






CANTERBURY DHB & WEST COAST DHB

MATERNITY QUALITY AND SAFETY PROGRAMME

ANNUAL REPORT 2014/15

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Annual Report 2014/15

Production

This report was produced by Women's and Children's Health (W&CH), Canterbury District Health Board (CDHB) and West Coast District Health Board (WCDHB) in June 2015.

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Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee members

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Disclaimer

Contents

1. Overview

1.1 Background

This is the third Canterbury DHB and West Coast DHB Maternity Quality and Safety Annual Report since the establishment of the Ministry of Health Maternity Quality and Safety Programme (MQSP) in 2011. The National Maternity Monitoring Group (NMMG) came into operation in 2012, as part of this programme, to oversee the maternity system in general and the implementation of the New Zealand Maternity Standards.

The high-level strategic statements of the New Zealand Maternity Standards are:

- Provide safe, high-quality maternity services that are nationally consistent and achieve optimal health outcomes for mothers and babies;
- Ensure a women-centred approach that acknowledges pregnancy and childbirth as a normal life stage;
- All women have access to a nationally consistent, comprehensive range of maternity services that are funded and provided appropriately to ensure there are no financial barriers to access for eligible women.

1.2 Aims and Objectives

Both Canterbury DHB and West Coast DHB are committed to improving the quality and safety of maternity services for consumers.

The Canterbury DHB and West Coast DHB Maternity Services' aims and objectives are to:

- Provide woman-centred maternity care that meets the needs of the population;
- Continue to implement, review and establish as required, systems and processes to support the provision of quality and safe care;
- Take a whole of systems approach towards improving the health of women and children as guided by the Ministry of Health's goals and targets;
- Align the maternity workforce to meet the needs of the population;
- Align and strengthen regional links.

1.3 Purpose of this report

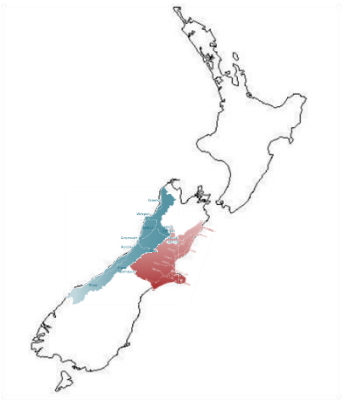
The purpose of this report is to provide information about the DHBs':

- Improvements in relation to the overall aims and objectives
- Achievements against the quality improvement goals set for 2014/15
- Contribution towards addressing the priorities of the NMMG
- Performance in relation to the Ministry of Health's New Zealand Maternity Clinical Indicators (2012);
- Response to consumer feedback and ongoing consumer involvement
- Quality initiative goals for 2015/16

The content in this report demonstrates the collaboration between professional disciplines, managers and consumers and it should therefore serve as a useful resource for a range of stakeholders including the NMMG, local clinicians, planners and funders as well as consumers.

2. Canterbury DHB and West Coast DHB Context

2.1 Regional Boundaries



Canterbury and West Coast DHBs cover a predominant part of the top half of the South Island of New Zealand. The Canterbury DHB is the second largest DHB in the country by both geographical area and population size. There are two separate divisions within Canterbury DHB responsible for providing the maternity services; Women's and Children's Health (W&CH), and Ashburton and Rural Health. The DHB also has a contract with St George's Hospital, Maternity Centre to provide maternity care.

West Coast DHB has the smallest population of the twenty DHBs. It is the most sparsely populated DHB in the country with a population density of 1.4 people per square kilometre and population less than 1% (0.7%) of New Zealand's total estimated resident population. The West Coast DHB has two facilities where maternity care is provided; McBrearty Ward at Grey Base Hospital and Kawatiri Unit at Buller Hospital in Westport.

2.2 Regional collaboration

Canterbury DHB provides many services for the West Coast DHB. The shared service and clinical partnership arrangements that have been developed are also part of the MQSP. This 'transalpine' approach to service provision has allowed better planning for the assistance and services Canterbury DHB provides to the West Coast DHB so people can access services as close as possible to where they live.

2.3 Maternity Facilities

There are a range of facilities available to women in Canterbury and West Coast (see table 1). Christchurch Women's Hospital (CWH) is the only tertiary facility and accepts referrals from both regions. For this reason, the majority of births in Canterbury DHB take place here (see table 2). West Coast DHB has two facilities in the region and the majority of births occur at the larger Grey Base Hospital. (See table 3).

	Canterbury DHB		West Coast DHB
	Women's and Children's Health Division	Ashburton & Rural Services	
Primary	○ Burwood Birthing Unit ○ Lincoln Maternity Hospital ○ Rangiora Hospital ○ St George's Maternity Centre (contract with CDHB)	○ Ashburton Hospital ○ Darfield Hospital ○ Kaikoura Hospital ○ Waikari Hospital (Postnatal care only)	○ Kawatiri Unit at Buller Hospital in Westport
Secondary			McBrearty Ward at Grey Base Hospital
Tertiary	Christchurch Women's Hospital		

Table 1 Maternity Facilities Canterbury DHB & West Coast DHB

All referrals for tertiary care from West Coast DHB primary and secondary units, Canterbury DHB primary units and homebirths go to Christchurch Women's Hospital.

Location of Deliveries by DHB Maternity Facility

Canterbury DHB Maternity Facility	Number of Deliveries	
Ashburton Hospital	114	(2%)
Burwood Hospital	184	(3.3%)
Christchurch Women's Hospital	5144	(91.3%)
Darfield Hospital	5	(0.1%)
Kaikoura Hospital	15	(0.3%)
Lincoln Hospital	80	(1.4%)
Rangiora Hospital	90	(1.6%)
Grand Total	5632	(100%)

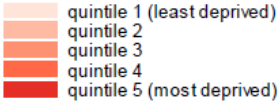
Table 2 Canterbury DHB Location of Deliveries 2013

West Coast DHB Maternity Facility	Number of Deliveries	
McBrearty Ward, Grey Base Hospital	273	(97.2%)
Kawatiri, at Buller Hospital in Westport	8	(2.8%)
Grand Total	281	(100%)

Table 3 West Coast DHB Location of Deliveries 2013

2.4 Canterbury DHB & West Coast DHB Maternity Demographics 2013

The following short facts table provides a 'snapshot' of the demographics of women who reside in the Canterbury DHB and West Coast DHB area. It is based on the National Maternity Collection (MAT) 2013 collated by the Ministry of Health and published in February 2015, which presents statistical, demographic and clinical information about selected publicly-funded maternity services up to nine months before and three months after a birth.

Category	Canterbury DHB	West Coast DHB
 **Birth Rate** 162 babies born every day in New Zealand	5826 deliveries in 2013 On average 16 babies are born every day in CDHB facilities	378 deliveries in 2013 On average 31 babies per month are born to WCDHB mothers
 **Maternal age**	Highest percentage of CDHB mothers are in 30-34 years bracket	Highest percentage of WCDHB mothers are in 25-29 years bracket
 **Maternal ethnicity**	68% European descent 13% Maori 12% Asian 5% Pacific 2% Other	75% European descent 19% Maori 2% Asian 3% Pacific 1% Other
 **Primary Maternity Services Registration by Trimester**	1st Trimester - 75% 2nd Trimester - 21% 3rd Trimester - 2% 'unknown' (n=14)	1st Trimester - 62% 2nd Trimester - 26% 3rd Trimester - 8% 'unknown' (n=77)
 **Deprivation**	11% CDHB women are in Deprivation Quintile 5 - most deprived	33% WCDHB women are in Deprivation Quintile 5 – most deprived
 **Birth by Facility Type**	87% of CDHB at Christchurch Women's Hospital 8.3% in Primary Units 3.5% home	71% of WCDHB at Grey Base Hospital 11% home 11% Christchurch

Category	Canterbury DHB	West Coast DHB
 **Parity**	42% Primiparous 57% Multiparous	Births classified as parity 'unknown' *
 **Body Mass Index**	50% CDHB women were a healthy weight	36% WCDHB women were a healthy weight
 **Smoking at first LMC Registration**	87% were not smoking (0.2% 'unknown')	75% were not smoking (20% 'unknown')
 **Smoking 2 weeks postnatal**	87% were not smoking (2.5% 'unknown')	69% were not smoking (25% 'unknown')

* West Coast DHB parity was unknown as this data was not collected at that time.

3. Governance and Leadership

Canterbury DHB & West Coast DHB have layers of governance and reporting lines. Table 4 below illustrates the governance levels of the various groups.

Governance level	CDHB General Managers' Group	CDHB Clinical Board WCDHB Clinical Board	WCDHB Executive Management Team
	W&CH Clinical Governance Committee	CDHB & WCDHB Maternity Clinical Governance Committee	
Reporting level	W&CH Clinical Audit Committee	W&CH Maternity Operations Group	Ashburton and Rural Health Services Maternity Continuum Team
	St George's Obstetric Committee	WCDHB MQSP Group	WCDHB Clinical Quality Improvement team
Operational Level	Perinatal and Maternal Mortality Review Committee	Incident Review Groups	Maternity Clinical Guidelines Group

Table 4 Governance and Leadership Groups Canterbury DHB & West Coast DHB

Quality Planning and Reporting

Each operational group develops a quality plan for their area which includes priorities directed by the Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee. Quality plans and quarterly reports are submitted as outlined below in Table 5.

Women's & Children's Clinical Governance Committee	**Canterbury DHB Clinical Board**	**West Coast DHB Clinical Board**
Bi-annual Reports are submitted		
Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee		
Annual Quality Plans and Quarterly Reports are submitted to ensure alignment of work across the services		
W&CH Maternity Operations Group	Ashburton and Rural Health Services Maternity Continuum Team	St George's Obstetric Committee	West Coast DHB Maternity Quality and Safety Group

Table 5 Reporting Flow Canterbury DHB & West Coast DHB

Contracts relevant to maternity services between the DHB Planning and Funding Department and non-governmental organisations are also reported in a similar way.

Governance Committee Structure

The committee structure in Figure 1 below is complex due to the spread of maternity services and associated groups and committees both within and across the two DHB's.

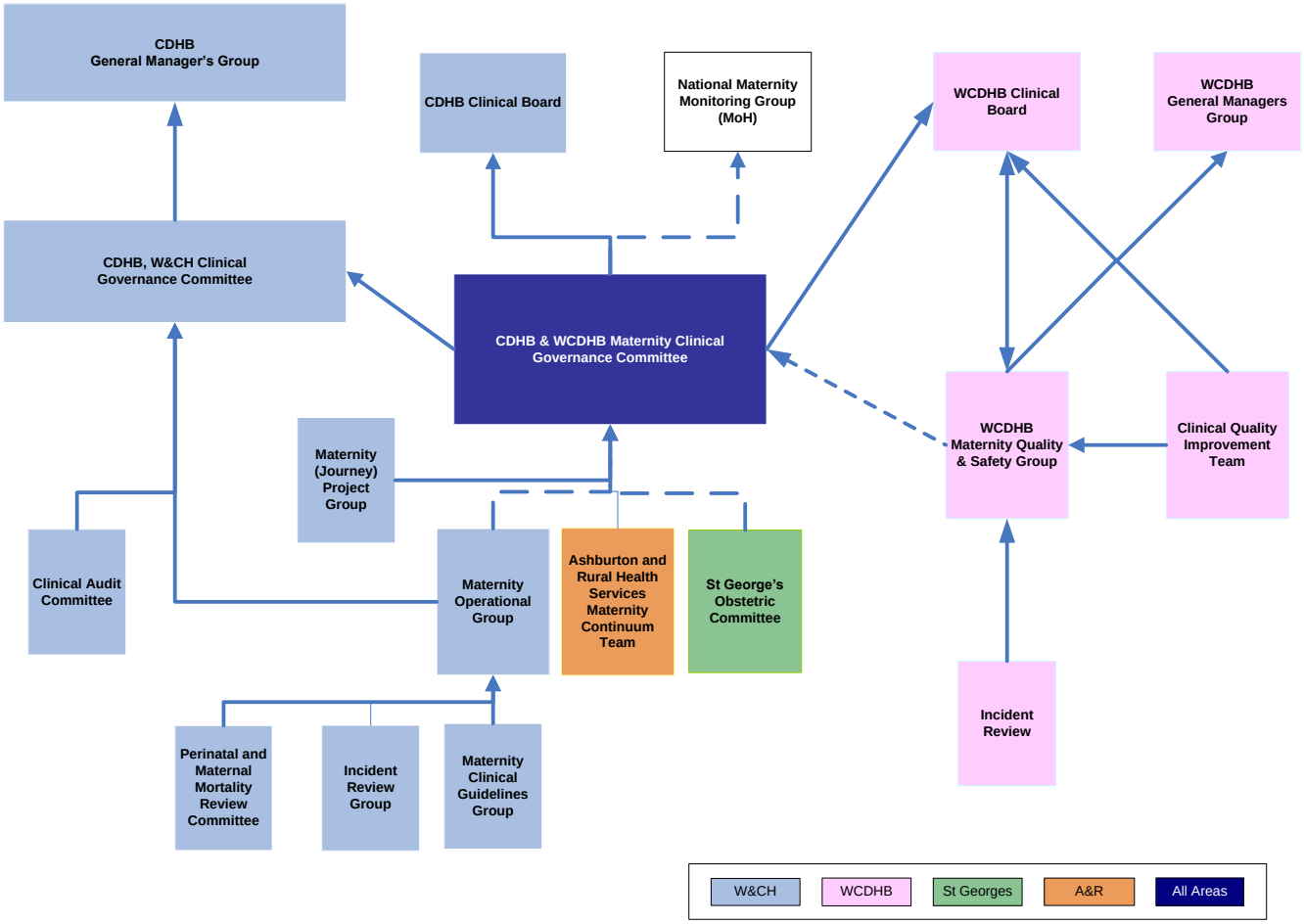


Figure 1. Governance Committee Structure and Reporting Lines

Funding Utilisation

MQSP funding received by both DHBs over the past year has been invaluable in enabling various quality improvement initiatives to be undertaken. The funds have been utilised in employing dedicated staff (Coordinator, Lead Maternity Care Liaison and Administrator) to continue the establishment of the programme structure. This has involved travel between DHBs and attendance at local and national meetings.

Consumer representatives have also contributed to the programme over the past year and have been remunerated for their contributions at local and national meetings.

The implementation of the initial priority projects has required the input of additional staff resource, staff training and material resources. A significant amount has been specifically dedicated to the initial development of the Canterbury DHB Kiriata Māmā (Television for Mothers) project (see page 38).

4. Overview of MQSP Priorities 2014/15

Table 6 below outlines the priorities of both the NMMG and the Canterbury DHB & West Coast DHB Maternity Quality & Safety Programme for 2014/15.

MINISTRY OF HEALTH MATERNITY SECTOR GOAL Ensure the same high standard of care throughout New Zealand for all women using maternity services								
NATIONAL MATERNITY MONITORING GROUP Oversees the maternity system in general Oversees the implementation of the New Zealand National Maternity Standards Acts as a strategic adviser to the Ministry of Health on areas for improvement in the maternity sector								
NMMG PRIORITIES								
Referral Guidelines	Pregnant women smoking	Timing of registration with an LMC	Variation in gestation at birth	Maternal mental health services	Primary maternity ultra-sounds	Maternity consumer represent-atives	NZ Maternity Clinical Indicators	DHB Maternity Annual Reports
CDHB & WCDHB MATERNITY QUALITY AND SAFETY PROGRAMME								
MATERNITY CLINICAL GOVERNANCE COMMITTEE								
QUALITY INITIATIVES AND PRIORITIES								
Reduce waste and variation	Improve guidelines, standards, policy, procedures, patient information	Analyse and review local performance in view of the NZ clinical indicators	Continue to audit outcomes of care and service provided	Define and develop processes for clinical case review and formal review of serious and sentinel events				
Promote Maori, Pacifica and younger women attend pregnancy and parenting support classes	Encourage early pregnancy registration with an LMC	Reduce smoking rates in pregnant women	Encourage breastfeeding	Involve community practitioners in perinatal & maternal mortality & morbidity	Promote use of primary birthing facilities	Promote access to maternal mental health services		
INFORMATION AND COMMUNICATION SYSTEMS		**DATA MONITORING**						
Develop design and content of CDHB Maternity Services website	Develop CDHB Intranet content for enhanced information sharing	Reduce term babies transferring to Neonatal Intensive Care Unit (NICU)	Improve eclampsia management	Continue audits of Caesarean sections, and Inductions of Labour	Audit pre-term births 32-36 weeks gestation & mode of birth	Reduce Women admitted to ICU and HDU		
CONSUMER ENGAGEMENT			**SECTOR ENGAGEMENT**					
DHBs' Maternity Services websites	Maternity consumer experiences	MQSP Annual Report published yearly	Formal process for dissemination of information to community based clinicians					

Table 6 Overview of MQSP Priorities 2014/15

5. Quality Initiatives - Achievements against Priorities 2014/15

This table summarises the quality improvement work undertaken in Maternity Services across **both DHBs** in the 2014/15 years. The work is the result of interdisciplinary collaboration and the involvement of consumer representatives.


Indicates that the work has been completed


Indicates that the work is in progress and nearing completion


Indicates that there is still a significant amount to achieve before completion.

	Priority Area	Progress Report	Status
1	Establish a communication platform for information sharing between and within DHBs	CDHB Intranet site has been reviewed, revised and updated pages published. The information is now in use across Child Health, Maternity, and Gynaecology sectors. New documents and text are uploaded regularly as new material is required. WCDHB has had their business case for the National Maternity Clinical Information System approved and once implemented across both DHBs in 2015 the system will improve efficiencies with transalpine information sharing.	
2	Define and develop processes for clinical case review and formal review of serious and sentinel events	Progress continues to be made on this work with input from various stakeholders and advisors. A draft new report template has been used on a review and approved. WCDHB will align their processes for review with CDHB. Supporting documentation is in the process of being standardised across the DHBs but some further work is required on policies.	
3	Perinatal and maternal mortality and morbidity review activities involve hospital and community based practitioners	At each meeting the DHB staff, LMC and GP of each case being presented for discussion are invited to attend the meeting. In addition, LMC's are now welcome to present their own cases. Following the meeting the co-ordinator completes a perinatal mortality report on each case which covers, obstetric history, antenatal course, labour, birth, investigations completed and neonatal outcomes. The cause of death is identified and a plan for next pregnancy outlined. This is shared with the LMC and the woman's GP following the meeting. The Fetal Loss package was revised in October 2014 following recommendations from the audit on documentation at time of fetal loss completed in September 2014.	 
4	Analysis of National Maternity Clinical Indicators	CDHB and WCDHB have a process for ongoing analysis of the New Zealand Maternity Clinical Indicators and the findings from review of the 2012 data are in this report. A plan to address the areas requiring focused improvement has been developed by each local group.	
5	Eclampsia – NZ Maternity Clinical Indicator 13 (2012)	Reviews were completed on recent cases where women presented with eclampsia and these were found to have been well managed by the multidisciplinary team. Reviews were shared to ensure wider team learning. CDHB successfully implemented an improved post discharge management process to ensure suitable, funded follow-up of women with pre-eclampsia/eclampsia by their GP and LMC in the community.	
6	Pre-term birth NZ Maternity Clinical Indicator 15 (2012)	Two audits of pre-term births, between 32-34 weeks and 34-36 weeks gestation, have been initiated. Auditing emergency caesarean sections and inductions of labour continues across both DHBs.	

	Priority Area	Progress Report	Status
7	Transfer of term babies (without congenital abnormality) to NICU.(NMMG Annual Report 2013)	An audit of admissions of term babies (without congenital abnormality) to NICU has been commenced. An audit of Neonatal retrievals into NICU has been completed. The results of this audit have informed the development of the Neonatal Early Warning Score (NEWS) system which has been piloted and is in the process of being introduced.	 
8	Maternal admissions to Intensive Care Unit and Acute Observation Unit. (NMMG Annual Report 2013)	Clinical reviews have been undertaken of cases where women have been admitted to ICU and AOU utilising the NZ Perinatal and Maternal Mortality Review Committee tool. Recommendations have been discussed with health care professionals through quality publications and perinatal education sessions.	
9	Implement a formal process for the dissemination of information to community based clinicians	HealthPathways are in place to provide direction to staff regarding the management of conditions in the community and referral process to tertiary care. CDHB has a good information sharing process via LMC Liaison and GP Liaison positions as well as via newsletter to LMCs. The concept of a common platform website which can be accessed by hospital, rural birthing units and community based practitioners across both DHBs has been reviewed and up to date and relevant information is currently available on newly revised CDHB, WCDHB and South Island Alliance websites and through HealthPathways.	 
10	Conduct research into maternity consumer experiences	The effectiveness of the 'We Care About Your Care' Maternity Services Feedback form and system is being monitored across both DHBs. Two quarterly reports to track themes in women's feedback and suggestions about areas for improvement, were produced in February 2015. Any feedback expressing concerns about treatment, service or facilities was forwarded to Charge Midwife Managers for follow up.	
11	Develop web-based public information about maternity activities and services	The Maternity Services site on the CDHB Internet has been revised and relaunched. The HealthInfo website has been established and contains a wide range of information for the public including maternity services and related health conditions. St Georges Hospital also updated their maternity service webpage and included an on-line booking form. WCDHB has developed a maternity services and maternity activities webpage for consumers.	  
12	Improve the attendance of Māori, Pacific Island and younger women at pregnancy and parenting classes	CDHB and WCDHB have developed a proposal to move Pregnancy and Parenting Education (PPE) services from hospital based to Non-Government Organisation (NGO) community based services. Two NGOs have been contracted to deliver PPE for young parents 23 years and under. Both providers are working together and will alternate classes. Work continues on a communications plan to introduce these services. A one day workshop with TAHA Well Pacific Mother and Infant Service was held in November 2014 to improve engagement and services for Pacific People. Thirty-three providers from a wide range of services attended and found the day very worthwhile. Data collection from providers has been improved to ensure that CDHB has a better understanding of who is attending both DHB and NGO courses.	  
13	Increase the proportion of women registering with LMCs in the first trimester	CDHB has a high rate of women engaging with maternity services in the first trimester at 74%. There has been ongoing promotion of the "Find Your Midwife" webpage through the New Zealand College of Midwives and a review and redevelopment of the online information available for women on the CDHB and HealthInfo website.	

	Priority Area	Progress Report	Status
		WCDHB developed strategies for promotion of the early registration with online and print promotion. WCDHB has promoted the 'Find your Midwife' website in a communications strategy and has distributed promotional material across the West Coast.	
14	Decrease smoking rates and offer support to women who smoke during pregnancy to meet the MoH's and Well Child/Tamariki Ora's targets:	**Smoking Cessation Goals** The CDHB and WCDHB Maternity Clinical Governance Committee at its November 2014 meeting committed to 'CDHB and WCDHB's Goals for Pregnant Women Who Smoke'. See page 19. WCDHB outcome data for the six goals has been developed and illustrated on McBrearty's Ward's Quality Board for women, visitors and staff to review. **Education** 87% of WCDHB core and LMC midwives undertook the four hour Innov8 Smokefree Education in September 2014. WCDHB Smoking Cessation Advisors complemented these Innov8 Smokefree education sessions with further information on West Coast smoking cessation services. All of the nurses employed on McBrearty Ward have completed smoking cessation training. Arrangements have been made that as of April 2015 CDHB's Core Competency Study Day for Midwives will include a 1 and ¾ hr session on smoking cessation which will be facilitated by CDHB's Smoking Cessation Advisor. **Smokefree Incentive Programme** WCDHB commenced a trial of an incentive programme for pregnant women who smoke in November 2014. This is available to mothers up to 28 weeks pregnant and extends over a 12 week period of weekly to fortnightly contact. A total of $300 grocery vouchers will be given at one, four, eight and twelve weeks after quitting has started. Mothers on the programme who are still smokefree two weeks after baby's arrival will earn a $50 pharmacy voucher.	
15	Develop and promote primary maternity facilities	**Lincoln Maternity Hospital** Evidence-based upgrade of birthing room, including a new birthing couch, has been completed. Photos of the room have been used in promotional material to encourage its use. A business plan for reconfiguration of postnatal rooms to increase privacy and the view to the outside was approved and the work was completed in June 2015. **Rangiora Maternity Hospital** A new hospital is currently being built and is due for completion in October 2015. A birthing couch will also be installed in one of the birthing rooms here. **Kawatiri Maternity Facility, Westport** Due to concerns about staffing and safety the Kawatiri maternity facility was closed for planned birthing in 2013. The WCDHB has subsequently changed the model of service delivery and sought expressions of interest from suitable providers to manage the facility. The Haslett Partnership has been contracted to WCDHB and a return to planned birthing in Kawatiri took place in March 2015 with provision for 24/7 cover for labours and births, inpatient postnatal care and emergencies. **St George's Maternity Centre** In early 2014 St George's Hospital informed the public that they were resuming offering facilities for labour and birth care. The website has also been reviewed and updated.	
16	Form an Ashburton & Rural Health Services promotion of Primary Maternity Unit Group.	A consumer representative attended Continuum meetings and contributed her view as a new mother with an interest in issues affecting mothers and babies. The information booklet for women and partners who intend to birth at Ashburton Maternity has been updated. Privacy has been improved in all patient rooms in Ashburton and furnishings in the maternity rooms at Darfield Hospital have been upgraded and a new double bed is now in the birthing room.	

	Priority Area	Progress Report	Status
17	Improve breastfeeding rates	WCDHB maternity ward has Mum4Mum Breastfeeding Peer Support Counsellors visiting McBrearty Ward most days. This is putting a face to a name, so when women go home they know that there is someone they can telephone to discuss breastfeeding; especially normal breastfeeding issues. A referral for all babies to the Breastfeeding Advocacy Service is now initiated via completion of the newborn enrolment form. CDHB is still working though how Breastfeeding Peer Support Counsellors can be introduced into NICU as a way of improving breastfeeding support services for mothers and babies discharged from NICU. Both DHBs have had their Breastfeeding Priority Plans endorsed by CDHB & WCDHB Maternity Clinical Governance Committee. Each one has identified a small range of activities that they will focus on until then end of 2016.	  
18	Utilisation of workforce	Recruitment and retention strategies to attract maternity hospital and community based practitioners are ongoing. St Georges Maternity Centre has negotiated a contract with Christchurch Polytechnic Institute of Technology (CPIT) to reintroduce student midwives working there as at June 2014. Graduate Midwives have been provided with information packs and access agreement forms as at December 2014. WCDHB has; – moved from DHB employed case-loading midwives to self-employed LMC midwives in the community. This will improve the continuity of care for women on the West Coast. – WCDHB's Planning and Funding Department has contracted with self-employed LMC's on the West Coast for a sustainability package to remunerate them for additional infrastructure costs associated with caring for women who live in rural and remote rural locations.	  
19	Implement a regional safe sleeping policy	Safe Sleep policy has been uploaded on to CDHB & WCDHB intranet sites. Education requirements and resources for ward areas have been developed and implemented. Further promotion is planned, followed by a post-implementation audit, the tool for which is in the final stages of being completed.	 
20	Ensure consistency in the clinical decision making and management of gestational diabetes	The National Guideline for the Screening Diagnosis and Management of Gestational Diabetes has been reviewed. Local physicians and obstetricians in the High Risk Clinic have reservations about the viability of the Guidelines and plan to formulate a local adaptation of the Guideline which will ensure comprehensive clinical decision making and management of gestational diabetes.	
21	Strengthen co-ordination and increase knowledge of maternal mental health services across primary and secondary care. *(NMMG Report 2013)*	The existing CDHB maternal mental health referral pathway from conception to one year postnatal has been mapped and this information will be made accessible to LMCs and General Practitioners via HealthPathways and to women via the CDHB website and HealthInfo. See pathway on page 20 WCDHB have also clearly defined the referral pathway for access to maternal mental health services and have a designated nurse position to co-ordinate these between primary and secondary care providers in the region.	 
22	Implement the Referral Guidelines (2012)	Development of Maternity Consultation and Transfer of Care policy is underway. Consultation and Transfer of Care sticker tool is in the process of being developed.	

Table 7 Achievements against 2014/15 Canterbury DHB & West Coast DHB Priorities

Additional Quality Improvement Initiatives

Canterbury DHB – Neonatal Unit - Human Milk Bank

Fridges in the Human Milk Bank

After four years in the making, the Neonatal Unit Human Milk Bank at Christchurch Women's Hospital was officially opened on the 4th February 2014. This is the first Milk Bank in New Zealand.

The aim of the milk bank is to provide a natural pasteurised alternative to formula for babies in NICU with a gestational age of 35 weeks or less, whose mothers' milk supply is not yet meeting their nutritional demands.

It is already 1 year since the Human Milk Bank opened and it has pasteurised over 256 litres of human milk from over 54 donors. There have been 171 babies and families who have benefited from receiving this milk. A survey conducted at the end of 2014/beginning of 2015 reviewed knowledge and attitudes around the Human Milk Bank and the results show strong support from both families and staff. The survey indicated that this innovation has been very positively received and parents feel more comfortable with the option of pasteurised donated human milk than with formula.

St Georges Hospital – 60 Minute Workout Education Sessions

Following attendance at a project management course, it was identified that there was a need for regular staff education- topical, evidence based and related to practice lasting no longer than 60 minutes including a question time. Currently there are sessions like this at CWH but St George's staff did not regularly attend.

A "60 Minute Workout" session was planned for at least six weekly intervals, inviting various speakers and encouraging staff to present any cases to share knowledge with all clinical staff.

Benefits include ongoing up to date education for clinical staff ultimately benefiting the consumer. Staff can take up the opportunity to improve their own learning and teaching by presenting sessions.

The format will be evaluated and adjusted according to feedback from staff.

West Coast DHB - Maternity Service Review Recommendations

During 2014 West Coast DHB has implemented most recommendations from the 2013 Maternity Services Review. This includes reviewing all maternity clinical guidelines and policies. It has used Canterbury DHB policies as a guide and adapted these to suit the West Coast DHB clinical environment.

An elective transfer policy has been developed for women transferring to Canterbury DHB prior to the birth of their baby. A policy has also been developed for clinical contingencies to cover options when weather conditions interfere with patient transfers.

West Coast DHB has implemented a Canterbury DHB initiative that enables LMCs to refer women to a GP for a free (DHB funded) consultation for general health, maternal mental health or social issues that could impact on pregnancy.

Canterbury DHB – Lincoln Maternity Hospital - Birthing Room Upgrade

Hannah and Aitana

Hannah and her husband Francisco are proud parents of their beautiful baby girl, Aitana, who was born at Lincoln Maternity Hospital. The hospital was the first choice for the couple, as it was the nearest to them and had the home-like atmosphere they were looking for. "We liked their whole philosophy of as natural a birth as possible and the support they offer, and it is such a nice hospital. It has a lovely feeling and it is nice and small."

Hannah says she couldn't fault the hospital, "it was amazing". "The birthing room was lovely and super comfy. I used the new birthing couch and the new birthing mats to kneel on, which were very cushiony." She and Francisco both felt welcome and at home at the hospital. "The midwives were great. We felt really looked after and the surroundings were so nice. We would definitely recommend it."

Lincoln Maternity Hospital's birthing room upgrade arose from an objective to actively promote normal vaginal birth (NVB) in a primary birthing unit as a safe option for healthy women who are interested in giving birth this way.

Studies have demonstrated the influence of the environment on NVB, including factors such as space, aesthetics, images, furnishings, and colour. International evidence sourced from varied disciplines including midwifery, architecture and design was reviewed in the decision making process. Redecorating items were sourced economically with consideration given to the age of the building, infection prevention and control, and the health and safety of all those using the room.

For the upgrade, a birthing couch and gym-mat were imported from the National Childbirth Trust, in the UK for a cost of less than a third of the price of a birthing bed. A mobile washable screen conceals medical equipment and emergency staff information and provides privacy from the door.

Birthing Room at Lincoln Maternity Hospital

To make it all happen, local Lead Maternity Carers and hospital midwives, partners and children, held a working-bee to paint the walls and woodwork and help achieve the vision.

Since the arrival of the couch and gym-mat and removal of the hospital bed, midwives have noticed women spontaneously using the couch to gain optimal positioning for birthing, almost without exception.

Large cushions and a beanbag back-rest have since been purchased to help with comfort for breastfeeding.

Canterbury DHB & West Coast DHB – Air Transfer between Hospitals

Transportation often seems slow to arrive in an emergency situation and the interim period can cause high levels of anxiety for those isolated in remote regions such as on the West Coast. The Canterbury DHB **'In-Utero Transfer between Hospitals'** policy has been rewritten to streamline the co-ordination process for transport, with particular focus on the West Coast DHB.

Members of the Flight Team

The aim was to ensure coordination with the minimum of delay, and to increase communication during the process between coordinators in the tertiary unit to those caring for women awaiting retrieval by air ambulance.

Transfer is a complex multidisciplinary process during an emergency. The revised policy now includes short practice steps for each discipline involved in the following scenarios: transfer out of Christchurch Women's Hospital (usually when the Neonatal Unit is full); or retrieval into Christchurch Women's Hospital for tertiary level care.

The steps are graphically illustrated on a colour coded 'role specific' flow chart, demonstrating appropriate consultation, and creating a quick reference for organising an air ambulance transfer during an emergency. These are displayed on the wall in all areas within Canterbury DHB & West Coast DHB involved in maternal transport by air.

Additionally, updating and informing the referring midwife of progress is now included as a step in both the policy and the In-utero Transfer Checklist.

The policy was widely disseminated to the flight midwives, and relevant multidisciplinary leaders within Canterbury DHB & West Coast DHB in January 2015. The level of improvement will be evaluated via audit following a 12 month period of implementation (January 2016).

Care In-flight

Canterbury DHB & West Coast DHB Goals for Pregnant Women Who Smoke

The CDHB and WCDHB Maternity Clinical Governance Committee endorsed the setting of the following goals for Canterbury and West Coast for reducing the numbers of women who smoke in pregnancy.

Smoking is the main preventable cause of problems in pregnancy. There is NO safe level of smoking while pregnant.
Our aim is to provide every woman high quality support to be smoke free during pregnancy and beyond.

Focus	Target	Goal (By 30 June 2015)
Booking	80%	Women have enrolled with an LMC midwife by 12 weeks.
Advice	90%	Pregnant women who identify as smokers are offered advice and support to quit at first registration visit.
Referral	50%	Pregnant women who smoke accept smoking cessation support during pregnancy.
Hospital	95%	Women who smoke will be given support to stop smoking while in hospital.
Home	86%	Mothers are smoke free at two weeks postnatal.
Education		LMCs, core midwives and nurses within CDHB maternity facilities complete a smoking cessation training programme.

Figure 4 Canterbury DHB & West Coast DHB Goals for Pregnant Women Who Smoke

Progress towards the 'Goals for Pregnant Women Who Smoke' are outline below;

Canterbury DHB - Smoking Cessation 2014-15	Q1	Q2	Q3
Smokers Gestation at Booking (weeks)	11.4	11.1	12.3
% Smoking Prevalence	12.0%	12.4%	13.1%
% Smokers Offered Brief Advice	94.2%	93.3%	93.4%
% Smokers Offered Cessation Support	94.2%	100.0%	78.0%
% Smokers who Accepted Cessation Support	30.9%	30.3%	24.7%

Table 8 Canterbury DHB Smoking Cessation 2014-15

West Coast DHB - Smoking Cessation 2014-15	Q1	Q2	Q3
Smokers Gestation at Booking (weeks)	13.8	13.2	13.6
% Smoking Prevalence	20.0%	19.1%	26.1%
% Smokers Offered Brief Advice	100.0%	100.0%	100.0%
% Smokers Offered Cessation Support	100.0%	100.0%	82.6%
% Smokers who Accepted Cessation Support	14.3%	22.2%	26.1%
Number of events	70	47	88

Table 9 West Coast DHB Smoking Cessation 2014-15

While across both DHB's some of the targets are being met in some quarters, further work is required to move all of the figures further towards the targets set.

6. Maternal Mental Health Referral Pathways

One of the areas of focus for the NMMG is to improve the national consistency of provision of co-ordinated maternal mental health services. The following outlines how services are provided in our DHBs. Pathways are aligned to the Ministry of Health Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines), [Section 88 Maternity Services Notice 2002, used in conjunction with the Primary Maternity Services Notice 2007] provides advice.

6.1 Canterbury DHB Perinatal Mental Health Local Referral Pathways

Within Canterbury DHB, maternal mental health in the primary setting is managed by General Practitioners and guidance is available to them via HealthPathways.

Pregnant women or women considering a pregnancy who have a history of or a current severe mental illness are at increased risk of mental health issues during pregnancy and postpartum, and should be assessed by Mental Health Services. It is essential that the Lead Maternity Carer (LMC) Midwives or Obstetricians, General Practitioners, Antenatal Clinic, and Mental Health Services provide an integrated approach to any woman at high risk of psychiatric complications during and after pregnancy.

Canterbury DHB Referral Pathway

The Canterbury DHB Referral pathway (see Figure 2) should be read in conjunction with the Referral Guidelines (in particular, Categories of Referral and the Process Maps) which emphasise communication and collaboration among health professionals involved in the care of a pregnant woman with mental health issues.

In the event of a pregnant woman presenting with an acute (emergency) mental health event in the community an individual, family member, Obstetrician, or LMC midwife, General Practitioner or Well Child Provider should refer the woman to the Psychiatric Emergency Service via the Emergency Department which is the Single Point of Entry (SPOE) at Christchurch Public Hospital for assessment.

If the pregnant woman is an in-patient the Obstetrician or Midwife should telephone 378 6615 for the Psychiatric Consultation Services at Christchurch Hospital.

Referral to secondary regional mental health service (the Mothers' and Babies' Service)

The Canterbury DHB Specialist Mental Health Service provides a secondary regional service for maternal mental health, which includes the Mothers' and Babies' Service located at The Princess Margaret Hospital in Christchurch. Within Canterbury DHB, referral to this service is through a GP or an antenatal clinic obstetrician, or the Consultant Psychiatrist for the Psychiatric Consultation Service. An LMC Midwife is not permitted to refer directly to the Mothers' and Babies Service.

Canterbury DHB Perinatal Mental Health Referral Pathway

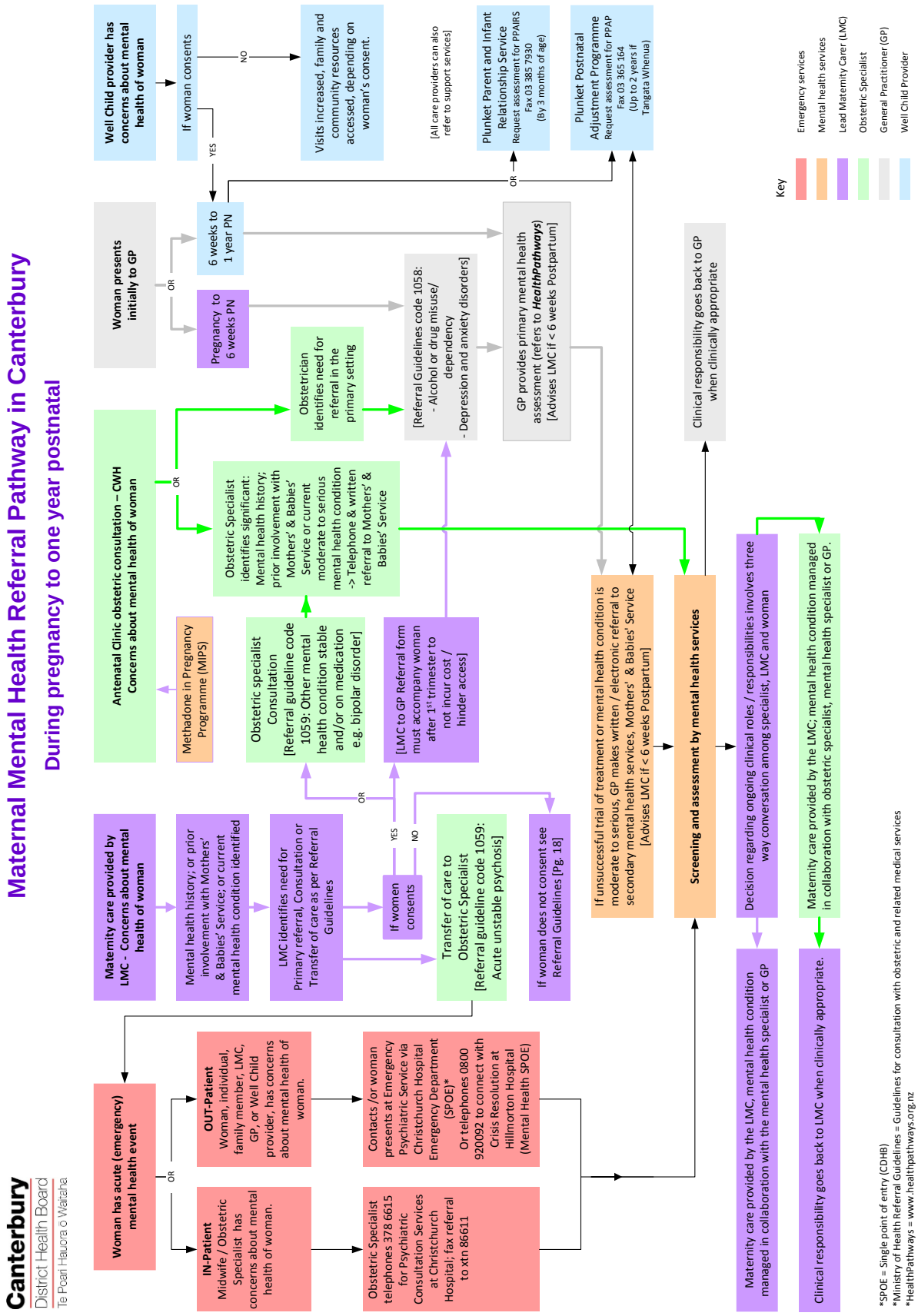


Figure 2 Canterbury DHB Referral Pathway

6.2 West Coast DHB Referral Pathway

The referral, consultation and transfer pathways should follow the Ministry of Health Guidelines, and referrals to the secondary services of the Mothers and Babies Unit in Christchurch should follow the same referral pathways as outlined for Canterbury DHB.

In West Coast DHB this task is undertaken by the Liaison Nurse; a designated role to co-ordinate maternal mental health services between primary and secondary care providers in the region and the Mothers and Babies Resource/Liaison Nurse working with West Coast DHB mental health services.

The role includes:

- Support and advice to women on mental health issues and concerns;
- Assessment and screening for developing mental health issues;
- Direct care and oversight of women with existing mental illness during pregnancy, in collaboration with the midwifery team;
- Access to psychiatrist review during pregnancy (if needed);
- Access to specialist maternal mental health services;

The purpose of the role is to ensure care is co-ordinated in a manner that is both responsive and proactive. This person is a member of the interdisciplinary Maternal Care and Unborn Wellbeing group, which has a focus on at-risk/vulnerable mothers and babies/infants.

The Maternal Care and Unborn Wellbeing group is co-ordinated by the Violence Intervention and Child Protection team. There is a clearly defined referral pathway to access maternal mental health services; however, it is essentially not required. West Coast DHB Mental Health service works to the principle that 'any door is the right door'. Most referrals involve a less formal process of simple discussion between the midwife and the resource/liaison nurse. Women may also choose to self-refer. The informal referral system works well (without replacing the formal process) and has been based upon the development of a trusted relationship between primary and secondary services; (midwives, rural nurse specialists; general practitioners, practice nurses, mental health services). There is a fundamental recognition that there is always the welfare of two (the mother and the baby) to be considered.

West Coast DHB Perinatal Mental Health Referral Pathway

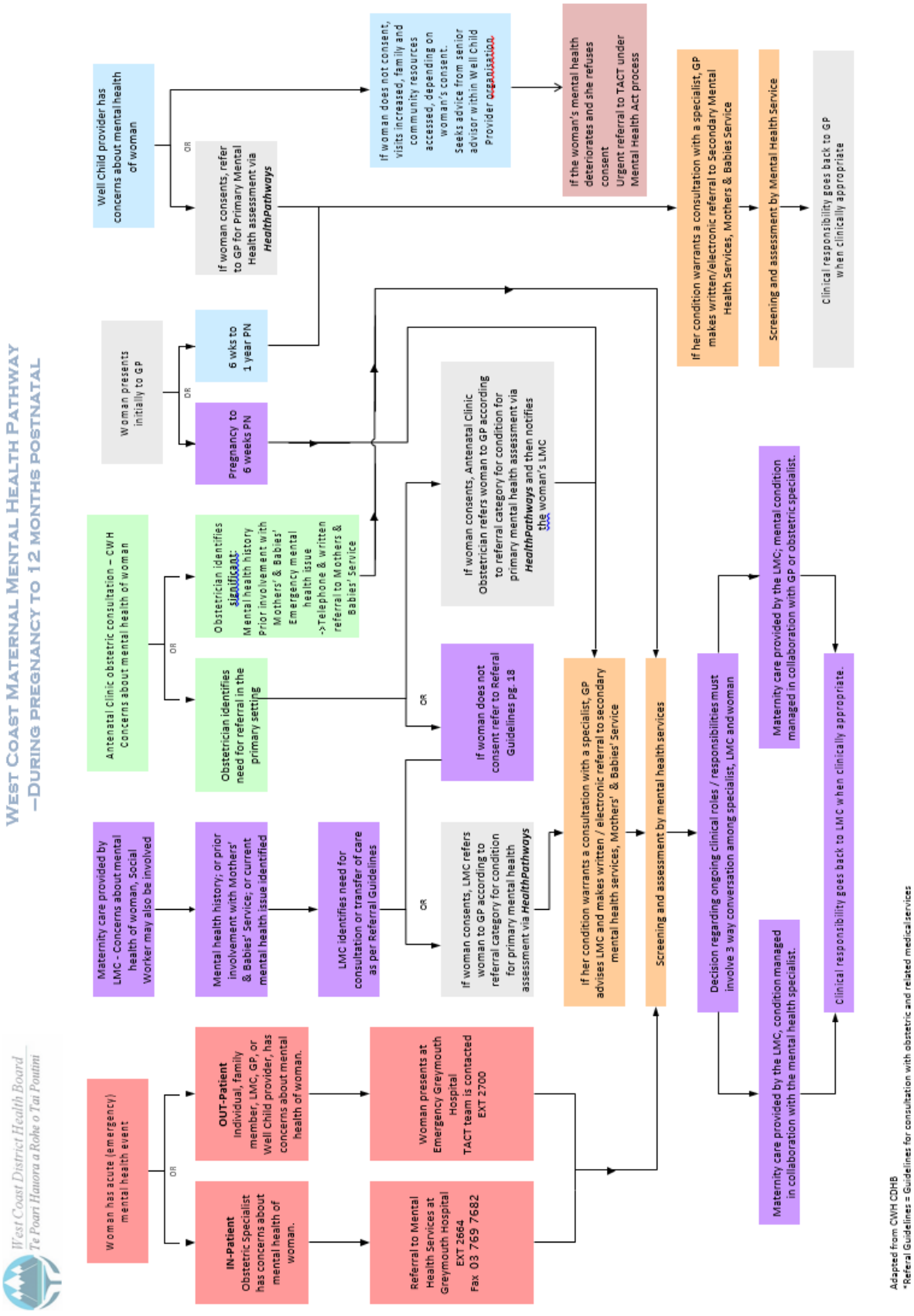


Figure 3 West Coast DHB Referral Pathway

7. Clinical Indicators Analysis

The Ministry of Health's data New Zealand Maternity Clinical Indicators (2012) was published in October 2014. The publication shows key maternity outcomes for each DHB for 2012; and is the latest data available.

The analyses below, shows each of the DHB's performance and position in relation to both the indicators and national averages. Percentage figures are from either the 'DHB of Domicile' set or the 'facility of birth' as indicated and are based on standard primiparae only (rather than all women giving birth / all deliveries).

7.1 Canterbury DHB Response to New Zealand Maternity Clinical Indicators (2012)

7.1.1. Introduction

The purpose of these indicators is to increase the visibility of the quality and safety of maternity services, and to highlight areas where quality improvements could be made. Three new indicators which reflect care during pregnancy and the postnatal period, and severe maternal morbidity have been added for the 2012 report. The data largely refer to 'standard primiparae' (SP) who make up 16% of all births nationally and 12.1% in Canterbury DHB. This group (aged 20-34 years, uncomplicated singleton pregnancy, full term, cephalic i.e. head presentation) represent the least complex situations in which intervention rates would be expected to be low, and can be compared between institutions.

7.1.2 Analysis of Individual Indicators 2012

Key: ▲ *Higher than the national average* ▼ *Lower than the national average*

Indicator	Title	CDHB rate	Higher or lower than national average	National Average
Indicator 1	**Registration with a Lead Maternity Care**	CDHB 74.1%	▲	National 63.5%

This is a new indicator regarding timely registration with a Lead Maternity Carer (LMC), and is a target for the National Maternity Monitoring Group. In Canterbury the rate was significantly above the national average of 63.5% with 74.1% of SP domiciled in the area being registered with an LMC in the first trimester. This is in part due to the higher number of LMC midwives per capita than in most other regions, and in part attributable to the development of the "Find your Midwife" website as part of the "Improving the Patient Journey" project. It sits as an active quality project under the Canterbury DHB & West Coast DHB Maternity Governance Group.

Indicators 2-5 Type of birth

These indicators are about the type of birth among SP. Their stated purpose is to encourage maternity service providers to review the appropriateness of interventions, with the long term aim of reducing maternal and perinatal morbidity.

There is no national or international recommendation regarding the optimum proportion of deliveries by caesarean section or instrumental delivery, although the World Health organisation (WHO) acknowledges that a caesarean section rate of less than 15% has a negative impact on neonatal outcomes. There has been a worldwide pattern of increasing caesarean section rates in the increasingly risk averse climates of the Organisation for Economic Co-operation and Development (OECD) countries.

Indicator 2	**Spontaneous vaginal birth**	CDHB 58.5%	▼	National 64.7%

The Indicators show that the rate of spontaneous vaginal birth for SPs in the secondary/tertiary facility in Canterbury overall is 58.5% *(2009=50.8%, 2011=54.0%)*, compared to a national average of 64.7% *(2009 = 64.8%, 2011=65.6%)*. This represents a significant improvement in the rate from 11.6% to 6.2%, below the national average.

Indicator 3	Instrumental vaginal birth	CDHB 23.4%	▲	National 17.2%

The rate of instrumental birth in the secondary/tertiary facility in Canterbury is relatively high at 23.4% *(2009=26.9%, 2011=25.1%)* vs. the national average of 17.2% *(2009=16.3%.2011=16.0%),* although it is noted that the difference when compared to the national average has reduced from 9.1% to 6.2%. This discrepancy is recognised and continues to be the subject of ongoing audit and review. An audit in September 2011 showed that a large proportion of instrumental births were occurring out of hours with inconsistent notification or involvement of the Senior Medical Officer (SMO). A detailed credentialing process for registrars was therefore developed, and a detailed guideline published regarding their need for supervision. An audit in 2014 showed 100% compliance with the guideline over a 4 month period. In response to the NMMG letter of 14 Jan 2015 a further audit is planned in 2015 including information regarding location of procedure.

The relatively high rate of epidural analgesia in Canterbury DHB may also be a factor affecting instrumental birth. The recent changes under the Misuse of Drugs Act, which enable midwives to utilise opiate analgesia is expected to be associated with a reduction in epidural rates and a concomitant fall in intervention rates, as has been experienced in other areas.

Revised Canterbury DHB Induction of Labour guidelines were written and published in 2014 and regular practical training for registrars is provided. We are also currently considering the proposed Royal College of Obstetrician and Gynaecologists (RCOG) programme which it may be possible to either adopt or adapt for local use.

The multidisciplinary Maternity Guidelines Group is developing a guideline regarding management of the second stage of labour. This will need to include possible changes in the internal culture at Christchurch Women's Hospital to encourage and support midwifery escalation prior to calling for medical intervention. A similar project called 'Fresh Eyes', which encourages peer review offetal heart beat (cardiotocograph) interpretation, is continuing to be implemented and evaluated.

It is noted that the data currently under review in this report is for 2012 which is two years in arrears. It will be interesting to note the success or otherwise of the work done in the intervening period.

Indicator 4	Caesarean Section	CDHB 18.0%	▲	National 17.8%

The rate of caesarean section for SPs in the secondary/tertiary facility in Canterbury was 18.0% (2009=21.7%, 2011= 20.8%) which was slightly above the national average of 17.8% (2009 =17.9%, 2011=17.9%). It has previously been identified that this rate was higher than average, and changes have been successfully implemented following ongoing audits of clinical practice and improved accreditation for medical staff in training. An increase in senior staff levels has allowed SMO supervision and involvement in decision making on the birth suite.

The weekly case review meeting is being well attended, with increased numbers of midwives becoming involved, and the generation of published 'learning points'.

A formal External Cephalic Version (ECV) guideline has recently been developed and once operational will be the subject of an audit.

Indicator 5	Induction of Labour	CDHB 4.0%	▼	National 4.2%

The rates of induction of labour are expected to be low for this defined low risk group, which is confirmed to be the case for women domiciled in the Canterbury DHB at 4.0% *(2009=4.1%, 2011=4.0%)* and is consistent with the national average of 4.2% *(2009=4.5 %, 2011=4.3%).*

The Canterbury DHB evidence based guideline for Induction of Labour was implemented at the start of 2014, with the aim of decreasing the rate further, and improving quality of care and experience for families. One of the key changes was a substitution of prostaglandin gel with prostaglandin pessaries. An initial audit has demonstrated a reduced number of vaginal examinations were necessary, and confirmed good outcomes, which were reviewed and discussed at the CWH 'Quality Half Day' in January.

Indicators 6-9 *Degree of Damage to Lower Genital Tract*

These indicators, which are about the degree of damage to the lower genital tract of the mother, demonstrate that this is not increased for the Canterbury population.

Indicator 6	**Intact Lower Genital Tract**	CDHB 27.4%	▼	National 28.0%

The rate of SP in Canterbury giving birth vaginally with intact lower genital tract in 2012 was 27.4% *(2009 = 32.0, 2011=33.3%)* which is closely in line with the national average of 28% (2009 = 35.6, *2011= 33.1%).*

Indicators 7 and 9	**Episiotomy <u>without</u> and <u>with</u> third and fourth degree tear**	CDHB 27.0% (without) 1.2% (with)	▲ ▼	National 20.6% 1.6%

The rate of episiotomy with **no** third/fourth degree tear was 27.0% (*2009=27.6%,* 2011=25.4%) in Canterbury which is higher than the national average of 20.6% (*2009= 19.2%, 2011 = 19.0)*, and the rate of episiotomy **with** such tears was only 1.2% (*2009= 1.0%, 2011=0.6%)* vs a national average of 1.6% *(2009= 1.2% 2011= 1.1%).* Further analysis regarding episiotomy use is planned this year.

The relatively high rate of episiotomy overall (27.0% vs national average of 20.6%) is partially accounted for by the higher than average instrumental birth rate, during which episiotomy is recommended by international standards of best practice. These percentages represent very small numbers with 9 women suffering third/fourth degree tears in Canterbury and 123 women nationally.

Indicator 8	**Third or Fourth Degree Tear without episiotomy**	CDHB 2.8%	▼	National 3.7%

The rate of third or fourth degree tear without episiotomy for the Canterbury DHB population is 2.8% *(2009= 1.9%, 2011= 2.7%)* which is below the national average value of 3.7% *(2009= 2.9%, 2011=* 3.2%*)*

It is notable that indicators 6-9, which are about the degree of damage to the lower genital tract of the mother, demonstrate that this is not significantly increased for the Canterbury population. In particular, as would be expected with the high rate of instrumental birth there is a correspondingly high rate of episiotomy, but **not** of third or fourth degree tears after episiotomy, with 1.2% compared to the national average of 1.6%. There is also a lower than average rate of third or fourth degree tear for those who did not have an episiotomy at 2.8% vs. an average in all secondary and tertiary facilities of 3.7% .

These data suggest that episiotomy continues to be used appropriately to avoid third and fourth degree tears.

Data has been collected for an audit regarding third and fourth degree tears, with results due for publication in 2015 and will be used to inform the further analysis regarding episiotomy overall.

Indicator 10	**General Anaesthetic for Caesarean section**	CDHB 4.7%	▼	National 8.6%

The rate of general anaesthetic use for caesarean section in secondary/tertiary facilities in Canterbury is low at 4.7% *(2009= 6.1%, 2011=*4.9%*)* which is significantly lower than the national average of 8.6% (*2009=9.0%, 2011=* 8.3%*)*. This corresponds favourably with best practice recommendations regarding the safety for both mother and neonate when regional anaesthesia is used, and reflect the presence of a dedicated consistent high quality obstetric anaesthetic service.

Indicators 11 and 12	**Blood Transfusion after Caesarean Section and Vaginal Birth**	CDHB 2.3% (caesarean) 1.4% (vaginal)	▼ ▼	National 3.2% 1.6%

The proportion of women in Canterbury undergoing blood transfusion after caesarean section was 2.3% (2009= 3.3%,2011= 2.6 %) which is below the national rate of 3.2% (2009=3.7%,2011=3.3%), and after vaginal birth it was 1.4% (2009=1.4% ,2011=1.1%) which is below the national rate of 1.6% (2009=1.5% ,2011=1.6%).

The rate of use of transfusion is used as a measure of severe life threatening haemorrhage, and the results show that in Canterbury DHB there is a consistently lower than that the national average rate, with continuing improvement.

Indicator 13	Severe maternal morbidity	CDHB (n=4)		National (n=14)

This is the second of the newly introduced indicators, with eclampsia selected as a potentially avoidable severe complication of pregnancy.

The very small numbers preclude statistical analysis with 14 cases diagnosed nationally, and fewer than 5 in each DHB. The four cases in Canterbury DHB were individually reported and investigated with particular attention to opportunities for upstream management of hypertension and/or pre-eclampsia.

Indicator 14	Tobacco use during the postnatal period	CDHB 10.8%	▼	National 13.9%

This is the final newly introduced indicator, chosen to inform the potential need for improved smoking cessation services. The rate of smoking in SP women domiciled in the Canterbury area during the postnatal period was 10.8% which was significantly below the national average of 13.9%. This is included in the DHB targets, and also sits in the Canterbury DHB & West Coast DHB quality plan.

Indicator 15:	Preterm births (under 37 week's gestation)	CDHB 8.4%	▲	National 7.6%

This is an alteration of indicator since the previous two reports, where the rates of preterm births from 32 – 36 weeks gestation only were reported.

The rate of premature birth for women domiciled in Canterbury of gestation 32 – 36 weeks has increased to 7.0% (*2009=6.7%, 2011=6.9%)* and the national average was 6.3% (*2009=6.1%, 2011=*6.1%*)*

The new indicator regarding all preterm births under 37 weeks gestation shows that this was 8.4% in Canterbury DHB, which was significantly higher than the national average of 7.6%. This trend is likely to be due to higher maternal morbidity as well as the closer monitoring of pregnancies.

Table 10 Canterbury DHB Clinical Indicators

The Canterbury DHB has an ongoing multidisciplinary commitment for improving maternity services across the continuum of care. The strategic project "Improving the Maternity Journey" is ongoing and reports to the Canterbury DHB & West Coast DHB governance group.

7.1.3 Action points or opportunities which have been achieved by this project include:

- Established standardised Canterbury-wide information accessible from a wide variety of sources.
- Publicised the electronic "Find your Midwife" website
- Continued to fund referrals made from LMCs to General Practitioners.
- Published an evidence based guideline to support women and LMCs in deciding whether a primary or secondary care level birthing facility is most appropriate.

7.1.4 Opportunities currently under development include:

- Improving Pregnancy and Parenting Courses to meet the needs of the people in the community.
- Considering establishment of a dedicated primary birthing facility close to CWH.
- Improving breastfeeding education and support.
- Developing standardised, streamlined processes for notification and referral from LMC to Well Child/Tamariki Ora provider and general practice, and confirmation that the referral has been accepted.

7.1.5 Conclusion

Overall in Canterbury all secondary and tertiary services are provided at Christchurch Women's Hospital, and the indicators show that the high level of safety for both mothers and babies continues to be above average for New Zealand.

There is however continued work needed to reduce the high number of instrumental births and episiotomies. Further auditing of practice and education in regard to fetal heart monitoring guidelines and fetal blood sampling is planned for the coming year. Work is ongoing to ensure data integrity and to audit against appropriate standards to ensure all interventions are indicated in the clinical context.

7.2 West Coast DHB Response to New Zealand Maternity Clinical Indicators (2012)

Indicator	Title	WCDHB rate	Higher or lower than national average	National Average
Indicator 1	**Registration with a Lead Maternity Care**	WCDHB 60.0%	▼	National 63.5%
West Coast DHB have moved away from a model of care utilising DHB employed case loading midwives (working one week on and one week off) to self-employed LMC midwives. The DHB has promoted the 'Find Your Midwife' website across the region in order to assist women with registering with an LMC in the first trimester.				
Indicator 2	**Spontaneous vaginal birth**	WCDHB 68.3%	▼	National 68.6%
It is anticipated (and appears to be evident in more recent data with a 12% increase) that the change to model of care now being provided by self-employed LMC midwives will contribute to an increase in the rate of this indicator.				
Indicator 3	**Instrumental vaginal birth**	WCDHB 17.1%	▲	National 15.3%
This rate is slightly higher than the national average and may reflect the slightly decreased caesarean section rate when compared to the national average. West Coast DHB has planned for and has had approved an electronic dashboard to display the DHB maternity service data for all clinicians. This indicator is on the West Coast DHB MQSP work plan for 2015.				
Indicator 4	**Caesarean Section**	WCDHB 14.6%	▼	National 15.8%
West Coast DHB is currently auditing all LCSC data and the clinical indications for these.				
Indicator 5	**Induction of Labour**	WCDHB 7.3%	▲	National 4.2%
West Coast DHB is in the process of implementing a modified version of the Canterbury DHB Induction of Labour guideline with the assistance of an obstetrician from Canterbury DHB and a newly appointed West Coast DHB Maternity Educator. West Coast DHB takes cognisance of the high rate (7.3%) when compared to the national average of 4.2% for this indicator. An audit will be conducted following the implementation of the guideline with the hope of demonstrating compliance with the guideline and decreasing the West Coast DHB rate.				
Indicator 6	**Intact Lower Genital Tract**	WCDHB 40%	▲	National 28%
West Coast DHB has employed a Maternity Educator and plans to facilitate education regarding this indicator even though the rate is higher than the national average.				
Indicator 7 and 9	**Episiotomy <u>with</u> and <u>without</u> third and fourth degree tear**	WCDHB 17.1% (without) 0.0% (with)	▼	National 20.6% 1.6%
As per indicator 6. Staff at West Coast DHB appear to have practised judicious use of episiotomy and this indicator is consistent with the instrumental birth rate.				
Indicators 8	**Third or Fourth Degree Tear without Episiotomy**	WCDHB 0.0%		National 3.7%
There were no third or fourth degree tears to report in this category.				

Indicator 10	**General Anaesthetic for Caesarean section**	WCDHB 8.1%	▼	National 8.6%
Simulation training with theatre staff is planned for 2015. In addition an operations group with representatives from all services involved with maternity including anaesthetics meet monthly. The anaesthetic service is now able to provide an epidural service, which will likely decrease the West Coast DHB rate of general anaesthetic required for women giving birth by caesarean section.				
Indicator 11	**Blood Transfusion Caesarean Section**	WCDHB 3.2%		National 3.2%
The 'massive transfusion' protocol for the DHB has nearly been completed.				
Indicator 12	**Blood Transfusion Vaginal Birth**	WCDHB 0.3%	▼	National 1.6%
As per indicator 11. In addition, Practical Obstetric Multi-Professional Training (PROMPT) will be introduced to facilitate multi-disciplinary collaboration in managing emergencies such as post-partum haemorrhage (PPH). The national PPH guideline has also been implemented to encourage standardisation of practice.				
Indicator 13	**Severe maternal morbidity**	WCDHB (n=0)		National (n=14)
Guidelines for in-utero transfer from West Coast DHB to Canterbury DHB have been finalised. In particular, women with significant pre-eclampsia are now transferred to tertiary services in Christchurch.				
Indicator 14	**Tobacco use during the postnatal period**	WCDHB 14.5%	▲	National 13.9%
West Coast DHB has implemented an initiative whereby women have GP visits funded for primary care referrals from the LMC midwife. Midwives have completed the Te Hapū Ora clinical training support for pregnant women who smoke.				
Indicator 15	**Preterm births (under 37 week's gestation)**	WCDHB 9.2%	▲	National 7.6%
West Coast DHB is now utilising fetal fibronectin testing to improve the decision making regarding whether to transfer to CHDB for tertiary care or not. The absolute number of preterm births at West Coast DHB was small and West Coast DHB intends to analyse this indicator over the next two years in order to determine if the increase is a trend.				

Table 11 West Coast DHB Clinical Indicators

7.2.1 Action points

Actions West Coast DHB plans to work towards over the next one to two years include:

- Consolidation of changes to the model of care with the move to a self-employed LMC community based workforce.
- Implement and evaluate adherence to the Canterbury DHB Induction of Labour Guideline which has been adapted for the West Coast DHB.
- Analyse the West Coast DHB data regarding Preterm births (Indicator 15).
- Audit instrumental births at West Coast DHB in order to identify areas for differential decision making.

7.2.2 Conclusion

Overall on the West Coast, the change to self-employed LMC's will support improvement in continuity of care for mothers and babies in the community and in the hospital.

West Coast DHB is committed to working towards improving outcomes and experiences for mothers and babies on the Coast and utilising clinical indicators to identify the direction of this work. The change in model of care will support better information collection to enable monitoring of West Coast DHB progress toward meeting national targets.

8. Data Analysis

The data in this section is from local Canterbury DHB & West Coast DHB Maternity data sources and shows 2012 and 2013 in comparison, with percentage increase or decrease noted. Data here is counted either in terms of all 'deliveries' which is a count of mothers (as opposed to a count of exclusively standard primiparae as used by the New Zealand Maternity Clinical Indicators), or in terms of 'births' which is a count of babies

Key: *2012-2013 increase* ▲ *2012-2013 decrease* ▼

8.1 Canterbury DHB Maternity Data

Gestation at Birth	Number of Births 2012		Number of Births 2013	
Extremely preterm (<28 weeks)	26	(0.4%)	22	(0.4%)
Very preterm (28-31 weeks)	60	(1%)	48	(0.8%)
Moderate preterm (32-33 weeks)	30	(0.5%)	26	(0.5%)
Late preterm (34-36 weeks)	410	(7%)	391	(6.9%)
Term (37-41 weeks)	5277	(89.7%)	5150	(90.3%)
Prolonged (>42 weeks)	79	(1.3%)	67	(1.2%)
Total	**5882**	**(100%)**	**5704**	**(100%)**

Table 12 Gestation at Birth 2012 and 2013 Canterbury DHB

Despite a decrease in the number of births in 2013 when compared to 2012 of 178 babies, the percentage of births in each gestational category has remained almost unchanged.

Type of labour	Number of deliveries 2012		Number of deliveries 2013	
Spontaneous	3298	(56.8%)	3126	(55.5%)
Induced	880	(15.2%)	961	(17.1%)
Artificial rupture of membranes	412	(7.1%)	344	(6.1%)
Augmented	425	(7.3%)	391	(6.9%)
Did not labour	791	(13.6%)	810	(14.48%)
Total	**5806**	**(100%)**	**5632**	**(100%)**

Table 13 Type of Labour 2012 and 2013 Canterbury DHB

▼ The proportion of women for whom labour proceeded spontaneously decreased slightly by 1.3%.

Induction of labour	Number of deliveries 2012		Number of deliveries 2013	
No	4583	(78.9%)	4303	(76.4%)
Yes	1223	(21.1%)	1329	(23.6%)
Total	**5806**	**(100%)**	**5632**	**(100%)**

Table 14 Induction of Labour 2012 and 2013 Canterbury DHB

▲ The proportion of women who had their labours induced rose in 2013 by 1.5%.

Method of Birth	Number of Births 2012		Number of Births 2013	
Vaginal	3076	(52.3%)	2849	(49.9%)
Vaginal Water Birth	310	(5.3%)	272	(4.8%)
Vacuum Extraction	420	(7.1%)	355	(6.2%)
Forceps	366	(6.2%)	402	(7%)
Caesarean Section	1710	(29.1%)	1826	(32%)
Total	**5882**	**(100%)**	**5704**	**(100%)**

Table 15 Method of Birth 2012 and 2013 Canterbury DHB

There was a 2.9% increase in the rate of caesarean section with a corresponding reduction in the rate of unassisted vaginal birth.

Breech Birth	Number of Births 2012		Number of Births 2013	
No	5690	(96.8%)	5456	(95.7%)
Yes	192	(3.2%)	248	(4.3%)
Total	**5882**	**(100%)**	**5704**	**(100%)**

Table 16 Breech Births 2012 and 2013 Canterbury DHB

There was very little change in the percentage of breech births between 2012 and 2013.

Anaesthetic	Number of deliveries 2012		Number of deliveries 2013	
None	1890	(32.6%)	1934	(34.3%)
Local	1086	(18.7%)	822	(14.6%)
Pudendal Block	60	(1%)	72	(1.3%)
Epidural	1305	(22.5%)	1284	(22.8%)
Spinal/Epidural	90	(1.6%)	114	(2.%)
Spinal	1283	(22.1%)	1291	(22.9%)
Sublimaze IV	2	(0.03%)		
Caudal			1	(0.02%)
General	70	(1.2%)	96	(1.7%)
Mixed general/Epidural	5	(0.1%)	6	(0.1%)
Other	15	(0.3%)	12	(0.2%)
Total	**5806**	**(100%)**	**5632**	**(100%)**

Table 17 Anaesthetic 2012 and 2013 Canterbury DHB

There was no significant change in the method of analgesia used during labour or birth between 2012 and 2013.

Perineal Tears	Number of deliveries 2012		Number of deliveries 2013	
Intact	2962	(51%)	3027	(53.7%)
Labial Tear	91	(1.6%)		
First Degree Tear	803	(13.8%)	801	(14.2%)
Second Degree Tear	1013	(17.4%)	958	(17%)
Third Degree Tear	27	(0.5%)		
3a Degree Tear	33	(0.6%)	64	(1.1%)
3b Degree Tear	22	(0.4%)	28	(0.5%)
3c Degree Tear	13	(0.2%)	14	(0.2%)
4th Degree Tear	2	(0.03%)	12	(0.2%)
Vaginal Wall Tear	50	(0.9%)		
Vaginal Wall & Perineal Tear	11	(0.2%)		
Episiotomy	775	(13.3%)	728	(12.9%)
Extended Episiotomy	4	(0.1%)		
Total	**5806**	**(100%)**	**5632**	**(100%)**

Table 18 Perineal Tears 2012 and 2013 Canterbury DHB

The data categories for perineal tears changed between 2012 and 2013 to improve the clinical documentation of the actual perineal injury sustained. Closer review of the data above and amalgamation of 2012 data into corresponding 2013 categories indicates very little difference between the two years.

Blood Loss at Delivery	Number of deliveries 2012		Number of deliveries 2013	
<1000mL	5481	(94.4%)	5255	(93.3%)
1000ml - 1500mL	245	(4.2%)	275	(4.9%)
>1500mL	80	(1.4%)	102	(1.8%)
Total	**5807**	**(100%)**	**5632**	**(100%)**

Table 19 Blood Loss at Delivery 2012 and 2013 Canterbury DHB

Overall there was a slight increase in blood loss 1000mls and greater of 1.1% in 2013.

Blood Transfusion Required	Number of deliveries 2012		Number of deliveries 2013	
No	5705	(98.3%)	5498	(97.6%)
Yes	101	(1.7%)	134	(2.4%)
Total	**5806**	**(100%)**	**5632**	**(100%)**

Table 20 Blood Transfusion Required 2012 and 2013 Canterbury DHB

There was less than a 1% difference between the two years in regard to the percentage of women receiving blood transfusion.

Admission to Neonatal Intensive Care	Number of Babies 2012		Number of Babies 2013	
No	5036	(85.6%)	4956	(86.9%)
Yes	846	(14.4%)	748	(13.1%)
Total	**5882**	**(100%)**	**5704**	**(100%)**

Table 21 Admission to Neonatal Intensive Care 2012 and 2013 Canterbury DHB

There was a 1.3% reduction in the number of babies admitted to Neonatal Intensive Care in 2013.

Neonatal Outcomes	Number of Babies 2012		Number of Babies 2013	
Well Neonates	5872	(99.8%)	5697	(99.9%)
Neonatal Death	10	(0.2%)	7	(0.1%)
Total	**5882**	**(100%)**	**5704**	**(100%)**

Table 22 Neonatal Outcomes 2012 and 2013 Canterbury DHB

There were 3 fewer neonatal deaths in 2013 compared to 2012 producing a 0.1% decrease.

Small for Gestational Age	Number of Babies 2012		Number of Babies 2013	
No	5479	(93.1%)	5329	(93.4%)
Yes	403	(6.9%)	375	(6.6%)
Total	**5882**	**(100%)**	**5704**	**(100%)**

Table 23 Small for Gestational Age 2012 and 2013 Canterbury DHB

There was no significant difference between the years in terms of the percentage of babies that were small for gestational age.

Feeding Method	Number of Babies 2012		Number of Babies 2013	
Artificial	174	(3%)	159	(2.8%)
Exclusive	4443	(75.5%)	4290	(75.2%)
Fully	309	(5.3%)	179	(3.1%)
Nil	9	(0.2%)	9	(0.2%)
Partial	489	(8.3%)	603	(10.6%)
Not documented	458	(7.8%)	464	(8.1%)
Total	**5882**	**(100%)**	**5632**	(100%)

Table 24 Feeding Method 2012 and 2013 Canterbury DHB

In 2013 there was a 2.2% reduction in the number of babies fully breastfed and a 2.3% increase in the number of babies partially breastfed.

8.2 West Coast DHB Maternity Data

Gestation at Birth	Number of Births 2012		Number of births 2013	
Extremely preterm (<28 weeks)	1	(0.3%)	1	(0. 4%)
Very preterm (28-31 weeks)	2	(0.7%)	0	0
Moderately preterm (32-33 weeks)	1	(0.3%)	1	(0.4%)
Later preterm (34-36 weeks)	15	(4.9%)	6	(2.1%)
Term (37-41 weeks)	287	(93.5%)	272	(96.1%)
Prolonged (>42 weeks)	1	(0.3%)	3	(1%)
Total	**307**	**(100%)**	**283**	**(100%)**

Table 25 Gestation at Birth 2012 and 2013 West Coast DHB

From 2012 to 2013 the percentage of preterm births between 34-36 weeks reduced by 2.8% and the percentage of preterm births overall reduced by 3.3%.

Type of Labour	Number of deliveries 2012		Number of deliveries 2013	
Spontaneous	140	(46.1%)	107	(38.1%)
Induction	37	(12.2%)	29	(10.3%)
Artificial Rupture of Membranes	51	(16.8%)	67	(23.9%)
Augmented	23	(7.5%)	31	(11.0%)
Did not labour	53	(17.4%)	47	(16.7%)
Total	**304**	**(100%)**	**281**	**(100%)**

Table 26 Type of Labour 2012 and 2013 West Coast DHB

From 2012 to 2013, the rate of spontaneous labour decreased by 8 %. The artificial rupture of membranes increased by 7.1%

Method of Birth	Number of Births 2012		Number of Births013	
Elective Caesarean Section	50	(16.3%)	28	(9.9%)
Vaginal	168	(54.96%)	168	(59.4%)
Vaginal Water Birth	1	(0.3%)	7	(2.5%)
Kiwi Cup	16	(5.2%)	14	(4.9%)
Ventouse	5	(1.6%)	3	(1.0%)
Forceps	13	(4.2%)	4	(1.4%)
Emergency Caesarean Section	51	(16.6%)	58	(20.5%)
VBAC	3	(1.0%)	1	(0.5%)
Total	**307**	**(100%)**	**283**	**(100%)**

Table 27 Method of Birth 2012 and 2013 West Coast DHB

From 2012 to 2013, there was an overall decrease in caesarean sections (elective and emergency) of 2.5%.

Breech Birth	Number of Births 2012		Number of Births 2013	
No	285	(92.8%)	274	(96.8%)
Yes	22	(7.2%)	9	(3.2%)
Total	**307**	**(100%)**	**283**	**(100%)**

Table 28 Breech Birth 2012 and 2013 West Coast DHB

There were fewer breech births in 2013 (n=9) compared to 2012(n=22), a reduction of 4%.

Anaesthetic	Number of deliveries 2012		Number of deliveries 2013	
None	159	(52.3%)	147	(52.3%)
Local	37	(12.2%)	28	(10.0%)
Epidural	4	(1.3%)	17	(6.0%)
Spinal/Epidural	96	(31.6%)	86	(30.6%)
General	8	(2.6%)	3	(1.1%)
Total	**304**	**(100%)**	**281**	**(100%)**

Table 29 Anaesthetic 2012 and 2013 West Coast DHB

From 2012 to 2013, there was a 4.7% increase in the percentage of women using epidural analgesia.

Perineal Tears	Number of deliveries 2012		Number of deliveries 2013	
Intact	107	(35.2%)	106	(37.7%)
1st Degree tear	55	(18.1%)	50	(17.8%)
2nd Degree tear	26	(8.6%)	20	(7.1%)
3rd or 4th Degree tear	5	(1.6%)	4	(1.4%)
Episiotomy	26	(8.5%)	26	(9.3%)
N/A	85	(28.0%)	75	(26.7%)
Total	**304**	**(100%)**	**281**	**(100%)**

Table 30 Perineal Tears 2012 and 2013 West Coast DHB

From 2012 to 2013, there was slight increase in the percentage of women with an intact perineum (2.5%)

Postpartum Haemorrhage	Number of deliveries 2012		Number of deliveries 2013	
No	277	(91.1%)	253	(90.0%)
Yes	27	(8.9%)	28	(10.0%)
Total	**304**	**(100%)**	**281**	**(100%)**

Table 31 Postpartum Haemorrhage 2012 and 2013 West Coast DHB

From 2012 to 2013, there was a slight percentage increase in postpartum haemorrhage.

Blood Loss	Number of deliveries 2012		Number of deliveries 2013	
>1500mL	3	(1.0%)	1	(0.4%)
<1000mL	279	(91.8%)	232	(82.6%)
≥1000mL ≤1500mL	5	(1.6%)	11	(3.9%)
N/A	17	(5.6%)	37	(13.1%)
Total	**304**	**(100%)**	**281**	**(100%)**

Table 32 Blood Loss 2012 and 2013 West Coast DHB

From 2012 to 2013, there was a slight increase in the percentage of women reported to have blood loss between 1000 – 1500mls (2.3%) but also an increase in the number of deliveries where blood loss does not appear to have been recorded.

Admission to Neonatal Intensive Care	Number of Babies 2012		Number of Babies 2013	
No	301	(98.7%)	279	(98.9%)
Yes	4	(1.3%)	3	(1.1%)
Total	**305**	**(100%)**	**282**	**(100%)**

Table 33 Admission to Neonatal Intensive Care 2012 and 2013 West Coast DHB

There was little difference in the percentage of live born babies admitted to Neonatal Intensive Care.

Neonatal Outcomes	Number of Babies 2012		Number of Babies 2013	
Well Neonates	305	(100%)	282	(100%)
Neonatal Deaths	0	0	0	0
Total	**305**	**(100%)**	**282**	**(100%)**

Table 34 Neonatal Outcomes 2012 and 2013 West Coast DHB

There were no neonatal deaths in either year.

Stillbirth	Number of Births 2012		Number of Births 2013	
No	305	(99.4%)	282	(99.6%)
Yes	2	(0.6%)	1	(0.4%)
Total	**307**	**(100%)**	**283**	**(100%)**

Table 35 Stillbirth 2012 and 2013 West Coast DHB

In 2013, there was one less stillbirth than in 2012.

Small for Gestational Age	Number of Births 2012		Number of Births 2013	
No	290	(94.5%)	278	(98.2%)
Yes	17	(5.5%)	5	(1.8%)
Total	**307**	**(100%)**	**283**	**(100%)**

Table 36 Small for Gestational Age 2012 and 2013 West Coast DHB

From 2012 to 2013, there was a slight decrease in the percentage of small for gestational age babies of 3.7 %.

Feeding Method	Number of Babies 2012		Number of Babies 2013	
Bottle	13	(4.3%)	11	(3.9%)
Breast	292	(95.7%)	271	(96.1%)
Total	**305**	**(100%)**	**282**	**(100%)**

Table 37 Feeding Method 2012 and 2013 West Coast DHB

These totals show the method of feeding at birth for all live born infants. There was little difference in the percentage of babies being breast fed between 2012 and 2013.

9. MQSP Priorities 2015/16

9.1 Planned Actions for the future of the Maternity Quality & Safety Programme

Committees

The view of Canterbury DHB and West Coast DHB in moving beyond the initial establishment of the Maternity Quality & Safety Programme is that the principles, areas of focus and priorities become embedded into the quality work within the DHB's as part of 'how things are done' instead of a distinct 'programme'.

The maternity quality committee structure for the Canterbury DHB and West Coast DHB was established at the outset with the transition to business as usual in mind. As this has been working effectively the committee structure will be maintained and the same committees will continue to meet and inter-relate.

Positions

With the programme elements and functions established, the additional roles created by utilising the additional funding have now been discontinued as planned. The Maternity Quality & Safety Programme Coordinator (1.0 FTE) position, which operated across both DHB's, and the 0.5 FTE Administrator position have been discontinued. The LMC Liaison position (0.2 FTE) and the roles of the consumers continue. Canterbury DHB has also continued to employ a Quality Coordinator for Maternity (1.0 FTE).

With the announcement of the continuation of funding beyond July 2015 for quality and safety work within Maternity Services the following positions to support the ongoing work are being proposed;

- For West Coast DHB: a Quality Coordinator for Maternity (0.4 – 0.6 FTE)
- For Canterbury DHB: consideration is being given to what form further possible midwifery and administration positions will take (in addition to the continued Quality Coordinator Maternity position)

Projects

- **CDHB - Kiriata Māmā (Television for Mothers)**

Funding will be used to improve the access of consumers to educational information by upgrading the inpatient and outpatient television screens to enable new educational resources to be shown on a rolling programme or via external storage device for specific 1:1 teaching.

- **Canterbury DHB - Addressing Themes of Consumer Feedback**

Feedback obtained from consumers during the past year has highlighted the desire of many women to have their partners stay with them in hospital facilities after the birth of their baby. A change in the policy is planned to seek to address this request within our primary birthing facilities alongside staff training and provision of comfortable chairs. We will also be endeavouring to action other suggestions raised by our consumers.

9.2 MQSP Goals and Priorities for 2015/16

MINISTRY OF HEALTH MATERNITY SECTOR GOAL Ensure the same high standard of care throughout New Zealand for all women using maternity services								
NATIONAL MATERNITY MONITORING GROUP Oversees the maternity system in general Oversees the implementation of the New Zealand National Maternity Standards Acts as a strategic adviser to the Ministry of Health on areas for improvement in the maternity sector **NMMG PRIORITIES**								
Timing of registration with an LMC	Variation in gestation at birth	Maternal mental health services	Primary maternity ultra-sounds	Maternity consumer represent-atives	Maternity clinical indicators	Access to rural maternity services	National maternity clinical guidelines	Clinical coding
CDHB & WCDHB MATERNITY QUALITY AND SAFETY PROGRAMME								
MATERNITY CLINICAL GOVERNANCE COMMITTEE								
QUALITY INITIATIVES AND PRIORITIES								
Introduce Newborn Early Warning Score (NEWS)	Promote Maori, Pacifica and younger women attending pregnancy and parenting support classes	Implement standardised Safe Sleep Policy & education	Implement measures to reduce caesarean section, instrumental birth and episiotomy rates	Improve guidelines, standards, policies & procedures				
Promote access to care in 1st trimester including early registration with an LMC	Reduce smoking rates in pregnant women	Review, restructure & evaluate effectiveness of lactation support services	Increase use of primary birthing facilities (urban & rural)	Promote and support breastfeeding	Promote access to maternal mental health services			
INFORMATION AND COMMUNICATION SYSTEMS		**DATA MONITORING**						
Introduce new terminology for gestation over 37 weeks - e.g. early term, full term, post term	Prepare for introduction of National Maternity Clinical Information System	Support Clinical Coding consistency to national standard & communication with maternity clinicians	Analyse and review local performance in view of the NZ Maternity Clinical Indicators	Continue to audit outcomes of care and service provided	Monitor gestation at birth and appropriate gestation for IOL & CS	Review evidence and indications for ultrasound scans		
CONSUMER ENGAGEMENT					**SECTOR ENGAGEMENT**			
Evaluate effectiveness of information available to consumers	Capture maternity consumer experiences/ feedback	Link maternity consumer representatives with community	MQSP aligned with wider DHB quality agenda					

Table 38 MQSP Goals and Priorities 2015/16

9.3 MQSP Priorities and Action Plan 2015/16

	Initiative/Priority	Action	Expected Outcome	Measure
1.	Introduce Newborn Early Warning Score (NEWS)	• Repeat pilot of revised tool • Introduce documentation and education across all maternity & neonatal services	• Appropriate referrals to neonatal team • Reduction in retrievals of babies who were transferred to primary birthing units	• NEWS implemented by Dec 2015 • Audit of tool use and retrievals from primary birthing units
2.	Promote Maori, Pacifica and younger women attending pregnancy and parenting support classes	Conduct a Request for Proposal to identify providers to deliver community based pregnancy and parenting education (PPE) for all first time parents	Increased number of first time parents, Maori, Pacific and young parents complete PPE	30% of Māori, Pacific, and teen pregnant women complete DHB funded pregnancy and parenting education
3.	Implement standardised Safe Sleep Policy & education	Further promotion of policy and education as required	Policy and practice is fully embedded into all maternity services	Audit of all areas is conducted by March 2016
4.	Monitor gestation at birth and appropriate gestation for IOL & CS	• Complete pre-term birth audits • Disseminate findings • Implement recommendations • Audit relevant clinical guidelines	A clearer understanding of practice and outcomes is obtained and changes implemented as appropriate	Evidence of audits completed and recommendations implemented.
5.	Implement measures to reduce CS, instrumental birth and episiotomy rates	• Audit elective caesarean section & episiotomy • Develop delayed progress in labour guideline • Promote Birth After Caesarean Clinic & Primary Birthing Units • Educate to encourage adherence to fetal heart monitoring guideline • Develop fetal blood sampling teaching model	Intended actions have been implemented and effectiveness evaluated	Data indicates reduction in rates of caesarean section, instrumental birth and episiotomy post implementation of actions
6.	Improve guidelines, standards, policies & procedures	• New documents and those due for review are updated based on best evidence • Ensure clear process for prioritising development of new documents • Review accessibility of documents to staff	• Documents are up to date and easily accessible to staff • Clinical guidelines are evidence based	• 100 % of documents are up to date • All recently developed or revised clinical guidelines contain references to evidence • All documents are easily accessed
7.	Promote access to care in 1st trimester including early registration with an LMC	• Consider how to best inform women • Address cultural needs including Maori & Pacifika • Facilitate maternity service access for rural women	• Updated information available for women around early engagement with an LMC • Promotion of key health messages for early pregnancy	80 % of women will register with an LMC in the first trimester
8.	Reduce smoking rates in pregnant women	• Continue to implement actions from previous year – staff education programme and Smokefree Incentive Programme • Roll over the 'Goals for Pregnant Women who Smoke' into 2015/16 (Page 19)	Further reduction in percentage of women smoking at key times outlined in the 'Goals for Pregnant Women who Smoke'	See 'CDHB & WCDHB Goals for Pregnant Women who Smoke'

	Initiative/Priority	Action	Expected Outcome	Measure
9.	Review, restructure & evaluate effectiveness of lactation support services	• Review all lactation consultant services currently available across the CDHB • Explore and develop alternative and additional lactation consultant/ tongue tie services	• Increased lactation consultant services for inpatient services	Reduction in waiting time for inpatient referrals
10.	Increase use of primary birthing facilities	• Refurbishment completed • Promotional material/ information distributed • Bed management process is embedded	Increase in number of women choosing to birth or have postnatal care in DHB primary birthing facilities	Bed occupancy and birth location data indicates increasing usage of primary birthing units
11.	Promote and support breastfeeding	Implement the Breastfeeding Priority Plan Reconfigure tongue tie release services across the hospital and community	• A formal assessment process for tongue ties will be used before referrals are made • Pathway for tongue tie release services developed to include provision in community	• A decrease in the numbers of tongue tie releases being performed • All post-discharge tongue tie release procedures are being performed by the most appropriate service provider
12.	Promote access to maternal mental health services	• Distribute Maternal Mental Health Pathway to all relevant clinical staff • Make information available electronically to staff and consumers	• All staff are aware of the pathway and how to locate it. • Consumers have access to information about maternal mental health services	• Information is available in electronic format and website 'hits' show this is being accessed. • Correct process for referrals is followed
13.	Introduce new terminology for gestation over 37 weeks - e.g. early term, full term, post term	• Determine scope of change (reporting only or clinical language) • Ensure all documentation uses correct terminology	All relevant documentation will display correct use of terminology	Audit of relevant documentation to determine if change is embedded
14.	Prepare for introduction of National Maternity Clinical Information System	• Business cases approved • Current process mapping completed • New process mapping commenced • Change management planning commenced	Both DHB's make significant progress towards the implementation of the electronic maternity information system	Stated actions have been completed by June 2016
15.	Support Clinical Coding consistency to national standard & communication with maternity clinicians	• Meet with clinical coders • Determine criteria / guidelines for nationally consistent data collection for benchmarking • Increase communication between coders & maternity clinicians via joint data review meetings • Establish audit/quality assurance process to evaluate effectiveness of measures	Increasingly accurate coding of maternity data with minimal gaps Coding of maternity data will be consistent with national standards	• Meetings have occurred • Audit/quality assurance of maternity coding

	Initiative/Priority	Action	Expected Outcome	Measure
16.	Analyse and review local performance in view of the NZ maternity clinical indicators	• Multidisciplinary review of the maternity clinical indicator data within each DHB • Evaluation of whether previous actions have impacted on data • Formulate action plan to address areas for improvement	Data is used to evaluate the effectiveness of previous actions and to plan future actions	There is evidence of a direct correlation between clinical indicator data and relevant quality improvement initiatives and/or changes in practice
17.	Continue to audit outcomes of care and service provided	Programme for ongoing audit is established within each maternity service	Each maternity service audits relevant aspects of their service provision	Evidence of audits and implementation of any recommendations
18.	Review evidence and indications for ultrasound scans	• Implement revised 'in hospital' Obstetric Ultrasound Guideline • Establish working group to jointly review access, indications & evidence around primary maternity ultrasounds	Determine whether the regional guidance on performing obstetric ultrasounds is aligned with best evidence	Working group review is completed by June 2016
19.	Evaluate effectiveness of information available to consumers	• Review data on maternity website 'hits' (HealthInfo, DHB sites, HealthPathways) • Review patient information leaflets e.g. for content, availability	• Women & staff are accessing information on websites • Up to date information is accessible in appropriate formats (paper, electronic)	• Evaluation of 'hits' on web pages & which information is being more readily viewed. • Documents do not exceed review dates & latest versions are published
20.	Capture maternity consumer experiences/ feedback	• Evaluate the effectiveness of the current maternity consumer experience form • Explore suitability of other inpatient survey systems for this purpose • Promotion of feedback options	Consumer experience information is collated, analysed and used to inform service improvements	• Evaluation completed • Evidence of ongoing evaluation of consumer feedback • Consumer feedback can be identified as driver for improvements
21.	Link maternity consumer representatives with community	• Develop good communication systems for consumers to link regularly • Provide a support/link person for consumer representatives • Profile and promote consumer representatives	Increased visibility of consumers and consumer input into service improvements and governance	• Evidence of consumer representative satisfaction through retention • Visibility of consumer consultation and input at operational and governance level
22.	MQSP aligned with wider DHB quality agenda	The wider quality initiatives of the DHB are also applied to & reflected in maternity services	Maternity quality & safety initiatives contribute to the wider quality initiatives of DHB	Maternity quality activities are included in DHB documents (e.g. quality accounts)

Table 39 MQSP Priorities and Action Plan for 2015/16

10. Appendices

APPENDIX ONE

10.1 Glossary

Caesarean section	An operative birth through an abdominal incision.
Episiotomy	An incision of the perineal tissue surrounding the vagina to facilitate or expedite birth.
Neonatal Death	Death of a baby within 28 days of life.
Parity	Number of previous births a woman has had.
Primiparous	A woman who has given birth once; multiparous is a woman who has given birth two or more times
Postpartum Haemorrhage	Excessive bleeding after birth that causes a woman to become unwell.
Primary Maternity	Primary maternity services are provided to women and their babies for an uncomplicated pregnancy, labour and birth, and postnatal period. They are based on continuity of care. The majority of these maternity services are provided by Lead Maternity Carers (LMCs). Primary maternity facilities provide inpatient services for labour and birth and the immediate postnatal period.
Secondary Maternity	Secondary maternity services are those provided where women or their babies experience complications that need additional maternity care involving obstetricians, paediatricians and other specialists. Secondary maternity services include routine and urgent specialist consultations, elective and emergency caesarean sections, assisted births, all treatment required in emergency situations, allied health services, and support from a lactation consultant for women and babies who experience breastfeeding complications.
Standard primiparae	**Standard primiparae:** a group of mothers considered to be clinically comparable and expected to require low levels of obstetric intervention. Standard primiparae are defined in this report as women recorded in the National Maternity Collection (MAT) who meet all of the following inclusions: • delivered at a maternity facility • are aged between 20 and 34 years (inclusive) at delivery • are pregnant with a single baby presenting in labour in cephalic position • have no known prior pregnancy of 20 weeks and over gestation • deliver a live or stillborn baby at term gestation: between 37 and 41 weeks inclusive • have no recorded obstetric complications in the present pregnancy that are indications for specific obstetric interventions. Intervention and complication rates for such women should be low and consistent across hospitals. Compiling data from only standard primiparae (rather than all women giving birth) controls for differences in case mix and increases the validity of inter-hospital comparisons of maternity care (adapted from Australian Council on Healthcare Standards 2008, p 29).
Stillbirth	The birth of an infant after 20 weeks gestation, which has died in the womb and weighed more than 400 grams
Tertiary Maternity	Tertiary maternity services is maternity care provided to women and their babies who have highly complex clinical needs and require consultation with and / or transfer of care to a multidisciplinary specialist team. This consultation and / or transfer of care will be organised by the LMC in conjunction with Christchurch Women's Hospital.
Weeks' gestation	The term used to describe how far along the pregnancy is. It is measured from the first day of the woman's last menstrual cycle to the current date.

APPENDIX TWO

10.2 Abbreviations

CDHB	Canterbury District Health Board
DHB	District Health Board
GP	General Practitioner
HDU	High Dependency Unit
ICU	Intensive Care Unit
IOL	Induction Labour
LMC	Lead Maternity Carer
NICU	Neonatal Intensive Care Unit
NMMG	National Maternity Monitoring Group
PMMRC	Perinatal and Maternal Mortality Review Committee
PPH	Postpartum Haemorrhage
SMO	Senior Medical Officer
VBAC	Vaginal birth after caesarean
WCDHB	West Coast District Health Board
W&CH	Women's and Children's Health

APPENDIX THREE

10.3 List of Tables

10.4 List of Figures