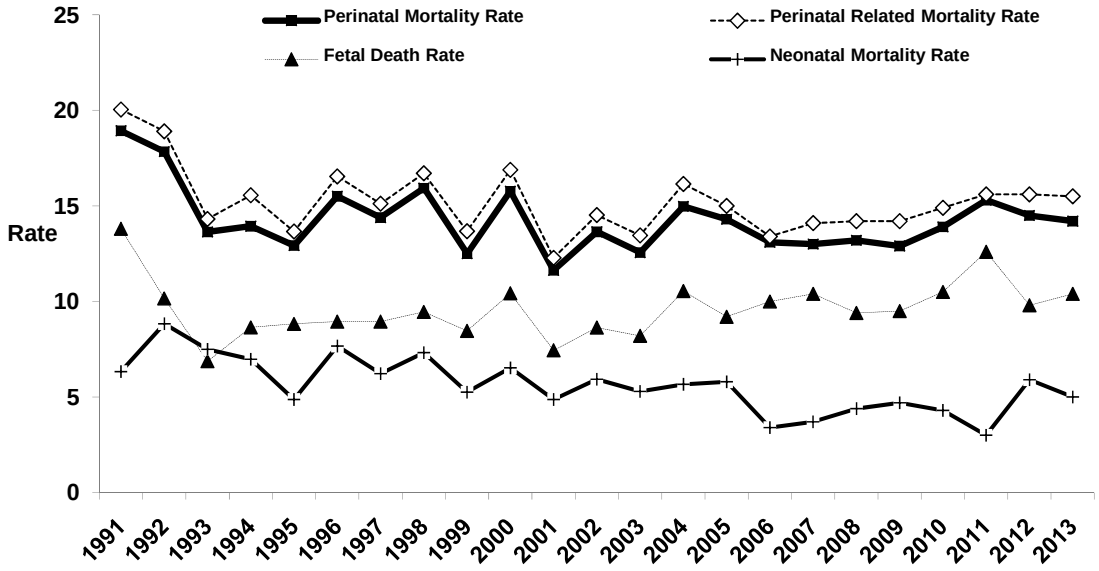


Figure 5: Perinatal mortality rate, perinatal related mortality rate, fetal death rate and neonatal mortality rate



2.5. Summary of neonatal outcomes 2013

Approximately ten percent of babies were born pre-term. Of all babies, just over ten percent (11.3%) were admitted to NICU, approximately half of whom were pre-term. Just under 80 percent of babies were either exclusive or fully breast-feeding on discharge. Babies are discharged to home or to Birthcare for their post-natal stay.

Table 14: Neonatal outcomes among babies born at National Women's in 2013

	Babies born n=7377	
	n	%
Gender		
Male	3854	52.2
Female	3522	47.7
Preterm birth		
20-27 weeks	103	1.4
28-31 weeks	103	1.4
32-36 weeks	568	7.7
Term birth		
37-41 weeks	6542	88.7
42+ weeks	61	0.8
Apgar at 5 min <7**		
Preterm	59	0.8
Term	90	1.2
SGA (by Customised Centile)		
Preterm	303	4.1
Term	779	10.6
Admission to NICU		
Preterm	435	5.9
Term	396	5.4

**numerator excludes fetal deaths

Table 15: Perinatal related mortality 2013

	Babies born n=7377	Rate
Fetal deaths	77	10.4/1000 births
Early neonatal deaths	28	3.8/1000 live births
Late neonatal deaths	9	1.2/1000 live births
Neonatal death	37	5.1/1000 live births
Perinatal deaths (fetal & early neonatal)	114	14.2/1000 births
Perinatal related deaths (fetal & all neonatal)	123	15.5/1000 births

Thirty nine percent of all perinatal deaths occurred in women who did not reside in Auckland DHB area. The majority of these deaths were from pregnancies/ babies who required transfer to our tertiary centre for their care. The perinatal related mortality rate for women resident in ADHB area and giving birth at National Women's in 2013 was 14.2/1000 total births which is unchanged compared to the rate last year of 14.1/1000 or 2010 of 13.1/1000 total births.

Table 16: Infant Feeding at discharge from National Women's

Infant Feeding at discharge from NW facility (excludes babies admitted to NICU)			
Exclusive breastfeeding	6452	5094	79.0
Fully breastfeeding	6452	256	4.0
Partial breastfeeding	6452	963	14.9
Artificial feeding	6452	138	2.1

National Women's continues to meet the target of 75% exclusive breastfeeding rate. Note that the babies which are excluded from the denominator are those babies who were admitted to NICU. Babies on ward who are less than 2500gm or less than 36 weeks or whose mothers have medical complications such as diabetes are included in the denominator.

2.5.1 Preterm Birth 2013 - Preterm babies cared for on the postnatal wards (2013)

The issue of caring for preterm babies on the wards was raised at the ACR day. As a result work has been undertaken to identify the issues which this model of care creates.

In other centers in New Zealand these babies would be in the neonatal intensive care unit. Due to a shortage of baby cots and a desire to keep mothers and babies together these babies are cared for on the postnatal ward. These mothers and babies require a significant amount of staffing resource. It is the intention of NW to look at models of care for these mothers and babies which might better meet their needs. This issue was identified at the NW Annual report day in 2012 and this analysis has been carried out as a result.

There were 283 preterm babies who spent time on the postnatal wards in 2013. Three of these had their primary admission in NICU and were only admitted to 96/98 or Tamaki as a readmission, 3 spent time in NICU and on Tamaki, 50 spent time in the NICU and on 96/98, 75 were on Tamaki only, and 152 on 96/98 only.
In 2013, there were 449 babies born between 34 and 36 weeks, inclusive. Of these 25 (5.6%) went directly to Birthcare or home, 227 (50.6%) had their postnatal stay entirely on a postnatal ward, 57 (12.7%) had their postnatal care from a mix of NICU and the postnatal wards, and 140 (31.2%) had their care entirely in NICU.

Figure 6: Distribution of postnatal care among 34-36 week babies 2013.

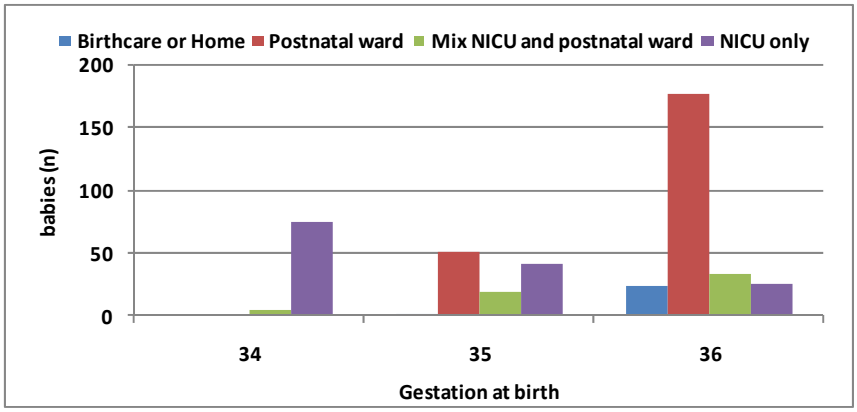


Figure 7: Gestation at birth of preterm babies who spent time on the postnatal wards 2013

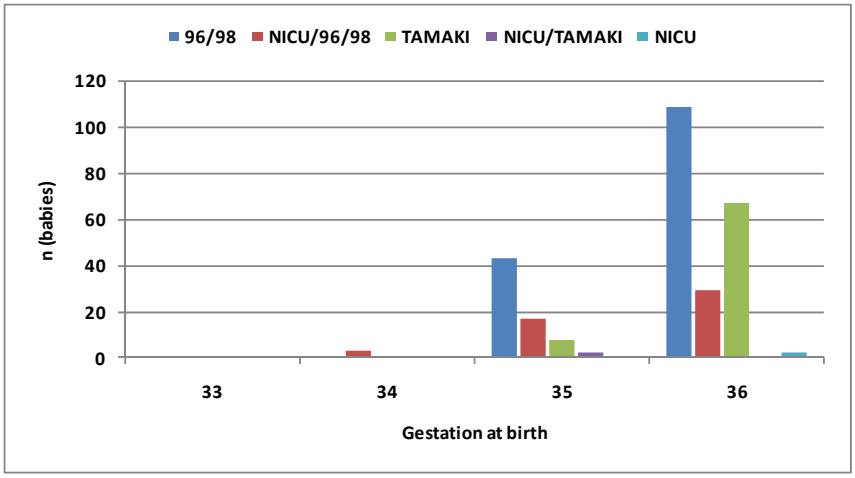
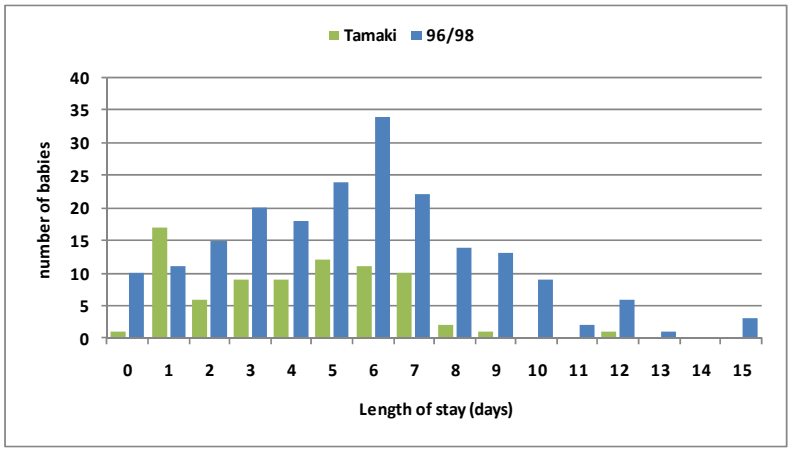


Table 17: Clinical characteristics of preterm babies cared for on the postnatal ward compared to all babies born at NW 2013.

					WARD					
	All births NW n=7378		Total n=283		96/98 n=152		Tamaki n=75		NICU/NICU-Tamaki/ NICU-96/98 n=56	
	n	%	n	%	n	%	n	%	n	%
Gestation at birth										
33	67	0.9	1	0	0	0	0	0	1	2
34	81	1.1	4	1	0	0	0	0	4	7
35	115	1.6	70	25	43	28	8	11	19	34
36	261	3.5	208	73	109	72	67	89	32	57
Plurality									0	0
Multiple pregnancy	305	4.1	74	26	42	28	16	21	16	29
Singleton pregnancy	7073	95.9	209	74	110	72	59	79	40	71
Growth by customised centiles										0
SGA	1083	14.7	75	27	40	26	13	17	22	39
AGA	5716	77.5	179	63	102	67	52	69	25	45
LGA	572	7.8	29	10	10	7	10	13	9	16
Preterm birth									0	
Spontaneous preterm birth	292	4.0	93	33	49	32	30	40	14	25
Iatrogenic preterm birth	483	6.5	190	67	103	68	45	60	42	75
Mode of birth									0	0
SVB	3943	53.4	122	43	70	46	36	48	16	29
Operative vaginal	835	11.3	19	7	6	4	9	12	4	7
CS elective	1279	17.3	76	27	41	27	18	24	17	30
CS emergency	1321	17.9	66	23	35	23	12	16	19	34
Length of stay										
median (IQR)			6	(4-8)	6	(5-8)	5	(2-6)	8	(6-11.5)
mean (sd)			6.5	(4.2)	6.4	(2.9)	4.3	(2.5)	9.9	(6.5)
Readmission			8	3	2	1.316	0	0	8	14

Note *that a quarter of these preterm babies cared for on the postnatal wards are multiple births, compared to a multiple birth rate of 4.1% in the total population of births at NW.*
A quarter of preterm babies on the ward were SGA using customised centiles (if it can be assumed that these are valid preterm).
One third of these babies resulted from spontaneous preterm births and two thirds were iatrogenic preterm births, meaning that birth resulted following elective Caesarean, emergency Caesarean before the onset of labour, or induction of labour.
Half of mothers gave birth by Caesarean section, and a further 7 percent by instrumental vaginal birth.

Figure 8: Length of stay of preterm babies while staying on the postnatal wards (includes only the 96/98 or Tamaki stay of babies who also spent time in NICU) 2013.



Average (mean) length of stay was 6.5 days, 4.3 days on Tamaki and 6.4 days on ward 96/98. Median length of stay was 6, 6, and 5 days, meaning that 50% of babies are on the ward for 5 or 6 days.

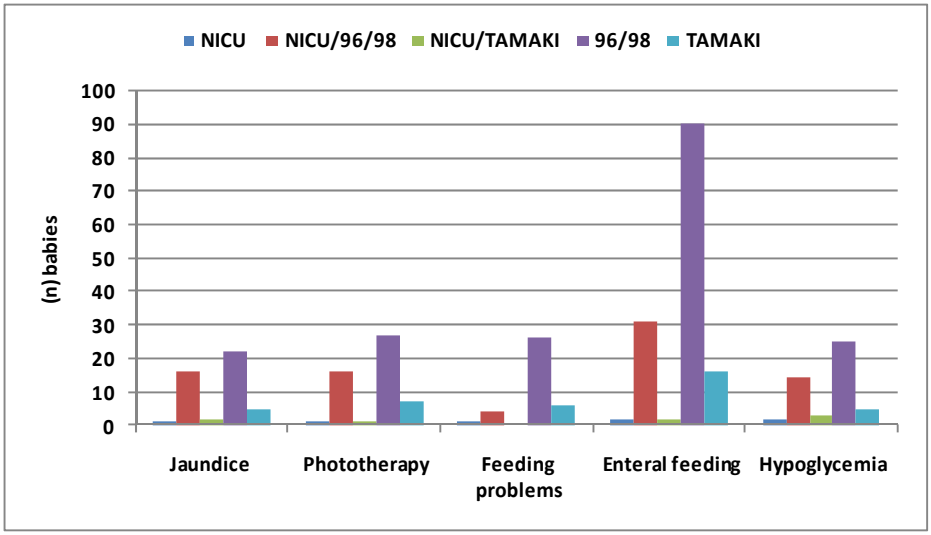
Table 18: Demographic characteristics of preterm babies cared for on the postnatal ward compared to all babies born at NW 2013.

					WARD					
	All births NW n=7378		Total n=283		96/98 n=152		Tamaki n=75		NICU/NICU-Tamaki/ NICU-96/98 n=56	
	n	%	n	%	n	%	n	%	n	%
Maternal Ethnicity										
NZ European	2623	35.6	113	40	56	37	29	39	28	50
Maori	543	7.4	24	8	13	9	7	9	4	7
Pacific	919	12.5	35	12	20	13	10	13	5	9
Asian	1600	21.7	48	17	29	19	13	17	6	11
Indian	630	8.5	24	8	13	9	6	8	5	9
Other European	790	10.7	24	8	14	9	6	8	4	7
Other	273	3.7	15	5	7	5	4	5	4	7
DHB of residence									0	
ADHB	5016	68.0	194	69	104	68	55	73	35	63
WDHB	1100	14.9	42	15	23	15	9	12	10	18
CMDHB	1102	14.9	43	15	22	14	11	15	10	18
Other	160	2.2	4	1	3	2	0	0	1	2
Smoker at booking	423	5.7	22	8	9	6	9	12	4	7
Deprivation quintile (NZDep2006)									0	
1 (least deprived)	1282	17.4	65	23	36	24	17	23	12	21
2	1450	19.7	42	15	24	16	11	15	7	13
3	1582	21.4	51	18	25	16	14	19	12	21
4	1646	22.3	66	23	38	25	16	21	12	21
5 (most deprived)	1405	19.0	58	20	29	19	17	23	12	21
missing	13	0.2	1	0	0	0	0	0	1	2
Parity										
Nulliparous	3510	47.6	132	47	73	48	38	51	21	38
Multiparous	3868	52.4	151	53	79	52	37	49	35	63
Assisted reproduction (IVF)	182	2.5	19	7	11	7	5	7	3	5

Mothers who have had assisted reproduction treatment by IVF made up 19 (7%) of mothers; compared to 2.5 percent of the birth population at NW in 2013.

Slightly more mothers were smokers than the general maternity population, but the distribution by deprivation score and by ethnicity were similar to that of the general maternity population.

Figure 9: Specific conditions and provision of care for preterm babies cared for on postnatal wards by Ward stay 2013.

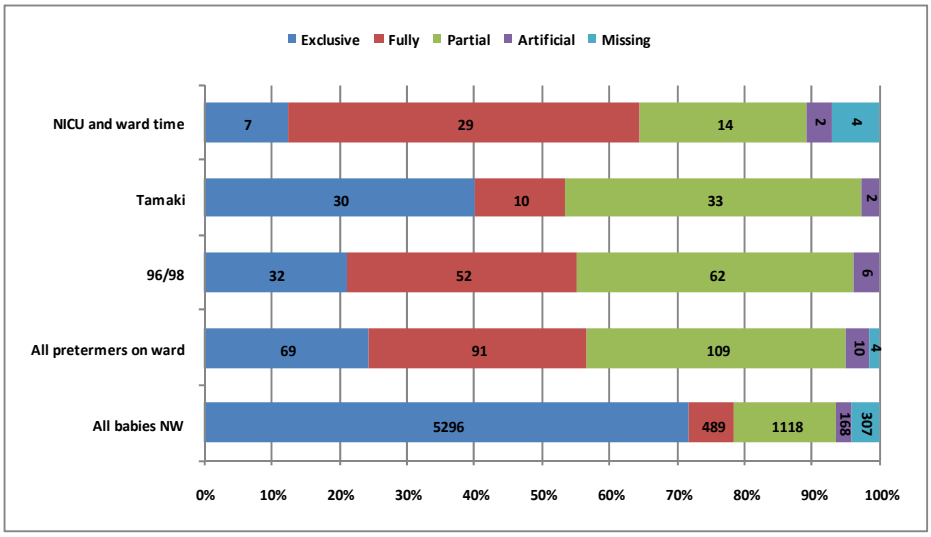


Enteral feeding and phototherapy are commonly required in this population, required for 18 percent and 50 percent of babies overall. National Woman's has just undergone the BFHI reaccreditation process and is awaiting the results from this although initial feedback has been very positive.

Table 19: LMC and breastfeeding at discharge among preterm babies cared for on the postnatal ward compared to all babies born at NW 2013.

					WARD					
	All births NW n=7378		Total n=283		96/98 n=152		Tamaki n=75		NICU/NICU-Tamaki/ NICU-96/98 n=56	
	n	%	n	%	n	%	n	%	n	%
LMC				0		0		0		
Self-employed midwife	3483	47.2	83	29	42	28	25	33	16	29
Private Obstetrician	1913	25.9	90	32	47	31	25	33	18	32
GP	17	0.2	1	0	1	1	0	0	0	0
NW-Community	1375	18.6	65	23	38	25	18	24	9	16
NW-Diabetes	203	2.8	22	8	11	7	4	5	7	13
NW-Medical	323	4.4	20	7	13	9	1	1	6	11
Other DHB	33	0.4	1	0	0	0	1	1	0	0
Not booked	31	0.4	1	0	0	0	1	1	0	0
Breastfeeding on discharge										
Exclusive	5296	71.8	69	24	32	21	30	40	7	13
Fully	489	6.6	91	32	52	34	10	13	29	52
Partial	1118	15.2	109	39	62	41	33	44	14	25
Artificial	168	2.3	10	4	6	4	2	3	2	4
Missing	307	4.2	4	1	0	0	0	0	4	7

Figure 10: Breastfeeding among preterm babies on postnatal wards compared to birthing population at NW 2013



3. Section Three: Maternity Quality & Safety Programme governance and operations

3.1. Achievements of the Clinical Governance groups

3.1.1 Establishment of clinical governance groups

During 2012/13 the clinical governance groups became an established part of all clinical areas. Membership was developed and attendance improved. Problem areas were identified and addressed in management meetings to highlight the importance of the clinical governance function within Women's Health. The agendas for all meetings were further standardised to facilitate a clear reporting mechanism.

The appointment of a clinical governance coordinator directed the 'push' for the establishment in function and membership of these groups with the overall purpose of 'closing the loop'.

3.1.2 Review of new and outstanding SAC (Severity Assessment Code) 1 and 2 Root Cause Analyses (RCAs)

ADHB Quality department is in the process of reorganization and has suffered from staffing shortages. These have affected our timeliness in addressing new and outstanding SAC1 and 2 events. Strategies were implemented to manage in the interim

- Recruitment has begun for a new ADHB quality link to Women's Health.

3.1.3 Review of new and outstanding complaints, risk pro reports and concerns.

A new monitoring and triage group was formed to 'oversee' complaints/SAC/Risk Pro/informal concerns. This MOTIF (monitoring of, triage of, follow up of) group meets every Wednesday for an hour. The group consists of the Director, the midwifery director, Clinical Director of allied health, Clinical Director of obstetrics, Clinical Director of gynaecology and the general manager.
The purpose of the group is to ensure that quality concerns are appropriately addressed in a timely manner. Our aim to establish a robust database of quality concerns, actions arising from recommendations as to how best to address the concern and person responsible for the action.

Improvements seen as a result of this group thus far;

- Greater visibility to the senior team of complaints
- Complaints are now triaged to appropriate person to investigate
- Less 'double handling'
- More timely response
- Improvement measures directed to appropriate clinical governance group to implement.
- Themes can be identified
- Concerns have a process for follow up

Previously 'concerns' from members of staff which did not fit into our "Risk Pro" or complaints process did not have a specified pathway by which they could be formally addressed. These issues are now reviewed by the MOTIF group. An example of where this has had an impact has been in the area of communication with our private obstetricians. A number of concerns related to the manner in which booking of private caesarean sections was managed by this group, has resulted in a Private Obstetrician's Clinical Governance group being established and facilitated. This group now provides a forum in which to address the issues

such as gestation at elective caesarean section, which has been identified as national Women's and NMMG priority.

At the time of implementing the new MOTIF group it was identified that there was also the need for a process that would look at adverse outcomes or concerns around provision of care, that did not meet the threshold for a formal Root Cause Analysis, through a systems lens. A process has now been formally established that allows such cases to be efficiently and systematically reviewed using a process based on a modified PMMRC tool.

This has culminated in the establishment of RAMP (Rapid Multidisciplinary Review Panel). This RAMP panel consist of a 'core' membership from a variety of disciplines linked to Women's Health with additional specialists co-opted as required for each individual case. The panel meets once a month for two hours to discuss up to three cases that have been identified at MOTIF as requiring a formal review.

Recommendations from the RAMP process are fed back to the MOTIF group who then direct the recommendations and responsibilities for the actions the appropriate group or person to implement; for example a complaint from a woman with RH negative blood group was identified as having possible process issues and reviewed by the RAMP group. The recommendations made were discussed at MOTIF and then tabled on the level three clinical governance agenda.

3.1.4 Policies and guidelines

The Level 3 CGG continues to be very successful in leading the drive to update the maternity and gynaecological policies and guidelines. By taking these to this forum the policies and guidelines are not the responsibility of an individual person and can be used as part of professional development pathways for all clinicians working in women's health. Consumer feedback is now a firmly established part of the consultation process for policies and guidelines.

3.2. Current Quality Improvement Initiatives and activities at ADHB

3.2.1 Reducing rates of blood transfusion (NMMG priority)

Although 2012 saw a small decrease in the transfusion rate it appears this is on the increase once more. Work continues to understand why this is happening and to implement identified improvement measures.

- Case reviews via RAMP group of PPH events to identify possible process/practice issues.
- Further evaluation of antenatal iron initiatives
- Use of the National Consensus Guideline for Treatment of Postpartum Haemorrhage (PPH) as a link within the recently updated National Women's PPH guideline.
- Use of the flow chart in the National Consensus Guideline for Treatment of PPH as a visual aid; this has been laminated for each resource folder in the delivery room for midwives and others to refer to.

3.2.2 Diabetes management

Positive results were seen following the establishment of this service within WDHB however further work is needed as the population of women with diabetes in pregnancy continues to increase in all regions.

- Review of the diabetes service in National Women's. This is the focus of a greenbelt project which commence June 2014 and is being led by our Director of Allied Health.
- Regional collaboration on the design of diabetes services across the region.

3.2.3 Perinea trauma

Figure 11: Perinea trauma rates (2013)

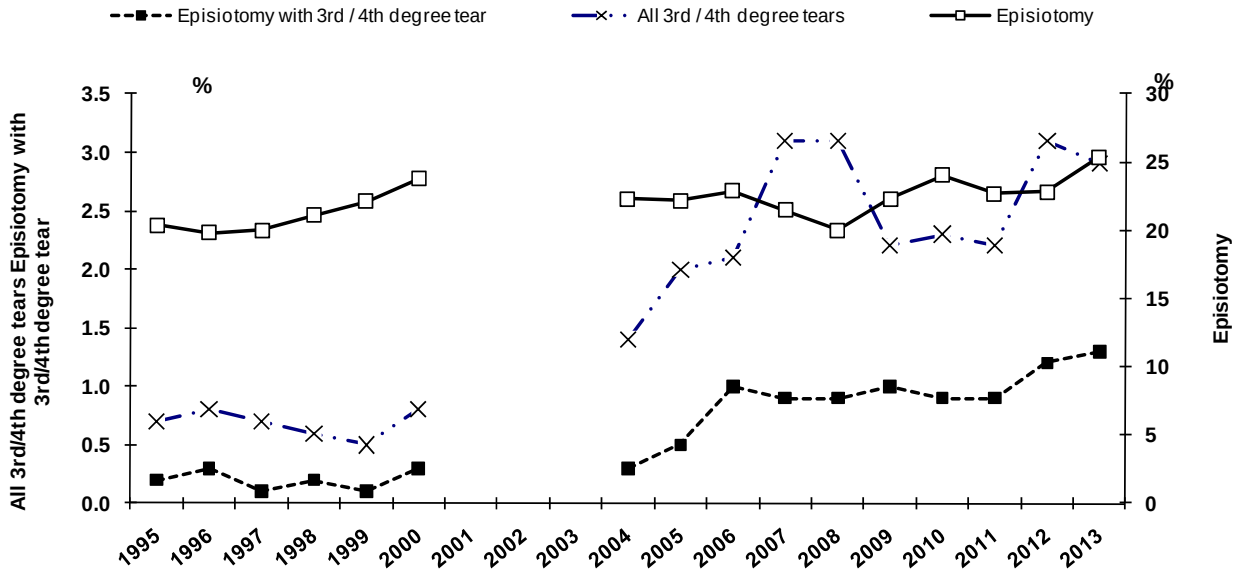


Table 20: Perinea trauma by mode of birth, parity & LMC at birth among all vaginal births NWH 2013

	Total	Episiotomy		3rd/4th tear		Vaginal wall tear	
	N	n	%	n	%	n	%
Total vaginal births	4717	1200	25.4	138	2.9	279	5.9
Mode of birth							
Normal vaginal	3828	603	15.8	77	2.0	224	5.9
Vaginal breech	56	4	7.1	1	1.8	1	1.8
Vento use	541	345	63.8	33	6.1	32	5.9
Forceps	292	248	84.9	27	9.2	22	7.5
Ethnicity							
New Zealand European	1517	397	26.2	30	2.0	85	5.6
Māori	380	27	7.1	10	2.6	18	4.7
Pacific	681	63	9.3	13	1.9	60	8.8
Asian	1089	392	36.0	47	4.3	62	5.7
Indian	392	127	32.4	27	6.9	25	6.4
Other European	482	156	32.4	6	1.2	21	4.4
Other	176	38	21.6	5	2.8	8	4.5

In the early 2000s there was a dramatic rise in third and fourth degree tear rates which have since stabilised at 2-3%. In 2013 a further small decrease in the 3rd/4th degree tear rate occurred, and a small increase in the episiotomy rate.

Causal factors for the increased rate in the early 2000s may have included better diagnosis. Diagnosis of the type of tear and the correct procedure for repair remains a focus and in 2014 a specific documentation form is being introduced for use in all births involving perinea trauma. This will include diagnosis, repair, and follow-up care for these women.

As a lack of support of the perineum ("hands off policy") with crowning of the head and birth of the posterior shoulder, as well as an inadequate episiotomy (size or position) increase a patient's risk of anal sphincter injury, from late 2012 there was an education campaign instituted in Labour and Birth Suite. Our education program continues for all midwives, focusing on the risk of trauma to the perineum and the identification of women most at risk.

With an increase in various risk factors, including ethnic group (i.e. Indian, Asian women), mean BMI and incidence of LGA babies, continued focus on prevention of perinea trauma remains a priority. The approach will include such things as perinea massage, support of the perineum, "hands on" the presenting part at the time of the birth, and improved supervision for those women most at risk of trauma. Where an episiotomy is indicated, the need for it to be at the correct angle and of adequate length will also be reinforced.

The perinea tear clinic is well utilised with appropriate referrals being received.

3.2.4 Implementation of perinatal mortality and morbidity meeting recommendations

Our Perinatal Mortality& Morbidity meetings continue to be a rich source of discussion to inform practice and review processes. Concerns identified from this forum come to the MOTIF group and are assigned an appropriate pathway; for example a case of early spontaneous rupture of membranes where there were concerns regarding our processes and individual practitioner performance was directed to a RAMP review and individual practitioner review. Recommendations were then implemented via our clinical governance structure.

3.2.5 Complaints Processes

ADHB is currently reviewing its overall approach to the handling of complaints. Identified concerns included; complaints being sent to the wrong department, too many clinicians being involved and investigating the same complaint; wasting valuable time doing the same work and complaints being 'lost' in the system. ADHB has yet to confirm a new overall process. In the meantime our Women's health service has modified its approach to address these concerns.

- MOTIF now captures all women's health complaints via HDC/Consumer liaison
- The data about each complaint is captured in a summary spread sheet to allow better local tracking of progress for each complaint
- Responsibility for the complaints investigation is allocated to a named single person

3.2.6 Adverse Events Processes

This process is generally working well and we are improving on our timeliness of response. We remain challenged by the resources available to us from our ADHB quality department. Following the completion of an Adverse Event investigation the recommendations are robustly reviewed at our level 2 CG meeting and cascaded down to the appropriate level 4 clinical governance groups. For example this year through the Risk Pro reporting system within women's health a theme was identified of retained swabs and an RCA was required. The following recommendations were made:

- Size of swabs in delivery packs were changed from small to large to reduce the chance of them being left in the vagina. Our level 4 Labour and Birth CGG took responsibility for implementing the changes in policy and process that were necessary on the delivery unit.
- Education on the Combo for midwives around importance of swab counts – clinical governance coordinator organised this with the educators.
- Refinement of documentation to ensure swab count data is captured and documented, currently under review.

3.2.7 Referral Guidelines (NMMG priority)

The implementation of referral guidelines at National Women's is going well.
Effort has been put in to educate staff and LMC's through various means;

- Clinical governance groups
- Access holders meetings
- Email communication
- Short sharp education sessions

A reminder was sent out to staff that the referral guidelines are accessible electronically via the Ministry of Health (MOH) website.

The referral process for the 'Walk in Centre' at Greenland was reviewed a number of months ago; referrals are now triaged for the five geographical teams by a senior member of that team on the same day as receipt.

- Our expectation is that referred women will be contacted in a timeframe no greater than the ABC triage system that is used (A contact same day as triaged, B contact within one week, C within 2 weeks, is appropriate to clinical/social need)
- Random audits of this process demonstrate that this new system is working well and that women are being contacted in a timely manner.
- An increase in the use of E referrals from GP's to the Walk in Centre has been observed. Currently these are still being printed and faxed from surgeries rather than acting as a true electronic referral. A process is underway within ADHB to transition to electronic referrals.

The level of referral information provided is improving, however our midwives still need to regularly phone GPs to ask for more detail when it is not provided. Our policy is not to accept incomplete referrals.
Once a referral is accepted the 'Pregnancy' is created on the National Women's Healthware system regardless of LMC. That way if the women presents to Women's Assessment Unit (WAU) prior to being formally booked/seen there is an open event for documentation already available. This has increased the quality of data capture. In the future we plan to eliminate C category referrals with the aim of seeing all referrals within a week. A review of 'late' referrals and formal audit to look at 'referral time to actual appointment time' is planned.

- All referrals for Maori women are sent through to the Maori midwife for LMC discussion and all referrals for Chinese speaking women are sent through to the Chinese speaking midwife.
- A reallocation of midwives has increased the number available in the Walk in Centre. The midwives here triage the referrals and assist women to find a self-employed LMC whilst providing health information relevant to early pregnancy care.
- Referrals for secondary care are triaged in the Walk in Centre and a clinically appropriate appointment is allocated, usually within 2-3wks depending on clinical need.
- In situations where a timely appointment cannot be offered, a specialist Virtual Consultation is undertaken. This ensures that the LMC is provided with an interim plan which is documented on Healthware until the patient can be seen face to face in the Antenatal clinic.

A specific fast track pathway has been established for pregnancies where the only concern is prolonged gestation(41:1wks or more.) Referrals are received by fax and the cases are reviewed within 48 hours. On review if they are deemed low risk they are allocated a post term virtual consultation based upon gestation on receipt(for example if the referral was received at 39.6 weeks they would not be reviewed until 41.1 weeks) At the time of the virtual review the women, if appropriate are allocated an IOL date. Providing there is evidence of reassuring fetal status an IOL will be booked for as close to 41:5wks as possible in cases where SGA is suspected an appointment will be allocated with an USS to coincide within 7days of receipt of referral.

Referrals for Iron infusion are frequently allocated virtual appointments within 24-48hrs which usually result in an appointment to go directly to our Day Assessment Unit (DAU) within 2wks again depending on gestation and clinical need.

Audits are planned in other areas of National Women's, particularly with respect to our tertiary services to look at the timeliness in which women referred to our service are seen.

3.2.8 Timing of registration with LMC (NMMG and PMMRC priority)

Table 21: Trimester at booking for Auckland DHB residents compared to NZ among women booked with self-employed LMC (excluding women booked with hospital LMC services or uncooked).

	Total NZ (excluding unknown) n=62403-7081=55322		**ADHB DHB of residence n=6708-1628=5080**	
Trimester at registration	**n**	**%**	**n**	**%**
1	35136	63.5	3267	64.3
2	17102	30.9	1575	31.0
3	2573	4.7	206	4.1
postnatal	511	0.9	32	0.6

Unknown assumed as booked with hospital LMC: (n=7081 (11.3%) of total; n=1628 (24.3%) of ADHB residents

Data source: National Maternity Collection, Ministry of Health, 2014.

National Women's has used various approaches to encourage timely access to antenatal care. The following projects are underway;

In January 2014 Women's Health launched the "Pregnancy and Early Family Care" Facebook page. Working with other hospital and community initiatives this social media tool aims to support and encourage women to engage with healthcare professionals as soon as they know they are pregnant and within the first 13 weeks of pregnancy. It is also proving to be a useful way of getting other pregnancy related health messages across.

The National Women's web site itself has been updated with links to;

www.findyourmidwife.co.nz
www.midwife.org.nz
www.healthpoint.co.nz

This project has also looked used that the data it has to inform next steps to increase the number of women who register with an LMC at less than 13 weeks gestation.
The following table shows the gestation at registration with a NW Community LMC.

Figure 12: Gestation at first registration with a NW Community LMC 2013

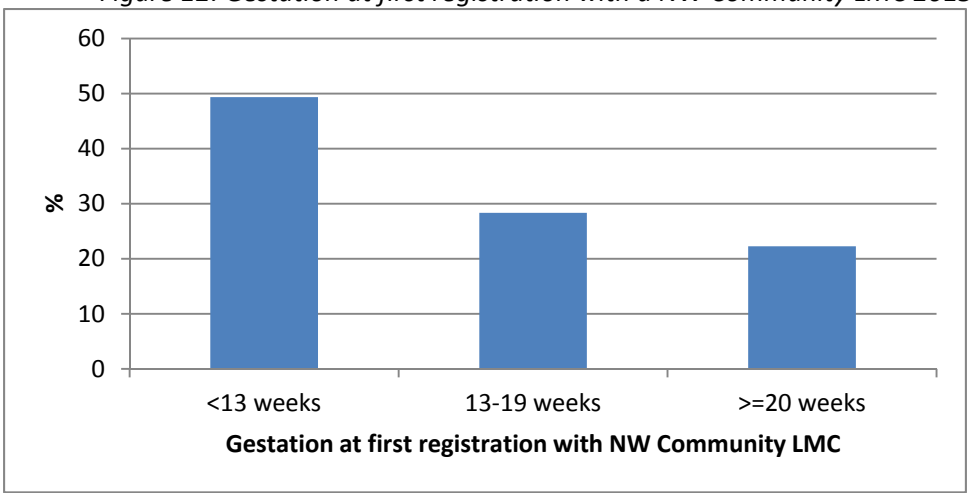


Figure 13: Gestation at booking with a NW community LMC by ethnicity 2013

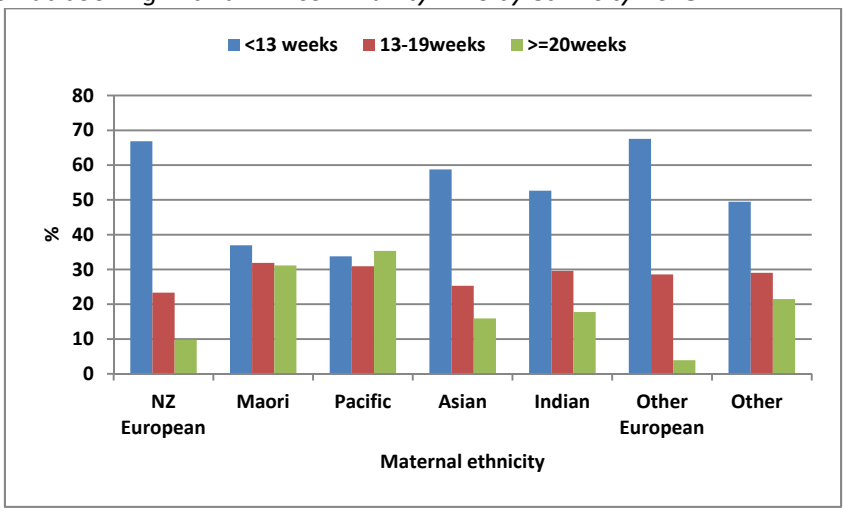
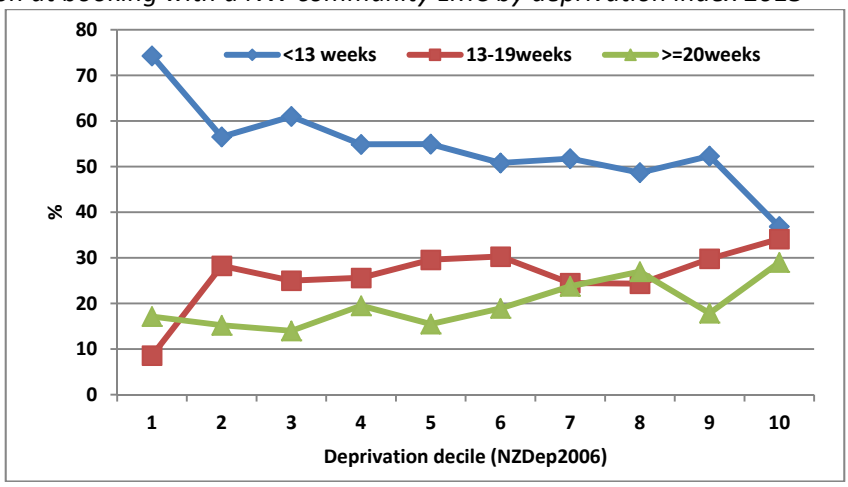


Figure 14: Gestation at booking with a NW community LMC by deprivation index 2013



Less than fifty percent of women book at less than 13 weeks gestation with a NW community LMC. Maori and Pacific are more likely to book late. These figures highlight where NW needs to put it efforts.

A large piece of work has been under taken by the community team this year following the decision to expand the capacity of the 'Walk in Centre' and increase the number of midwives based at the Walk in Centre.

There has been a strong focus in developing relationships with the GPs with the intention of encouraging GP's to refer women earlier and provide information about the Walk in Centre service at Greenland, this has occurred through:

Increasing midwives presence in GP practices:

- Visiting all GP practices who refer women
- Visiting and talking to PHO group meetings
- Regular articles in the GP newsletters; Walk in Centre and early booking.

Feedback from GP meetings has been very positive; the role of the Walk in Centre is well-defined. GP's have named midwife contacts and are building relationship with the service. In 2013/14 further plans to increase the visibility of the walk-in centre include visual displays and midwifery presence at community events during the year. Midwives will continue to provide the education sessions to GP's about various pregnancy topics.

Additionally:

- A midwife has been allocated to work with teen mothers and their families, liaising with the local schools and working on improving communication with Plunked and Thrive.
- Maori and Pacific engagement of women has been encouraged by culturally specific midwives working with other services such as Ngami What Tamarisk Oar and the Early Childhood team to ensure information about booking early is widely known and point of contact easily identified.
- A pathway for referral to the Walk in Centre has been developed for the local CYF's service, following visits and discussion with CYF's staff around the importance of women booking for antenatal care and early in the pregnancy.
- A further increase the availability of midwives antenatal clinics at GP practices, Ngami what rooms and Plunked rooms in the community.
- Private and employed LMCs have also been encouraged to book earlier through communication at clinical governance groups and the importance of documenting gestation at engagement has been emphasized through written communication to LMCs and regular Access Holders meetings held by National Women's.
- A questionnaire has been devised that is being used to gain information from women who have booked late to identify reasons for late booking. From our data many Maori and Pacific women book late, therefore we have specifically asked Pacific and Maori midwives to complete the questionnaires with these women.
- Liaison has been set up with the New Migrant Centre to provide education and information on pregnancy and the reasons for booking early.

Waitemata DHB and Counties Manukau Health have also developed questionnaires on why women book late and Auckland DHB anticipates additional learning's from the other regions strategies to improve early registration along with the results of local information to inform suitable plans to improve early registration.

3.2.9 Emergency transfer (NMMG priority)

As part of the NMMG recommendations National Women's reviewed its processes around Emergency referrals. Discussions were held with Birthcare, Waitemata DHB, Home birth midwives and Waaihoek midwives to understand issues these groups might have with the emergency transfer process to National Women's.

- Birthcare have set up regular meetings with St Johns ambulance and now review all ambulance transfers. They have a developed a good working relationship with St John's and together take responsibility to address any issues or concerns with the transfer process.
- A challenge for Waitemata DHB, who commonly transfer to National Women's, is that there is sometimes confusion as to whether the woman should be transferred to North Shore or to Auckland. They are currently in conversation with St Johns Ambulance to ensure that clear guidelines are established.
- Home Birth Midwives expressed no concerns with transfer. Calls to St Johns Ambulance are responded to quickly and efficiently. They are very satisfied with support from St Johns and the transfer process.
- Transfers from Waaihoek Island to Auckland hospital are by way of Westpac ambulance or the Police launch. It is reported that all work well irrespective of the time of day, and occur within an hour from time of call to time of arriving at National Women's.
- A meeting has occurred between the midwives who work as LMCs on Waaihoek, the emergency transfer services and Women's Health. This meeting discussed the issues which occur when transferring from Waaihoek and resolved the current issue. Plans have been made for more regular meetings.

3.2.10 Maternal Mental Health (NMMG priority)

This year has seen further work undertaken to address maternal mental health needs beginning with women who have an Auckland DHB LMC for their pregnancy care.

- Introduction of fortnightly multi-disciplinary clinics with a consultant psychiatrist and a maternal mental health nurse have been established at the Greenland and Grafton sites.
- Clear assessment criteria and pathway to care has been developed with the use of the Edinburgh scoring system to help identify those at risk.

Due to our limited resources and the fact that this type of care is very resource intensive we have only been able to offer this service to women if they are within the ADHB catchment area. Those out of area are referred to their local Maternal Mental Health team.

A broader regional initiative is addressing the acute Maternal Mental health needs for women in the region. This project will result in:

- A 3 bed parent and baby unit, located in the Child and Family Unit at Star ship Hospital
- Access to 24/7 maternal mental health advice
- Enhanced community respite care
- Wrap around packages of care which will support women and their babies in various locations

3.2.11 Gathering of Consumer feedback

Consumer feedback at National Women's is collected by a number of methods. In addition to the traditional means of letters, feedback forms, verbal communication and complaints the DHB is embracing the current digital revolution.

An on line Reo-Oar – Health voice provides all Auckland DHB consumers with the opportunity to contribute through surveys and online discussion forums; a place for consumers to share thoughts and opinions and for the departments within the DHB via the website to feedback to participants on the findings of said surveys and how this is being used within the service. Women's Health are working towards using this engaged consumer group with future initiatives..
The Patient Experience survey is a standardized electronic form that is sent out to all patients across the DHB within 14 days of access to services via email. The top three factors that have been identified from this questionnaire as making the most difference to their quality of care and treatment are;

- Communication (clear answers that can be understood)
- Feeling confident about the quality of care and treatment
- Getting coordinated care

A Patient experience report is produced for the various areas in the DHB from the data submitted; for Women's Health these reports are feedback to staff via communication folders and utilised through the Clinical Governance groups as standing item on the agenda for further discussion.
For example following the Labour Governance level four meeting it was agreed that 'communication' would be an identified theme broken down into common categories in which short sharp education sessions with staff would be used to promote self-reflection around the many facets of communicating well with women and their families.

The National Women's (NW) website, in addition to supplying comprehensive health information has the capacity to receive feedback, it is managed on a regular basis along with the new Facebook page and feedback is passed on to the relevant service for review/comment as required.

Feedback from the Patient Experience survey is beginning to help the service develop a clear picture of how well care is being delivered and what makes a difference to those accessing services. There is work to be done however to improve on the collection of email information for those accessing services in order to utilise data more effectively for the broader population.

Patient experience report example January 2014

Addition information is gathered via our complaints process. Where appropriate we offer women the opportunity to meet face to face to discuss their concerns. This has included the midwifery director visiting women in their homes. Women's feedback and comments (with the woman's permission) are used for education sessions, to inform and improve practice and may result in us recruiting engaged consumers to act as consumer advocates for the service.

3.2.12 Smoking rates

Smoking rates of women who birth at NW continue to decline. In 2009 the smoking rate at booking was 9.6% while in 2011 the smoking rate at booking was 6.6% and in 2013 it is 5.7%.
ACH has a smoking cessation service and women are referred from the clinics directly to the service. A regular report of 'top referrers' to the service is sent to ward managers and then out to staff as a guide on how well individuals are doing with referrals.
Many staff have undertaken the 40 minute on line training and a high number are now quit card providers within the DHB.
Nicotine patches, lozenges, and gum are available in the wards for use during the admission of a current smoker to minimise cravings to smoke.
Auckland DHB employs a pregnancy team of 3 quit coaches who visit pregnant women who smoke out in the community as well as texting and making phone calls, there are also community Quit Groups. It is notable that the smoking rate for pregnant mums who are admitted (6.2%) is less than half the national average for adults smoking (15%).

In the period 1 July – 31 December 2013 the Smoke free pregnancy team received 154 referrals primarily from ADHB Community midwives of whom 94 were enrolled on to the quit smoking programme.
In the period of Jan 2014 to June 30th 2014, 100% of women who smoked at booking with an LMC were given brief advice to stop smoking. This is an excellent effort by all of the LMCs.

3.2.13 Small for gestational age project

The development of the SGA project began because of the over representation of SGA babies in our perinatal mortality statistics and our concern that many SGA babies were not optimally monitored and managed.
There was no specific guideline concerning the monitoring of babies with suspected SGA and the monitoring and management of those confirmed as SGA.

The MFM network collaboratively developed guidelines to assist with local guideline development. This was used as a basis for a local ADHB process. A working group was formed with the objective of developing a clear care pathway for women with suspected SGA or confirmed SGA and linking said pathway to the new SGA guideline.
This large project was overseen by a project group whose membership included a self-employed LMC, a consumer who herself had recent experience of an SGA pregnancy and a clinical governance consumer representative.
Sponsorship from the Star ship foundation helped fund a brightly designed SGA pack, with a 'monopoly board' cover, for care planning documentation that the women hold.
Crucial elements agreed on early in the project were that a named clinician should be responsible for the management plan; and that the plan would not change unless said clinician was consulted.
The monopoly board was designed to be a detailed document of all monitoring schedules inclusive of USS dates and Induction of Labour date mirroring information contained in Healthware.
LMCs can now expect a clinic appointment for women within one week at Greenland for first specialist assessment of SGA over 34 weeks.
MCA Doppler is now performed at Greenland at the first appointment
Care is mapped out and IOL can now be booked in advance for women on the pathway at 38 weeks unless low risk
The patient has a record of the plan with helpful information, all in a "Special Delivery" Folder.
An audit is planned for half way through the current year to monitor improvements in outcome, satisfaction and identify further areas for further development.

3.2.14 The Observation of Mother and Baby in the immediate postnatal period (NMMG priority)

The Observation of Mother and Baby in the Immediate Postnatal Period: Consensus statements guiding practice has been discussed at a number of clinical governance group meetings and opinion was that midwives complied with the recommendations made in this document, however further work is taking place in the 'postnatal pathway project' to include these guidelines in 2013/14.

3.3. Planned Quality Improvement Initiatives

3.3.1 Regional collaboration

National Women's has been working closely with WDHB on a number of projects, sharing resources and information.
The Tongue Tie pathway is an on-going project that is involving a wide variety of professionals from surgeon's to dentists along with midwives, lactations consultants and mothers. It has been discussed at regional level and has become a project that both WDHB and ADHB are working on in view of the close referral relationship between Starship.

Other collaborative projects include:

- The referrals criteria guideline
- Obesity guideline
- IOL guideline

3.3.2 Normal birth project

National Women's is a large complex service that simultaneously provides care to women under independent LMC care, those requiring secondary care and the most complex of our women who require tertiary and quaternary resources. We believe that our current model makes it more difficult for us to support a normal birth pathway for the women we care for. Currently women booked at National Women's birth in our delivery ward regardless of their level of complexity. We contract with Birthcare to provide a low risk birthing environment for eligible women, however the number of women choosing to birth at Birthcare is lower than we estimate the demand for a low risk birthing environment to be.
We are committed to establishing a normal birth pathway for women in Auckland. This will be achieved in part through our collaboration project with WDHB and in part from a refocusing on the needs of women under LMC care. Our leadership restructure at level 3 will include a Clinical Director of Primary Care, who will have responsibility to lead a change process to strengthen primary birthing.

3.3.3 Annual Clinical Report 2013

National Women's continues to build on improvement initiatives through the Annual Clinical report it produces each year. This report and day encompasses the Maternity, Gynaecology and Newborn service. One of the benefits of the day is that it brings the different disciplines together.

The Maternity Topics for the 2014 ACR day (2013 data) include:

- Early registration with an LMC, progress on projects. This is a collaboration with WDHB
- MFM data analysis
- Late preterm babies on the ward
- Review of the management of women with GDM
- Helping families understand the process of perinatal autopsy

4. Section Four: Business as usual

It will be a challenge to ADHB to provide the same level of activity with no additional funding. There are however many projects and processes which are functioning well which will enable the MQSP to continue albeit with reduced outputs. One of the challenges will be to provide a report of this size and content. This report will need to be reviewed to make it sustainable for 2015.

The Clinical Governance structure within National Women's has been set up in the knowledge that in 2015 it would be business as usual. The groups have a recognised framework with terms of reference and committed membership. They have meeting dates and times firmly established. Although there are to be some refinements in administrative support in 2014/15 the groups are already part of the quality structure with ADHB.

The new MOTIF and RAMP groups are becoming established and a pack/checklist is currently being developed to enable the new administrative support role to collect the data needed for presenting at the meetings.

The Women's Health Intelligence and Business Intelligence teams will continue to provide data and analysis to enable and support quality projects. The Women's Health Intelligence team will continue to lead quality projects.

The MQSP report data and priorities from the NNMG has been tabled at the fortnightly meetings of the Women's Health Quality Improvement, indicators and standards (QIIS) working group. This established group addresses projects that are already taking place within Women's Health or planned for the Annual Clinical report in addition to consideration of the clinical indicators and NMMG priorities.

National Women's has always strived towards excellence and will continue to do so. The project improvement teams will continue to support National Women's with the many quality improvement projects which are undertaken.

Projects such as

- The Early Engagement of an LMC project is already underway and will continue in their work. This project has many work streams which are functioning well.
- Improving outcomes for Pacific women is being supported by Pacific Health
- Improving the accuracy of coding data project is already started on and will continue.
- Electronic reporting from the scanning service is a large project which has an established team. This project will bring about liaison with private providers which may assist with next steps of looking at the utilisation of ultrasound scans in the community.
- The ADHB smoking cessation team will continue to provide a service to assist with reducing smoking for all pregnant women and to provide a smoke free environment for newborn babies and families.
- The Women's Health Intelligence team will provide the data and monitor against the soon to be released clinical indicators
- Sending primary maternity data to MOH has made good progress and work will continue to send historic data
- Review of the Induction of Labour policy is underway with an established team and it will look at the IOL rates and find ways to improve the process for booking and IOL which may have an effect on reducing the IOL rate.