Waitemata
District Health Board

Best Care for Everyone

Waitemata DHB Maternity Quality and Safety Programme

ANNUAL REPORT

2014 - 2015

Contents

Waitemata DHB Promise statement

Best Care for Everyone

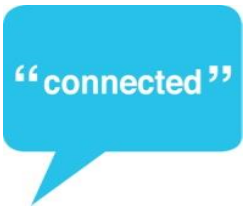
Women can expect to receive sensitive, effective and timely maternity care that recognises birth as a normal and important life event.

Waitemata DHB Values

Women can expect clinicians to work in partnership with them. Birth is a social and family event and staff will welcome and value the participation and contribution of partners, family and whānau. Te Tiriti o Waitangi is valued, and culture and diversity is respected. Colleagues and students of all disciplines are supported and respected.

Women can expect staff to take a sensitive and supportive approach, seeking to understand and meet their individual needs. Newborns are cared for gently and respectfully.

Each woman’s maternity experience is made special and memorable by the excellent care she receives. We take an innovative view of maternity services and look for opportunities to create improvements. We actively support improvement ideas to ensure that positive change occurs.



Women can expect seamless care and consistent information and advice from all members of the healthcare team. Our multidisciplinary teams ensure that women receive the best care from the most appropriate health professional. Midwives are aware of community supports available and ensure that each woman feels connected to her community.

Maternity Quality and Safety Programme

Purpose

The Maternity Quality and Safety Programme (MQSP) is a Ministry of Health (MOH) initiative to improve the quality of maternity care services nationally. MQSP builds on work already taking place in District Health Boards (DHBs). The multi-disciplinary team works together to identify ways that services and care can be improved and works to implement those improvements.

MQSP encourages collaboration by working with the community, stakeholders and with consumers.

MQSP is underpinned by the New Zealand Maternity Standards, New Zealand Maternity Clinical Indicators and the Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines).

Alignment with Maternity Standards

Standard 1: Maternity Services provide safe, high-quality services that are nationally consistent and achieve optimal health outcomes for mothers and babies

- 8.2 Report on implementation of findings and recommendations from multidisciplinary meetings
- 8.4 Produce an annual maternity report
- 8.5 Demonstrate that consumer representatives are involved in the audit of Waitemata DHB maternity services
- 9.1 Plan, provide and report on appropriate and accessible maternity services to meet the needs of the Waitemata region
- 9.2 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 2: Maternity Services ensure woman-centred approach that acknowledges pregnancy and childbirth as a normal life stage

- 17.2 Demonstrate in the annual maternity report how Waitemata DHB have responded to consumer feedback on whether services are culturally safe and appropriate.
- 19.2 Report on the proportion of women accessing continuity of care from a Lead Maternity Carer for primary maternity care

Standard 3: 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

- 24.1 Report on implementation of the Maternity Referral Guidelines processes for transfer of clinical responsibility

Alignment with Waitemata DHB and Women and Child Health Service Annual Plan

We will improve access, quality and outcomes and reduce inequities for women, babies and infants in Waitemata DHB through the delivery of effective, integrated, evidence-based maternity and children's services.

A wide variety of stakeholders, and range of perspectives including health literacy, education, safety and

improved access to primary care and specialist services, need to be included in planning effective care. Target areas include:

- To reduce smoking in pregnancy.
- To implement relevant responses to *Rising to the Challenge* (e.g. Healthy Beginnings: Developing Perinatal and Infant Mental Health Services).
- To improve staff training for recognition and responding to family violence.
- To strengthen the work of Te Aka Ora - Vulnerable Families Forum – increasing identification during pregnancy.
- To facilitate early registration with a LMC (by 12 weeks gestation).
- To promote the Normal Birth project.
- To implement the national guideline for the screening, diagnosis and management of gestational diabetes.
- To maintain Breastfeeding Friendly Hospital Initiative (BFHI) accreditation (on-going) and investigate opportunities to extend the concept into primary care settings by April 2015.
- To improve the quality and safety of maternity services, as measured by improved consumer satisfaction and through a range of indicators in the Annual Clinical Report.

Alignment with Waitemata DHB Quality

We have undertaken work to become a values-led organisation, holding patient and staff listening events, analysing compliments and complaints, and surveying our staff. We have established a steering group to lead a Patient and Family Centred Care Programme and continued to remove barriers for whānau, family and friends through extended visiting hours, improved patient information, daily rounds by ward leaders, and hourly rounds by our ward staff.

We have successfully implemented a patient experience reporting system: the Friends and Family Test, to help us understand the views of our patients and identify areas for improvement. We have also engaged patients and the community to improve services, including involvement in locality planning and participation in co-design programmes and in service planning.

We aim to respond to complaints in less than 15 days.

Maternity Quality and Safety Programme Objectives 2014/2015

1. To increase the number of women who register with a Lead Maternity Carer (LMC) by week 12 of their pregnancy (NMMG priority).
2. To improve access to Maternal Mental health (NMMG priority).
3. To improve communication and information to and from Stakeholders (NMMG priority).
4. To improve our understanding of the health needs of Māori, Pacific, Asian and teen populations (NMMG priority).
5. To increase access to information about services, guidelines and best practice (local priority).
6. To improve the validity and reliability of maternity health data (NMMG priority, local priority).
7. To decrease the number of women who smoke in pregnancy (NMMG priority).
8. To contribute to higher breastfeeding rates at three months of age, particularly for Māori, Pacific and Asian women (local priority).
9. To increase the number of women having a normal birth (Clinical Indicators).

10. To improve care for mothers and babies using the National Maternity Clinical Indicators developed by the Ministry and other data (NMMG priority).
11. To implement the referral guidelines (NMMG priority).
12. To implement the national guideline for PPH (NMMG priority).
13. To improve and standardise the postnatal care for women and their babies in the hospital setting (local priority).
14. To standardise the criteria and practice for labour Induction (IOL) regionally (Clinical Indicators).
15. To reduce incidence 3rd and 4th degree trauma (Clinical Indicators).

Waitemata DHB Context

Region

Our district encompasses Auckland North Shore, Auckland West, and Rodney where over 582,700 people live. Waitemata DHB is the largest and the fastest growing population of all districts with the population expected to grow by an additional 111,300 people (20%) over the next 10 years. Our population is relatively affluent with the third highest proportion of least deprived people (decile one and two) and the second lowest proportion of highly deprived people (decile 10) of any DHB. 20% of the Waitemata population is Asian, 10% Māori and 7% Pacific. 37% of our population was born overseas, compared with 25% nationally; 3.5% of total population do not speak English well.

12% of people in our area are smokers, lower than national average of 15%. 23% of adults are obese and a further 32% are overweight. Only 45% meet guidelines for physical activity, fewer than in 2006.

There are 62 General Practitioners (GPs) per 100,000 - lower than the national average of 74. The infant mortality rate is 2.3 - lowest in the country (national rate is 5.2). The teenage pregnancy rate is 15 (national average is 25).

Figure 1: Waitemata DHB area

Area analysis

The North Shore district was described in the Census as 'least deprived' and includes problems that are related to social stressors and anxiety. Many women are generally healthy and have access to good nutrition and medical care. Significantly more Māori and Pacific Island women live in the Waitakere district that have more decile 10 (more deprived) people, and are generally younger. Our area also covers semi-rural and rural communities. Waitemata DHB has:

- More women over 35 years giving birth than anywhere else in the country (n= 1577)
- The highest Asian population in the country giving birth (n=2020). This has increased by 220 in one year
- The third highest number of teens giving birth (n=220). This has reduced by 54 since 2014

Ethnicity of women giving birth in our area

	NSH		WTH		WDHB	
	No.	%	No.	%	No.	%
Asian Chinese	793	20.0%	235	8.1 %	1028	11.5%
Asian Indian	134	3.4%	282	9.7%	416	6.3%
Asian Other	383	9.6%	193	6.7%	576	8.4%
Asian Total	1310	33.0%	710	24.5%	2020	29.5%
European	2129	53.6%	1257	43.4%	3386	49.5%
Māori	215	5.4%	367	12.7%	582	8.5%
Pacific	178	4.5%	464	16.0%	642	9.4%
Other	139	3.5%	98	3.4%	237	3.5%
Total	**3971**	**100.0%**	**2896**	**100%**	**6867**	**100%**

Table 1: Ethnicity of women giving birth in Waitemata DHB area in 2014

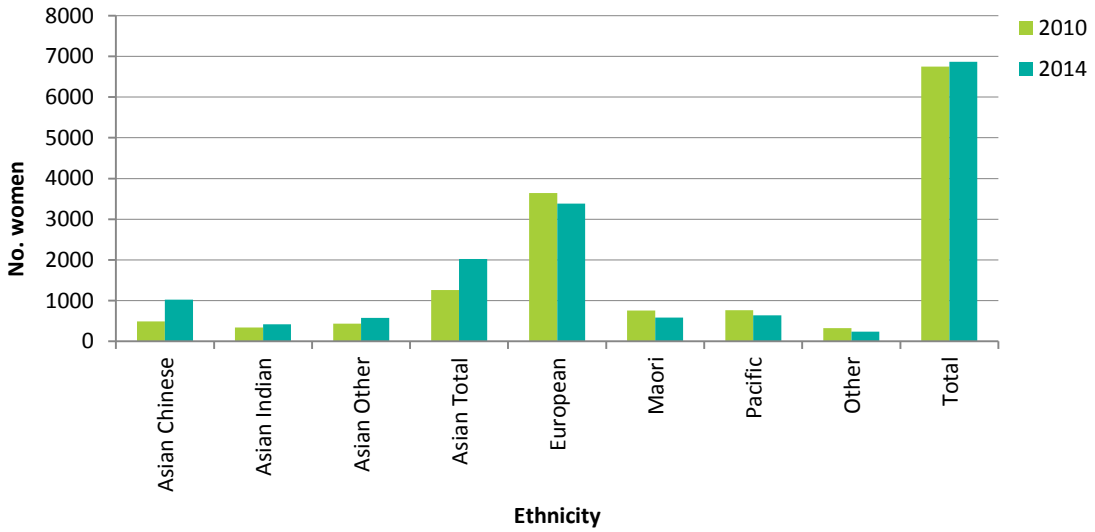


Figure 2: Ethnicity of women giving birth between 2010 to 2014

The number of births to European, Pacific and Māori women reduced over 2014, but significantly increased to Asian women. Of these groups, the highest increase was Chinese. Asian women now account for one third of births in our facilities and the number is increasing.

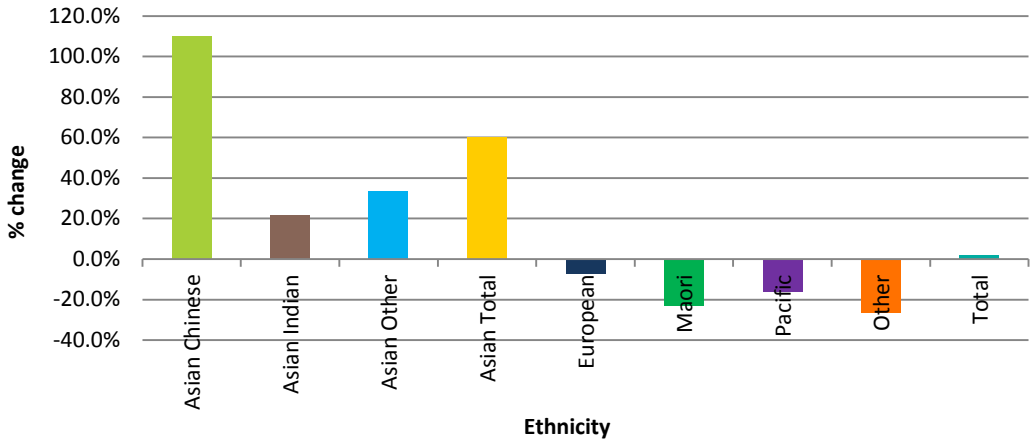


Figure 3: Percentage change in ethnicity of women giving birth 2010 to 2014

Age of women giving birth in our area

	NSH		WTH		WDHB	
Age	**No. women**	**%**	**No. women**	**%**	**No. women**	**%**
< 20	74	1.9%	146	5.0%	220	3.2%
20 - 24	377	9.5%	496	17.1%	873	12.7%
25 - 29	965	24.3%	835	28.8%	1800	26.2%
30 - 34	1534	38.6%	863	29.8%	2397	34.9%
35 - 39	815	20.5%	466	16.1%	1281	18.7%
40 +	206	5.2%	90	3.1%	296	4.3%
Total	**3971**	**100.0%**	**2896**	**100.0%**	**6867**	**100.0%**

Table 2: Age of women giving birth in 2014

There are significant differences between North Shore and Waitakere hospitals in maternal age. North Shore has fewer teens and women in their 20's giving birth with over one quarter of all births to women aged 35 years or older.

The 30 to 34 age group had the highest increase in births in 2014.

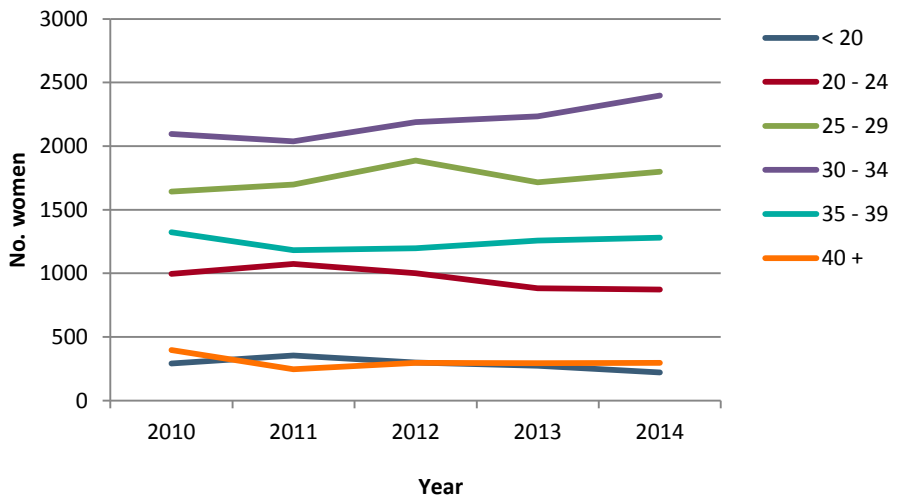


Figure 4: Number of births by age, 2010 to 2014

Waitemata DHB Maternity Facilities

Waitemata DHB provides maternity services at two hospitals and offer services at three primary birthing units in rural areas. The two hospitals provide primary and secondary maternity services for women in the Waitemata region. Women who are expected to have complications that require tertiary level care will be seen at Auckland City Hospital.

North Shore Hospital

Level 2 maternity services with access to intensive care facility

Maternity Community/Outpatient Services:

Obstetric Clinics, Obstetric Physician Clinics, Diabetes in Pregnancy Clinics, Community Midwifery Clinics, Anaesthetic Clinics, Lactation Clinics, Newborn Hearing Screening Clinics.

In 2014 the clinic area was temporarily relocated to a smaller area separate to the existing maternity facilities. This required significant upheaval and its current effective operation is a credit to the commitment of the outpatient staff.

Maternity Facility:

10 birthing rooms, one four-bed assessment room, and 3 birthing pool rooms. 36 antenatal and postnatal in-patient beds.

In 2014, the four bedded assessment area attached to Birthing Suite was closed for building work. It is being replaced by four separate rooms as part of a rebuild that includes the addition of a gynaecology ward and a bereavement suite. The four assessment beds were temporarily relocated into the ward area. This reduced postnatal bed capacity by four. Women who have uncomplicated normal births are invited to transfer out where possible. Reduced bed capacity has been an ongoing challenge for the core maternity staff this year.

Theatre

A designated obstetric theatre as part of the main theatre suite.

Special Care Baby Unit (SCBU):
12 cots accommodating babies born at 32 plus weeks gestation. Babies born before 32 weeks are usually transferred to Auckland City hospital.

Other services:
Pregnancy and parenting courses, lactation services, including breastfeeding classes and lactation consultants, dietician, physiotherapy, social work services, paediatric services, anaesthetic services and newborn hearing screening, Asian support service, chaplaincy.

Waitakere Hospital

Level 2 maternity services

Maternity Community/Outpatient Services:
Obstetric Clinics, Obstetric Physician Clinics, Diabetes in Pregnancy Clinics, Community Midwifery Clinics, Anaesthetic Clinics, Lactation Clinics, Newborn Hearing Screening Clinics.

Maternity Facility:
Spread across two wings with 8 birthing rooms in total, two birthing pools, two assessment rooms and 26 antenatal and postnatal beds.

In 2014, this area underwent renovation, especially to the bathrooms. A designated room for pregnancy loss was also incorporated.

Theatre:
A dedicated 24 hour obstetric theatre.

Special Care Baby Unit (SCBU):
12 cots accommodating babies born at 32 weeks' plus gestation. Babies born before 32 weeks are usually transferred to Auckland City hospital.

Other services:
Pregnancy and parenting courses, lactation services, including breastfeeding classes and lactation consultants, dietician, physiotherapy, social work services, paediatric services, anaesthetic services and newborn hearing screening, Māori liaison co-ordinator, Pacific liaison co-ordinator (both liaison coordinators work across both sites)

Primary Birthing Units

Warkworth (rural): Two birth and ten postnatal rooms (report in Appendix 2).

Helensville (rural): Two birth rooms and four postnatal rooms (report in Appendix 3).

Wellsford (rural): Two birth rooms

Collaboration project to develop a strategy for maternity services to 2025

Since 2013, Women's Health services at Waitemata DHB (WDHB) and Auckland DHB (ADHB) have been working collaboratively with a range of stakeholders to determine how best to deliver primary and secondary maternity services to our populations and create better frameworks for primary healthcare providers using DHB services.

In order to inform future maternity system design, the Collaboration Steering Group has undertaken:

- a review of the current models of care and configuration of services across primary, and secondary services.
- modelling of future demand for primary and secondary maternity volumes over the next 10 years.
- development of a collaborative model of care that includes recommendations for location and configuration of future services.

Current analysis estimates an increase of between 200 to 1300 births across the region by 2025, with the largest growth predicted to occur in West Auckland.

In 2015, stakeholders were consulted to assist with future planning. The collaboration steering group has now developed a set of proposed service and facility enhancements. Public consultation is due to commence in October 2015, with the aim of implementing those approved from 2016.

Uptake of maternity services

Maternity Access agreements held by:

- 197 self-employed midwives
- 10 specialist obstetricians
- 2 General Practitioners (GPs)

Primary Maternity Care:

Our area is well served with LMC midwives who provide 93% women with maternity care. At North Shore, 9% women choose a specialist LMC. Most women in our area are able to find a Lead Maternity Carer (LMC).

Some women, for example those with complex needs, or new immigrants, still require DHB midwifery. This number is reducing every year.

	NSH		WTH		WDHB	
Midwife	3529	88%	2837	98%	6366	93%
Specialist	371	9%	-	-	371	5%
GP	35	1%	-	-	35	0.5%
DHB	36	1%	59	2%	95	1.4%
Total	**3971**		**2896**		**6867**	

Table 3: LMC uptake 2014

Trimester of LMC registration

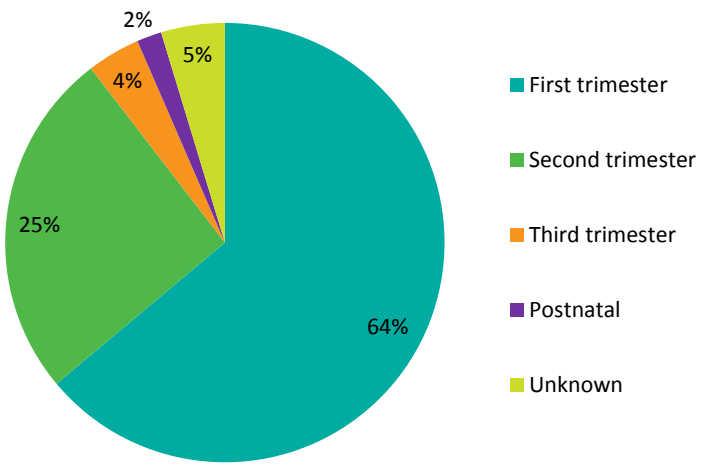


Figure 5: Trimester of LMC registration with a LMC (Source - 2013 MAT data).

Trimester of registration has been the focus of collaborative practice improvement and activity is described in MQSP goals: #1.

Outpatient Activity

Referrals to the secondary service are triaged by the Community Liaison Midwife in consultation with the Obstetrician and/or Physician using the Referral Guidelines and WDHB Local Implementation of the Referral Guidelines. Appointments are made, where possible, two to three weeks in advance to allow time for letters to reach the woman and for the woman to organise herself to attend. LMCs are sent a copy of the appointment letter encouraging them to be present with the woman to better facilitate care planning. In 2014 there were approximately 4610 referrals overall.

Women who do not attend appointments are rigorously followed up. The LMC is notified of non-attendance.

North Shore

18 Obstetrican and 3 Obstetric Physician clinics occur over a two-week cycle. Approximately 2600 referrals were made to a North Shore obstetrician in 2014.

In 2014, building work necessitated a change in location to restricted facilities.

Waitakere

14 Obstetrician and 3 Obstetric Physician clinics occur over a two week cycle. In 2014, there were approximately 2000 referrals to a Waitakere Obstetrician.

Diabetes in Pregnancy (DiP)

The Diabetes in Pregnancy service responds rapidly to referrals to reinforce the importance of management of diabetes in pregnancy and its health implications. Every woman retains her LMC and this service works in partnership with primary care. Since commencement of the service in 2012, not one LMC has handed over care. In 2014, 623 new patients were seen and there were 469 follow ups. The DiP Service provides:

- A one-stop multidisciplinary experience that values women's time and provides a seamless integrated service in one place and at one time.
- A focus on the woman's journey resulting in a very low DNA rate of 0.02%.
- Proactive relationship building with primary care including mobile phone support.
- Ongoing regular telephone support for the woman that reduces repeat clinic follow-up appointments and assists maintainance of better blood glucose control.
- A multidisciplinary care planning tool that is faxed to LMC following each clinic visit and followed up by a phone call.
- Information on Healthpoint e.g. screening tools and referral pathways
- Education for LMCs, PHOs and core staff.

A 2014 audit of the timing of DiP appointments showed that 86% women were seen by all the necessary specialist professionals within two hours. 14% women required further clinical input and these women were seen within three hours. Survey feedback is overwhelming positive. Consistent themes from women were:

"It was all very helpful and helped me a lot to understand diabetes to another level"
"It is good to have someone to get in touch and answer any questions I may have."

Feedback from LMCs:

"The people in the DiP team are very knowledgeable and competent and take great care of my women with diabetes. I get great feedback from them. Updates after appointments are great and clearly written plans are faxed. Fantastic work!"

This service presented the DiP partnership model at the final round of the WDHB 2013 Health Excellence Awards, and the Biennial National Midwifery Conference in 2014.

Implementation of the national Gestational Diabetes Mellitus (GDM) guideline

A group of stakeholders were invited to consider the published national GDM guideline. Significant consideration was given to the group of women whose HbA1c fell between 41 and 49 who are currently referred in to the Diabetes in Pregnancy (DiP) service. Under the national guideline, these women would not be eligible for a referral. At Waitemata DHB, we are recommending this group of women continue to be referred to the DiP service. Women will receive individualised advice. Those not seen in accordance with the new guideline will be offered an oral glucose tolerance test (OGTT) later in pregnancy.

The national guideline has been localised along with a new referral form for the clinic. An electronic discharge letter to GPs from the DiP service has been designed. Roll out occurs on 1st July 2015.

Virtual post-dates clinic

A post-dates virtual clinic was established in 2012 for well women (with no identified risk factors) who have not birthed by 41 weeks. This has further supported the promotion of normal birth and reduced the need for women to have a clinic appointment unless they or their LMC choose to do so. LMCs send in the completed virtual triage form at around 41 weeks. A phone conversation then takes place to discuss any recommendations for further assessment and labour induction. The woman's LMC can arrange labour induction once the woman reaches 41+5 weeks gestation, allowing time for spontaneous labour to occur. This system is operating well and is popular amongst LMCs.

The Midwife Community Liaison role

This Midwife – Community Liaison provides an effective communication pathway between the woman, the LMC and secondary services. It is a visible and easily accessible point of contact to achieve fast, co-ordinated care.

Some women are unsure of how to access maternity care so information on options is provided to assist early engagement. A small group of women are particularly anxious and are given someone to listen to their concerns, so their needs can be better addressed. LMC also have a point of contact for referral to secondary services. Best practice and care planning is often discussed and LMCs have told us how much they value this role.

In 2014, there were approximately 260 women in the North Shore area and 580 in Waitakere who called the Community Liaison Midwife. In addition, GPs, the hospital emergency department, Family Planning, Social Workers and Plunket made contact to either discuss care or refer women.

The Pacific Island Community Liaison role

The Pacific Island Community Liaison role is to provide support and education for pregnant and postpartum Pacific women living in the Waitemata District. The aim is to increase knowledge and understanding about the importance of antenatal care and pregnancy support so enhancing early engagement and promoting practices that encourage the woman's participation in pregnancy care.

In 2014, there were 325 referrals/women assisted in this role. This included women who had not attended for an appointment (DNA), women who did not know how to find a midwife, families with transport difficulties, relationship or family issues, teen pregnancy, language and/or cultural issues, CYF, drug and alcohol dependency, violence and mental health concerns.

Over the past year, work has also occurred in the following areas:

- Healthy Babies Healthy Future initiative: exploring ways to work with Pacific providers to engage with Pacific mothers and families.
- THRIVE teen services: how to link teen mothers to appropriate community services.
- TAHA: as part of the steering group for the development of the Tapuaki Programme. This very successful programme was piloted in the Henderson community and received overwhelming positive feedback.
- TAHA phone App, website and Facebook page: promoting the utilisation of these resources.
- A weekly drop in clinic at The Fono in Henderson. This clinic is run jointly by a Community Midwife and the Pacific Liaison Coordinator. It provides a pathway for early engagement.
- Work with Pasifika Beatz playgroup (Royal New Zealand Plunket Society): providing support to Pacific mothers.

- Teen Dad programme: providing support and mentoring to young pacific fathers and help with parenting education.
- Tuvalu Faatoaga o Keriso (Women's group): to educate, promote and support them in their work with Tuvalu women. This is a high needs group with complex issues including, poverty, language, access immigration and isolation.
- Church: Outreach to ten Pacific Churches across Waitemata District in Kelston, Henderson, Ranui, Massey and Northcote. Education sessions are provided to the whole congregation to build knowledge that supports Pacific mums to engage in health care and adopt healthy practices.
- Early childhood education: Outreach to six Pacific early child education centres to support their work and education of Pacific children.
- Pepi-Pod: distribution and promotion of safe sleep education to our Pacific community, identifying barriers for use.

  In August 2014, this work was co-presented as *"Taking it to the People"* at the Biennial National Midwifery Conference.

The Māori Community Liaison Coordinator role

The Māori Community Liaison Coordinator role is to engage with women and whānau in a way that is non-threatening, culturally appropriate, and helps women to feel they are important. Women and whānau are supported to make better choices and to take responsibility for those choices. Information sharing, referral onto other agencies, providing transport if needed, appointment reminders and avoiding appointment clashes are key elements of this role.

Māori are supported and engaged by attending hui, by referring onto other Māori organisations within our area, by making sure their next appointment is made soon after they DNA, and by giving whānau the opportunity to deal with their own health needs and those of their Tamariki by working collaboratively with colleagues and community groups. It is most important to ensure Tikanga is correctly observed in all interaction with Māori and their whānau. Home visits enable whānau to feel comfortable so health needs can be assessed and appointments can be facilitated.

In 2014, 138 women either self-referred or were referred by LMCs, Te Aka Ora Advisory Forum, Community organisations, maternity social workers, employed midwives and colleagues. Women who did not attend clinic appointments (DNA) were rigorously followed up and barriers for attendance removed, where possible.

Over the past year, work has occurred in the following areas:

- Te Aka Oranga Waikawa Wahakura Wananga: Development of this programme where cultural reframing of important health messages has been a key component in 2014/15. Connection with the Māori community and Tikanga was vital to the success of this programme with the support of Kuia and Kaumatua, (the report is included in the SUDI section). This has been a strong quality improvement focus since 2014 and recently won the Waitemata DHB Health Excellence award for its innovation in promoting health messages to Māori.
- Pepi-Pod distribution: Over 50 Pepi-Pods have been distributed since May 2014 when the programme started. In most cases Māori are among the highest receivers of Pepi-Pods.
- Community engagement - Hui/meetings : Te Matapuna Roopu is a group of Māori workers within Waitemata DHB who come together every two months to discuss up and coming events, Powhiri of new Māori workers and scholarships.
- Whanui hui: Attending whānau hui with non-health agencies.

- Support for women with pregnancy loss: assisting family decision-making such as post mortem and Tangi.
- Family Group Conference – Child Youth and Family; supporting women and their whānau as safety plans are developed where care and protection of the newborn is a concern.

Pregnancy and Parenting Education

Waitemata DHB provided pregnancy and parenting education to approximately 1100 women in 2014. 100 small groups were scheduled on weekdays, evenings and/or weekends over a six week cycle. First time parents predominate participants. Booking into a parent education group is available electronically, and by email, text or answerphone.

- There were 20 Chinese language sessions offered in 2014: 12 at North Shore and 8 at Waitakere. All included information on breastfeeding.
- A lactation consultant facilitated 35 breastfeeding information and education sessions across both sites.

We have worked collaboratively with community agencies in the area of education for pregnant teens. THRIVE - a specialist teen service in Central and West Auckland provided Teen Pregnancy and Parenting education classes until October 2014 when it stopped providing antenatal classes. To meet demand, Waitemata DHB is now providing information and education classes for young parents.

Antenatal Clinics Review

A review of antenatal clinic flow is currently in process. The woman's journey through the clinic is being mapped to identify areas for improvement, particularly to reduce delays and review care planning around follow up appointments. We are also capturing how the three way LMC/woman/specialist conversation currently occurs so we can consider improvements.

Births 2014

North Shore Hospital	3971 (55%)	Waitakere Hospital	2896 (40%)
Warkworth Birthing Centre	129 (1.7%)	Helensville Birthing Centre	40 (0.5%)
Wellsford Birthing Centre	21 (0.2%)	Home	195 (2.7%)
Total	7252		

There were 200 more births in our area in 2014 than in the previous year (n= 7052). This 3.2% increase occurred at North Shore hospital where there were 200 more births. All other facilities in our locality showed a slight decline.

95% births occurred in the base hospitals. Births in primary units accounted for 2.4% of the total births, and 2.7% were homebirths. There are no primary birth units in the North Shore or Waitakere urban districts - hence the much lower rates of births in primary birth units than the national average. The possibility of providing local birth centres is currently being worked through as part of the Auckland collaboration

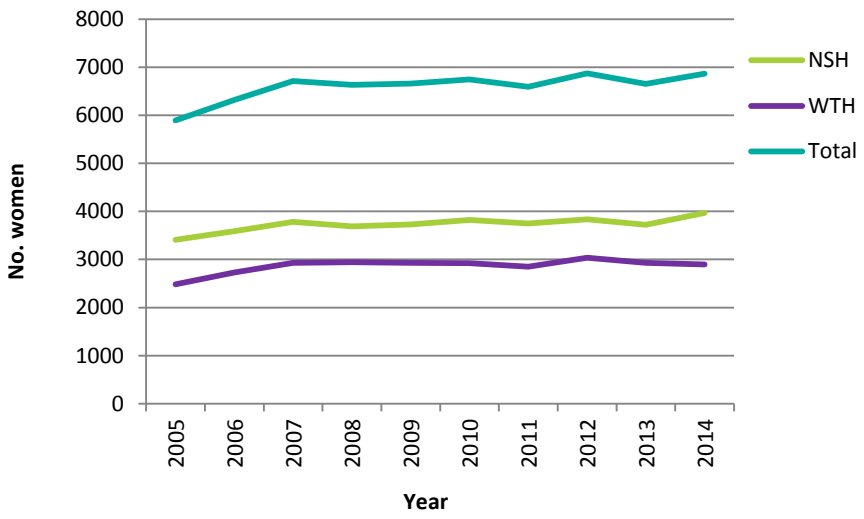


Figure 6: Women giving birth: NSH & WTH: 2005-2014

Mode of Birth 2014

Mode of birth	NSH		WTK		WDHB	
	No. women	%	No. women	%	No. women	%
Vaginal	2229	56.1%	2028	70.0%	4257	62.0%
Caesarean	1296	32.6%	694	24.0%	1990	29.0%
Ventouse	331	8.3%	111	3.8%	442	6.4%
Forceps	100	2.5%	54	1.9%	154	2.2%
Breech	15	0.4%	9	0.3%	24	0.3%
Total	**3971**	**100.0%**	**2896**	**100%**	**6655**	**100%**

Table 4: Mode of birth 2014

In 2014, 62.0% of women had a vaginal birth and 29.0% had a Caesarean operation; these rates have remained stable over the three year period from 2012 to 2014. It was pleasing, however to see the trend for increasing Caesarean rates at North Shore reverse, albeit slightly (33.3% in 2013) especially since this has been a MQSP focus this past year.

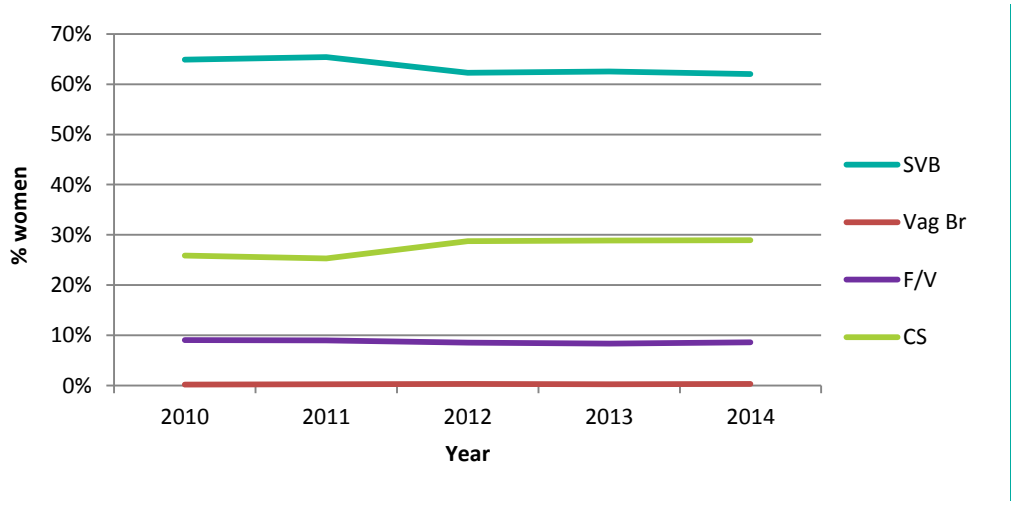


Figure 7: Waitemata DHB Mode of birth 2010 to 2014

There continues to be a significant difference between Waitakere and North Shore hospital mode of birth outcomes. This may be partly explained by demographics, such as increasing maternal age, at North Shore. Women with particular risk factors, such as morbid obesity, pre-existing medical conditions and twins, or where complicated surgery is anticipated, are asked to birth at North Shore.

MQSP Governance and Operations

The MQSP programme is overseen by the Maternity Clinical Governance Forum and is embedded in the wider DHB organisational structure.

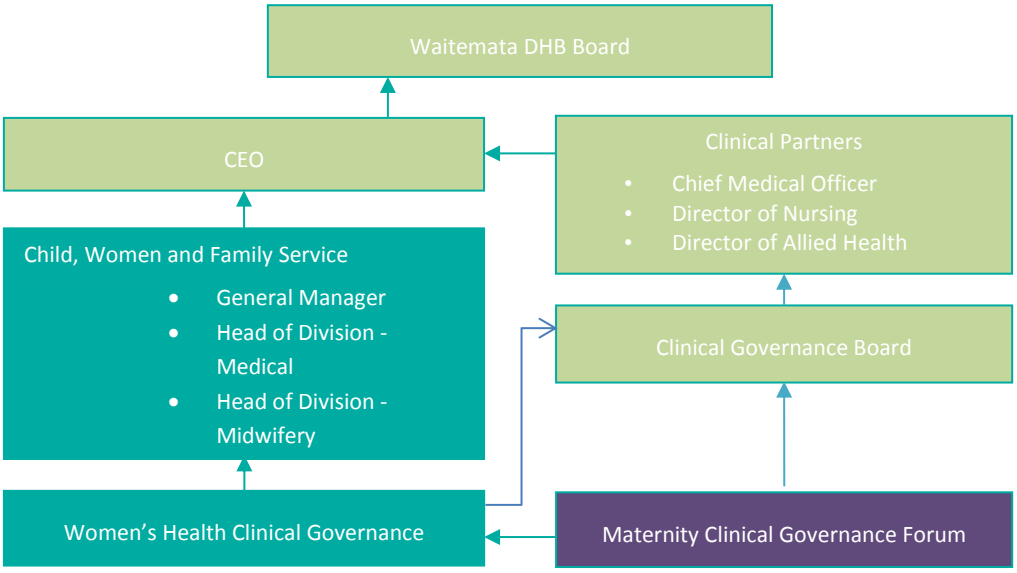


Figure 8: Waitemata DHB Governance and Structure

Membership of Maternity Clinical Governance Forum:

2 Consumer representatives (1 North & 1 West)	Operations Manager – Women's Health (Chair)
2 Primary Birthing Unit representatives	Clinical Director - Obstetrics
5 midwife LMCs	Head of Division - Midwifery
Obstetrician LMC	Clinical Director - Neonatology
Child, Women and Family service Quality Lead	3 Midwife Managers (NSH, WTH, Community)
Allied Health representative	2 Midwife Co-ordinators - Quality
Planning and Funding	Anaesthetist - Obstetric Lead
Administrator	N.B. To be appointed 3rd consumer - Asian voice

Figure 9: Maternity Clinical Governance Forum membership 2014

Embedding the MQSP Programme:

We have made steady progress over 2014/15, concentrating on progressing the work streams of our MQSP goals, establishing permanent processes within the programme, and strengthening stakeholder relationships as we work towards "business as usual". The continuation of MQSP funding will help us to make further progress moving from the recently described 'established' towards meeting the 'excelling' criteria of the MQSP programme.

We were pleased to participate in the Allen and Clarke MQSP evaluation as a "case study" and eagerly await the report.

Roles associated with MQSP:

- Midwife Coordinator – Quality: MQSP Coordinator: 0.9 FTE
- Midwife Coordinator – Quality: 0.9 FTE supporting MQSP and local initiatives
- Clinical Director – Obstetrics
- Head of Division – Midwifery
- Public Health Physician
- Data analyst/statistician/Healthware
- Consumer representatives: 2 for MCGF and others appointed to projects or collaboration groups

Groups that support MQSP:

Multidisciplinary monthly group meetings

- Maternity Clinical Governance Forum
- Maternity Quality meeting
- Midwifery leadership group
- Perinatal Mortality Review (PMR) at each site with pathologist
- Maternity Case Review (MCR) at each site

Current groups projects

- Early pregnancy care and first trimester registration
- Promoting normal birth
- Smoking in pregnancy
- Annual report
- Transfer of Care
- Clinical Coding
- Induction of labour
- Health Round Table work

Current collaboration groups

- Auckland region collaboration
- Maternal mental health
- Regional MQSP Coordinators (Northland, Waitemata, Auckland and Counties Manukau).

Maternity Clinical Governance Forum (MCGF) activity

MCGF meets monthly (except January) and reports to Child, Women & Family Service Clinical Quality group and the DHB Clinical Governance board. Its core values are:

- Co–operation
- Collaboration
- Consumer focus
- Consideration
- Confidentiality

MCGF activity includes, but is not restricted to:

1. Stakeholder engagement and communication
2. Providing oversight to safe practice
3. Providing oversight to clinically effective practice
4. Understanding the maternity experience

The agenda is organised around the above activity. Regular reports and guests are given a specified time to discuss their progress or to present audit or research proposals

MCGF #1 - Stakeholder engagement

Two consumers have been regular contributors to the monthly MCGF meetings since 2013. They continue to be supported by the MQSP Co-ordinator by way of regular meetings and phone or email contact outside of the monthly governance meeting schedule. This enables them to raise concerns and discuss issues in a more relaxed environment and their feedback is then incorporated into the governance meeting. They receive remuneration for attendance at meetings according to the Waitemata DHB non-employee schedule.

We have been very pleased with the participation of our consumer members and the feedback they provide. Recruitment is currently underway for a third consumer member of Asian ethnicity to enable the voice of the Asian woman and family to be more clearly heard.

"We have continued as consumer members of the Maternity Clinical Governance Forum over the past year. We attend the forum meeting each month and have regular meetings with the Quality midwives and other staff as appropriate. We also maintain email communication, particularly in relation to review of documents and resources under development or review.

This year has continued to see a strong MCGF group where we feel welcome and respected. Some processes, for instance research presentations and applications have been streamlined making the group a little more efficient. In the last few months a regular slot for our input has been added to the agenda which has yielded some interesting opportunities for discussion.

We have had input on a raft of issues through the forum meetings such as privacy of woman's information (notes) and their use in retrospective evaluations or audits of procedures, processes for gaining consent appropriately for women participating in surveys or research, strategies to continue to improve rates of skin to skin contact in theatre, raising challenges around maternal mental health including the accessibility of support services amongst other issues.

We have seen a number of positive initiatives within the DHB such as the normal birth project, the regional induction of labour guideline, the wahakura. The maternity service has also had to respond to challenges such as building work and associated capacity issues which have been addressed with consideration to optimising communication to women and LMCs and providing the best care in somewhat constrained circumstances.

During this year we have had the opportunity to participate in two MoH consumer forums, first in August 2014 in Wellington and recently in May 2015 in Auckland. We have also had input into the evaluation of the Maternity Quality Initiative commissioned by the Ministry. We are pleased to see the Ministry's ongoing effort to strengthen consumer involvement in Maternity Quality strategies. We believe we are strongly supported in our roles at Waitemata, but embedding consumer input more broadly and throughout all DHBs requires sustained effort.

We see lots of enthusiasm and applied effort to improve quality processes and the quality of maternity care at Waitemata. There are many opportunities for growth and we appreciate the opportunity to be involved in the ongoing work of the Waitemata DHB Maternity Clinical Governance Forum."

Jesse Solomon & Yvonne Hall

Six Lead Maternity Carers (LMCs) participate in the Clinical Governance meetings. This includes five midwife LMCs and one obstetrician. In view of the unpredictable nature of LMC work, not all can usually be present. Most MCGF meetings have at least two LMCs present**.**

"From a LMC midwifery perspective, we are seeing the improvements and changes we discuss at the governance meetings being put into action.

Skin to skin in theatre is more easily facilitated. Obstetricians and anaesthetists are happy with this request as long as mum and baby are in good health. We have also personally had experiences with surgeons providing delayed cord clamping in theatre for Caesarean operations. This is brilliant. Women are also very happy this is being offered. Core staff who care for mums and babies born at elective Caesareans also support this initiative.

The promotion of normal birth is filtering through. We are noticing and appreciating the changes with [hand held] dopplers now available to use in the birthing rooms and the cardiotocograph (CTG) machines out of sight. There are more birthing balls and the floor mats on some of the rooms are great. Just need our ropes and birthing stools now.

All LMCs we have spoken to are very complimentary about the monthly Quality Newsletter that Diane puts together – it is brief, concise and informative with topics relevant to staff and access holders.

Overall, we feel there is good support for LMCs from staff and colleagues as we work to practice and promote normal birthing at North Shore."

Lynden Shanahan & Matty van Oosteram

The managers of the primary birthing units are also participants but are not always able to be present.

"The manager midwives attend the Quality meeting at North Shore Hospital. The agenda items are sent to us via email and we can add items to be discussed. Then if we feel it is important to attend we do. This does require a considerable commitment of time as the journey alone amounts to 2 hours. Therefore we tend to be selective on what we attend. Getting the minutes after the meeting does help keep us up to date."

Sally Wilson, Warkworth Birth Unit

The Community manager represents the Pacific and Māori Liaison Coordinators at MCGF, and manages the liaison with Primary Care because she also has active relationships with community stakeholders. Allied staff are represented by the maternity social worker.

MCGF #2- Providing oversight to safe practice

Incidents and corrective actions:

- The learning points from multidisciplinary perinatal mortality meetings and maternal case reviews are discussed, action plans are proposed and progress reported monthly.
- Learning points from adverse events are discussed every two months. There has been a change in how these are investigated and reported in 2014 with a new Adverse Event guideline being published. The numbers of significant events is thankfully very small given our birth numbers.
- Changes have been made to birth and suturing packs, as well as clinical documentation requirements for suturing to minimise any opportunity for retained vaginal swabs.
- Over the past two years generally there has been a reduction in laboratory form completion errors.

Emergency processes:

These are improving as a result of work being done around transfers and discussion with St John's Ambulance Service.

Accurate data:

Entry into the Healthware electronic database has been a focus over 2014 with staff and clerical education.

Staffing issues:

Discussed regularly especially if there are any difficulties with recruitment.

MCGF #3- Providing oversight to effective clinical practice

Audits:

The audit process is now streamlined and requests come through Awhina Learning Centre with the exception of Trainee Interns. Application is then made through Clinical Governance for local DHB approval. Audit recommendations are presented back to Clinical Governance.

2014/15 Completed audits are:

- Postpartum haemorrhage
- Induction of labour (described under MQSP goals – Increasing normal birth rate)
- Admission CTG re-audit (described under MQSP goals – Increasing normal birth rate)
- Pilot emergency Caesarean (described under MQSP goals – Increasing normal birth rate)
- Emergency Caesarean (roll out of permanent audit)
- Timing of planned Caesarean operations (described under Alignment with National Priorities)
- Late preterm births (described under Alignment with National Priorities)
- Skin to skin in theatre (described under BFHI)
- Access to Smartphone technology for women and their families
- Safe sleep (described under SUDI)
- Artificial membrane rupture (described under MQSP goals – Increasing normal birth rate)
- Position at birth (described under MQSP goals – Increasing normal birth rate)
- Classification of perineal tears (in progress)
- Antenatal clinic flow (in progress)

Postpartum haemorrhage (PPH) audit:

500 sets of clinical notes were examined for evidence of the correct definition being used, the correct blood loss stated when there was cumulative blood loss after birth, as well as other criteria. PPH was not accurately documented, and cumulative blood loss not well recorded, in the woman's clinical notes resulting in an incorrectly low PPH rate in our data.

A small working group was set up to investigate the issues and collaboration occurred with the Coding department to identify solutions. Collaboration also occurred with the coders at Auckland DHB. Clinicians did not always understand how the words they use when documenting a birth, or omissions, affect coding.

To better capture women's blood loss at birth, we changed the Labour and Birth Summary form to record blood loss AND cumulative blood loss. Staff education was provided and staff were asked to write "PPH" every time PPH actually occurred. This made is much easier for identify women who had had a PPH for coders. This work occurred in tandem with the national PPH guideline roll out. Re-audit is planned in 2015/16.

Access to Smartphone technology for women and their families audit:

Women coming in to antenatal clinics were asked to note if they owned or had access to a Smartphone. Almost 90% women answered positively. This knowledge has been used to make recommendations in the Text Match and other communications projects.

Research/audit proposals:

The following research proposals have been approved by MCGF in 2014/15:

- Obstetric Smartpage Emergency Notification Proposal (WDHB)
- Hypoglycaemia Prevention with oral dextrose (Hpod), (Liggins Institute)
- Safer sleep (Anaesthetists)
- Pregnancy nutrition and the relationship to chronic ill health (Gunn - PhD candidate)
- Point of care testing for blood glucose concentrations in babies at risk of neonatal hypoglycaemia (Ewan - Masters thesis)
- EpiNet study (status epilepticus) (Fellow research)
- Effects of antenatal steroids on insulin requirements (Liggins Institute)

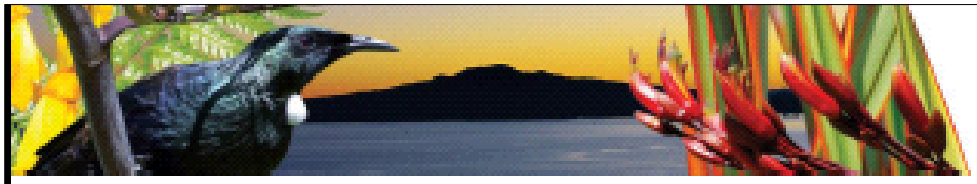
The following were considered only:

- GEMS study
- PEN study amendment for collection of cord blood
- Newborn pulse oximetry screening

Development of Guidelines, Processes and Policies:

Bringing our guideline schedule up to date has been a strong focus of 2015. The following have been published or are almost complete:

- Access agreement (review)
- Admission criteria (review)
- Adverse events (new)
- APH (review)
- Caesarean birth (review)
- Development dislocation of the hips (review)
- Dietician referrals (new)
- Fetal Assessment in Labour guideline (review) and CTG sticker.
- Induction of labour (review)
- Local Implementation of Referral guidelines (antenatal) (new).
- MEWS - Maternity Early Warning Score (new)
- National GFM guideline (review and localisation)
- Nausea and vomiting (review)
- Obesity in pregnancy(review)
- Observation in the Immediate Postpartum (roll out of national gudielines)
- Perineal Trauma and Repair guideline (new, amalgamated)
- Placenta/whenua (review)
- Removal cervical cerclage (new)
- Renal dilatation - newborn (review)
- National PPH guideline and documentation (review and localisation)
- Safe staffing (review)
- Stillbirth guideline and folders (review)
- Teenage pregnancy (new)
- Tongue-tie (new)
- Verbal communication (ISBAR) (new)
- Vitamin K prophylaxis (review)
- Water birth guideline (review)



Waitemata District Health Board

Best Care for Everyone

TEENAGE PREGNANCY

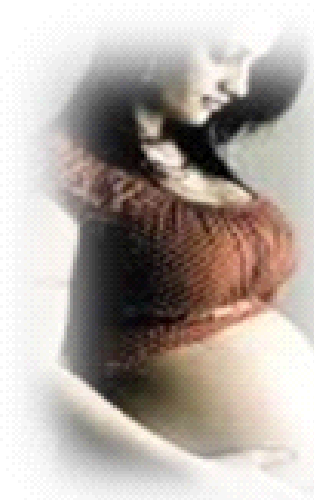
August 2014

The stigmatization teenage parents face because of their age worsens their experiences and the outcomes for their children (Whitely and Kirkmayer, 2008)

In 2013, 273 teens gave birth in our area: 178 births at Waitakere and 95 births at North Shore

Perinatal related death rates by maternal age (PMMRC 8th report, 2014)

Age	Stillbirths (per 1000)	Neonatal deaths (per 1000)	Perinatal deaths (per 1000)
<20	7.92	4.65	16.10
20-24	5.61	5.39	10.89
25-29	4.08	2.78	9.35
30-34	4.73	1.93	9.13
35-39	4.93	2.87	11.29
40+	8.53	4.89	18.55



The health needs of teens are often complex and can be associated with

- Poor health
- Social exclusion
- Smoking
- Maternal anaemia
- UTI
- Preterm birth
- Hypertension & eclampsia
- Fetal growth restriction
- Postnatal depression

Good support can change outcomes

Teenagers may need help to tell their parents they are pregnant. Galuafi, Rosie and/or the maternity social workers can assist

Extra support for pregnant teens and LMCs

Sue Grimmer
Midwife Coordinator Vulnerable Families
Te Aka Ora Co-ordinator

Phone: 021 778 924
Fax: 09 838 1737 (Te Aka Ora referrals)
Email: Sue.Grimmer@waitemata dhb.govt.nz

Galuafi Lui
Pacific Island Liaison Co-ordinator

Phone: 021 286 1686
Email: Galuafi.Lui@waitemata dhb.govt.nz

Rosie Houghton
Maori Liaison Co-ordinator

Phone: 021 926 361
Email: Rosie.Houghton@waitemata dhb.govt.nz

NEW GUIDELINE
"Better, best, brilliant"

Key guideline recommendations that improve outcomes

- ✓ Early referral to a maternity social worker
- ✓ Early referral to Te Aka Ora for women aged 17 years or younger
- ✓ Early referral for cultural support
- ✓ Early referral for age-appropriate antenatal education e.g. Thrive
- ✓ Home antenatal visits, if appropriate
- ✓ Encouragement to make healthy dietary changes. The FoodSwitch app. may be helpful
- ✓ Assistance for substance use, fads, self-harm and exposure to domestic violence
- ✓ Early referral to *Smokefree Pregnancy or Quitline*; NRT, and constant encouragement to reduce smoking
- ✓ Provision of condoms in early pregnancy to prevent transmission of STIs
- ✓ Screening for chlamydia (at least twice: at booking and at 32-36 weeks by self-collected vaginal swab)
- ✓ Screening and treatment for UTIs (at least twice: at booking and at 26-28 weeks) to prevent preterm labour
- ✓ Screening for anaemia including ferritin and B12
- ✓ Reminders to take iron supplements
- ✓ Full length hospital stay accompanied by the key female support, such as their mother
- ✓ May be eligible for Pepi-pod programme via Te Aka Ora

NEW resource directory for teens

MATERNITY QUALITY SPECIAL EDITION 1

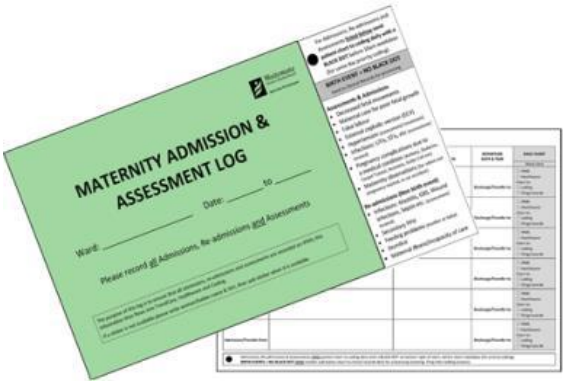
Figure 10: Teenage Pregnancy guideline information as an example of roll-out information

Publication of parent Information:

- Chinese Breastfeeding Guide Flipchart (new)
- Group B streptococcus (GBS) (new)
- Healthy Eating for women with Diabetes in pregnancy (new)
- Maternity services brochure (update)
- Your Caesarean information (update)
- Vitamin K parent information (update)
- Induction of Labour (update)

Projects (additional to MQSP goals):

- **Virtual access (VPN)**
  This project has been more difficult than initially anticipated and is currently being brought to conclusion.
- **Capturing Codable events**
  (i) PPH audit: change of birth summary documentation and staff education
  (ii) Assessment and/or admission to the facility: change of documentation and staff education
- **Transfers**
  Work is progressing to clarify what happens when women are transferred - especially in urgent situations. Clinicians have met with St John's Ambulance to understand their processes and what equipment and personnel are available. Communication between clinicians and St Johns is a project priority. Issues are being identified and worked through.



- **KanBan**
  KanBan is an efficient and streamlined facility ordering system that was recently introduced into maternity to make re-ordering supplies simple for staff. The KanBan system also minimises waste by not overstocking. Storage of items is logical, systematic, easy to find and saves time. Feedback from staff has been very positive.

Reports to MCGF:

- Newborn Hearing screening
- Antenatal HIV screening
- Midwifery Education
- BFHI

MCGF #4 - Providing oversight to maternity experience

Figure 11: The Waitemata DHB consumer experience model

Waitemata DHB has a corporate Patient Experience Manager who, using the DHB consumer experience model, works with us so we can better understand and engage our consumers. He is currently collecting stories from women for "*in your shoes*" – a method of women telling their story to highlight aspects of their care.

Local and Ad hoc surveys:

Consumers are encouraged to feedback on all aspects of their care. Paper feedback forms are placed by in-patient beds and are collected and collated by the Midwife Managers who respond directly to the feedback. New Zealand College of Midwives (NZCOM) feedback forms are also available in the ward areas for women to give feedback directly to midwives and are encouraged to do so. Questions:

- My overall experience was….
- The length of time I spent in hospital was…
- I found the staff caring and helpful…..
- I felt I was listened to ……
- I was happy with the breastfeeding support ….
- I was happy with the new born hearing screening service
- I received enough information about how to care for my baby
- I was offered pain relief when I needed it
- I had enough to eat and drink
- The quality of food was good
- My bathroom was clean
- While my baby slept, I was able to rest
- The visiting hours were…
- Would like to be contacted (if indicated)

Most questions have scaled responses. Written feedback from women has been very positive. When named feedback is received, a copy is sent directly to the staff member. Midwife Managers present feedback themes to Clinical Governance. Common feedback:

"The staff are very helpful"
"I wish my partner could have been given a meal"
"I had lots of help to latch my baby"
"Beautiful women"

Family and Friends Test:

The Friends and Family Test is offered to maternity consumers and their families by way of computer tablets. It is a standard set of questions that enables comparison of experiences across all areas of the DHB. Data is collected electronically and is analysed on a monthly basis. The ward reports are displayed on the individual quality boards which are in public areas. Service reports are provided to the Hospital Advisory Committee. An example of analysis is below. There are 5 translations available within the program which provides a platform for feedback from non-English speakers who would often remain unheard.

Figure 12: The Family and Friends Dashboard

Quality Boards:

There is a Maternity Quality Board in the foyer of each facility displaying current statistics, projects, consumer feedback and the Maternity News. The CEO makes regular visits to view the boards, to discuss the display with staff and provide feedback. Families have commented how much they enjoy having this information on display.

Complaints:

The number of complaints maternity receives continues to trend down. Response to complaints occurs within the WDHB time-frames. Corrective actions occur promptly and confidentially and are reported to MCGF.

Local Perinatal Mortality Review (PMR) meetings

We are fortunate at Waitemata DHB in that our Clinical Director (Obstetrics) is the Chairperson of the National PMMRC and helps drive our well-attended PMR meetings. Two local PMR midwife co-ordinators run effective monthly meetings at both hospitals. The meetings are further enhanced by frequent attendance of the area pathologist. The numbers of practitioners attending the PMR are increasing with the average attendance at the North Shore lunch time meeting of around 50 – 60 participants. At Waitakere, the meeting is held at 9am with fewer numbers. Discussion is underway to increase numbers of practitioners attending at Waitakere including the possibility of changing the meeting time.

Notes are not allowed to be taken. The quality team logs the issues and learning points. These are clarified with the PMR Coordinators at the end of every meeting. The learning points are reported to Maternity Clinical Governance and published in the Maternity Quality Update.

The following are initiatives and work-streams we have developed, enhanced or continued over the past 12 months from local PMR meetings:

Continued focus on baby movement education

In 2013, we published parent information on baby movements and produced posters that were placed in antenatal clinics. These were circulated to LMC and GP practices free of charge. Information was also accepted for publication in the *GP Weekly* and also circulated to Waitemata PHO GPs and practice nurses.

In 2012, six women delayed reporting reduced fetal movements resulting in stillbirth. In 2013, there were three and in 2014, we are pleased to report there were none.

Drawing attention to the national PMMRC publication

The PMMRC 8th Annual Report was circulated to LMCs and staff. We drew attention to the groups of women who have independent risk factors for stillbirth: women who have a high BMI, women who smoke during pregnancy, women of Indian ethnicity and women having their first birth. We reiterated the recommendation for all women who smoke during pregnancy to be given brief advice about referral to a smoking cessation programme.

One whole PMR meeting was given over to presenting the PMMRC report followed by staff education.

Placenta disposal

We have developed a reminder list of reasons for not disposing of the placenta and a placenta and cord description tool. We have placed signage in the utility areas reminding staff of the importance of saving the placenta for any unexpected outcome.

Group B streptococcus (GBS)

We repeatedly published information on how to recognize sepsis in a baby and those who are at increased risk of contracting GBS infection. We are in the process of publishing GBS parent information.

SUDI

We have reminded practitioners that twins should have their own sleep space and the recommendations of the Safe Sleep Programme. We have instigated the Pepi-Pod safe sleep programme and published how to refer.

Neonatal cooling to prevent encephalopathy

We select babies for therapeutic cooling if they are 36 weeks or more born with significant asphyxia. We have provided information on how to achieve this in practice.

Stillbirth guideline and folders

In collaboration with SANDS and maternity social workers, the stillbirth guideline and folders are currently being reviewed. Staff told us they struggle with broaching the subject of post mortem when parents are facing pregnancy loss. How to achieve this will be a feature of the new guideline.

Vitamin K parent information leaflet

This was further updated

Local Maternal Care Reviews

Sepsis

In acknowledgment of one of the leading causes of maternal mortality and morbidity, we have published information and recommendations regarding infection including:

- Statistics
- Flu and flu vaccine
- Early diagnosis of infections including recommended observations
- Confirmation of SROM using sterile speculum instead of vaginal examination
- Women who present unwell
- Treatment of persistent wound ooze

The Maternity Early Warning Score (MEWS) chart has also been developed and introduced in 2015.

Cholestasis

We have published information on how to recognise obstetric cholestasis and how to recognise a deterioration in the woman's condition

Removal of cervical suture

A new guideline has been written in response to variance in clinical practice.

BMI documentation

We remain concerned that height and weight measurements provided at LMC registration may not be accurate and have raised this in the Maternity Quality Update. We are currently in the process of capturing this data so we can feed back directly to clinicians.

Quality Improvements aligned with national priorities

Maternity Clinical Indicators

The publication of the 2012 Maternity Clinical Indicators has been carefully considered. We are fortunate that we are able to extrapolate local data to see current trends and we look forward to the forthcoming 2013 Clinical Indicators.

Indicator	Description	NSH 2012	WTH 2012	WDHB 2012	NSH 2013	WTH 2013	WDHB 2013	NSH 2014	WTH 2014	WDHB 2014
1	Standard primiparae who have a spontaneous vaginal birth	61.3%	73.3%	66.5%	60.2%	73.8%	66.3%	60.8%	71.2%	65.4%
2	Standard primiparae who undergo an instrumental vaginal birth	18.5%	10.8%	15.2%	19.1%	11.3%	15.6%	21.7%	11.0%	17.0%
3	Standard primiparae who undergo Caesarean section	20.4%	15.9%	18.4%	20.8%	15.3%	18.4%	17.5%	17.8%	17.6%
4	Standard primiparae who undergo induction of labour	5.7%	3.6%	4.8%	2.7%	3.9%	3.2%	4.5%	3.5%	4.1%
5	Standard primiparae with an intact lower genital tract (no 1st-4th-degree tear or episiotomy)	16.8%	26.3%	21.1%	16.0%	22.9%	19.2%	10.6%	20.6%	15.0%
6	Standard primiparae undergoing episiotomy and no 3rd-4th degree perineal tear	24.1%	17.3%	21.1%	27.5%	20.4%	24.2%	32.6%	21.5%	27.8%
7	Standard primiparae sustaining a 3rd-4th degree perineal tear and no episiotomy	4.1%	2.6%	3.4%	4.8%	3.7%	4.3%	5.3%	4.1%	4.8%
8	Standard primiparae undergoing episiotomy and sustaining a 3rd-4th degree perineal tear	1.9%	0.2%	1.1%	1.6%	1.1%	1.4%	1.4%	0.7%	1.1%
9	General anaesthesia for Caesarean section	10.1%	10.8%	10.3%	9.4%	7.2%	8.6%	8.6%	7.2%	8.1%
10	Blood transfusion after vaginal birth	1.5%	1.0%	1.2%	1.8%	0.7%	1.3%	1.4%	0.8%	1.1%
11	Blood transfusion after caesarean section	2.4%	0.8%	1.8%	1.9%	1.3%	1.7%	1.3%	0.9%	1.2%
12	Premature births (delivery between 32 and 36 weeks)	5.8%	4.4%	5.2%	5.7%	4.1%	5.0%	5.2%	4.5%	4.9%

Table 5: New Zealand Maternity Clinical Indicators and local data 2012 to 2014

In general, there are on-going differences between North Shore and Waitakere which can, in part, be explained by population differences.

The numbers of instrumental births have risen and the numbers of Caesarean operations have correspondingly reduced at North Shore (20.8% in 2013, to 17.5% in 2014). Although the numbers are quite small, they are encouraging - especially since Promoting Normal Birth (PNB) has been a recent focus. PNB will further rolled out at Waitakere, where the Caesarean rate is climbing.

The labour induction numbers for standard primipara are small and so a trend could not be identified. IOL project work is continuing and is further described in this report.

Rates of intact perineum continue to decline, and rates of severe perineal trauma and episiotomy are increasing. We have carefully considered this trend and this is of concern to us. We note the continued growth of birthing women who identify as Chinese, South East Asian and Indian in our DHB. It is well documented that rates of perineal trauma in these ethnic groups is increased. We would therefore expect these numbers to trend upwards. Significant work has been completed in 2014/15 and is described under Health Round Table activity.

BFHI

North Shore and Waitakere hospitals both hold BFHI accreditation as Baby Friendly Hospitals. Cultural norms around breastfeeding continue to create a challenge for staff in promoting best practice. Our breastfeeding statistics for 2014 are inclusive of low birth weight babies (less than 2500g) but exclude babies who were cared for in the neonatal unit.

Waitakere had an exclusive breastfeeding rate of 84.3%, with 2.41% of babies being completely artificially fed. The remaining 13.29% of babies received some artificial milk during their hospital stay.

North Shore had an exclusive breastfeeding rate of 78.9%. Just 1.8% of babies were completely artificially fed. The remaining 19.3% of babies received some artificial milk during their hospital stay.

Notably, women of Chinese ethnicity had lower breastfeeding rates at both DHB sites. Breastfeeding flipcharts are printed in Mandarin as well as English, and given to all women on the postnatal wards. We continue as a team to work hard to make improvements in breastfeeding rates for all women and babies.

An area of continued focus this year has been to improve the opportunity in theatre for the baby to have skin to skin with its mother. This has had significant success at North Shore where a designated staff member has advocated for skin to skin at every planned Caesarean operation. The practice at emergency Caesareans is improving especially if the woman's LMC is with her.

Women's stories of successful or non-successful skin to skin in theatre are currently being recorded for staff feedback purposes.

Late Preterm Births (34-36 weeks) 2014

There were 294 late pre-term (34-36 weeks) births in 2014. There is generally a slight downward trend in pre-term births, but the numbers are still small. We have completed the 2014 audit to ascertain the reasons for late preterm birth and this has been forwarded to clinicians. There is increasing awareness that there must be a strong indication for an elective birth before 37 weeks.

The majority of late preterm births were twins and women who had liquor loss and then went into labour. The overall preterm birth rate for teens was 5% (20 to <37 weeks). This is a reduction from 2013 following the teen pregnancy project.

Year	NSH	WTH	WDHB
2009	6.4%	3.8%	5.3%
2010	6.4%	4.3%	5.4%
2011	5.4%	5.4%	4.9%
2012	5.8%	4.4%	5.2%
2013	5.7%	4.1%	5.0%
2014	5.1%	4.3%	4.8%

Table 6: Preterm birth rates 2009 - 2014

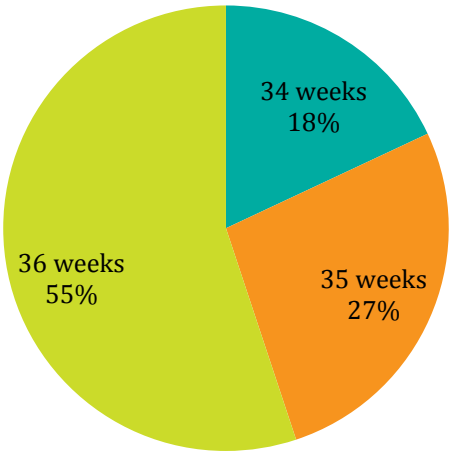


Figure 1: Distribution of births at 34-36 weeks for 2014.

Gestation at elective caesarean section

All 2014 elective Caesarean operations over both hospital sites were recently re-audited. Caesarean operations prior to 39 weeks were performed for either medical indications such as twins, growth restriction, unstable GDM with a complicating factor, and hypertensive disorders , or because the woman had presented in labour when a Caesarean had been planned.

There were still some Caesarean operations carried out late in the 38th week. A contributing factor may be the limitation in available slots, particularly the increasing number of women with co-morbidities who require a double theatre time-slot.

The process of booking an elective Caesarean operation has been reviewed in 2015 with strict rules about gestation. Any elective operations before 39 weeks for no medical indication are scrutinised.

	Waitakere	North Shore	Total
Elective CS	239 (3.5%)	533 (7.6%)	772 (11%)
LMC present	164 (68%)	435 (81%)	599 (77%)
39 weeks +	164	319	483
38 to 38.6	59	152	211
37 to 37.6	8	42	50
<37	8	20	28

Table 7: Elective Caesarean operations 2014

SUDI

Over the past year, all employed midwives had Safe Sleep education as part of their mandatory training, facilitated by the Safe Sleep champions. The champions are supported in their role to attend specific SUDI education and partake in the Whakawhetu SUDI hui annually. The Safe Sleep champions:

- Arrange the December Safe Sleep day in the community with displays, basinettes, Pepi-pods, wahakura, poster and pamphlet resources.
- Participate in planning for 'this side up' clothing to be distributed to every baby on the next safe sleep day.
- Perform clinical audits using the northern regional alliance audit tool. Midnight audits have been carried out on the wards. Monthly audits will continue until we achieve 100% compliance to the standard.

The distribution of Safe Sleep Pepi-pods commenced in May 2014 as a pilot scheme. Vulnerable families were identified through the Te Aka Ora Advisory Forum. Teenage mothers were also eligible as recommended in the 2013 Service Review for Pregnant Teens. Community Midwives were trained as distributors together with the Māori and Pacific Liaison Coordinators.

Addressing cultural disparity was addressed by development of Te Aka Oranga Waikawa Wahakura Programme:

"Te Aka Oranga Waikawa Wahakura Wananga is a programme aimed at SUDI prevention and safe sleep education for Māori mothers. Māori have almost double the rate of SUDI than non-Māori and higher rates of smoking in pregnancy. Māori are not engaged well with current education opportunities and the message on safe sleep protection is not reaching them.

Te Aka Oranga means pathway to wellness; Waikawa is the weave and Wahakura Wananga is teaching how to weave a baby basket. Cultural reframing of how we communicate these important and protective health messages was the innovation. As women wove their Wahakura, important safe sleep messages, smoking cessation and breastfeeding education was interwoven into the day. High levels of engagement and extremely positive feedback and outcomes suggest that this is an important model for sharing information and changing practice in an effective and i culturally appropriate manner."

Sue Fitzgerald and Rosie Houghton

Te Aka Oranga Waikawa Wahakura was submitted to WDHB Health Excellence awards and was awarded overall winner. Further presentation at Whakawhetu SUDI hui gained acknowledgement by Dr David Tipene Leach for the excellent work achieved in this area of engaging Māori who have the highest SUDI rates.

We plan to continue this very successful initiative. The next course is already fully booked and we note participation of women's partners.

Vulnerable families and national alert system

Te Aka Ora Advisory Forum is now well established. In 2014, there were 187 new referrals from LMCs, Maternity Social Workers, Child Youth and Family, Maternal Mental Health, Public Health Nurses, Emergency & Community Social Workers, and CADS. Increasing workload and referrals necessitated the appointment of a full time Midwife Coordinator – Vulnerable Families.

Māori are overrepresented in the vulnerable families' cohort with 41 % of families being Māori compared to 9% of the birthing population.

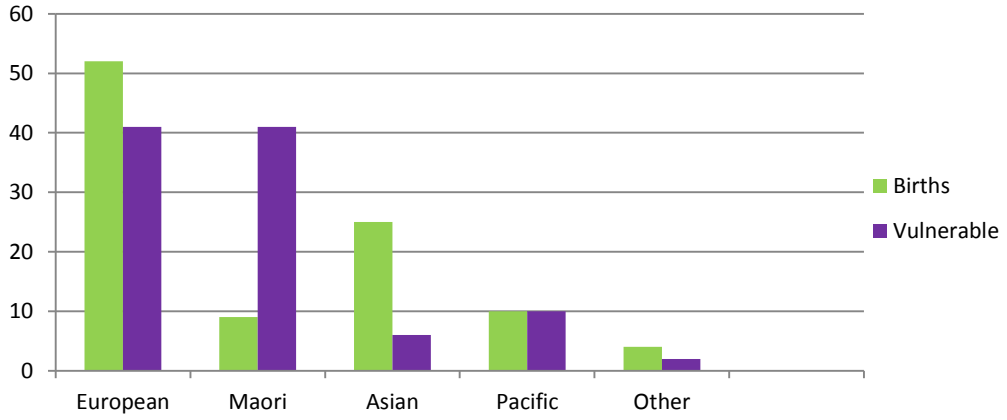


Figure 14: Vulnerable families' ethnicity compared to total births.

Similarly, teen mothers were also over represented. Over half the mothers were smokers. Many families present with multiple concerns so there are often multiple indications for referrals to the Te Aka Ora Advisory Forum and the groups are not mutually exclusive.

Of the 187 families, 176 families were supported to parent successfully and a variety of support agencies were engaged in providing support including: Family Start, Thrive, OHANA, Living and Learning, Te Puna Hauora, The Fono, Dayspring Trust, Family Works, Women's Refuge, Waipareira, Odyssey and the Bridge Program, teen residential units, Family Action.

For some families, a choice was made to plan the baby's care separate to the mother. Parents and families were included in the decision making and mothers were able to spend time with baby for a few days, breastfeed if that was their choice and make plans for on-going access. It is a mark of success of this forum that very few babies were taken into the care of Child, Youth and family services.

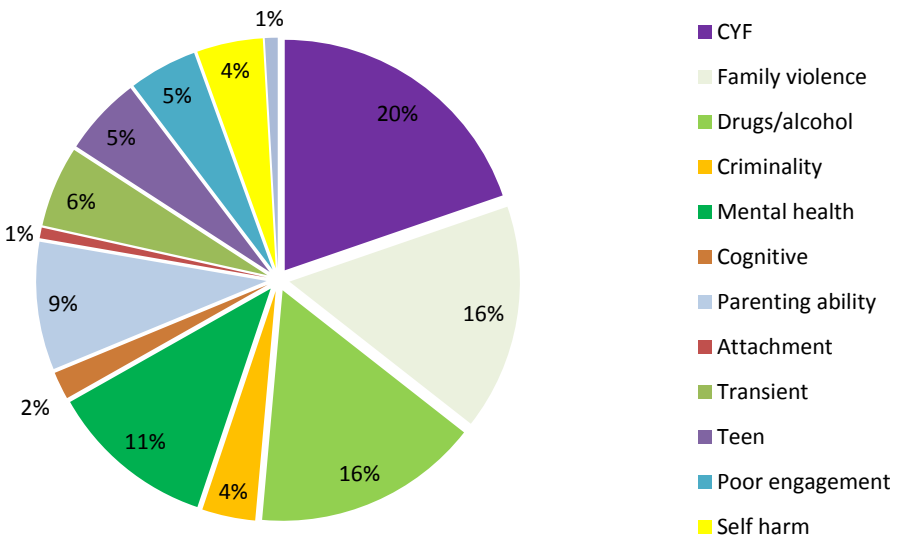


Figure 15: Indications for referral to the Te Aka Ora, vulnerable families forum, 2014.

Quality improvements are continually sought and we have recently introduced an electronic discharge planner for GPs and telephone conference capability to effectively communicate with LMCs.

We have presented the work of Te Aka Ora Advisory Forum to other professional groups and organisations.in 2014, we presented at the biennial Midwifery conference in Hamilton.

Maternal Mental Health

In January 2012 the Ministry of Health published *Healthy Beginnings: Developing perinatal and infant mental health services in New Zealand.* In 2014, new funding was made available to the Northern Region to expand the continuum of acute mental health services available for mothers (and fathers or primary carers) and babies. Planning for enhanced Perinatal and Infant Mental Health services began in 2013, with involvement of Northland DHB, Waitemata DHB, Auckland DHB and Counties Manukau DHB.

A three bed mother and baby unit opened in 2014, based at the Child and Family Unit at Starship Hospital, ADHB. In addition funding has been made available to increase the maternal mental health FTE and provide a regional telephone response on-call roster for maternal mental health.

A new initiative is the opening of a four bed respite centre in Te Atatu on 26th June 2015. This will provide support to mothers and babies in a community setting. Maternity services have been involved in providing assistance with operating protocols and providing training and support to the new staff that have been recruited for this service.

Work continues on developing referral pathways for LMCs with a draft pathway currently undergoing consultation. It is anticipated this will be completed before September 2015.

Health Round Table Improvement Groups

Waitemata DHB is a member organisation of Health Roundtable (HRT). This is a non-profit organisation of hospitals throughout Australia and New Zealand who:

- Provide opportunities for health executives to learn how to achieve Best Practice in their organisations.
- Collect, analyse and publish information comparing organisations and identifying ways to improve operational practices.
- Promote interstate and international collaboration and networking amongst health organisation executives.

Members are provided with a wide range of documents and presentations that identify innovations in health care practice, as well as comparative information and meeting notes. Any staff member from a member health service can access these reports by registering for access with their health service email address.

In addition to be a member organisation, Waitemata DHB has for the past three years, been subscribing to the Maternity Service Health Improvement group. Workshops are held annually on key relevant topics/conditions comprising presentations on innovations from all participating organisations.

In 2014/15 there has been significant work to Improve Perineal Care, the subject of the 2014 Melbourne HRT Conference under MQSP deliverables: Goal #15. This work is now complete.

In May 2015, the same three clinicians attended the HRT conference in Brisbane entitled "The Safe Prevention of Primary Caesarean delivery". This has helped clarify the steps we need to take to further the Promoting Normal Birth project.

MQSP strategic plan deliverables

Goal #1 - To increase the number of women who register with a Lead Maternity Carer (LMC) by week 12 of their pregnancy

Early engagement (by 12 weeks gestation) with a LMC is a NMMG priority action to improve maternal and perinatal health, highlighted in the Waitemata DHB Annual plan.

The Ministry of Health (MoH) analysis of LMC claims for booking over the last two years indicates that only 63% of women nationally book within the first trimester (12 weeks gestation). This figure is substantially lower than the Maternity Consumer Survey which suggests 83% of women book before 12 weeks, and a recent Growing Up in New Zealand sub-study which indicates that 91.8% of women engage a LMC in the 'recommended' time prior to 10 weeks gestation. It is possible that these latter two surveys reflect women's understanding of 'booking' is contacting a LMC, rather than the physical registration appointment.

Between 60-70% of women in New Zealand attend a GP as their first health professional in pregnancy, and although women may attend a GP and they may contact a LMC, it appears that many women do not actually register (attend a face-to-face first appointment and complete a registration form) with a LMC until early in the second trimester. Despite the LMC system being established for nearly two decades, women and GPs still report confusion and inconsistent messages around booking with a LMC in pregnancy.

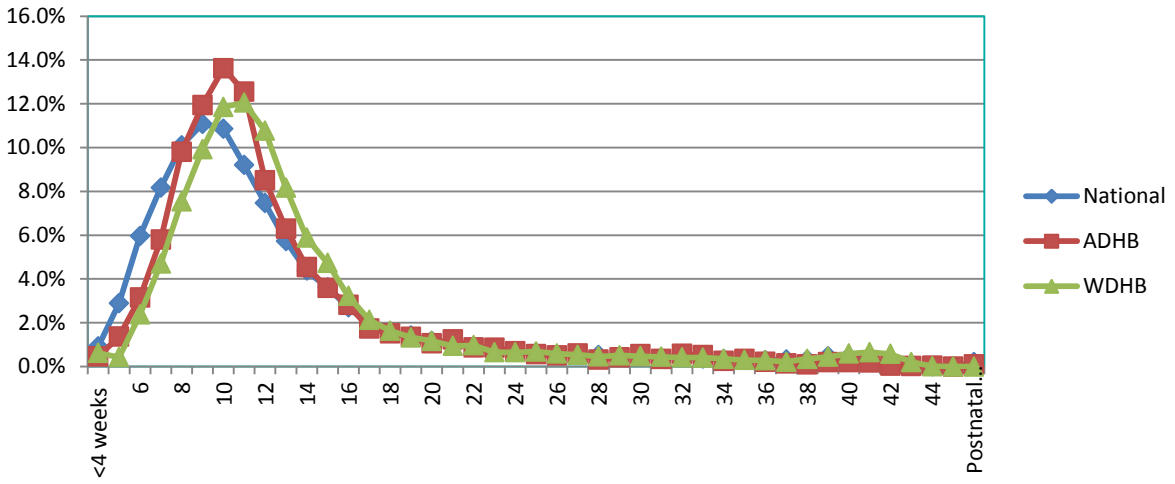


Figure 16: LMC registration for Waitemata and Auckland DHBs (MAT data)

In 2014, a survey was conducted at Waitemata DHB with the aim to identify barriers to early LMC registration. A steering group was established to assist in the development of the three survey tools: for postnatal women, for LMCs and for GPs.

The survey of postnatal women was delivered by face-to-face invitation on the postnatal wards of North Shore and Waitakere Hospitals. Women were offered the option of online survey completion (Survey Monkey using a hospital tablet device) or a paper-based form. Online surveys were provided to GPs and LMCs via a link in routine communications for each of the groups.

Targeted recruitment strategies, involving Māori and Pacific Liaison Co-ordinators, were initiated after the first month of postnatal data collection indicated low participation from young women, Māori and Pacific women. Recruitment was highly successful, with the proportion of postnatal Māori and Pacific women participating in the study being higher than any other ethnic groups.

Level 1 Ethnicity	Number	Proportion	Proportion of births*
Māori	15	10%	16%
Pacific	8	5%	7%
Asian	37	24%	11%
MELAA	2	1%	5%
European/Other	95	61%	14%
Total	**157**	**100%**	53%

Table 8: Ethnicity of women surveyed in proportion to births, 2014

- 32% women said finding pregnancy care was difficult.
- 17% women were unaware of the need to choose and register with a LMC.
- 9% women did not know that pregnancy care was important.

Barriers to early engagement with a LMC

- Moving house (32%)
- Forgetting appointments (30%)

- No transport to appointments (30%)
- Stress (29%)
- Concern about spoken English (26%)
- Past negative experience (6%)
- No appointments at suitable times (6%)
- Uncertainty regarding keeping an unplanned pregnancy (5%)
- Not having anyone to care for other children (4%)
- Not wanting people to know about the pregnancy (3%)
- Not having enough money (for scans, parking, transport)
- Not being able to take time off work

When examined together, a prominent theme of the combined surveys was the need for women to be provided with information about the importance of early pregnancy care, where to get early pregnancy care, what early pregnancy care should involve and the need to visit a LMC in early pregnancy.

A further prominent theme was the continued importance of GPs and general practices in the early stages of pregnancy, with the majority of women visiting a GP as their first health professional (90%), and women and LMCs wanting GPs to provide women with clear information about the importance of early LMC engagement, and with direct LMC referrals. Providers recognised that to support the provision of comprehensive early pregnancy care to women, relationships between LMCs and GPs need to be developed, furthered or improved. Specifically, enhancing collegial relationships would enable direct referrals from GPs to known and trusted LMCs, and ongoing collegial communication for the betterment of early pregnancy care.

From this original work, the Early Engagement Regional Group (EEG) was set up in September 2014 to implement a regional strategy to improve early pregnancy engagement. This group consists of representatives from Waitemata, Auckland and Counties Manukau DHBs, consumers, primary care (LMCs and GPs) together with Māori, Pacific and Asian health.

Work currently in progress:

- A first trimester care regional clinical pathway is being developed and is almost complete.
- Education of women/whānau is occurring regionally using agreed key messages on the importance of getting first trimester care. “Best for Baby” was the theme chosen.
- Education of primary care sector providers.
- Enabling e- referrals.
- Collaboration and continuing to build relationships between providers.

Status

Progressing steadily now the project has moved into the regional collaboration phase; soon to be operationalised locally. Goal #1 should remain in place for 2015/16.

Goal #2 -To improve access to Maternal Mental health

Described under Maternal health

Status

Progressing: New beds opened late June 2015, and work continues on developing referral pathways for LMCs with a draft pathway currently undergoing consultation. It is anticipated this will be completed before September 2015. Goal #2 should remain in place for 2015/16.

Goal #3 - To improve communication and information to and from Stakeholders

Publication of the Maternity Quality Update commenced in September 2013 and continues to be published every month. LMCs appreciate the one-page format so they can read it quickly. QR coding of publications on Healthpoint enable clinicians to download articles, guidelines and information quickly. Feedback is overwhelming positive and includes:

"great information in an easy to read format"

"good to have to learning points as I can't always get to the case review meetings"

"great to know what's going on"

Waitemata District Health Board
Best Care for Everyone

January 2015

Maternity Quality Update 015

What is driving our quality programme?

1. NZ Maternity Standards
   - Safe, high-quality services that are nationally consistent
   - Women-centred, normal life-stage approach that responds to consumer feedback
2. Maternity Clinical Indicators
   Benchmarking of NVB rates, CS rates, etc.
3. Implementing the Referral Guidelines
4. National Maternity Clinical Guidelines (e.g. PPH, GDM)
5. Health and Safety Sector Standards: 2015 Audit
6. Health Quality and Safety Commission SSI: Reducing C Section wound infections
7. Local quality initiatives to meet DHB needs

In 2015 we are required to:
- Promote LMC early registration before 10 weeks.
- Audit early term births, especially inductions & elective C Sections
- Provide a nationally consistent maternal mental health service
- Examine clinical indicators for national consistency, & improve quality of data from coding etc.
- Show how we are implementing the Referral Guidelines & improving the process of emergency transfers
- Improve documentation of care planning

Our DHB goals are to:
- Improve feedback opportunities
- Promote normal birth
- Review labour induction processes
- Develop clinical pathways (tongue-tie, renal dilatation, DDH)

We welcome your help. Contact Diane.Hirst@waitematadhb.govt.nz

DID YOU KNOW?

2014 DHB Statistics
Available on CEDSS

The National GDM guideline
Published Dec 2014. We are considering how to respond. A regional meeting is planned to discuss implementation. Please continue with our current process at present.

LINK http://www.health.govt.nz/publication/screening-diagnosis-and-management-gestational-diabetes-new-

Timing of Guthrie tests has been audited by NSU.
The test is carried out as soon after 48 hours as possible and should be received at NSU lab no later than 4 days after the test is taken. Allow 2 hours to dry then POST THE SAME DAY AS THE TEST USING FASTPOST

Fast
Make friends with your local Fast post box!
Note: There is a Fastpost box in the main entry of both North Shore and Waitakere hospitals

Learning points
Confidential enquiry into Maternal Deaths, UK, Dec 2014.

Two thirds of mothers died from medical & mental health problems in pregnancy and one third from direct complications of pregnancy e.g. bleeding.

Women with sepsis need:
- Early diagnosis
- Rapid antibiotics
- Review by senior doctors and midwives

Flu causes significant maternal mortality. More than half could have been prevented by vaccination. In UK, there has been a particularly nasty strain of 'flu that is expected here soon. The MOH strongly recommends all pregnant women are vaccinated FREE from their GP.

All women with any symptoms or signs of ill health, including postnatal women, should have TPR & BP taken and the results acted upon.

Quality Focus 2015: Off the bed

84% women at WDHB birthed in a semi-recumbent or lithotomy position (excluding all CS)

94% women who had an ARM labour augmentation birthed in a semi-recumbent or lithotomy position (excluding all CS)

Women who are upright have shorter labours
This is our challenge

Next meetings

Perinatal Mortality reviews (PMR)
North Mon 2 February @ 1200, Conference room 1
West Thur 26 February @ 0900, Kawakawa room

Morbidity case reviews(MCR)
West Thur 12 February @ 0830, Kawakawa
North Mon 16 February @ 1200, Conference room 1

3 x attendance = 5 points Prof Devt points for RMs
1 x presentation = 5 points Prof Devt points for RMs

1

The practitioner version of the Maternity Quality Update is published in a consumer-friendly version called the Maternity News and displayed on the Maternity Quality Boards in the facility foyers.

Waitemata DHB is reviewing its website with a strong "patient experience" focus. The Patient Experience Manager has already engaged with our MQSP consumers and brainstorming our requirement to plan future needs.

Planning for online Virtual Maternity Unit Tours is underway.

Status

We would like to further develop communication to and from our community stakeholders. We have invited Auckland DHB to work collaboratively with us to progress this goal. Goal #3 could be further developed in 2015/16.

Goal #4 -To improve our understanding of the health needs of Māori, Pacific, Asian and teen populations

The Māori and Pacific Liaison coordinators work with their respective communities to understand their health needs. They feed back by way of monthly reports to the Community Manager who supports them in their work, helps to identify issues and reports to clinical governance.

Te Aka Oranga Waikawa Wahakura Wananga (SUDI prevention and safe sleep education for Māori) has been locally and nationally recognised as an innovation in meeting needs of Māori. The next course is fully booked and feedback is of unprecedented excitement for this programme amongst Māori.

The needs of pregnant teens are identified by the Midwife Coordinator for vulnerable families after the completion of the Pregnant Teens Service review (as described in 2013/14 Annual Report). In response to feedback by teens in the review, a key female support person (usually their mother) is now enabled to stay in hospital with them for their entire stay. This gives the new teen mother permanent support so she is less likely to feel the stigma of being teenage mother – feedback states this is the most important part of their experience.

We acknowledge the increase in Asian women giving birth in our area. To date, Asian women and families have been represented by us meeting regularly with the Waitemata DHB Asian support service. They are actively involved on the wards and may be called to support Asian women. To further improve our understanding, we are currently in the process of recruiting a consumer of Asian ethnicity to work alongside our other two MCGF consumer members at clinical governance.

Status: Almost complete: To appoint a new consumer to MCGF who identifies as being Asian.

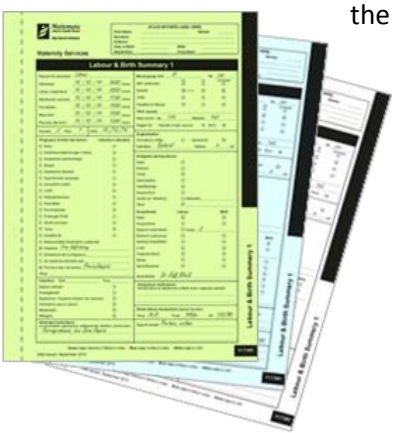
Goal #5 -To increase access to information about services, guidelines and best practice

- The Maternity Service information pamphlet has been updated and republished.
- Plans are underway to redevelop the maternity website and virtual maternity unit tours
- The Quality Boards are in place in the foyers
- Guidelines are loaded onto Healthpoint, QR coded and links published to the Maternity Quality Update published every month. Guideline development has been a strong focus in 2015.
- The Clinical e-decision site is available on the intranet

Status: Almost complete

Goal #6 - To improve the validity and reliability of maternity health data

Maternity data outputs depend on accurate inputs. Over 2014/15 we have identified areas for improvement, such as PPH definitions. We have worked with Coding to identify areas of confusion and worked to rectify these. The Labour and Birth summary was changed to better capture blood loss and the classification of perianal tears and how they were sutured.
Prospective data collection would often be preferred over retrospective analysis, for example, indications for labour induction, and capturing co-morbidities. Many proposed changes are on hold until the Maternity Clinical Information System (MCIS) has been introduced.



Status: Ongoing

Goal #7 -To decrease the number of women who smoke in pregnancy

Waitemata DHB is part of the Auckland and Waitemata Maternity Advisory Group. This group comprises of Midwifery, DHB Planning and Funding, Pregnancy Smoking Cessation Services, Primary Health Organisations and the DHB Smokefree Team. The aim of the group is to develop, implement and review strategies that will support women to quit smoking in pregnancy, particularly for priority population women, including Māori, Pacific and youth. The group has a focus on ensuring that Primary Care and DHB smoking cessation activities provide women with comprehensive and consistent support across the continuum of their pregnancy and beyond.

The Waitemata DHB Maternity sector has fed into the development of the Auckland DHB and Waitemata DHB Tobacco Control Plan for 2015-18. The purpose of the plan is to reduce tobacco related morbidity and mortality, and decrease tobacco-related disparity. The focus being to coordinate all ongoing tobacco control work undertaken within and across sectors within the Auckland DHB and Waitemata DHB regions to ensure progress towards Smokefree 2025.

Smoking in pregnancy

In Waitemata DHB, there were 668 women documented as smoking at facilities booking in 2014: 310 Māori (46.4% of pregnant smokers - all ethnicities), 99 Pacific (14.8%) and 259 Asian, European and Other (38.8%) (Table 9).

Ethnicity	Bookings	Smoking at booking	
		Number	%
Māori	920	310	33.7%
Pacific	765	99	12.9%
Asian	2222	14	0.6%
European	3657	243	6.6%
Other	270	2	0.7%
Total	7834	668	8.50%

Table 9: Waitemata DHB smoking status in pregnancy at facilities booking, 2014

The proportion of Māori women documented as smoking at booking is two and a half times that of Pacific women, and five times that of European women in Waitemata DHB.

Initiatives Planned for 2015/2016

Implement and evaluate an incentives-based smoking cessation in pregnancy programme within the Auckland DHB and Waitemata DHB region to support pregnant women and their whānau to quit smoking. This initiative will include providing midwives who have a high case-load of Māori and Pacific women with carbon monoxide monitors to use as a biofeedback, motivational tool to encourage engagement with stop smoking services. As part of the incentives-based programme, a communications plan targeting Māori and Pacific pregnant women and their whānau will be developed and implemented. A pilot was implemented by Waitemata PHO in 2015 to trial providing incentives to LMCs who referred women to Smoking Cessation services. An evaluation of this pilot will be carried out in 2015.

Activities undertaken in 2014/15

- Information cards have been distributed to all Midwives with information about brief advice for women and prescription of nicotine replacement therapy (NRT).
- Smoking cessation training continues for midwives and primary care. The training helps to support all health professionals to support pregnant women to quit smoking ideally in the first trimester.
- Smokefree Communities ran regular promotional stalls outside West Auckland Work and Income New Zealand offices to reach pregnant women and offer them support to be smokefree.
- Design of a new Waitemata DHB funded and produced Smokefree pregnancy leaflet that included information on the Smokefree Communities service. A thorough consultation process took place involving midwives, Māori health, hospital staff, clinical directors and service users. The Smokefree Pregnancy team connected with all midwives to introduce the service flyer and supported midwives to have the conversation with women and their partners and whānau.
- Smokefree Communities ran a focus group with midwives. Midwives were asked for their input into how Smokefree Communities could improve and reach more pregnant women. Positive feedback was received about the system in place and how the service could be improved. A point that was made in the discussions was that face value to a service is important. This feedback was taken on board and there is now a team member assigned to each group of midwives, to be their "Midwife Liaison Smokefree Coordinator". This approach for the midwives will hopefully add a personal connection to the service.
- Smokefree Communities ran a focus group for pregnant women who continue to smoke and have received support to quit from the service. Women who came gave valuable insight into their thoughts and feelings of smoking and the support they required. Some of the information that came to light was that they wanted to be supported in an environment with women just like them who were trying to become smokefree. From this feedback the Smokefree/Weaving/Wellbeing group was designed, this service is for all pregnant women and their partners and whānau.
- The Smoke Free/Weaving/Wellbeing Group, the overall objective of this group is to get a whole whānau or family to be engaged in quit smoking in a supportive setting where they can have space to enjoy themselves, and learn about both weaving and healthy living, without feeling that they are being lectured too. The aim is to also give the attendees a wide range of healthy lifestyle messages. These topics include but are not limited to:
    - Smokefree Pregnancy and Whānau
    - Weaving
    - Korowai
    - Exercise
    - Nutrition
    - Safe Sleep
    - Breastfeeding

The planning and design of this group was influenced by the information received through the focus groups with Midwives and pregnant women who smoke. Planning was in 2014 and the Auahi Kore group began early 2015 in West Auckland.

Status: On-going

Goal #8 -To contribute to higher breastfeeding rates at three months of age, particularly for Māori, Pacific and Asian women

Waitemata DHB is currently working on plans to introduce a frenotomy service as part of the outpatient lactation clinics. This is currently being rolled out.

Status: To be further developed.

Goal #9 - To increase the number of women having a normal birth

This goal arose from the published Clinical Indicators where comparison can be made for the standard primipara giving birth. Overall, the Caesarean operation rate in the standard primipara was rising and North Shore had a significantly higher rate than Waitakere. Population difference could be one explanation for this difference. Waitakere has only senior obstetricians, whereas North Shore has a private obstetrician contingent. Both have been shown in the literature as influencing Caesarean rates.

Promoting Normal Birth was a MQSP project that commenced in 2014 to address these differences.

Indicator	2012			2011	2010
	North Shore	Waitakere	Waitemata DHB		
Caesarean Section	20.4%	15.9%	18.4%	17.9%	17.9%

Table 10: Standard primipara Caesarean operations at Waitemata DHB

Promoting Normal Birth (PNB) was set up to make practice changes that the literature suggested were most likely to make a difference in outcomes – because they support normal physiology:

1. Labour should begin on its own
2. Women should have freedom of movement in labour
3. Women should have continuous labour support
4. There should be no routine interventions
5. Women should be able to push spontaneously in non-supine positions
6. Mother and baby should stay together
7. Caesarean operations should be monitored.

Two projects were set up simultaneously, one at each site. The project team consisted of MQSP coordinator, consumers, LMCs, facility managers and core staff.

1. Labour should begin on its own:

In the 2013/2014 MQSP report, we noted the induction rate had significantly increased:

> *"The issue of induction of labour continues to be an area of concern with a sudden and significant rise in induction in 2013"*

From Robson group information, 50% primigravid women in our DHB who underwent labour induction went on to have a Caesarean operation.

In June 2014, Auckland DHB, Counties-Manukau DHB, and Waitemata DHB published a consensus guideline (summary of evidence) on the indications for labour induction. This document guides clinicians to offer labour induction when appropriate (i.e. where evidence shows that benefit to mother and/or baby outweighs the risk), and to avoid it when not appropriate. The purpose of the guideline was to decrease variation in clinical practice between and within hospitals, improve patient safety and satisfaction, and to increase the proportion of clinically appropriate inductions. Once published, we undertook a baseline induction of labour audit to help identify target areas for improvement.

Induction of labour (IOL) audit

All labour inductions across both sites between January and June 2014 were included in the audit. 759 Healthware entries were interrogated for diagnoses, interventions, and event summaries. Each woman was assigned a principle indicator for IOL. Where confounding factors or co-morbidities were present, the medical condition or disorder was given the priority definition. Once a principal indicator for labour induction had been identified, this was categorised into a standard or a non-standard indication as defined by the Auckland region consensus guideline.

3288 women gave birth. 19.4% women had IOL. A significant proportion of labour inductions occurred for non-standard indications.

2014 IOL audit against standard indications			
	NSH	**WTK**	**Total**
Births	1882	1406	3288
Standard indications	288	187	475
Non-standard indications	111	53	164
Labour inductions (from audit)	399 (21%)	240 (17%)	639 (19.4%)

Table 11: Labour inductions for standard and non-standard indications, 2014

Labour induction rates increased with increasing age in our population.

2014 IOL and woman's age		
Age	**IOL (rate%)**	**WDHB births**
<20 years	18 (3%)	105 (5%)
20–34 years	412 (64%)	2427 (76%)
35–39 years	150 (23%)	622 (16%)
40+	59 (9%)	134 (3%)
Total	**639**	**3288**

Table 12: IOL and woman's age, 2014

Gestational diabetes, preterm rupture of membranes, growth restriction and hypertensive disorders accounted for two thirds of all labour inductions. Overall, GDM was the most common indicator. The numbers of women with GDM being induced can partly explain the increase in WDHB induction of labour rates we reported in 2013.

Standard Indications for labour induction			
	NSH	WTK	Total
GDM	74	40	114 (18%)
PROM	46	56	102 (16%)
Post-term	46	33	79 (12%)
IUGR	47	27	74 (11%)
Hypertension & preeclampsia	44	21	56 (9%)
Maternal age	10	4	14 (2%)
Twins	13	0	13 (2%)
Cholestasis	3	4	7 (1%)
APH	3	1	4
Previous stillbirth	2	1	3
Total	**288**	**187**	**475**

Table 13: Distribution of standard indications for IOL, 2014

The audit report was circulated to staff and, in particular to obstetricians, and was highlighted in the Maternity Quality Update. Discussion occurred in teams and at multidisciplinary meetings and was the subject of topic seminars. Since the audit we:

- Provided information, seminars and education on the Auckland regional consensus guideline and the baseline audit report.
- Published the list of standard IOL indications into the front page of the IOL booking diaries and enabled the Clinical Charge Midwives to challenge non-standard indications.
- Offered women with uncomplicated GDM IOL at 40 weeks or more (when blood sugars are stable and the baby's growth is normal).
- Offered IOL for "advanced maternal age" to women aged 40 years or over at 40 weeks or more (provided their pregnancy is uncomplicated).
- Are investigating the different rates of normal births following PROM between the two sites.
- Reviewed and updated the IOL guideline.
- Reviewed (by a consumer focus group) and are currently updating the IOL parent information.
- Recommended a system of prospective data collection once the Maternity Care Information System (MCIS) is implemented.

In 2014, the overall IOL rate decreased. Further reduction of the IOL rate is looked for in 2015.

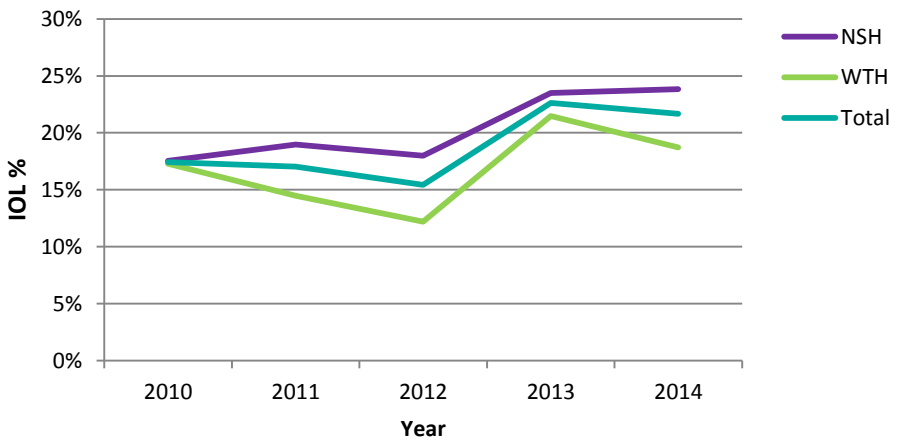


Figure 17: Percentage of labour inductions from 2010 to 2014

2. Women should have freedom of movement in labour:

Freedom of movement in labour and the CTG

LMCs and consumers raised the issue that women were denied freedom of movement on admission to hospital because of an expectation that a Cardiotocograph (CTG) recording of the fetal heart rate was performed. In April 2014, we conducted an audit to find out the extent this was occurring. There was 50% compliance to the indications for admission CTG in the Fetal Assessment in labour guideline. The result of this audit was published in the Maternity Quality Update. Since this audit we have:

- Reviewed and published an updated Fetal Assessment in Labour guideline with published algorithms and colour-coded action plans in line with the 2014 RANZCOG guidelines. We clearly stated:

  "Admission CTG
  Current evidence does not support the use of admission CTGs as they increase the rate of continuous monitoring and are associated with an increased risk of caesarean section. It is possible that a small number of unidentified at risk babies may be identified but the study numbers were too small to demonstrate this."

- Provided an updated CTG interpretation sticker for use in the woman's clinical notes. The new sticker asks clinicians to explain their rationale on commencement of a CTG recording (this was missing in the audit).
- Provided education, attended Clinical Charge midwife meetings and appealed to the new graduate groups to carefully consider admission CTGs. This has been recently repeated.
- Removed CTG machines from sight in the birth rooms at North Shore hospital.
- Provided a small portable water-proof Doppler device on wheels for each birthing room.

The practice of performing CTGs on admission in labour is changing. Professionals are asking each other for rationale for this intervention especially at North Shore.

There is a new acknowledgment that CTGs should be out of sight at Waitakere as well - once a suitable storage area has been identified.

We have recently completed a re-audit that showed improved compliance with the Fetal Assessment in labour guideline, though there is still room for improvement.

Freedom of movement in labour and the birth environment

LMCs and consumers also raised the issue that our facility birth environments did not promote normal physiology well. The project consumers were asked to complete the **BUDSET** audit tool – a way of assessing how facilities promote or act as a barrier to birth hormones. This included walking through the units and also contacting consumers to complete the audit tool. The audit report was published and discussed. Changes made since the audit are:

- Immediate purchase of Swiss balls and mats.
- Removing unnecessary medical posters from the walls.
- Pumping up the beds to remove the expectation that women would use them on admission to hospital.
- Amending the labour and birth rooms' standard equipment - to include props required to promote normal birth (change in philosophy).
- Capex for birth stools.
- Capex for telemetry.
- Improved signage to identify where to go.
- Plan for décor upgrade with calm colours.
- Investigation into ceiling mounted ropes and wall mounted ladders (denied due to poor structure).

The information in the **BUDSET** audit will be helpful when any rebuild is proposed. Privacy for women at North Shore will be improved once the conversion of the 4 bedded assessment area has been transformed into four separate rooms.

3. Women should have continuous labour support:

In the pilot CS audit we noted that women who had an early admission to the hospital facility in labour featured strongly in the emergency CS cohort. A full literature review entitled "*What do women need to get through a long early labour"* was conducted and published in the Maternity Quality Update and in the clinical areas. A home assessment by the woman's LMC featured strongly in favour of reducing the rate of Caesarean operations. Ways to achieve this are currently being explored.

This also aligns with the aims we brought back from the May 2015 HRT Brisbane conference:

"To reduce the number of women admitted to birthing units who are not in established labour"

- To promote home visits in early labour
- To provide women with appropriate information on coping with early labour
- To change women's expectation in early labour, working with LMCs and Pregnancy and Parent education providers.

This will be a feature of the goals to progress the PNB project in 2015/16.

4. There should be no routine interventions:

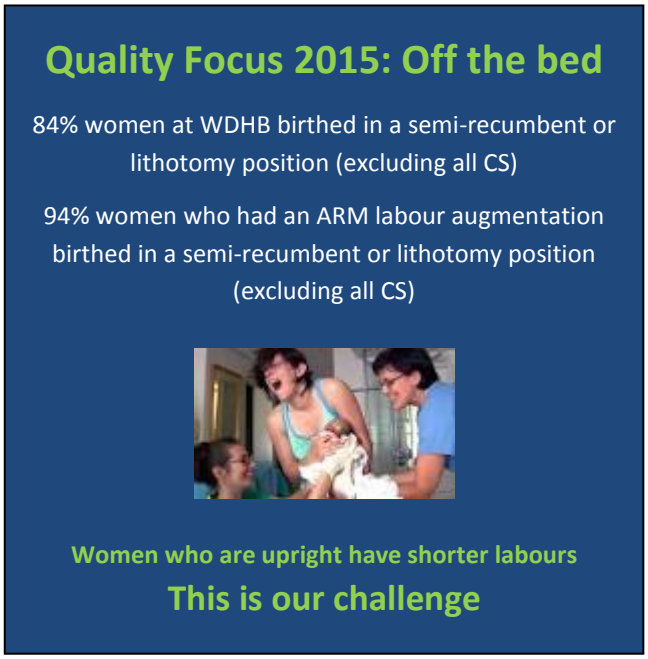
Core staff brought to our attention that the practice of rupturing membranes without clinical indication, was widespread. Moreover, 94% women who had ARM, birthed in the semi-recumbent position. In total 84% of all

women gave birth semi-recumbent. We are currently gathering more information so we can feed back appropriately to LMCs and women about these trends.

We are in the process of publishing intervention rates, including the use of water in labour, in the hope this will encourage healthy professional debate about what is happening in our facilities.

5. Women should be able to push spontaneously in non-supine positions:

84% women having a vaginal birth in our DHB do so in a semi reclined or lithotomy (using poles) position. Most women do not do so instinctively so this needs to be explored further in 2015/16. A campaign entitled "Off the Bed" has been launched.



6. Mother and baby stay together:

Skin to skin contact straight after birth is an expectation and occurs at most births in the birth rooms. Skin to skin in theatre was done poorly and has been a target of practice improvement this year. We have:

- Assigned one midwife to assisting at planned Caesarean operations at North Shore. She has enabled 100% women and babies to have a skin to skin experience in the operating theatre.
- Assisted LMCs to be present in theatre (if possible and if it suits them)
- Examined the barriers for core staff in achieving skin to skin and where still an issue have recounted women's stories to focus on what is important for the woman.
- Had dialogue and provided education and information with theatre staff, anaesthetists and obstetricians.

We plan to continue to improve skin to skin opportunities for all babies.

Planned for 2015/16 is to investigate the practice of cord cutting because there is significant evidence to suggest early separation of the cord may be harmful for the baby.

7. Caesarean operations should be monitored:

Caesarean operations (CS) have been monitored ad hoc to date. Our aim was to roll out a permanent audit of all non-planned CS. The first stage of this project was to design a tool that captured all necessary information yet was not too unwieldy or time-consuming to administer. The Clinical Director requested information on prophylactic antibiotics and the practice of Clexane and we were able to easily incorporate these requirements into this audit.

A pilot tool was developed was tested over 51 CS occurrences of at Waitakere. Findings of the pilot audit:

- BMI was poorly documented.
- Long latent phases with hospital assessments in early labour were common.
- Apart from in early labour, women had continuous midwifery support.
- CS indications as written in the woman's clinical notes by the surgeon (Table 14).

Indications for CS – PILOT audit	
"Failure to progress"	21
"Fetal distress"	17
Previous CS in labour or SROM	5
Breech presentation in labour	3
APH	1
Cord presentation	1
Maternal request	1
Total	51

Table 14: Indications for CS in the CS Pilot audit November 2014

- "Fetal distress" where fetal blood was sampled= 0.
- Administration of Clexane was inconsistent
- TEDS application was not clearly demonstrated

The audit report was circulated to the specialists, staff and LMCs and there was an immediate local enquiry into why no lactates had been performed for suspected fetal compromise. Poor BMI documentation has been brought to LMCs attention on several occasions in the Maternity Quality Update and may need more work. Clexane administration will be the subject of further work later in 2015.

Awhina Learning Centre assisted with the development to the electronic version of this audit tool. The ward midwives administer it once the woman has gone home. Once entered, the data is automatically entered into the live spread sheet. The full audit went live in April 2015 and we are awaiting the first quarter analysis.

Promoting Normal Birth has made an impact over 2014/15. The normal birth rates for the standard primpara increased at North Shore hospital from 2013 to 2014. Professional conversations are changing and there is a higher expectation that we must explain rationale for our decision-making. Outcomes have been more visible and clinicians are starting to make changes. Planning is underway to roadshow this project in the community.

Status: Progressing

Goal #10 -To improve care for mothers and babies using the National Maternity Clinical Indicators developed by the Ministry and other data

We will continue to use the Clinical Indicators, the PMMRC report, the NMMG report and local data to drive our MQSP programme. In 2014/15 we have:

- Actively Promoted Normal Birth in recognition of disparity in the 2011 and 2012 Clinical Indicators and have introduced permanent audit tools to more effectively monitor rates. The normal birth rate for standard primpara at North Shore has increased.
- We have reduced induction of labour rates and introduced a regular audit to effectively monitor progress.
- We have acknowledged the rates of perineal trauma and made changes to improve practice that improves outcomes and improve recognition of severe tears.

Goal #11 -To implement the referral guidelines

The referral guidelines are implemented. Local Implementation of the Referral Guidelines was published in 2015 after repeated requests from LMCs for assistance with timing of referrals into our secondary service. We emphasise this is a local implementation initiative only and not intended for use in any other DHB. It was developed with LMCs and had consumer input.

Work is occurring to improve three way conversations and to improve communication with transfers as previously explained.

Status: Almost complete

Goal #12- To implement the national guideline for PPH

Status: Completed with local changes, documentation changes and education.

Goal #13 -To improve and standardise the postnatal care for women and their babies in the hospital setting

Status: Completed with local changes, documentation changes, planning pro-forma and education.

Goal #14 - To standardise the criteria and practice for labour induction (IOL) regionally

Status Implemented.

Goal #15 - To reduce incidence 3rd and 4th degree trauma

The 2012 Maternity Clinical Indicators suggest that women who birth at Waitemata DHB are increasingly less likely to have an intact perineum and are more likely to experience an episiotomy and/or a severe perineal tear. In May 2014, three maternity staff accepted the invitation to the Health Round Table conference in Melbourne - "Improving Perineal Care". Here we had the opportunity to benchmark our outcomes with those in Australia as well as explore the international data (we are not allowed to publish the coded pseudonyms).

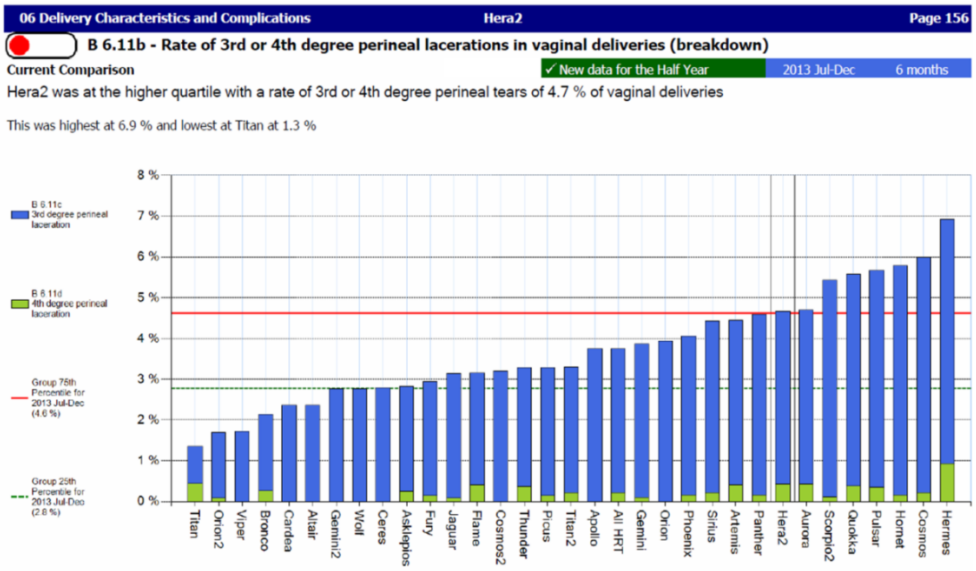


Figure 18: Rate of 3rd and 4th degree perineal tears across Australasia

Waitemata DHB as a whole featured at less than the 50th centile for this group.

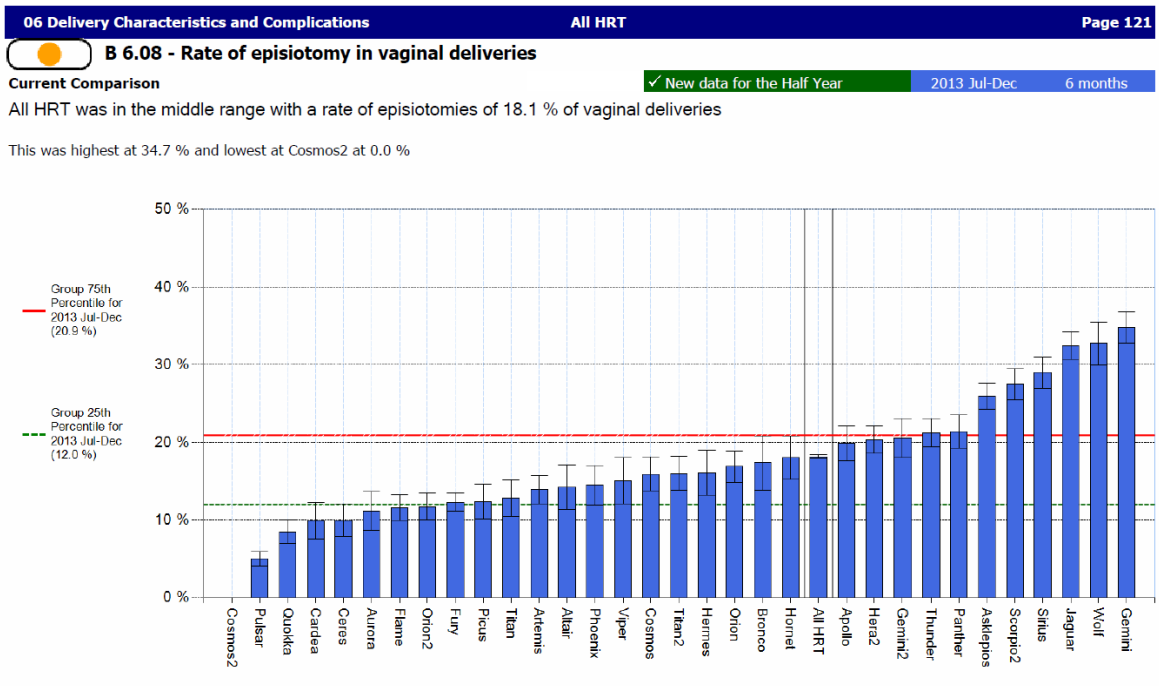


Figure 19: Rate of episiotomy across Australasia

Data presented from a large prospective audit conducted over 18 months at the Mater in Brisbane (n=13,000) determined that the principle risk associated with severe perineal trauma was ethnicity, especially South-East

Asian (6.3%) where the rates more than doubled from that of Caucasian women (2.9%). The association remained when controlled for birth-weight, parity, episiotomy, and use of instrument: OR 3.40 (1.07-10.83).

A further literature review was carried out: Asian women were more likely to sustain severe perineal tears as well as experience more episiotomies. Moreover in the very large studies, rates of severe perineal tears increased due to better recognition and repair. Higher rates are therefore not necessarily associated with poorer outcomes.

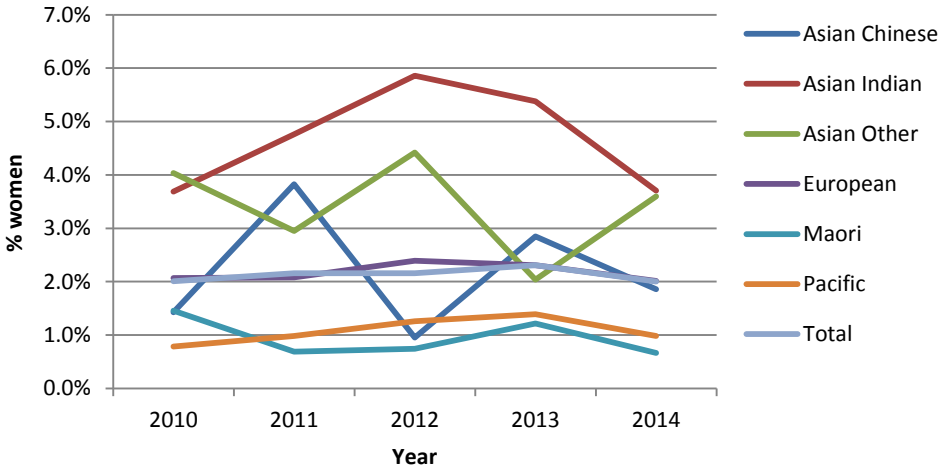


Figure 20: 3rd/4th degree perineal tears and ethnicity 2010 to 2014

In Waitemata DHB, the overall percentage of women undergoing an episiotomy increased from 2010 (11.1%) to 2014 (16.9%); episiotomy was highest among the Asian sub groups. Rates of third and fourth degree tears were highest for women undergoing a forceps assisted birth.

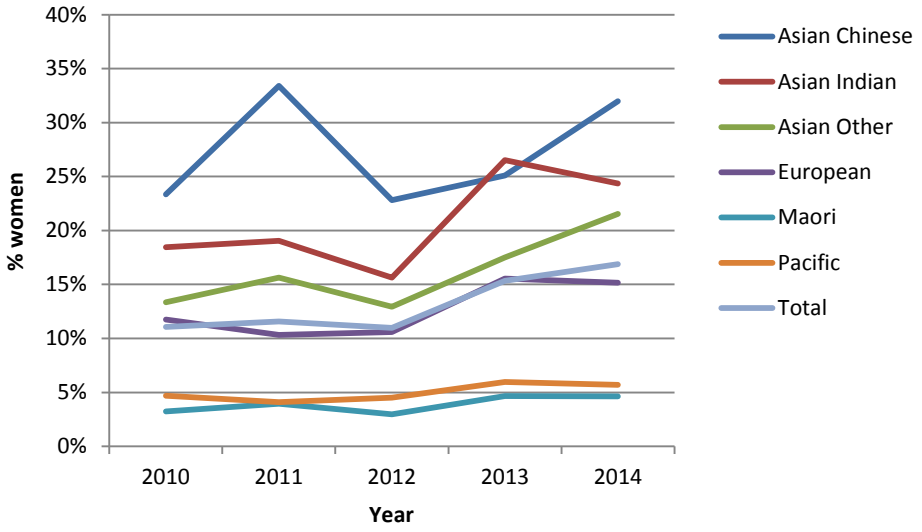


Figure 21: Episiotomies among vaginal births, 2010 to 2014

Mode of birth	2013			2014		
	Births	3'' and 4th degree tear		Births	3rd and 4th degree tear	
Breech	21	0	0.0%	33	0	0.0%
Forceps	127	11	9.5%	156	7	4.7%
Vaginal	4179	80	2.0%	4271	76	1.8%
Ventouse	432	18	4.3%	446	14	3.2%
Total	4759	109	2.3%	4906	97	2.0%

Table 15: 3rd and 4th degree tears with mode of birth in 2013 and 2014

Risk reduction strategies were discussed at the HRT conference and appeared strongest for the use of warm perineal packs in the second stage of labour.

Since the conference we have:

- Presented the HRT and local data to clinicians
- Made a recommendation to clinicians supporting the use of warm compresses on the perineum in the second stage of labour in the Maternity Quality News

Feedback from Health Round Table Conference
Preventing 3rd and 4th degree tears:

The use of warm compresses on the perineum is associated with a 48% decreased occurrence of perineal trauma (95% CI). (Cochrane, 2012)

- Reviewed and amalgamated several guidelines into one: Perineal Trauma and Repair
- Held an education day "Care of the Perineum" discussing episiotomy, the angle of episiotomy, and the relation of trauma to ethnicity.
- Recommended that clinicians consider episiotomy for South East Asian women, Indian women, who are undergoing a forceps-assisted birth.
- Changed the labour and birth summary to enable clinicians to more accurately document perineal trauma and how it is repaired.
- Supported a Fellow research project to investigate how clinicians classify perineal tears.
- Investigated and improved the tap water temperature at North Shore to facilitate the use of warm compresses
- Set up a regular tap water temperature audits.

Large studies that investigate 3rd and 4th degree perineal trauma have found that rates have increased when practice is explored. We assume that scrutiny improves reporting. This must be taken into consideration when considering any statitiscs on 3rd and 4th degree trauma.

Status: Completed.

Goals for 2015/16

1. Continue to work collaboratively across the region to improve early LMC registration
2. Continue to improve women's access to maternal mental health
3. To work collaboratively with Auckland DHB on developing a communication strategy with community stakeholders.
4. To continue to address the needs of Maori, Pacific, Asian and teens and vulnerable women and families
5. To decrease the number of women who smoke in pregnancy
6. To increase the number of women who have a normal birth.
7. To increase the number of babies who achieve skin to skin
8. To improve care for mothers and babies using the national Maternity Clinical Indicators and recommendations from NMMG and PMMRC.

Appendix 1 MQSP Deliverables (against Maternity Standards)

Standard 1: Maternity Services provide safe, high-quality services that are nationally consistent and achieve optimal health outcomes for mothers and babies

Audit criteria	Measurement	Status	Comment/action required
8. All DHBs have a system of on-going multidisciplinary clinical quality review and audit of their maternity services, involving consumer representatives and all practitioners linked to maternity care	8.1 Multidisciplinary meetings convene at least every three months.	Achieved	Maternity Clinical Governance Forum (MCGF) meets monthly
		Achieved	Case Review meetings and Perinatal Mortality Review (PMR) meetings occur approximately fortnightly.
	8.2 DHBs report on implementation of findings and recommendations from multidisciplinary meetings.	Achieved	MCGF Considers Ministry of Health directives, clinical indicators, national PMMRC and National Maternity Monitoring group recommendations
		Achieved	Learning points from case reviews and local PMR meetings are reported and considered at MCGF
		Achieved	Learning points are published monthly in the Maternity Quality Update
	8.3 DHBs invite all practitioners linked to maternity care, including holders of Access Agreements, to participate in the multidisciplinary meetings, and report on proportion of practitioners who attend.	Achieved	MCGF membership includes LMCs and representatives from primary birth units –in MQSP Annual Report
		Achieved	TOR Agenda and minutes of MCGF meetings are published
		Achieved	Staff and LMCs are notified of schedule for PMR and case review meetings and are encouraged to attend
		Achieved	An end of year local PMR and case review report on progress of the implementation of quality improvements from these meetings
	8.4 All DHBs produce annual maternity report.	Achieved	Annual Maternity Report group is regularly convened and assists development of the MQSP Annual Report
		Achieved	MQSP Annual report is published and is publically available
	8.5 DHBs can demonstrate that consumer representatives are involved in their audit of maternity services.	Achieved	At least two consumers are appointed at MCGF
		Achieved	MCGF consumer representatives receive training and support so they may be effective contributors
		Achieved	Consumers are engaged in MQSP project steering groups
		Achieved	Parent information is reviewed by maternity consumers and the Consumer Literacy Group.
9. All DHBs work with professional organisations and consumer groups to identify the needs of their populations and provide appropriate services accordingly	9.1 All DHBs plan, provide and report on appropriate and accessible maternity services to meet the needs of their population.	Achieved	There is collaboration between ADHB and WDHB in determining the future strategy Women's Health Services to 2016
		Achieved	Development of closer collaboration with Child health services
		Progressing	Development of closer working relationship with key stakeholders (particularly Teen Parent Unit, St John Ambulance service)
	9.2 All DHBs 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.	Achieved	Demographic data is analysed for changes and reported in MQSP Annual Report
		Achieved	Demographic data is analysed to help assess the needs of Māori , Pacific and Asian women
		Progressing	Significant rise in Asian women accessing WDHB maternity service requires specific feedback
		Achieved	Needs of the most vulnerable of our population e.g. teens, are explored
		Progressing	Waitemata DHB explores ways to record and report on Maternal mental health issues
		Achieved	Waitemata DHB reports on early mid and late preterm birth rates
	9.3 All DHBs plan and provide appropriate services for groups of women within their	Achieved	Service for women with gestational diabetes that started in 2012 is regularly audited for effectiveness

Audit criteria	Measurement	Status	Comment/action required
	population who are accessing maternity services and who have identified additional health needs		
	9.4 The proportion of women with additional health and social needs who receive continuity of midwifery care is measured and increases over time.	Achieved	LMC engagement is reported in the Annual Report
		Achieved	Percentage of women who have registered with a LMC increases
		Progressing	The number of women registering with a LMC in the first trimester increaes
10. Communication between maternity providers is open and effective	10.1 Local multidisciplinary clinical Audit demonstrates effective communication among maternity providers	Achieved	Clinical audits are undertaken and reported on through MCGF.
		Achieved	Documentation audits are undertaken for evidence of clear communication between maternity providers and corrective actions are taken as necessary.
		Achieved	Incidents are reviewed and corrective actions are taken
		Progressing	Corrective actions necessary reduce over time
	10.2 The number of sentinel and serious events in which poor communication is identified as a risk decreases over time.	Progressing	Information is being collected and collated
11. A national set of evidence-informed clinical guidelines is implemented within each DHB funded maternity service	11.1 The number of national evidence-informed clinical guidelines implemented in each DHB funded maternity service increases over time	Achieved	PPH
		Achieved	Immediate postpartum care
		Achieved	Gestational Diabetes
12. National maternity service specifications are implemented within each DHB funded service	12.1 100% maternity service specifications are implemented in each DHB funded maternity service	Achieved	The number of LMCs with Access Agreements is reported
		Achieved	Trendcare assists in the identification of appropriate staffing levels
		Achieved	Referral guidelines are implemented

Standard 2: Maternity Services ensure woman-centred approach that acknowledges pregnancy and childbirth as a normal life stage

Audit criteria	Measurement	Achieved	Comment/action required
16. All women have access to pregnancy, childbirth and parenting (PPE) and education services	16.1 All DHBs provide access to pregnancy, childbirth and parenting information and education services.	Achieved	Women who register with Waitemata DHB for birthing are given options for pregnancy and parenting education
		Achieved	Characteristics and attendance of women participating in PPE is reported
		Progressing	Consumers participate in consultation regarding pregnancy and parenting information
		Progressing	Links are strengthened with private providers of PPE in the Waitemata area
17. All DHBs obtain and respond to regular consumer feedback on maternity services	17.1 All DHBs apply the national tool for feedback on maternity services at least once every five years	Pending	National consumer feedback collated and available. Corrective actions applied
	17.2 All DHBs demonstrate in their annual maternity report how they have responded to consumer feedback on maternity services	Achieved	Uses multiple methods of obtaining consumer feedback
		Achieved	Identifies and reports on themes and corrective actions
18. Maternity services are culturally safe and appropriate	18.1 Consumer feedback demonstrates that consumers consider the services to be culturally safe and appropriate	Achieved	Pacific liaison support worker invited to report and make recommendations
		Achieved	Māori liaison support worker invited to report make recommendations
		Achieved	Asian support service invited to make recommendations
		Achieved	Where possible, corrective actions are identified and implemented
	18.2 All DHBs demonstrate in their annual maternity reports how they have responded to consumer feedback on whether services are culturally safe and appropriate	Achieved	MCGF in annual report
19. Women can access continuity of care from a Lead Maternity Carer	19.1 All DHBs have a mechanism to provide information about local maternity facilities and services and facilitate women's contact with lead maternity carers and primary care	Achieved	LMCs are listed on HealthPoint
		Progressing	Development of Maternity Service information website
		Achieved	Explore possibilities of using social media such as a Facebook page
		Achieved	Two Community liaison midwife coordinators assist primary care professionals. Activity of this role to be reported in the annual report
	19.2 The proportion of women accessing continuity of care from a Lead Maternity Carer for primary maternity care is reported in each DHB's annual maternity report.	Achieved	The aim is for this number to increase in each annual report

Standard 3: 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

Audit criteria	Measurement	Achieved	Comment/action required
22. All DHBs plan locally and regionally to provide nationally agreed levels of primary, secondary and tertiary maternity facilities and services for their population	22.1 Local services are consistent with the national and regional plans and are accessible and appropriate for the local population	Achieved	Regional planning in collaboration with ADHB continues
		Achieved	Local planning at MCGF reflected in annual report goals
23. Women and their babies have access to the levels of maternity and newborn services, including mental health, that are clinically indicated	23.1 Local multidisciplinary clinical audit demonstrates women and babies have access to levels of care that are clinically indicated.	Achieved	Opening of a regional mother and baby unit on the Auckland City Hospital site
		Achieved	Service review for pregnant teenagers and mothers
24. Primary, secondary and tertiary services are effectively linked with seamless transfer of clinical responsibility between the levels of maternity care, and between maternity and other health services	24.1 All DHBs report on implementation of the Maternity Referral Guidelines processes for transfer of clinical responsibility	Achieved	Acting on feedback from LMCs, local implementation of referral guidelines in place
		Progressing	Transfer of clinical responsibility processes are audited
	24.2 Local multidisciplinary clinical audit demonstrates effective linkages between services	Progressing	Emergency transfers by ambulance are audited
		Progressing	Relationships with St Johns are strengthened
		Achieved	Relationships with primary care providers and first contact health professionals are strengthened
25. All DHBs plan locally and regionally for effective clinical and organisational pathways to respond to maternity and neonatal emergencies	25.1 All DHBs have local and regional maternity and neonatal emergency response plans agreed by key stakeholders including emergency response services	Progressing	Transfers project is completed
	25.2 All maternity providers can demonstrate knowledge of local and regional maternity and neonatal emergency plans	Achieved	Clinicians have access to multidisciplinary emergency training
	25.3 Local multidisciplinary clinical audit demonstrates effective communication in cases of clinical emergency	Achieved	ISBAR tool in place and used to audit effectiveness of communication
26. Women whose care is provided by a secondary or tertiary service receive continuity of midwifery and obstetric care	26.1 All DHBs provide, or accommodate, a model of continuity of midwifery and obstetric care when secondary or tertiary services are responsible for the woman's care	Achieved	Women who receive secondary maternity care receive continuity of maternity care between their LMC and the obstetrician responsible for their care.
		Progressing	Three way conversations can be demonstrated in all communication channels between LMCs and Secondary services.
	26.2 Consumer feedback demonstrates that an increasing proportion of women requiring secondary or tertiary level care are satisfied with the continuity of midwifery and obstetric care they received.	Achieved	Consumer survey of women who use specific services e.g. Diabetes in Pregnancy

Appendix 2

Annual Quality Report for Warkworth Birthing Centre

Warkworth Birthing Centre (WWBC) Charitable Trust is a 13 bed private hospital. There are 2 birthing suites each with a pool, an assessment room and 10 postnatal beds.

All births are attended by the woman's LMC. WWBC provides a second midwife for births and to assist the LMC. The two managers are alternatively on call and respond when there is an emergency.

Postnatal staff are registered midwives and nurses. Most postnatal women have transferred from North Shore hospital. Some women transfer in from a home birth.

2014 Statistics:

There were 129 births in 2014, 26 primigravida and 103 multigravida. 45 of these were births into water (34%).
18 primigravida and one multipara were transferred out in labour (12.8% transfer rate)
755 women had a postnatal stay.

Maternity Quality and Safety

There is a robust quality and safety programme at the Birthing Centre. Staff are encouraged to look for improvement measures for all issues.

All clients are given a questionnaire with a self-addressed envelope to take home and return when their care ends. The latest return rate for these was 59%. The majority were complimentary and positive. The WWBU managers action any suggestions or investigate any complaints as soon as possible. All complaints are treated seriously and a responded to immediately.

At 6 monthly intervals a Quality committee made up of the managers, a registered staff member (rotating), Maori consumer, consumer Trust member and committee secretary meet to discuss the last six months' feedback. A report is made available for any consumers or staff to read.

When able the managers attend the Quality meeting at North Shore Hospital. The agenda items are sent to us via email and we can add items to be discussed. Then if we feel it is important to attend we do. This does require a considerable commitment of time as the journey alone amounts to 2 hours. Therefore we tend to be selective on what we attend. Getting the minutes after the meeting does help keep us up to date.

WWBU hold BFHI accreditation.

Our main concern at present is the steady decline in births at the Centre. In 2005 there were 178 births). Rodney is growing and we would like to see more women using the centre to birth. We wold like to see more 'low risk" women being encouraged to use primary birth units, especially in the light of recent published literature.

Appendix 3

Annual Quality Report for Helensville Birthing Centre

Helensville Birthing Centre is a wholly owned subsidiary of the Helensville District Health Trust. It has two large birth rooms and 4 postnatal rooms. Helensville Birthing Centre provides a maternity facility for well women wanting a minimal intervention birth and postnatal care.

The Unit is staffed by midwives and nurses and works with a lactation consultant.

2014 Statistics:

There were 40 births in 2014, 18 primigravida and 22 multigravida. 5 primigravia were transferred out in labour (12.5% transfer rate). 451 women had a postnatal stay.

We aim to meet the needs of local women, however over the years we have become known in the wider community as a centre of excellence for postnatal care. In 2014, two thirds of mothers came from outside the west Rodney area and the number of women having a postnatal stay increased by 12%.

Maternity Quality and Safety

All families are given the opportunity to provide written feedback and robust quality management systems ensure that all feedback is evaluated and appropriate quality improvements occur. All women are given feedback forms to complete and we have a very good return rate. The Quality Assurance team meets approximately every six weeks to review consumer feedback.

A large focus of our care at the birthing centre is promoting, protecting and supporting breastfeeding. In 2014, the exclusive breastfeeding rate upon discharge was 92%. We are BFHI accredited.

Complaints and incidents are dealt with promptly and reported on.