
Hutt Maternity Quality and Safety Programme
Annual Report 2017

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- Wirangi Luke, Tamariki Ora - Te Runanganui O Te Atiawa Whanui o te Upoko o te ika a Maui

Thank you to the staff and families who have so generously agreed to us using their photos in this publication. Special thanks to Amanda Ashcroft for the cover design.

All care has been taken in the production of this publication. Data was accurate at the time of release, but may be subject to change over time as more information is received. Huttmaternity welcomes comments and suggestions for future reporting.

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Hutt river flowing, fertile.

Hutt river flowing, fertile.
Te whenua flourishes.
Tides of the harbour,
ebb and flow.
Te marama glows,
pregnant with hope.
Koru, sacred spirals.
Cycles of growth, birth, death.
Renewal.

An embryo deeply embedded,
hidden.
Tiny, vulnerable, protected.
Unfurling, in darkness,
reaching for light.
Whenua, placenta, the organ of nourishment.
Sustaining life.
Pivotal with dynamic purpose.
A vital link.
Life grows in the bridges of exchange and flow.

Here we are.
Wahi o te aroha.
A microcosm of connectivity.
Flourishing and flowing within.
Healthy, pulsing, thriving.
Unified.
Nurturing whānau, community.
Our arteries reaching far and wide.
Rivers and tides.
Our interconnection is our greatest
strength.
A vital link.
We wrap around our tangata whenua.
Supporting change,
trauma, death.
Holding, helping, healing.
Growing, connection.
Transition.
Birth.

Poem by Rebecca Foster (friend of Huttmaternity)
Cover artwork by Amanda Ashcroft (Huttmaternity Registered Midwife)

Message from Maternity

In our 2017 Maternity Services Annual Clinical report, we are pleased to report on the progress of our Maternity Quality and Safety Programme (MQSP) as part of our commitment to providing high quality care to women and their whānau in our region.

A highlight of this reporting period, is the creation of a collaborative drop-in clinic for advice and support across the perinatal period. This clinic is called Hapū Ora and is based at Waiwhetu Marae alongside other Te Runanganui O Te Atiawa services such as Tamariki Ora and Breastfeeding Support. The objective is to improve early engagement with Lead Maternity Carers (LMC's), provide long term contraception postnatally, and appropriate referral to other services to optimise the outcome for wahine Māori and her whānau. This initiative aligns well with the DHB priorities around early engagement with a LMC and contraception for young people. This and other quality improvements from MQSP will be outlined in this report.

Our consumer members have a strong quality focus and a real commitment to improving primary birthing and to represent all groups in our maternity community. Successful engagement with other consumers and community groups has been achieved by such activities as drop in coffee groups. Quality improvements such as information pamphlets for women and improving the environment have been invaluable. We are grateful to this dedicated group of women.

We continue to look critically at our performance by placing our service in the context of others through the National Clinical Indicator results (Section Four). Alongside recommendations from the National Maternity Monitoring Group (NMMG) and self-audit using the New Zealand Maternity Standards, we identify the areas of our service needing improvement. Our revised two-year plan reflects this with actions to meet our objectives (Appendix Two).

Successes in the 2017 programme and our future objectives, give us incentive to continue improving our services and to further embed Maternity Quality and Safety practices as "business as usual" in our DHB.

Chris Mallon, Director Of Midwifery

Karen Daniells, Clinical Midwifery Manager

Dr Meera Sood, Clinical Head of Dept, Obstetrics and Gynaecology

Nicky Jackson, Quality Facilitator MQSP

From our Consumers

During this reporting period we have worked on various methods of gaining consumer feedback, including holding our first morning tea out in the community. This was a way of connecting with Mamas and verbally gaining feedback of their maternity experiences. The feedback survey response rate has steadily increased over the last year, and feedback has also been gained through a Facebook competition. The idea of creating a “Friends of Hutt Maternity” group has also come about, and something to be worked on in the coming year.

We have made ourselves available as much as possible where our input has been requested, and we have appreciated that the Quality Facilitator and Administrator have been so committed to including the consumer voice in the running of the Maternity Unit.

In early 2017 the consumers of the Maternity Clinical Governance Group (MCGG), were given the go ahead to do a “make-over” of the Maternity Unit’s Whānau Room, with a small budget in place. This room is in dire need of some attention, to make it a friendly, usable and comfortable space for whānau. The aim had been to complete this project in 2017, but it has been a slow and frustrating process, with the expectation now that it will be completed within the first half of 2018.

We would also be keen to see the recommendations from the Birthing Unit Design Spatial Evaluation Tool (BUDSET) being implemented in the near future.

Currently we have three consumers, who have been members of the MCGG for two and a half years now. We have remained committed to assisting with the work streams given and are striving to include new members to represent our diverse community in the near future.

Claire, Vida and Megan

Hutt Valley DHB Vision, Mission and Values

Our Vision

Whānau Ora ki Te Awakairangi

Healthy people, healthy families and healthy communities

Our Mission

Working together for health and well-being

We commit to work cooperatively, as an active part of the health sector and the Hutt Valley community.

Our Values

Hutt Maternity Vision

Everyday we come to work and
remind ourselves what is really important in life:

healthy babies
healthy mothers
healthy families
healthy communities

We help to create new families and the best
start for the next generation of New Zealanders.

HUTT maternity
Hutt Valley Maternity Care

Ia rangi haere ai tātou ki te mahi me te whakamahara ki
a tātou anō he aha te mea hira rawa o tēnei ao

He kōhungahunga hauora

He kōkā hauora

He whānau hauora

He hāpori hauora

Ko ta mātou mahi, he āwhina kia waihanga whānau
hou me te whakarite tīmatanga tino pai rawa atu mā te
reanga kei Aotearoa e haere ake nei.

HUTT maternity
Hutt Valley Maternity Care

Contents

Executive Summary

It is a privilege to present our fifth report of the Maternity Quality Safety Programme (MQSP) at Hutt Valley District Health Board.
In 2017 we moved forward with several work streams reflecting localised needs and with consideration to the priorities and recommendations from both the National Maternity Monitoring Group (NMMG) and the Perinatal and Maternal Mortality Review Committee (PMMRC).

Highlights have included the establishment of a community clinic run by our Primary Midwife Team, which has been truly collaborative and an effort to reduce inequity for our Maori wahine and whānau. This clinic is accessible and helps women link with a Lead Maternity Carer in the first trimester. The clinic named Hapū Ora, also facilitates timely referral to other services and aims to improve the maternity journey and optimise outcomes for wahine and her pepi. Women can also access long term reversible contraception. A formal review of this service will be carried out in the upcoming year. Further links with the community have been established with Hutt Maternity holding a stand in the health tent at a local festival *Te Rā o te Raukura* . This was alongside other organisations promoting healthy lifestyle and in collaboration with Regional Public Health we were able to offer pregnant women immunisations for pertussis and flu on the spot. Other outreach work to improve our uptake of immunisation is currently underway.

We have delivered on a broad range of our MQSP objectives including raising awareness of the need to register early with a midwife and the reasons to "call the midwife". This was through a sub-regional poster campaign and aligned with the Midwifery Council advice to women to call rather than text their midwife. Such reasons for calling included reduced baby movements, symptoms of flu and symptoms of pre-eclampsia. Ongoing initiatives include providing a primary birthing environment to promote primary birth, the completion of a virtual tour and increased use of social media to deliver important messages to pregnancy women.

Our review of our 2017 clinical indicator data identifies our induction and caesarean section rates as ongoing areas for investigation. A plan for the multi-disciplinary audit of our caesarean sections with standard primiparae women has been initiated. At the next programme review we have identified the need to address our rate of term babies having unplanned admission to our special care baby unit and requiring respiratory support. Other streams of work include improving the journey for women with high BMI's through our service with the development of a dedicated clinic and strengthening education around baby safety.

I am immensely proud of the Huttmaternity team and they are to be congratulated on their quality improvement performance despite considerable stresses on the maternity workforce in 2017 which are ongoing. It is heartening to hear the Ministry of Health is endorsing this programme alongside addressing workforce issues.

I look forward to 2018 and continuing to improve and develop our quality and outcomes in our maternity service for our women and their babies and their whānau.

Chris Mallon
Director of Midwifery

Purpose

The purpose of the Huttmaternity Maternity Quality Safety Programme (MQSP) Report is to:

- Assess and report on our performance over the previous year.
- Provide information about the quality improvement work underway in the Hutt Valley area for women living and birthing in our district as well as the maternity workforce.
- Provide the Ministry of Health with the contractually required information as set out in Section 2 of Maternity Quality Safety Programme (MQSP) Crown Funding Agreement Variation.
- Demonstrate self-audit of the New Zealand Maternity Standards.
- Provide feedback to the NMMG on their recommendations.
- Benchmark against New Zealand Maternity Clinical Indicators.
- Document Huttmaternity's progress towards meeting the MQSP Work Plan objectives in 2017.
- Describe the work planned to improve the quality and safety of maternity services delivered in the 2017-2019 period.

Section One: About Hutt Valley District Health Board

Our Population

The Hutt Valley district is spread across 916 square kilometres, covering the Lower Hutt City and Upper Hutt City local authorities. For the 2016/17 years, Hutt Valley District Health Board had a projected population of around 145,310 people, with 17.4% of our population identifying as Māori, 7.8% as Pacific, and 11% as Asian. This is a slightly higher proportion in each of these groups compared to the national average (MOH 2016)[1]. Our Māori and Pacific populations are younger than average and have higher fertility rates and this is reflected in our birthing population (Māori 20.4%, Pacific 9%). There are recognised health disparities for several population groups due to accessibility, social determinants of health, cultural responsiveness, and current models of care. Women can find it hard to access services or to know how to manage their health if services are not culturally competent. We acknowledge our responsibility to design and deliver maternity services that are accessible and responsive to our population's needs, in line with the New Zealand Health Strategy.

1. http://www.health.govt.nz/new-zealand-health-system/my-dhb/hutt-valley-dhb/population-hutt-valley-dhb *Accessed 13 April 2017*

Quality - at the heart of what we do

Our District Health Board (DHB) continues to strive for the highest quality health and wellbeing services for our local population. We develop, review, and update our plans under the lens of the three new strategic directions: Living well, Care Closer to Home, and Shorter, Safer, Smoother care. This is enabled by: an Adaptable Workforce, Smart Infrastructure and Effective Commissioning.

Our quality goals are underpinned by a culture of working together at all levels across the Hutt Valley Health System and with our neighbouring DHBs to achieve patient centred care, openness and

transparency, learning from error or harm and ensuring that the contribution of staff from all levels of the DHB for quality improvement and innovation, are truly valued.

Hutt Valley DHB have committed to the establishment and maintenance of a HVDHB Consumer Council.

We would like to acknowledge the above information has been sourced from the Hutt Valley DHB Annual Plan 2016-17 and SOI. And Communications Department HVDHB.

Full copies of the Hutt Valley DHB Annual Plan 2016-17 can be found at:
http://www.huttvalleydhb.org.nz/content/286a32c2-bcfb-4cb8-bdd3-0b0c2e268040.html

Section Two: Maternity Service Configuration and Facilities

Maternity Services

In 2017, Hutt Valley DHB is the only birthing facility in the Hutt Valley and provides both primary and secondary care facilities for a largely urban population of approximately 144,300. Hutt Valley DHB supports approximately 1850 births per year. Our birthing population consists of NZ European 45.7%, Māori 20.4%, Asian 9.8%, Pacific Island 9% and Indian 6.9%, Other 8.2%.

Our facilities include our Birthing Suite, Antenatal & Postnatal Unit, and a Maternity Assessment Unit. We also provide a community based midwifery service.

Table 1: Births in New Zealand and Hutt Valley DHB Facility

	2013	2014	2015	2016	2017
Births in NZ (NZ Statistics) [1]	58717	57242	61038	59430	59610
Births at Hutt Valley DHB	1850	1791	1856	1871	1848
% of all NZ births in Hutt	3.1%	3.1%	3.0%	3.1%	3.1%

LMC providers

In 2017, in the Hutt Valley DHB region, women could choose a midwife or private obstetrician LMC. These practitioners have an access agreement to use the facilities. For women unable to access the services of a LMC midwife or private obstetrician, the DHB Huttmaternity midwifery team provide this service. (There are no GPs practising obstetrics in the Hutt Valley).

LMC midwives: The DHB fluctuates between thirty-five and forty-five LMC midwives; currently there are thirty-six community-based case-loading midwives with primary access agreements providing lead maternity care.

LMC private obstetricians: In this reporting period there were three LMC obstetricians (two of whom are also employed by the DHB). For women who chose a private obstetrician as their lead maternity carer, midwifery care was subcontracted either by the hospital and/or community-based midwives, or by private arrangement with LMC midwives.

Women requiring Secondary Care services received clinical oversight by hospital obstetricians with midwifery care from LMC midwives or our primary midwifery team alongside; as outlined in the Guidelines for Consultation and Referral (MOH 2012).

1. *https://www.stats.govt.nz/information-releases/births-and-deaths-year-ended-december-2017 Accessed 30 April 2018*

Workforce

In our midwifery workforce, there continues to be a reciprocal flow between those in LMC practice and those employed by our DHB. This enhances a collaborative working environment and develops important skill sets across the midwifery workforce.

The core midwifery workforce has come under particular pressure in 2017 as historically Huttmaternity has not fulfilled its obligation to provide core midwifery care during operative and instrumental births. Significant work has been initiated this year, to develop a staged solution that will enable Huttmaternity to deliver the midwifery care components of its secondary maternity service specification. This will involve the additional provision of core midwifery care for up to six hundred more procedures per annum.

In addition to this, a primary/secondary midwifery interface group has been formed with membership from most LMC practices in the region and core midwifery representatives. The brief of this group is to develop locally agreed processes to facilitate the real-time primary and core midwifery relationships that are referred to in the frameworks that guide our practice and interface. The initial work of this collegial strategy to find solutions by consensus has been very encouraging.

The maternity service includes the following clinical staff:

- Director of Operations, Surgical Women's and Children's
- Clinical Head of Department, (CHOD) Obstetrics and Gynaecology
- Director of Midwifery (DOM) 0.5 FTE
- Clinical Midwifery Manager (CMM) 1.0 FTE
- Associate Clinical Midwifery Managers – two (ACMM) .9 FTE
- Midwifery Educators (two) 1.0 FTE
- Lactation Specialists (two) 1.5FTE
- Obstetrics and Gynaecology Consultants (six), Registrars (five), Senior House Officer (one)
- A core DHB employed team of approximately 42 midwives, 3 registered nurses, 2 enrolled nurses giving 27.0 FTE and 9 healthcare assistants 6 FTE.
- Casual pool of 13 midwives and 1 nurse

Maternity Unit

Birthing Suite

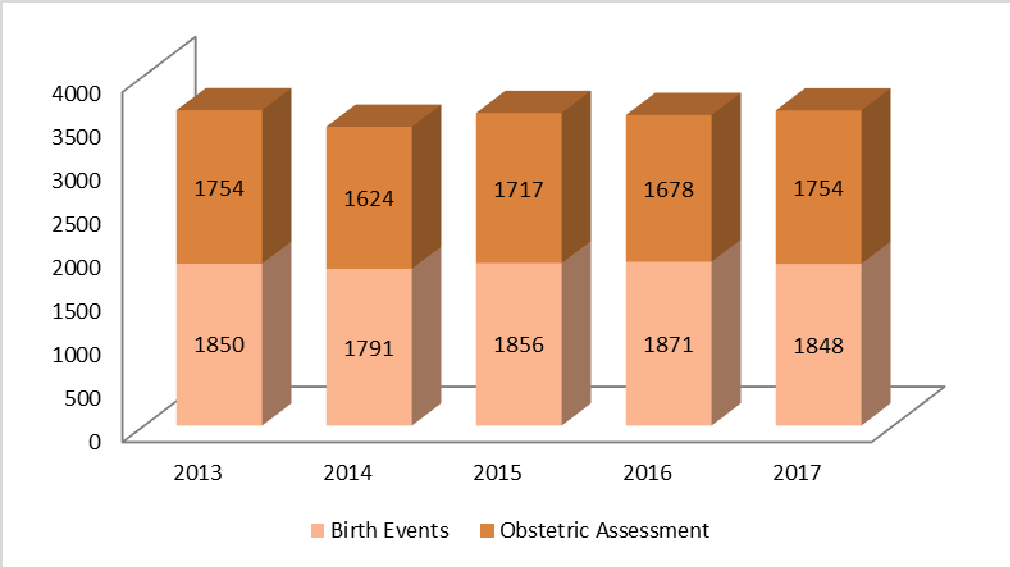
Birthing suite is staffed by core midwives providing midwifery care for DHB primary and secondary care women, as well as those women under a private LMC obstetrician. The midwives provide emergency care 24 hours a day, seven days a

week and support LMC midwives as required. Medical staff, consisting of a Consultant Obstetrician, Senior Registrar or House Officer are rostered to cover an on call system 24 hours a day. We aim to have more Senior Medical Officers to comprehensively to support our services.

Table 2: Births at Hutt Valley DHB Facility

	2013	2014	2015	2016	2017
Single Liveborn	1813	1752	1823	1843	1818
Single Stillborn	12	12	13	7	11
Twin Liveborn	25	27	20	22	17
Twin Stillborn					2
Total births at facility	1850	1791	1856	1871	1848

Figure 1: Maternity Unit and Birthing Suite Maternity Assessments[1] and Birth Events



[1] Maternity Assessments are acute, non-delivery assessments in pregnancy, undertaken within the birthing unit environment (excludes assessments undertaken in the Maternity Assessment Unit MAU on the ground floor).

The following tables/figures demonstrate Birth Events in Hutt Valley DHB Facilities by: Parity, Age and Ethnicity.

Our analysis of the following data by Parity, Age and Ethnicity show little change in the demographic of the birthing population at Hutt Valley DHB. The number of women who can be categorised as Standard Primiparae[1] is consistent. The definition is women who meet all of the following criteria:

- No previous pregnancy of 20+ weeks, and
- Maternal age 20-34, and
- Cephalic presentation, and
- Singleton, and
- Term gestation, and
- There have been no recorded obstetric complications that are indications for specific obstetric interventions.

[1] Ministry of Health. 2018. *New Zealand Maternity Clinical Indicators 2016*. Wellington: Ministry of Health pg. 7 accessed 15 May 2018.

Figure 2: Births in Hutt Valley DHB Facility by Parity

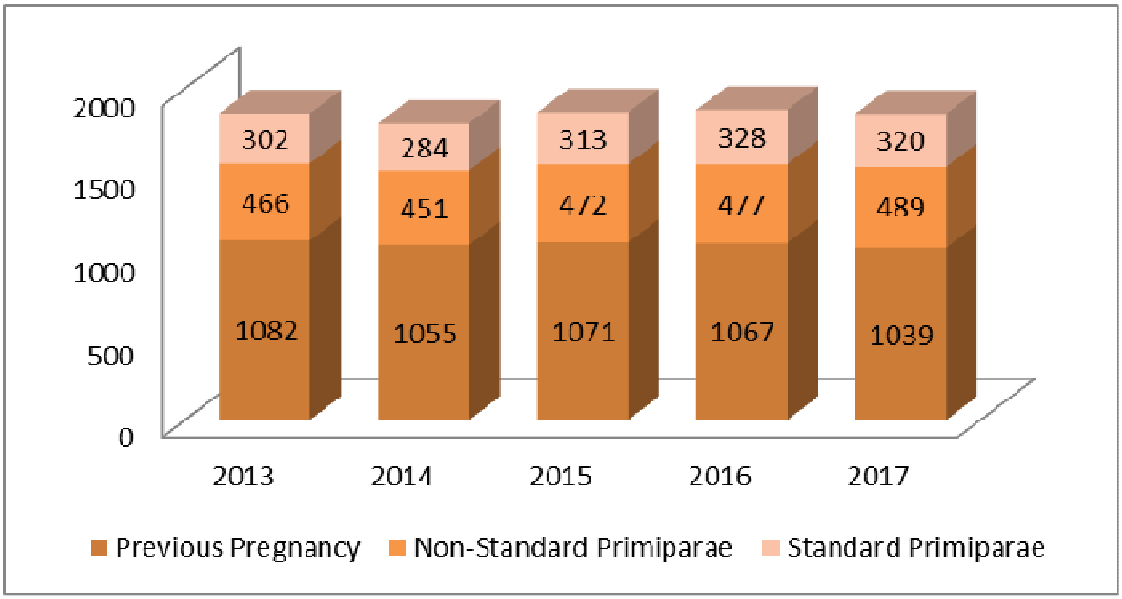


Table 3: Birth Events by Maternal Age and Ethnicity

Age	2013	2014	2015	2016	2017
Under 16 years	1	1	4	3	5
16 to 19 years	110	97	108	79	80
20 to 24 years	339	307	277	308	280
25 to 29 years	434	436	486	500	513
30 to 34 years	537	548	581	570	588
35 to 39 years	336	321	306	336	313
40 plus years	93	82	93	75	69
Ethnicity					
European	1011	984	1028	998	946
Māori	384	357	373	370	377
Pacific	191	178	182	180	169
Asian	157	159	147	165	183
Indian	72	77	89	119	127
Other	32	31	32	34	43
Not stated	3	6	4	5	3

Antenatal and Postnatal Ward

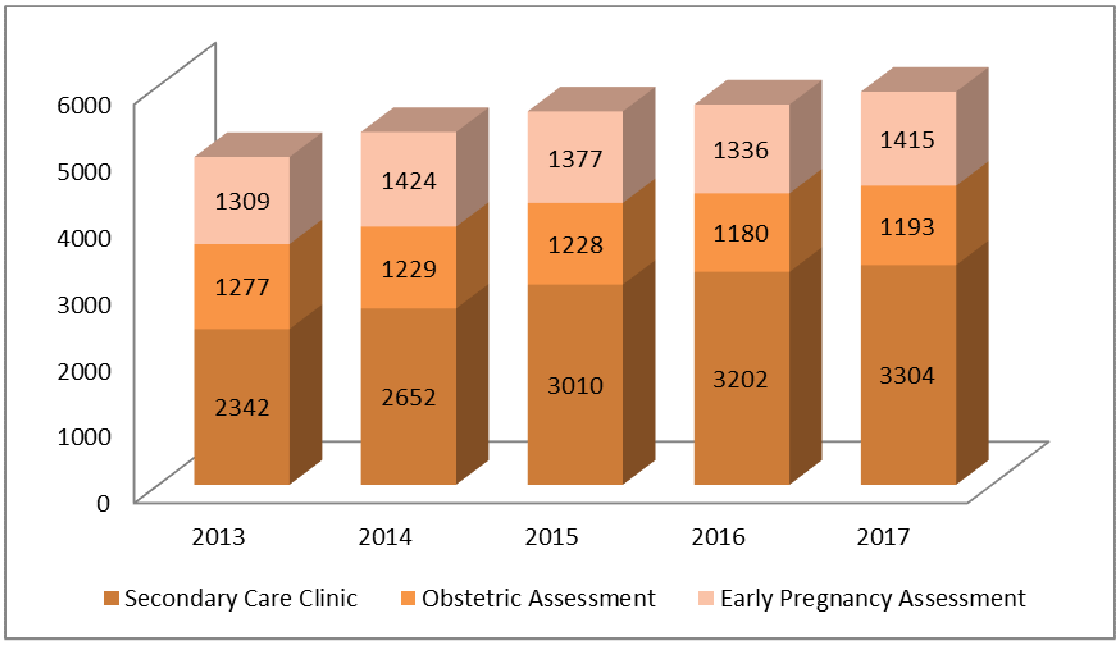
The postnatal section of the maternity unit is made up of thirteen single rooms and two double rooms with shared ensuite facilities (an additional four bed spaces can be utilised when the need arises).

Our unit caters for both antenatal and postnatal inpatients as well as providing rooms (if available) for women 'rooming in' with babies in the Special Care Baby Unit (SCBU). The unit is staffed by midwives with assistance from nurses and health care assistants.

Maternity Assessment Unit (MAU)

MAU is an acute assessment area, open Monday to Friday, and works as an outpatient facility. The unit incorporates the Secondary Care Obstetric Clinics, Maternity Assessments and an Early Pregnancy Assessment Clinic (EPAC).

Figure 3: Maternity Assessment Unit (MAU) Total Events



Maternity Assessments in the MAU include acute assessments of women who are stable enough to be seen in an outpatient setting. Those that require assessment outside of MAU hours or need a higher level of care are assessed in the Maternity Unit on level 2 and are included in the Figure 3 statistics. Examples of this include women with pre-eclampsia for day case assessment, women with reduced fetal movements, or those requiring Anti D administration etc.

Early Pregnancy Assessments include women experiencing pain and/or bleeding in early pregnancy who are seen for assessment and management, less than 20 weeks' gestation.

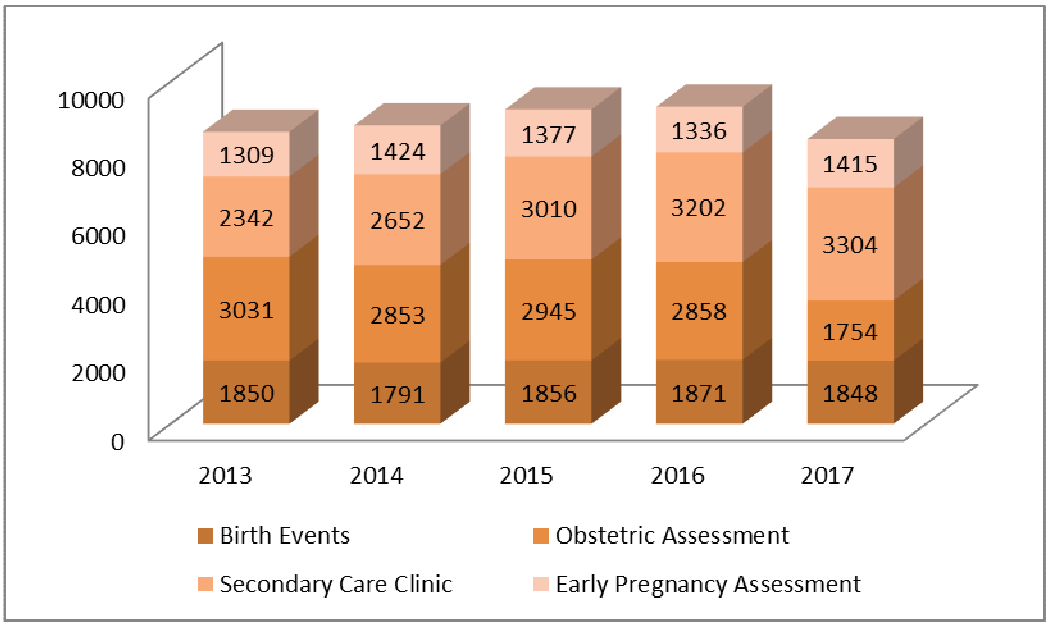
Secondary Care Clinic episodes refer to women seen by a member of the Obstetric Team in the Obstetric Clinic in MAU. These women have been referred under the Guidelines for Referral and Consultation (2012) for an obstetric opinion.

There continues to be an increasing trend of referrals to the Secondary Care Clinic. Childbearing women have increasingly complex maternity needs including those associated with increasing rates of maternal diabetes (MOH 2014)[1], advanced maternal age (MOH 2015)[2] and elevated Body Mass Index (OECD 2014)[3]. This may in part account for this increase.

Overall Service Workload

The following figure demonstrate the overall workload across the Maternity Unit, Birthing Unit and the Maternity Assessment Unit. The demand in the secondary care clinics suggests an increasing rate of referral as the service becomes more familiar to general practitioners, particularly our Early Pregnancy Assessment Clinic (EPAC) and the three DHB Health pathway specifying referral to this clinic. Total new referrals for Secondary Care and Early Pregnancy assessment in 2017 were 1294.

Figure 4: Total Maternity Services Events



"Specialist care through MAU was amazing - very supportive, informative and reassuring."

Huttmaternity Primary Midwives Team (PMT)

In response to a fluctuating population and midwifery workforce needs in the community, our service continues to include primary community maternity care. The antenatal care is provided in home or clinic with the intrapartum service being provided by core midwives on birthing suite. The team also provides some antenatal and all postnatal care for those women under our Secondary Care Obstetric team without an LMC midwife or those women who have a private obstetrician LMC. The team is referred to as our Community Midwives or our Primary Midwives Team (PMT).

Our client demographic:

The PMT provides a maternity service for some of the most vulnerable women in our community. Wider ranging social complexity increases their obstetric risk and requires additional resources to enable timely access to care. Additional effort is also required to arrange multi-disciplinary professional input and develop plans that deliver wrap around services involving cross sector collaboration. The PMT attend our fortnightly Vulnerable Women and Unborn Baby Group Meetings as able.

Other women come to the team for various reasons which include:

- Lack of available LMCs
- Preference for Hutt Valley DHB midwives over LMCs
- Lack of eligibility for free maternity care due to residency status
- English as a second language
- Late booking
- Lack of engagement with other maternity or health care
- Vulnerable women with complex social needs

Hapū Ora:

As part of a 'people-powered' approach (MOH, 2016)[1] to this arm of our service, we have established a drop-in clinic based at a local marae. This clinic is run by midwives from the PMT and is called Hapū Ora and commenced operating in August. This is a collaboration with Te Runanganui o Te Atiawa with the primary aim to increase engagement with a lead maternity carer in the first trimester. Early engagement is known to help reduce inequalities in maternity care.[2]

Of the sixty-five contacts over the months of August to December 2017, 98.5% were with women who identified as Māori or Pasifica, with Māori 83% of all contacts. Also of note, 63% were under twenty-five years old. The following table shows the activities and referrals to local providers.

[1]Minister of Health. 2016. New Zealand Health Strategy: Future direction. Wellington: Ministry of Health. Pg. 16

[2] Aust N Z J Obstet Gynaecol. 2015 Aug;55(4):323-30. doi: 10.1111/ajo.12319. Epub 2015 Jul 14.

Abby Hewitt, Primary Maternity Team Midwife at Hapū Ora

Table 4: Hāpu Ora activities and referrals to local providers

Pregnancy tests	
Pre-conception advice	
Folic Acid/Iodine given	2
Iron therapy given	8
Nutrition/Activity advice discussed	6
Smoking cessation referrals	6
NET referrals	4
Kokiri Marae Social Services referrals	1
Lactation Support Services	3
Well Homes Referrals	4
Connected to Tamariki Ora	6
Contraception advice	6
Depo Provera given	
Jadelle Inserted	
Condoms given	1
Linked to a LMC	5
Referred to GP	1
Immunisation Services	
Safe Sleep Education	10
Pregnancy education referral	4
Power to Protect training	
Car seat safety discussion	7
Antenatal check	50
Postnatal check	1
Greenstone doors referral	2
NRT given	4
Bloods done on site	4

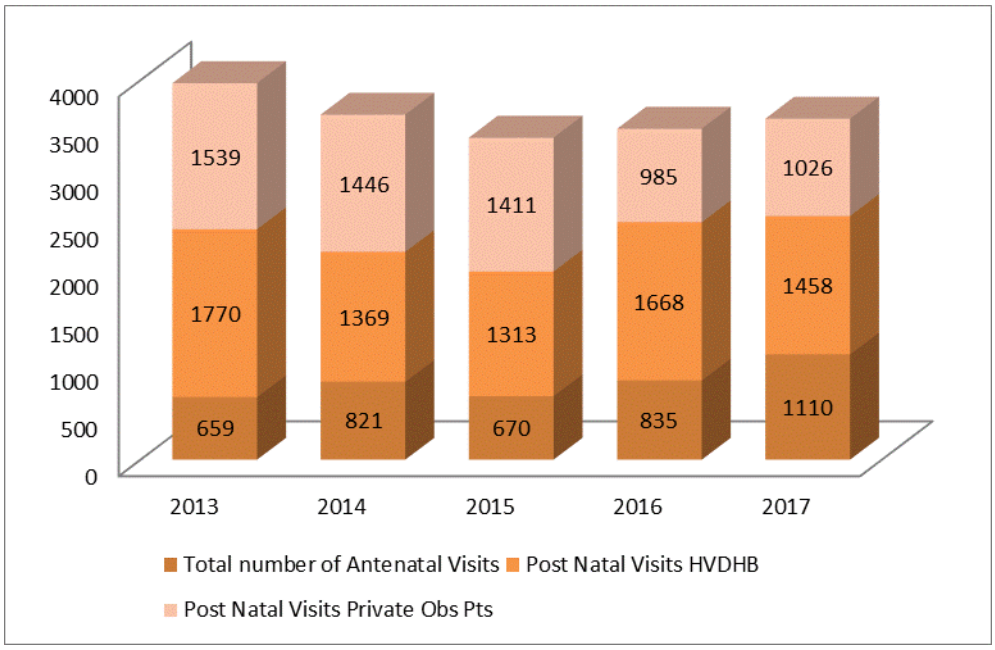
Primary Maternity Team Workload:

The figures below give an indication of the number of women booked with the PMT each month because they do not have a LMC midwife. This includes women under the PMT, Secondary Care Team and private obstetricians. The three private obstetricians have midwives subcontracted to undertake their 'bookings', but our PMT will back up these midwives when required.

The following table demonstrates the actual visits by our Primary Midwives Team. Antenatal Visits include full Primary Midwives Team LMC cases and bookings.

To note: a) The Primary Maternity Team has undertaken visits for birth planning in recent years for Secondary Care women and private obstetrician clients under Primary Maternity Team care. This may account for the general increase in antenatal visits.
b) Not all women continue care postnatally with the Primary Maternity Team. Some women move out of area, or are not within our catchment for postnatal care. Some women may also have transferred to a private LMC midwife for postnatal care
c) There is a fluidity of the population base between Hutt Valley DHB and our neighbouring DHB's (Capital Coast DHB and Wairarapa), and also women who reside outside our DHB domicile. This means there is a fluctuating number of women who may commence care here, but end with another provider outside the area, or transfer into our services part way through their journey.
d) Hapū Ora clinic events as above are not included in this workload.

Figure 5: Total number of Primary Midwives Team Visits



"My postnatal midwife was amazing. She took the time to fully understand how my previous birth experience had affected me and worked with me to make this experience a better one. I felt respected and listened to and this gave me confidence that I was making the right decisions for my family."

Lactation Service

The service offers breastfeeding support to mothers and babies on the Postnatal unit, Special Care Baby Unit, and throughout the main hospital campus as requested. Outpatient appointments are offered for mothers and baby up to six weeks old, following referral from the Lead Maternity Carer or Well Child Tamariki Ora providers. Our service also accepts antenatal referrals for women with complex breastfeeding needs.

Table 5: Lactation Consultant workload by Clinic Type

	2013	2014	2015	2016	2017
LSINPT – Inpatient Assessment	n/a	n/a	557	560	320
LSOPD – Outpatient Assessment	n/a	n/a	354	353	264
LSOTH – Assessment other DHB Department	n/a	n/a	23	11	15
LSSCBU –Special Care Baby Unit Assessment	n/a	n/a	164	104	123

"Very supportive with assisting breastfeeding as my baby was having difficulty latching"

Breastfeeding Support Clinic

The Breastfeeding Support Clinic is for any mothers and babies with feeding difficulties. If a tongue tie (ankyloglossia) is assessed and the mother and baby dyad are experiencing feeding difficulties as a result of this, then a specific pathway is followed to determine whether treatment is necessary. Huttmaternity are pleased to report we are operating well within the accepted incidence of tongue tie which is reported to be present in up to 10% of newborn babies, but with a more widely quoted incidence of 2-5% [1,2]

A policy around this and an information booklet for whānau has been produced during this reporting timeframe.

[1]Hogan M, Westcott C, Griffiths M. Randomised controlled trial of division of tongue tie in infants with feeding problems. J Paed Child Health 2005 41

[2]Ballard JL, Auer CE, Khoury JC. Ankyloglossia; Assessment, incidence and effect of frenuplasty on the breastfeeding dyad. Paediatrics 2002 110

Table 6: Number of events, Breastfeeding Support Clinic by Type

	2014	2015	2016	2017
Breastfeeding Support Clinic – Referrals New	142	196	144	242
Breastfeeding Support Clinic – Follow Ups	84	52	27	126

Total	**226**	**248**	**171**	**368**

Table 7: Number of events, Breastfeeding Support Clinic Ankyloglossia (tongue tie)

	2017	% birth rate*
Breastfeeding Support Clinic – Tongue tie assessment	64	3.4
Breastfeeding Support Clinic – Simple Frenotomy	54	3.0
Total	**118**	

*babies ever initiated breastfeeding

Baby Friendly Hospital Initiative

Preparation for the Baby Friendly Hospital Initiative (BFHI) audit by New Zealand Breastfeeding Alliance (NZBA) next due in 2019, is ongoing work for our Lactation Specialists with 0.1 dedicated fte for this. Part of this role is ensuring staff education is up-to-date across the DHB, including theatre and paediatric staff, monthly overview of breastfeeding status on discharge statistics and implementing recommendations from previous audits such as discharge information. The service has instigated a specific survey for users of the lactation service and are collating the findings to further guide the service in future.

Breastfeeding Information

Based on the patient information “Breastfeeding your baby – Commonly asked questions” in use at Hawkes Bay DHB, with consent we localised a series of flip cards. These are now in every room within our unit, SCBU and the Children’s Ward. They are based on questions like “Why breastfeed?”, “When to breastfeed?”, “Is baby getting enough?” and use a range of easy to view images/diagrams and pictures. We have also purchased some of the Mama Aroha breastfeeding reference cards created by Amy Wray for use by the Lactation Consultants.

Breastfeeding Education to Women

BirthEd is the provider arm delivering antenatal education. In this reporting period, all standard twelve-hour antenatal courses had two hours of breastfeeding education. This includes courses for women under 24 years and their support persons, and courses held on a Marae. Women in Hutt Valley DHB region also have the opportunity to access an add-on breastfeeding course run for three hours each month. These courses are taught by breastfeeding specialists with the content and resources shared with the DHB and subject to audit by NZBA.

Breastfeeding Network

The Hutt Valley Breastfeeding Network began in April 2003 as the “Hutt Valley Breastfeeding Coalition”, changing its name in 2004 to “Best part”. Initially its membership was made up of HVDHB clinical staff with the addition of one or two community organisations. In July 2006 the group became known as “The Hutt Valley Breastfeeding Network” and by this time was attracting a number of participants and community organisations interested in breastfeeding support. During 2008/2009 the Hutt Valley DHB became more formally involved in the Network with the implementation of the HEHA (Health Eating, Healthy Action) programme. HEHA provided financial and personnel support to encourage and support the Breastfeeding Network. Since this period (2008/2009) there has been growth in membership particularly from Māori and Pacific, Health and Community organisations. Currently the Network is community coordinated with a volunteer holding the positon of secretary and a meeting venue supplied by Te Runanganui o Taranaki Whanui ki te Upoko o te Ika a Maui. The role of the network is to protect, promote and support breastfeeding in the Hutt Valley.

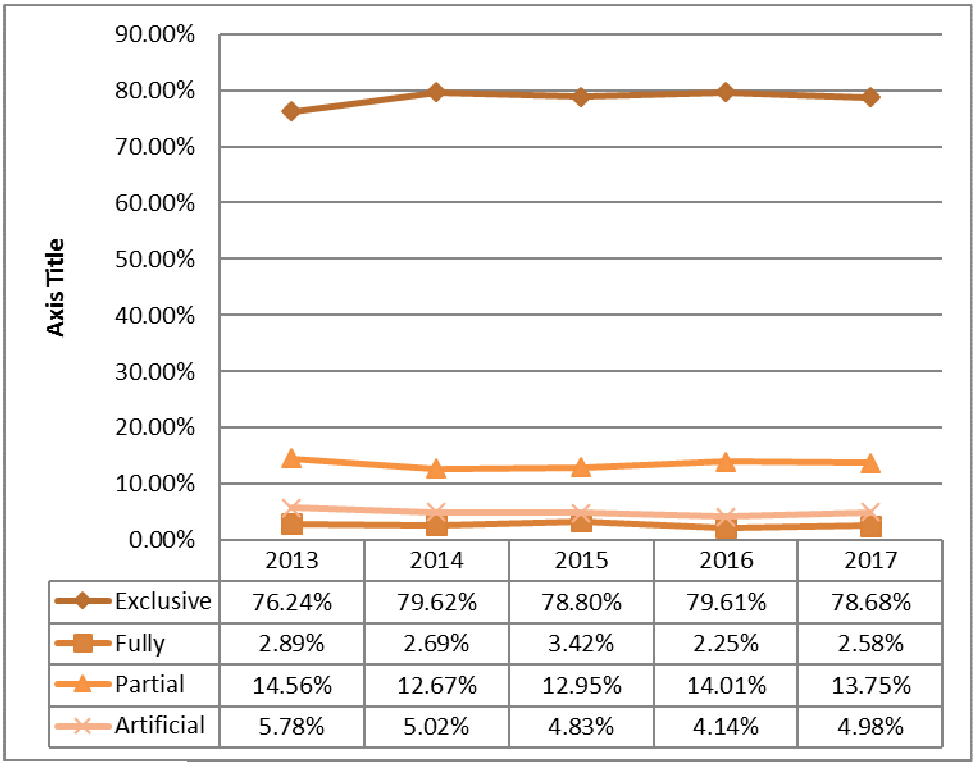
The breastfeeding Network stand at Te Rā o Te Rāukura

Infant Feeding Status

Infant feeding status is recorded at time of discharge from our facility. For some, this is following Planned Early Discharge from the Birthing Suite, for some following an inpatient stay in our Postnatal Unit. Babies admitted and discharged from the Special Care Baby Unit are excluded from the data presented here.

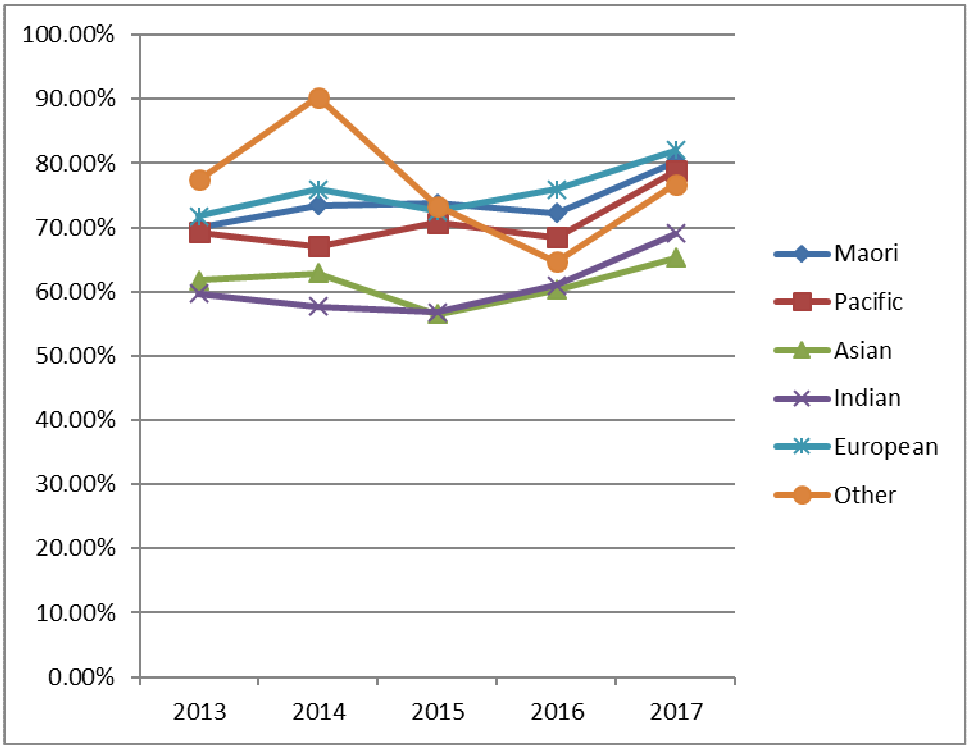
"The support from the hospital midwives was amazing, they really cared about me and my recovery as well as my baby"

Figure 6: Feeding percentage by Type



	2013	2014	2015	2016	2017
Exclusive	76.24%	79.62%	78.80%	79.61%	78.68%
Fully	2.89%	2.69%	3.42%	2.25%	2.58%
Partial	14.56%	12.67%	12.95%	14.01%	13.75%
Artificial	5.78%	5.02%	4.83%	4.14%	4.98%

Figure 7: Exclusive Breastfeeding Rates by Ethnicity



Note: Other = Women who have identified their ethnicity as Middle Eastern, Latin American/Hispanic and African

There is a reduced breastfeeding rate among women who identify as Indian or Asian ethnicity. Whether cultural beliefs and increased morbidities such as an increase in

rates of small for gestation age babies and induction of labour rates are confounding variables, requires further exploration. Dedicated culturally appropriate breastfeeding education antenatally may be feasible to address this.

Table 8: Breastfeeding type by Age of mother, Mode of Delivery and Gestation at birth 2017

	Artificial	Exclusive	Fully	Partial	Total
Under 16 years	0	3	0	0	3
16 to 19 years	8	52	2	7	69
20 to 24 years	13	199	7	27	246
25 to 29 years	19	383	11	48	461
30 to 34 years	19	414	13	97	543
35 to 39 years	19	217	8	41	285
40 plus years	5	42	2	9	58
Total	**83**	**1310**	**43**	**229**	**1665**
Breech Delivery	0	0	0	0	0
Caesarean Acute	12	214	12	77	315
Caesarean Elective	15	162	11	35	223
Instrumental Delivery	6	128	3	30	167
Vaginal Delivery	50	806	17	87	960
Total	**83**	**1310**	**43**	**229**	**1665**
20 to 23 weeks	0	0	0	0	0
28 to 31 weeks	0	1	0	0	1
32 to 36 weeks	2	22	2	15	41
37 to 41 weeks	81	1274	41	212	1608
42 plus weeks	0	12	0	1	13
Not stated	0	1	0	1	2
Total	**83**	**1310**	**43**	**229**	**1665**

There are well documented associations between mode of delivery, gestation and rates of successful breastfeeding. We recognise babies who have been admitted and discharged from SCBU have data missing on breastfeeding status which accounts for nearly 10% of our babies. This has been discussed at Quality meetings and it is an objective to improve collection of this data for 2018

Breastfeeding Support Close to Home

The Breastfeeding Support Service was initially started in 2013 with twelve month funding from the HVDHB Primary Nurse Innovation Fund. Currently Te Rūnanganui o Te Atiawa Whanui o te Upoko o te ika a Maui has an agreement with Hutt Valley District Health Board (HVDHB) to provide this service and Milly Carter, a Lactation Consultant (LC) and Registered Nurse, has been subcontracted to deliver the service supported by staff in Tamariki ora and the Iwi Health Coordinator.

The Breastfeeding Support Service (BFSS) takes a whānau ora approach to care for the mother and family. Within this holistic approach is the process of whakawhānaungatanga (to establish relationships), where the family is taken care of whilst the consultation occurs.

The BFSS aims to:

- Be **whānau-led** in its approach to health and wellness, providing a family friendly, professional and accepting approach for all.
- **Increase knowledge base** and **professional expertise** around breastfeeding with whānau, health and social services in the Hutt Valley
- Identify high need (e.g. S.U.D.I risk factors, parent who smokes, incomplete immunisation status, family violence, post-natal depression, family has no primary care and/or Well child Tamariki Ora provider) and **refer appropriately** across the range of health and social services.
- **Work collaboratively** across Well child Tamariki Ora, health and a social sector service in the Hutt Valley by ensuring that breastfeeding remains high on the agenda.

Home visits are prioritised to those with no transport and/or health issues making a visit to a clinic impossible, e.g. caesarean section women. Clinics are held at the Hauora building by Tamariki ora rooms in Waiwhetu.

The target population for the BFSS are Māori, Pacific and teen mothers, though no one is excluded. Occasionally the LC will triage and refer mothers to other LC services if the BFSS is overloaded. The LC visits Titiro Whakamua (Teen Parent Unit) weekly and it has been pleasing to see the increasing numbers of teen mum's breastfeeding and for extended periods.

January 2017 - December 2017, of the one-hundred-and-fifty-five new clients, there were twenty referred in by the HVDHB Midwives (12.9%).

"Thanks for all your help. What an important job you are doing in the community! T"

"Thanks for keeping in touch! M has been good and we've dropped the nipple shield altogether now and she has put on tons of weight! B"

Home Births in Hutt

Hutt Valley DHB does not collect data on home births. However, women are usually booked into the facility by their LMCs in case of transfer and our administrators record the known homebirths. This was forty-seven for 2017 representing 2.5% of our total number of births. The Ministry of Health has provided the data for the 2013 – 2015 years which are sourced from the National Maternity Collection[1] but not yet available for 2016 and 2017. The national average is 3.7% with Hutt Valley DHB falling below this average for the years 2013-2015.

[1] Ministry of Health. 2017. Report on Maternity 2015. Wellington: Ministry of Health.

Table 9: Home Births in Hutt Valley DHB catchment

	2013	2014	2015	2016*	2017*
Number of Homebirths	63	38	60	41	47
Percentage of total birth number	3.3%	2.1%	3.1%	2.2%	2.5%

*Provisional Data from Administrator Maternity Unit, Hutt Valley DHB.

Thanks to Jamie and Shane for sharing their family photos. (Lockie 20 months and baby Max).

"It was amazing having Lockie right there and so involved. Home is definitely better."

Section Three: Education Report

Education is an integral part of the Maternity Quality and Safety Programme. Thank you to all the staff who engaged fully with the education programme, initiated robust discussion and gave valuable feedback and ideas on 'doing it better.'

In April 2017 Midwifery Council of New Zealand approved our application to be a provider of continuing midwifery education.

Midwifery Education

Combined Emergency Skills Day

The months of February and March brought the usual increased numbers of midwives having to complete their mandatory combined emergency skills day prior to March the 31st in order to declare their competency before Midwifery Council. This included many enquiries from out of area midwives. From the 1st April 2018, we followed the new format suggested by Midwifery Council and facilitated nine combined emergency skill workshops for both core and community midwives. The number of attendees on average was ten; both core and community midwives. This provided a forum for peer learning from many aspects, which the midwives loved and participated in with no reservations. This is a most valued aspect of the emergency day which is supported by midwives' feedback.

A continual challenge for educators is to keep this day fresh and engaging for the participants. The educators introduced a different form of scenario work. Instead of having to think about what we would do in an emergency, the educators turned the scenario around and gave teams all the information they would require to run a perfect scenario. The idea was to 'showcase a perfect response to an emergency'. There was mixed feedback but the majority of the midwives stated that they 'learnt heaps' especially about uncommon emergencies. We seldom see what a brilliant scenario looks like in practice and in scenario work. Ongoing planning for 2018 is to run emergency scenarios in different areas e.g. Emergency Department.

Secondary Care Skills Day

We facilitated one secondary care study day; concentrating mostly on dysfunction of the placental, foetal and maternal relationship especially the (ill) health of the spiral arteries and the effect of a hostile environment; and the consequences this has on a baby. We included preeclampsia, abnormal uterine activity and the effect on a baby during labour, with or without foetal heart rate abnormalities, intrauterine growth restriction and the use of GROW. We included a practical session of drawing up and correct administration of drugs, checking reflexes, clonus and placement of a foetal scalp electrode. There was much discussion on the administration of oxytocin, the use of terbutaline and the administration of a subcutaneous injection.

Epidural Workshop

Together with the anaesthetic team we ran four epidural workshops. These are two hours long and include a session on aseptic technique demonstrated by the theatre educator.

Partnership: Promoting Perineal Integrity

We ran two workshops detailing information sharing and supporting women's decisions, antenatal preparation and perineal management during labour. We had not focussed on the antenatal education before and the midwives found this to be extremely useful. Literature and evidence around perineal management at the time of birth was sought and discussed. The quality team have purchased warmers for perineal compresses which can be used in second stage of labour for prevention of severe tearing as evidenced first by a midwifery researcher in Australia. The nurse educator from the plastic ward presented on wound healing, which received really good feedback from the midwives. The knock on effect from that is the sharing of information for staff and women on wound healing post caesarean section. The educator is releasing an updated policy which will include the maternity staff.

The physio presented on helpful/useful tips for midwives in managing women with some form of incontinence and reminding us to refer on.

Follow-up from these workshops is the consideration of the continued reluctance of some midwives to suture woman whom they support in labour. I have asked individual midwives what they would consider to be optimal support for them and the plan is more one on one support for suture technique and confidence building. In 2018 we will introduce champion midwives who will support midwives with suturing a woman's perineum whom they have cared for during labour.

Infection Control

Mini education sessions before the afternoon handover were successful and well attended. The most popular sessions were from the infection control department and their take on steam cleaning with microfiber cloths.

DHB Education Requirements

Ko Awatea

Employed midwives have a responsibility to maintain their online learning and hand their certificates in so that their education is noted on one staff. Prior to the emergency day, all participants are requested to complete the online learning for resuscitation. Feedback from the midwives is that this is worthwhile and are requesting an online neonatal resuscitation package.

IV Therapy/Cannulation/Phlebotomy

This education is provided by the relevant educators based on individual staff members' needs; recognition of prior learning is taken into account.

Violence Intervention Programme

All new staff members are booked to attend this one day education session and a programme is being put in place to ensure existing staff members are enrolled as per DHB requirements.

First Year of Practice Programme

We ran a first year of practice programme for three midwives. A comprehensive orientation plan was developed and they achieved their personal learning goals. It was decided not to run the programme in the first part of 2018 which affords the educators time to update the programme.

Orientation

There is a comprehensive orientation in place for all staff. The DHB generic orientation programme for nurses, midwives and anaesthetic technicians is being re-developed. The educators will work with the nursing development team to finalise the programme.

Multi-professional Education

Practical Obstetric Multi-Professional Training (PROMPT) Training

From the 25/11/2011 to present, the following health care professionals have attended the course:

Table 10: Attendance by health professionals at PROMPT training

Core midwives	84
LMC midwives	45
Student midwives	5
LMC Obstetricians	3
Obstetric Senior Medical Officers	5
Obstetrics and gynaecology Registrars/Senior House Officers	34
Anaesthetists	13
Emergency Department Senior Medical Officers	5
Trainee Interns	10

Two courses were run in 2017. We have support from Clinical Lead Obstetrician, Director of Midwifery and our Clinical Charge Midwife to release staff for this course. The antenatal clinic closes for the day and no elective cases are booked for theatre. Thank you to the management team as this is a great learning opportunity for all. Current scenarios are postpartum haemorrhage, preeclampsia with severe

hypertension leading to eclampsia and maternal septic shock with peri-partum hysterectomy. One of the better lessons for us in maternity is observing how different specialities deal with emergencies especially in terms of communication and team work. Never in eight years has there been negative feedback.

Breast Feeding Workshops

- Four workshops throughout the year open to all staff.
- Fully booked.

Neonatal Life Support

This continues to be a popular choice for the multi-professional team. We have two midwives who are NZRC newborn life support instructors and we are hoping to increase this number in 2018. All maternity staff who attended in 2017 passed the written and practical assessment.

Foetal Surveillance

We held the RANZCOG face to face Foetal Surveillance Workshop in November 2017. It was well attended and fully booked. We run this in conjunction with the online OFSEPlus programme which the DHB funds. We have just completed the first 100 vouchers which means that 100 midwives have accessed the online education.
From October 2017 we introduced a more formalized CTG meeting to provide education on recognition, describing and interpreting CTG traces using the RANZCOG protocol. The attendance list shows an increase in the number of staff attending. We have utilised our LMC interface meetings to have CTG presentation and review as a standard agenda item to increase access to CTG education. Educators are planning a workshop on Structured Intermittent Auscultation for low risk women for 2018.

Planning for 2018

- We are in the process of redeveloping our education strategy.
- We are starting off the year with back to back study days on the community support available to women in the postnatal period.
- We plan to run a study day with a focus on maternal mental health in September.
- The educator from the Perinatal Institute will provide two workshops on the Growth Assessment Protocol (GAP).
- PCEA education will be delivered to all core and LMC midwives as we move to PCEA epidural management.

Quality Leadership Programme

Hutt Valley DHB continues to support and actively promote the Quality and Leadership Programme. We currently have twenty midwives on the QLP pathway, eight at Confident level and twelve at Leadership level and a large number of midwives are in the process of compiling their portfolios ready for assessment. The 2015 changes to the programme have made it more accessible and achievable which is encouraging engagement. The contribution to the unit made by midwives includes QLP activities such as Health and Safety, Infection Control and Hand Hygiene reps, audit activities and initiatives such as establishing and designing a Primary Birthing Room. We thank all our midwives for the activities they undertake above and beyond the basic requirements of their job and for their effort and contribution.

"Loved today. Was as good as I imagined it would be. Great cover of all aspects of perineal care and enjoyable interactive sessions. Thanks." Midwife Participant

Section Four: Links with Other Services

Māori Health Unit

Kia ora koutou katou,

My name is Diane Kotua. I am one of the Family Support Coordinators within the Māori Health Unit at HVDHB. My role is not clinical, Māori Health Supports link patients and whānau to Community Health and Social Service Providers. I support particular wards within the hospital, including the Children's ward, Post-natal, Special Care Baby Unit and Maternity Assessment Unit.

I visit my wards daily and link whānau to Community Health and Social Service Providers depending on their identified needs and aspirations. I have good community networks and will often link in with the following community groups.

- Kokiri Marae Hauora, Seaview
- Te Awakairangi Health PHO
- Well Child Tamariki Ora Provider
- Salvation Army
- Plunket
- Naku Enei Tamariki (NET Māori),
- Tu Kotahi Asthma Trust
- Mana Wahine – Cervical screening and breast screening
- Parenting groups community
- Midwifery services
- Kia Auahi Kore – Quit Smoking – I supply prescription for patches/gum/ lozenges.

In order to work alongside whānau I practice Tikanga Māori (cultural values), Whakawhānaungatanga (relationships and connections) and strengthening Whakapapa (genealogy). Building relationships first and foremost is a valuable tool, the forming of connections, as this allows me to link to whānau and supports my work immensely. An example of strengthening whakapapa is through communication, sharing whakapapa connections, knowing the whānau. This information is the foundation of building these relationship with whānau.

Being connected in the Māori community with marae based services also allows me to connect whānau to a large number of support networks and services, depending on their needs. I also support mothers once discharged, with breast-feeding to support latching, providing a breast-pump and supporting information.

Breast feeding has long been a part of Māori tradition and practice. I completed the Mum for Mum Breast-feeding Peer Counsellor Programme, through La Leche League. This knowledge allows me to support mums and whānau with their breast feeding goals. I also work with other community groups to engage whānau in breastfeeding and can provide support post discharge including breast pumps and lactation connections.

I will also be doing some support work with maternity to improve smoking cessation for Hapū mama and their whānau, so I will be working alongside Takiri mai te Ata Regional Stop smoking service to enhance the connections in our community.

Operating Theatre

There are no operating theatre facilities attached to the Birthing Suite. Trial of forceps, caesarean sections and manual removal of placenta or any other procedures requiring an operating theatre require women to be transferred to the main DHB theatres on the first floor of the Heretaunga Wing. In 2017, there were six-hundred-and-twelve elective and emergency caesareans.

Anaesthetic Department

Our obstetric anaesthetic service is part of the multidisciplinary team and is represented on the Maternity Quality Committee. They provide an obstetric pre-assessment clinic and made eighty-one pre-labour assessments in the 2017 period.
Labour analgesia and anaesthesia for caesarean and other obstetric procedures are provided 24 hours a day. In 2017, there were five-hundred-and-sixty-five epidurals administered by the obstetric anaesthetic service. In forty-five caesarean cases, a general anaesthetic was used. This is almost half the rate of the previous reporting year. It is hoped with the introduction of Patient Controlled Epidural Analgesia (PCEA) this rate will further decline. This initiative is also expected to improve the quality of pain relief, reduce delays in accessing pain medications and at the same time also reduce the work load on staff with regard the administering of medications.
In late 2017, an electronic insertion record was integrated in to the Concerto Medical Applications Portal to improve the quality of record keeping and allow for the development of automated reports to monitor maternal satisfaction and epidural complications.

SCBU

There is a level 2 Special Care Baby Unit, with twelve cots and two ventilators. This unit provides care for babies above thirty-two weeks' gestation. Babies under this gestation are transferred to the tertiary level Capital and Coast DHB; an attempt is made wherever it is safe to do so, to transfer women prior to birth at gestations earlier than thrity-two weeks. In 2017, there were 395 admissions and sixty-eight transfers in from other hospitals, primarily Capital and Coast DHB, for ongoing care.

"SCBU unit was amazing!"

"SCBU took great care for my baby and we are very grateful! Thank you!"

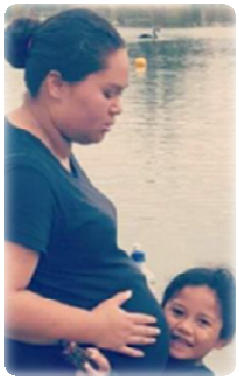
Maternal Green Prescription

Maternal Green Prescription (MGRx) is a 12-month into its free supportive prescription and has now been in operation for twelve months across the Wellington region. The MGRx team work alongside women and other providers involved in their healthcare, from the second trimester of pregnancy (ideally), following through into the post-partum period. This is to enable healthy lifestyle goals, planning and education across the perinatal period which continues beyond so breastfeeding and baby's first foods can also be a topic of exploration and support.

The team are focused on working with women who may have less access to support, or barriers to accessing good health lifestyle support. Māori and Pasifika women are identified as a priority, alongside younger mums-to-be and those with pre-diabetic risks or a high BMI >30.

As visibility for the programme grows amongst referrers and women, the team are seeing a steady number of referrals coming in from LMC midwives. Many Hutt Valley DHB referrals also come through the Diabetic clinic nurses later in pregnancy and there is an increase from GP practices as GP's can refer via Healthlink. The Hutt Valley DHB has surpassed the referral targets in the 2017 year.

Women can also self-refer via the Facebook page if they fulfil the criteria. https://www.facebook.com/MGRxWgtn/



"I have got myself to the gym once since we last talked and I just blocked everyone else out and did my thing and best part was I went all by myself and took every inch of me there. We have been doing so much walking, taking the pram out and most times we have walked to our appointments. We have been saving quite a bit of money by buying lesser portions of meat and much more portions of veges and salads and have also finally taken the first step of actually buzzing my dad out with my 'positive' words." – W.G.

Universal Newborn Hearing Screening and Early Intervention Programme (UNHSEIP)

Newborn Hearing Screening is offered nationally through all the District Health Boards (DHB). The aim of the programme is the early identification of permanent hearing loss in newborn babies so that they can access timely and appropriate interventions, inequalities are reduced and the outcomes for these children, their families and society are improved. The specific goals are completion of screening by one month, diagnosis by three months, and early intervention offered by six months. Early intervention before six months has been demonstrated to significantly improve long-term outcomes for children with hearing loss and their whānau.

Screening is offered to all newborn babies in the Hutt Valley DHB area through inpatient and outpatient services. The service operates six days per a week in the Maternity and Special Care units and three weekly outpatient clinics are run in the Audiology Department. We have a staff resource of two Screeners and one Screener/Coordinator (2.3 FTE).

The programme is managed through the Audiology Department under the Service Manager, Plastics, Dental, Maxillofacial, Ear Nose and Throat (ENT), Audiology and Ophthalmology and under the Service Group Manager Surgical and Women's and Children's Health. In addition it is included in the Maternity Clinical Governance Group. Data is collected daily, analysed monthly, and reported quarterly to the National Screening Unit NSU.

The service continues to maintain a high quality screening programme and in June received commendation from the NSU for achieving 100% compliance in all forty-five areas of the second round of national audit of delivery of the UNHSEIP. This included auditing the screening and diagnostic audiology services throughout all DHB's nationally and was an excellent result for our hardworking and dedicated teams here at Hutt Valley DHB.

Our continued quality focus from last year has seen further improvement this year to the diagnostic referral rate which reduced from a total of forty-four (2.3%) in 2016 to twenty-seven (1.4%) in 2017. In addition, we had our lowest decline rate of five (0.25%) and only one (0.05%) incomplete recorded for the year. These pleasing results have been due to continued and ongoing effort in appointment making, reconfirming, and did not attend (DNA) processes and embracing our DHB values within these processes to better meet the needs and support access for all of our Hutt babies and their families/whānau. In addition, we completed new work this year to improve processes for babies who transfer from other DHBs within our sub region in addition to developing a new screener resource to improve communication of information for surveillance referrals.

Our work plan for the next year includes looking at consumer experience for those families referred for diagnostic assessment and subsequently when there is a hearing loss diagnosed. This will complement previous and ongoing work of consumer experience of screening services.

Table 11: HVDHB UNHSEIP Volumes 2017

Newborns Offered Screening	1976
Completed Screening	1970 (99.6%)
Declined Screening	5
Screening Not Completed	1

Table 12: Location of First Screen

First screen as Inpatient	1303 (66.1%)
First screen as Outpatient	667 (33.9%)

Table 13: Referral for Audiology Assessment

Ref for Audiology Assessment	27

Table 14: Referral Outcome

Audiology	Confirmed Permanent Hearing Loss	Unilateral	Bilateral
		4	4
Early Intervention	Referred to ENT Specialist	4	
Referred to AODC	3		

Pregnancy and Parenting Education (PPE)

There are two main providers of PPE within the DHB region, Hutt Valley DHB contracted services from BirthEd and Parents Centre which is privately run.

BirthEd

BirthEd is contracted by Hutt Valley DHB (and Capital and Coast DHB) to provide a range of free courses for adults and youth in the Hutt Valley and in the greater Wellington area. BirthEd provides high quality childbirth and early parenting education and support to women and their whānau or support people, so they can make safe, well informed choices about the birth of their baby and their parenting. They are based both in the hospital and in the community with courses running from Upper Hutt to Petone, including youth classes at Vibe. Breastfeeding is an important component of BirthEd's nine-week course outline and is taught by breastfeeding specialists. A one-off three-hour breastfeeding course building on the basic information is well subscribed to, and open to antenatal and postnatal women and their breastfeeding support persons. Homebirth as an option is another three-hour add-on course which has had increasing enquiries and attendance. This is run every two months. Baby safety is held monthly on a Saturday afternoon and conveys

important messages including shaken baby prevention, safe sleep, smoking cessation and infant CPR with Red Cross.

The Marae-based antenatal course known as Kaupapa M.A.K.E (Māori Antenatal and Kaiāwhina Education) incorporates pregnancy, birthing and parenting education alongside weaving of a wahakura (safe sleeping device) or a kono. BirthEd works collaboratively with many agencies on this programme, including services from Kokiri Marae such as Hapū Mama and Naku Enei Tamariki.

BirthEd continuously evaluate their courses and changes in this reporting period have been the launch of a course in 2017 called Out of the Blues, to provide information to women and families about antenatal and postnatal anxiety and depression. This has been well subscribed to. Since 20th November, women are now able to book their courses online through the website which has improved the ability of BirthEd to manage the waitlists for each course amongst other advantages the new customer relation programme brings.

In 2017, six-hundred-and-thirty-five women enquired about BirthEd classes, with five-hundred-and-eighty-six actually commencing rate of 78.6%. 94% of attendees were first time mothers and 17% of attendees were under twenty-four years of age.

Table 15: Number of Courses Offered

	2014	2015	2016	2017
Mainstream	19	20	20	19
Youth	6	5	5	4
Mainstream Postnatal	19	20	20	19
Youth Postnatal	6	5	5	4
New Baby	12	11	9	11
Breastfeeding	12	11	12	12
Baby Safety	11	11	8	11
Homebirth Option			3	6
Marae Option			4	2*
Out of the Blues			0	4
TOTAL	**85**	**83**	**86**	**92**

*Course lengthened by 12 hours

Table 16: Attendance by Ethnicity

	2014	2015	2016	2017
African	3	13	8	23
Chinese	36	27	62	42
Pacific Island	41	20	14	10
Indian	33	34	31	62
Māori	64	57	63	41
Middle Eastern	4	2	5	1
NZ European	338	311	284	269
NZE/NZM	40	40	29	17
NZE/Pacific Island	1	3	1	4
NZM/Pacific Island	0	5	1	4
Other European	33	48	57	74
South East Asian	41	27	14	28
Other/Unknown	0	0	0	15
TOTAL	**634**	**587**	**569**	**583**

Parents Centre Lower Hutt

Parents Centre Lower Hutt is one of fifty centres nationwide. Their mission is "positive birth experiences and informed parenting in a community where parents are highly valued and supported in their role." Lower Hutt delivered fifteen antenatal classes and had one-hundred-and-forty-eight couples attend during 2017. There is a charge for these courses. No figures were available from the Upper Hutt branch.

Well Child Tamariki Ora Providers

Plunket

Plunket offers parenting information and support as well as developmental assessments of children. Plunket Registered Nurses provide support through home and clinic visits, mobile clinics and PlunketLine; a free telephone advice service for parents. Plunket also organises parent groups, parenting education, toy libraries, drop in centres and play groups. In the 2015/16-time period, Plunket saw approximately one-thousand-six-hundred new babies in the Hutt Valley. (This figure includes babies moving into the area or born at CCDHB).

Thriving Cores (formerly known as Pacific Health Well Child)

The aim of this service is to support parents and families to ensure that children achieve a strong foundation of health which will lead to overall wellbeing as they grow. Thriving Cores Well Child Tamariki Ora Provider Nurses work around families to ensure that health assessments take place, and are on time according to the Ministry of Health schedule. These can be clinic or home visits. Thriving Cores has also extended to holding clinics after hours (twice a month) and Saturday clinics (once a month) to provide working and studying parents the opportunity to complete the core checks of their whanau. The service works collaboratively with many agencies to ensure that additional support is given where required. Referrals out to other agencies with permission may be made. Other services include support at medical appointments, extra visits and education sessions. Thriving Cores had a name change in 2016, and saw fifty new babies in the Hutt Valley in 2016 with thirty-nine referrals coming from midwives. In 2017, Thriving Cores saw one-hundred-and-thirty-three new babies in the Hutt Valley with one-hundred new referrals coming from midwives.

Tamariki Ora

Tamariki Ora helps provide whānau with the wellbeing of their Tamariki/Children up to age five. The service aims to give children the best start in life with Health and Development Assessments, Whānau Care and Support and Health Education. Visits can take place at home or at Tamariki Ora clinics in Waiwhetu (opposite Waiwhetu Marae), Kokiri Pukeatua, Wainuiomata, Tui Glen School (Koraunui Marae, Stokes Valley) and at the Orongomai Marae Health Clinic, Upper Hutt.

The Tamariki Ora service saw 370 new babies (from 1 July 17 – 1 June 2018) with 20% of referrals from the DHB Primary Midwives Team and 70% from midwife LMCs, and 10% GP and other community groups.

> "Access to so much information and support when in hospital. Lactation, feeding, sleeping etc. Great how the hospital staff ease you into it as much as possible."

Violence Intervention Programme (VIP)

Hutt Valley DHB Violence Intervention Programme (VIP)

- Claire Southward started at HVDHB in September 2017, as VIP Coordinator, and Claire and Lynn O'Toole share the 1.0FTE to implement the Ministry's VIP at HVDHB.
- VIP management is led by Chris Mallon, Service Manager Women & Children's Health Hutt Valley DHB**.**
- VIP Sponsorship: Dale Oliff, our Chief Operating Officer, is the sponsor for the VIP Programme.
- The VIP Advisory Group manages and supports programme implementation. This Advisory group meets quarterly.

Ministry of Health's Family Violence Assessment and Intervention Guideline: Child Abuse and Intimate Partner Violence. 2016

The HVDHB VIP policies for Intimate Partner Violence and Child Abuse and Neglect Management have been revised to align to the Ministry of Health (MoH) *Family Violence Assessment and Intervention Guideline* (2016).

Violence Intervention Programme Training

The VIP core eight hour VIP training package has been updated to align to the MoH *Family Violence Assessment and Intervention Guideline* (2016). The annual VIP Training Plan will focus on bridging training where VIP has already implemented VIP, refresher training for staff in the designated areas and the development of the clinical champions in each of the designated services where VIP has been implemented.

Training dates are advertised on the HVDHB intranet and the Huttmaternity Internal fortnightly newsletter.

National Child Protection Alert System

In December 2014, Hutt Valley DHB was the ninth DHB approved to lodge alerts using the National Medical Warning System. Child protection alerts can be placed on the mother's file antenatal. The alert appears as *CHILD PROTECTION CONCERNS* CONTACT HVDHB. The alert can transfer to the child's file when the baby is born and their NHI number is generated. Multi-Disciplinary Team (MDT) review of antenatal alerts occurs within six weeks of the birth. One-thousand-two-hundred-and-ten Child Protection Alerts are currently loaded by HVDHB on the National Child Protection Alert System.

Evaluation and Monitoring

As part of the ongoing evaluation and monitoring, VIP completes quarterly clinical audits in the designated services where routine enquiry for intimate partner violence is expected. In maternity service, there have been quarterly audits commenced since 2016.

The antenatal screen audit results range from 37%-66%.

Power to Protect (formerly known as Shaken Baby Prevention Programme)

Approval and implementation of the Power to Protect (formerly known Shaken Baby Prevention Programme) Project in June 2016 commencing with identified project lead, Registered Midwife, Abby Hewitt. It was launched on 26 May 2016 with a two-hour Train the Trainer session held on the same day. Quarterly auditing has occurred since as part of the VIP Clinical Audits. The audit results have improved from 10% in March 2016 to 48% in the latest audit in July 2017.

Vulnerable Women and Unborn Baby Group

Hutt Valley DHB implemented a Vulnerable Women and Unborn Baby (VWUB) Group in 2012 to identify vulnerable pregnant women and to strengthen collaborative support for these women and their families. This multi-agency group continues to meet fortnightly.

External DHB members include: Police Family Safety Team members, Oranga Tamariki DHB Liaison Social Worker, Naku Enei Tamariki (NET) Early Intervention Service Manager, Kokiri Marae, Whānau Ora, Social Services Manager, Well Child Tamariki Ora Providers and a Vibe Youth Health Service senior nurse clinician.

Minutes are recorded at each forum with updates and actions related to each woman who is discussed by the group. A virtual event is created on WebPAS for data purposes. If there is child protection concerns and the case is open with Oranga Tamariki, a Child Protection multi-disciplinary team summary is completed on concerto. LMC's are welcome to attend the regular forum and LMC's can contact the Violence Intervention team and/or a Oranga Tamariki DHB Liaison Social Worker.

From this clinic data there has been an increase from referrals in 2014 and 2015: eighty-five and eighty-eight respectively. In 2016, one-hundred-seventy-one women were referred and one-hundred-fifty-seven new referrals were received in 2017. The group are planning to adopt the national Maternal Care Child Protection and Wellbeing toolkit in the forthcoming year which will improve communication for LMC and Primary Care.

Table 17 and 18: Referral Source and Ethnicity of Women Referred to VVUB

2017 Referral Source	
CCDHB	3
Corrections	1
CYF/Oranga Tamariki	22
HVDHB	7
LMC	6
Maternity	38
MAU	4
Police FST	59
Social Worker	9
Soma Medical Centre	1
Tairawhiti DHB	1
Te Mahoe Unit	2
VIBE	3
Wairarapa DHB	1

Ethnicity	
Chinese	1
Cook island Māori	2
Fijian	2
Indian	1
NZ Euro	53
NZ Māori	86
Other Asian	1
Other Euro	3
Samoan	7
SE Asian	1

There has been no formal data collection of the interventions or evaluation of our interventions and outcomes for the woman and children referred to the VWUB Group. This data can be collected retrospectively for future evaluation.

The VWUB group 2017 milestone was to implement the national Maternity Care, Wellbeing and Child Protection resource toolkit by December 2017 at HVDHB. This expectation was not met and a dedicated meeting is planned to achieve this milestone by late 2018 and allocate resource to roll out the toolkit.

Oranga Tamariki – (formerly known as Child, Youth and Family (CYF) Liaison

The Hospital Liaison Social Worker role provides a link between the DHB and Oranga Tamariki/CYF. The role involves working collaboratively with health professionals and police to ensure quality service delivery to children and young people who present to the DHB with child protection concerns. The Oranga Tamariki/CYF Liaison ensures that a multi-agency safety plan is put in place for all children and young people admitted to Hutt Valley DHB who are suspected of, or confirmed as having a non-accidental injury. Additionally, the role works collaboratively with hospital personnel to enhance earlier identification of children at risk of child abuse and neglect.

The two key objectives of the Hospital Liaison Social Worker are:

- Ensuring that OTMC and DHB work together for all children when there are care and protection concerns.
- The early identification and appropriate response for children at risk of abuse and or neglect. This includes risk to unborn babies.

The Hospital Liaison Social Workers role is to:

- Build strong functional working relationships across the DHB and promote collaborative practice.
- Be the Oranga Tamariki/CYF liaison point within the DHB.
- Be available to share information and child protection expertise with DHB staff.
- Provide support and liaison for DHB staff to ensure that children and young people admitted with child protection concerns receive a quality service from Oranga Tamariki/CYF.
- Be a first point of contact for advice on working with the DHB. They will support and guide staff when they need assistance. For example, if you need help with developing a multi-agency safety plan, or advice on how to work through an issue that has arisen with a particular case involving the DHB.
- Be available to work with Oranga Tamariki/CYF and DHB staff to resolve interagency issues or disputes.

Women's Health Social Worker

The Hutt Valley DHB Social Work Department provides social work service to both inpatients and outpatients who are experiencing health-related difficulties. Social workers advocate for and assist patients to access services or support within the hospital or in the community to maximise independence, wellbeing and coping abilities.

Our women's health social worker will work with and for the vulnerable pregnant women and infants in our community to focus on the safety and wellbeing of both. Our services can also provide support with adjustment to changes in physical health, mood and maternal mental health or pregnancy/birth-related difficulties.

Maternal and Early Child Health Provider Group (MECH)

The new Maternal and Early Child Health Provider Group has met twice in 2017 since it started mid-way through last year. The group representation from maternity (both provider arm service and community lead maternity carers), general practice, Well Child Tamariki Ora (WCTO) services, Nāku Ēnei Tamariki, Kokiri, HVDHB Violence Intervention Programme, Central Regions Technical Advisory Service (Central TAS), lactation consultant and Te Awakairangi Health Network membership.

The purpose of the group is to oversee the implementation of the region's agreed Sudden Unexpected Death in Infancy Prevention Programme, WCTO quality improvement programme, WCTO vulnerable children's work, newborn enrolment and other key maternal/child health priorities. The main focus of the group recently has been to oversee the planning and implementation of the region's Sudden Unexpected Death in Infancy (SUDI) Prevention Programme.

Sudden Unexplained Death in Infancy (SUDI)

There has been recent funding provided from the Ministry of Health for SUDI prevention services and enhancements for the next three years. The funding followed the government's announcement in June 2017, that they will take steps to reduce SUDI. A national SUDI coordination provider (Hapai Te Hauora) has been appointed. There has been a central coordinator employed by Central TAS. A regional plan has been developed with the focus on safe sleeping and support for programmes to prevent SUDI. A local coordinator employed by a community provider will oversee the programme, training and development, consistent messaging and wahakura/pepipod distribution to providers. As funding has been given for three years this allows space for reviewing and developing the model to achieve best outcomes for at risk whānau. This programme will start on 1st April 2018.

Maternal Mental Health

The Specialist Maternal Mental Health Service (SMMHS) is a community-based, tertiary mental health service. The focus is on providing support for women and babies within the Hutt Valley, Kapiti and Wellington areas.

Referrals for women living in the Hutt Valley can be made through Te Haika (mental health intake centre) on 0800 745 477.

Referrals can be made by a woman's midwife, GP or other health professional. Criteria for referral is women who are pregnant or post-partum with an infant up to twelve months; who are experiencing a moderate to severe mood disorder/mental illness; this may be new onset, or previous history re-triggered in the perinatal period. Women with an existing mental illness requiring consultation or advice related to conception or pregnancy can also be referred. Women who have miscarried or do not have the care of their child, or who are already being supporting by another mental health team do not come under this service.

The SMMHS also provides consultation and education support to all DHBs in the Central Region. This can include virtual MDT meetings, case consultations, service development support, and workshops.

The SMMHS service works closely with other health and social service providers who support women, babies and families. Wherever possible they support and promote education and awareness about perinatal mental illness.

A 4-Box Referrers Guide has been created to support health professionals with decisions around support for women needing support in the perinatal period. Health professionals can access referral information and advice on Health Pathways, with the Maternal Mental Health Pathway having been completed and convers information which serves our three DHBs. A consumer patient information sheet "Caring for pregnant women, postnatal mothers & babies and their families/whānau" has been produced along with a service information pamphlet.

"Multidisciplinary approach to our pregnancy, birth etc. Working with all teams to get the best care for our beautiful baby and having the delivery we wanted."

Maternity Acupuncture Clinic

The maternity acupuncture service opened in 2008 and has now been operating within the Hutt Valley Hospital outpatient department for ten years. This clinic provides free acupuncture care for pregnancy and postnatal related conditions.

This is the first, and to date only, clinic of this type within a New Zealand hospital. This clinic is managed by the New Zealand School of Acupuncture and Traditional Chinese Medicine (NZSATCM). Women access this outpatient's service directly, making an appointment through maternity administration staff. Treatment rooms are provided two afternoons a week for the school teaching year which is thirty weeks. NZSATCM fourth year acupuncture students provide treatment under supervision of professionally registered acupuncturists experienced in pregnancy related care. All women sign consent forms for treatment and data collection.

Number of Women Treated and Referral Pathways

The clinic been providing treatment for 120 – 130 women per year bringing the total number to over one thousand women in the past ten years. The main referral to the clinic is through midwives acting as Lead Maternity Carers (LMCs) recommending women to make an appointment.

Treatment Delivered

The majority of women present for treatment of lumbo-pelvic pain (LPP) – a term that includes back and pelvic and hip pain, and labour preparation. A range of other treatments are delivered that include treatment for nausea, heart burn, headaches or migraines, emotional concerns, insomnia and varicosities (which includes women presenting for treatment of vulval varicosities, varicose veins and haemorrhoids), blood pressure problems, rib, abdominal and neck pain, carpal tunnel, anaemia, hay fever, sinus and bleeding in pregnancy. Further details relating to these treatments have been reported as observation studies (Betts, McMullan, & Walker 2016; Soliday & Betts, 2018).

Patient Feedback and Adverse Events

Since 2016, all women receiving three or more treatments have been asked to complete an anonymous feedback form on their third visit to identify any concerns about the treatment they received. This form asks for comments about what had been beneficial or, not beneficial and if they have experienced any uncomfortable pain at needle site, bleeding or bruising from treatment, felt faint during or after treatment, had symptoms that became worse or had any other concerns. The only reported events have been minor with the majority involving pain or bruising at needle site with women leaving comments indicating that they did not view these

events as detracting from an overall positive treatment experience (Soliday & Betts, 2018).
At the time of writing this report it can be confirmed that this clinic continues to operate as a free outpatient service at Hutt Valley hospital. Data collection continues for future reporting.

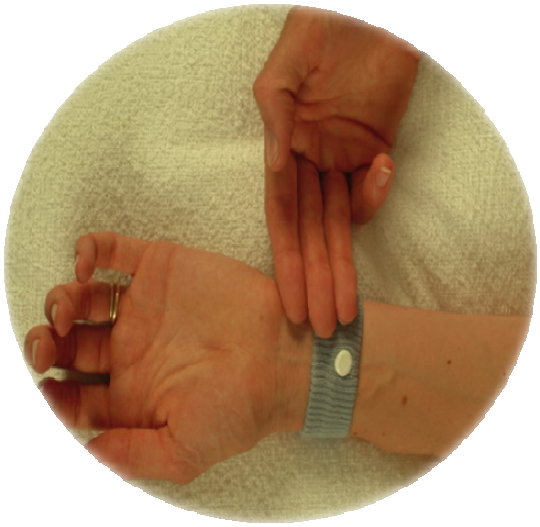
Our thanks to Debra Betts for providing the above information. Debra, alongside her qualifications as RN, BHSc (Ac), PhD, is an Adjunct Fellow at the National Institute Complementary Medicine, Western Sydney University and Supervisor Hutt Hospital Maternity Acupuncture service.
http://www.acupuncture.ac.nz http://acupuncture.rhizome.net.nz

References

Betts, D., McMullan, J. & Walker, L. (2016). The use of maternity acupuncture within a New Zealand public hospital: Integration within an outpatient clinic. *New Zealand College of Midwives Journal, 52*: 45-49
Soliday E, Betts D. (2018). Treating Pain in Pregnancy with Acupuncture: Observational Study Results from a Free Clinic in New Zealand. *J Acupunct Meridian Stud*,11(1):25-30.doi: 10.1016/j.jams.2017.11.005.

"Thanking staff for the support and the different services that are available including acupuncture for pre-natal services."

"Pregnancy rash relieved and helps with back pain, nausea/acid reflux – really good experiences and helped me through the pregnancy a lot. Hope to get extended treatment and come back for postnatal too."



Physiotherapy Services

There is an allocated Women's Health Physio working across the Obstetrics and Gynaecology department five days a week, at 0.8 FTE. This covers both inpatient and outpatient physiotherapy services. Inpatient services include seeing the majority of women who have undergone caesarean section. Our physiotherapist also runs a free Antenatal Stretch Class once a week.

Common reasons for antenatal referral include abdominal, back and/or pelvic pain, carpal tunnel syndrome and pelvic floor disorders. Postnatally, women are referred for pelvic floor issues, third-degree perineal tears and pelvic/back pain. Anecdotally our physio has noticed an increase in referrals due to perineal tears graded third or fourth-degree. This correlates with our increased rates see pg. 62 for clinical indicators 6-9.

Table 19: Physiotherapy Outpatient events (Antenatal and Postnatal)

	2017
Antenatal	101
Stretch Class	186
Postnatal	40
Perineal tears	53
Total	380

"I particularly loved that I was surrounded by young women - midwife, registrar, intern and anaesthetist. They were a fantastic team that kept the mood positive throughout the birth."

Section Four: Maternity Services Clinical Outcomes 2017

The New Zealand Maternity Clinical Indicators

The New Zealand Maternity Clinical Indicators show key maternity outcomes for each DHB region and maternity facility.

The purpose of the New Zealand Maternity Clinical Indicators is to:

- Highlight areas where quality and safety could be improved at a national level.
- Support quality improvement by helping DHBs to identify focus areas for local clinical review of maternity services.
- Provide a broader picture of maternity outcomes in New Zealand than that obtainable from maternal and perinatal mortality data alone.
- Provide standardised (benchmarked) data allowing DHBs to evaluate their maternity services over time and against the national average.
- Improve national consistency and quality in maternity data reporting.

The New Zealand Maternity Clinical Indicators are evidence-based and cover a range of procedures and outcomes for mothers and their babies. Where possible, the New Zealand Maternity Clinical Indicators are aligned with international maternity indicators to enable international comparison. For the purposes of this report, we have produced data based on the Ministry of Health's (MOH) 20 New Zealand Maternity Clinical Indicators and commented on those where we are outliers compared to other DHB's.

Huttmaternity Data

The data has been sourced from Hutt Valley DHB events, stored in the Hutt Patient Management System (WebPAS) and the Huttmaternity Database (Concerto), and has been extracted from the National Minimum Dataset (NMDS) and coded using ICD-10-AM-v6.

MOH produce New Zealand Maternity Clinical Indicator reports annually, but are two years behind in the data they provide. We have developed an internal data report based on the above system that enables us to look at our data from the previous year in order to react more responsively, instigating audits and changes in clinical practice. We have retrospectively compared our reporting to that in the New Zealand Maternity Clinical Indicators to assess for major inconsistencies.

The data in this report is based on births at our facility and does not include homebirths, or births by women from Hutt Valley DHB domicile who birth at other facilities. Due to this there will always be a slight difference in what is within our report and that of the MOH report.

During the compilation of this report we continue to have been confronted with a number of data integrity issues. We will continue to work on this and have put this report together to the best of our ability

See Appendix One for 2017 Maternity Clinical Indicator description.

Maternity Clinical Indicators

Indicator One: Registration with a Lead Maternity Carer in the first trimester of pregnancy (by facility)

We are pleased to report an increase in the percentage of women who registered with a Lead Maternity Carer in the first trimester, from 64.1% in 2015 to 68.9% in 2016. This figure (68.9%) is closer to the national average (72%) than previous years.

The collaboration with our local provider Te Runanganui o Te Atiawa is an initiative to encourage early engagement with a LMC through an accessible community based drop in clinic. (see pg. 106 for more detail) and would need further evaluation as to the contribution this may have made to improving the registration.

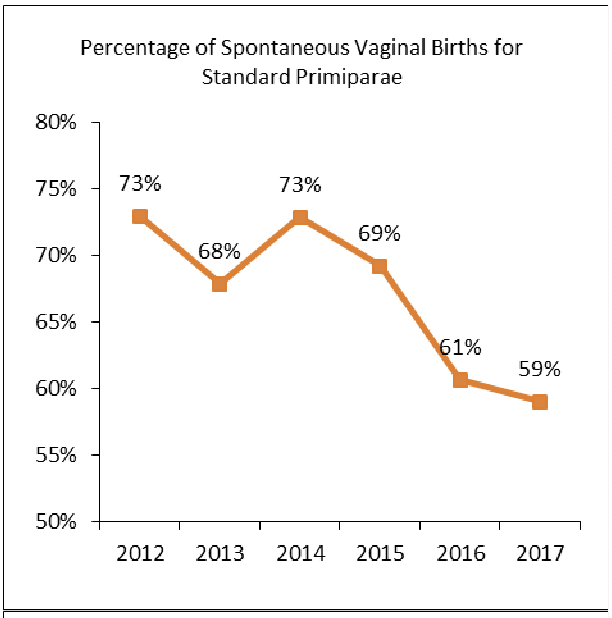
We have continued to work with MOH to provide data for women under DHB care via the Primary Maternity Data Collection System. Gestation at registration for women with a LMC is not collected at a local level. We hope to improve our data collection in this regard.

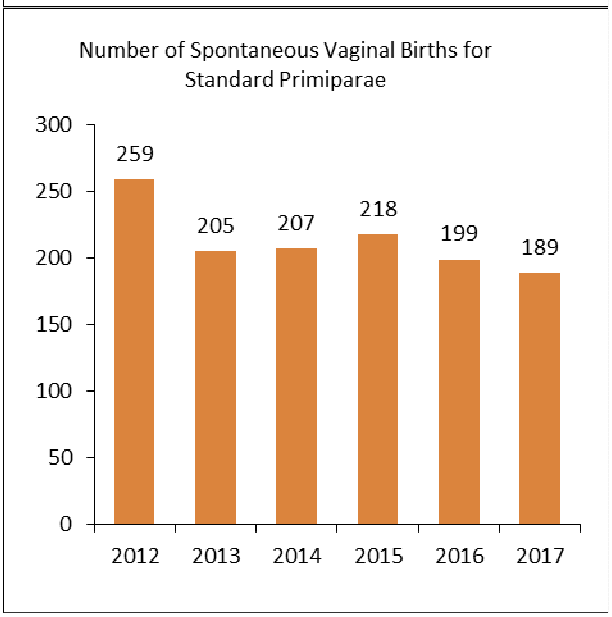
Table 20: Registration with LMC in First Trimester by % (by facility)

	2012	2013	2014	2015	2016
Huttmaternity	55.9%	52.6%	60.1%	64.1%	68.9%
Secondary and Tertiary Facilities	64.2%	65.6%	68%	70.3%	72.3%
National	63.5%	64.9%	67.7%	70%	71.9%

Numerator: Total number of women who register with a LMC in the first trimester of their pregnancy.
Denominator: Total number of women who register with a LMC.

Indicator Two: Standard Primiparae who have a spontaneous vaginal birth (by facility)

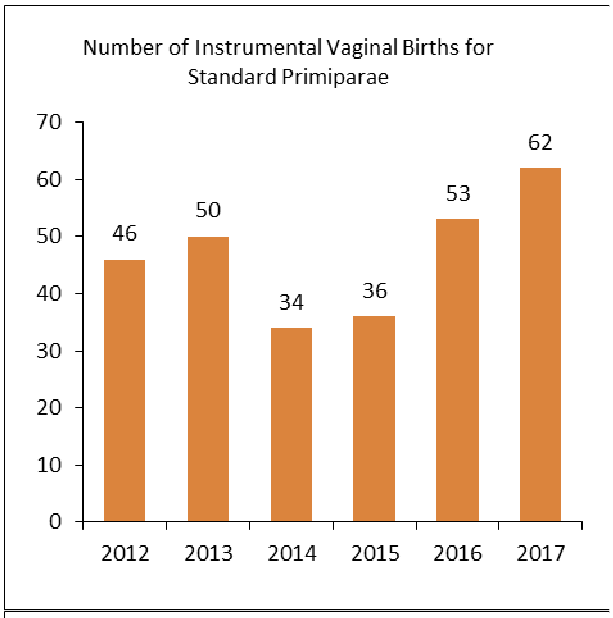


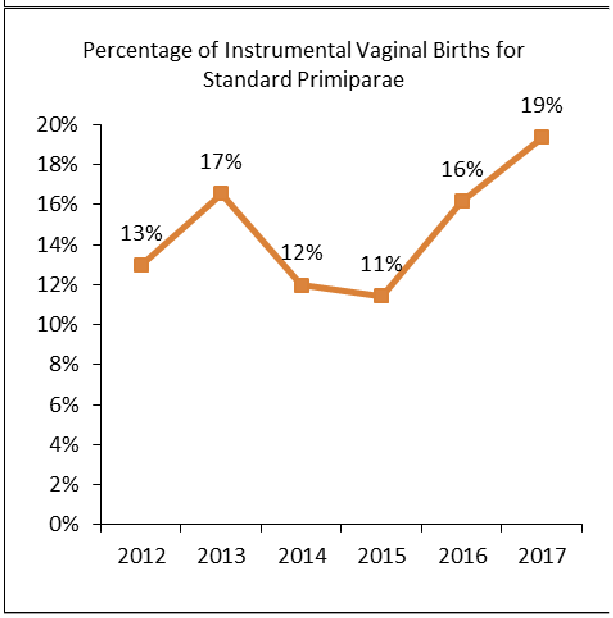


Numerator: Total number of standard primiparae who have a spontaneous vaginal birth at a maternity facility.
Denominator: Total number of standard primiparae.

Comment:
The National rate for standard primiparae spontaneous vaginal birth in 2016 was 62.7% for all secondary and tertiary facilities. The Hutt DHB had a rate of 61% (by facility) in 2016. Our data for 2017 suggests that our rates of spontaneous vaginal birth in the standard primaparae has further declined to 59%. To investigate this decline we have conducted an initial multi-disciplinary audit of our C/S in the standard primiparae (see Appendix Five) that will inform further workstreams to increase our understanding of these statistics and guide us towards specific remedial interventions.

Indicator Three: Standard Primiparae who undergo an instrumental vaginal birth (by facility)

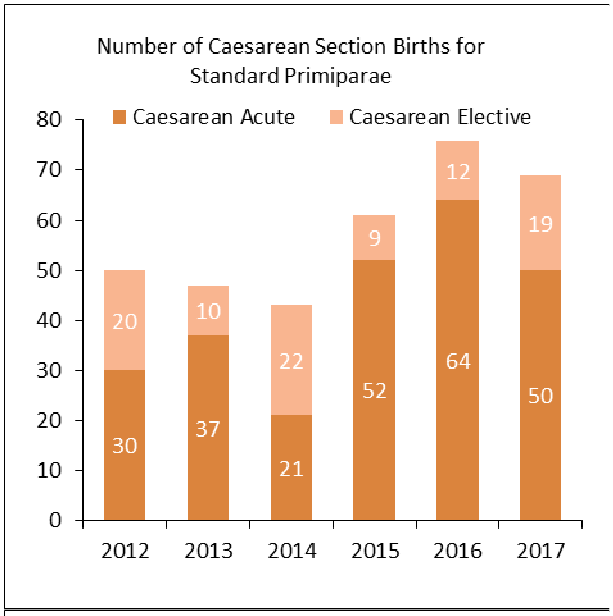


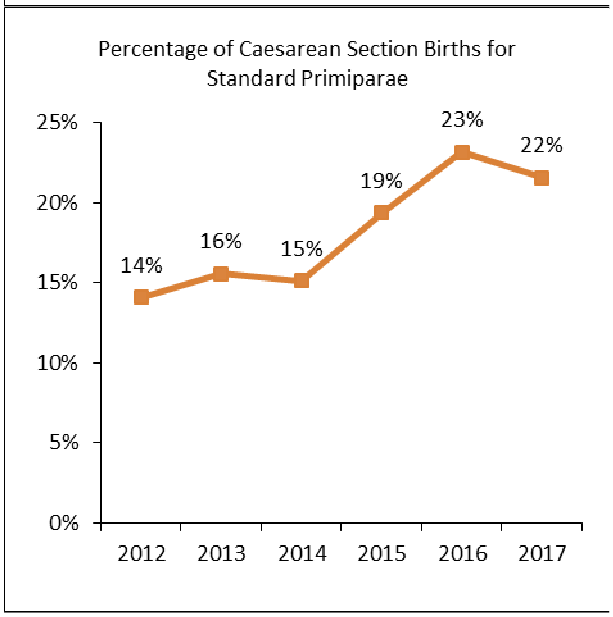


Numerator: Total number of standard primiparae who undergo an instrumental vaginal birth.
Denominator: Total number of standard primiparae.

Comment:
The National rate for standard primiparae undergoing an instrumental vaginal birth in 2016 was 15.9% (by facility), and 18.9% for all Secondary and Tertiary Facilities. In comparison, the Hutt Valley DHB had a rate of 15.7 % (by facility) in 2016. While this is under the rate for all secondary and tertiary facilities, trends in data collection including 2017 suggest that our rates of instrumental vaginal birth have increased. Work to explore the relationship with our perineal trauma, induction of labour and caesarean section rates is being continued in this reporting period.

Indicator Four: Standard Primiparae undergoing caesarean section (by facility)





Numerator: Total number of standard primiparae who undergo caesarean section.
Denominator: Total number of standard primiparae.

Comment:
The national rate for standard primiparae undergoing caesarean section in 2016 was 15.9% (by facility), and 19% for all secondary and tertiary facilities. This shows a small increase nationally however in the same year Hutt Valley DHB had a rate of 22.8% (by facility) showing an increase from the rate of 19.5% in 2015. Our 2017 data collection suggests a slight drop to 22%, however we are still outliers based on this data set.

To investigate this and take remedial action, we have commenced a multi-disciplinary audit of caesarean sections undertaken on standard primiparae within the context of a Plan, Do, Study, Act (PDSA) improvement methodology. Please see Appendix Five for findings. As part of this audit, indications for standard primiparae

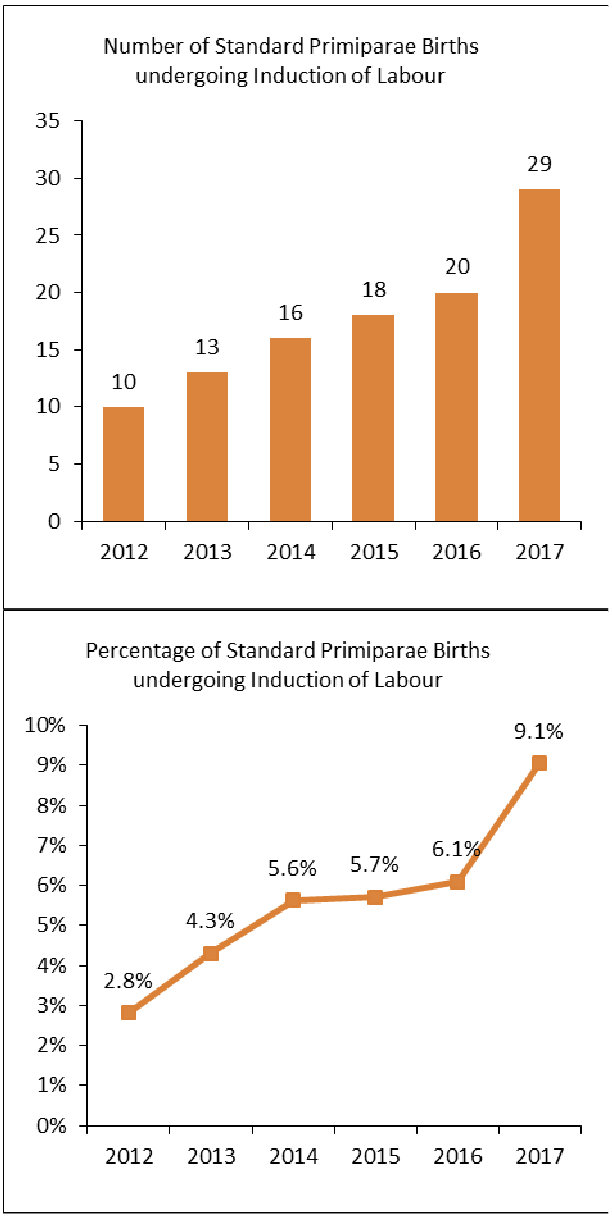
undergoing elective caesarean sections was considered and findings will inform our overall work on caesarean review.

This revealed miscoding of 11 (placenta previa and previous medical/surgical history). The audit has provided further insight into our data integrity issues which will become part of a larger piece of work.

Table 21: Indication for Standard Primiparae Undergoing Elective Caesarean Section

	No.
Placenta previa	6
Breech presentation	3
Previous medical/surgical history	5
Mental health (severe) circumstances	1
Large for gestational age	1
Maternal request	3
Total	19

Indicator Five: Standard Primiparae who undergo Induction of Labour (by facility)



Numerator: Total number of standard primiparae who undergo induction of labour.
Denominator: Total number of standard primiparae.

Comment:
Data from the 2016 clinical indicators show the national rate of standard primiparae women undergoing induction of labour at 6.3% and 7.3% for all secondary and tertiary facilities. The Hutt Valley DHB rate has significantly increased from 6.1% in 2016 to 9.1% in 2017. We are awaiting the release of the maternity clinical indicator data for 2017 to put this increase in the context of national data. Until this time, as part of our overall review of caesarean sections, a review of reasons for induction for standard primiparae (29 recorded) will be undertaken as 28% had an emergency caesarean.

In order to understand our increasing induction of labour rate for the standard primiparae, we will also try to ensure our coding of standard primiparae is correct and inductions are properly distinguished from augmentations. We can then benchmark the definitions we use with other DHBs.

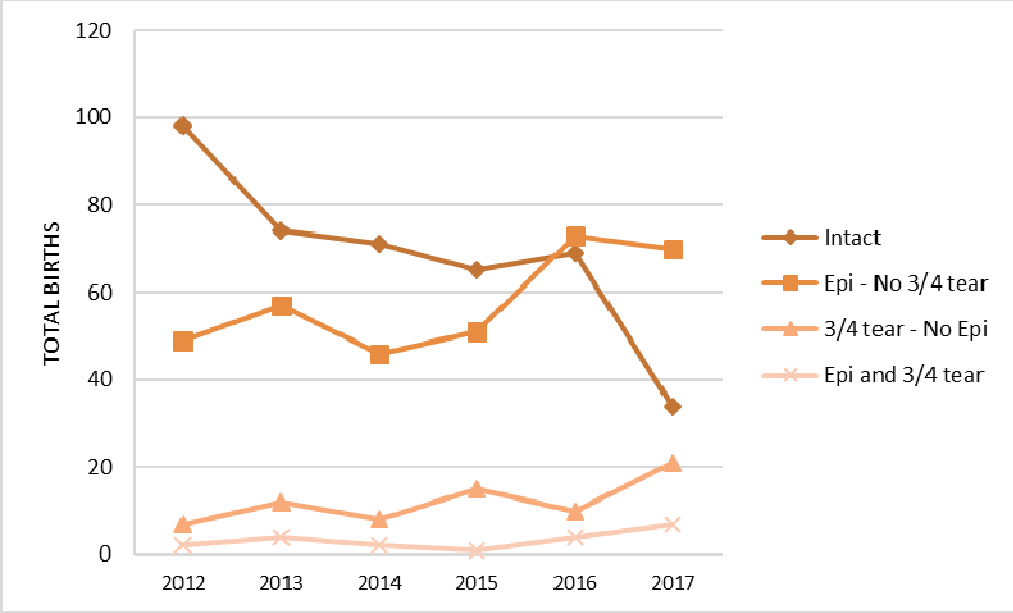
Table 22: Methods of Induction of Labour 2017 Standard Primiparae (by facility)

Method Induction	Number	Comment
Medical with prostin	4	All had factors excluding from standard primiparae definition due to existing history. All had emergency caesareans.
Medical with oxytocin	3	All labours spontaneous onset.
Surgical by artificial rupture of membranes	6	5 labours spontaneous onset 1 for IOL.
Medical and surgical	14	x 1 exclusion of std primiparae for medical history. x 3 coded this but no prostin used.
Wrongly coded	2	Discovered on audit.
TOTAL	**29**	

Indicators Six to Nine: Perineal Outcomes

Figure 15 presents an overview of the MOH New Zealand Clinical Indications 6 – 9, around perineal status at delivery for Standard Primiparae. This includes intact lower genital tract, episiotomy with no third or fourth-degree tear, third or fourth-degree tear with no episiotomy and those with both episiotomy and third or fourth-degree tears.

Figure 8: Overview of Perineal Status for Standard Primiparae women (by facility)

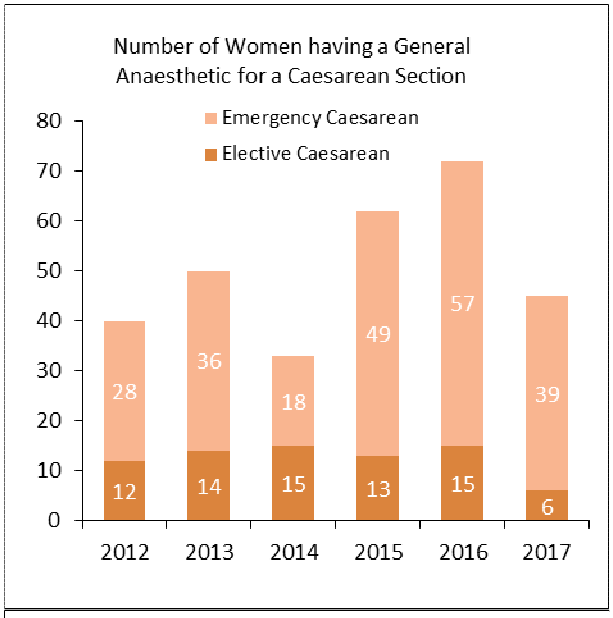


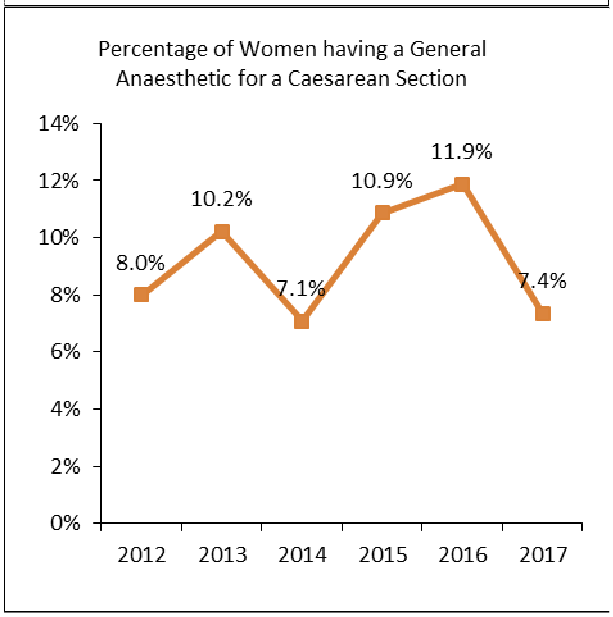
Comment:
Hutt Valley DHB continue to be benchmarked as outliers compared to the median rate of other DHBs for these indicators with our intact lower genital rate for standard primiparae showing a significant decrease from 27% in 2016 to 14% in 2017 (Indicator 6). There is a significant continued increase in our overall use of episiotomy at 28% in 2017 which is slightly above the national rate for all secondary and tertiary facilities (27.4%) and cannot wholly be explained by our increased instrumental delivery rate.

Standard primiparae sustaining a third-degree tear or fourth-degree tear (without episiotomy) rates have increased significantly from a rate of 4.0% in 2016 to 8.4% in 2017. Of all births, 3.5% sustained a third-degree tear, and this accounted for the greatest increase in severe tears, as fourth degree tears have decreased from 1.6% in 2016 to 0.32% for all births in 2017. A further 2.8% of all standard primiparae women birthing in 2017 sustained a third or fourth-degree tear with episiotomy. We are awaiting the release of the maternity clinical indicator data for 2017 to put our performance in national context.

Given the persistence of poor perineal outcomes, we will need to continue to investigate these outcomes and develop specific, improvement interventions.

Indicator Ten: General anaesthesia for all Caesarean sections (by facility)





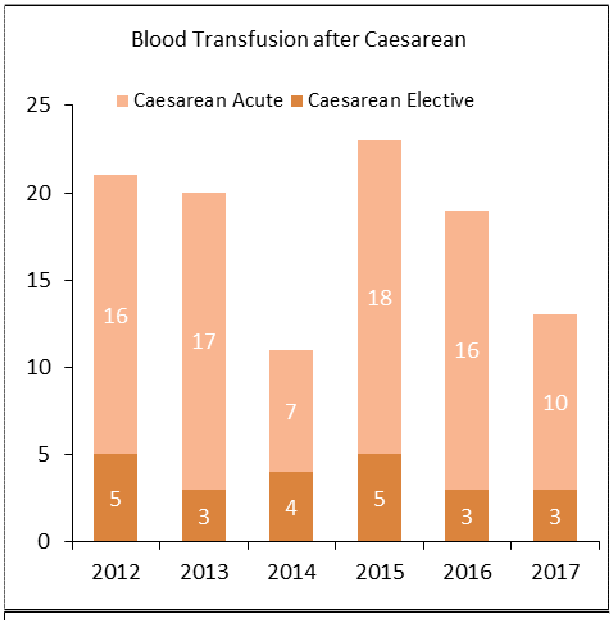
Numerator: Total number of women having a general anaesthetic for a caesarean section.
Denominator: Total number of women who undergo caesarean section.

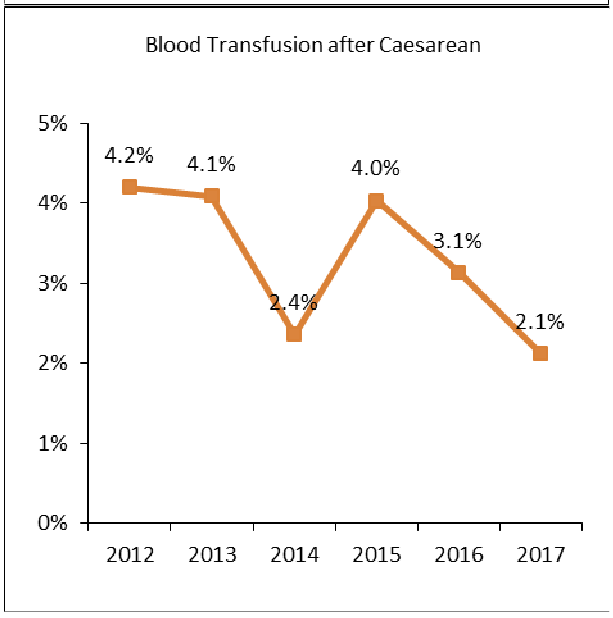
Comment:
Our rates of caesarean sections under general anaesthetic have decreased significantly in 2017, however we remain outliers for this indicator when compared with other DHBs for the most recent clinical indicator data. The national rate by facility of birth for secondary and tertiary units in 2016 was 8.5% compared to our rate of 11.9%. We are awaiting the release of the maternity clinical indicator data for 2017 to put our performance in national context.

Recommendations from an audit on caesareans converting from regional to general anaesthetic in 2015 included better clinical management of epidurals, earlier communication and improved pre-assessment of women in the birthing suite. Patient-controlled epidural analgesia pumps were going to be introduced to our unit

in 2017. However, this has been postponed to 2018 to enable workforce training and a proper rollout of this change in practice. Plans are being made to evaluate the introduction in 2018 in the context of reducing general anaesthetics for caesarean section. Of note in 2017, was the reduction in use of general anaesthesia for elective caesareans from fifteen to six cases in 2017. A multi-disciplinary audit of our standard primiparae caesarean sections was undertaken to address our increasing overall caesarean section rate including those under general anaesthetic. (see Appendix Four for findings)

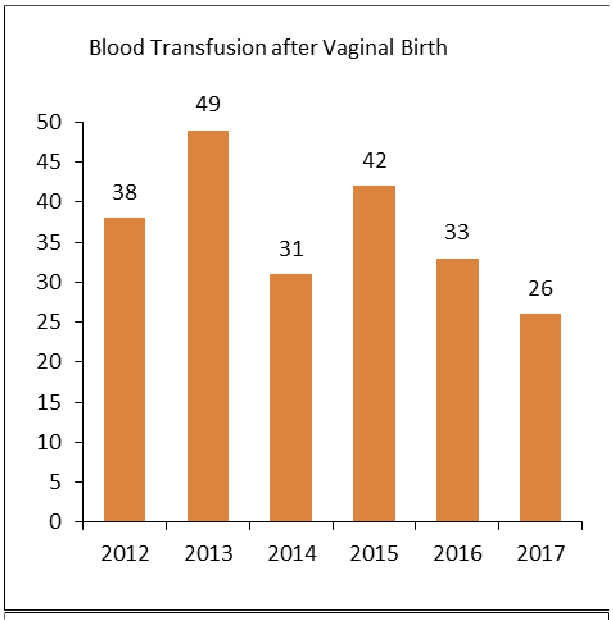
Indicator Eleven: Women requiring a blood transfusion with Caesarean Section (by facility)

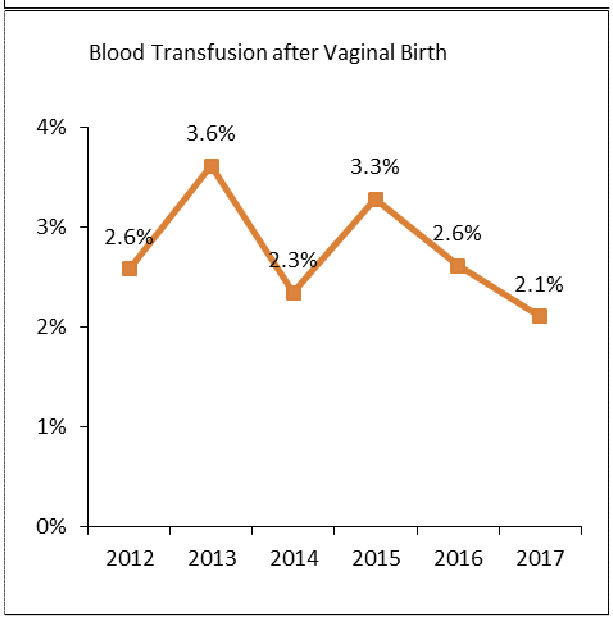




Numerator: Total number of women requiring a blood transfusion with caesarean section.
Denominator: Total number of women who undergo caesarean section.

Indicator Twelve: Women requiring a blood transfusion with Vaginal Birth (by facility)





Numerator: Total number of women requiring a blood transfusion with vaginal birth.
Denominator: Total number of women who give birth vaginally.

Comment:

Our rates of blood transfusions required with both caesarean and vaginal births (2.1% and 2.1% respectively) have shown a decline since 2016. Carboxymaltose is given in the HVDHB Medical Day Stay Unit. A business case submitted to enable administration in the maternity unit was put forward to allow for opportunistic transfusion for those women who are not well engaged with care. The results of this are still pending.

Indicator Thirteen: Diagnosis of Eclampsia at birth admission (by facility)

Data provided by Ministry of Health from the New Zealand Maternity Indicators state there were no women diagnosed during labour in 2016 and this is the same as the aggregated rate for all secondary/tertiary figures.

Table 23: Diagnosis of Eclampsia at birth admission

Rate (%)

Facility	2012	2013	2014	2015	2016
All secondary/tertiary facilities	0	0	0	0.1	0
Hutt	0	0	0	0.1	0

Numerator: Total number of women diagnosed with eclampsia during birth admission.
Denominator: Total number of women giving birth.

Indicator Fourteen: Women having a peripartum hysterectomy (by facility)

There were no women who had a peripartum hysterectomy at Huttmaternity Facility for 2016. This is the same aggregated rate for all secondary/tertiary figures.

Table 24: Women having a peripartum hysterectomy

Rate (%)

Facility	2012	2013	2014	2015	2016
All secondary/tertiary facilities	0.1	0	0.1	0.1	0
Hutt	0.1	0	0	0.1	0

Numerator: Total number of women having an abdominal hysterectomy within six weeks after birth.
Denominator: Total number of women giving birth.

Indicator Fifteen: Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period (by facility)

Ministry of Health have provided data and there were no women requiring mechanical ventilation during the pregnancy or postnatal period in this reporting timeframe of 2016.

Table 25: Women admitted to ICU and requiring ventilation during the pregnancy of postnatal period

Rate (%)

Facility	2012	2013	2014	2015	2016
All secondary/tertiary facilities	0	0	0	0	0
Hutt	0	0.1	0	0	0

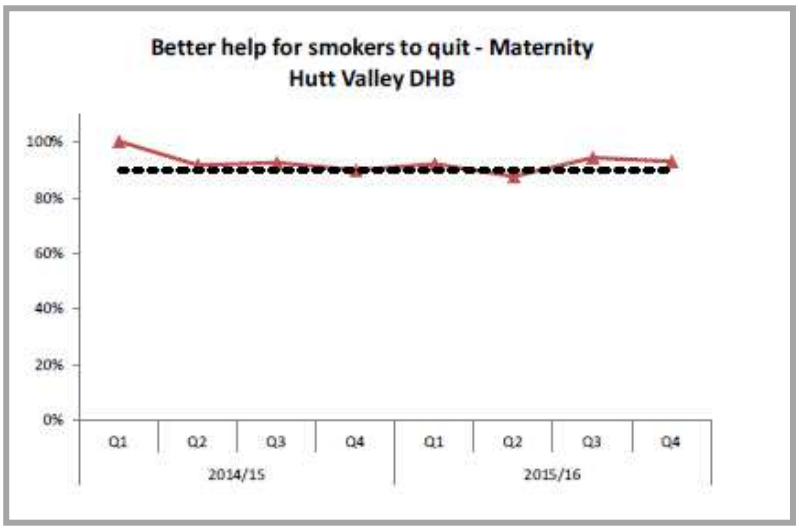
Numerator: Total number of women admitted to ICU and requiring over 24 hours of mechanical ventilation during admission anytime during the pregnancy or postnatal period.
Denominator: Total number of women giving birth.

In 2017, thirteen women were admitted to ICU with none of them being ventilated.

Indicator Sixteen: Maternal tobacco use during postnatal period (by facility)

Both coded data and MMPO data show that LMCs and core midwives are consistent in asking women delivering in Hutt Hospital about smoking status and offering quit advice. Better help for smokers to quit was one of the Minister's Health Targets as outlined in the HVDHB Annual Report 2016. Results indicate the target of 90% was exceeded at 93%.

Figure 9: Better help for smokers to quit – Maternity Hutt Valley DHB



Source: Hutt Valley District Health Board Annual Report 2016 pg. 12.

Table 26: Smoker at time of Birth by %

Delivery Year	Māori	Pacific	Asian	Indian	European	Other	Not Stated	All ethnicities
2013	43	13	1	1	11	0	25	16
2014	38	11	0	0	9	0	11	13
2015	40	9	0	0	11	3	0	15
2016	42	13	0	1	9	0	0	15
2017	33	13	0	0	9	5	0	13

Table 27: Maternal tobacco use during postnatal period (2 weeks after birth), by facility

	2013	2014	2015	2016
Our rate %	11.3%	10.2%	11.4%	9.5%
All Secondary and Tertiary Facilities	12.6%	11.0%	11.3%	11%
New Zealand	13.5%	12.8%	12.0%	11.7

Numerator: Total number of women identified as smokers at 2 weeks after birth.
Denominator: Total number of women with smoking status at 2 weeks after birth reported.

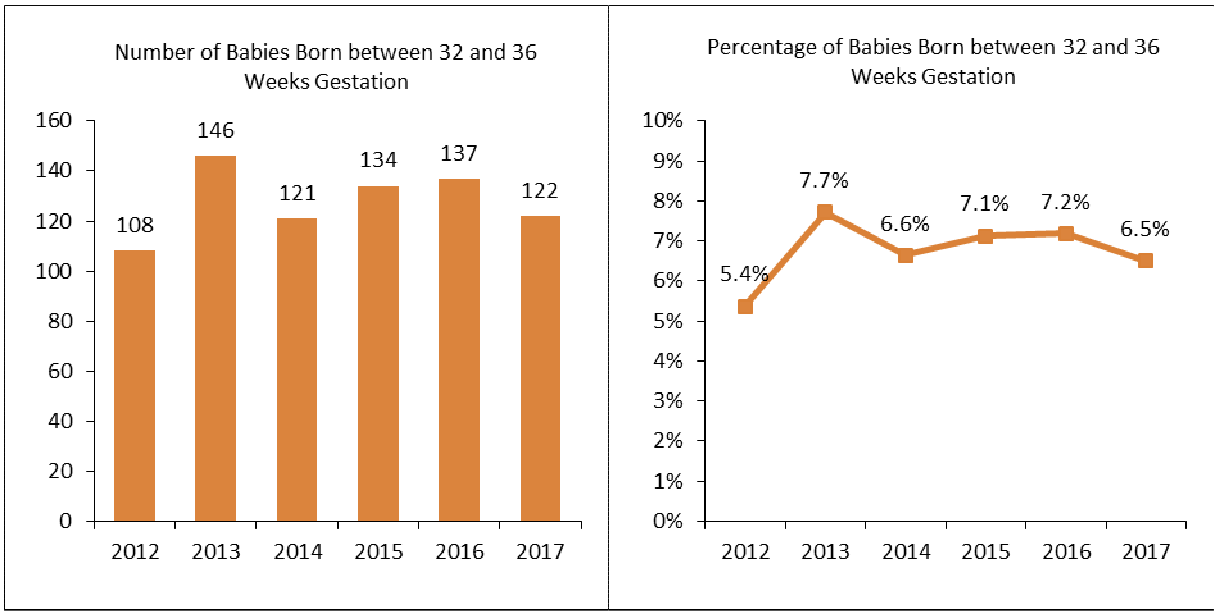
Comment:
Data on smoking status at discharge from this facility is collected. (Table 27)

This is only data for DHB employed midwives providing pregnancy care.

At a National level MOH introduced a Key Performance Indicator, maternal tobacco use during postnatal period, into the New Zealand Maternity Clinical Indicators for 2012. This provides data on smoking status at two weeks following birth, for those women registered with an LMC. It does not currently include women who receive DHB funded Primary Care. The most recent data (2016 NZ Clinical Indicators) shows this rate at 9.5%, which is below the national average of 11.7% and is tracking downwards. Of note too, is our decrease in women identifying as Māori smoking at the time of birth from 42% to 33 %.

However, if women registered with the DHB Primary Midwives team (PMT) were included in this national data, then our rates would likely be higher as the caseload of our PMT is over-represented with women who are smoking on discharge.

Indicator Seventeen: Preterm birth (by facility)



Numerator: Total number of babies born under 37 weeks gestation.
Denominator: Total number of babies born (live births).

Comment:
In 2012, this indicator was further broken down to <32 weeks and 32-36 weeks in the New Zealand Maternity Clinical Indicators. Our above figures do not include the <32 week figures as these babies would be transferred to a Level 3 facility. This makes it difficult to benchmark against MOH data. By facility we recorded five births under 32 weeks, all transferred to CCDHB and three transferred in from another hospital once they reached a weight or corrected gestational age threshold.

Indicator Eighteen: Small babies at term (37-42 weeks' gestation) (by facility)

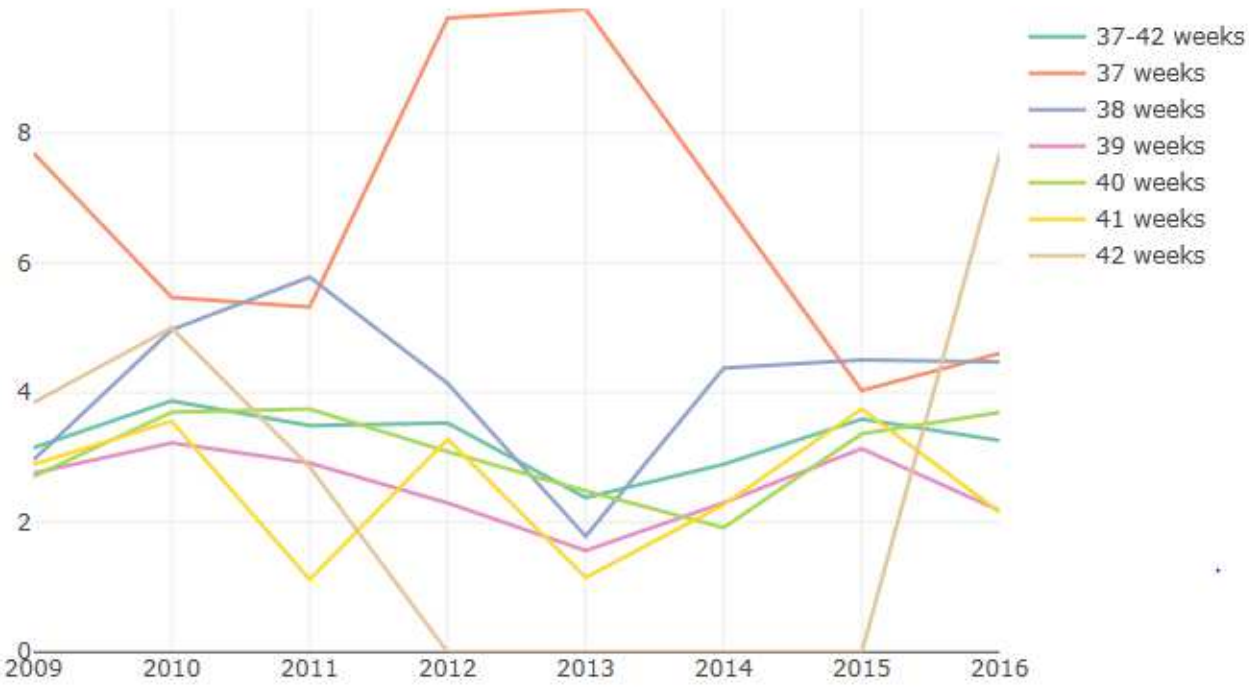
Table 28: % Small babies at term (37-42 weeks' gestation)

Facility	2012	2013	2014	2015	2016
All secondary/tertiary facilities	3.4	3.2	3.3	3.4	3.2
Hutt	3.5	2.4	2.9	3.4	3.3

Numerator: Total number of babies born at 37-42 weeks' gestation with birthweight under the 10th centile for their gestation.
Denominator: Total number of babies born at 37-42 weeks' gestation.

Comment:
Our rate of 3.3% for 2016 is comparable to the national rate. This puts us at the 50th percentile in the context of the national data. Our numerator for 2017 is thirty-nine babies with the denominator one-thousand-seventy-six by facility which decreases our rate but will need to be seen in comparison with other DHB's when the clinical data is released.

Figure 10: % Small babies born at 37-42 weeks' gestation by gestation in weeks



Indicator Nineteen: Small babies at term born at 40-42 weeks' gestation (by facility)

Table 29: % Small babies at term, born 40-42 weeks' gestation

	2013	2014	2015	2016
Huttmaternity	39%	30.6%	41.9%	42.1%
Secondary and Tertiary Facilities	34.9%	37.9%	37.0%	34%
National	36.7%	39.4%	38.4%	35.8%

Numerator: Total number of babies born at 40-42 weeks' gestation with birthweight under the 10th centile for their gestation.
Denominator: Total number of babies born at 37-42 weeks' gestation with birthweight under the 10th centile for their gestation.

Comment:
The numerator for Hutt Valley District Health Board of babies born at 40-42 weeks' gestation with birth weights under the 10th centile for their gestation is twenty-four babies by facility and the denominator is fifty-seven by facility.

Our rate of 42.1% is over the national rate and shows a steady increase (see figure 10) This rate puts us at the seventy-fifth percentile in the context of the national data and requires further investigation as we rank sixth out of twenty DHBs for this indicator.

Indicator Twenty: Babies born at 37+ weeks' gestation requiring respiratory support (by facility)

Table 30: % Babies born at 37+ weeks' gestation requiring respiratory support

Facility	2012	2013	2014	2015	2016
All secondary/tertiary facilities	1.8	2.1	2.2	2.1	2.1
Hutt	2.1	2.1	2.1	2.3	3.1

Numerator: Total number of babies born at 37+ weeks' gestation requiring over 4 hours of respiratory support.
Denominator: Total number of babies born at 37+ weeks' gestation.

Comment:
Hutt Valley DHB shows a significantly higher incidence than the national rate of 2.1% for 2016 within this indicator. The numerator is fifty-four and the denominator one-thousand-forty-nine. This puts us at the seventy-fifth percentile in the context of national data and we rank fourth out of twenty-nine DHBs for this indicator. The relatively high rate of admissions of babies over thirty-seven weeks' gestation requiring respiratory support, needs further exploration to both understand the data and to take appropriate remedial action if it is required.

Section Five: Maternity Quality and Safety Programme Activities 2017

The Maternity Quality and Safety Programme (MQSP) had a number of quality initiatives underway for the 2017 year. This was a combination of building on work commenced in 2016, review of work undertaken to ensure embedded processes and new work streams.

The MQSP at Hutt is supported by a Coordinator at 0.4 FTE, and Administration support at 0.5 FTE.

Governance and Clinical Leadership

Our range of meetings and forums are well embedded within our governance structure and are working well. (Figure 18).

The Sector & Consumer Engagement Group continues on alternate months. This is to support progression of the Sector and Consumer work streams.

We have tried to engage representation from General Practice on our MCGG without success in this reporting period. However, there has been interest expressed by a local GP for the forthcoming year.

Consumer Members

There is growing evidence to support the relationship between consumer engagement and improved outcomes from health care. The Health Quality and Safety Commission (2015) defines consumer engagement as:

> "A process where consumers of health and disability services are encouraged and empowered to actively participate in decisions about the treatment, services and care they need and receive. It is most successful when consumers and clinicians demonstrate mutual respect, active listening and have confidence to participate in full and frank conversation. Systems that support consumer engagement actively seek input from consumers and staff at all levels of an organisation."

Our consumer members are highly valued and lead some of our workstreams to make quality improvements for the women and families they represent. We are trying to recruit another two consumers to enhance this team of dedicated women.

1. *Health Quality and Safety Commission. (2015). Engaging with consumers: A guide for District Health Boards. Health Quality and Safety Commission, Wellington, New Zealand. Accessed 14 May 2017. http://www.hqsc.govt.nz/assets/Consumer-Engagement/Publications/DHB-guide/engaging-with-consumers-3-Jul-2015.pdf*

MCGG Members

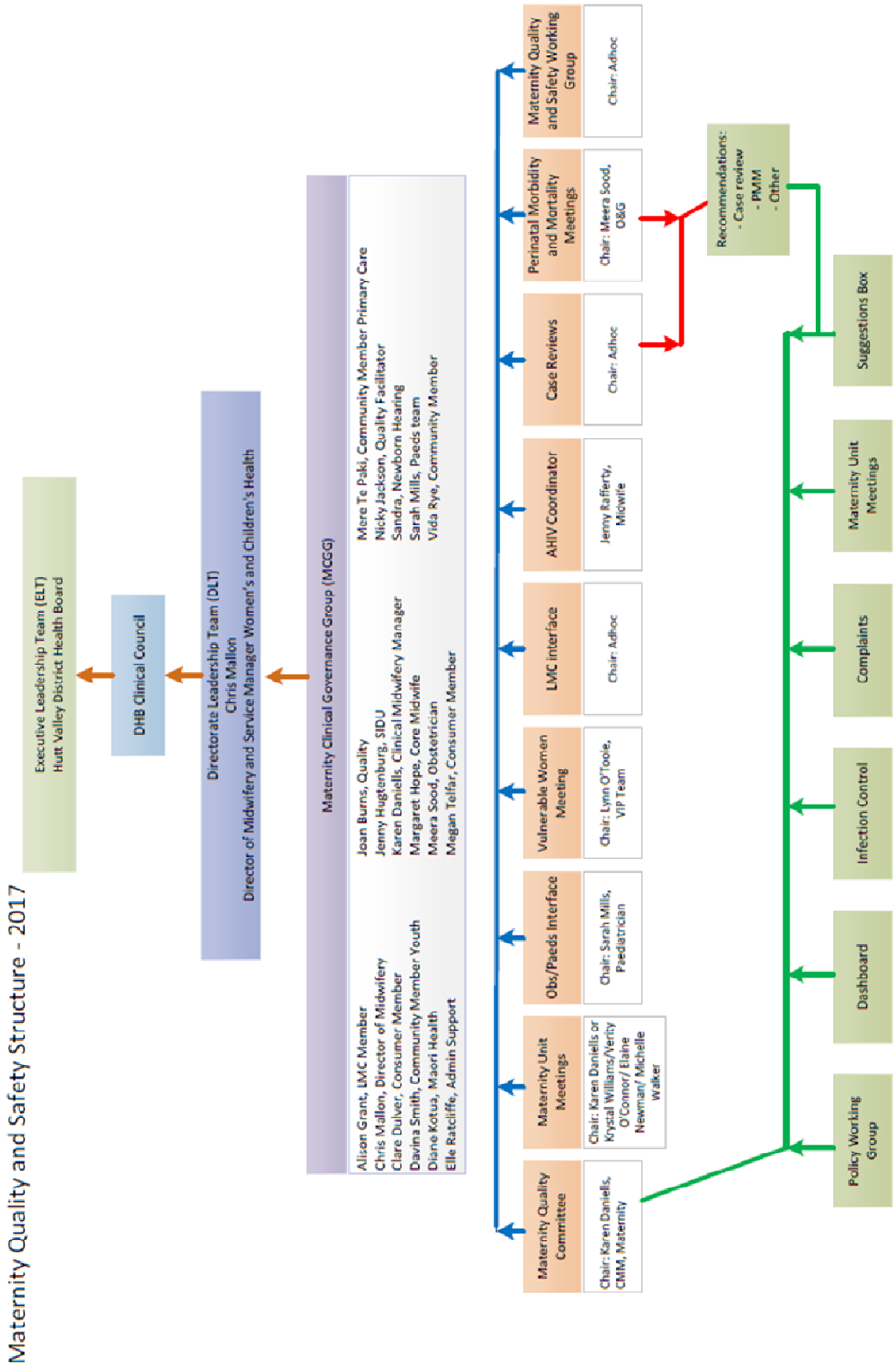
Left to Right are:

Elle Ratcliffe, Admin Support, MQSP Programme
Patsy Moeahu, Māori Health
Vida Rye, Consumer Member
Meera Sood, Obstetrician
Davina Smith, Community Member Youth
Megan Telfar, Consumer Member
Clare Dulver, Consumer Member
Nicky Jackson, Quality Facilitator
Sarah Mills, Paediatrician
Karen Daniells, Clinical Midwifery Manager
Alison Grant, LMC Member
Margaret Hope, Core Midwife Member
Chris Mallon, Director of Midwifery
Jodi Caughley, SIDU
Joan Burns, Quality - DHB Quality Team

Absent
Fuaao Stowers, Pacific Health
Sandra Hoggarth, Newborn Hearing
Mere Te Paki, Community Member Primary Care

Maternity Quality and Safety Structure – 2017/18

Figure 11: Maternity Quality and Safety Structure - 2017/18



Quality Initiatives

3DHB Campaign

Each year Capital Coast, Wairarapa and Hutt Valley DHBs meet quarterly to discuss and share our ongoing projects. We plan an annual sub-regional campaign with a different focus each time. For example: the top five things to do when women find out they are pregnant, the importance of monitoring baby movements and a pregnancy checklist for women to tick off throughout their pregnancy. In 2016, we aligned our campaign with the Midwifery Council Be Safe paper on text messaging. The campaign was to promote the importance of calling a midwife for a number of symptoms in a timely manner rather than texting. We also promote engagement with LMCs through the find your midwife site.

Huttmaternity Facebook

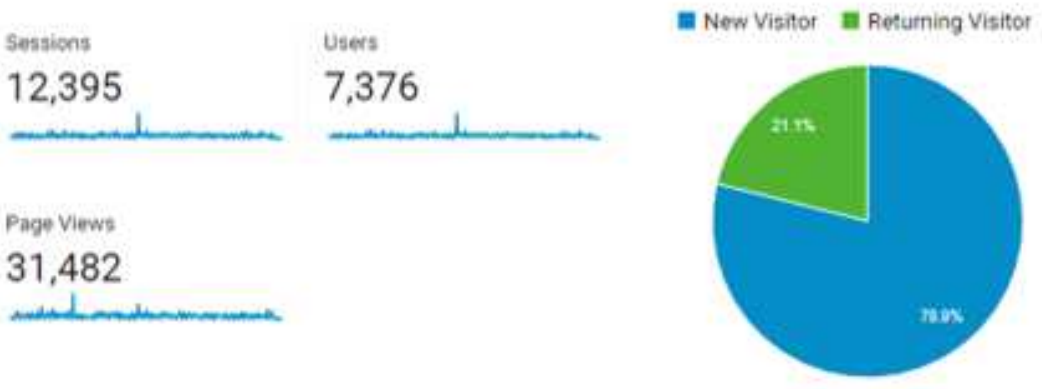
Our Huttmaternity Facebook went live in December 2014 and continues to promote important messages to our online community. Competitions such as our Christmas baby photo competition increased our engagement and our following continues to grow.

Figure 12: Growth of Huttmaternity's Facebook Page - 2017

Huttmaternity Website

The website is continually updated with additions to the resource section and links to policies as they are updated. The site also includes a live feed to our Huttmaternity Facebook page. Below are the sessions, users and page view numbers for 2017.

Figure 13: Huttmaternity website engagement - 2017



Te Rā o Te Raukura

Te Rā o Te Raukura is a local festival which has been running annually for 23 years. The kaupapa is to share information that will help whānau to improve their health, education, well-being or creative strength. Arohanui ki te Tangata is the guiding statement that expresses sentiments of sharing, love, respect and togetherness towards fellow neighbours. The festival has grown from a couple of tables to now being held in a 60' x 10' marquee. The local PHO Te Awakairangi health network alongside other providers of health services and Te Runanga o Taranaki Whanui Hauora services promote a "healthier Hutt Valley for all."

It was fitting for Huttmaternity to have a table at this event as Maori wāhine make up 20% of our birthing population. Our aim was to promote early engagement with a lead maternity carer (LMC) and give early pregnancy advice.

One initiative to encourage whānau to see all information on offer was a "health passport" where people answered a question to go in the draw for a basket of goodies. Our question followed our sub regional campaign at the time by asking for one of the top five things to do when you find out you are hapū. Over the course of the festival (10-4pm) forty-six hapū (or planning to be), wāhine and whānau, stopped and spoke with a midwife on the stand. Information included: obtaining a LMC, pregnancy checklist, healthy and safe eating in pregnancy, antenatal education based on the marae and normal baby movements. Huttmaternity was also able to promote its website and Facebook information.

From this kaupapa, we were invited to hold a community clinic at Waiwhetu Marae and this was the beginning of dialogue with the local iwi and Te Rununga around a collaborative project.

Community Support Information

A goal for 2017, was to work with our consumers on making our Community Directory for health professionals user friendly for women and families. This was completed but in the form of a pamphlet rather than a booklet. The original directory was also reviewed in 2017 to make sure all contact details were up to date and new agencies, NGOs or community groups added.

Internal Newsletter

We continue to have an external newsletter, which is produced three to four times a year. Our internal newsletter for core staff and LMCs is emailed out on the first and third Monday of the month. There are multiple contributors to these newsletters and it is open to everyone to submit items. By having this planned approach, it has reduced the amount of information sent out separately. We include items like: news

items, education and training, staff news, upcoming meetings, recommendations, policy updates, and meeting minutes. We have included short surveys for staff to encourage wider consultation on issues pertaining to our maternity services. We continue to look for ways to improve readership such as ensuring we have up-to-date emails, hard copies left in the unit and on noticeboards and incentivising readership occasionally with draws to win a voucher for the café.

Staff Flu Vaccinations

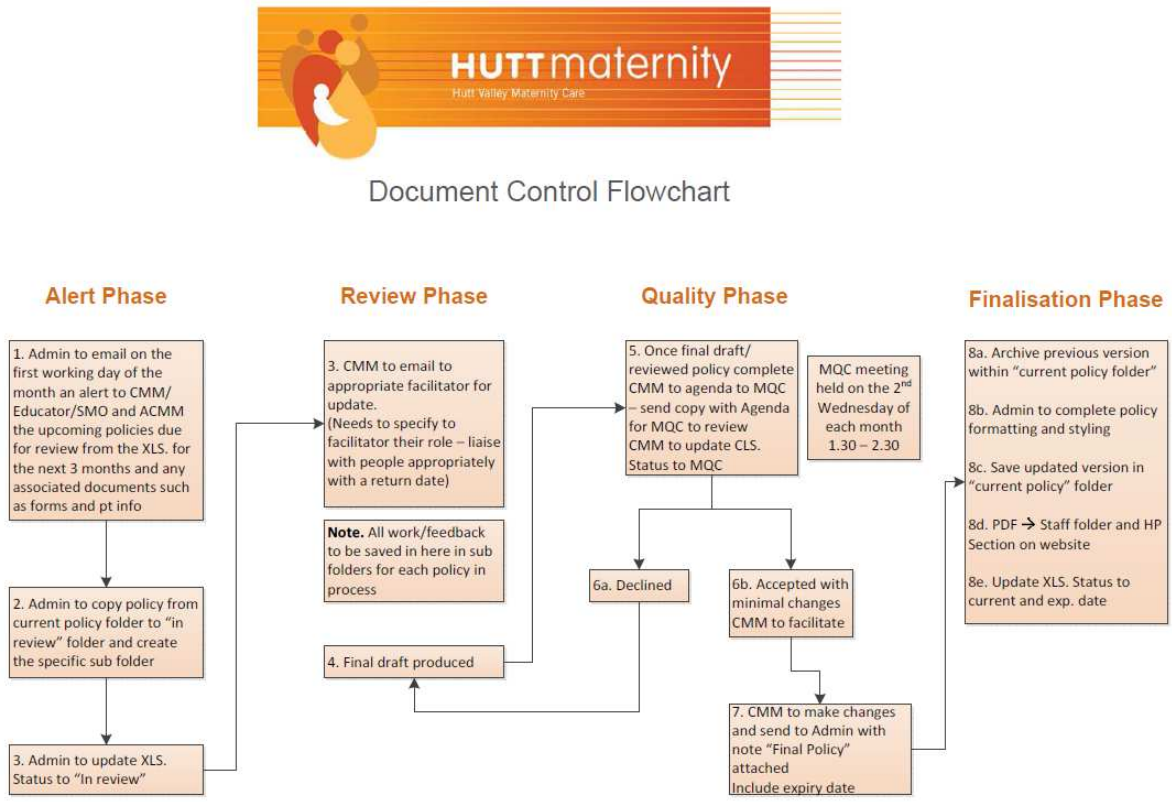
During the 2017 flu season, thirty core midwives (employed) and four LMC midwives were vaccinated by the DHB occupational health team. Huttmaternity are pleased to report that two of our staff members have been administering flu vaccinations to women and staff, pre flu season. This has shown that alongside the DHB campaign there was a slight overall increase from 2016 where only twenty-eight members of staff were vaccinated.

Virtual Tour

Filming and creation of a virtual tour was completed in June 2017. The purpose is to allow people to see the facilities, to use the opportunity to provide information to women and their whānau and to reduce the large group foot traffic of antenatal education provider tours. The antenatal educator BirthEd, who hold a contract with HVDHB contributed to the cost of the production.

Document Control

These systems ensure a robust revolving system for reviewing all Huttmaternity documents in a timely manner. This is an ongoing MQSP activity but relies on input from the whole unit to review documents according to the deadline set. This needs additional FTE to align with other units where there is dedicated FTE for policy writing.



Improving journey for women with high BMI

Table 31: Body Mass Index for all Births in 2015 – 2017 Huttmaternity Data

	2015	2016	2017
<= 18.4	28	26	40
18.5 - 24.99	833	791	770
25 - 29.99	534	546	516
30 - 34.99	230	299	273
35 - 39.99	119	116	128
>= 40	84	85	101
Unknown	28	8	20
Total	**1856**	**1871**	**1848**

Workshop

A workshop was held in March 2017 to begin a conversation about our care of women with high Body Mass Index (BMIs). The impetus for this was our rate of women with BMI over thirty-five and anecdotal reports of women choosing not to attend our secondary care clinic for this condition under the referral guidelines. Presentations outlining the women's voice alluded to barriers for women and feedback from the forty-two participants, who were multi-disciplinary and included consumers, was that we hadn't exhausted our consultation of the users of the service to find out what an acceptable service would look like. A working party was formed and a survey carried out amongst women who did attend our clinic in 2016 for this reason. The response rate was poor but those who did respond spoke of time wasting and 'fat shaming'.

Further work on this project includes the design of a clinic to cater to women in a more individualised fashion, utilising existing services in a co-ordinated manner. The primary outcome would be improving the journey for these women and a secondary one of prevention of the development of gestational diabetes with early intervention.

Section Six: National Maternity Monitoring Group Recommendations

Alongside our own MQSP Objectives we have attempted to allocate priority to the National Maternity Monitoring Group (NMMG) work streams and key findings of external review of Maternity Services. We have outlined our progress or plans to date, in those relevant priorities.

Maternal Mental Health

Access to community non acute mental health services has shown forty-two women were assessed in clinic by a member of the Specialist Maternal Mental Health team in 2017. (see pg. 51 for a description of this service) We have updated our Community Support brochure to highlight support for women with mental health concerns and published the Edinburgh Postnatal Depression Scale to make it more accessible to midwives to use with their clients. Education on awareness of the Maternal Mental Health Pathway for our DHB is ongoing and planned workshops on maternal mental health, dealing with trauma and a cultural view of mental health, are planned for September 2018 and February 2019.

Workforce

Please see pg. 19 for a breakdown of staffing. The following outlines workforce issues in the 2017 reporting period.

Essential maternity services at Hutt maternity have grown over the last ten years in keeping with national maternity service expectations. However, workforce planning has not kept pace with the increased midwifery staffing needs that these services require. An augmented midwifery staffing budget is needed to run daily secondary care antenatal clinics, a weekly diabetic multi-disciplinary antenatal clinic, a daily early pregnancy clinic and a community midwifery team that takes a large proportion of socially complex clients. The current staffing deficit will be exacerbated by the requirement for core midwifery staff to provide operative and instrumental birth care and an increasing seasonal deficit in the LMC workforce over the summer months. The midwifery staffing deficit has been recognised by the organisation and planning to address this issue as part of a staged process is in progress.

MQSP Annual Reports

The content of our annual MQSP report focuses on our maternity service, our collaboration both within the DHB and community agencies and our consumers. Our quality improvement initiatives are highlighted and future improvements identified.

Our response to trends in clinical indicators benchmarked against other DHBs are outlined and we have considered recommendations from National Maternity Monitoring Group (NMMG) and the Perinatal and Maternal Mortality Review Committee (PMMRC) recommendations, annual maternity report and PMMRC annual report.

Following feedback from the Ministry of Health, we will make our report publically available on our DHB website. We are constantly looking at ways of improving our reporting.

NE Task Force Initiative

Neonatal Encephalopathy (NE) is a one of the main causes of brain injury in newborn babies. When NE does occur, the effects have a long-lasting impact on whānau and support services over the course of a lifetime. ACC has initiated work with the maternity sector to achieve a 25% reduction in the incidence and severity of preventable NE by 25% by 2022. Hutt maternity is pro-actively involved in this initiative and has representatives on all of the arms of the planned interventions – fetal monitoring, universal cord lactates, implementation of the growth assessment protocol and use of the neonatal early warning score charts. By working collaboratively and across the sector we hope to improve outcomes for babies and whānau.

Connecting Sector Leadership

Implementing recommendations made by PMMRC and sub committees and NE taskforce
Implementation of national maternity clinical guidelines and monitoring existing guidelines.
A meeting with NMMG and MQSP coordinators from all DHBs was hosted by the Ministry of Health and attended by Huttmaternity. This is an annual face to face and invaluable learning is gained from other regions regarding their successful quality and safety programmes.

New Zealand Maternity Clinical Indicators

Work to improve our systems for the collection of accurate data that reflects our outcomes is ongoing and involves working closely with our clinical coding team and IT Department. Our reporting period is one year ahead of the availability of annual Maternity Clinical Indicator Data and means we are retrospectively benchmarking our DHB. We have developed an internal data report based on the indicators which enables us to look at our data from the previous year in order to react more responsively, instigating audits and changes in clinical practice.

Our review of the 2016 Clinical Indicators and continuing trends have prompted plans to investigate high rates of induction of labour and caesarean sections for standard primiparae. Of note is our decreasing rate of intact lower genital tract and third degree tears (Indicators 6-9). Work on education and quality improvement to practice has been undertaken. This is ongoing work carried over from the last reporting period. Please see Section 4 for 2017 data.

Equity

Investment at the start of life in the form of antenatal care and education needs to underpin some of the work of the MQSP. The DHB currently contracts BirthEd and with a focus on birth and parenting education including safe sleep principles, their MAKE Kaupapa (Māori Antenatal and Kaiāwhina Education) is reaching women who may not ordinarily access antenatal education as it is close to home (marae-based). Hapū Ora is the drop in clinic set up in collaboration with Te Runanganui o Te Atiawa. One of the aims for this clinic is to reduce inequity, again closer to home and linked with other services such as Tamariki ora, GP and breastfeeding support from the same venue.

Increasing our consumer representation of marginalised groups is a further aim of this MQSP to help understand inequities in our service.

Equitable access to contraception of choice – Hapū Ora

As well as early pregnancy advice and the goal of engaging women with a lead maternity carer in the first trimester, the clinic offers another place to obtain contraceptive advice, prescriptions and insertion of the long term contraceptive, levonorgestrel-releasing implant (Jadelle). We paid for one of our midwives to attend a Family Planning Association course at the end of October 2017 for this purpose. We are collecting data on the activities at the clinic and will monitor the uptake of this service.

Ultrasounds

Huttmaternity acknowledges the recommendations of the Maternity Ultrasound Advisory Group but has yet to implement anything locally.

Engagement with LMC in first trimester

Indicator one shows a slow steady increase in engagement. Locally we have work to do with our data collection to allow a snapshot of the entire DHB rather than women engaging only with our Primary Midwifery Team. This will give insight into how we are tracking, prior to the clinical indicator data for which there is a time lag.

Anti-D

Our DHB has a comprehensive guideline and pathway for the administration of Anti D in a timely manner. We will work with our laboratory service to review ways of monitoring the uptake of prophylactic Anti D immunoglobulin. LMCs are able to send their women to our Maternity Assessment Unit and in 2017 there were one-hundred-and-eighty-nine episodes of Anti D administration.

Primary Maternity Facilities and Place of Birth

Whilst Hutt Valley DHB area has no primary unit in this reporting period, we are cognisant of the need to increase our physiological birth rate. We are still proposing to increase the number of primary births in our unit by promoting normal birth and providing an option for an environment of low technology. Our consumers are involved in this project which is ongoing due to financial constraints though concept designs have been presented.

Our consumers wish this programme to look at ways to support homebirth as an option. This may be in the form of providing linen and birthing packs to women and midwives doing homebirths and through education utilising the provider arm-contracted antenatal providers.

Consistency in the Quality of First Trimester Care

Hutt Valley DHB is involved in creating localised health pathways for ensuring health professionals are providing evidence-based care. We have made attempts to appoint a practising general practitioner (GP) to our Maternity Clinical Governance Group and will keep pursuing this to ensure representation of this part of the maternity sector.

Section Seven: Perinatal and Maternal Mortality Review Committee (PMMRC) Recommendations at Huttmaternity

PMMRC is an independent committee that reviews the deaths of babies and mother in New Zealand. The PMMRC provides a comprehensive reporting system, a network of nationally linked coordinators and a framework for assessing cases with the aim of progressively improving care. Every year the PMMRC release a range of recommendations. The recommendations from the 11th Annual Report released in June 2017 are listed in Appendix One. As with NMMG, these include recommendations around data collection, actions undertaken at Huttmaternity in direct relation to recommendations, and work to improve our data integrity. To date this has involved work to identify the issues and is ongoing, involving expert assistance external to our Maternity Unit. Once the Ministry of Health has updated the MAT dataset, we will audit our collection of the requested data using reports generated by the Ministry of Health identifying the gaps.

The National Interdisciplinary Clinical Practice Guideline on the indication and timing for induction of labour is eagerly anticipated as we seek to improve our rates of induction of labour by applying a practice guideline based on high quality research. In the interim we have reviewed our process with regards to the booking of induction and handover of care from primary to secondary care.

With regard to Maternal Mental Health, this has been prioritised as an objective and in collaboration with our neighbouring DHBs is the theme of our sub-regional campaign. Work on improving knowledge within our workforce is ongoing with education sessions planned for 2018 and 2019. MQSP supports Maternal Mental Health awareness week and has supported staff to be attend this conference and hopes to do this for future years.

Section Eight: Quality and Safety

Consumer Feedback

Our consumer survey localises the National Consumer Survey Tool provided by MOH. This is sent out quarterly to women with valid emails (currently 50%). The response rate is currently 34%. Women and their whānau also have the opportunity to provide this feedback by hard copy and complaints are directed to our DHB quality team should this be requested. The identification of themes from our survey to feed into MQSP objectives is one of our ongoing workstreams.

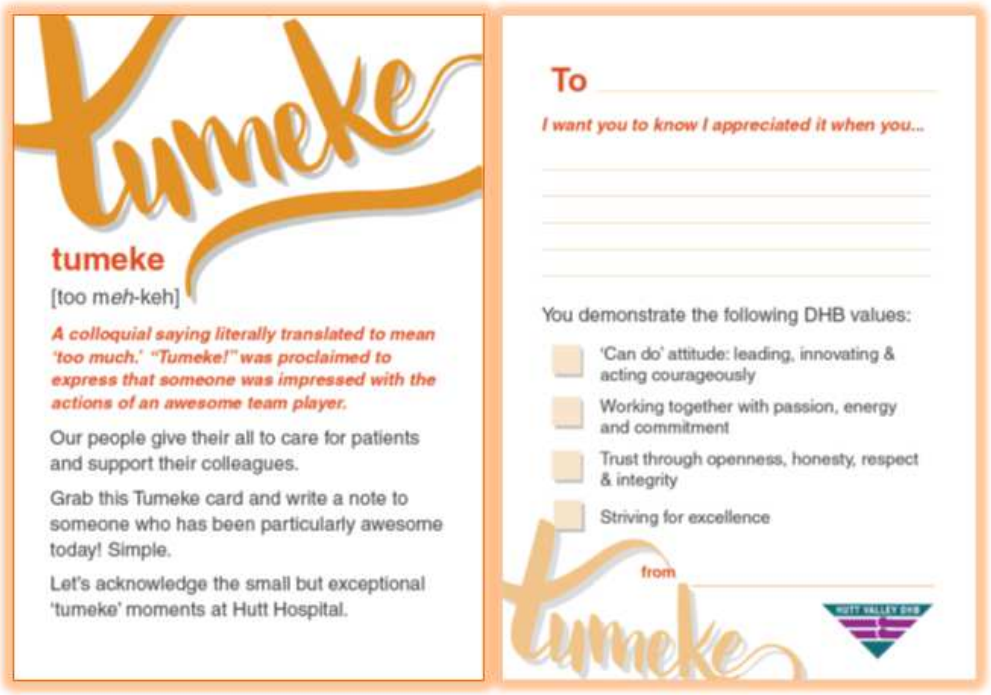
Compliments, complaints and recommendations from all sources are reviewed by the Maternity Quality Committee. Appropriate actions are planned, documentation altered as needed and decisions communicated to relevant parties. Feedback from the Maternity Quality Committee is a standard item on our MCGG.

Compliments

Along with compliments in our survey, seventeen praises relating to the Maternity Unit were registered with the DHB Quality Team for 2017. The themes of these compliments relate to care and staff professionalism. Please find some examples of these compliments:

> *"Mother thanking the "amazing" staff on the postnatal ward for the communication and care provided. This mother singles out a number of staff for specific thanks."*
>
> *"Mother of new baby praising the midwives and nurses of the Post Natal Unit for their supportive, non-judgemental and consistent advice."*
>
> *"Mother thanking staff of the Delivery Suite and Maternity Ward for the care provided - received absolutely wonderful care." "I never felt I was a burden or that I was asking silly questions."*
>
> *"Praise for Maternity Ward: Mother felt very well looked after and felt no pressure in needing to call for help." "Midwives were great at answering questions and took time with us which we appreciated."*
>
> *"Mother praising the standard of care form the delivery suite and the postnatal after undergoing an emergency C Section."*

It should be acknowledged that not all compliments are registered through the Quality Team and many thank you cards are given collectively and to individual staff members in our unit or through sending the staff a "Tumeke" card. This initiative is another means of feedback and is being well utilised by staff to staff for compliments also.



Complaints

In the 2017 year, there were sixteen complaints registered with the DHB Quality Team. All complaints were responded to in writing. If appropriate, a meeting was held with the complainant and their family and clinical staff.

The themes can be summarized by this Wordle:

Figure 14: Complaints by Category

We have a main DHB generic Health Care Events reporting system and a complementary process to capture specific maternity events. See our pathway (Appendix Two).

Health Care Events

For our internal event reporting there were sixty inpatient and unit events and thirty-four events for employees and affiliates. Staff and safety reportable events showed a fourfold increase from the previous year. These include such events as needle sticks, slips and trips, and strains. All events are reviewed by the Clinical Midwifery Manager and Line Managers as appropriate.

The main categories of the events concerning the ward environment and inpatients were:

- Care service coordination issues: These include such issues as equipment problems and handover between staff members.
- Equipment staffing and resource: Events concerning the availability of staff or equipment, and equipment failure.
- Medication and Fluid events.
- Maternal and Childbirth: Where the process did not go smoothly due to staffing or equipment issues.

Trigger List/Event Reporting

This pathway currently sits alongside our DHB Health Care Events. Each event is reviewed by the Weekly Trigger Review Group and a review plan decided. Options include; nil action required, systems review, case review or refer on to the Review Steering Group for consideration of Root Cause Analysis (RCA).

Event Reports are produced quarterly on the number of events and unexpected outcomes which are presented to the MCGG and recommendations are circulated to Maternity Staff via our internal newsletters and in our online staff folders.

Health and Disability Commission (HDC) Reviews

In this reporting period, there were eight complaints via the Health and Disability Commission. Three of these complaints related to another provider and records were requested. On receipt of a complaint from HDC, HVDHB commences an investigation and responds to the Commission's requests for clinical records and associated documentation pertaining to the concerns raised. The completed response is provided to the HDC who reviews the case to decide if further action is required.

Clinical Reviews and Recommendations from 2017

As an outcome of the use of the trigger forms, there were fifteen clinical reviews from sixty-eight events triggered. Some of the reviews were multi-faceted i.e. delay in theatre equipment and high lactate of baby. The cases of abnormal lactates made up 33% of reviews (five). Others were; admission to intensive care unit (two), unexpected admission to SCBU (one), a category 1 transfer to theatre (two) significant delay in theatre (two) and a third degree perineal tear repaired on unit (one) and severe hypertension at 31 weeks (one) and abruption (one)

Recommendations included improvements in communication, education on cardiotocograph (CTG) monitoring and interpretation through weekly CTG meetings and attendance at RANZCOG Fetal Surveillance Education Programme (FSEP) education and on online FSEP. Regular emergency drills and transfers to theatre scenarios were recommendations. Staffing shortages and escalation of reporting to Senior Medical Officers were examined and new protocols developed. Individualised education plans were prepared for one staff member.

Adverse Serious (SAC2) and Sentinel (SAC1) Events

The Severity Assessment Code (SAC) is a numerical rating which defines the severity of an adverse event and as a consequence the required level of reporting and investigation to be undertaken for the event.

Source: http://www.hqsc.govt.nz/assets/Reportable-Events/Resources/guide-to-using-sac-2008.pdf Accessed 28 June 2017.

There were two SAC2 events reported in 2017.

Perinatal Mortality Cases

In the 2017 reporting timeframe there were twelve stillbirths. Of note three babies had chromosomal abnormalities, three babies at term were stillborn for mothers with gestational diabetes mellitus. Two babies who died in the third trimester had an unexplained cause of death. There were a variety of reasons for fetal demise for the remaining babies with no trend. There were no maternal deaths in 2017.

Perinatal Morbidity and Mortality Meetings are scheduled quarterly. The format has been changed to allow Community Midwives to present their own cases and in 2017 included education sessions on neonatal encephalopathy and lactate monitoring during labour. We are trying to provide multidisciplinary team education and have more of a focus on near misses and good catches in our care at this forum. We sadly said farewell to a long standing external advisor, Dr Jane Zuccullo – Pathologist, who has been attending our meetings since the commencement of the Perinatal Mortality and Morbidity Review Committee establishment in 2011.

The small numbers do not allow for any statistically significant analysis, however, we are cognisant of the PMMRC recommendations and endeavour to incorporate any recommendations into practice. (See section seven).

Section Nine: Forward Planning 2018-19

As part of the Maternity Quality and Safety contract we regularly review our two-year plan. This is included as an appendix and summarises activities in 2017 and objectives for the two year period, 2017-2019. Potential objectives have been identified and are to be taken to the Maternity Clinical Governance Group for the mid-year review of the two-year plan.

(See Appendix Six)

Appendix One: Background Information

Our Maternity Quality and Safety Programme work is guided by the following documents.

The NZ Maternity Standards[1]

The New Zealand Maternity Standards provide guidance for the provision of equitable, safe and high-quality maternity services throughout New Zealand. They consist of three high-level strategic statements to guide the planning, funding, provision and monitoring of maternity services by the Ministry of Health, DHBs, service providers and health practitioners.

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

Standard Two: Maternity services ensure a women-centred approach that acknowledges pregnancy and childbirth as a normal life stage.

Standard Three: All women have access to a nationally consistent, comprehensive range of maternity services that are funded and provided appropriately to ensure there are no financial barriers to access for eligible women.

The National Maternity Monitoring Group

The NMMG acts as a strategic advisor to the Ministry of Health on areas for improvement in the maternity sector, provides advice to District Health Boards on priorities for local improvement and provides a national overview of the quality and safety of New Zealand's maternity services.

An annual report is produced by the NMMG detailing work carried out, conclusions reached and recommendations made during the previous year. Also, its priorities and work programme for the following year.

Together, the Maternity Quality Initiative, the Maternity Standards and the New Zealand Health Strategy with the Roadmap provide guidance on how the NMMG and maternity stakeholders can work together in the future to ensure that women and babies live well, stay well and get well if they are sick.

1 *Ministry of Health 2011 New Zealand Maternity Standards: A set of standards to guide the planning, funding and monitoring of maternity services by the Ministry of Health and District Health Boards. Wellington: Ministry of Health.*

2. *National Maternity Monitoring Group 2016 National Maternity Monitoring Group Annual report 2016. Wellington: Ministry of Health.*

The Perinatal and Maternity Mortality Review Committee

Recommendations from 11th Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality [1]

Perinatal mortality

1. The Mortality Review Committee's Māori Caucus reiterate, "As a matter of urgency, the Ministry of Health update the National Maternity Collection (MAT) including the ethnicity data as identified by the parents in the birth registration process," (PMMRC recommendation ninth report 2015).

2. A) That the MOH urgently require DHBs to provide complete and accurate registration data to the MAT dataset. Specifically this should include women who present for birthing at DHB facilities without previous antenatal LMC registration and women who are provided primary maternity care by DHB maternity services.

   B) Require the MAT dataset include complete registration and antenatal data on live and stillborn babies from 20 weeks gestation (including terminations of pregnancy).

3. That the PMMRC investigate why there has been no reduction in neonatal mortality in New Zealand.

4. The PMMRC supports the development of a national interdisciplinary clinical practice guideline on the indication and timing for induction of labour, to guide clinicians to offer induction when appropriate (that is where evidence shows that benefit to mother and /or baby outweighs risk) and to avoid induction when not appropriate.

5. That district health boards with rates of perinatal related mortality and neonatal encephalopathy significantly higher than the national rate review, or continue to review, the higher rate of mortality or morbidity in their area and identify areas for improvement.

6. The PMMRC recommend the HQSC establish a permanent Suicide Mortality Review Committee.

7. Recommendations from the Mortality Review Committee's Māori Caucus:

   Improved awareness and responsiveness to the increased risk for Māori women (of suicide).

   Primary care (GPs, FPA) LMC's, TOP services, alcohol and drug services and secondary and tertiary providers of maternity, obstetric, mental health, and maternal mental health services should improve their systems, guidelines and professional development to ensure that they are responsive to the identified increased risk for Māori women.

Comprehensive assessment of risk factors for Māori women should be undertaken at diagnosis of pregnancy and/or on first presentation for antenatal care. This should be undertaken for all Māori women, regardless of age, including those who are seeking termination of pregnancy.

Recommended Management

A) Where Māori women exhibit symptoms suggesting serious mental illness or distress, an urgent mental health assessment, including consultant psychiatrist review and consultation with perinatal mental health services, on the same day these symptoms are first noted should be undertaken.
B) Māori women who have a history of serious mental illness and are currently well should be referred to specialist mental health services for a mental health birth plan, and monitored closely by their maternity care provide +/- mental health services. Where such a woman has a miscarriage, the GP should be notified immediately and an explicit process for early follow up that includes a review of mental health status agreed with the GP.
C) The referring doctor of women who undergo a TOP is expected to provide a free post TOP follow-up consultation 10-14 days after the procedure. The referring doctor should actively follow up Māori women referred for TOP to ensure this consultation is completed and review mental health status during this consultation.

8. Communication and coordination between primary care (GPs, FPA) LMC's, TOP services, alcohol and drug services, and secondary providers of maternity, obstetric, mental health and maternal mental health services should be improved and enhanced using a variety of means of including but not limited to case management, integrated notes systems and electronic transfer of information.

9. Child and Youth Mortality Review Committee (CYMRC) consider including information about whether female suicide cases were pregnant in the 12 months prior to their deaths in addition to the pregnancy status information currently collected.

[1] PMMRC. 2017. Eleventh Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2015. Wellington: Health Quality & Safety Commission. Pp 16-21.

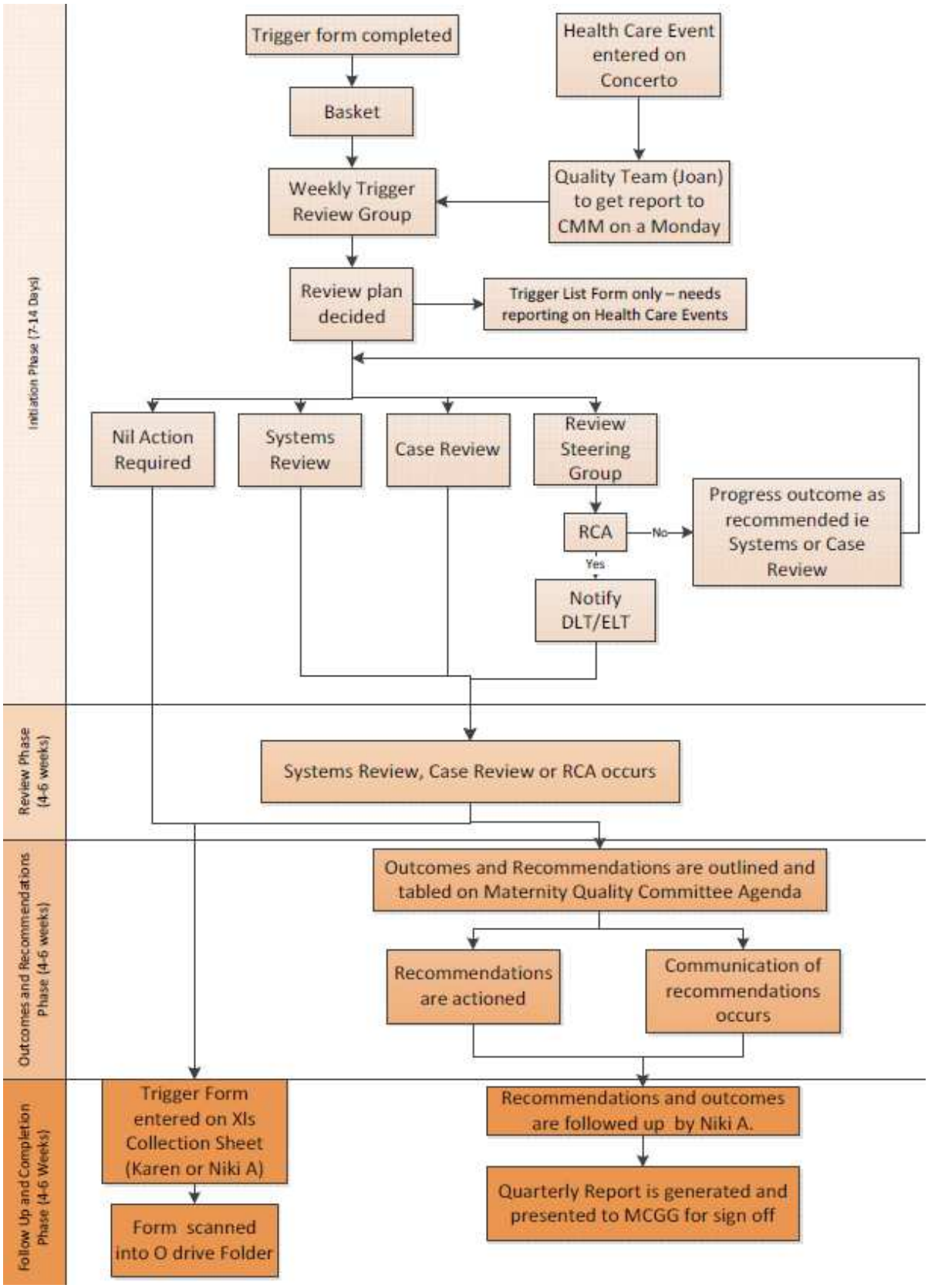
New Zealand Maternity Clinical Indicators

Table 32: New Zealand Maternity Clinical Indicators

		Indicator
Women registered with an LMC	1	Registration with a LMC in the first trimester of pregnancy
Standard Primiparae	2	Standard Primiparae who have a spontaneous vaginal birth
	3	Standard Primiparae who undergo an instrumental vaginal birth
	4	Standard Primiparae who undergo caesarean section
	5	Standard Primiparae who undergo induction of labour
	6	Standard Primiparae with an intact lower genital tract (no 1st- to 4th-degree tear or episiotomy)
	7	Standard Primiparae undergoing episiotomy and no 3rd- or 4th-degree perineal tear
	8	Standard Primiparae sustaining a 3rd- or 4th-degree perineal tear and no episiotomy
	9	Standard Primiparae undergoing episiotomy and sustaining a 3rd- or 4th-degree perineal tear
Women giving birth	10	Women having a general anaesthetic for caesarean section
	11	Women requiring a blood transfusion with caesarean section
	12	Women requiring a blood transfusion with vaginal birth
	13	Diagnosis of eclampsia at birth admission
	14	Women having a peripartum hysterectomy
Women giving birth	15	Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period
	16	Maternal tobacco use during postnatal period
	17	Pre-term birth
Live-born babies	18	Small babies at term (37–42 weeks' gestation)
	19	Small babies at term born at 40–42 weeks' gestation
	20	Babies born at 37+ weeks' gestation requiring respiratory support

3. *Ministry of Health 2018 New Zealand Maternity Clinical Indicators 2016. Wellington: Ministry of Health.*

Appendix Two: Trigger / Event Reporting Pathway - Huttmaternity



Appendix Three: Ministry of Health Letter 20 December 2017

133 Molesworth Street
PO Box 5013
Wellington 6140
New Zealand
T+64 4 496 2000

20 December 2017

Dr Ashley Bloomfield
Chief Executive
Hutt Valley DHB
Ashley.bloomfield@huttvalleydhb.org.nz

Dear Ashley

Maternity Quality and Safety Programme Annual Report

The Ministry would like to acknowledge and congratulate Hutt Valley DHB on the production of an excellent Maternity Quality and Safety Programme Annual Report. It is evident of the hard work put into the Maternity Quality and Safety Programme in your DHB.

We saw positive coverage of your DHB's previous year's activities in your published report including consumer engagement, and quality improvement activities incorporating the recommendations from the Perinatal & Maternity Mortality Review Committee and National Maternity Monitoring Group. The report has demonstrated the excellent progress made against the 2016/17 programme plan.

We wish to recognise some highlights:

- The pregnancy checklist campaign – encouraging women to engage with an LMC, consider their birthing options and self-care e.g. such as taking folic acid.
- An excellent section on Hutt Valley DHB demographics, maternity services configuration and facilities.
- The standard primiparae spontaneous vaginal birth rate – focus for 2017/18.
- Maternal Mental Health Services – development and promotion of maternal mental health referral pathway to services.
- Audits undertaken as a result of reviewing Maternity Clinical Indicators.
- Hutt Maternity Expo – providing the opportunity to showcase the Maternity Services available to women and their whanau.

Hutt Valley DHB has demonstrated a commitment to ensuring that women and whānau are able to access and receive maternity care facilitating optimal outcomes for mothers and babies.

The Ministry encourages Hutt Valley to publish the report on its website so your population, especially women and prospective mothers and whānau, can see the maternity services available in their district.

Overall, Hutt Valley DHB has a well embedded programme with consistent regular and renewed activities that are appropriate for your population.

Well done on your hard work over the year and thank you for your continued dedication to providing quality maternity care.

National Maternity Monitoring Group comments

The NMMG was pleased to read about the successful audit of BFHI (Baby Friendly Hospital Initiative) accreditation and acknowledges the Lactation Service for their work to support breastfeeding in the community.

We were pleased to read of the quality improvement project analysis concerning the UNHSEIP (Universal Newborn Hearing Screening Programme), noting especially the results of the ethnicity data review which show a significant reduction in DNA (Did Not Attend) and incomplete rates for Māori whānau.

Yours sincerely

Clare Perry
Group Manager – Integrated Service Design
Service Commissioning

Dr John Tait
Chair
National Maternity Monitoring Group

Cc: Nicola Jackson - MQSP Coordinator

Appendix Four: Anaesthetic Department Audit

In 2017, an audit was conducted of the previous year's data and categorised caesareans by urgency. This showed that over half of caesareans are booked as Category 1 or 2 cases.

Table 33: Caesarean Deliveries at Hutt Hospital (January – December 2016)

RANZCOG Category	(n)	(%)
1 – urgent threat to the life or the health of a woman or fetus	55	9
2 – maternal or fetal compromise but not immediately life threatening	322	53
3 – needing earlier than planned delivery but without currently evident maternal or fetal compromise	21	3
4 – at a time convenient to both the woman and caesarean section team	209	34
Total	607	

Over this same period, Hutt Hospital performed over four-thousand-six-hundred acute surgical cases and obstetrics was identified as the surgical specialty with the greatest proportion of urgent cases at 78% and for category 2 cases at 72%.
Ensuring general anaesthesia for caesarean delivery is reserved for situations in which a regional is either not possible or not appropriate continues to be a focus of improvement.

In 2017, an audit of the previous year's caesarean anaesthesia technique was undertaken and identified Category 1 emergency caesarean deliveries as an area where further efforts to reduce general anaesthesia could be focussed.

Table 34: Percentage of Caesarean Deliveries under Regional Anaesthesia

Category	2015 (%)	2016 (%)	Audit Standard (%)
1	47	49	>50
1-3	85	87	>85
Elective	94	97	>95
Overall	88	90	

Audit Standard achieved
Audit Standard not achieved

Continuing our focus on improving care for women, planning is currently underway on two initiatives aimed at giving woman greater control over their pain relief. One is the introduction of Patient Controlled Epidural Anaesthesia and the second, blister packs of analgesic medication allowing women to self-medicate following surgery.

Appendix Five: Standard Primiparae Caesarean Section Audit

A preliminary audit of 49 standard primiparae women who had an emergency caesarean was undertaken. This was in order to understand the indication for this mode of delivery in this low risk group and to give direction for further investigation of our rising caesarean rate.

Findings discovered three incorrectly coded cases. This included breech presentation, maternal request (but coded as acute rather than elective) and one was multiparous. This finding has prompted us to plan work around clear documentation and developing robust systems to ensure our data integrity. Of the remaining 46 women, 5 of these electronic notes did not clearly state the indication of caesarean. To address this we would like to develop and implement standardised primary indications for caesarean to improve future auditing.

All births occurred over 38 week's gestation. 23% had BMI over 30, 10% had a general anaesthetic and 2% required a blood transfusion. Ethnicity distribution was established (see table). This data will prompt us to explore the drivers for the disproportionate ethnic distribution of caesareans sections.

Ethnicity	%
NZE	47.8
NZM	8.7
PI	6.5
Indian	8.7
Asian	8.7
MELLA	6.5
Other European	2.1
African	4.3
Not indicated	4.3
TOTAL	**100**

Indication	= n
Failed instrumental	1
Failed TOL	1
FTP 1st	15
FTP 2nd	4
Fetal distress	19
Fetal compromise	1
Indication not stated (no op note on concerto)	2
Failed IOL	3
TOTAL	**46**

We would like to further explore the practice surrounding the decision making for caesarean section in the two largest indication groups – failure to progress and (41% and fetal distress (43%).

Indication Recorded on electronic operation notes:
We plan first to investigate our caesarean sections performed due to failure to progress, but will first need to develop a standard for determining what constitutes this diagnosis. Secondly we will investigate the practice and systems surrounding the indication of fetal distress.

Appendix Six: MQSP 2-year Plan 2017 - 2019

HUTT maternity
Hutt Valley Maternity Care

Maternity Quality and Safety

2 Year Programme Plan 2017-2019

Established January 2017

Reviewed April 2018

Background

Huttmaternity has engaged in quality and safety activities since 2011, initially as a 'Demonstration Site' for MOH, the prequel to the formal Maternity Quality and Safety Programme (MQSP) which rolled out nationally in 2012. Over this time we have made great inroads in establishing a quality and safety framework led by our Maternity Clinical Governance Group (MCGG). Our MCGG consists of clinical leaders from Obstetrics and Paediatric services, consumers, midwives and obstetricians, core midwifery staff, primary care, youth care, DHB Quality, Maori Health, Pacific People's Health and Service Planning and Integration members.

A review of the MQSP took place in 2014/15 and ongoing Service Specifications are aimed at 3 tiers: Emerging, Established or Excelling. Huttmaternity and MOH have agreed that we are in the "Established" tier.

The MQSP has multiple influences at both national level with MOH and the National Maternity Monitoring Group (NMMG) workstreams, National Clinical Indicators, the New Zealand Maternity Standards, and at local level with service requisites.

It has been these influences that have guided Huttmaternity to develop its workstreams and objectives to date. Further information on the objectives and MQSP work previously completed is detailed in the Maternity Clinical Annual Reports for 2012 – 2016 inclusive; these are all available on the Huttmaternity website: www.Huttmaternity.org.nz

Moving forward into the end of 2017 to 2019 period, we have identified current objectives for completion and established new objectives with a localised focus. The below objectives are in no significant order or priority, see the timeline for further detail.

The MQSP Coordinator will facilitate all workstreams and monitor progress until completion, with the support of the Huttmaternity Clinical Governance Group and management.

Summary 2017 Activities

Objective	Summary
1.	Smoking data collection
2.	Huttmaternity Website and Facebook maintenance
3.	Consumer Workstreams
4.	Te Rā o Te Raukura hauora expo
5.	Document Control
6.	Production and distribution of consumer survey
7.	Information for women and community support directory
8.	Increase primary birthing – primary birthing room
9.	Annual Report 2016
11.	3 DHB Regional Campaign – Call the Midwife
12.	Self-Audit against NZ Maternity Standards and corrective measures
13.	Clinical Indicators Audit – Perineal trauma, Haemorrhage
14.	Virtual tour maternity unit
15.	Improve services to women with high BMI
16.	Marae based drop in clinic
17.	Launch of Tumeke (compliment) cards

Planned 2017 – 2019 Objectives and Activities

Objective	Summary
1	**MQSP Activities**
a.	Annual report compilation
b.	Collect smoking cessation advice data (DHB team)
c.	Contribute to Maternity Quality Committee
d.	Document control
e.	Facilitate Maternity Clinical Governance Group
f.	Facilitate quality improvement initiatives as recommended by Localised objectives set by MCGG -PMMRC -NMMG
g.	Planning for business as usual
h.	Self-Audit of NZ Maternity Standards
2.	**Increasing registration with LMC in first trimester**
a.	3 DHB campaign
b.	Marae based clinic
c.	Te Rā o Te Raukura hauora expo
3.	**Improving consumer engagement**
a.	Consumer MCGG rep meetings
b.	Consumer survey
c.	Consumer workstreams – directory, liaise with community
d.	Info for women
e.	Improve facilities
f.	Website and Facebook maintenance
g.	Virtual tour of unit

4. **Improving perineal care outcomes**

a. Audit
b. Education sessions
c. Install towel warmers

5. **Increasing primary births**

a. Acupuncture observational study
b. Primary birthing room
c. Review IOL processes
d. C/S processes

6. **Improving journey for women with high BMIs**

a. Workshop and working party

7. **Monitoring consumer feedback**

a. Consumer survey
b. Liaise with DHB Business Unit and Quality teams

8. **Monitoring Clinical Indicators**

Maternity dashboard data integrity improvements

9. **Perinatal Mental Health**

a. Promote Perinatal Mental Health pathways
b.. Education for staff

Potential Objectives 2018-2019

1. Audit numbers of women undergoing general anaesthesia for emergency caesareans following introduction of Patient controlled epidural analgesia PCEAs (Indicator 10).

2. Babies with unplanned admissions to SCBU including Babies born at 37 weeks + requiring respiratory support (indicator 20).

3. Breastfeeding status data for babies admitted and discharged from SCBU to be included in our overall data.

Detailed Objectives, Activities and Rationale

1. MQSP Activities

a) Annual report compilation

As a requirement of MQSP Programme a Clinical Annual Report is produced each year. Several consultations with stakeholders before final sign off by our MCGG are undertaken. The Report is due to MOH by 30th June each year, and is facilitated by the MQSP Coordinator.

b) Collecting smoking cessation advice data (DHB team)

This is a "business as usual' activity initiated in 2015 where mandatory data reporting to MOH on screening, brief advice and cessation support offered, is reported. This data is for DHB employed midwives providing pregnancy care. We are currently reviewing systems for collecting this data for all women accessing our facilities.

c) Contribute to Maternity Quality Committee

The facilitator of the MQSP now sits on the Maternity Quality Committee which feeds into the MCGG. This Committee is the operational arm of Maternity Quality in the DHB, with such activities as approval of audit applications, policy reviews and approval and day to day running of the unit, for example infection control, health and safety, new protocols.

d) Document Control

This is an ongoing activity to ensure policies and consumer information are reviewed, updated to align with latest evidence and are accessible. Our consumer representatives are involved in reviewing the consumer information which has been highly valued. A new medi-board display has been created in the maternity unit entrance.

e) Facilitating Maternity Clinical Governance Group

Terms of reference for the Maternity Clinical Governance Group (MCGG) are reviewed annually. The facilitation of this group is by the coordinator supported by the Administrator for the Maternity Quality and Safety Programme (MQSP) and is running well. Meetings are bi-monthly with the wider membership, with meetings on alternate months for the consumers, coordinators and management to progress consumer workstreams. This governance group has representatives from all disciplines; Obstetric, Paediatric, Midwifery, the Primary and Secondary sector and Consumers and the DHB Maori Health unit, (until recently Pacific People's Health representative) Quality team and Service Integration unit. This group feeds into the overall Clinical Council with our Director of Midwives, sitting on both groups.

f) Facilitate quality improvement initiatives as recommended by MCGG guided by: Perinatal and Maternal Mortality Review Committee Recommendations, and National Maternity Monitoring Group Priorities

See sections six and seven of the Maternity Quality and Safety Programme Report 2017 for more detail on recommendations. www.huttmaternity.org.nz

g) Planning for embedding MQSP activities as business as usual

Such activities as directing document control and quality actions around feedback are examples of how we plan to embed MQSP activities. We are currently awaiting announcement from the MOH on ongoing funding for this contract from July 2018.

h) Tool for Self-Audit of New Zealand Maternity Standards

An annual process to guide remedial actions and setting of objectives for the Maternity Clinical Governance Group. This was carried out in January 2017 and is due to be repeated for the May MCGG meeting.

2. Increasing registration with LMC in the first trimester

a) 3DHB Campaign

The 2017 Campaign in conjunction with neighbouring DHBs Capital and Coast and Wairarapa, was titled “Call the Midwife” and promoted calling rather than texting for such situations as changes in baby’s movements, flu like symptoms, persistent headaches. Quarterly meetings are held with personnel involved in the MQSP in the respective DHBs to promote sharing of ideas and progressing the annual shared campaign. The 2018 campaign is due to be launched in May (World Maternal Mental Health Day, International Midwives Day, and Mother’s Day) and the focus is maternal mental health.

b) Marae based clinic – Hapū Ora

This is a collaboration with Te Runanganui o Te Atiawa and has been running since August 2017. It has been designed with the aim of improving access, directing women to Huttmaternity and community based services and early engagement with a LMC. Women fitting a criteria can have Jadelles (long term contraception) applied at this clinic. It is run as a drop in and staffed by one of our community team midwives. To date the feedback has been excellent and this service will be more formally evaluated in the coming months.

c) Te Rā o Te Raukura hauora expo

Engagement with local Iwi to organise a DHB stand at this event has been in progress for the past two years. Our goal is to increase the visibility of Huttmaternity services and promote early engagement with a LMC. In February this year we had additional members of the Huttmaternity team offering pregnant women onsite Boostrix immunisation.

3. Improving Consumer engagement

a) Consumer MCGG rep meetings

These meetings are held every two months with MQSP and management personnel. This was a change initiated in 2015 to progress the following workstreams: We have three members currently and wish to recruit two further to represent our diverse community.

b) Consumer survey

Late 2016 a consumer survey based on the Ministry of Health’s Maternity Consumer Survey, was localised and created with a high level of input from our consumer members. The survey is electronic but available in hard copy and sent to all women (who we have emails for) quarterly. We have a process for further contact if this is indicated by the participant. We plan to work with the business intelligence unit to make the data reporting more useful.

c) Consumer workstreams – directory, liaising with community

A local directory for health professionals, describes the services of agencies, NGOs and community groups for pregnancy and postnatally. This was compiled and circulated widely by the MCGG in 2015. A smaller version has been created as a consumer directory. Our consumers held a morning tea in the community inviting women to feedback on their experience with Huttmaternity and plan to make this a regular occurrence.

d) Information for women

Consumer members of the MCGG are asked to review our information for women and whānau. The plan is to keep adding to a series of consumer information pamphlets and align the review of this with the associated policies. A medi-display board has been produced to enable access to this information on a wide range of topics from community supports to turning a breech baby.

e) Improving facilities

Our consumers carried out an assessment of our facilities in late 2015 using BUDset (Birthing Unit Design Spatial Evaluation tool). Work has continued where able but has been constrained by finances, to improve the unit with one aim being to increase our primary birth rate. Plans are underway to renovate an existing room to create a birth space for low risk women. Our consumers are underway with plans to update our whanau waiting area and have gained sponsorship from a local building supplier to paint and tidy the kitchen area.

f) Website and Facebook maintenance

This is on-going work and contributions are made by Consumers and the MQSP team to improve engagement of our community. Activities such as competitions at Christmas or Mother's Day have been used.

g) Virtual Tour

Filming and creation of a virtual tour was completed in June 2017. The purpose is to allow people to see the facilities, to use the opportunity to provide information to women and their whānau and to reduce the large group foot traffic of antenatal education provider tours. The antenatal educator BirthEd who hold a contract with HVDHB contributed to the cost of the production.

4. Improving perineal care outcomes

a) Audit

An audit was undertaken of all births from September 2015-2016 to ascertain the rate of third and fourth degree tears. This was as a result of our increase in standard primiparae sustaining a third/fourth degree perineal tear with no episiotomy and with episiotomy (Clinical Indicators 8 and 9). We have identified a need to continue to investigate these outcomes and develop specific, improvement interventions.

b) Education sessions and information

Two education sessions to present audit findings and improve evidence-based care were held in 2017. Alongside the education a consumer information booklet was produced with regard to care of third and fourth degree tears.

c) Installation of towel warmers

Seven towel warmers have been purchased to enable the evidence-based practice of warm compresses to the perineum during second stage of labour.

5. Increasing primary births

a) Observational study: acupuncture for ruptured membranes at term (with no labour)

Indicator five results in 2016 demonstrated a rise in induction of labour rates in our standard primiparae women. Work with our in-house registered acupuncturists and to capitalise on skills of some staff members to offer and evaluate this as a way of reducing inductions of labour has been outlined as an action to meet the objective of increasing primary births in our unit.

b) Primary birthing room

Plans to create a specific primary birthing room are on-going and will involve broad consultation with staff, LMCs, consumers and the wider hospital services. A concept design has been produced and the final is awaited.

c) Review inductions processes

This is on-going work to monitor reasons for women being induced and at what gestation. A review of the process will be carried out at an operational level in the Maternity Unit.

d) Review Caesarean processes

This is on-going work to streamline and reduce rates of caesarean and improve the journey for women needing to have both elective and acute caesareans. A job for dedicated midwives to accompany women to theatre for elective surgery has been advertised.

6. Improving journey for women with High BMI

a) Workshop and working party

Whilst our guidelines have been aligned with "Screening, Diagnosis and Management of Gestational Diabetes in New Zealand: A clinical practice guideline," some women are declining referral to secondary services for having a high BMI but no gestational diabetes. A workshop and initial working party meetings have occurred in order to look at improving services to these women. An initial survey to women attending clinic in the previous year has been undertaken. A plan to consult more extensively with consumers is being developed. This is to address Maternity Indicator 17 where in 2016, eighty-five women had a BMI >40. Of these 35% identified as NZE, 31% Maori and 30% Pacific Island. Although this indicator has been removed in 2017, our rates have further increased with one-hundred-and-one women having a BMI of >40.

7. Consumer Survey

a) On-going management and monitoring

Development of survey, increasing audience access through emails and offering hard copy and oral survey options was developed in 2016. Work on improving uptake and distribution of the survey quarterly is on-going.

b) Liaising with DHB Business Intelligence Unit and Quality Teams for consumer survey

This is an objective to ensure quality improvement is determined by findings from the survey.

8. Maternity Clinical Indicators Dashboard

a) On-going updating and maintenance

An audit of the data collected to ensure alignment with MOH data has been identified as a priority objective.

9. Perinatal maternal mental health

a) Promotion of maternal mental health pathway for referrals

Creation of Edinburgh Postnatal Depression Scale (EPNDS) for staff to use has been completed and the consumer support brochure to specifically include support for those suffering from maternal mental ill health has been updated.

b) Education session on perinatal maternal health

A midwifery refresher day was held and attended by 95% of the LMC workforce and 50% of our community team. This included a presentation from Maternal Mental Health on the pathway for referral and support for women.

Timeline: MQSP Programme Huttmaternity 2018

Objective	Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	**MQSP Activities**												
	Annual report compilation		✓	✓	✓	✓	✓						
	Collecting smoking cessation advice data (DHB team)	✓			✓			✓			✓		
	Contribute to Maternity Quality Committee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Document Control	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Facilitating Maternity Clinical Governance Group	✓		✓		✓		✓		✓		✓	
	Facilitating quality improvement initiatives as recommended by: Localised objectives set by MCGG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NMMG	✓					✓						
	PMMRC	✓					✓						
	Planning for embedding MQSP activities as business as usual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Tool for Self-Audit of NZ Maternity Standards				✓								
2	**Increasing registration with LMC in first trimester**												
	3 DHB campaign		✓	✓	✓	✓							
	Marae based clinic COMPLETED												
	Te Rā o Te Raukura hauora expo COMPLETED		✓										
3	**Improving consumer engagement**												
	Consumer MCGG rep meetings		✓		✓		✓		✓		✓		
	Consumer survey	✓			✓			✓			✓		
	Consumer workstreams – directory				✓	✓	✓	✓	✓				
	Info for women	✓	✓	✓									
	Improving facilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Website and facebook maintenance	✓			✓			✓			✓		
	Virtual tour of unit COMPLETED												
4	**Improving perineal care outcomes**												
	Audit COMPLETED												

	Education sessions COMPLETED												
	Installing towel warmers				✓	✓							
5	**Increasing primary births**												
	Observational study: acupuncture for ruptured membranes at term (with no labour)									✓	✓	✓	
	Primary birthing room	✓	✓	✓	✓	✓							
	Reviewing induction processes							✓	✓	✓			
	Reviewing c/s and processes							✓	✓	✓			
6	**Improving journey for women with high BMIs**												
	Working party and consultation community				✓	✓	✓						
7	**Monitoring consumer feedback**												
	Consumer survey – ongoing management and monitoring	✓			✓			✓			✓		
	Liaising with DHB business unit and Quality teams					✓	✓						
8	**Monitoring Clinical Indicators**												
	Maternity dashboard – ongoing management and monitoring	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	**Perinatal mental health**												
	Production of EPNDS/Update directory COMPLETED						✓						
	Education session for staff – screening and referring		✓	✓						✓			

Summary

We look forward to producing our 2017 Annual report to reflect the quality and safety improvement activities we have undertaken over the year. In particular, we are proud of our involvement in initiatives to improve access to services for the women we serve in the Hutt Valley, for example the Hapū Ora Clinic in collaboration with Te Runanganui o Te Atiawa. The projects around improving the journey for women with high BMIs and measures to address our falling primary birthing rate, will have hopefully progressed by the end of this funding year but is resource dependant.

We will likely be required to carry over some of the objectives from the 2017-18 year into 2018-19 workstreams. Our Maternity Clinical Governance Group will help to set new objectives based on national and internal directives.

It is difficult to know how the MQSP programme will progress from 1 July 2018 as funding agreements haven't been finalized.

We will continue to work towards embedding this programme as business as usual in the DHB.

If you have any enquiries about this report, or wish to contact Hutt Valley DHB, please contact the Hutt Valley DHB Director of Midwifery:

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