

## **Maternity Services Annual Clinical Report 2014**

www.huttmaternity.org.nz



We would like to acknowledge the contribution of:

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- HVDHB Primary & Community Midwives Team
- HVDHB Lactation Consultant Services
- Jenny Rafferty, Antenatal HIV Coordinator
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- HVDHB Maternity Clinical Governance Group
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- Sandra Hoggarth, Newborn Hearing Screening
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## **Messages from Maternity Leaders**

The DHB is delighted with the on going support from the Ministry of Health for the Maternity Quality and Safety Programme. It ensures dedicated focus on quality improvement in the service. The measurable gains that have been made over the last year have included, launch of the Shaken Baby Syndrome programme, Top 5 things to do in the first 10 Weeks, consumer forums for vulnerable women, Trigger Event notification and reporting, combined Newborn Enrolment form, provision of Primary Maternity Data and our Out and About with Maternity Services to primary care practices. There will be a big focus in the service over the coming year in introducing Badgernet This will greatly improve access to critical information regarding women and the service as whole. We are really excited to be starting off the year in July with the first Hutt Maternity Network Expo, bringing health professionals involved in maternity care together across the Hutt Valley.

#### Sarah Boyes, Director of Operations, Surgical, Women's and Children's Directorate

2014 was a good year which saw us bringing in some new quality and teaching strategies. It is very pleasing to see that Hutt maternity clinical outcomes are in keeping with the National figures, although we continue to strive for better. We have now a smooth running Quality and Safety programmes and an interactive groups/ programmes which aim at improving the liaison with primary and secondary sector. We look forward to achieving new aims/ goals for this year.

#### Meera Sood, Clinical Head of Department, Obstetrics

Yet again a busy year for the Hutt; the decrease in birth numbers doesn't reflect the activity of the unit. 2014 heralded a 3DHB campaign 'the first 5 things to do in the first 10 weeks' of pregnancy in order to encourage women to register with a LMC promptly and to be mindful of the important activities they need to be aware of in early pregnancy. Within the Maternity Unit staff have been active auditing our PPH statistics and altering practice as necessary; coping with the new electronic birthing unit summary and preparing for the introduction of the acuity tool Trendcare.

Highlights of our year were the NZCOM Liz Brunton Midwife of the Year Award presented to Kim Billaney one of our Hutt LMCs, and our community midwifery team presented with a Hutt Valley DHB excellence award. The plan for 2015 is to continue to ensure our data is robust and to interpret it effectively to guide best practice in the care of our mothers and babies. We will continue to build our community interface and work with our colleagues in primary practice to ensure excellent communication between secondary and primary care.

Jo McMullan, Clinical Midwifery Manager

## Hutt Valley DHB Vision, Mission and Values

## **Our Vision**

Whanau 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**

'Can do' - leading, innovating and acting courageously

Hutt Valley DHB leads the New Zealand health sector. We are committed to quality and innovating to improve the health of our people.

Working together with passion, energy and commitment

We are passionate about our work. We direct our energy to doing the best for our clients and the community.

Trust through openness, honesty, respect and integrity

We regard trust as essential to success. The people we serve must have confidence in us. We are open, honest, and respectful. We act with integrity.

Striving for excellence

We aim for excellence, individually and as an organisation. This commitment defines us, the services we provide, the way we work with each other and how we shape our systems.

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## **Executive Summary**

Hutt maternity have participated in formal maternity quality initiatives since 2011, initially as a Demonstration Site for the Ministry of Health.

This was part of the foundation for the subsequent Ministry of Health Maternity Quality and Safety Programme (MQSP), which was introduced nationally from 2012.

DHBs were challenged with a framework involving seven elements:

- o Governance & Clinical Leadership
- Information and Communication Systems
- Data Monitoring
- Coordination and administration
- o Sector Engagement
- Consumer Engagement
- o Quality

We are pleased to present our third Maternity Services Annual Clinical Report which outlines how we have risen to the challenge of maternity quality and safety, and the work streams undertaken in the 2014 year within the suggested seven elements. With each years report we refine and expand the information we report on demonstrating an ever improving service.

Our report provides the opportunity to review and analyse our services thus we are able to respond to the needs of the maternity population within the Hutt Valley. We utilise our Annual Report to assist in our self audit against the New Zealand Maternity Standards (2011).

We are able to provide data on Hutt maternity events and services, and current data on the New Zealand Clinical Indicators. Ministry of Health release data in the New Zealand Clinical Indicators from previous years, and we have benchmarked against national averages within secondary care facilities. These are outlined in Sections Two and Three.

Each year the Hutt Maternity Clinical Governance Group (MCGG) set objectives and priorities for the upcoming year. This includes priorities from Ministry of Health (MOH) and the National Maternity Monitoring Group (NMMG). Outcomes and summaries of our 2014 objectives and priorities are detailed in Section Four.

Moving forward into 2015 we have outlined several work streams reflecting localised needs and with consideration to the priorities of the NMMG. As a service we feel we have embraced the Maternity Quality & Safety Programme and been able to embed some excellent quality initiatives into business as usual. Our upcoming challenge will be to continue this momentum within the projected resources and capacity available.

## Section One: About Hutt Valley District Health Board

Hutt Valley District Health Board plans, funds, and provides government-funded healthcare and disability support services for 146,000 people in the Hutt Valley. Of these people, 104,000 live in Lower Hutt and 42,000 live in Upper Hutt.

The Hutt Valley population has a slightly higher proportion of Māori and Pacific people compared to the national average. Around 18% (25,700 people) of the Hutt Valley population are Māori, and about 8% (12,200 people) are Pacific people. We also have sizeable Asian and refugee populations. Most Māori and Pacific people live in Lower Hutt. The Māori and Pacific populations are younger than other ethnic groups, with around half younger than 25 years. The Māori and Pacific populations also experience higher levels of deprivation than other ethnic groups.

An estimated 19% (27,000 people) of the Hutt Valley population have some form of disability. Of these people, around 11% (16,000 people) are younger than 65 years old. Most disabled people live in the community, with only 13% of older disabled people in residential care and less than 1% of disabled people under the age of 65 in residential care.

When compared with national figures, our population has:

- Similar rates for health risk factors: smoking, low physical activity, fruit and vegetable intake, hazardous drinking, obesity, high cholesterol and high blood pressure
- A higher rate of asthma, but similar rates of other chronic conditions: diabetes, chronic obstructive pulmonary disease and chronic mental health disorders
- Higher rates of hospitalisation for cardiovascular disease
- Similar leading causes of avoidable hospitalisations and mortality
- Lower rates of unintentional injury hospitalisation
- Higher rates for prescriptions
- Higher rates for emergency department attendances
- Lower number of GPs per 10,000 population

The health status of our population shows that we need to continue to increase our activity in the following areas:

- Working closely with primary care to address long-term conditions and avoidable hospitalisation, and to reinforce education and prevention, particularly amongst Māori, Pacific and people with higher needs;
- Continuing our positive engagement with community providers, including the cluster of Whānau Ora providers, with a focus on education, prevention and outreach services, particularly amongst Māori and Pacific people;
- Continuing our emphasis on better linking our hospital services with our primary care providers; and
- Positioning ourselves to meet the changing demand for services, particularly those resulting from an ageing population.

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Our Hutt Valley DHB annual budget in 2013/14 was \$447.6 million and the DHB employs over 2,200 staff. Most work in our provider arm at Hutt Hospital, or for community or regional health services.

A governance board oversees the DHB. The Board has seven members elected by the community, four members appointed by the Minister of Health (including the Chair) and a Crown Monitor. (See the directory at the end of this report.) The Board ensures that our DHB meets our local and national health objectives. Board elections were held in 2013, with three new members taking up roles from December.

We also share our Board Chair with Capital & Coast DHB. Our advisory committees also reflect this joint approach: the Community and Public Health Advisory Committee and Disability Services Advisory Committee share members from each of the three sub-regional DHBs.

The Planning & Funding arms of Wairarapa, Hutt Valley and Capital & Coast DHBs amalgamated to form the 3DHB Service Integration and Development Unit (SIDU). On behalf of the three DHBs they plan, contract, monitor and evaluate health and disability services run by the DHBs and their contractors. SIDU strives to maintain and improve the Hutt Valley community's health within available funding. They also consult the community on significant changes to services and ensure any advice given to the Board is consistent with national strategies and Government policy.

In the 2013/14 year, priority activity areas for the DHB were:

- Improve, promote and protect the health of communities within the Hutt Valley
- Reduce health disparities and improve the health of Maori and Pacific people
- Enable the community to take part in improving healthcare and planning health services changes
- Ensure anyone who needs health services or disability support gets effective help
- Supporting people with disabilities to take part in the community.

To meet the wide range of needs in our community we buy services from health and disability service providers. These include:

- Primary healthcare providers (including general practices and youth health services)
- Māori and Pacific health providers
- Aged residential care and home support services
- Mental health providers
- Pharmacies
- Laboratory and radiology providers
- Local, regional and national hospitals

We would like to acknowledge the above information has been sourced from the Hutt Valley DHB Annual Report 2014.

# Section Two: Maternity Service Configuration and Facilities

## **Maternity Services**

The 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 146,000. Hutt Valley DHB supports approximately 2000 births per year. Our birthing population consists of NZ European 55%, Maori 20%, Asian 10%, Pacific Island 9% and Indian 4%.

Whilst a downward trend in birth numbers has occurred over the last four years, consistent with birth numbers across the rest of NZ (table 1 and 2), the number of non-birth admissions and obstetric assessments have increased (table 3).



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

	2010	2011	2012	2013	2014
Births in NZ (NZ Statistics)	64,315	61,923	61,178	58,717	Not avail
Births at Hutt Valley DHB	2,161	1,969	1,982	1,850	1791
% of all NZ births in Hutt	3.3%	3.1%	3.2%	3.1%	Not avail

#### Table 2: Birth Breakdown Hutt Valley DHB Facility

	2010	2011	2012	2013	2014
Single Liveborn	2129	1923	1943	1813	1752
Single Stillborn	9	16	11	12	12
Twin Liveborn	23	29	28	25	27
Total births at facility	2161	1968	1982	1850	1791

Women requiring Secondary Care services as outlined in the Guidelines for Consultation and Referral (MOH 2012) are cared for by hospital obstetricians and midwives.

The below graph indicates all inpatient birth events (delivery events), non-birth admissions and urgent obstetric assessments undertaken in the Maternity Unit on level 2.

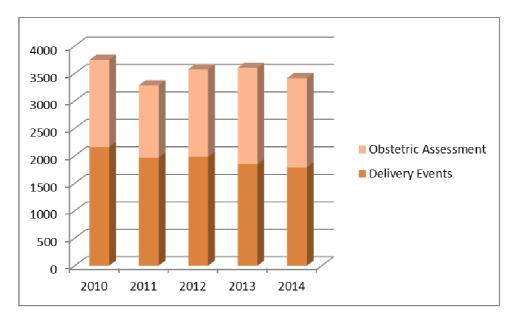


Figure 1: Maternity Ward and Birthing Suite events/activity

Table 3: Birthing Suite Events

	2010	2011	2012	2013	2014
Birth Events	2161	1969	1982	1850	1791
Obstetric Assessment	1587	1316	1596	1754	1624

## LMC providers

Primary maternity care is provided by LMC midwives and private obstetricians who have an access agreement to use the facilities. For women unable to access the services of an LMC midwife, the DHB Hutt maternity midwifery team will provide this service. (There are no GPs practicing obstetrics in the Hutt Valley).

LMC midwife: The DHB has on average 40 community-based case loading midwives with primary access agreements providing lead maternity care.

LMC private obstetrician: There are three LMC obstetricians (two of whom are also employed by the DHB). For women who choose a private obstetrician as their lead maternity carer, midwifery care is subcontracted either by the hospital and / or community based midwives, or by private arrangement with LMC midwives.

Women requiring Secondary Care services as outlined in the Guidelines for Consultation and Referral (MOH 2012) are cared for by hospital obstetricians and midwives.

## Workforce

An increasing number of midwives working within the DHB have previously worked in LMC practice and vice versa. This creates an appreciation with each others roles and assists with integrating community based LMCs into hospital based clinical reviews and other quality processes. The maternity service includes the following clinical staff:

- Director of Operations, Surgical Women's and Children's
- Obstetric Clinical Leader
- Clinical Midwifery Manager (CMM)
- Associate Clinical Midwifery Manager (ACMM)
- Midwifery Educator
- Lactation Specialists x2
- 5 Obstetric and Gynaecology consultants, registrars (one ITP training post), house surgeons, trainee interns on rotation and medical students
- A core DHB employed team of approximately 50 midwives, registered nurse, enrolled nurses and healthcare assistants
- Midwifery students on rotation

The DHB Operations Centre was established in 2013 and introduced Trendcare into the organization. Maternity was incorporated into Trend Care at the end of 2014. These tools will provide better utilization of workforce and bed management across the DHB.

## **Birthing Suite**

Birthing Suite consists of eight birthing rooms and an acute assessment room. Each birthing room is fully equipped for labour and birth, including a neonatal resuscitation station and private bathroom facilities. The rooms have a large deep corner bath for water births.

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, 7 days a week and support LMC midwives as required. Medical staff, consisting of a consultant obstetrician, senior registrar or senior house officer is rostered to cover an on call system 24 hours a day.

## **Maternity Ward**



The maternity ward is made up of 13 single rooms and, two double rooms with shared ensuite facilities (an additional four bed spaces can be utilized when the need arises).

Our ward caters for both antenatal and postnatal inpatients as well as provides rooms (if available) for women 'rooming in' with babies in the Special Care Baby Unit (SCBU). The ward 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 facility is utilised by both community based LMCs and women under DHB maternity care (Primary and Secondary). Women requiring inpatient care are transferred to birthing suite or the ward. The unit incorporates the Secondary Care Obstetric Clinics, Obstetric Assessments and an Early Pregnancy Assessment Clinic (EPAC).

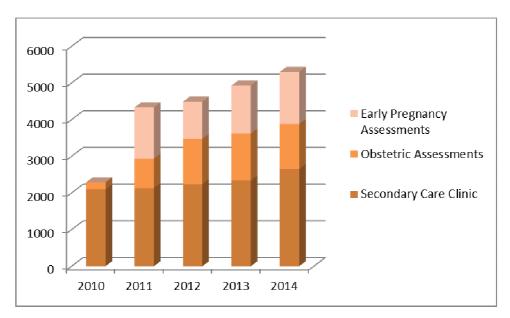


Figure 2: Maternity Assessment Unit Total Patient Events

Table 4: Maternity Assessment Unit Events

	2010	2011	2012	2013	2014
Secondary Care Clinic	2099	2130	2240	2342	2652
Obstetric Assessment	191	805	1236	1277	1229
Early Pregnancy Assessment	1	1399	1014	1309	1424

There are three main work streams in MAU:

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

Obstetric Assessments in the MAU include acute assessments of women who are stable enough to be seen in an outpatient setting. Those that required 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 1 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.

Note: the 2013 and 2014 figures include a specialist service for insertion of Jadelle. There were 103 in 2013 and 150 in 2014.

Early Pregnancy Assessments include women experiencing pain and/or bleeding in early pregnancy who are seen for assessment and management

## **Overall Service Workload**

The following tables demonstrate the overall workload across the Maternity Ward, Birthing Unit and the Maternity Assessment Unit.

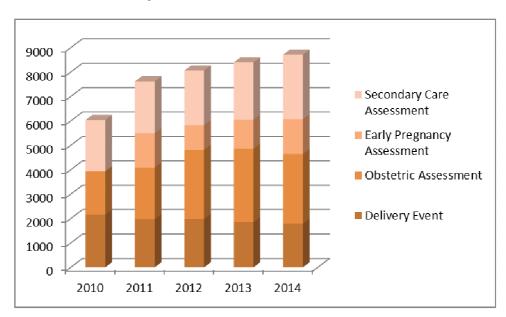


Figure 3: Overall Maternity Services Events

Table 5: Overall Maternity Services Events

	2010	2011	2012	2013	2014
Delivery Event	2161	1969	1982	1850	1791
Obstetric Assessment	1778	2121	2832	3007	2853
Early Pregnancy Assessment	1	1399	1014	1200	1424
Secondary Care Assessment	2099	2130	2240	2342	2652

Comment:

The total birth numbers continue to decrease, but there has been a rise in the number of Obstetric Assessments and referrals to the Secondary Care Clinic indicating an escalation in the clinical complexity of our women.

## HuttMaternity Midwifery Team (HVDHB)

Historically we have had a small team of community based midwives providing postnatal care for women with our Secondary Care Obstetric team as LMC or those women who have a private obstetrician LMC.

However in early 2002, in response to a fluctuating population and workforce needs in the community, our midwives team has evolved to include full primary care. This is now a well established service, with many women choosing to return to our team for subsequent pregnancies. Initially this team worked in a community based clinics in several locations across the valley, but are now home visit based. Labour care is coordinated by our birthing unit midwives.

The women within this population are often referred because:

- There are no LMCs available
- Women choose HVDHB Midwives as LMC
- The family are not NZ residents
- English is a second language
- The woman is late booking
- There are complex social issues
- Engaging with health care is an issue



Women who are under the clinical responsibility of the Secondary Care Obstetric Clinic are also referred to our Community/Primary Midwives team for primary midwifery input in their care if they do not have an LMC Midwife.

Our client demographic: It is realistic to say that our antenatal client base would reflect a higher proportion of the following groups, than is seen overall in the local population:

- Non-residents
- Non-English speakers
- Women who live with social complexity
- Teenagers

It is difficult to anticipate the work of the Community team. The figures below give an indication of the number of women that are booked each month by the primary midwives team, for both LMC care and for Post Natal care if they have a Private Obstetrician LMC. This gives an indication of the potential work loads across the year. The pre-admissions are based on the due date of the women, so there may be some cross over in the end / beginning of each year, again demonstrating the potential numbers of women that the community/primary team may be involved with for care.

	2010	2011	2012	2013	2014
Bookings Primary	86	153	69	44	49
Bookings Private Obs Patients	77	94	68	66	73
Number of Bookings TOTAL	163	247	137	110	122
Primary Preadmissions	84	98	66	54	40
Private Obs Patients Preadmissions	231	221	232	192	205
Secondary Care Preadmissions	58	55	68	80	60
Number of Preadmissions TOTAL	373	374	366	326	305

## Table 6: Total Number of Hospital Booking and Total Number of Pre-Admissions by LMC type

The following table demonstrates the actual visits by our Community / Primary Midwives Team. Antenatal Visits include full Primary Midwives Team LMC cases and Bookings, with an additional antenatal visit at 34 weeks for Private Obstetric women for on going birth planning. A point to note is that not all women continue care postnatally with the Team. Some women move out of area, or are not within our catchment for postnatal care. This is anecdotally high with Private Obstetric LMC women. They may have gone to a private LMC Midwife especially if they live outside of the Community / Primary Midwives team catchment area, or been linked with Primary midwives teams in those areas.

#### Table 7: Total number of Primary Midwives Team Visits

	2010	2011	2012	2013	2014
Total number of Antenatal Visits	534	906	539	659	821
Post Natal Visits HVDHB	3930	4632	2551	1770	1369
Post Natal Visits Private Obs Pts			1269	1539	1446
Total number of Post natal Visits	3930	4632	3820	3309	2815
Total Community Midwives Events	4464	5538	4359	3968	3636

Figure 4: Total Number of Primary Team Visits, Antenatal and Postnatal

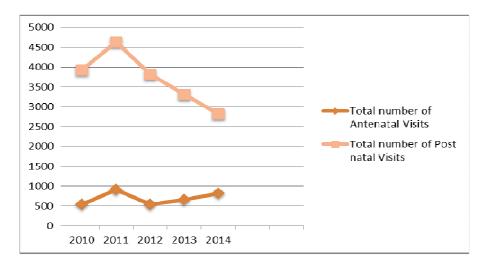
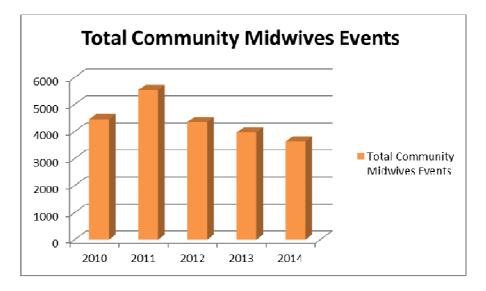


Figure 5: Total number of Primary Midwives Team Visits



#### Comment:

We have had a decrease in the number of post natal visits by our community midwives, with a slight increase in the number of antenatal visits. Overall there has been a decrease in the work of the Community Midwives team including women where they undertake full Primary Care. The work load of our Primary Midwives team is very fluid with women moving in and out of the area, and shared care between Primary and Secondary Care. This decrease in number of visits reflects our decreasing birth rate at Hutt Valley DHB.

There has been an increase in the number of midwives working with private obstetricians to being involved with antenatal bookings and post natal care.

## Lactation Consultants/BFHI Coordinators

HVDHB has achieved Baby Friendly Hospital Initiative (BFHI) accreditation through until 2017. Helping to maintain our BHFI accreditation is a comprehensive Lactation service.

Currently an FTE of 1.1 is shared between a certified Lactation Consultant and a Registered Nurse / Breast feeding Specialist. The service offers breast feeding and lactation support to mothers and babies on the post natal floor, special care baby unit, and throughout the main hospital campus as requested. Outpatient appointments are offered for Mum and baby up to six weeks old, following referral from the Lead Maternity Carer or Plunket. Our service also accepts referrals for women antenatally with complex breastfeeding needs.

Along side breast feeding support, a reasonable part of our role is the on-going education of DHB staff and external stakeholders to maintain BFHI accreditation.

Our team works continuously to develop our services, and implement quality improvements e.g. audits and policies to maintain our standard of care.

In addition to these services we support and assist with a Breast Feeding Support Clinic run weekly. At this time we also offer assessment and possible frenotomy with regard to Ankyloglossia if impacting on optimum Breast feeding. Follow up is available up to six weeks as required. The BFSC in the 2014 year have had 276 events, 167 of these were new assessments and 109 follow up assessments.

In the upcoming year (2015) the Lactation Services team will be working hard to stream-line our services, focusing on patient referral systems, clinical recording data bases, and ability to gather statistics for our inpatient and outpatient visits. This is to better understand our work requirements, future planning for the service and all the time working to increase our Breast feeding rates. Over the previous 3 years there has been a promising upward trend of breastfeeding rates with this year already demonstrating improved exclusive rates.



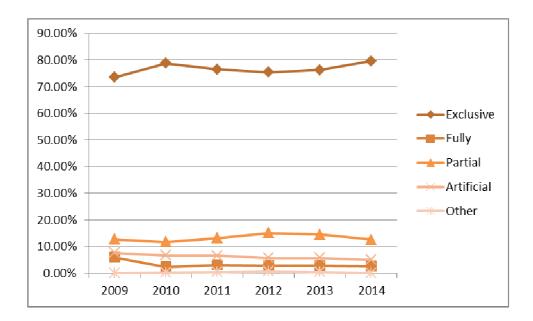
## **Breastfeeding rates at discharge from Hutt Facility 2014**

Rates on Breast feeding status are recorded at discharge from our facility.

Delivery Year	Exclusive	Fully	Partial	Artificial	Other	Grand Total
2009	73.47%	6.04%	12.72%	7.72%	0.05%	100.00%
2010	78.80%	2.44%	11.77%	6.69%	0.31%	100.00%
2011	76.47%	3.10%	13.23%	6.64%	0.55%	100.00%
2012	75.47%	2.88%	15.19%	5.75%	0.71%	100.00%
2013	76.24%	2.89%	14.56%	5.78%	0.53%	100.00%
2014	79.63%	2.69%	12.66%	5.02%	0.00%	100.00%

Table 8: Breast Feeding percentage by feeding type

Figure 6: Breast Feeding Percentage by Feeding Type



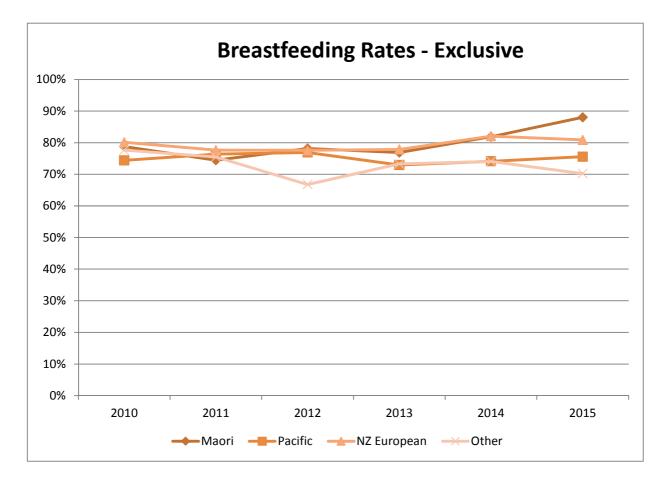


Figure 7: Exclusive Breastfeeding Rates by Ethnicity



## **Other Links**

#### Social Worker:

We have a dedicated women's health social worker available Monday to Friday. Women can be referred by a health practitioner or they can self refer.

#### CYF Liaison:

A CYF Liaison Social Worker is on site and provides support for Maternity Services to address the needs of our vulnerable women and babies. There are strong links between our CYF Liaison and Child Protection team.

#### **Operating Theatre**:

There is no operating theatre facilities attached to the Birthing Suite. Trial of forceps, caesarean sections and manual removal of placenta or any other theatre requirements need to transfer to the main DHB theatres.

#### SCBU:

There is a level 2 Special Care Baby Unit, with 12 cots and 2 ventilators. This unit provides care for babies above 32 weeks gestation.

#### Acupuncture Clinic:

Hutt Maternity provides a free acupuncture service in conjunction with The NZ School of Acupuncture and Traditional Chinese Medicine. The clinics currently run twice a week. Women can self refer to these clinics.

#### Stretch Class and Physiotherapy Services:

Stretch classes are run once a week by our Women's Health Physiotherapist. The physiotherapist visits the Maternity Ward daily Mon-Fri, and is also available to women for consultation on issues in pregnancy e.g. carpel tunnel, back pain on referral from their LMC or self referral.

#### Ionazone Treatment:

Our Women's Health Physiotherapist provides this free service.

#### **Pregnancy and Parenting Education:**

DHB funded Antenatal Education are subcontracted to an external agency, BirthEd. There is also one private provider in the district that runs classes in both Lower and Upper Hutt.

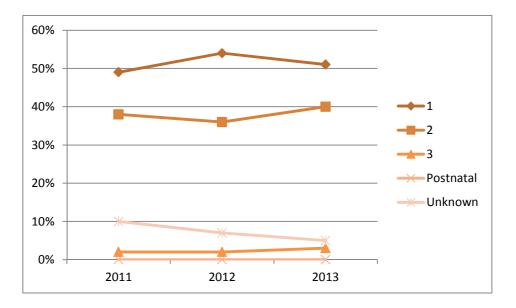
## **Maternity Providers**

Maternity provider at time of registration data is not collected by the DHB. The National Maternity Monitoring Group (NMMG) provided data on LMC registration in the first trimester as 55% for the 2011 year and 58% for the 2012 year, based on Domicile. The national average for 2012 sits at 64% (NMMG). MOH have provided DHBs with data for 2011-2013 when the Maternity Quality and Safety Programme commence. In 2014, 2012 data was made available as a new NZ Maternity Clinical Indicators; this is recorded by facility, not domicile.

	2011	2012	2013
1	49%	54%	51%
2	38%	36%	40%
3	2%	2%	3%
Postnatal	<1%	<1%	<1%
Unknown	10%	7%	5%

 Table 9: LMC Registration by Trimester, by Facility

Figure 8: LMC Registration by Trimester, Percentage by Facility



Comment:

A large amount of work has been undertaken in the 2014 year by Hutt Maternity with our 3DHB Top 5 campaign. We are expecting a positive change in 2014 data. There has been a decrease in the numbers of recorded unknowns as HVDHB are now providing Primary Maternity figures to MOH via the Primary Maternity Data Collection System (PMDSC). It is hard to compare data from MOH with the NMMG as measuring parameters are either by Facility or Domicile and are not comparable.

## **Births Events in Hutt Valley Facilities**

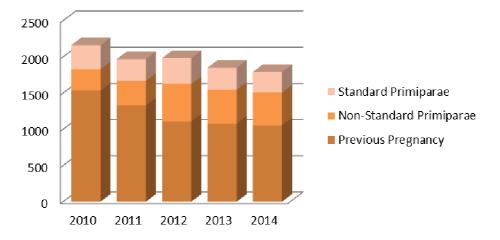


Figure 9: Births in Hutt Valley Facilities by Parity

Table 10: Women giving birth in Hutt Hospital 2010 to 2014 by Parity

Parity Type	2010	2011	2012	2013	2014
Previous Pregnancy	1534	1331	1107	1078	1056
Non-Standard Primiparae	293	337	520	467	451
Standard Primiparae	334	300	355	304	284
Grand Total	2161	1968	1982	1849	1791



Figure 10: Birth Events by Maternal Age

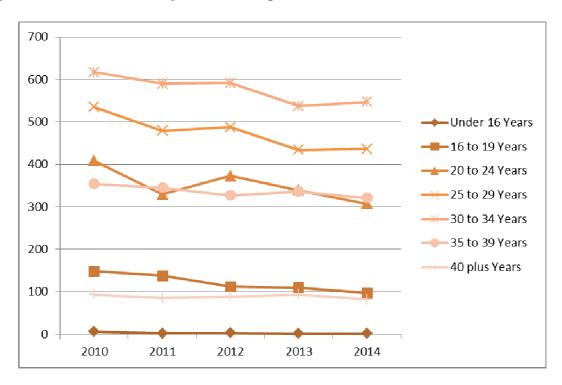
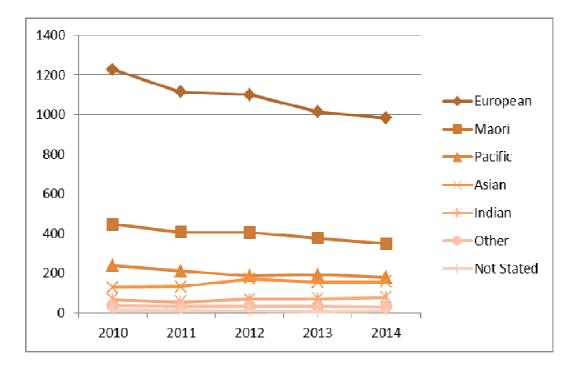


Figure 11: Birth Events by Ethnicity



## **Body Mass Index for Births in 2014**

BMI	Number	Percentage
< 35	786	43.89%
>= 40	23	1.28%
<= 18.4	29	1.62%
18.5 - 24.99	418	23.34%
25 - 29.99	242	13.51%
30 - 34.99	110	6.14%
35 - 39.99	48	2.68%
35 - 49	116	6.48%
>= 50	6	0.34%
(blank)	13	0.73%
Grand Total	1791	100.00%

#### Table 11: Body Mass Index for Births in 2014

#### Comment:

Prior to 3/7/2014 HVDHB Data collection ranges for BMI were; <35, 35-49 or  $\geq$ 50. This was changed to align with PMMRC criteria. In order to produce some data on BMI, the above table is a mix of our old indices and the PMMRC ranges.

In 2015 we will have a complete year with the same reference ranges and this will enable us to benchmark against National Standards.

## Smoking rates in pregnancy

In our 2014 work it was recognised that it is very difficult to get robust data on smoking rates in pregnancy and behaviour change. Data on smoking status is collected in a multitude of repositories and these do not all have the same parameters. We know from coded data that women delivering in Hutt Hospital and from MMPO data that LMC's and core midwives are consistent in asking about smoking status and quit advice. Here at the DHB we are able to collate data on smoking status at birth from this facility

	Maori	Pacific	Asian	Indian	European	Other	Not Stated	Grand Total
2009	48%	16%	1%	0%	13%	3%	0%	19%
2010	48%	15%	1%	3%	14%	0%	6%	20%
2011	44%	14%	1%	0%	13%	3%	13%	18%
2012	42%	10%	1%	0%	9%	0%	0%	15%
2013	42%	13%	1%	1%	11%	0%	14%	16%
2014	38%	11%	0%	0%	9%	0%	17%	13%

Table 12: Smoker at time of Birth from HVDHB Maternity Services by %

Comment: overall showing a decrease in rates.

In 2014 Ministry of Health released the New Zealand Maternity Clinical Indicators from 2012. They incorporated a new Key Performance Indicator: Maternal tobacco use during postnatal period. This provides data on smoking status at two weeks following birth, of those women registered with an LMC (89% in 2012). It does not currently include women who receive DHB funded Primary Care.

Table 13: Maternal tobacco use during postnatal period (2 weeks after birth)

	2012
Number of smokers at 2/52	160
Number of all smokers	1750
Our rate %	9.1 %
All Secondary and Tertiary Facilities	12.8 %
All Primary Facilities	22.5 %
All home births	13 %
New Zealand	13.9 %

Comment:

This data is from MOH, shows our rate at 9.1% below both the National average of 13.9% and the percentage for Secondary/Tertiary Facilities at 12.8%.

Late in 2013 we established a small group of internal stakeholders to review actions that could be done to improve the smoking rate at discharge. This group continued to meet over the 2014 year and has undertaking the following initiatives.

**Text referral**: A text referral service to Quitline was established in February 2014. This enables LMCs and Midwives registered to text a clients contact details directly to Quitline.

**Education/training**: Over the year several education opportunities have been available. ABC for Smoking Cessation was held and is available to any staff member as required. This also included sessions with Childbirth Educators at BirthEd. Te Hapu Ora training commenced in November, and there are further sessions planned for 2015. A presentation on smoking rates, risks, benefits of quitting, was done at our LMC/Core interface meeting.

**3D Health Pathway**: the Smoke Free Advisor up dated the 3D Health Pathway in April, to include information on the organisations that provided cessation for pregnant women. It also includes how to text-refer to Quitline and the details for Innovate (Smoke Change) for education.

**5 Things to do within the first 10 weeks**: This was a 3 DHB sub regional campaign we launched in May. It included: 1. Find LMC, 2. Folic Acid and Iodine, 3. Screening, 4. Best start – smoking, alcohol and drugs, and 5. Eat well and stay active. This was launched via a wide range of media, advertising, flyers, through Primary care practices, and pharmacies.

**Out and About with Maternity**: In September, Two midwives went out and about to primary practices with resources including the "5 things to do within the first 10 weeks", and copies of the Quitline "I'm Quitting Smoking for Baby and Me".

**Nicotine Oral Spray Resource Packs**: Resource packs were provided to LMCs, and Core staff, which included information on smoking cessation, "I'm Quitting Smoking for Baby and Me" and the new Quickmist nicotine oral spray and smoke free home and cars information.

## Home Births in Hutt

Hutt Valley DHB does not collect data on Homebirths. The Ministry of Health has provided the data for the 2011 - 2013 years which are sourced from the National Maternity Collection.

#### Table 14: Home Birth in Hutt Valley DHB

	2011	2012	2013	2014*
Number of Homebirths	61	49	63	38
Percentage of total birth number	3.1 %	2.5 %	3.3%	2.1%

\*Provisional Data from Maternity Unit, HVDHB.

#### Comment:

We had made an assumption that most LMCs submit a hospital 'booking' for homebirth women, and when the woman homebirths the LMC notified Maternity Enquiries and this pre-admission is then cancelled. To try and ascertain some data around homebirths in 2014 we introduced an informal system to capture the number of homebirths that were "booked / pre-admitted" and the Pre-admission cancelled due to homebirth. Administration staff documented 38 cancelled pre-admissions for 2014. This does not account for homebirths where the LMC did not arrange a facility booking / pre-admission, which they are not obligated to do. Of note the National Immunisation Register was only notified of 24 home births in the 2014 year.

## Universal Newborn Hearing Screening and Early Intervention Programme (UNHSEIP)

Newborn Hearing Screening commenced at Hutt Valley District Health Board (HVDHB) in July 2009 and is now offered nationally through all the District Health Boards. The aim of the programme is the early identification of permanent congenital hearing loss with specific goals of completing screening by 1 month, diagnosis by 3 months, and interventions offered by 6 months. Early medical and educational intervention before 6 months has been demonstrated to significantly improve long-term outcomes for children with hearing loss and their whanau.

Screening is offered to all newborns in the Hutt Valley DHB area through inpatient and outpatient services. The service operates 6 days per a week in the Maternity and Special Care units and 3 weekly outpatient clinics are run in the Audiology Department. We have a staff resource of 2 Screeners and 1 Screener / Coordinator (2.0 FTE).

The programme is managed through the Audiology Department under the Surgical, Women's & Children's directorate and is included in the Maternity Clinical Governance Group. Data is collected daily, analysed monthly, and reported quarterly to the NSU. The service maintains a high quality screening programme through continuing to meet or exceed all NSU performance indicators. Our first routine national audit was completed in February 2014 and a high level of compliance was achieved. There were no areas of non-compliance.

Improvements this year include a 7.5% increase in the inpatient capture rate, a 50% reduction in the number of declines and 75% reduction in the number of screens not completed. This is the result of a continuing quality focus on access in particular strategies to reduce DNA for which we received nominations for both the 3DHB Allied Health, Scientific and Technical Awards, Team of the Year, and 3DHB Quality Awards.

Next year's work plan includes the introduction of a new national screening regime including change of screening equipment, change in screening protocols, and implementation of a national newborn hearing information management system.

Newborns Offered Screening	1920
Completed Screening	1910 (99.5%)
Declined Screening	7
Screening Not Completed	3

#### Table 15: HVDHB UNHSEIP Volumes 2014

#### Table 16: Location of First Screen

First screen as Inpatient	1543 (81%)
First screen as Outpatient	367 (19%)

Table 17: Referral for Audiology Assessment

Ref for Audiology Assessment46

#### Table 18: Referral Outcome

Audiology	Confirmed Permanent	Unilateral	Bilateral
Audiology	Hearing Loss	2	4
Early Intervention	Referred to ENT Specialist	5	
Referred to AODC	4		



## **Pregnancy and Parenting Education (PPE)**

There are two primary providers of PPE within the DHB region, Parents Centre which is privately run, and HVDHB contracted services from BirthEd. We are unable to source data from Parents Centre, but BirthEd provided quarterly data to the DHB.

BirthEd is contracted by Hutt Valley and Capital and Coast District Health Boards to provide a range of free courses for adult 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 Wainuiomata, including youth classes at Vibe and the Upper Hutt teen school Titiro Whakamua. BirthEd continuously evaluate their courses and have added two additional courses planned to commence in 2015 - Preparing for Homebirth and a Marae based antenatal course with a Baby Safety focus.

In the 2014 year BirthEd provided, 19 Mainstream Antenatal, 6 Youth Antenatal, 19 Mainstream Post Natal, 6 Youth Post Natal, 12 Baby Cares, 12 Breastfeeding and 11 Baby Safety classes. There were 634 women enrolled in BirthEd classes, with 602 actually commencing and a completion rate of 96%. 96% of attendees were primips. 31% of attendees were under 24 years of age.

#### Table 19: Number of PPE Classes Offered

Mainstream	19
Youth	6
Mainstream Postnatal	19
Youth Postnatal	6
Baby Cares	12
Breastfeeding	12
Baby Safety	11

#### Table 20: Number of Entrants Enrolled, Commenced and Completed

	Number	Percentage
Number Enrolled	634	100%
Number Commenced	534	84%
Number Completed	512	96%

## Table 21: Primip and Youth Attendance numbers/Rates

	Number	Percentage
Primips	602	65%
Under 20	66	10%
Between 20-24	135	21%

## Table 22: Attendance by Ethnicity

Ethnicity	Annual total	Percentage
NZ European	338	53%
Maori	64	10%
NZE / NZM	40	6%
Cook Island Maori	5	1%
Fijian	8	1%
Niuean	0	0%
Samoan	26	4%
Tokelauan	2	0%
Tongan	0	0%
NZE/Pacific Island	1	0%
NZM/Pacific Island	0	0%
Chinese	36	6%
Sth East Asian	41	6%
African	3	0%
Middle Eastern	4	1%
Other European	33	5%
Indian	33	5%
Other	0	0%
Total	634	

## **Antenatal HIV**

The Antenatal HIV Screening Programme was established nationally, and rolled out by HVDHB in July 2009. HIV screening should be offered to all pregnant women. The benefits of screening is to have access to early treatment and care with specialist services, and especially to reduce mother to baby transmissions from 31.5% (MOH) without treatment to <1% with appropriate treatment. Since screening started nationally only four women have been found to have an HIV diagnosis in pregnancy, and no babies have been infected with HIV during pregnancy, birth or postnatally. There have been no women in the Hutt found to have been HIV positive since screening commenced in 2009.

The role of the AHIV Coordinator was established in 2009, with a second coordinator orientating into the role at the beginning of 2013. The role includes:

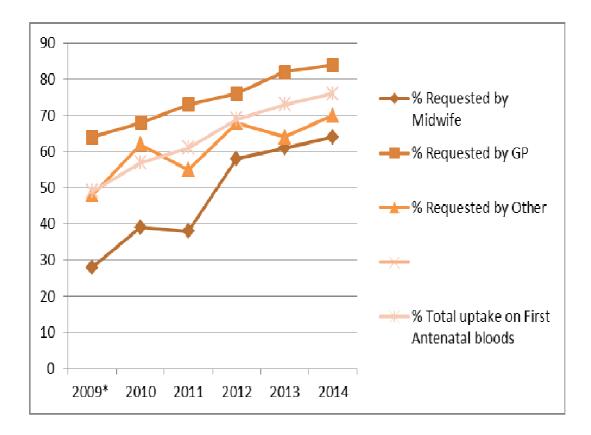
- Receiving and analysis of monthly data, from both the community laboratory and the hospital laboratory for this DHB
- Reporting data to MOH quarterly
- Reporting narrative information to MOH on emergent issues or concerns
- Education of existing and new practitioners in the area

#### Table 23: Percentage of Antenatal AHIV Screening Update by Practitioner and Year

	2009*	2010	2011	2012	2013	2014
% Requested by Midwife	28	39	38	58	61	64
% Requested by GP	64	68	73	76	82	84
% Requested by Other	48	62	55	68	64	70
% Total uptake on First Antenatal bloods	49	57	61	69	73	76

\* partial year





The National Screening Unit (NSU) has decided to end the contracts with DHBs for the Antenatal HIV Screening Programme at the end of June 2015 as it is felt that AHIV screening is now well embedded as a part of antenatal care. We have certainly seen a pleasing increase in uptake of AHIV screening over the last six years which should continue with the support of practitioner and consumer resources.

# Section Three: Maternity Services Clinical Outcomes 2014

This section outlines Hutt Maternity data based on the Ministry of Health's (MOH) twelve New Zealand Maternity Clinical Indicators. The data has been sourced from Hutt Valley DHB events stored in the Hutt Patient Management System (WebPAS) and the Hutt Maternity Database (Concerto), and has been extracted from the National Minimum Dataset (NMDS) and coded using ICD-10-AM-v6. See Appendix one for more details.

MOH produce New Zealand Maternity Clinical Indicator Reports annual, 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 change in clinical practice. We have retrospectively compared our reporting to that in the New Zealand Maternity Clinical Indicators for major inconsistencies.

The data reported on in this report is based on births at our facility and does not include homebirths, or births by women from HVDHB domicile that 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.

The indicators from 2009 -2011 are:

- 1. Standard Primiparae who have a spontaneous vaginal birth
- 2. Standard Primiparae who undergo an instrumental vaginal birth
- 3. Standard Primiparae who undergo Caesarean section
- 4. Standard Primiparae who undergo induction of labour
- 5. Standard Primiparae with an intact lower genital tract (no 1st-4th degree tear or episiotomy)
- 6. Standard Primiparae undergoing episiotomy and no 3rd-4th degree perineal tear
- 7. Standard Primiparae sustaining a 3rd-4th degree perineal term and no episiotomy
- 8. Standard Primiparae undergoing episiotomy and sustaining a 3rd or 4th degree perineal tear
- 9. Women having a general anaesthetic for Caesarean section
- 10. Women requiring a blood transfusion with Caesarean section
- 11. Women requiring a blood transfusion with vaginal birth
- 12. Premature births (between 32 and 36 weeks gestation)

#### In 2012 MOH changed the NZ Maternity Clinical Indicators

- 1. Registration with a Lead Maternity Carer in the first trimester of pregnancy.
- 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-4th degree tear or episiotomy)
- 7. Standard Primiparae undergoing episiotomy and no 3rd-4th degree perineal tear
- 8. Standard Primiparae sustaining a 3rd-4th degree perineal term and no episiotomy
- 9. Standard Primiparae undergoing episiotomy and sustaining a 3rd or 4th degree perineal tear
- 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. Maternal tobacco use during postnatal period
- 15. Preterm birth

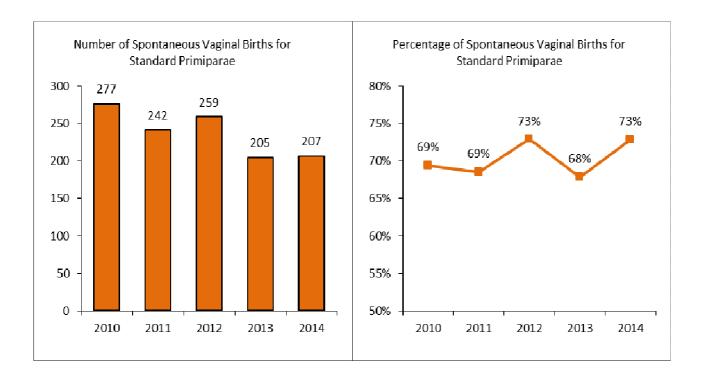
We have aligned our reporting for the 2014 year with the 2012 Clinical Indicator numbers as out lined above.

## Indicator One: Registration with a Lead Maternity Carer in the first trimester of pregnancy.

Information on Registration with a Lead Maternity Carer has been provided earlier in Section Two under Maternity Provider (page 23).



## Indicator Two: Standard Primiparae who have a spontaneous vaginal birth

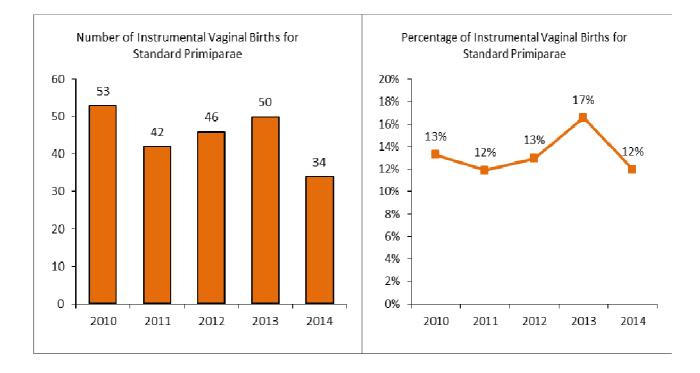


Numerator: Total number of standard primiparae who had a spontaneous vaginal birth Denominator: Total number of standard primiparae who give birth

#### Comment:

This indicator continues to track above the national and secondary/tertiary rates.

## Indicator Three: Standard primiparae who undergo an instrumental vaginal birth



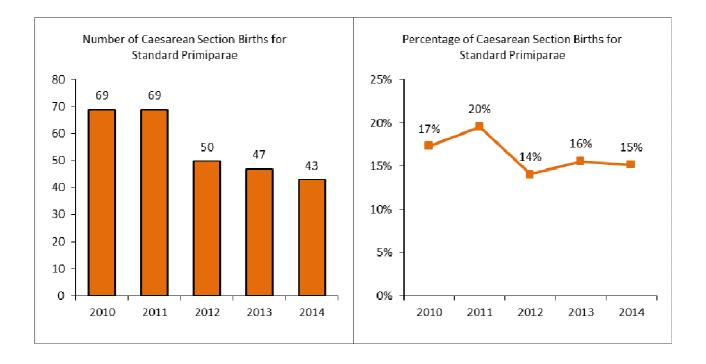
Numerator: Total number of standard primiparae who undergo an instrumental vaginal birth

Denominator: Total number of standard primiparae who give birth

#### Comment:

This indicator has dropped 5% since 2013 and is now below the national and secondary/tertiary rates. Although this may be reflective of a change in obstetric personnel there has not been an increase in caesarean section.

## Indicator Four: Standard primiparae undergoing caesarean section



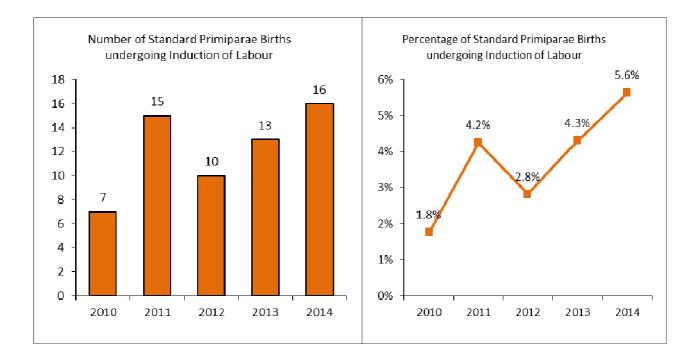
Numerator: Total number of standard primiparae undergoing caesarean section

Denominator: Total number of standard primiparae who give birth

#### Comment:

This indicator is tracking below the national and secondary/tertiary rates and although instrumental births have decreased this has not affected the caesarean section rate.

## Indicator Five: Standard primiparae who undergo induction of labour



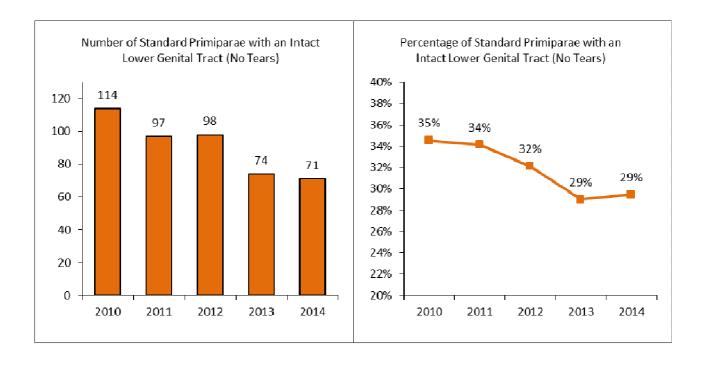
Numerator: Total number of standard primiparae who undergo induction of labour

Denominator: Total number of standard primiparae who give birth

#### Comment:

From 2010 to 2012 HVDHB maternity induction of labour rates were below the National average. Based on our internal data there has been a trend upwards in the standard primipara inductions of labour over the last 2 years, although the raw numbers are small. We have highlighted this as a potential audit topic.

## Indicator Six: Standard primiparae with an intact lower genital tract (no 1<sup>st</sup> - 4<sup>th</sup> degree tear or episiotomy)

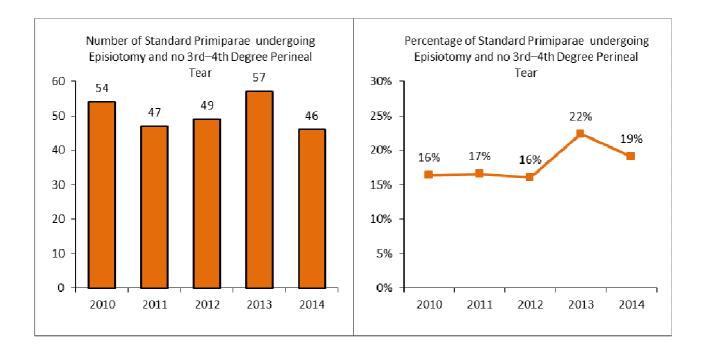


Numerator: Total number of standard primiparae with an intact lower genital tract Denominator: Total number of standard primiparae who gave birth vaginally

#### Comment:

Until 2012 our rate of intact lower genital tract was above the National averages. However in 2013 and 2014 there has been a significant downwards trend in this indicator. Our team are keen to understand the reasons behind the worsening rate.

# Indicator Seven: Standard primiparae undergoing episiotomy and no $3^{rd}$ / $4^{th}$ degree perineal tear



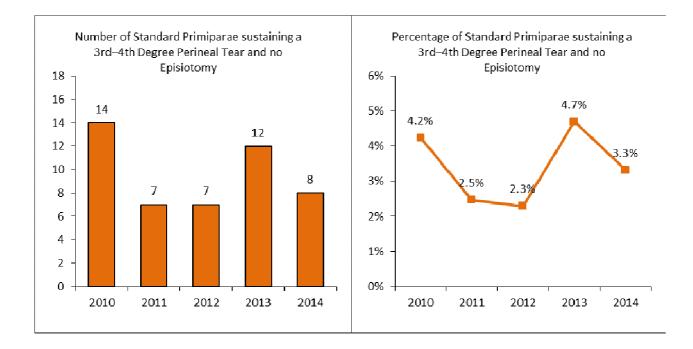
Numerator: Total number of standard primiparae undergoing episiotomy and no 3rd-4th degree perineal tear while giving birth vaginally

Denominator: Total number of standard primiparae who gave birth vaginally

#### Comment:

The indicator remains close to national trends.

# Indicator Eight: Standard primiparae sustaining a 3<sup>rd</sup> / 4<sup>th</sup> degree perineal tear and no episiotomy

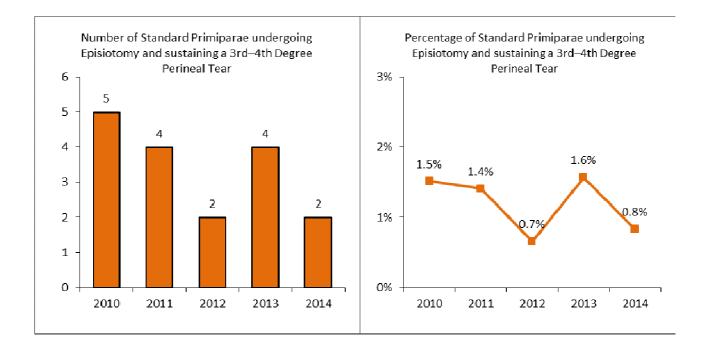


Numerator: Total number of standard primiparae sustaining a 3rd-4th degree perineal tear and no episiotomy Denominator: Total number of standard primiparae delivering vaginally

#### Comment:

Our rate has hovered around the national rate although raw numbers are small.

# Indicator Nine: Standard primiparae undergoing episiotomy and sustaining a 3<sup>rd</sup> / 4<sup>th</sup> degree perineal tear



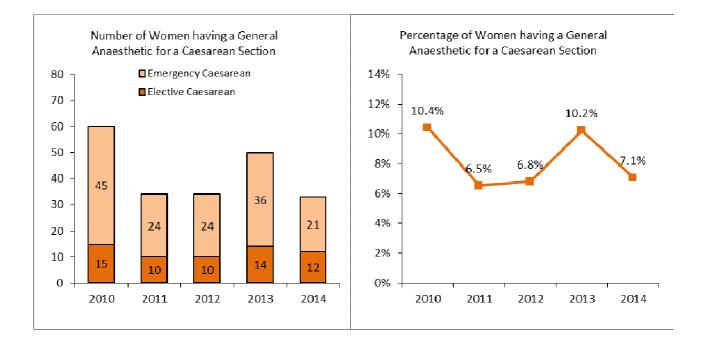
Numerator: Total number of standard primiparae undergoing episiotomy, and sustaining a 3rd-4th degree tear while giving birth vaginally

Denominator: Total number of standard primiparae delivering vaginally

#### Comment:

The number remains at a level that is too low to draw any significant conclusions, although we remain well below the National average.

### Indicator Ten: General anaesthesia for all Caesarean sections



Numerator: Total number of women having a general anaesthetic for a caesarean section

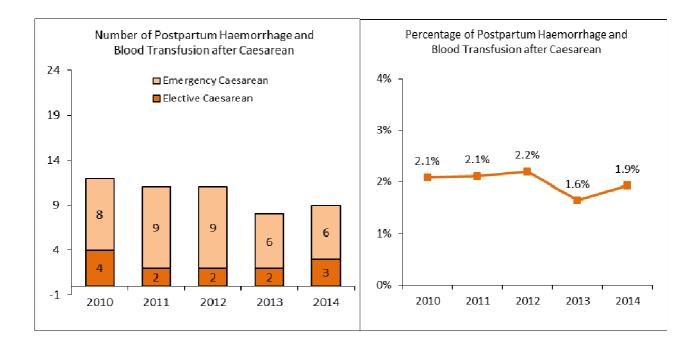
Denominator: Total number of women having a caesarean section

#### Comment:

This indicator remains around the national rate. The raw numbers are too small to comment on any trends.

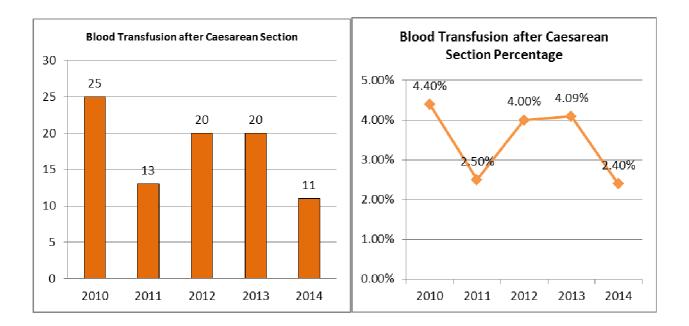
## Indicator Eleven: Post Partum Haemorrhage and Blood Transfusion, with Caesarean section (HVDHB internal indicator)

In previous years for our clinical annual report we have given details and data on 'Postpartum Haemorrhage and Blood transfusion after Caesarean Section', as this was an internal service indicator. As part of our audit of Post Partum Haemorrhage there have been changes in clinical practices, and we will continue to monitor as an internal indicator Postpartum haemorrhage and blood transfusion after a caesarean section.



For the 2014 year we have added in the New Zealand Maternity Clinical Indicator.

## Indicator Eleven (A): Women requiring a blood transfusion with Caesarean section (New Zealand Maternity Clinical Indicator)

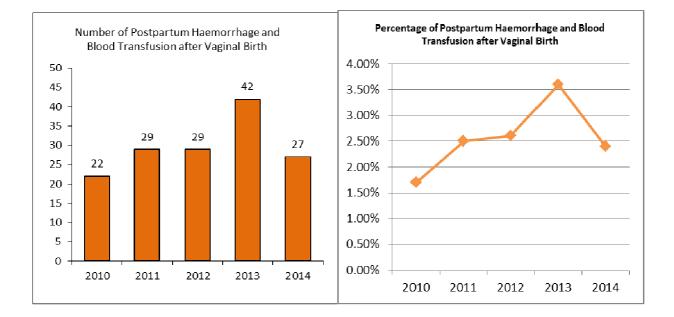


#### Comment:

Our rates in 2012 were fractionally higher than the national average of 3.2%. In response to this we conducted an audit on 2013 data, clinical changes were made and we are pleased to see a decrease in the rate of blood transfusion with caesarean section in the 2014 year.

## Indicator Twelve: Post Partum Haemorrhage and Blood Transfusion, with Vaginal Birth (HVDHB internal indicator)

As stated for the above indicator; in previous years our clinical annual report has reported on details and data on 'Postpartum Haemorrhage and Blood transfusion after Vaginal Birth', as this was an internal service indicator. As part of our audit of Post Partum Haemorrhage there have been changes in clinical practices, and we will continue to monitor as an internal indicator Postpartum haemorrhage and blood transfusion after a caesarean section.

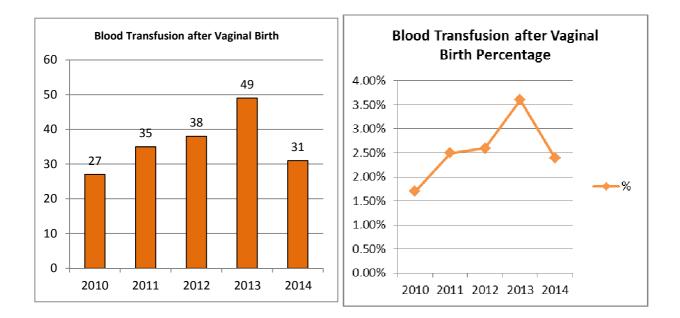


#### Comment:

Post audit we are please to see this rate has decreased since 2013.

For the 2014 year we have added in the New Zealand Maternity Clinical Indicator in order to benchmark against national levels.

### Indicator Twelve (A): Women requiring a blood transfusion with Vaginal Birth (New Zealand Maternity Clinical Indicator)



#### Comment:

Our rates in 2012 were fractionally higher than the national average of 1.6%. In response to an increasing rate of blood transfusion after vaginal birth, we conducted an audit on 2013 data, clinical changes were made. We are pleased to see a decrease in this indicator.

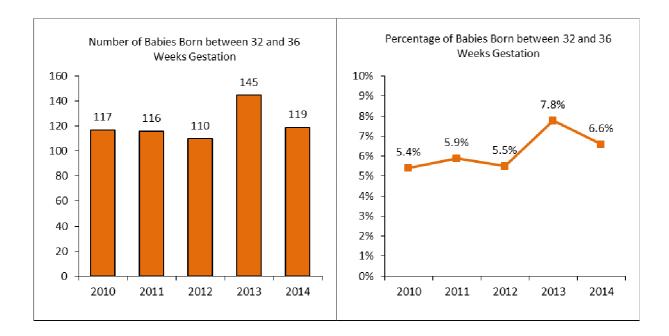
### Indicator Thirteen: Diagnosis of Eclampsia at birth admission

This is a new Clinical Indicator for the 2012 year. Data provided by MOH from the New Zealand Maternity Indicators state there were no diagnosis of eclampsia at birth admission at HVDHB for the 2012 year.

## Indicator Fourteen: Maternal tobacco use during postnatal period

Smoking is a difficult subject to report data on. There are no consistent or robust systems that look at smoking status across a woman's journey through out pregnancy, birth and post partum. We have commented on smoking status at discharge from the facility in the previous section alongside data from this new Maternity Indicator on page 27.

## **Indicator Fifteen: Preterm birth**



Numerator: Total number of deliveries at between 32 weeks 0 days and 36 weeks 6 days gestation

Denominator: Total number of hospital births

#### Comment:

Preterm birth was highlighted as a priority by the National Maternity Monitoring Group (NMMG) in their 2013 work programme. As we had also had an increase in the number of babies born between 32 and 36 weeks at our facility we choose to undertake an audit. The audit was commenced in 2014 and reviewed 2013 preterm births. Audit findings were presented at the November 2014 Perinatal Mortality and Morbidity meeting at Hutt Valley DHB Maternity Services. We are please to see there has been a reduction in the 2014 figure from the 2013 year.

For the 2012 MOH NZ Clinical Indicator the indicator changed to Preterm birth, with the numerator; Total number of babies born under 37 weeks gestation, and the denominator; Total number of babies born (live births). The data has been presented in more specific details of <32 weeks, and 32-36 weeks.

## Section Four: Maternity Quality & Safety 2014

The Maternity Quality and Safety Programme (MQSP) is now well embedded as business as usual for Hutt Maternity. We have well established forums and meetings covering the range of quality initiatives, and each year we set objectives for the upcoming year. Work planning and prioritisation occurs, with working groups established as required. The MQSP team work through these objectives over the year and any addition work streams that arise. Although at the time of this report further funding for the MQSP is not finalised, a portion of the Quality Facilitator, Surgical Women's and Children's Directorate FTE will still be allocated to MQSP facilitation.

### **Governance and Clinical Leadership**

Hutt Maternity has a well established Governance Structure, with minor changes in some of the forums in the 2014 year around the Chair, and meeting times. Understanding around governance alignment within the DHB was sought and clarified, with the MCGG reporting to the Directorate Leadership Team, and the Executive Leadership Team.

There were also changes in our Maternity Clinical Governance Group (MCGG) and the members' composition. There were nine meetings of the MCGG in 2014.

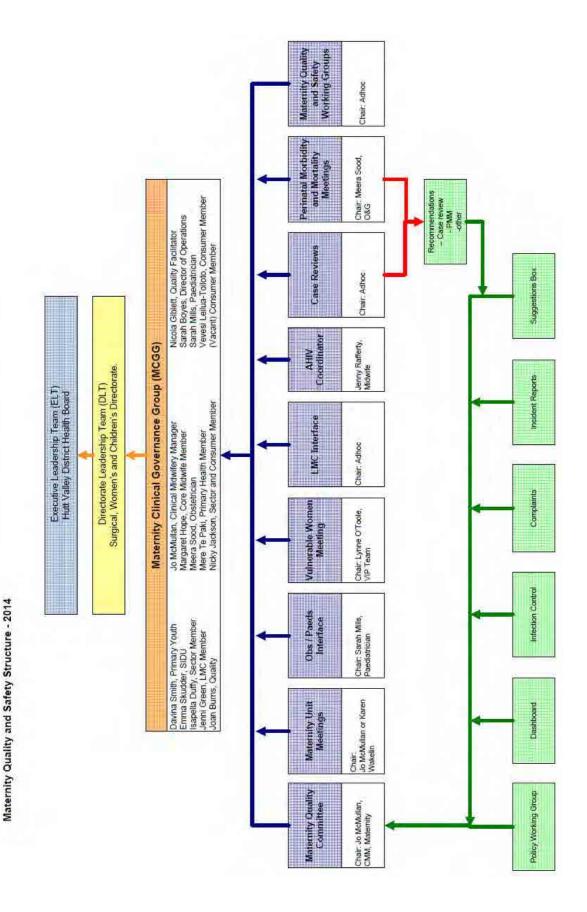
In 2012 and 2013 we struggled with consumer member participation and attendance. We recruited two new consumer members in February 2014. To offer improved consistency and engagement of MCGG members we increased the length of term from one to two years. This has worked well in the 2014 year.

We also recruited an MCGG Member from our regions youth health service, as this is one of our potential vulnerable groups.

Within the 3DHB region there has been agreement for a joint Director of Midwifery, it is expected the recruitment for this position will be early 2015.

### **Consumer Members**

As outlined above we have had difficulty with consumer recruitment and retention, and to support our current consumer members they attended a national meeting held in Wellington in September, which was facilitated by the MOH. Their feedback to the MCGG was this was a valuable networking forum. Suggestions from the meeting were also feedback to the MCGG and we have subsequently introduced several mediums for consumer members to utilise. These consist of business cards, a separate email address and a Facebook page. All our consumer members are reimbursed for their time attending all meetings. Our consumer members also have standing slot on the MCGG agenda to raise items.



#### Figure 13: Maternity Quality and Safety Structure, HVDHB

## Data

Significant changes have been made within our administrative and clinical recording systems, in order to obtain robust data for reporting. This involved consultation with staff, LMCs and Clinical Coding representatives. This has been a large pocket of work for our Information Technology and Services team, but has made a substantial improvement in our ability to measure and benchmark key performance indicators. This work has been on-going in 2014.

We also completed all contractual requirements with submitting primary maternity data to the Primary Maternity Data Collection System (PMDCS). Data was collected retrospectively, from 2007 forwards, from medical records of all women with some aspect of DHB provided primary care. This is an on-going requirement and now part of our business as usual processes.

## Administration/Coordination



Coordination for the MQSP at HVDHB has been undertaken by the Quality Facilitator for Surgical, Women's and Children's Directorate. In December 2014 we recruited an Administration Support clerk at 0.5 FTE.

Nicola Giblett, Quality Facilitator, MQSP and Elle Ratcliffe, Administration Support, MQSP.

### **Sector and Consumer Engagement**

In the 2014 year we concentrated substantially on consumer and sector engagement. We ran a "Top 5 things to do in the first 10 weeks" campaign in conjunction with CCDHB and WDHB. Using a variety of media this was launched in May, and has been an on-going focus in our website, Facebook, newsletters and was taken "Out and About" to Primary practices and pharmacies.

Continuing on the work networking with primary practice we released three newsletters.

One of our MCGG members facilitated several consumer forums in our vulnerable groups. A report on the findings was presented to the MCGG and recommendations made. These recommendations have been incorporated into our 2015 objectives.

Our Hutt Maternity website went live in April 2013 and a review is currently underway. This is looking at both the ease of use and content.

In December 2014 we launched a HuttMaternity Facebook page. In its first month it received 100 likes and is now started to received feedback and questions from consumers.

A Communications Survey was also undertaken by Core Staff and LMCs. This was to investigate current methods and effectiveness of communications within the maternity service.

## **Other Quality Initiatives**

#### Trigger List/Event reporting:

In October 2014 we commenced a trial phase of a localised Obstetric Trigger List. This was to highlight 'events' that are not collected on the DHB Health Care Events (HCE) reporting system, with the aim of improving services and learning opportunities. These trigger events will be collated with our events on HCE and feedback to stakeholders via a quarterly reporting system. Our trial phase was October – December, with review due in January 2015, and our first report February 2015.

#### **Risk Register:**

Maternity services contribute to the Surgical Woman's and Children's directorate quality processes through regular updating of a risk register. The risk register captures actual and potential, clinical, environmental and professional risks to the service and is forwarded regularly to the directorate. Both the trigger list and event reporting assist in the identification of risks.

#### Audit:

In 2013/14 2 audits were undertaken on the same topic of post partum haemorrhage, both with similar parameters. This was unbeknown to the parties involved. To resolve this issue and best utilise resources we created an Audit Register. Audits are now notified and feedback mechanisms arranged through the Maternity Quality Committee.

In alignment with the National Maternity Monitoring Group priority, our major audit for the 2014 year was on Preterm Labour. See further information under Indicator 12.

#### Safe Sleep:

Work commenced in 2013 on reviewing safe sleep policies as requested by HQSC and Change for our Children. It was noted that we had several across the DHB in different area such as Maternity, SCBU, and Children's ward. In order to have a universal policy work commenced late in 2013 combining several of the policies from the variety of clinical areas across the DHB. This was signed off early in 2014. Our SIDU team have taken the lead on other work around Safe Sleep within the community stakeholders, via a series of network meetings and planning.



#### Newborn enrolment:

A project manager was recruited by SIDU for this initiative and Newborn enrolment went live in February 2014. Working with stakeholders within Hutt DHB during consultation and engagement stages was challenging at times, but by utilising existing processes and pathways familiar to stakeholders at Hutt Maternity issues arising were worked through and resolved as they occurred. This process is now embedded as business as usual, and is due for a review in 2015.

#### Maternity Assessment Unit and Community Midwives Team Health Check:

Our Maternity Assessment Unit (MAU) has been in operation since late 2010, with the introduction of phased work streams. Within MAU we have 3 focuses, the Secondary Care Obstetric Clinic, and Early Pregnancy Assessment service and Obstetric Assessments. MAU has not had a review of pathways and processors during this time, although small changes have been made as needed. We have also had changes occurring within our Community Midwives Team. To assess these services we undertook at Health Check, using the framework of four quadrants: Patient Experience, Process & Efficiency, Health Workplace and Value for Money. Staff were invited to feedback several ways, this information was collated and feedback to staff twice for further comment / input. From this stocktake recommendations were made and these will be incorporated into the 2015 objectives for the MQSP.

#### Holly Walker Education Fund:

This fund commenced in 2014 at the generosity of a consumer member from our Maternity Clinical Governance Group. Rather than receiving a koha for participation in the MCGG, the funds were placed in an education trust. Any core staff member or LMC are able to apply for funding to attend training or education that has direct impact on care of women. This sum of funding was also matched by an anonymous donor.

#### **ISBAR Tool:**

Identify, Situation, Background, Assessment and Recommendation was introduced in February as a result of case reviews and communication being raised in several situations, it is now widely used within our unit.

#### Support/Partner Trial:

We undertook at trial phase of enabling a support person or partner to stay in the unit. This has not been without occupational, health and safety issues arising. These have been dealt with as they have arisen and this is now standard for any women needing a support person to stay with her on the post natal ward.

#### MAU TV:

Our Maternity Assessment Unit has a wall mounted TV in a small waiting area. It was decided to use this for pregnancy and parenting health promotion messaging. Over the second part of the 2015 year work commenced putting together images, messaging and videos. This will go live in January 2015, and will be reviewed within 3/12.

## **National Maternity Monitoring Group Priorities**

Along side our own MQSP Objectives we have allocated high priority to the National Maternity Monitoring Group (NMMG) work streams. We have outlined our progress or plans to date, in each of these priorities.

#### Connecting and supporting maternity consumer members:

We have commented on consumer member support and engagement on page 54.

#### **Clinical indicators:**

Hutt maternity has over 2013 and 2014 undertaken a significant review of data gathered and reporting aspects. We have made multiple changes to clinical documentation and electronic collection to be able to provide accurate information. At the time of the review data on the NZ Clinical Indicators and our internal maternity dashboard requirements were considered. We consulted with a wide range of stake holders including clinical coders to improve data capture and reporting.

#### Early LMC engagement:

Work has continued with a strong focus on LMC engagement. In 2011 our LMC registration in the first trimester was 55% (NMMG), with a slight improvement in 2012 to 58% (NMMG). This has now become a New Zealand Maternity Clinical Indicator; Registration with a Lead Maternity Carer in the first trimester of pregnancy. We have commented on this data earlier in the report.

The percentage figures above did not include data on primary care by the DHB, and in the 2014 year we established and implemented a system to submit data on this to MOH via the PMDCS, which in the future should provide more accurate data. This was a large undertaking retrospectively collecting and entering data as far back as 2007.

We undertook a 3DHB campaign (Hutt, Wairarapa and Capital & Coast DHBs), launched on Mothers Day 2014, around the Top 5 things to do in the first 10 weeks of pregnancy. This included the number one item of finding an LMC.

Our Huttmaternity website framework has had an update, and is now more user friendly. We have links to localised LMC availability lists by due month, to the findyourmidwife.co.nz and wellingtonmidwives.com sites.

For Core staff, LMCs and primary practices we continue to produce our newsletters regularly, and in the 2015 year we will be establishing a Health Professional Page on the Huttmaternity website. This will include links to our newsletters, latest news, policies and training & education opportunities.



As part of the Top 5 campaign we undertook and "Out and About" through all the GP practices, and including local Pharmacies. Thus building on networks made in 2013 with our Road Show and extending our networks further. This was well received.



Late December 2014 saw the launch of the Huttmaternity Facebook page. This was an outcome of some consumer forums that we undertook, and has been developing slowly. Alongside the MQSP Co-ordinator, we have a group of Administrators managing this page including our MQSP Consumers, Lactation Consultants, Community Midwives, LMC member and core member.

We held six forums through out the community with a particular focus on vulnerable groups, these were lead by external facilitators and women were asked to share their experiences of maternity care in the valley. Several recommendations were made and these have been included in our 2015 work streams.

We have established two emails for consumer feedback, one is internal with a DHB address and one via a generic g-mail account that can be accessed and are monitored by our consumer members from the MCGG.

#### Preterm Births:

Along side being a priority of the NMMG, our service also had an increase in the number of babies born between 32 and 36 weeks at our facility. In response to this we choose to undertake an audit.

The audit was commenced in early 2014 and reviewed 2013 preterm births. Audit findings were presented at the November 2014 Perinatal Mortality and Morbidity meeting at Hutt Valley DHB Maternity Services. We are please to see there has been a reduction in the 2014 figure from the 2013 year. The audit highlighted the multifactorial nature of preterm birth, and demonstrated that less than half of the women delivery preterm had recognised risk factors for preterm delivery in early pregnancy.

#### Smoking amongst Pregnant Women:

Details on smoking amongst pregnant women have been commented on in an above section. Work will continue within our services to assist maternity stakeholders to reduce smoking in pregnancy and post partum.

#### Maternal Mental Health (MMH):

In 2013 we produced a specific pathway for MMH referrals, and identified services available in the community within this pathway. This was to support primary care and LMCs use the most appropriate and effective referral modes. It outlined external agency options, then linking to DHB agency referral through Secondary Care Services. This was presented to Primary Care providers in our Maternity Road Show.

At this time we also initiated a Specialist Obstetric Clinic for those referred to our service; this includes the support of a Nurse Specialist from the regional Maternal Mental Health Services. This service has been well received and is run along side an Obstetrician.

Moving forward there is currently a project being lead by SIDU across the three DHBs to align pathways across the region.

#### Implementation of the Referral Guidelines:

A new referral form template was designed by RMO staff for the Obstetric clinic, looking at what information was required for referral to Secondary care services. We have also undertaken a health check on our Maternity Assessment Unit for Clinic needs currently and in the future. This was to look at access to services after referral to clinic. Moving forward we will be adapting the Waitemata Plus document which provides guidelines on when to referral and additional comments on clinical care.

Not wholly unrelated to the implementation of the referral guidelines is the confusion regarding on what conditions LMCs are able to transfer the midwifery care of their women. As this has been quite a contentious and confusing issue two workshops were held facilitated by Sue Lennox and John Marwick to support effective communication and to unpick some of the existing issues. Core midwifery, obstetric staff and LMCs were invited to participate. The sessions although did not solve all the issues provided a sound base for future negotiations.

## Compliments

We have had 47 praises registered with the DHB Quality Team for 2014. The themes of these compliments relate to care and staff professionalism:

"The level of service, care and advice I received was out of this world and has just enhanced this special time. Thank you for your care - I was truly blessed!"

*"I really respect the professional approach and personal care; you are all part of a fantastic team making dreams come true everyday"* 

"The level of care I received was second to none. Everyone we met was,

kind & respectful - right through to the orderlies"

## **Reportable Events, Serious Events and Complaints**

HVHDB Maternity Service had no adverse serious (SAC2) or sentinel (SAC1) events in the 2014 year.

For our internal event reporting there were 35 inpatient and ward events, and 14 events for employee and affiliates. 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

## Complaints

In the 2014 year there were 21 complaints registered with the DHB Quality Team. These can be summarized into the following categories: - please note that Cleaning and Environment have been merged into one category as we have aligned our categories with Wairarapa DHB and Capital and Coast DHB.

#### Table 24: Complaint numbers by Category

Communication:	4
Treatment:	9
Other:	1
Nursing care:	3
Environment:	4

All complaints where the complainant can be identified are responded to in writing. In addition to the above, there was 1 complaint where the complainant could not be identified.

Our 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 agenda.

All compliments and complaints are co-ordinated through the DHB Quality Team. There is a suggestions box at the Maternity Unit reception.

### **Clinical reviews and recommendations from 2014**

The use of the trigger form process has instigated increased numbers of clinical reviews than previous years. There have been ten case reviews held in the unit since June 14 some which have showcased good practice and staff have been commended.

The recommendations from the reviews all have aspects of increasing effective communication, some tweaking of clinical policies and some facilitation of education for individual practitioners.

### **Perinatal Mortality Cases**

In 2014 in response to concerns from the community regarding place of care the birthing suite admitted fetal losses from beyond thirteen weeks gestation.

There were fourteen stillbirths and two neonatal deaths; and three under 20 week losses one being classified a neonatal death. The age range of the mothers was 23-43 years with representation across Maori, Pacifica, New Zealand European and Indian ethnicities. This included 8 multips and 4 primips, only 2 were current smokers. One mother was classed as morbidly obese. Eleven post mortems were requested; two placentas sent for histology. There were a variety of reasons for the fetal demise with no trend. There were no maternal deaths in 2014.

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.

## **Section Five: Forward Planning 2015**

Although we were very ambitious in the 2013 year with our objectives, and some of these carried across into the 2014 year, we have made great headway in progressing them to the next phase or completion. In November 2014 the MCGG signed off on a series of goals for the 2015 year. As we move to business as usual with the Maternity Quality and Safety Programme, they move away for the MOH Elements as guided in the first year of the programme. In the 2015 year we will be aiming for more regional/sub regional collaboration. Our work streams and priorities come from threes main areas, the MQSP, the NMMG priorities and actions and recommendations from our MAU/Community Health Check.

#### Maternity Dashboard:

To align our KPIs with MOH, we have undertaken background work in clinical information collection. Having our own data collection and visual dashboard allows us to act upon poor indicators in a timely fashion. We are also able to compare our data collection to that at MOH and provided at a national level.

#### **Electronic Notification of Births:**

Currently our clinical staff completes the BDM form, which is checked by administration staff and faxed manually to BDM. This is a very time intensive process for both clinicians and administrative staff, considering all requested information is entered into our clinical system. We have been liaising with our IT developers and BDM to interface electronically. This will decrease the amount of administration and clinical time completing a faxing a form, and will reduce the potential for errors.

#### Trigger List/Event Reporting:

Work will continue in 2015 following our trial phase of Oct-Dec 2014 for a localised Obstetric Trigger Form. As we move into business as usual we will be looking at ways to increase utilisation of the forms, and evaluating the data and outcomes, looking for valuable learning opportunities and quality improvements.

#### Notification of Registration to Primary Sector:

During the time of pregnancy women will choose an LMC. In the Huttmaternity region there are no GPs practicing obstetrics. It was highlighted that it is often unknown to a GP if a women is pregnant because of this. We will be trialling a notification system to GPs when a women books with our Primary Midwives Team or Secondary Care services.

## Consumer Pre & Post Pregnancy Resources, Health Practitioner Pre & Post Pregnancy Resources and Maternity Sector Networking Expo:

In our region there are a wide range of services, groups and networks available to women in pregnancy. There is no one place for this information. In order to assist women access these networks and agencies, and for Health Practitioners refer appropriately we are collating two resources for Pre & Post Pregnancy. One will be aimed at consumers (women and their families) the other at health professionals. These will be completed by June 2015 and launch at a maternity sector networking expo. Our aim is to have a wide range of NGO/community groups/services at the expo and invite health practitioners along. We will be running 2-3 short sessions and early pregnancy care, bookings, finding an LMC etc.

#### **Breast Feeding Working Group:**

In 2014 we commenced work within our Breastfeeding Support Clinic and a Guideline to our Lactation Support Services. This work will be on-going in 2015. It will have a particular focus of Tongue Tie & service provision/review, and the work of the Lactation services. We are keen on producing a guideline toolkit for staff to utilise alongside BFHI training, reviewing our patient information and discharge summary information for health professionals.

#### Smoking:

As explained in our Smoking and Pregnancy section earlier in the report, we have made inroad in the reduction of our smoking population. Work will continue into 2015 looking at ways at making smoking cessation accessible to health professionals and women and families.

#### Website development:

Our Hutt Maternity website went live in April 2013 and a review is currently underway. This is looking at both the ease of use and content. We have been awaiting feedback from our consumer forums before finalising these changes. Once this is established we would like to explore the use of multilingual fact sheets to be available on the site.

## Standard Operating Procedure (SOP) Manuals for the Maternity Assessment Unit (MAU):

Over time some of the pathways and procedures, and service development of MAU have changed. Often these changes are verbally passed from staff. We are in the process of documenting all our SOPS in MAU for more robust pathways.

#### Secondary Care Referral Guidelines:

Continuing on with work recommendations from the MAU and Community Health Check we will be reviewing our Clinic Structures, availability of appointments, numbers required for future workloads. This will also include a Secondary Care Referral Guidelines Plus, based on the work done by Waitemata DHB, and localised for HVDHB.

#### 3DHB campaign:

In 2014 we ran a sub regional campaign on the first 5 things to do in 10 weeks. This year we are looking at a similar campaign based on fetal movements and what is appropriate. We will be in discussions with WDHB and CCDHB early in 2015.

#### Maternity Unit documentation, version control and updates:

We have noted that a portion of our documentation has not version control or update protocol. We will be designing a system to ensure that all service documentation is authorised by the Maternity Quality Committee and follows an appropriate review pathway.

#### Maternity Specific Consumer Feedback:

Although we have a feedback box situated in Maternity, this is an under utilised facility. We have in the past as a Demonstration Site and in the 2014 year, held resource intensive surveys or forums for consumer feedback. We will continue to promote our Huttmaternity Facebook page and website, but need to develop an effective and on-going way of consumer feedback in the 2015 year.

## **Appendix One: Data Information**

#### Data Sources

Data for birth numbers and clinical indicators was sourced from hospital events stored in the Hutt Patient Management System (IBA) and the Hutt Maternity Database (Concerto). Data from the Hutt PMS is reported to the National Minimum Dataset (NMDS) and coded using ICD-10-AM-v6 clinical codes. Therefore the coding rules followed for extracting patients to meet the specifications of this report were obtained from the Ministry of Health's Analytical Services team.

Data captured in the Maternity Database is sourced from online forms completed by Maternity staff during the patient admission and the clinical summary completed by the consultant after patient discharge. This data was used to determine the parity of the patient and provide detailed Breast Feeding reporting as this information is not available using clinical codes.

For this report, all women discharged following a publicly funded hospital birth in 2012 and all babies live-born in hospital in 2012 were selected based on the rules listed below. Specific conditions and procedures (including birth type) were identified using ICD-10-AM-v6 clinical codes.

Coding extract rules for Mothers

All records (including privately funded) where any of the following codes are present, and where Delivery date (DPD, if null then ESD) is between 01/01/2012 and 31/12/2012: Z370 to Z379 (ICD-10-AM-v6, outcome of delivery)

O80 to O82 (ICD-10-AM-v6, delivery diagnosis code)

9046700, 9046800, 9046801, 9046802, 9046803, 9046804, 9046805, 9046900, 9046901, 9047000, 9047001, 9047002, 9047003, 9047004, 1652000, 1652001, 1652002, 1652003 (Blocks 1336 to 1340) (ICD-10-AM-v6, delivery procedure code)

Coding extract rules for Babies

Please extract all records (including privately funded) where Event start date is between 01/01/2010 and 31/12/2010 and at least one of the following criteria is met: any diagnosis code is equal to Z380 to Z388 (ICD-10-AM-v6, Live born infant) Event type = BT

Standard Primiparae Must meet all the following criteria: No previous pregnancy of 20+ weeks, and Maternal age 20-34, and Cephalic presentation, and Singleton, and Term gestation, and Without specified medical complications

## **New Zealand Maternity Clinical Indicators**

	Indicator	Numerator	Denominator	Coding Rules
1	Standard primiparae who have a spontaneous vaginal birth	Total number of standard primiparae who have a spontaneous vaginal birth	Total number of standard primiparae who give birth	Standard primiparae with a 9046700 procedures or O80 diagnosis.
2	Standard primiparae who undergo an instrumental vaginal birth	Total number of standard primiparae who undergo an instrumental vaginal birth	Total number of standard primiparae who give birth	Standard primiparae with one of the following procedures 9046800, 9046801, 9046802, 9046803, 9046803, 9046804, 9046805 9046900, 9046901 or a diagnosis of O81.
3	Standard primiparae who undergo Caesarean section	Total number of standard primiparae who undergo Caesarean section	Total number of standard primiparae who give birth	Standard primiparae with one of the following procedures 1652000, 1652001, 1652002, 1652003 or a diagnosis of O82
4	Standard primiparae who undergo induction of labour	Total number of standard primiparae who undergo induction of labour	Total number of standard primiparae who give birth	Standard primiparae with one of the following procedures 9046500, 9046501, 9046502, 9046502, 9046503, 9046504, 9046505.

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	Indicator	Numerator	Denominator	Coding Rules
5	Standard primiparae with an intact lower genital tract (no 1st to 4th degree tear or episiotomy)	Total number of standard primiparae with an intact lower genital tract	Total number of standard primiparae giving birth vaginally	Standard primiparae excluding 9047200 procedures and excluding O700, O701, O702, O703, O709 diagnosis.
6	Standard primiparae undergoing episiotomy and no 3rd- or 4th- degree perineal tear	Total number of standard primiparae undergoing episiotomy and no 3rd- or 4th-degree perineal tear while giving birth vaginally	Total number of standard primiparae giving birth vaginally	Standard primiparae with 9047200 procedures but no O702 or O703 diagnosis.
7	Standard primiparae sustaining a 3rd- or4th-degree perineal tear and no episiotomy	Total number of standard primiparae sustaining a 3rd- or 4th-degree perineal tear and no episiotomy	Total number of standard primiparae giving birth vaginally	Standard primiparae with O702 or O703 diagnosis and no 9047200 procedure.
8	Standard primiparae undergoing episiotomy and sustaining a 3rd- or 4th-degree perineal tear	Total number of standard primiparae undergoing episiotomy and sustaining a 3rd- or 4th-degree perineal tear while giving birth vaginally	Total number of standard primiparae giving birth vaginally	Standard primiparae with a 9047200 procedures and O702 or O703 diagnosis.
9	General anaesthesia for Caesarean section	Total number of women having a general anaesthetic for a Caesarean section	Total number of women having a Caesarean section	All Caesarean Births (1652000,165200 1,1652002,165200 3 or O82) with a 92514XX procedure

	Indicator	Numerator	Denominator	Coding Rules
1 0	Postpartum Haemorrhage and Blood transfusion with Caesarean section	Total number of women who undergo Caesarean section who require a blood transfusion during the same admission	Total number of women who undergo Caesarean section	All Caesarean Births (1652000, 1652001, 1652002, 1652003 or O82) with one of the following procedures 1370601, 1370602, 1370603, 9206200, 9206200, 9206300, 9206400 and a diagnosis of O72.0, O72.1,O72.2 or O72.3
1	Postpartum Haemorrhage and Blood transfusion with vaginal birth	Total number of women who give birth vaginally who require a blood transfusion during the same admission	Total number of women who give birth vaginally	All Vaginal Births (9046700 or O80) with one of the following procedures 1370601, 1370602, 1370603, 9206000, 9206200, 9206300, 9206400 and a diagnosis of O72.0, O72.1,O72.2 or O72.3
1 2	Premature births (between 32 and 36 weeks gestation)	Total number of babies born at between 32 weeks 0 days and 36 weeks 6 days gestation	Total number of babies born in hospital	