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Wednesday 14 August 2013

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Chief Executive Officer
Canterbury District Health Board &
West Coast District Health Board
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Dear David

Acceptance of Canterbury and West Coast DHB's Maternity Quality and Safety Programme Annual Report

Thank you for submitting Canterbury and WestCoast DHB's final Maternity Quality and Safety Programme Annual Report. I am pleased to accept this report on behalf of the Ministry of Health.

The reviewers noted your DHB's comprehensive but separate reporting from each maternity facility and encourage you to consider ways to further integrate the quality and safety programme for maternity services across the Canterbury and West Coast districts in 2013/14. In future reporting they would also like to see how the issues identified as 'areas of concern' for each facility or region are being prioritised and addressed as part of your programme.

I strongly encourage you to make this report publicly available, for example via your DHB's website, to further engage your wider maternity sector in local quality improvement activities and to share knowledge and innovation with other regions.

I thank you for the commitment your DHB has made to the Maternity Quality and Safety Programme and I look forward to seeing continued progress on your local quality and safety improvement priorities over the coming year.

Yours sincerely

Cathy O'Malley
Deputy Director-General
Sector Capability and Implementation

cc Lesa Freeman

CDHB & WCDHB

Maternity Quality & Safety Programme

2012-2013

ANNUAL REPORT

For the purpose of the CDHB and WCDHB Maternity Quality and Safety Programme Annual Report 2012/13,
CDHB comprises Women's and Children's Health, Ashburton and Rural Maternity Services and St George's Hospital.

Produced by
Women's and Children's Health, Canterbury District Health Board and
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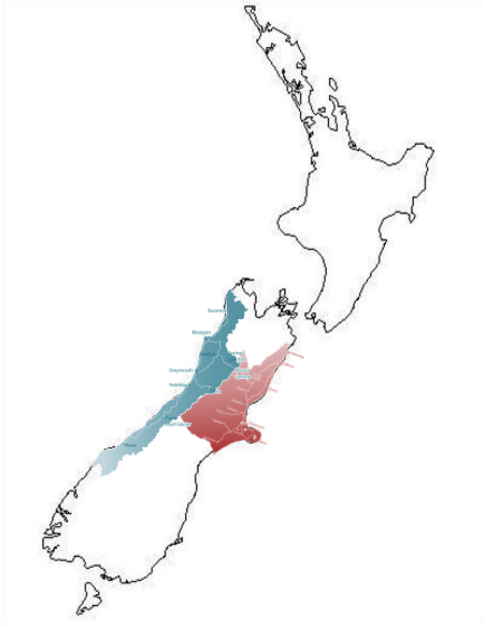

Canterbury District Health Board
Te Poari Hauora ō Waitaha

To promote, enhance and facilitate the health and wellbeing of the people of the Canterbury District.

Ki te whakapakari, whakamaanawa me te whakahaera i te hauora Mo te orakapai o ka takata o te rohe o Waitaha.

West Coast DISTRICT HEALTH BOARD
TE POARI HAUORA A ROHE O TAI POUTINI

To fund a continuum of quality health services aimed at providing improved health outcomes and maximising the independence of people with disabilities.

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1 Introduction

Maternity Quality and Safety Programme

The Maternity Quality and Safety Programme (MQSP) is one component of an initiative by the Ministry of Health (MoH) to improve the quality of maternity care services nationally. The MQSP is designed to assist District Health Boards (DHBs) to build on existing frameworks and systems for reviewing the quality of maternity services.

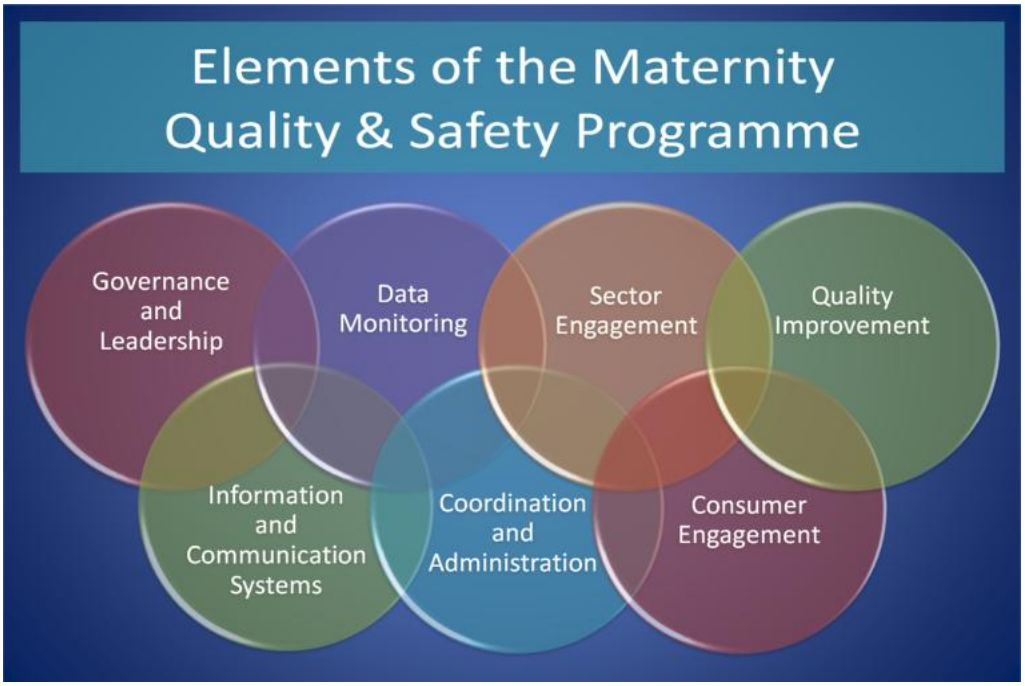
The MQSP encourages collaborative working across hospital and community services to identify and implement changes that will improve the standard of care and services, women and their babies receive.

The MQSP encompasses the following elements:

- Governance and clinical leadership
- Systems for sharing information
- Data monitoring
- Management and administration
- Clinical networking
- Consumer engagement
- Quality Improvement

As providers of the whole range of maternity services, Canterbury District Health Board (CDHB) and West Coast District Health Board (WCDHB) are committed to developing new and innovative ways to deliver healthcare across all sectors with the goal of improving outcomes and reducing harm.

This national initiative creates a platform for increasing the resources to further develop these established quality processes and formalise the additional quality work within both CDHB and in WCDHB and through the partnership between them.



The purpose of the CDHB and WCDHB MQSP Annual Report 2012/13 is to:

- Meet the expectations of the New Zealand Maternity Standards (see Table 1);
- Demonstrate CDHB and WCDHB delivery of the expected outputs as set out in Section 2 of the Maternity Quality and Safety Programme CFA;
- Outline progress towards CDHB and WCDHB MQSP Strategic Plan deliverables in 2012/13;
- Outline CDHB and WCDHB plans to improve the quality and safety of maternity services in 2013/14.

Table 1. Alignment with the New Zealand Maternity Standards

Standard One: *Maternity services provide safe, high-quality services that are nationally consistent and achieve optimal health outcomes for mothers and babies.*	
8.2	Report on implementation of findings and recommendations from multidisciplinary meetings
8.4	Produce an annual maternity report
8.5	Demonstrate that consumer representatives are involved in the audit of maternity services at Canterbury and West Coast District Health Boards
9.1	Plan, provide and report on appropriate and accessible maternity services to meet the needs of the Canterbury and West Coast regions
9.2	Identify and report on the groups of women within their population who are accessing maternity services, and whether they have additional health and social needs
Standard Two: *Maternity services ensure a women-centred approach that acknowledges pregnancy and childbirth as a normal life stage.*	
17.2	Demonstrate in the annual maternity report how Canterbury and West Coast District Health Boards have responded to consumer feedback on whether services are culturally safe and appropriate
19.2	Report on the proportion of women accessing continuity of care from a Lead Maternity Carer (LMC) for primary maternity care
Standard Three: *All women have access to a nationally consistent, comprehensive range of maternity services that are funded and provided appropriately to ensure there are no financial barriers to access for eligible women.*	
24.1	Report on implementation of the Maternity Referral Guidelines processes for transfer of clinical responsibility

MQSP Aims and Objectives

The aims and objectives for CDHB and WCDHB maternity services and the MQSP are to:

Provide woman-centred maternity care that meets the needs of the population

- Share resources and work cohesively across the DHBs to develop new initiatives and processes to improve the service as they are identified;
- Critically examine day-to-day business on a regular basis to ensure CDHB and WCDHB maternity services continue to meet the needs of women, their babies and families/whānau;
- Work in partnership with all health agencies providing women's health and child care, to continue to forecast, develop and enhance a seamless service.

Continue to implement, review and establish as required, systems and processes to support the provision of quality and safe care

- Continue to implement the National Maternity Standards;
- Align with the work of the Health Quality and Safety Commission;
- Utilise the New Zealand Maternity Clinical Indicators and other available data to inform areas for improvement.

Take a whole of systems approach and work towards improving the health of women and children as guided by the Ministry of Health's goals and targets

- Increase exclusive and fully breastfeeding rates at six weeks of age[1];
- Increase the number of registrations to the National Immunisation Register[2];
- Reduce smoking rates of pregnant women and their partners[3];
- Increase the number of women registering with a LMC by 12 weeks of pregnancy[4];
- Work with primary providers and primary health organisations (PHOs) to develop a regional programme for young vulnerable women who are pregnant[5].

Align the maternity workforce to meet the needs of the population

- Support the development of a skilled maternity workforce capable of providing safe and effective care;
- Continue to implement education, recruitment and retention strategies to meet the needs of both DHBs.

Align and strengthen regional links[6]

- Work with the five South Island DHBs via the South Island Alliance to provide shared services and woman centred care in a collaborative manner;
- Improve communication and the sharing of resources across DHBs to improve efficiency and effectiveness and reduce variation in practice.

[1]Ministry of Health, 2009. National Strategic Plan of Action for Breastfeeding, 2008-2012. Ministry of Health, 2001. Breastfeeding: A Guide to Action.

[2] Ministry of Health 2012/13 Health Target. Immunisation - 85 percent of eight months olds will have their primary course of immunisation (six weeks, three months and five months immunisation events) on time by July 2013, 90 percent by July 2014 and 95 percent by December 2014

[3]Ministry of Health 2012/13 Health Target. Better help for smokers to quit - Progress towards 90 percent of pregnant women who identify as smokers at the time of confirmation of pregnancy in general practice or booking with lead maternity carer are offered advice and support to quit

[4] New Zealand Maternity Standard 19.2

[5] The Child and Youth Health Compass: Supporting Innovation, Good Practice and Equity (2013). Office of the Children's Commissioner, PSNZ and Health Quality and Safety Commission.

[6] South Island Alliance Regional Health Service Plan 2012-2013

Strengthen the interface between primary and secondary care

- Continue to work with the professional colleges and access agreement holders to adopt the MoH requirements for maternity care in a collaborative way;
- Ensure adequate representation from self-employed midwives and NZCOM on quality initiatives, changes in practice and service re-configuration.

Provide a robust Maternity Quality and Safety Programme

- Establish the governance structure to ensure coherence in quality activities across both DHBs;
- Engage consumers and primary care in the development and implementation of the programme;
- Establish communication systems for sharing information with the wider community and obtain feedback on maternity services;
- Develop a system to disseminate information on the New Zealand Maternity Clinical Indicators to maternity clinicians;
- Consult with all maternity providers to identify areas of concern and collaborate to action quality improvements.

2 Background

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Canterbury DHB is the second largest by population and geographical area of the twenty DHBs. The CDHB region extends from Kekerengu in the north, to Rangitata in the south, and Arthurs Pass in the west and comprises six Territorial Local Authorities of Kaikoura, Hurunui, Waimakariri, Christchurch City, Selwyn and Ashburton.

The majority of the region is flat plains and is home to just over 500,000 people. Of these, 105,459 are women aged between 15 and 45 years, and of these approximately 7,000 will have a baby each year. Canterbury's population is relatively socio-economically advantaged compared to all of New Zealand. However, Māori in Canterbury are more deprived than non-Māori in terms of factors such as income, unemployment, educational qualifications, home ownership, household crowding, phone and motor vehicle access. There are also some significant areas of concern for maternity and mental health of Māori as a population[7].

Canterbury's maternity services are spread between two separate divisions of the CDHB: Women's and Children's Health, and Ashburton and Rural Health Services as well as contracting postnatal care to St George's Hospital. Overall there are ten facilities comprising one tertiary unit and eight primary birthing units, three of these are within Women's and Children's Health, and five within Ashburton and Rural Health Services and one private hospital (see Figure 1). All referrals for tertiary level care, including those from WCDHB are directed to Christchurch Women's Hospital (CWH).

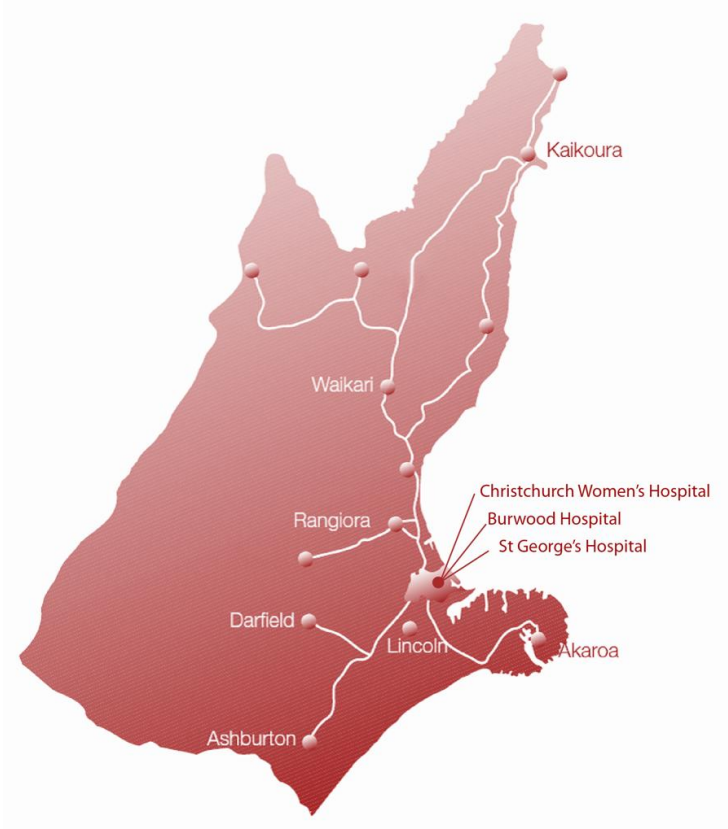


Figure 1. Canterbury District Health Board maternity facilities

[7] Canterbury District Health Board Māori Health Action Plan, 2012-2013, p4

Primary Maternity Services

Lead Maternity Carers

In 2011, CDHB had approximately 237 self employed LMCs. LMCs provide continuity of care for women throughout the antenatal period, labour and birth and then the postnatal period to six weeks. Two general practitioners (GPs) have access agreements with CDHB birthing facilities. In Kaikoura the general practice has a contract with CDHB, who in turn employ midwives to provide maternity care. Six obstetricians provide private primary maternity services.

Primary Birthing Units

Women's and Children's Health has three primary birthing units: Burwood, Lincoln and Rangiora. Ashburton and Rural Health Services have five primary birthing units: Ashburton, Kaikoura, Waikari, Akaroa and Darfield. St George's Hospital has a contract to CDHB to provide postnatal care. Table 2 outlines the facilities and service provided at each of these primary birthing units.

Table 2. CDHB primary birthing units

	Antenatal	Postnatal								
	Primary Birthing Units	Pregnancy testing and advice & Pregnancy parenthood classes (per year)		Swimming classes	Fluid replacement service	Number of birthing rooms	Number of beds	Option of water birth	Occupancy in 2011/12	Other
CDHB's Women's and Children's Health	**Burwood**	Yes	Yes	Yes	x	2	7	Yes	67%	TENS Machine
	Lincoln	Yes	Yes	x	Yes	2	7	Yes	39%	Brest Pump Hire TENS machine
	Rangiora	Yes	Yes	x	Yes	2	8	Yes	33%	Breast pump hire
CDHB's Ashburton and Rural Health Services	**Ashburton**	Yes	Yes	x	Yes	3	5	Yes	28%	Onsite RMO/MO support Breast pump hire
	Kaikoura	Yes	x	x		1	2	x	4%	
	Waikari	No	x	x	x	x	2 or 3	x	2%	
	Akaroa	x	Yes	x	x	1	2	x	6%	GP back up currently closed
	Darfield	x	Yes	x	x	1	2	Yes	13%	
St George's Hospital contract with CDHB	**St George's**	x	x	x	Yes	Nil	9-13	x	85%*	Antenatal Breastfeeding Classes Anti-D administration Drop-in breastfeeding centre
	St George's maternity facility was damaged beyond repair following the earthquake. It has now established a postnatal facility (9-13 beds). Current CDHB contract is until 30 June 2014. *2012 figure.									

Secondary and Tertiary Maternity Services

CWH provides primary birthing services for women in Canterbury plus secondary and tertiary maternity care for all South Island DHBs, (except for Nelson Marlborough DHB which accesses Capital and Coast DHBs Wellington Hospital). A LMC may request a specialist consultation during a woman's pregnancy, labour, birth or postnatal care. The responsibility of care may be transferred to the secondary/tertiary services, depending on the reason for referral.

Maternity Outpatient Services
The Maternity Outpatients Department includes the Day Assessment Unit and Fetal Maternal Medicine. Maternity clinics are held every weekday and include the: General Obstetric Clinic, High Risk Obstetric Clinic, Core Midwifery Clinic, Methadone in Pregnancy Clinic and Anaesthetic Pre-admission Clinic. The Day Assessment Unit provides care to pregnant women from 22 weeks gestation that have been identified by an obstetrician as requiring extra monitoring during pregnancy. This unit, containing three lazy boy chairs, allows a woman to remain at home with their family and attend the hospital for appointments to receive the extra monitoring required. In 2011 the unit had an occupancy rate of 150%. The Fetal Maternal Medicine Unit provides antenatal consultation and review for potential pregnancy problems which are identified from genetic or familial history, ultrasound-diagnosed abnormality, diagnostic or therapeutic procedures (e.g. amniocentesis, chorionic villus sampling) and pregnancies complicated by diabetes.

Maternity Inpatient Ward
This is a 45-bed maternity unit providing antenatal and postnatal inpatient services.

Birthing Suite
Birthing Suite at CWH comprises 13 birthing rooms, two multi-purpose rooms, one garden room, five assessment rooms, two operating theatres, four post-anaesthetic care unit (PACU) beds, and two acute observation beds.

Neonatal Intensive Care Unit
The Neonatal Intensive Care Unit (NICU) cares for newborn babies born prematurely or with surgical, congenital and medical complications following birth, requiring acute secondary and tertiary care. It also provides a transport retrieval service. There are ten intensive care cots and 28 special care cots for babies within NICU.

Other services
- Pregnancy and parenting courses;
- Lactation services, including breastfeeding classes and lactation consultants;
- Dietician, physiotherapy, Māori health and social work services;
- Paediatric services;
- Anaesthetic services and caesarean sections;
- Newborn hearing screening.

Earthquake Damage

Following the September 4th 2010 and February 22nd 2011 earthquakes, CWH sustained little damage and continued business as usual with the exception that high risk women and babies requiring neonatal care were transferred out to other tertiary centres. Rangiora increased maternity bed numbers. Burwood Hospital closed for 11 days following September 4th 2010, and was closed until 11th April 2011 after the February 22nd 2011 earthquake. Extra staffing was not required.

St George's Maternity Department was housed in the Heritage Building which was badly damaged in the February 2011 earthquake and subsequently demolished. The Maternity Department was closed until January 2012, when it reopened for postnatal care only in part of a surgical ward. During the closure, staff were re-deployed in surgical areas or assisting with projects within the hospital. St George's Hospital is working towards re-establishing a full birthing service.

Overview of Canterbury's Maternity Services (2011/2012 financial year)

Antenatal
- An estimated 70% of women had registered with a LMC by 15 weeks and 83% by 20 weeks;
- 6,872 specialist obstetric consultations occurred at CWH.

Labour and birth

- 1.9 days was the average postnatal length of stay for women who had vaginal births;
- 4.1 days was the average length of stay for women who delivered by caesarean section;
- 1005 women accepted the opportunity to stay longer because of: breastfeeding problems (59%), post-operative recovery (6.5%), ongoing medical problems (27.7%), psychological problems (1%), babies with special needs (5.3%), and geographical isolation (0.1%).

Canterbury DHB has been a member of Women's Hospital Australasia since 1997 and provides maternity data to benchmark clinical care and processes with similar women's health services predominantly in Australia and New Zealand.

Areas of Concern

When benchmarking the performance of CDHB and CWH maternity care against the New Zealand Maternity Clinical Indicators and Women's Health Australasia, the following variations were identified:

- Higher caesarean section rate;
- Higher assisted delivery rate, especially with vacuum extraction;
- Higher episiotomy rate with vaginal birth;
- Lower vaginal birth after caesarean section (VBAC) rate.

Ashburton and Rural Health Services have identified the following areas of concern:

- The need to attract and retain LMC midwives;
- Increased ambulance transfer times.

These areas of concern are being investigated and addressed (refer to Section 6 Quality Improvements and Section 7 Priorities, Deliverables and Planned Actions 2013/14).

St George's Hospital

St George's Hospital has provided a full private birthing and postnatal maternity service for the women of Christchurch and Canterbury since 1946. Unfortunately, the February 2011 earthquake resulted in severe damage and subsequent demolition of the Heritage Building housing the Maternity Department, hence the temporary closure of this service until January 2012. Maternity then reopened as a postnatal service only, under a two year contract to CDHB, which ends in June 2014. This contract enables St George's Maternity to accept women from CWH post delivery and post caesarean section who have been assessed as clinically safe to transfer.

In 2012, there were 1167 admissions to the department with an 85% occupancy rate (based on 10 beds). Between July 2012 and December 2012, 205 women were transferred post-caesarean section. From 7th January 2013 to 11th February 2013, 114 women were transferred post-caesarean section.

Maternity Department

- 9 - 13 postnatal beds;
- A charge midwife oversees the department;
- 102 LMCs have Access Agreements at St George's Hospital;
- 7.8 FTE midwives staff the Maternity Department;
- 1 FTE Registered and Obstetric Nurse;
- 1 Karitane Nurse;
- Obstetricians with Attending Rights visit their patients.

Other Services

- Antenatal Breastfeeding Classes are held fortnightly. In 2012, 480 women attended these classes;
- A free 'Drop in Centre' for postpartum women experiencing difficulty with breastfeeding was established in 2008. This service continued throughout the closure in 2011 and the numbers of sessions were increased from one to five per week to assist those who discharged early from hospital and experienced breastfeeding difficulties. 567 women attended in 2012;
- Anti-D immunoglobulin administration for outpatient women was established in conjunction with the CDHB Blood Bank. In 2012, 74 women received Anti D as an outpatient;
- Newborn Hearing Screening is available six days per week;
- Onsite Lactation Consultant;
- Physiotherapist (2x weekly visits);
- Kaumatua;
- Chaplain;
- Paediatrician (by referral two days per week).

Areas of Concern

- Delay in ambulance transportation for acute transfer of women and babies from St George's Hospital to CWH and NICU;
- Lack of standardised national guidelines for infant co-sleeping with mothers.

These areas of concern are being addressed (refer to Section 7 Priorities, Deliverables and Planned Actions 2013/14).

West Coast District Health Board
Te Poari Hauora a Rohe o Tai Poutini

The West Coast District Health Board has the smallest population of the twenty DHBs established under the New Zealand Public Health and Disability Act (NZPHD Act). 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. WCDHB extends from Karamea in the north, to Jacksons Bay in the south and Otira in the east and comprises three Territorial Local Authorities, Buller, Grey and Westland districts.

The geographic nature of the district, being bordered by the Southern Alps on the east and the Tasman Sea on the west, leads to the West Coast being the most rural and isolated region in New Zealand. The total land area covered by the West Coast DHB is 23,283 square kilometres and great distances separate many towns, with the distance between Karamea in the north and Haast in the south being 516 kilometres, approximately the same distance from Auckland to Wellington (492km).

The West Coast is home to a population of 32,900 people[8], an increase of 2% from the 2006 estimated resident population. Of these, 5,805 are women aged 15-44 years of age. The West Coast Māori Health Profile 2008[9] revealed that Māori in this district have a similar social profile to the rest of the West Coast population but in terms of health, have a poorer overall health status.

Analysis of socio-demographic data shows that compared with New Zealand as a whole, WCDHB has a:

- Lower mean annual personal income of $20,400 compared to the national average of $24,400;
- Slightly higher proportion of the population receiving unemployment benefits;
- Higher proportion of families receiving invalids benefit;
- Higher proportion of the population with no educational qualifications;
- Lower proportion of the population with access to a mobile phone;
- Similar proportion of the population with no access to a motor vehicle;
- Higher proportion of the population who are regular smokers.

The WCDHB has two facilities from where maternity care is provided: one secondary unit, McBrearty Ward situated within Grey Base Hospital and one primary unit, Kawatiri, based in Westport (see Figure 2). All referrals for tertiary level care are directed to the tertiary unit in Christchurch.

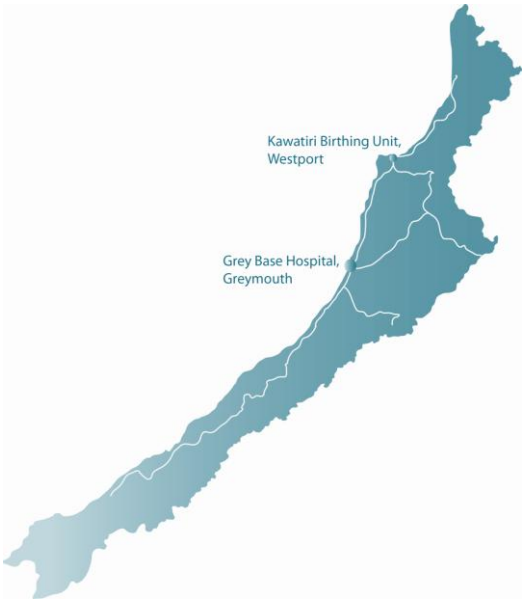


Figure 2. West Coast District Health Board maternity facilities

[8]Estimated Resident Population at June 2011– Source; Statistics New Zealand – Sub-national Populations Estimates: At 30 June 2011, accessed 25 October 2011.
[9] West Coast 'Te Tai O Poutini' Māori Health Profile 2008, prepared by Community and Public Health West Coast

Primary Maternity Services

Lead Maternity Carers. In the 2011/2012 financial year WCDHB employed three caseloading midwives in Buller and three caseloading midwives in Greymouth. There were two self-employed LMCs. One GP in South Westland is employed by WCDHB to provide maternity services in a shared care role, antenatal and postnatal care only. Rural nurses in South Westland are involved in acute maternity assessments and postnatal care. No obstetricians provide primary maternity services.

Primary Birthing Unit. Kawatiri Maternity Unit is situated at Buller Hospital, Westport and has a birthing suite, three postnatal beds and neonatal resuscitation facilities. Obstetric outpatient clinics are provided fortnightly by specialist obstetricians from Greymouth (see Table 3). Grey Base Hospital provides both primary and secondary maternity services for the West Coast.

Table 3. WCDHB primary and secondary birthing units

	Antenatal	Postnatal								
	Primary Birthing Units	Pregnancy testing/advice	Pregnancy & parenthood classes (per year)	Swimming classes	Fluid replacement	Number of birthing rooms	Number of beds	Option of water birth	Occupancy in 2010/11	Other
Grey Hospital	**McBrearty (Greymouth)**	Yes	Yes	No	Yes	2	5	Yes	58%	TENS Machine
Buller Hospital	**Kawatiri (Westport)**	Yes	Yes	No	Yes	1	2	No	1%	Breast Pump Hire
	Home based care	Yes	Yes	No	No	N/A	N/A	Yes	-	Breast pump hire

Secondary Maternity Services

Fetal Maternal Medicine

The West Coast maternity service works in conjunction with CWH for antenatal consultation and review for potential pregnancy problems which are identified from genetic or familial history, ultrasound-diagnosed abnormality, and diagnostic or therapeutic procedures (e.g. amniocentesis, chorionic villus sampling). Some services may be provided locally.

Neonatal Intensive Care Unit

The WCDHB has a single neonatal cot. If the neonate requires NICU services, then they are stabilised and transferred to a tertiary centre by an air retrieval team. On most occasions, this would be CWH.

High Dependency Unit

Grey Base Hospital has a four bed facility for women with high needs either awaiting transfer to tertiary services or to provide additional supportive care prior to return to the ward.

Inpatient Wards

WCDHB has two inpatient wards: Kawatiri, Westport which comprises one delivery bed and two postnatal beds and McBrearty, Greymouth which comprises two delivery beds and five inpatient beds for antenatal and postnatal care. WCDHB has no specialised Day Assessment Unit but provides such care to pregnant women within the body of the ward.

Other Services

- Pregnancy and parenting courses and antenatal education;
- Lactation services, including five lactation consultants on the WCDHB staff;
- Dietician, physiotherapy, Māori health, and social work services;
- Anaesthetic services;
- Operating theatre;
- Newborn hearing screening.

Overview of West Coast Maternity Services (2011/12 financial year)

Antenatal

- The midwives offer care with referral access to WCDHB O&G service as required. A small number of women living in South Westland elect for a shared care option with the resident GP in the area and LMCs based at Greymouth Hospital;
- There are two self-employed midwives in the community. They have elected to provide a homebirth service only;
- 534 specialist obstetric consultations occurred.

Labour and birth

- 292 hospital births were recorded; 276 births at Grey Base Hospital and 16 births at Buller Hospital, Kawatiri Maternity Unit;
- The average postnatal length of stay was 2.2 days and the average length of stay for caesarean sections was 4.4 days;
- Women accepted the opportunity to stay longer for reasons including postpartum care after hospital delivery, care and examination of lactating mother, and mothercraft.

Areas of Concern

- Issues with the recruitment and retention of senior medical staff, while acknowledging the significant progress that has been made through greater collaboration and changing models of care, with the CDHB;
- The need to attract and retain self-employed midwives on the West Coast;
- The need to attract and retain midwives and nurses on the West Coast;
- Maintaining consistent clinical management protocols between West Coast secondary services and CWH;
- Timely and appropriate patient transfers from primary to secondary services and from secondary to tertiary services;
- Meeting the educational needs of staff in a timely, cost effective way;
- Regular national networking opportunities for both midwifery and medical staff;
- Professional support for self-employed LMCs.

These areas of concern are being investigated and addressed (refer to Section 7 Priorities, Deliverables and Planned Actions 2013/14).

3 Governance and Operations

Governance Structure

Key clinical leadership positions necessary to implement the MQSP already exist within both CDHB and WCDHB with Directors of Midwifery and Nursing, Clinical Director and a Head of Department for Obstetrics and Gynaecology, GP Liaison and Quality Co-ordinator/Facilitators all in post (Figure 3). The programme will facilitate further development of the relationships that already exist between the clinical leaders at the various sites and collaboration between them on the quality initiatives. It was identified that although CDHB Women's and Children's Health did have a Maternity Clinical Governance Group in place that included clinical leaders from both obstetrics and midwifery professions representing hospital-based and community based clinicians, it did not have consumer and Māori representation.

In order to meet the requirements of the MQSP and to foster collaborative working on quality issues between CDHB and WCDHB, a decision was made to re-organise the quality management committee structure (Figure 4). The former Maternity Clinical Governance Group has been expanded to form a joint CDHB and WCDHB Maternity Clinical Governance Committee. This CDHB and WCDHB Maternity Clinical Governance Committee membership now includes clinical leaders from both medical and midwifery professions and representatives of Ashburton and Rural Maternity Services, St George's Hospital, the General Practitioner (GP) Liaison, the LMC Liaison, Planning and Funding, two consumer representatives and a Māori representative (see Appendix 1).

The first meeting of the CDHB and WCDHB Maternity Clinical Governance Committee was held in March 2013 to agree on the Terms of Reference (TOR), discuss the requirements of the Maternity Annual Report and determine the MQSP priorities, deliverables and planned actions for 2013/14.

Reporting into this CDHB and WCDHB Maternity Clinical Governance Committee is the CDHB Maternity Operational Group whose purpose is to operationalise the agreed objectives from the CDHB and WCDHB Maternity Clinical Governance Committee. This Maternity Operational Group comprises charge midwife managers, obstetric and gynaecology (O&G) senior medial officers (SMOs), and representatives from Safety and Quality, Allied Health, Neonatology, Ashburton, and the Regional New Zealand College of Midwives (NZCOM) Canterbury and West Coast (see Appendix 2).

The Ashburton and Rural Health Services Maternity Continuum Team's TOR have recently been updated (see Appendix 3). The purpose of this team is to provide interdisciplinary co-ordination, direction and leadership for clinical activities related to the maternity service and to ensure that requirements to meet the MQSP are implemented and maintained. The TOR have been amended to include contributing towards the MQSP Annual Report and establish reporting structures to the CDHB and WCDHB Maternity Clinical Governance Committee. Further, membership has been extended to include Māori and consumer representation, LMC and Rural Hospital Representatives, Clinical Medical Director, and Director of Midwifery.

St George's Hospital Obstetric Committee meets three-monthly and links to the St George's Hospital Quality Committee, Risk Management Committee and the St George's Hospital Board of Directors. Committee representation includes the Charge Midwife, Director of Nursing, an Obstetrician, a LMC and a consumer (see Appendix 4).

West Coast DHB has established an independent quality and safety structure that links into the CDHB and WCDHB Maternity Clinical Governance Committee. The WCDHB Maternity Quality and Safety Group was formed in May 2013. This Maternity Quality and Safety Group reports into the WCDHB Clinical Quality Improvement Team and the WCDHB Clinical Board. Membership includes: the Nurse Manager Hospital Services, Quality Co-ordinator, Clinical Midwife Manager, an O&G SMO, Clinical Nurse Manager Paediatrics, Lactation Consultant/Breastfeeding Advocate (West Coast PHO), maternity social worker, a LMC representative, a consumer representative and a Māori representative (see Appendix 5).

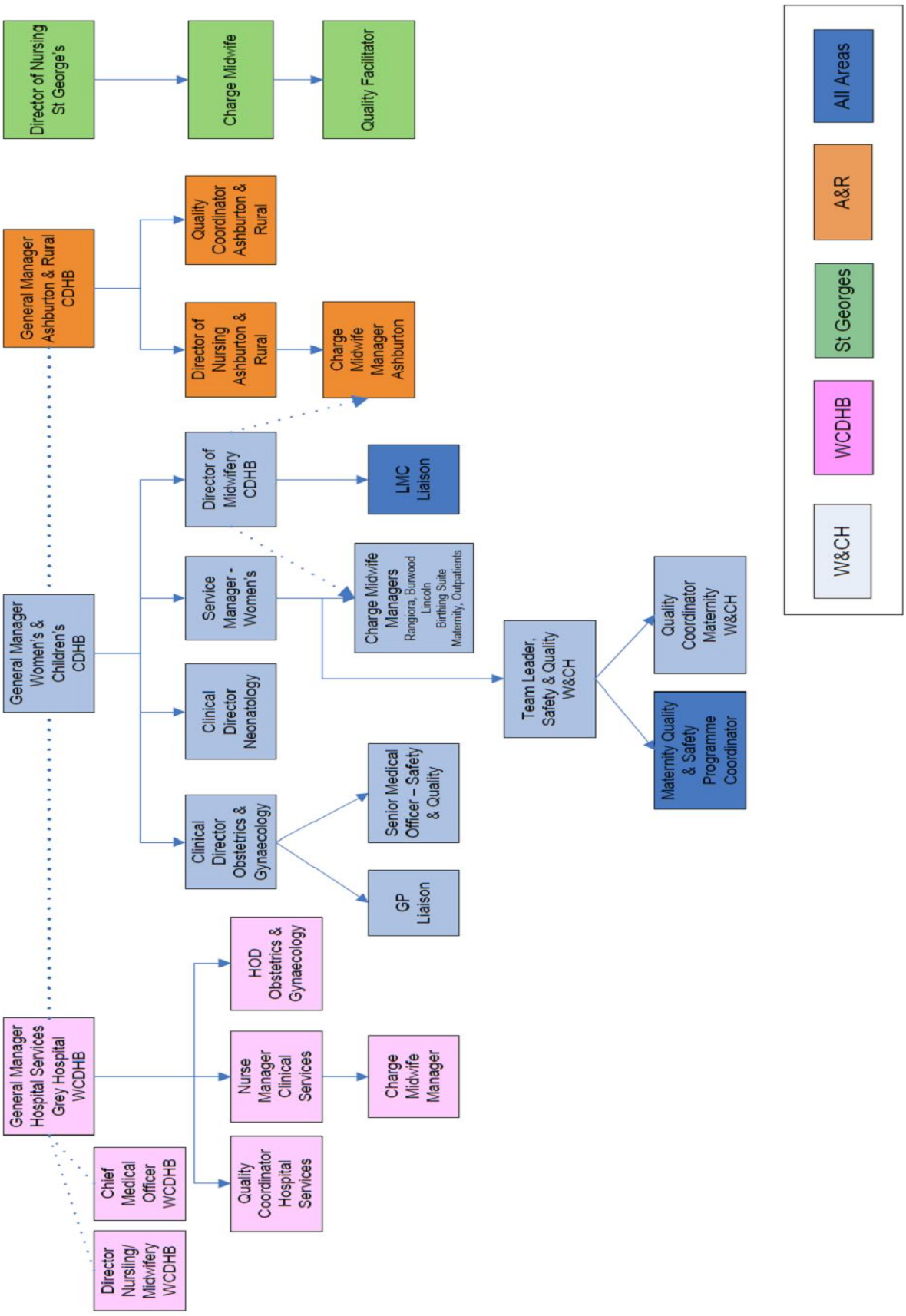


Figure 3. Maternity clinical leadership structure

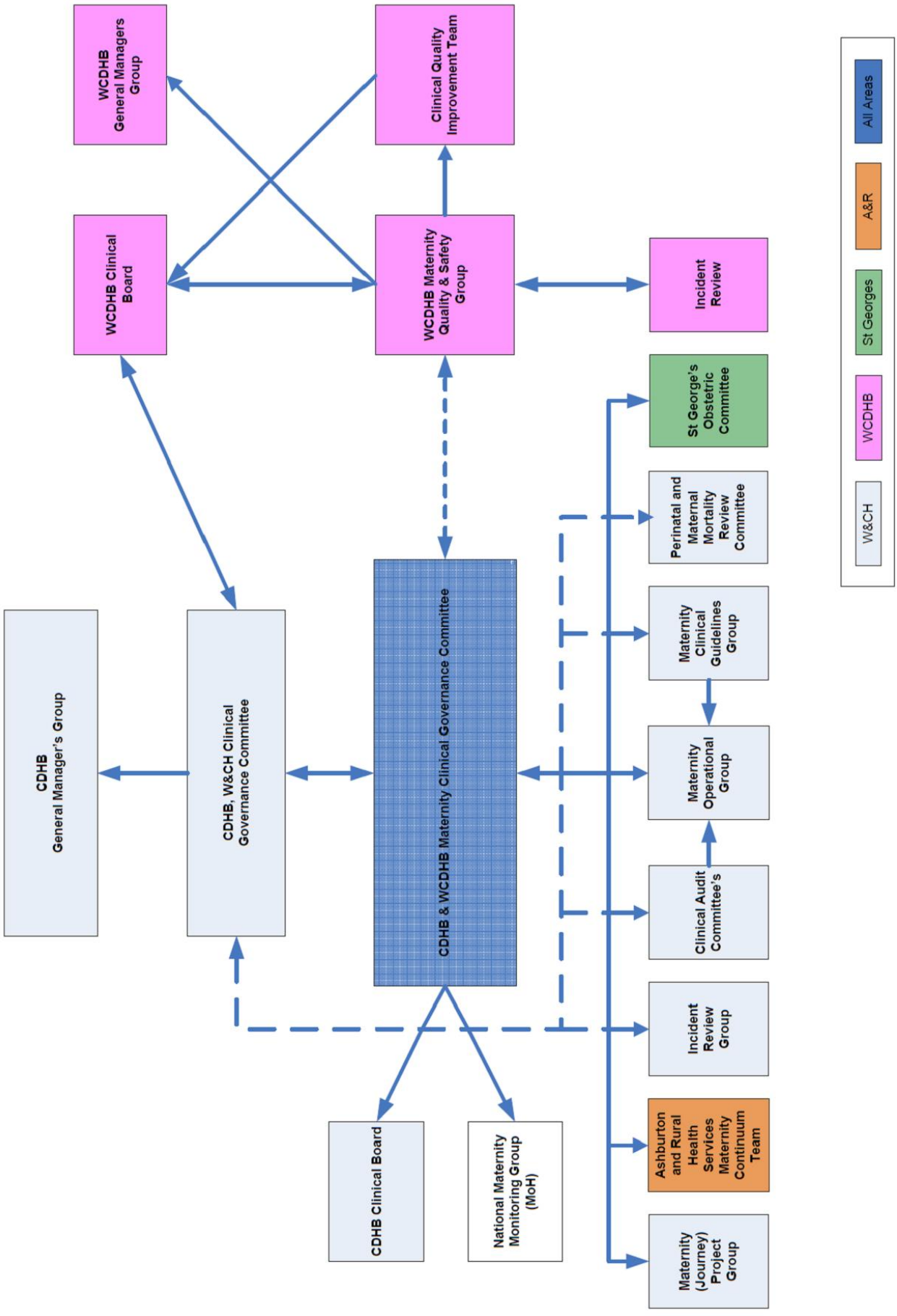


Figure 4. Maternity quality and safety committees

Maternity Quality and Safety Programme Roles

Maternity Quality and Safety Programme Co-ordinator
The MQSP Co-ordinator position was created as an additional resource to assist the CDHB Women's and Children's Health, Ashburton and Rural Health Services, St George's Hospital and WCDHB quality staff in developing their local quality systems and processes and co-ordinating the production of the combined Maternity Quality and Safety Annual Report. This full time, two year fixed term position was filled in February 2013.

Quality and Safety Administrator
To provide administrative support for the implementation of the MQSP, a part-time two year fixed role has been developed. Alongside general administrative duties, the primary task of this role is to co-ordinate and produce the CHDB and WCDHB MQSP Annual Report.

Māori Representatives
The Māori representative appointed onto the CDHB and WCDHB Maternity Clinical Governance Committee is a practising Māori midwife in the CDHB area. This representative is also a current Director for Ngā Maia O Aotearoa Me Te Wai Pounamu, a national body representing Māori Birthing; a representative on the National Committee for the New Zealand College of Midwives (NZCOM) and also the Governance committee for this Board; a Director for Ngā Manukura o Āpopō, the National Māori midwifery and nursing clinical leadership group under Health Workforce NZ, a Hauora Māori lecturer at Te Mātāpuna o te Matauraka (CPIT) and the Māori Indigenous Health Institute (MIHI-Otago medical school) and a clinical tutor in midwifery. Locally she is the Ngāi Tuhaitara representative on the Manawhenua relationship Board and various other broader health related appointments and involvements in her community.

The Māori representative appointed to the WCHDB Maternity Quality and Safety Group has been delegated by the Kaihautu Rata Te Awhina Trust.

Ashburton and Rural Health Services Maternity Continuum Team are in the process of appointing a Māori representative.

Consumer Representatives
Two consumer representatives have been appointed onto the CDHB and WCDHB Maternity Clinical Governance Committee to assist in the monitoring and reviewing of services and quality and safety activities. The first consumer representative has been nominated by La Leche League South Island, of which she is a Board Member. This consumer representative is also a Home Birth Canterbury committee member; a consumer reviewer for the Midwifery Standards Review and a consumer facilitator for the Canterbury Home and Primary Birth Antenatal Classes. The second consumer representative has been nominated by NZCOM and is a consumer reviewer for the Midwifery Standards Review. She is a Breastfeeding Peer Counsellor and a facilitator for the Young Parents Breastfeeding Group, Christchurch.

A further consumer representative has been appointed to the CDHB Maternity Operations Group by the Canterbury Home Birth Association. This consumer is involved with NZCOM National Committee and has previously been a consumer representative for the Ministry of Health IT, Shared Maternity Record of Care Project.

A consumer representative has been appointed to the WCDHB Maternity Quality and Safety Group, nominated by the West Coast Home Birth Association. This representative is a trustee and consumer representative for Homebirth Aotearoa, a committee member of the West Coast Home Birth Association and a consumer representative on the NZCOM National Committee.

Ashburton and Rural Health Services Maternity Continuum Team are in the process of appointing a consumer representative.

General Practitioner Liaison

Canterbury DHB employs a GP Liaison within Women's and Children's Health. This GP Liaison Women's Health role is well established having been in place for 10 years. The GP Liaison is able to give a primary care perspective on issues raised, share knowledge of access or lack of access to funding within primary care and has a working knowledge of what might be possible within primary care.

Lead Maternity Carer Liaison

A part time LMC Liaison position has been created to enhance two-way communication between the primary-secondary interfaces, to be an advocate for primary services and actively contribute to the maternity clinical governance framework. Further, the LMC liaison is the Vice-Chair of the NZCOM Canterbury West Coast Region and is a practising LMC midwife. This LMC liaison position was filled in March 2013.

Information Analysts

Canterbury DHB Women's and Children's Health Information Analyst and the WCDHB Information Technology Services Software Support Analyst are employed to monitor their respective services' operations. These information analysts are the point of contact for the receipt of maternity data and to supply information and analysis to internal and external stakeholders to assist them in decision making.

4 Data Analysis

All data presented within the following sections are for the 2011 calendar year.

Canterbury District Health Board

Maternal Age

The highest percentage of women accessing CDHB maternity services were aged between 30 to 34 years, 31.05%.

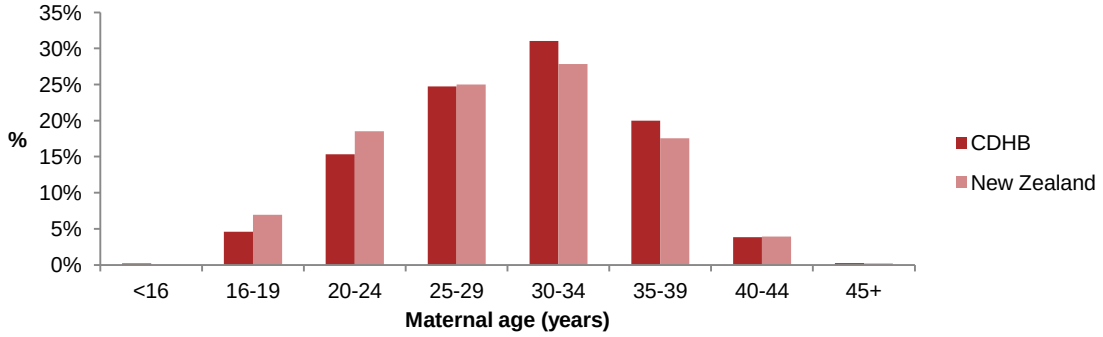


Figure 5. CDHB Maternal age distribution, 2011°

Maternal Ethnicity

The majority of women birthing at CDHB were European, (74%), followed by Asian (9.8%) and Māori (8.9%).

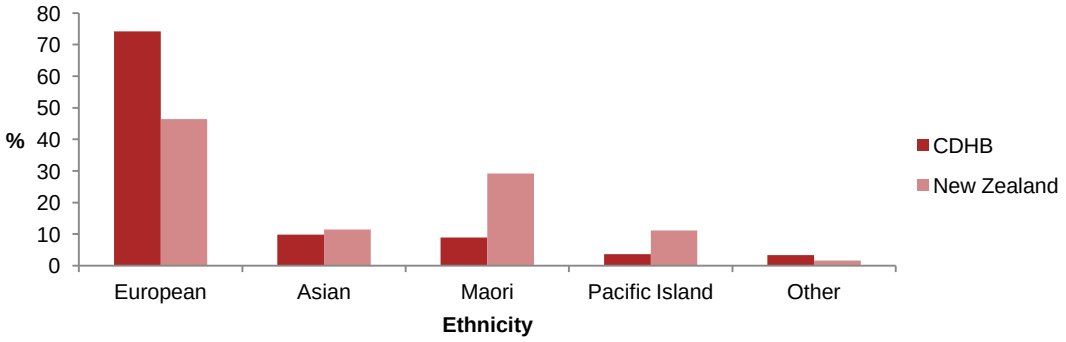


Figure 6. CDHB maternal ethnicity distribution, 2011*

Deprivation

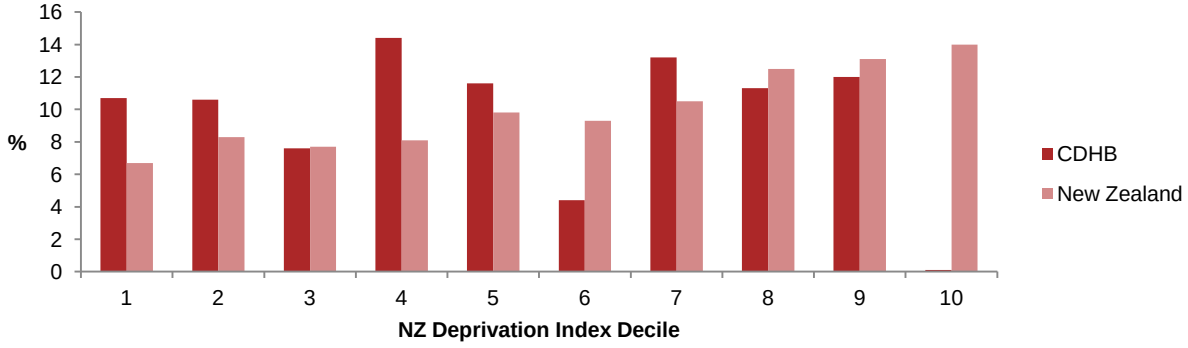


Figure 7. CDHB maternal deprivation distribution, 2011◊

° Source for New Zealand births by maternal age: Statistics New Zealand Births and Deaths Year Ended March 2011
* Source for New Zealand births by ethnicity: Birth Registration Dataset 2010
◊ Source for New Zealand births by deprivations: Birth Registration Dataset NZDep2006

Rurality

The vast majority of women accessing CDHB maternity services were from the Christchurch City region. Women from the Selwyn District, Waimakariri District, Ashburton District and Hurunui District (482, 462, 436, 129 respectively) also accessed these services.

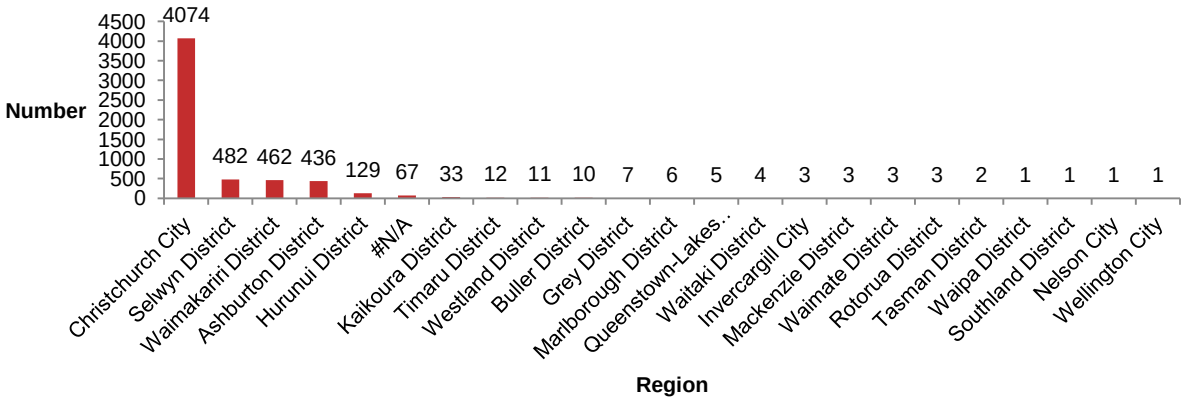


Figure 8. CDHB maternal rurality distribution, 2011

LMC Registration – Trimester of registration

The majority of women (73.3%) within CDHB access a LMC for continuity of primary maternity care within the first trimester of pregnancy. This is followed by a further 23.2% of women registering with a LMC in their second trimester.

Table 4. CDHB lead maternity carer registration*, 2011

Trimester of LMC registration	N= 6073	%
First trimester	4300	73.3
Second trimester	1362	23.2
Third trimester	195	3.3
Postnatal	4	0.1
Unknown	212	

Note * Data sourced from the National Maternity Collection 2011, Ministry of Health.

Births by Facility Type

In 2011, there were 238 homebirths within Canterbury.

Table 5. Canterbury births by facility type*, 2011

Facility	N=6073	%
Tertiary	5093	83.9
Secondary	54	0.9
Primary	635	10.4
Homebirth	238	3.9
Unknown	53	0.9

Note * Data sourced from the National Maternity Collection 2011, Ministry of Health
This regional information is based on mother's domicile not DHB of service; therefore numbers do not exactly match facility numbers but instead give a representation of Canterbury's resident population.

In 2011, the majority of women birthed at CWH (89.7%), this was followed by 7.4% at Women's and Children's Health primary birthing units and the remaining 2.9% at Ashburton and Rural maternity services.

Table 6. CDHB births by facility, 2011

Facility	N=5756	%
CWH	5161	89.7
Burwood	196	3.4
Lincoln	110	1.9
Rangiora	123	2.1
Ashburton	136	2.4
Darfield	20	0.3
Kaikoura	9	0.2
Akaroa	1	0.02

Births by non-CDHB domicile and transfers

Ninety-one women transferred to CWH from CDHB primary units in 2011 for labour and birth care. A further 69 women from outlying DHBs including West Coast, Southland and South Canterbury birthed at CWH.

Parity

Nearly half, (44.5%, n=2294) of women birthing at CDHB in 2011 were nulliparous.

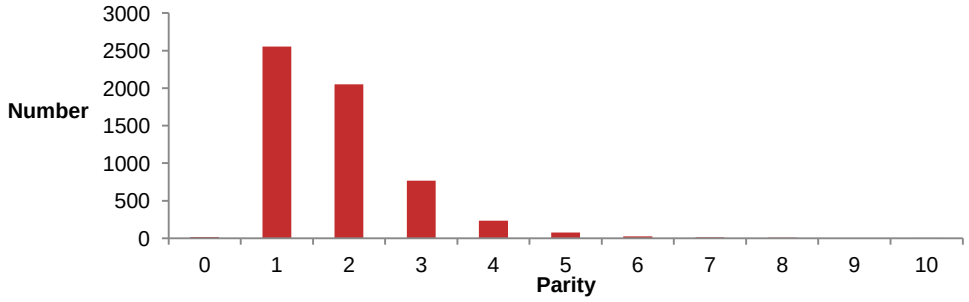


Figure 9. CDHB maternal parity distribution, 2011

Induction of labour

The rate of induction of labour in 2011 was 21.2%. This rate has risen since 2009 to figures similar to that of 2006 (20.1%).

Table 7. CDHB rates of induction of labour

	Total number of births	Total number of women undergoing IOL (N)	IOL rate per Year (%)
2006	5516	1106	20.1
2007	5807	999	17.2
2008	5977	1037	17.3
2009	5976	1157	19.4
2010	6089	1301	21.4
2011	5756	1219	21.2

Epidural analgesia

Of the 3,138 women who birthed vaginally (spontaneous and instrumental), 409 (10.3%) received epidural analgesia in labour.

Birth Outcomes

In 2011, 5,756 women birthed within CDHB, 5,161 of these births were at CWH. Eighty-seven women had multiple births (including 86 twins and one set of triplets) providing a total of 5,844 babies born within CDHB, excluding homebirths

Mode of Birth

The total caesarean section rate at CDHB in 2011 was 30.8%.

Table 8. CDHB mode of birth, 2011

	N= 5756	%
Spontaneous	**3138**	**54.5**
Instrumental vaginal birth	**848**	**14.7**
Forceps	356	6.2
Ventouse/Kiwicup	492	8.5
Caesarean section	**1770**	**30.8**
Elective CS	910	15.8
Emergency CS	860	14.9

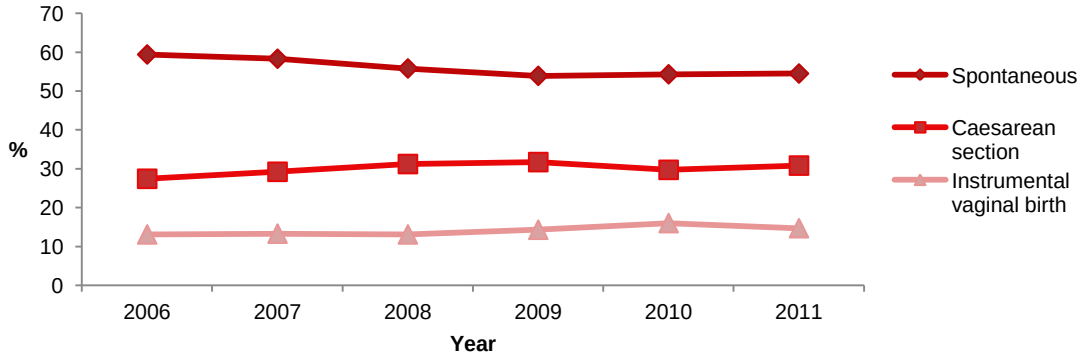


Figure 10. CDHB mode of birth, 2011

Vaginal Birth after Caesarean Section

The rate for vaginal birth after one previous caesarean section for CDHB in 2011 was 12% (n=212).

Post-partum Haemorrhage

The data presented includes only those women within CDHB who experienced a primary postpartum haemorrhage of 1000-1500ml and more than 1500ml as this measure is more indicative of potential maternal compromise.

Table 9. CDHB postpartum blood loss by mode of birth, 2011

	Spontaneous vaginal birth		Caesarean section	
	N=3751	%	N=1764	%
PPH 1000-1500ml	107	2.9	108	6.1
PPH > 1500ml	51	1.4	19	1.1

Perineal Trauma

Of the women who birth vaginally, 20.5% underwent an episiotomy. Only 5.9% of these were attributed to spontaneous birth, the remaining were performed with instrumental births (see Table 8). A further 188 women (4.7%) experienced 3rd and 4th degree tears.

Table 10. CDHB episiotomy rates of women birthing vaginally*, 2011

	N=3986	%
Episiotomy	**807**	**20.2**
Forceps rotation of fetal head with delivery	1	0.02
Low forceps delivery	36	0.9
Mid-cavity forceps delivery	271	6.8
Spontaneous vertex delivery	236	5.9
Vacuum extraction	263	6.6

Note * Includes spontaneous vaginal births and instrumental deliveries

Perinatal Outcomes

In 2011, 36 stillbirths (defined as death of a fetus at or over 20 weeks gestation or weighing 400g) and nine neonatal deaths (death of a baby showing signs of life at 20 weeks gestation or beyond or weighing at least 400g) were recorded within CDHB. Six hundred and twenty-one babies were admitted to NICU and 255 were admitted to the Neonatal Special Care Unit, combined this admission rate represents a total of 14% of all CDHB births.

Breastfeeding

In 2011, 76.3% of babies (n=4,393) were discharged from CDHB facilities exclusively breastfeeding; 4.9% fully breastfeeding (n=282); and 8.1% partial breastfeeding (n=467). These statistics are in accordance with the Baby Friendly Hospital Initiative (BFHI) audit standards and the UNICEF/WHO global criteria, which state that maternity facilities are required to achieve at least 75% exclusive breastfeeding rate at discharge.

West Coast District Health Board

There is a lack of capability in the existing information technology systems at WCDHB to collect some of the maternity outcome data and guarantee the quality and integrity of the data presented. This includes data on epidural analgesia, vaginal birth after caesarean section, post-partum haemorrhage, perineal trauma (New Zealand Maternity Clinical Indicators 7 and 8), stillbirths and neonatal deaths.

As of May 2013, a senior business analyst from CDHB has been engaged to work with WCDHB to investigate options to capture this data going forward. The recommended option is for WCDHB to move onto the current CDHB Maternity System, CareSys. This will enable the WCDHB to capture all information required regarding the MQSP data in a timely manner while streamlining the workflow and processes between the two organisations. The WCDHB data will automatically populate the CDHB data warehouse. Going forward WCDHB data will be identified separately and easily incorporated in all internal and external reporting requirements. This will also allow CDHB to support WCDHB with the migration to the National Maternity System in the future. Implementation of the recommended option will take some time to complete and once detailed planning is completed, timeframes will be made available. In the interim, WCDHB will provide the best it can with the data it has available.

Maternal Age

The range of maternal age spans 30 years with the highest number of women giving birth between 30 and 34 years (26.5%).

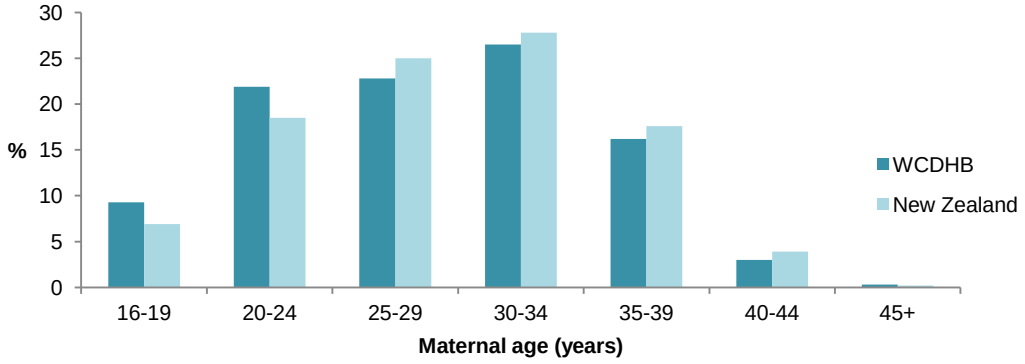


Figure 11. WCDHB maternal age distribution, 2011°

Maternal Ethnicity

Majority of women accessing WCDHB maternity services were European (86.6%) followed by Māori (5.3%), Asian (3.3%), and Pacific Island (0.7%).

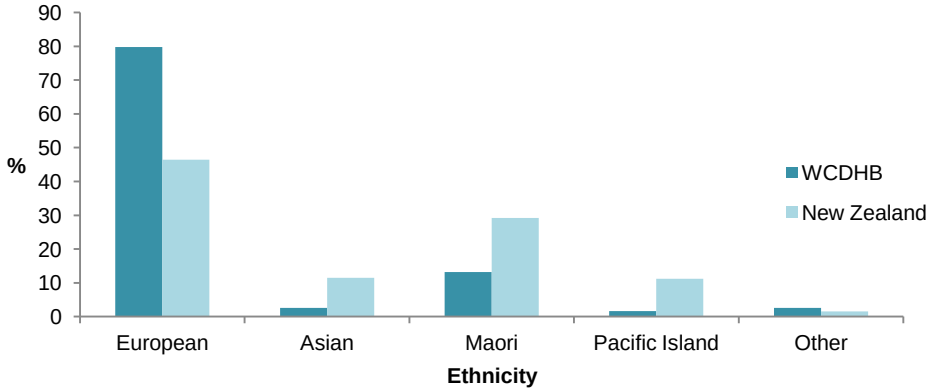


Figure 12. WCDHB maternal ethnicity distribution, 2011

° Source for New Zealand births by maternal age: Statistics New Zealand Births and Deaths Year Ended March 2011

LMC Registration – Trimester of Registration

It is acknowledged that the percentage of women booking in the first trimester of pregnancy is low on the West Coast and has been determined a priority and planned action for 2013/14.

Table 11. WCDHB lead maternity carer registration*, 2011

Trimester of registration	N= 408	%
First trimester	62	47.3
Second trimester	48	36.3
Third trimester	20	15.3
Postnatal	1	0.8
Unknown	277	

Note * Data sourced from the National Maternity Collection 2011, Ministry of Health.

Births by Lead Maternity Carer

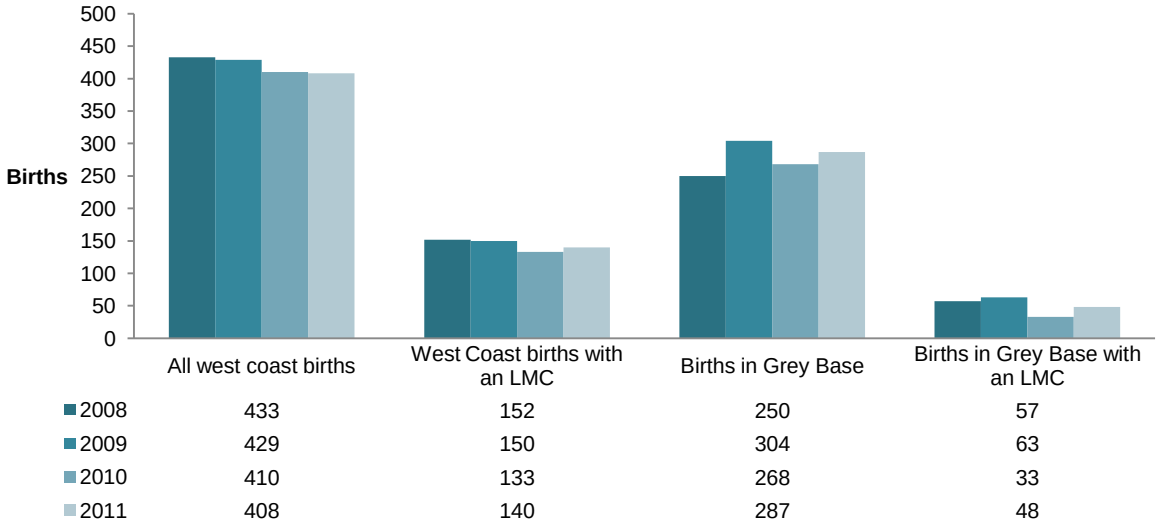


Figure 13. WCDHB births by Lead Maternity Carer

Births by Facility Type

In 2011, there were 52 homebirths on the West Coast.

Table 12. West Coast births by facility, 2011*

Facility	N=408	%
Tertiary	35	8.6
Secondary	299	73.3
Primary	21	5.1
Homebirth	52	12.7
Unknown	1	0.2

Note * Data sourced from the National Maternity Collection 2011, Ministry of Health
This regional information is based on mother's domicile not DHB of service; therefore numbers do not exactly match facility numbers but instead give a representation of Canterbury's resident population.

Grey Base Hospital Births

Of the 289 women who birthed at McBrearty Ward, sixty-one were nulliparous.

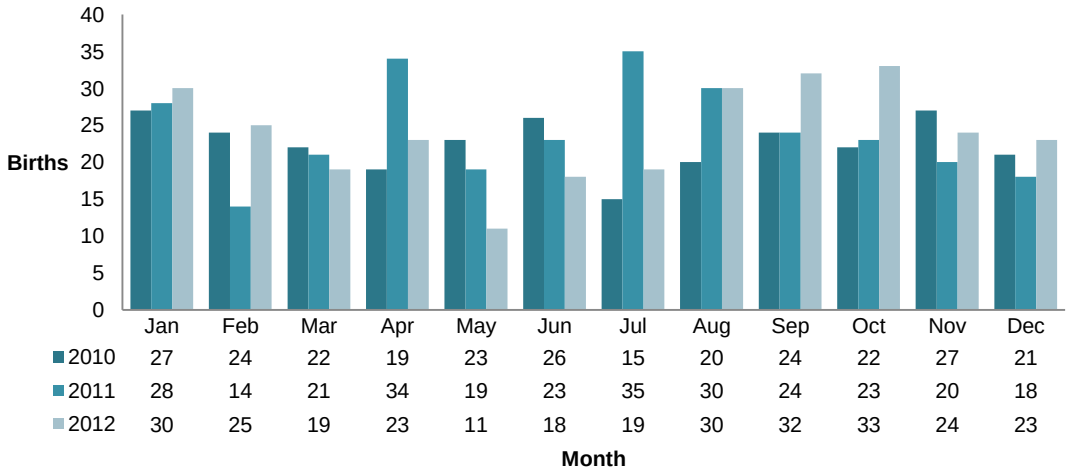


Figure 14. Grey Base births 2010-2012

Kawatiri Maternity Unit Births

In 2011, 19 women birthed at Kawatiri Maternity Unit.

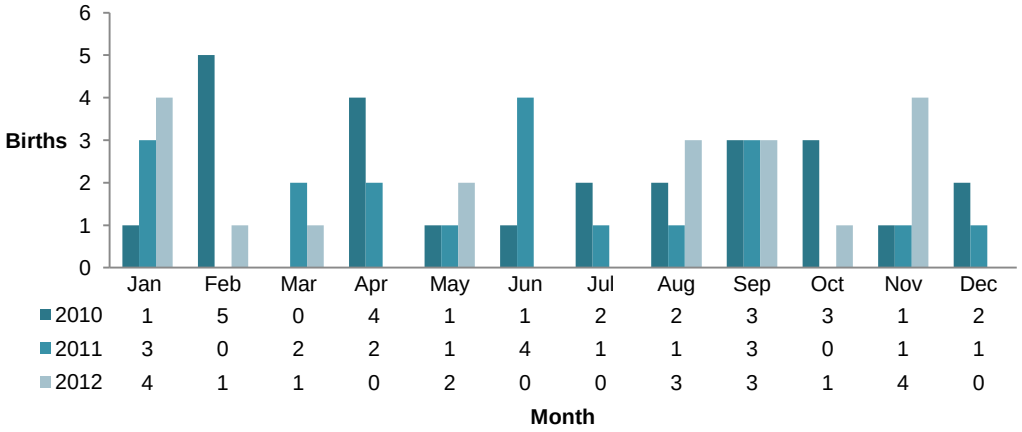


Figure 15. Kawatiri births 2010-2012

Epidural Analgesia

In 2012, Grey Base Hospital reintroduced an epidural service (refer to Section 6 Maternity Quality Improvements)

Table 13. WCDHB rates of epidural analgesia

	Total number of births	Total number of women undergoing IOL (N)	Epidural analgesia rate per Year (%)
2006	188	9	5%
2007	206	9	4%
2008	184	1	1%
2009	204	7	3%
2010	209	0	0%
2011	207	0	0%

Mode of Birth

The total caesarean section rate at Grey Base Hospital for 2011 was 26.5% (n=75), of these caesarean sections 30 were elective and 45 were emergencies.

Table 14. WCHDB mode of birth*, 2011

	N=283	%
Spontaneous	**188**	**66.4**
Instrumental vaginal birth	**20**	**7.1**
Forceps	5	1.8
Ventouse/Kiwicup	15	5.3
Caesarean section	**75**	**26.5**
Elective CS	30	10.6
Emergency CS	45	16.0

Note * Data presented for Grey Base Hospital only.

Breastfeeding

Eighty-five percent of babies (n=263) were discharged from WCDHB exclusively breastfeeding, exceeding BFHI audit standards and UNICEF/WHO global criteria of 75% exclusive breastfeeding rate at discharge from maternity facilities.

5 Maternity Clinical Indicators

CDHB and WCDHB contribute maternity data on an annual basis to the Ministry of Health's New Zealand Maternity Clinical Indicators (Appendix 6). These maternity clinical indicators are benchmarked against each DHB and individual secondary/tertiary maternity facility to show key maternity outcomes. CDHB and WCDHB have analysed these Maternity Clinical Indicators for 2011 and 2010 to drive quality improvement initiatives.

Indicator 1: Spontaneous vaginal births among standard primiparae

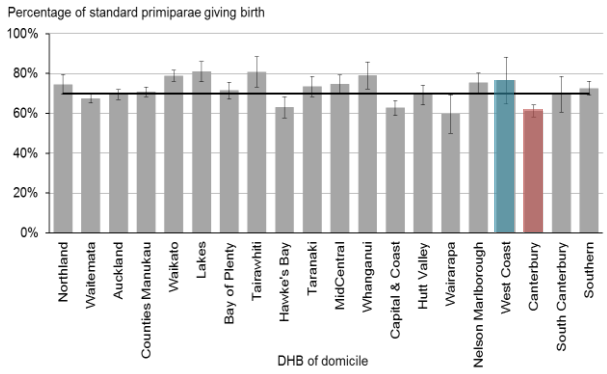


Figure 16. Percentage of spontaneous vaginal births among standard primiparae by DHB of domicile, 2011

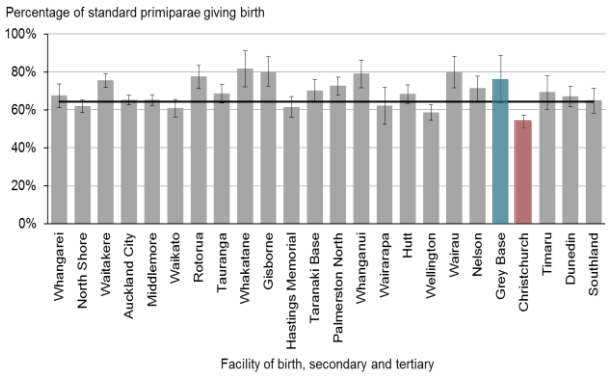


Figure 17. Percentage of spontaneous vaginal births among standard primiparae by facility of birth (secondary and tertiary facilities), 2011

The national average rate for spontaneous vaginal births among standard primiparae in 2011 was 70.1%, a rate consistent with that of 2010 (70.0%). As can be seen in Figure 16, CDHB was 8.9% below this national average at 61.2%. This spontaneous birth rate has dropped a further 1.6% since 2010 (62.8%). This is an area for further investigation with strategies in place to reduce the caesarean rate and increase the spontaneous birth rate (refer to Section 6 Maternity Quality Improvements). WCDHB in 2011 had a spontaneous vaginal birth rate for standard primiparae of 76.5%, 6.4% above the national average. However, this rate has decreased 5.0% from 2010 (81.5%) and requires investigation.

Indicator 2: Instrumental vaginal birth among standard primiparae

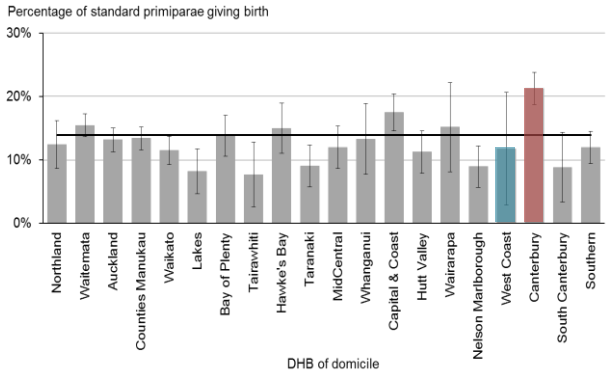


Figure 18. Percentage of instrumental vaginal births among standard primiparae by DHB of domicile, 2011

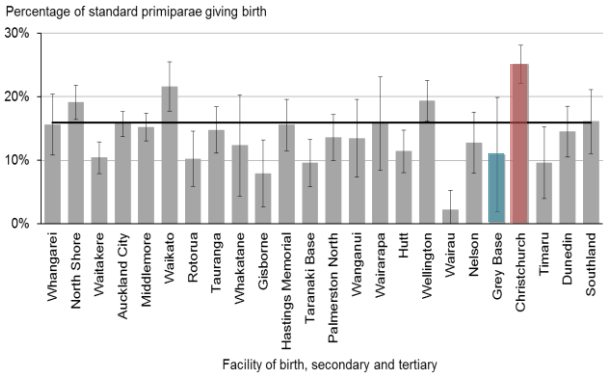


Figure 19. Percentage of instrumental vaginal birth among standard primiparae by facility of birth (secondary and tertiary facilities), 2011

The national average rate for instrumental vaginal births among standard primiparae in 2011 was 13.9% and in 2010 was 13.7%. Figure 18 shows that CDHB had a rate of 21.3%, 7.4 % higher than the national average. This rate has remained consistent with that of 2010 (21.9%). When benchmarked against all other DHBs, CDHB has the highest instrumental vaginal birth rate among standard primiparae and requires investigation. WCDCHB in 2011 had a rate of 11.8%, 2.1% below the national average. This rate has, however, increased 4.1% since 2010 (7.7%) and requires further investigation.

Indicator 3: Caesarean section among standard primiparae

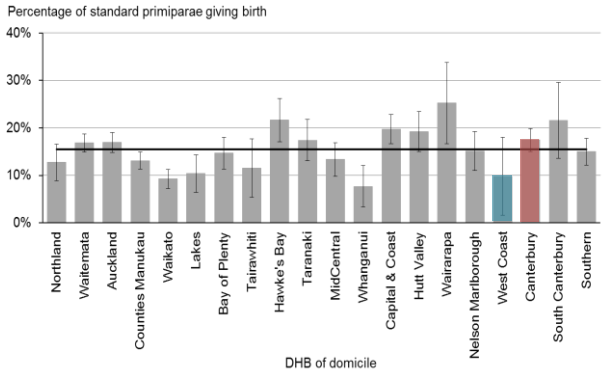


Figure 20. Percentage of caesarean section births among standard primiparae by DHB of domicile, 2011

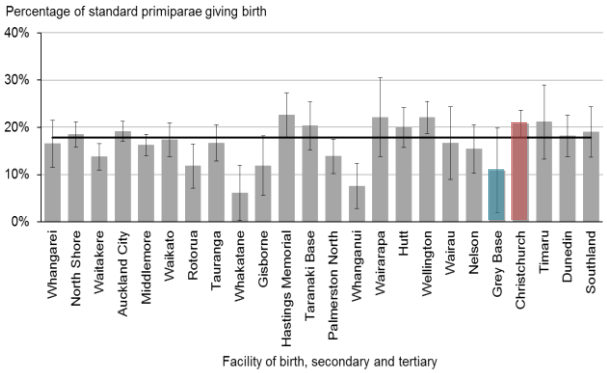


Figure 21. Percentage of caesarean section births among standard primiparae by facility of birth (secondary and tertiary facilities), 2011

The national average caesarean section rate among standard primiparae in 2011 was 15.5% and 15.4% in 2010. Figure 20 demonstrates that CDHB's caesarean section rate was 17.5%, 2% above the national average. This was a 2.7% rise from the previous year (14.8%). This higher than national average, coupled with an increase in rate requires further investigation. WCDHB in 2011 had a caesarean section rate among standard primiparae of 9.8%, 5.7% below the national average and a decrease of 1% from 2010 (10.8%). As indicated in Figure 20, this strength is only apparent in two other DHBs.

Indicator 4: Induction of labour among standard primiparae

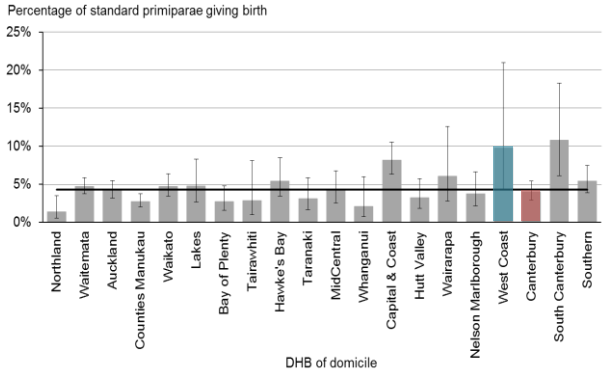


Figure 22. Percentage of induction of labour among standard primiparae by DHB of domicile, 2011

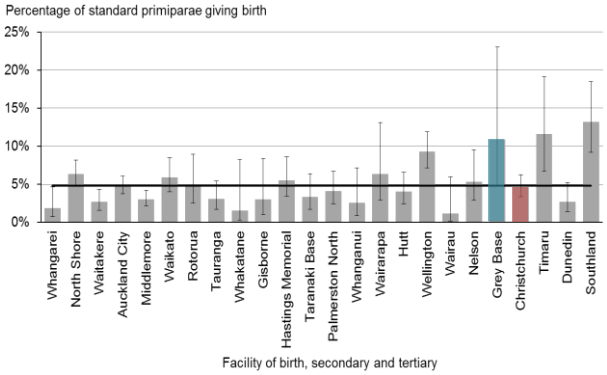


Figure 23. Percentage of induction of labour among standard primiparae by facility of birth (secondary and tertiary facilities), 2011

The national average rate for induction of labour among standard primiparae in 2011 was 4.3% and 4.0% in 2010. CDHB has maintained a consistent induction of labour rate for the last two years (4.0% in 2011, and 4.3% on 2010) with that of the national average. Figure 22 identifies that WCDHB had a rate more than double that of the national average (9.8%). Further, this is a two-fold increase from 2010 (4.6%) and requires investigation.

Indicator 5: Intact lower genital tract among standard primiparae giving birth vaginally

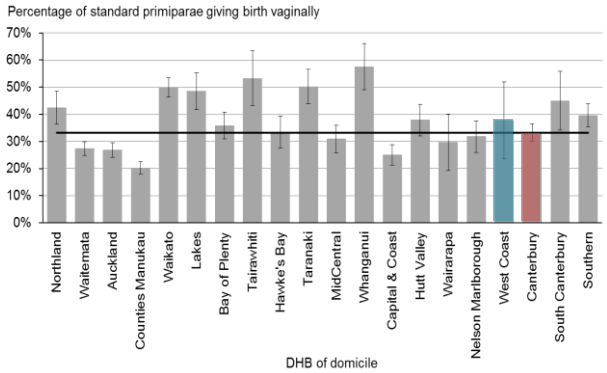


Figure 24. Percentage of standard primiparae giving birth vaginally with an intact lower genital tract by DHB of domicile, 2011

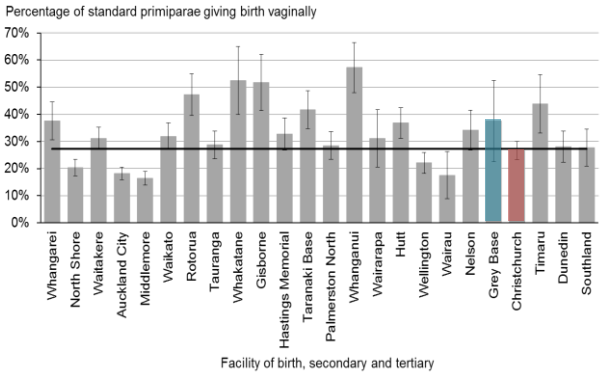


Figure 25. Percentage of standard primiparae giving birth vaginally with an intact lower genital tract by facility of birth (secondary and tertiary facilities), 2011

In 2011 the national average rate for intact lower genital tract among standard primiparae giving birth vaginally was 33.1% and in 2010 was 34.8%. As illustrated in Figure 24, CDHB had a rate of 33.3%, consistent with that of the national average. This rate was an increase of 1.5% since 2010 (31.8%). WCDHB in 2011 had a rate of 37.8%, 4.7% higher than the average. However, this rate has decreased 8.8% from 2010 (46.6%) and requires investigation.

Indicator 6: Episiotomy and no third- or fourth- degree tear among standard primiparae giving birth vaginally

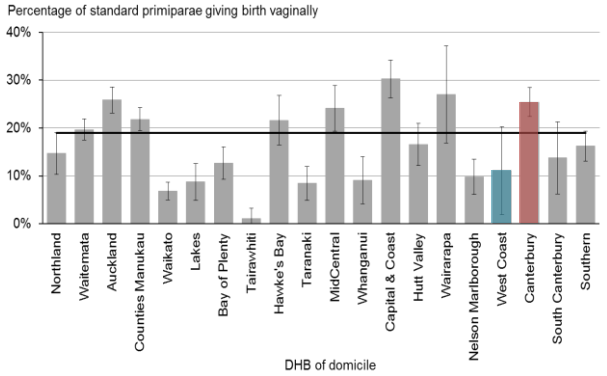


Figure 26. Percentage of standard primiparae giving birth vaginally and undergoing episiotomy without mention of third- or fourth- degree tear by DHB of domicile, 2011

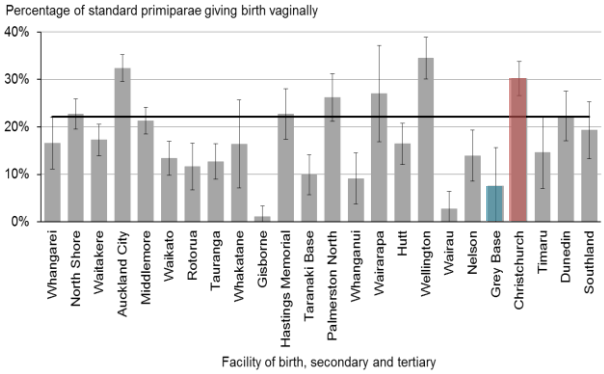


Figure 27. Percentage of standard primiparae giving birth vaginally and undergoing episiotomy without mention of third- or fourth- degree tear by facility of birth (secondary and tertiary facilities), 2011

In 2011, the national average rate for episiotomy without a third or fourth-degree tear among standard primiparae giving birth vaginally was 19.0% and in 2010 was 19.2%. Figure 26 demonstrates that CDHB had an episiotomy rate among standard primiparae of 25.4%, 6.4% higher than the national average. This rate is similar to that of 2010 at 24.9% and requires investigation. WCDHB in 2011 had a rate of 11.1%, 7.9% below the national average. This rate has improved a further 2.7% from 2010 (13.8%).

Indicator 7: Third- or fourth- degree tear and no episiotomy among standard primiparae giving birth vaginally

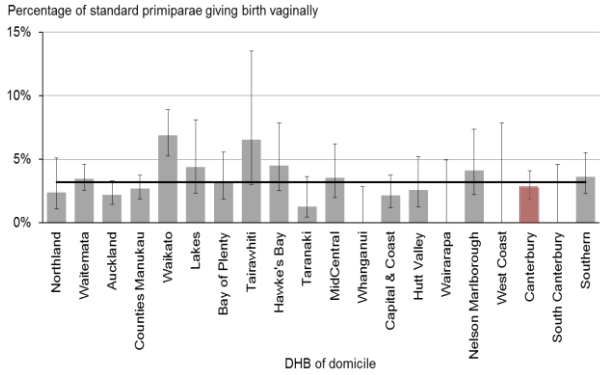


Figure 28. Percentage of standard primiparae giving birth vaginally sustaining a third- or fourth- degree tear and not undergoing episiotomy by DHB of domicile, 2011

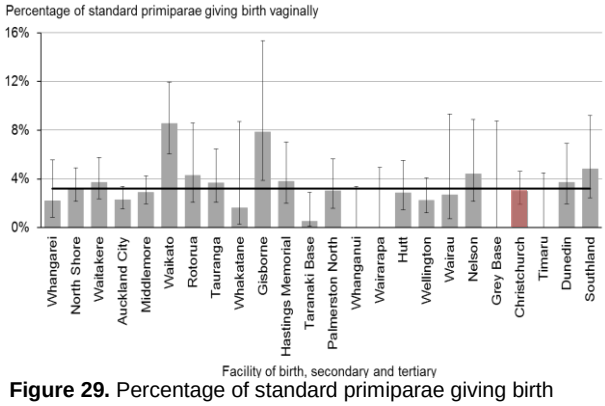


Figure 29. Percentage of standard primiparae giving birth vaginally sustaining a third- or fourth- degree tear and not undergoing episiotomy by facility of birth (secondary and tertiary facilities), 2011

In 2011, the national average for third or fourth degree tears without episiotomy among standard primiparae giving birth vaginally was 3.2% and in 2010 was 3.1%. Figure 28 shows that CDHB is marginally below this national average by 0.5% and remains consistent with that of 2010 (2.5%). No data is available for WCDHB to undertake a comparison for this clinical indicator.

Indicator 8: Episiotomy and third- or fourth- degree tear among standard primiparae giving birth vaginally

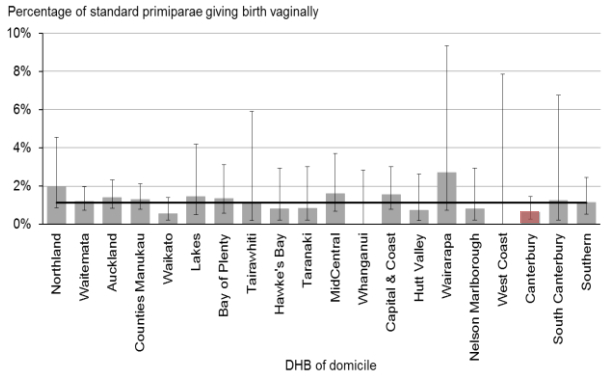


Figure 30. Percentage of standard primiparae giving birth vaginally undergoing episiotomy and sustaining a third- or fourth- degree tear by DHB of domicile, 2011

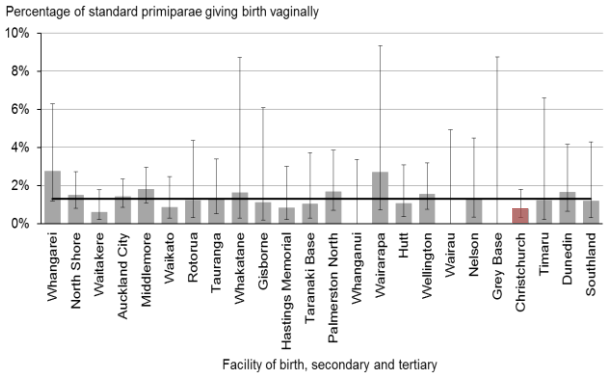


Figure 31. Percentage of standard primiparae giving birth vaginally undergoing episiotomy and sustaining a third- or fourth- degree tear by facility of birth (secondary and tertiary facilities), 2011

In 2011 the national average rate of episiotomy and third or fourth degree tears among standard primiparae giving birth vaginally was 1.1% consistent with that of 2010 at 1.0%. Figure 30 illustrates that CDHB in 2011 had a rate of 0.6%, 0.5% less than the national average. This rate has decreased 0.5% from that of 2010 (1.1%). No data is available for WCDHB for 2011 or 2010 to provide any comparisons for this clinical indicator.

Indicator 9: General anaesthetic for women giving birth by caesarean section

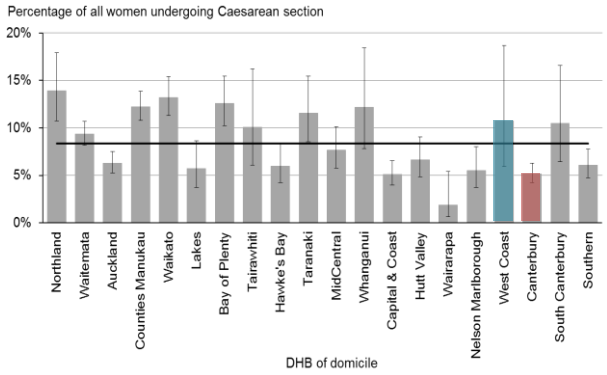


Figure 32. Percentage of women undergoing caesarean section under general anaesthetic by DHB of domicile, 2011

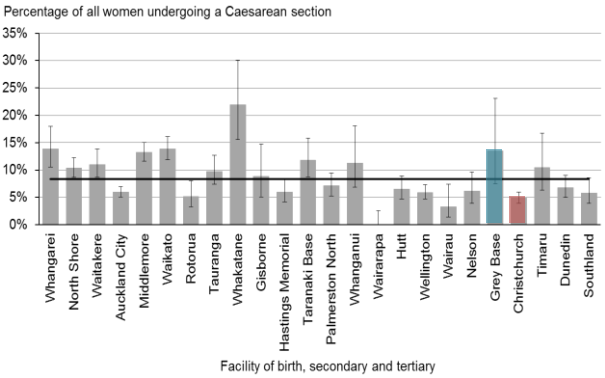


Figure 33. Percentage of women undergoing a caesarean section under general anaesthetic by facility of birth (secondary and tertiary facilities), 2011

In 2011, the national average rate of general anaesthetic for women giving birth by caesarean section was 8.4% and in 2010 was 9.1%. Figure 32 demonstrates that CDHB had a rate of general anaesthetic for women giving birth by caesarean section of 5.2%, consistent with that of 2010 (5.1%). This rate was 3.2% lower than the national average. WCDHB in 2011 had a rate of 10.8%, 2.4% higher than the national average and 1.6% higher than 2010 (9.2%). This is an area for further investigation and strategies have been put in place to provide women with an epidural service (refer to Section 6 Maternity Quality Improvements).

Indicator 10: Blood transfusion during birth admission for caesarean section delivery

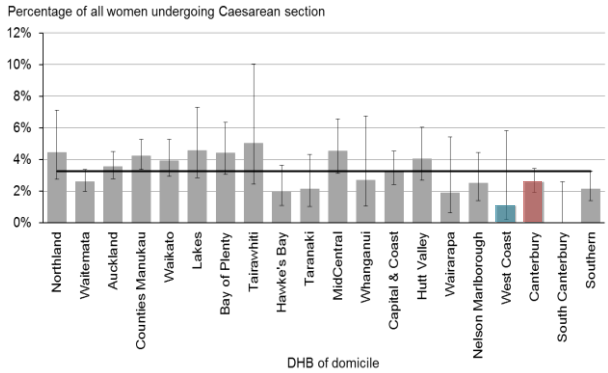


Figure 34. Percentage of women giving birth by caesarean section and undergoing blood transfusion during birth admission by DHB of domicile, 2011

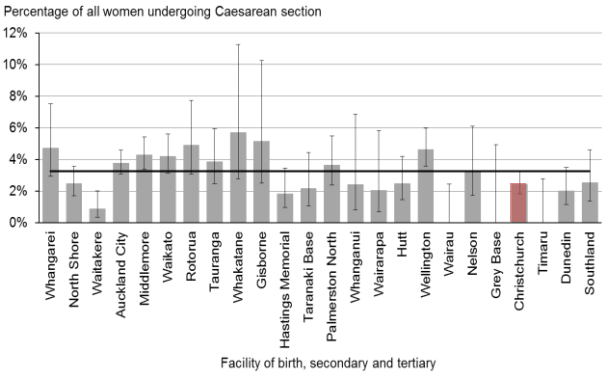


Figure 35. Percentage of women giving birth by caesarean section and undergoing blood transfusion during birth admission by facility of birth (secondary and tertiary facilities), 2011

In 2011 the national average rate for blood transfusion during birth admission for caesarean section delivery was 3.3%, consistent with that of 2010. Figure 34 shows that in 2011, CDHB had a rate of 2.6%, 0.7% lower than the national average and consistent with that of 2010 (2.2%). The blood transfusion during birth admission for caesarean section deliver rate for WCDHB in 2011 was 1.1%, half that of the previous year (2.3%). This rate was 2.2% below the national average and the lowest of all of the DHBs that provided data.

Indicator 11: Blood transfusion during birth admission for vaginal birth

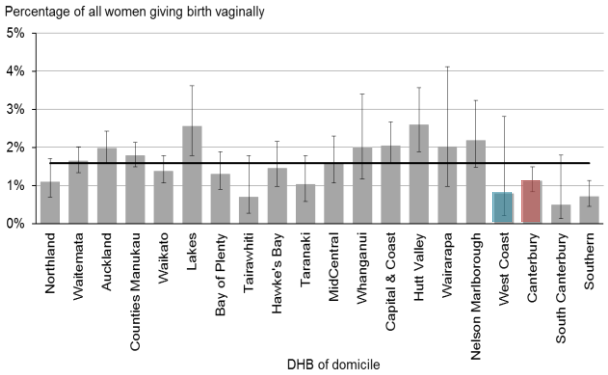


Figure 36. Percentage of women giving birth vaginally and undergoing blood transfusion during birth admission by DHB of domicile, 2011

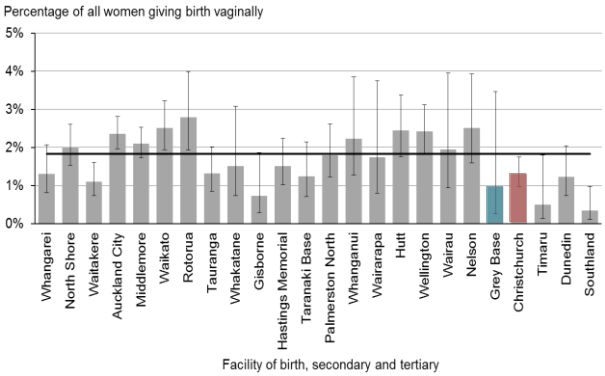


Figure 37. Percentage of women giving birth vaginally and undergoing blood transfusion during birth admission by facility of birth (secondary and tertiary facilities), 2011

In 2011, the national average rate for blood transfusion during birth admission for vaginal birth was 1.6%, consistent with that of 2010. Figure 36 demonstrates that in 2011, CDHB had a rate of 1.1%, 0.5% lower that the national average and a decrease of 0.6% since 2010 (1.7%). For the same year, WCDHB had a rate of 0.8%, half that of the national average.

Indicator 12: Premature birth (at 32-36 weeks gestation)

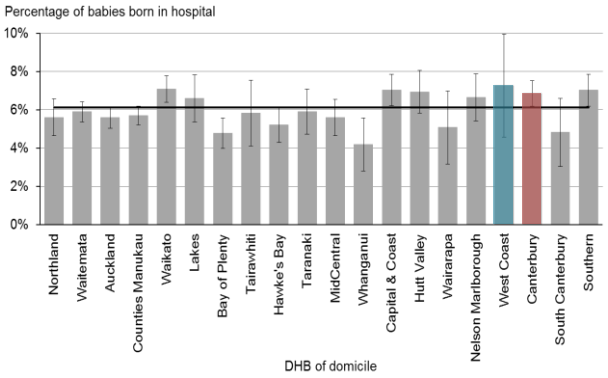


Figure 38. Percentage of premature births by DHB of domicile, 2011

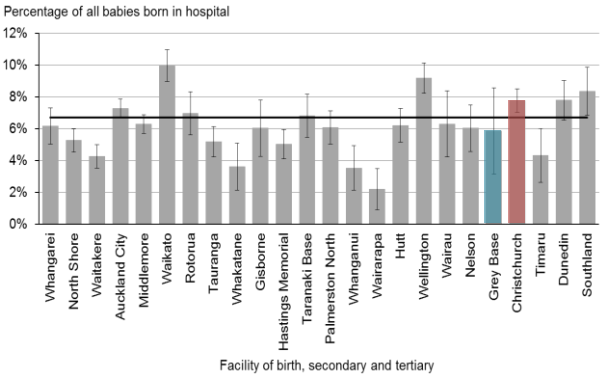


Figure 39. Percentage of premature births by facility of birth (secondary and tertiary facilities), 2011

In 2011, the national rate for premature births (32-36 weeks) was 6.1%, 0.3% higher than the previous year. Figure 38 illustrates that CDHB had a rate of premature birth of 6.9%, consistent with the national average and that of 2010 (6.4%). WCDHB in 2011 had a rate of 7.3%, 1.2% above the national average. Although 1.4% lower than the 2010 (8.7%), this requires further investigation.

Table 15 provides a snapshot of the strengths and areas for improvement for both CDHB and WCDHB for each of the twelve Maternity Clinical Indicators.

Table 15. CDHB and WCDHB Maternity Clinical Indicator strengths and areas for improvement

	Indicator	CDHB	WCDHB
Type of Birth			
1	Spontaneous vaginal births among standard primiparae	ⓘ	★
2	Instrumental vaginal births among standard primiparae	ⓘ	★ⓘ
3	Rate of caesarean section among standard primiparae	ⓘ	★
4	Induction of labour among standard primiparae	★	ⓘ
Degree of damage to lower genital tract			
5	Intact lower genital tract among standard primiparae giving birth vaginally	★	★ⓘ
6	Episiotomy and no tear among standard primiparae giving birth vaginally	ⓘ	★
7	Third or fourth degree tear and no episiotomy among standard primiparae giving birth vaginally	★	N/A
8	Episiotomy and third or fourth degree tear among standard primiparae giving birth vaginally	★	N/A
General Anaesthetic			
9	Rate of general anaesthetic for women giving birth by caesarean section	★	ⓘ
Blood transfusion			
10	Rate of blood transfusion during birth admission for caesarean section delivery	★	★
11	Rate of blood transfusion during birth admission for vaginal birth	★	★
Premature birth			
12	Rate of premature birth	★	ⓘ

Key: ★ Strengths
ⓘ Areas for improvement
★ⓘ National average met but further investigation is required

6 Maternity Quality Improvements 2012/13

Canterbury District Health Board
Women's and Children's Health

Clinical Indicator Quality Improvements

When comparing CDHB's 2011 caesarean section rate against the New Zealand Maternity Clinical Indicators for the standard primiparae it has been identified that CDHB's caesarean section rate is 2% higher than that of the national average. As such, Women's and Children's Health have been developing strategies under the auspices of the clinical governance model to actively reduce this caesarean section rate.

CWH is currently the only maternity facility in Canterbury to provide secondary/tertiary care and is also the main referral centre for the South Island. Further, CWH is the only facility in Canterbury providing operative support i.e. caesarean sections. Coupled with this CWH is a referral facility and by nature of receiving high risk cases from other DHBs attracts a higher intervention rate.

Vaginal Birth after Caesarean Section

In November 2011, CWH embarked on a project following the national health round table meeting "To design, implement, establish and audit a midwifery-led early intervention vaginal birth after caesarean section (VBAC) clinic. The overall aims of this project are to reduce the caesarean rate and increase the VBAC rate.

Since this time, a CDHB wide guideline has been developed for VBAC with input from the multidisciplinary team, NZCOM and the WCDHB. A triage system has been developed following referral from the primary setting, i.e. GP or LMC and a weekly outpatient VBAC clinic facilitated by two senior medical officers and a midwife commenced in May 2013.

Further work is in progress to develop electronic health pathways for primary care and a patient information leaflet. Canterbury DHB will also have VBAC portfolios for the clinical co-ordinators on the Maternity Ward counselling women post-caesarean section.

Review of Emergency Caesarean Sections

In April 2012, Professor David Elwood, the Professor of Obstetrics and Gynaecology at the Australian National University Medical School, Associate Dean of the Canberra Clinical School and a senior specialist at the Canberra Hospital, was invited to present information on the Clinical Indicators Women's Hospitals Australasia, at the Department of Obstetrics and Gynaecology rolling half day seminar series. Operating theatre lists and clinic appointments were postponed to provide the opportunity for as many doctors and midwives as possible to attend. Professor Elwood identified the importance of maternal age, parity, ethnicity and deprivation on intervention rates. One strategy discussed to address the caesarean section rate was conducting weekly review meetings of caesarean sections.

These weekly meetings were commenced in August 2012 to review recent emergency caesarean sections (with the exception of private cases). Senior medical officers and obstetric registrars review the clinical records of women who had an emergency caesarean section within the preceding week. Information such as demographics, labour progress, cardiotocograph monitoring, fetal blood sampling, neonatal outcome and indication for caesarean section is collected and maintained on a database to enable further auditing to be conducted. It is intended that this weekly meeting will be extended to include midwives and other members of the multidisciplinary team.

Other Quality Initiatives

Root Cause Analysis Review Recommendations

Classification and Communication for Caesarean Section Guideline

In December 2011 a multi-disciplinary working group was set up to develop the Classification and Communication for Caesarean Section Guideline as a result of root cause analysis recommendations. These recommendations centred around suboptimal communication regarding the urgency with which a caesarean section should be performed and notifying neonatologists after hours that their attendance was required for emergency caesarean sections.

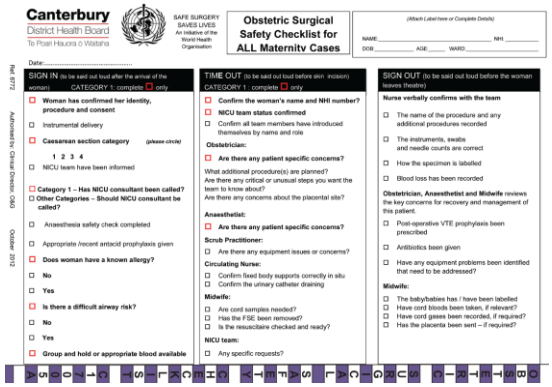
The purpose of developing the guideline was to outline the principles of multi-disciplinary communication in Birthing Suite, the procedure for categorising caesarean sections into an appropriate spectrum of urgency and the recommended procedure for each category in CWH.

As part of this work an Obstetric Surgical Safety Checklist, adapted from the WHO Surgical Safety Checklist for Maternity Cases Only (National Patient Safety Agency, 2010), was formulated. This Obstetric Surgical Safety Checklist identifies the criteria to be completed for Category 1 caesarean sections and the notification of the neonatologist.

A need for an 'obstetric emergency team' was recognised and established. Posters were developed to explain the emergency call system and emergency team composition and were placed in integral locations in the clinical areas. Criteria for neonatal team attendance at caesarean section was determined and included as an appendix to the guideline. Signage for use in operating theatre was made to identify to all staff the category of caesarean section being performed.

Fifteen minute education sessions were presented to midwives, obstetricians, theatre and PACU nurses, anaesthetic department and neonatal intensive care unit staff by 28 champions in each clinical area in preparation for implementation of the guideline on 10 December 2012. These sessions covered the classification of urgency of caesarean sections, CWH emergency call system, the Obstetric Surgical Safety Checklist and teamwork. A register was maintained identifying that approximately 400 staff received training. Information was also circulated to community based lead maternity carers and other health professionals working within Women's and Children's Health.

The material output from the working group was a completed guideline, a new surgical safety checklist specifically relevant to obstetrics, the formation of a new obstetric emergency team, clear criteria for attendance of the neonatal team and operating theatre signage.



Further positive impacts resulting from undertaking this series of work was the multidisciplinary collaboration and relationship building that occurred during the process. The engagement of staff who volunteered to be champions and the staff from a variety of disciplines who attended education sessions was encouraging and anecdotal evidence so far suggests that the language culture around caesarean sections has changed rapidly as a result.

Auditing is currently underway to be able to quantify the impact that the introduction of this guideline has had. Auditing of the Obstetric Surgical Safety Checklist commenced in February 2013 as part of the CDHB Auditing Programme on the WHO Surgical Safety Checklist. An audit is also currently being undertaken on the decision to delivery time to determine if the allocation of a category is impacting the speed with which the caesarean section is being performed. Continuous improvement forms have been widely distributed amongst staff for feedback and have been utilised effectively.

On-Call Neonatologist Call System

A system was developed to ensure that the on-call Neonatologist is informed when a decision is made to perform an urgent caesarean section where there is immediate threat to the life of the fetus (i.e. Category 1 caesarean section). The expected impact of implementing this system is that the most senior member of the neonatal team is present at the birth of babies who are expected to need the greatest assistance. An audit is planned to quantify the effectiveness of this change.

Obstetric Theatre Communication

Speaker phones were installed into both Obstetric Theatres, close to the resuscitaires, to enable easier, 'hands-free' communication between the team performing neonatal resuscitation and staff in other locations. Previously the circulating nurse in theatre would have to relay messages between the staff at the resuscitaire and staff on the phone. The benefit of this system is that neonatal staff can share and receive information directly from their colleagues; it improves access to the information source, increases the timeliness of the information transfer and enhances the safety systems in place to achieve the best outcomes for babies.

Instrumental Delivery Training

A regular in-house training programme on instrumental delivery for all obstetric medical staff was established to ensure staff were practising in line with the latest best evidence. These training sessions are intended to increase the skills of the junior medical staff and to ultimately improve safety and outcomes of instrumental deliveries.

Cardiotocograph Sticker

The cardiotocograph (CTG) sticker tool was modified to fit the RANZCOG guidelines as well as amended to enable it to be used by obstetric medical staff whenever a CTG is reviewed to assist in determining the overall assessment of the CTG and prompt the subsequent action required. The Fetal Monitoring Guideline was also amended in line with the changes to the sticker tool. The intended impact is that the use of the CTG stickers will become widespread amongst both midwives and medical staff, that assessment of CTGs will be more thorough and that the sticker template will prompt the formulation of an overall impression of each CTG and a documented plan. This is ultimately intended to improve the decision making around timing and method of delivery and the outcomes for babies.

Fetal Monitoring Training Package

Completion of the fetal monitoring training package and other regular fetal monitoring training has become mandatory for all obstetric medical staff. The intention of this is to ensure regular updating of skills in interpreting CTGs so that problems with the fetal heart rate can be correctly identified and a plan for ongoing monitoring or action made. The expected impact is of improved birth outcomes for babies.

Perinatal and Maternal Mortality Review Committee

Perinatal Review Meetings

Perinatal and Maternal Mortality Review Committee (PMMRC) meetings are held monthly and include maternity hospital practitioners and community LMCs. The Perinatal Mortality Meeting report, a summary of the case is prepared for the meeting. This report includes past medical history, obstetric history, present pregnancy, antenatal, labour and delivery and information on the baby and investigation results are completed.

At the PMMRC meetings a plan for next pregnancy is formulated. The death is coded by the PMMRC following this meeting. Copies of the completed report are filed in the woman's notes and sent to National PMMRC committee. A copy is also sent to the LMC to improve communication between practitioners for this

pregnancy and future pregnancies. LMCs have provided positive feedback identifying how helpful this information has been, and completes the process of the review. These PMMRC meetings are also streamed to the West Coast and an opportunity is made available for WCDHB to present their cases through this forum.

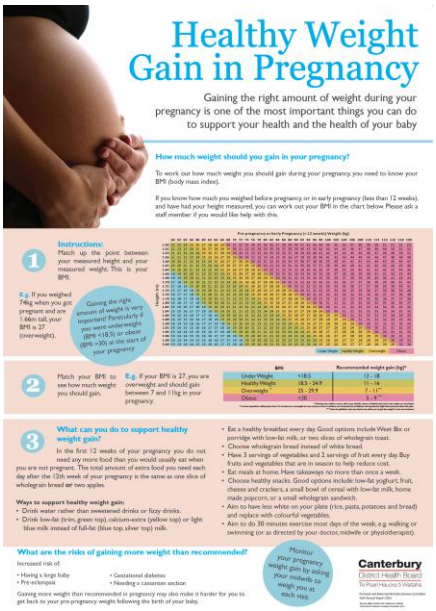
Education Workshops

The CDHB PMMRC Co-ordinator also facilitates an annual eight hour multidiscipline workshop entitled 'When a baby dies" in Christchurch. In 2013 these education days were also held for staff on the West Coast. Topics covered include: legal definitions, documentation, investigation and communication.

Clarification for other staff in the Emergency Department and Gynaecology ward is also undertaken regarding the legal requirements for live born babies under 20 weeks. This has made an impact on consumer satisfaction and assisted with their grief process as staff are well informed and able to advise women about the legal requirements.

Healthy Weight Gain in Pregnancy

The Sixth Annual Report from the Perinatal and Maternal Mortality Review Committee recommended that all pregnant women should be given an indication of their ideal weight gain in pregnancy according to their Body Mass Index (BMI). In response to this recommendation a CDHB dietician and the PMMRC Co-ordinator developed a poster entitled "Healthy Weight Gain in Pregnancy". This poster displayed in the antenatal clinic at CWH guides women to finding their BMI and their ideal weight gain according to the internationally recognised 2009 Institute of Medicine weight gain in pregnancy guideline.



Pregnant women are provided with a pamphlet to take home which women can records their BMI, expected weight gain and track their weight throughout the pregnancy. The reverse side includes supporting information on healthy eating and exercise in pregnancy. These posters and pamphlets have been distributed to all CDHB and West Coast maternity units and LMCs. Initial feedback from LMCs and women have been overwhelmingly positive. A formal review is planned after six months.

Improvements to the Garden Room

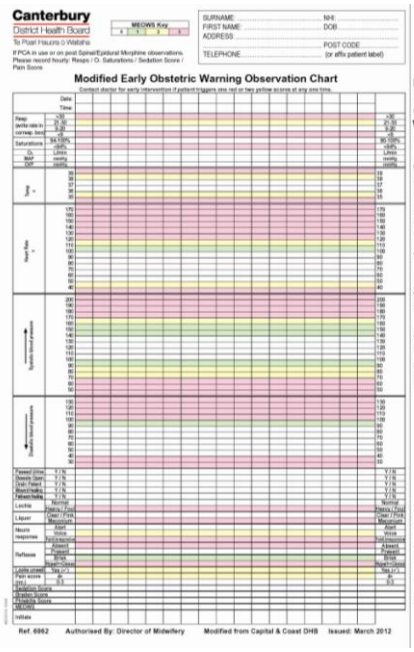
A multidisciplinary review of the Garden Room (a birthing room set up for women experiencing fetal loss) and its functioning on Birthing Suite was conducted in 2012. A project co-ordinated by one of the midwives on Birthing Suite with representatives from Stillbirth and Neonatal Death Society (SANDS), Māori health workers, social workers the Chaplain and midwives addressed the quality of the facilities in the Garden Room and how the needs of women and their families using the Garden Room could be accommodated.

With the financial support from the volunteers of the hospital, an upgrade of the facilities in the room included: designated table and chairs area, purchase of a flat screen TV, recovering the window seat and providing scatter cushions to enable increased seating area and the sleeping area to be more user friendly, and replacing the duvet set.

SANDS have provided a resource folder for families to read on services and supports when experiencing a loss. Birthing Suite have also purchased the improved quality SANDS heel print cards which eliminates the need to use ink on the babies' feet when making memory foot and hand prints. In December 2012, there was the introduction of an improvement of care questionnaire. This is sent postnatally to all women who have experienced the death of their baby.

Modified Early Obstetric Warning Score Chart

The Modified Early Obstetric Warning Score (MEOWS) chart was introduced in October 2011. This MEOWS chart was designed to assist in the early recognition and management of a clinically deteriorating woman.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Te Poari Hauora o Waitaha

Modified Early Obstetric Warning Observation Chart

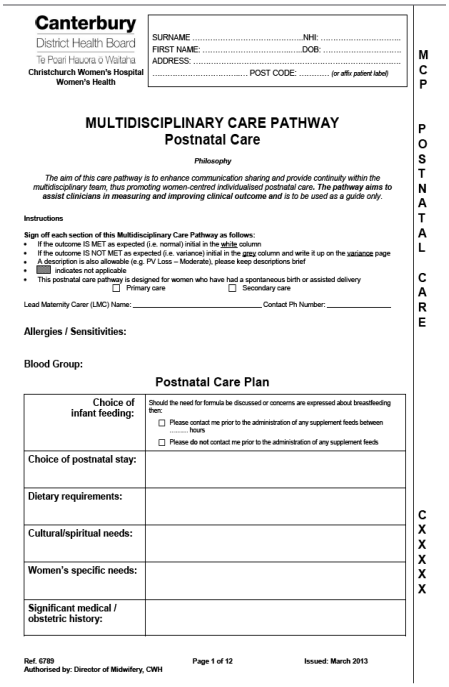
MEOWS OBSERVATION CHART

C280012

In early 2012, it was identified that the MEOWS chart needed to be amended to include the Braden score and the Braden scale risk assessment tool. All midwifery staff were required to complete the online Braden scale for predicting pressure sore risk teaching package, and the revised MEOWS chart was issued in March 2012. This MEOWS chart, which also includes vital observations and obstetric specific observations (such as blood loss, reflexes, liquor, lochia, wound and perineum healing, and urine output) is completed on all women receiving inpatient antenatal and postnatal care to ensure safe and high quality care. The Acute Observation Chart for Maternity was also updated in July 2012 to incorporate the MEOWS chart and the CDHB adult fluid balance chart.

Multidisciplinary Postnatal Care Pathway

CDHB's Care Planning and Clinical Pathways for Patients/Consumers Policy (2012) states that "within 24 hours of admission to a service/unit, every patient/consumer will either be placed on an approved clinical pathway or have a plan of care developed". In response to this requirement and Health and Disability Services Standards (NZS 8134:2008) the Multidisciplinary Postnatal Care Pathway (Secondary Care) was developed in June 2012 for women who have had spontaneous vaginal births and instrumental deliveries and who were receiving secondary care.


Canterbury District Health Board
Te Poari Hauora o Waitaha
Christchurch Women's Hospital
Women's Health

SURNAME: ..... NHI: .....
FIRST NAME: ..... DOB: .....
ADDRESS: .....
..... POST CODE: ..... (or affix patient label)

MULTIDISCIPLINARY CARE PATHWAY
Postnatal Care

Philosophy

The aim of this care pathway is to enhance communication sharing and provide continuity within the multidisciplinary team, thus promoting women-centred individualised postnatal care. The pathway aims to assist clinicians in measuring and improving clinical outcome and is to be used as a guide only.

Instructions

Sign off each section of this Multidisciplinary Care Pathway as follows:
- If the outcome IS MET as expected (i.e. normal) initial in the white column
- If the outcome IS NOT MET as expected (i.e. variance) initial in the grey column and write it up on the variance page
- A description is also allowable (e.g. PV Loss – Moderate), please keep descriptions brief
- ..... indicates not applicable
- This postnatal care pathway is designed for women who have had a spontaneous birth or assisted delivery
  ☐ Primary care ☐ Secondary care

Lead Maternity Carer (LMC) Name: _____ Contact Ph Number: _____

Allergies / Sensitivities:

Blood Group:

Postnatal Care Plan

Choice of infant feeding:	Should the need for formula be discussed or concerns are expressed about breastfeeding then: ☐ Please contact me prior to the administration of any supplement feeds between ..... hours ☐ Please do not contact me prior to the administration of any supplement feeds
Choice of postnatal stay:	
Dietary requirements:	
Cultural/spiritual needs:	
Women's specific needs:	
Significant medical / obstetric history:	

Ref. 6789
Authorised by: Director of Midwifery, CWH
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Issued: March 2013

MCP POSTNATAL CARE CXXXXX

The aim of this care pathway is to enhance communication sharing and provide continuity within the multidisciplinary team, thus promoting women centred individualised postnatal care. Further, the pathway aims to assist clinicians in measuring and improving clinical outcome. This care provides the opportunity for clinicians to sign if the expected outcomes have been met, develop a care plan when variances have been identified, and document further care provision on the clinical note pages. This pathway was trialled for a two-month time period with feedback books provided on the maternity ward and in the primary birthing units for health care providers to provide constructive comments and make any necessary amendments.

A Postnatal Care Plan (Primary Care) was further developed in November 2012 with feedback sought from members of the NZCOM Canterbury West Coast Region. It was then determined at the November 2012 Maternity Clinical Governance Committee meeting that the Postnatal Care Plan (Primary Care) and the Multidisciplinary Postnatal Care Pathway (Secondary Care) could be combined into one Multidisciplinary Postnatal Care Pathway. A working group was set up comprising NZCOM Canterbury West Coast Region Chairs, The Director of Midwifery, Quality Co-ordinator Maternity, a core midwife and the Charge Midwife Manager Maternity. The Multidisciplinary Postnatal Care Pathway was then endorsed by NZCOM Canterbury West Coast Region at its March meeting and approved by the Maternity Clinical Governance Committee on 12 March 2013. The Multidisciplinary Postnatal Care Pathway was launched in May 2013 and is utilised by all CDHB maternity facilities. Once this postnatal care pathway has been embedded in practice it will be audited and further improvements made.

Clinical Records Accompanying Women Transferring to St George's Hospital for Postnatal Care

To support informed and co-ordinated decision making and care provision, on Monday 20 August 2012 a process was developed whereby women transferring from CWH to St George's Hospital for postnatal care would take their clinical records with them. This brings the process for transfer to St George's Hospital in line with what currently occurs when a woman and baby transfer to the CDHB run primary birthing facilities for postnatal care.

Health Pathway Management of Postpartum Women with Hypertension in the Community

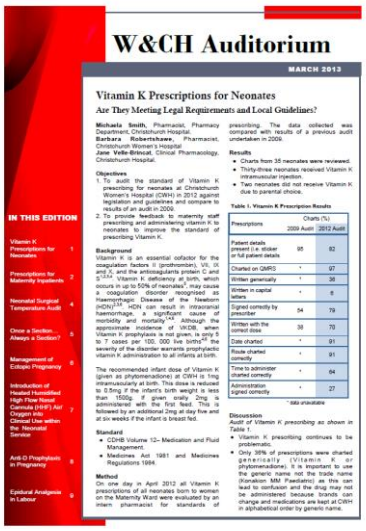
It was identified through the incident review process that a number of women were returning to CWH postnatally for blood pressure monitoring. This was unsatisfactory for the women, time consuming for hospital staff, and clinical records and plans of care were not always available.

The issue was escalated to the Maternity Clinical Governance Committee. A letter was written to the Canterbury Initiative Group and the NZCOM representative on the Maternity Clinical Governance Committee presented the issue at a Canterbury Initiative Group meeting in April 2012. Planning and funding, the GP Liaison and the NZCOM representative then worked on developing a health pathway for the follow up of women who remain hypertensive in the postpartum period and require ongoing regular monitoring for many weeks.

Implementation of this Health Pathway in August 2012 has led to a smooth transition between LMC care and GP care with the care remaining in the community. The pathway also provides clarity on how to access funding for those providing this care in the community and advises when referral to the hospital may be necessary.

Clinical Audits

In late 2011, the Safety and Quality Team, Women's and Children's Health revised an already established process to support all obstetrics and gynaecology house officers to undertake a clinical audit during their rotation. The Clinical Director Obstetrics and Gynaecology and the Quality Co-ordinators of Gynaecology and Maternity meet with house officers at the commencement of their rotations, provide the house officers with education on clinical audits and present them with a range of audit topics determined by the needs of the service. Each house officer is supported by a senior medical officer and the quality co-ordinators to develop, gain approval and conduct their clinical audits. On completion the house officers present their findings and recommendations to medical and midwifery staff and publish their audits in the W&CH Auditorium, a quarterly publication circulated to all staff in the Women's and Children's Health and LMCs. Since this process was revised, 100% of house officers have completed and presented their clinical audits.


W&CH Auditorium

MARCH 2013

Vitamin K Prescriptions for Neonates

Are They Meeting Legal Requirements and Local Guidelines?

IN THIS EDITION


W&CH Auditorium

Safety & Quality Unit December 2012

Oxycodone- the Right Drug of Choice for Paediatric Surgical Patients?

IN THIS EDITION

Oxycodone- The Right Drug of Choice for Paediatric Surgical Patients?

Caesarean Section Performed at Full Dilatation

Management of Mastitis

Labelling in IV Therapy Practice- a Snapshot!

Induction of Labour

Second Trimester Induction of Labour


W&CH Auditorium

September 2012

Safety & Quality Unit

Surgical Safety Checklist

In this edition:

Surgical Safety Checklist

Curosurf Surfactant use in the Neonatal Intensive Care Unit

Coding of Women's Obstetric Records

Use of Cardiotocograph (CTG) Assessment Stickers in Obstetric Records

External Cephalic Version

Repair and Management of Third and Fourth Degree Perineal Tears

Primary Facility ID and Temp Audit

A Quality Forum entitled *Midwives Influencing Practice* was held on Wednesday 18 July 2012. This forum provided the opportunity for five midwives to present their clinical audits on a number of topics including: Assessing the Number of Women who would Qualify for Magnesium Sulphate for Neuro-Protection of the Fetus in Preterm Labour; External Cephalic Version; Audit of Protocol for Postpartum Iron Transfusion; Staff Awareness around Management of Perineal Injury; and Audit of Midwifery Time Spent in Caring for Women during the Peri-operative and Post Anaesthetic Period.

Over fifty health professionals (NICU staff, PACU staff, physiotherapists, LMC midwives and St George's Hospital) attended over the two-and-a-half hour time period and midwives video-conferenced in from Greymouth and Buller. Feedback received from this forum recommended scheduling further quality forums and incorporating some of the clinical audits undertaken by the house officers.

Midwifery Time Spent Caring for Women during the Peri-Operative and Post-Anaesthetic Period

Historically the roles of circulating and PACU nurses were provided by registered nurses for the booked elective caesarean sections held each weekday morning on Birthing Suite. Under the previous contract Operating Theatre and PACU provided a service based on 20 hours per week. In addition a scrub nurse was provided for both the elective and emergency caesarean list and any trials of instrumental delivery. For all emergency theatre and PACU work after 1200 hours, midwives took on both roles of circulating and PACU nurse. This occurred for a variety of procedures including: emergency caesarean section, trial of instrumental delivery, manual removal of placenta, extended perineal and third degree tear repair and exploration under anaesthetic e.g. for obstetric haemorrhage or post caesarean section complications.

In March 2012, an audit was conducted by a Birthing Suite core midwife to determine: the length of time midwives spend caring for women during the peri-operative period; the post anaesthetic period; and the total number of nurses and midwives involved in the care of women in the post anaesthetic period. Overall results indicated that the average midwifery hours spent in the peri-operative and post anaesthetic settings were; 1 hour 12 minutes and 2 hours 48 minutes respectively. In particular, the high overall average within the post anaesthetic setting (2 hours 48 minutes) was suggestive of a large portion of midwifery time devoted to this care setting. The findings from this clinical audit suggested reviewing the midwifery workplace within the theatre and recovery environment and recommendations were made to utilise theatre trained nurses for staffing of the Peri and Post Operative environments and revise the handover practices from Birthing Suite PACU to the Maternity Ward.

On July 7th 2012, the service structure for maternity operating theatres and PACU was changed following a consultation process. Registered nurses from Christchurch Hospital now provide 24 hours, seven days a week cover for the roles of circulating nurse, for all emergency procedures and a PACU nurse, for recovery. One midwife is responsible for the care of the baby in Operating Theatre.

Rationale for this restructure included, to:

- Provide consistent excellent care to all women undergoing procedures in operating theatres and their subsequent recovery post anaesthetic in PACU;
- Enhance clinical safety parameters;
- Staff the theatre and PACU area with RNs to ensure ongoing clinical skills are maintained and that the service is consistent with coverage from a pool of nurses with equivalent skills;
- Acknowledge the move of midwifery to direct entry midwives which has changed the professional skills profile and the clinical focus for midwives from that of a nursing model of care to one of a midwifery model of care;
- Allow midwives to carry out their core business caring for the midwifery needs of women on the birthing suite;
- Allows for long term improved services for the women of Canterbury and West Coast;
- Enable compliance in all areas with current best practice guidelines.

Training and support has been provided and utilised by staff in all areas with midwifery and Operating Theatre educators and senior nurses and midwives providing education. The charge managers from Operating Theatre, PACU and Birthing Suite meet at two weekly intervals to ensure open channels of communication and to manage arising issues in a timely manner. Continuous improvement forms were widely distributed amongst staff for feedback and have been utilised effectively. Many of the initial challenges associated with the change in structure have been addressed successfully in this manner. The most important benefit to come from the reorganisation has been the improved clinical safety in Operating Theatre and PACU. The RNs who provide nursing care in these areas are specialist nurses with appropriate training and experience to ensure skilled and evidence based care.

Discharge of the Woman and Baby from Birthing Suite PACU to the Maternity Ward

In response to the above recommendation to revise handover practices, a project was undertaken in September 2012 whereby the midwife from Maternity Ward collected the woman from Birthing Suite PACU and received handover directly from the PACU nurse and midwife.

The objectives of this quality improvement were to:

- Improve the core handover of the woman's care by receiving handover from both the PACU nurse and the midwife in Birthing Suite PACU;
- Provide an increased opportunity to troubleshoot any potential problems or concerns prior to the woman and her baby leaving PACU;
- Align Birthing Suite PACU/Maternity Ward with the PACU structures already in place across CDHB;
- Align the handover of care of the woman in Birthing Suite PACU with the change of staffing and practice in Birthing Suite PACU;
- Appropriately utilise the clinical workforce within specialised areas such as Birthing Suite PACU, and utilisation of the midwifery workforce in the priority areas of Birthing Suite; as identified and recommended in the Clinical Audit Report;
- Enhance the relationship and understanding of the nursing/midwifery dyad in Birthing Suite PACU by the Maternity Ward midwife;
- Improve the journey of the woman and enhance her birthing experience by improved communication and reduction of delays.

Acute Observation Unit Discharge Summary

An Acute Observation Unit Discharge Summary was developed in February 2012 in collaboration with the CDHB Information Services Group, the Senior Medical Officer (SMO) Birthing Suite Lead and midwives to provide clear and concise information to other multidisciplinary stakeholders within CDHB and the community. This Acute Observation Unit Discharge Summary was subsequently audited in December 2012 identifying from the 115 cases reviewed, the need to provide further education to medical staff in the completion of this on-line summary.

Further midwifery audits are also currently being undertaken, these include an:

- Audit of orientation package and an update of the orientation process to Birthing Suite;
- Audit of the Multidisciplinary Elective and Emergency Caesarean Clinical Pathway.

Relocation of the Acute Observation Unit

A project group was set up in December 2012 working in collaboration with the SMO Birthing Suite and critical care team to: relocate the Acute Observation Unit (AOU) from the rooms at the end of the recovery area into a separate room, admit women having elective caesarean sections into the current AOU rooms within the PACU area, and utilise the assessment area for women requiring assessments and inductions of labour. The rationale for this relocation is to reduce the AOU visitor's traffic through PACU and to provide the opportunity for women having elective caesarean sections to meet their recovery nurse and familiarise themselves with the PACU environment. The women having inductions of labour will be provided with single rooms within the assessment area to provide more privacy rather than the current four bedded area. Surveys are currently being conducted on the experiences of women during the pre-operative stage of elective caesarean section and women's experiences in the AOU environment.

Maternity Guidelines Group

The Maternity Guidelines Group is responsible for the production of evidence-based clinical guidelines for use throughout CDHB Maternity Services. The group consists of representatives from the multi-disciplinary team including the Clinical Director of Obstetrics and Gynaecology, SMOs, an obstetric registrar, midwives, a pharmacist and a representative from NZCOM. The mix of health professionals is one of the group's strengths with all members having an equal voice and particular areas of expertise being utilised effectively.

Each member of the Maternity Guidelines Group then works with a smaller group of health care professionals who have expertise within the subject area to develop new guidelines, revise existing guidelines and write complementary patient information pamphlets. The Maternity Guidelines Group meets every two weeks to discuss and approve the completed guidelines. These guidelines are then circulated to the SMOs for consultation prior to sign off, document control and publication on the CDHB Intranet.

Equally important is the communication and education surrounding newly or revised guidelines, particularly where a change in practice is advocated. For a number of guidelines such as Classification and Communication for Caesarean Section (GL/M/0040) and Magnesium Sulphate for Neuroprotection in Preterm Births (GL/M/0041), this has included champions providing education and training to all midwives.

Maternity clinical guidelines published on the CDHB Women's and Children's Health internet site in 2012/2013 include:

- Management of Pre-eclampsia/ Eclampsia;
- Antenatal Ultrasound for Obstetric Indications;
- Preterm Pre-labour Rupture of Membranes;
- Prophylactic Antibiotic in Labour for Neonatal Group B Streptococcal Infection;
- Intra-partum and Postnatal Bladder Care;
- Cord Prolapse;
- Classification and Communication for Caesarean Section;
- Magnesium Sulphate for Neuroprotection in Pre-term Births;
- Remifentanil
- Vaginal Birth after Caesarean Section.

Birthing Suite Swabs

In March 2012, following the receipt of incident report forms identifying cases of women who had retained vaginal swabs following spontaneous and instrumental deliveries, Birthing Suite changed the swabs available to reduce the risk of this re-occurring.

The old packs of "combine dressings" containing six swabs that were routinely available in the birthing rooms were removed and replaced by a pack of five 30x30cm lap sponges with tapes that are raytec marked. These larger theatre grade swabs can be rolled up to make a tampon, and are thought to be more absorbent and robust.

A three month trial was undertaken with feedback sought by midwives and doctors as part of the evaluation. Since the introduction of these lap sponges there have been no further incidents reported. This change in practice has had the positive implication of decreasing the risk of harm for women using the service.

Baby Acuity Tool

A recommendation from the Audit on Baby Checks at 24 hours (2011) was the introduction of an Acuity Tool for babies under secondary care on the Maternity Ward. Maternity staff put forward a number of ideas and after a few trials a tool was developed in June 2012, designed to assist with an even distribution of work load for staff by assessing the needs of both mothers (already in use) and babies. The introduction of this baby acuity tool has led to an increase in the efficiency of work on the Maternity Ward and aides with the flow through the unit as a whole.

Ashburton and Rural Health Services

Inter-Hospital Collaboration

Ashburton and Rural Health Services have endeavoured to gain a closer collegial working relationship with Women's and Children's Health. The Charge Midwife Manager attends the CWH monthly manager's meeting and the Women's Services meeting and also sits on the Maternity Guidelines Group as a representative for the primary birthing units and the rural units. The Charge Midwife Manager was a member of the Maternity Clinical Governance Committee until this committee was reconfigured and is now a member of the CDHB Maternity Operational Group. Ashburton and Rural Health Services are also represented at senior level on the CDHB and WCDHB Maternity Clinical Governance Committee. Aligning Ashburton and Rural more closely with Women's and Children's Health has helped ensure that practice is not only evidence based but consistent throughout the district. Additionally Ashburton maternity core staff benefit through increased professional support and collegiality. Consumer satisfaction would be a result of this seamless service. Further work is to be done to ensure that the collegial relationship benefits the other rural units.

Medical Air Blenders

Blenders and medical air have been added to each of the Ashburton and Rural resuscitaires. This upgrade in equipment enables resuscitation of the infant according to 2010 Resuscitation Council Guidelines commencing in air and titrating the oxygen levels according to the babies' needs. The purchasing of new Oximeters has made the estimation of oxygen levels within the infant more accurate. This ability to titrate oxygen requirements results in a shorter time to "first breath" in the newborn and clinical improvement in the preterm baby. The new facility at Kaikoura is also to have blenders and medical oxygen fitted as part of the build.

Eclampsia Box

As a direct result of the transfer times to CWH, it was considered prudent to set up an emergency box for those women who presented 'fitting'. This eclampsia box contains all medications and equipment necessary to deal with this rare emergency and is designed for ease of use in a stressful situation. As many core staff and LMCs may never have dealt with this type of emergency a clear 'pathway of care' has been established in order to gain the multidisciplinary response necessary. In-house teaching sessions have been provided for all staff and LMCs with Practical Obstetric Multi-Professional Training (PROMPT) type scenarios and more formal lectures. This box and the training around its use has increased the confidence and knowledge base of the core and LMC staff. Its impact on clinical practice is to reduce the chances of error in administration of unfamiliar medications. This eclampsia box has been used recently; this resulted in favourable outcome for both mother and baby.

Neonatal Resuscitation Training

In-hose neonatal resuscitation trainings are held for all core staff, duty managers, medical officers and LMCs. This yearly session benefits the unit as it enables staff and LMCs to all train together on familiar equipment, and improves the team approach. In addition, the Midwifery Unit Manager provides monthly opportunities to refresh skills in small one-to-one refresher sessions. Further, all staff are encouraged to attend newborn life support (NZRC NLS) courses. The expected outcome is an improvement in the skill levels of LMC and core staff attending neonatal emergencies.

Adult Resuscitation Training

Adult resuscitation sessions with 'PROMPT' type scenarios are now held in the unit on a six monthly basis. This session focuses on maternal resuscitation using the equipment available to the staff and allows for more realistic training. These sessions are attended by core midwives, nurses, LMCs and duty managers. The opportunity to train together has proven to be invaluable. The expected outcome of these sessions is an improvement in the skill levels of LMC and core staff attending maternal emergencies.

Airway Box and Anaphylaxis Kit

An airway box has been configured to be in line with Ashburton Hospital equipment. This airway box also contains an anaphylaxis kit. A defibrillator is now available for use and training is provided to all staff in the above mentioned adult resuscitation sessions. Aligning equipment with that of Ashburton Hospital in general, improves client safety as all members of a resuscitation team will be familiar with the contents of the box. Access to the defibrillator enables Ashburton Maternity to comply with the 2010 guidelines for resuscitation which encourages early conversion of abnormal rhythms.

Intravenous Antibiotics

Intravenous (IV) antibiotics are now available for women wishing to birth in the unit for births complicated by Group B streptococcus, this practice is validated by CWH CDHB guidelines. This benefits the women who wish to birth in their local unit (preventing transfers to tertiary centre and enabling choice). It is also of massive benefit clinically to the preterm baby who will receive antibiotics in a more timely manner prior to any transfer to the tertiary unit.

Staffing

Core Midwives

Ashburton and Rural Health Services have had long-term recruitment issues with core staff. Sufficient core midwives are now employed in order to ensure that the vast majority of shifts are covered by a midwife onsite rather than a midwife on-call. Further, a long-term recruitment campaign has resulted in minimal use of casual staff. The impact on clinical practice is maternity care provided by midwives with the support of nurses.

Student Midwives

With a view to future staffing, Ashburton and Rural have recently enrolled in the CWH new graduate programme and continue to welcome first year midwifery students from Christchurch Polytechnic Institute of Technology (CPIT) and work closely with third year students who are on placement with local LMCs. It is anticipated that this relationship with CPIT will lead to an increased number of core and LMC midwives in the Ashburton area.

LMC Orientation Package

The LMC orientation package designed to identify which services are available in the unit and how to access on-line guidelines and policies has been updated. This encourages a working knowledge of emergency protocols. This teamed with on-site training for emergencies for core and LMCs improves maternal and infant outcomes through familiarity of equipment and guidelines.

Documentation Review

A documentation checklist has been designed in order to improve and standardise the information given to women. This checklist also helps with audit and shows staff compliance with BFHI requirements, Smoke Change and the Safe Sleep Campaign. The quality of notes and extra forms captured within them has improved enormously.

In addition the antenatal information letter and booklet introducing Ashburton Maternity (which is sent to all families booking to use the facility) has been updated to provide current information regarding the services offered. The leaflets given antenatally and postnatally have been standardised across the tertiary and primary units to ensure that all women get a unified message with the most up-to-date information available.

Computer Access

Technical skills sessions have encouraged the use of the GROW software (individualised growth charts) amongst LMCs. Internet access has also been arranged for all LMCs in order to open and print this computer package. Maternal and infant outcomes will improve leading to more accurate identification of the growth affected vulnerable babies.

Clinical Audits

Ashburton Maternity in conjunction with the tertiary and other CDHB primary birthing units performed a temperature and an identification audit. This audit highlights those babies who transfer to primary birthing units but on admission are cold, hungry or not correctly identified. The results of this audit showed that at times babies that transferred from CWH were hungry or cool which left them vulnerable to low blood sugars etc. This information has been communicated to CWH staff and internalised amongst Ashburton Maternity core staff who now ensure babies are fed before being discharged and return home in warmed cars. This higher focus reduces the transfer rate back to CWH with compromised babies.

Ashburton Maternity are in the process of finalising a post-partum haemorrhage (PPH) audit identifying women over the last year who have experienced a blood loss of 500ml or more. The results of this audit will be shared with LMCs to identify women inappropriate to plan delivery in a primary birthing unit and encourage earlier use of active management of the third stage of labour.

The unit continuously collects data on ambulance arrival times in order to evaluate the service received from St John. These audits are sent to senior management in order to build the case for further improvement in this service and to identify poor outcomes as a result of possible delay in transfer, arrival times are also communicated to local LMCs in order to highlight the need to consider early transfer to tertiary facilities.

Immunisation

A National Immunisation Advisory Centre education session was provided to LMCs in November 2012 and a Pertussis education board was publically displayed in the maternity unit.

Smoking Cessation

Ashburton and Rural have achieved 100% compliance when asking parents about their smoking behaviours and are displaying a "World Smoke-Free Day" education board. In April 2013, LMCs and core staff received education regarding Smoke Change.

Breastfeeding

Ashburton and Rural are further contributing to CDHB quality outputs by having lactation consultants available for weekly clinics. Lead maternity carers attend an in-house, eight hour breastfeeding education session which is held annually and training is given to allied health staff according to re-accreditation requirements. The BFHI Lead Midwife attends BFHI meetings and community breastfeeding groups. These activities have in turn influenced the rate of exclusive breastfeeding on discharge for women birthing at Ashburton and Rural units (91.6%).

St George's Maternity Service

CDHB and WCDHB Combined Maternity Clinical Governance Committee

The St George's Charge Midwife is a member of the CDHB and WCDHB Maternity Clinical Governance Committee. This has been a valuable experience as it provides the department with access to a communication stream within the maternity community. The benefits of membership to this committee will assist with the delivery of continuity and consistency of information leading to improved care outcomes for mothers and babies.

Inter-Hospital Communication

This has improved recently with St George's representation on the above committee as well as contributing to the MQSP. Access to this membership has provided the staff with current examples of quality improvements across the CDHB and WCDHB. This in turn prompts the team at St George's hospital to review their practice based on the recommendations from the quality audits and can duplicate these or develop audits specific to St George's Maternity Service. The quality audits will provide data that can lead to improved care and changes in clinical practice.

Satisfaction Surveys

These are available for all mothers to complete. Annual data is kept of these satisfaction surveys and quality improvements are referred to the appropriate hospital committee. One of St George's priorities is the provision of women centred care and to enable the woman to provide feedback on our care and service during their hospital stay. Each survey is reviewed and if there are any immediate concerns the woman may be contacted to seek resolution or a solution to the concerns raised. Generally the satisfaction surveys demonstrate that women are very satisfied with their experience at St George's hospital and their expectations were met. Collation of the data from satisfaction surveys will asset with meeting the needs of the consumers of the unit and confirming that quality care is being delivered.

Quality Leadership Programme

St George's Hospital is in partnership with the CDHB for the Professional Development and Recognition Programme and the Quality Leadership Programme (QLP). Currently St George's has three midwives on the QLP Confident level. Recognition of professional development will improve delivery of care as each specific midwife will undertake a portfolio relevant to their interests.

Incident Reporting /Serious or Sentinel Events

Incident reports are completed and become part of St George's Incident Reporting process, review and management. Incident reports pertaining to CDHB are referred to the Quality Co-ordinator Maternity, and are followed up and presented at the fortnightly Obstetrics and Gynaecology Reports Review Group meeting. Once the investigation is completed and recommendations and preventative actions have been taken, they are signed off by either the Clinical Director Obstetrics and Gynaecology, the Service Manager Women's Health or the Director of Midwifery and a copy maintained by the Quality and Safety Unit, Women's and Children's Health. These incident reports are then returned to St George's Hospital. Acute transfers of mothers or babies are also documented under this process and will be audited.

Ministry of Health Certification Corrective Actions

In February 2013 St George's Hospital underwent a certification audit against the Health and Disability Standards NZS8134:2008. Three corrective actions were identified for the Maternity Service. These were: patient goals/desired outcomes to be recorded in clinical care plans to serve as a basis for service delivery planning, the documenting of medication end dates when prescribing on the Drug Treatment Charts and the storage of a mother's self medication.

Issues around the prescribing of medications on the Drug Treatment Charts by medical staff at CWH are currently being addressed by the Safety and Quality Unit, Women's and Children's Health. The issue of storage of a woman's self medications has been addressed. These are documented on the medicine reconciliation sheet in her clinical record and then are stored in a cupboard in the woman's room out of reach of children. New multidisciplinary care pathways have been developed that include maternity patient outcomes as required by the auditors. The use of care pathways that are transparent to the woman and her family will assist in consistency of care and delivery of information

Education and Professional Development

St George's Maternity runs the Technical Skills Workshops and the Elective Breastfeeding course four times a year. These education days are endorsed by the Midwifery Council of New Zealand and provide the opportunity for St George's midwives to discuss practice and participate in clinical scenarios with LMC midwives.

St George's Hospital midwives participate in CDHB education such as the PROMPT and S.T.A.B.L.E courses, the K2 Fetal Monitoring Package and Neonatal Resuscitation (Level 10). They also attend CDHB Perinatal and Maternal Mortality meetings and quality forums. One midwife has received further training in newborn life support and acts as a clinical educator with the courses at CWH and St George's Maternity. This midwife is also a member of the CDHB IV Link Committee. These memberships support the consistency and communication between the two health providers.

Core midwives are meeting their recertification requirements and engaging with all aspects of maternity care. This is achieved by their release from rostered shifts to accompany LMCs in their antenatal, labour and postnatal practice on an annual basis. This ensures that experience with different situations is maintained, documented and evaluated to benefit the ongoing safe care of women and families.

Lactation Support for Community

The breastfeeding drop-in clinic has been increased to four mornings a week making it very accessible to all postnatal new mothers and their LMCs regardless of whether they came to St George's Hospital. The drop-in clinic is staffed by a lactation consultant and supported by a Karitane Nurse who is also a trained Peer Counsellor. Antenatal breastfeeding classes are held once every two weeks for women and support persons. This philanthropic programme ensures support is available to new mothers and will improve the exclusive feeding rates in the community.

Maternity Policies and Procedures

Maternity policies and procedures are reviewed two yearly and as necessary to reflect best and evidence based practice and provide guidelines for care and service at St George's Hospital. This process ensures that care is correct and relevant. Most recently the policy "infant safe sleeping" has been developed. This has resulted in the archiving of two other policies "babies co-sleeping with mothers' and "safe sleeping". This policy is relevant due to the ongoing issues with Sudden Infant Death Syndrome (SIDS) and Sudden Unexpected Death of an Infant Syndrome (SUDI) nationally. The aim of this policy is to ensure that parents are given evidence-based information proven to reduce the rates of SIDS and SUDI.

Engagement with Lead Maternity Carers

St George's Maternity Network has been re-established following the temporary closure of the unit. This group meets four times per year and provides an opportunity for professional development and relationship building between core staff and the LMCs. If there is high quality communication and respect for the professional roles of the LMC and core midwifery care for the women will be enhanced due to improved information sharing and consistency of information shared.

Baby Friendly Hospital Initiative Action Outcomes

Resulting from the recent BFHI survey, the St George's Breastfeeding booklet has been updated to ensure consistency of information within the CDHB and incorporate new information for mothers. Further, breastfeeding rates are now captured on the electronic patient management system, instead of manually configuring the statistics. Care pathways for postnatal care and care following birth by caesarean section have been updated to capture further breastfeeding targets. The data will give the staff monthly statistics so that trends can be identified and any variance of the breastfeeding rates can be targeted and actioned, and investigations undertaken if exclusive breastfeeding rates fall.

West Coast District Health Board

Maternity Clinical Guidelines

As CWH is the tertiary referral centre for WCDHB, membership on the Maternity Clinical Guidelines Group includes the Clinical Midwife Manager WCDHB. Where possible, WCDHB have adopted CDHB clinical guidelines with some local adaptations. Seventeen CDHB guidelines have been adopted since July 2012. Three further guidelines are being worked on (Fetal Loss Package from 20 Weeks; Placenta Praevia and Placenta Praevia Accreta: Diagnosis and Management; and Shoulder Dystocia). It is planned to have all applicable guidelines adopted by September 2013.

Lean Approach to McBrearty Ward

Following seismic testing at Grey Base Hospital, in late 2012, McBrearty ward was required to reconfigure forcing maternity services to downsize considerably. As a result, a lean approach was adopted. The first step included staff identifying anything that was old and outdated, items that were overstocked, and items not used. After six weeks a meeting was held where all listed items were reviewed by all staff present and decisions were made on what to keep, dispose of, or relocate.

This lean approach was applied to all stock (clinical and pharmacy) to ensure what is stocked is essential and appropriate for current practice. As part of the relocation maternity staff, Supply Department and Pharmacy have been working together to ensure all stock is appropriate in item and numbers with minimum and maximum levels being established. This will result in less wastage, and in fact saving which can then be used in other areas to improve care provided.

Review of Documentation

All current clinical documents are being reviewed to ensure they are needed, up to date, follow best practice guidelines and meet current needs.

A review is also being undertaken of the patient record with the aim of producing clinical notes that meet the needs of the woman, health professionals and are in accordance with legal requirements. This review includes assessing other DHB's clinical record systems and processes, Midwifery and Maternity Providers Organisation (MMPO) notes, and investigating legal obligations under the Maternity Services Notice.

A draft set of notes is currently out for comment with plans to adopt by late June 2013. A re-design of the patient file will meet documentation standards, improve communication, reduce time wasted in negotiating the current notes and provide clear care plans, which it is anticipated will improve patient-centered care.

Booking System

In July 2012, it was recognised that the maternity booking system (women seeking midwives to care for them during pregnancy) was not efficient leading to the women contacting the unit on multiple occasions. A book was introduced to record the women's details and a set message was conveyed informing them of the process (i.e. allocation occurred on Mondays and they could expect to be contacted 24–48 hours later and an appointment made). In addition to this a database was set up to ensure equality of workload amongst the case loading midwives

This quality initiative has subsequently been evaluated and determined to be successful with a couple of minor amendments required i.e. LMCs including the date of first appointment and that it is documented when a woman is unable to be contacted. Women are getting initial care earlier and in the right place and midwife case loads are being managed in a fairer manner.

Transfers between West Coast and Canterbury DHBs

It was identified through incident review process that there were issues regarding the co-ordination of women transferring from WCDHB to CDHB for tertiary care and the retrieval of women and babies from WCDHB via helicopter. All policies and procedures are currently being reviewed by CDHB and WCDHB with the aim of streamlining the documentation and the communication process

A helicopter familiarisation course has been run for West Coast midwives to bring them in line with aviation requirements and further documents are being developed to ensure client and midwife safety and appropriate care in flight. These changes are resulting in improved communication.

Development of Emergency Boxes

Following the first PROMPT course in April 2013 at Grey Base Hospital, the staff identified a need for a pre-eclampsia emergency box and an improved post-partum haemorrhage box. The boxes will facilitate a quicker response to emergencies and ensure all equipment needed is in place.

Epidural Service

Over the past ten months the epidural service has been re-introduced to the West Coast which has increased women's options for pain relief. Staff education was via DVD and worksheets and midwives were provided with work experience at CWH Birthing Suite. The anaesthetists have also agreed to be a resource for the midwives. Since its re-introduction, few women have accessed this service.

7 Strategic Plan Deliverables

The objectives set out in MQSP Strategic Plan (June 2012) for both DHBs for the first year of the project were as follows:

- *That the proposed quality programme structure and processes are implemented across the maternity services within both DHBs;*
- *That these revised systems are embedded into 'business as usual' by 2015;*
- *Collaborative working on quality issues occurs between various DHB sites;*
- *Consumers and primary care providers become involved in quality improvement activities/decision making processes at both local and regional level;*
- *Opportunities for improvement are identified at each site; quality plans are developed locally and reported to the local and regional Governance Committee;*
- *The programme implementation remains within allocated budget;*
- *The first annual report is produced by 30 June 2013.*

As highlighted in the governance section of this annual report the quality structure and processes for maternity services across both DHBs has been reshaped to meet the requirements of the MQSP. The CDHB and WCDHB Maternity Clinical Governance Committee and the CDHB Maternity Operational Group and their respective Terms of Reference have been established. Further, WCDHB have established a Maternity Quality and Safety Group.

Working groups with representatives from CDHB (Women's and Children's and Ashburton and Rural) and WCDHB are established as and when safety and quality issues are identified that impact on both DHBs. This collaborative working style is currently in place to address co-ordination issues with transalpine and rural transfer and retrieval of women and their babies.

Following the appointment of consumer representatives to all of the maternity quality and safety committees, further strategies for consumer engagement will be determined.

Maternity Quality Plans for 2013/14 are currently being developed and endorsed by each of the maternity quality and safety committees within their respective DHBs to address each of the priority areas. These quality plans setting out key quality improvement projects and initiatives will be a standing agenda item as the committee meetings to review progress against set timeframes and identify any potential risks.

Priorities, Deliverables and Planned Actions for 2013/14

The following list of priorities, deliverables and planned actions determined by CDHB and WCDHB for 2013/14 are based on identified areas of concern, quality improvement initiatives and Ministry of Health National Priorities. These priorities correspond with CDHB and WCDHB respective Annual Plans (see Appendix 7).

Priority Area	Actions	DHB/Unit Accountable	Expected Outcome	Measured by	Planned start/ Finish date
GOVERNANCE					
Establish the Governance Structure	• Establish the CDHB and WCDHB Maternity Clinical Governance Committee	CDHB WCDHB	Committee structures in place in both DHBs	Committee provides governance and leadership	Completed May 2013
	• Establish the CDHB Maternity Operational Group	CDHB			
	• Establish the WCDHB Maternity Quality and Safety Group	WCDHB		Committee structure oversees and ensures coherence across quality activities	
	• Expand Ashburton and Rural Health Services Maternity Continuum Team	CDHB			May to August 2013
	• Develop Terms of Reference for each of the three committees • Further develop clinical governance and MQSP reporting structures and embed lines of accountability within each DHB and across the National Maternal Monitoring Group	CDHB WCDHB	Terms of References ratified		March to June 2013
Consumer representatives and Māori and Pacific Island representatives are part of the maternity quality committees	• Appoint two consumer representatives onto the CDHB and WCDHB Maternity Clinical Governance Committee	CDHB WCDHB	Decision making includes the consumer input.	Governance committees include maternity consumer representation and Māori and Pacific Island representation as part of their membership	Completed May 2013
	• Appoint one consumer representative onto the WCDHB Maternity Quality and Safety Group	WCDHB			
	• Appoint a consumer and a Māori Cultural Advisor onto the Ashburton Maternity Continuum Committee	CDHB	Consumer representatives are clearly able to define their roles		March to August 2013
	• Appoint a Māori Representative onto the CDHB and WCDHB Maternity Clinical Governance Committee	CDHB WCDHB			Completed February 2013
	• Appoint a Māori representative onto the WCDHB Maternity Quality and Safety Group	WCDHB			Completed May 2013

Priority Area	Actions	DHB/Unit Accountable	Expected Outcome	Measured by	Planned start/ Finish date
	• Develop Position Descriptions for consumer representatives	CDHB WCDHB			Completed May 2013
Engage with community–based maternity practitioners	• Establish a LMC Liaison role • Advertise and appoint a LMC Liaison to work across CDHB and WCDHB and their respective communities	CDHB	Position description key tasks achieved	LMC Liaison position filled	Completed March 2013
Produce the MQSP Annual Report	• Develop a report framework • Determine maternity outcome data • Communicate requirements and identify contributors • Identify executives responsible for sign off • Implement recommendations	CDHB WCDHB	MQSP Annual report will be signed off by CDHB and WCDHB executives and submitted to the MoH by 30 June 2013	MQSP Annual Report approved by MoH	February-June 2013
INFORMATION AND COMMUNICATION SYSTEMS					
Establish a communication platform for information sharing between and within DHBs	• Explore extending the use of Share Point for document sharing and providing information on education sessions/ forums and on-line learning	CDHB WCDHB	Improved and strengthened communication linkages between and within DHBs and shared opportunities for learning	Increased involvement of health professionals from all maternity sites in forums and meetings	July 2013-June 2014
Define and develop processes for Clinical Case Review	• Gain multidisciplinary agreement on parameters for clinical case review • Develop a process for all areas • Involve community based practitioners and consumers • Gain multidisciplinary agreement on process • Document process • Disseminate guideline and make available electronically	CDHB WCDHB	Multi-disciplinary participation in clinical case reviews Clinical case review policies processes are in line with recommended best practice	Clinical case review reports are completed to a high standard in a timely fashion	August 2013-June 2014
Define and develop processes for formal review of serious and	• Review current policies and Health Safety and Quality Commission documents • Develop formal review processes • Provide RCA and London Protocol training to review team members	WCDHB	Investigation of serious and sentinel event policies processes are in line with recommended best practice.	Serious and sentinel event reports are completed to a high standard in a timely fashion	May 2013-February 2014

Priority Area	Actions	DHB/Unit Accountable	Expected Outcome	Measured by	Planned start/ Finish date
sentinel events	• Ensure composition of review team reflects the nature of the serious or sentinel event • Include involvement of community based practitioners and consumers • Document process, disseminate and make available electronically				
Perinatal and maternal mortality and morbidity review activities involve hospital and community based practitioners	• Develop a process based on MoH requirements to include a broader view of matters impacting on quality and safety • Develop linkages between PMMRC Co-ordinators across both DHBs • Provide a forum to enable both DHBs to present their cases at the PMMRC meetings • Ensure monthly meetings involve staff from both DHBs and community based practitioners i.e. LMCs and GPs • Ensure videoconferencing linkages are available	CDHB WCDHB	Increase in attendance of community and hospital based practitioners across DHBs attending PMMRC review activities	Hospital based and community based maternity care providers (LMCs and GPs) across all sites participate in PMMRC review activities	July 2013-February 2014
DATA MONITORING					
Improve WCDHB's IT system so that it has the capability of collecting maternity data	• Develop an interim system to collect maternity data until the National Maternity Data System is rolled out • Determine capacity for entering data • Update clinical forms to collect required information	WCDHB	WCDHB maternity outcomes data will be analysed and published in MQSP Annual Report	Maternity outcome data will be available to inform clinical practice	May 2013-June 2014
Analysis of National Maternity Clinical Indicators	• Analyse 2011 Clinical Indicators provided by MoH and formulate a plan to address the areas requiring focused improvement	CDHB WCDHB	Quality improvement initiatives will be developed to address Clinical Indicators outside of the national average	Reduced service gaps	July 2013-June 2014
SECTOR ENGAGEMENT					
Implement a formal process for the dissemination of	• Develop a common platform which can be accessed by hospital, rural birthing units and community based practitioners across both DHBs	CDHB WCDHB	Hospital and community clinicians will be aware of local priorities and changes in practice	Co-ordinated exchange of information between sites and the	August 2013-June 2014

Priority Area	Actions	DHB/Unit Accountable	Expected Outcome	Measured by	Planned start/ Finish date
information to community based clinicians				community	
CONSUMER ENGAGEMENT					
Streamline Maternity information on Canterbury Initiative's Health Information Site	• Redesign the Health Information site to enable women to easily access maternity information and resources • Regularly update maternity information on the Health Information site	CDHB	Women living in metropolitan rural and remote areas will have easy access to resources	Consumers are provided with information on the Health Information site	March 2013-June 2014
Conduct research into maternity consumer experiences	• Develop and conduct consumer satisfaction surveys with frequent reporting	CDHB	Quality initiatives meet the needs of consumers	Consumer feedback reports are presented at Maternity Quality and Safety Committee meetings	August 2013-June 2014
QUALITY IMPROVEMENT					
Strengthen the women and babies journey from points of entry through to discharge including ready access to secondary and tertiary services	• Update the transfer policy to ensure clear co-ordination and communication of care • Ensure collaborative working and communication when transferring women and babies between DHBs and to tertiary care	CDHB WCDHB	Improved communication between those transferring and receiving women and babies Co-ordinated care for women and their babies	Clearly defined roles and responsibilities Reduction in transfer times	April-December 2013
Improve the attendance of Māori, Pacific Island and younger women at pregnancy and parenting classes	• Identify availability of parenting education classes and barriers to attendance • If barriers are identified, develop strategies to improve attendance	CDHB WCDHB	A higher number of Māori, Pacific Island and younger women will attend pregnancy and parenting classes	Information is gathered on pregnancy and parenting classes. Numbers of enrolments of Māori, Pacific Island and younger women at pregnancy and parenting classes	August 2013-June 2014

Priority Area	Actions	DHB/Unit Accountable	Expected Outcome	Measured by	Planned start/ Finish date
Increase the proportion of women registering with LMCs in the first trimester	• Explore social media and other communication strategies • Network with consumer groups	CDHB WCDHB	Improved access to care	Increase in the number of women registering with LMCs in the first trimester	August 2013-June 2014
Develop combined educational events to improve collaboration between DHBs	• Rotate venues for education sessions and workshops • Involve hospital and community based clinicians across all sites • Provide video-conferencing linkages	CDHB WCDHB	Consistency in practice Collaborative working between DHBs	Attendance at education sessions includes practitioners from all sites and the community	July 2013-June 2014
Implement the new Maternity Referral Guidelines	• Determine strategies to record transfer of clinical responsibility	CDHB WCDHB	Improved safety for women and babies	Transfer of clinical responsibility is clearly documented within the clinical records	September 2013-June 2014
Decrease smoking rates and offer support to women who smoke during pregnancy	• Develop strategies to collect data to ensure women are receiving information on smoking cessation prior to 15 weeks gestation	CDHB WCDHB	Smoking cessation targets are maintained	Increased numbers of women accessing quit smoking programmes	August 2013-June 2014
Raise awareness about newborn immunisation	• Provide education and information to women and their families about childhood immunisation	CDHB WCHDB	Meet the Ministry of Health's immunisation target	Increase in enrolment of babies onto the National Immunisation Register	May 2013-June 2014
Develop primary maternity facilities	• Upgrade and expand birthing facilities and services at primary units	CDHB	Increase in women accessing primary maternity facilities	Number of women booking to birth at primary units	August 2013-June 2014

Priority Area	Actions	DHB/Unit Accountable	Expected Outcome	Measured by	Planned start/ Finish date
Improve breastfeeding rates	• Develop a BFHI database for recording breastfeeding education • Explore the use of IT applications to improve access to information for women who live rurally and remotely	CDHB WCDHB	Improved access to consistent breastfeeding information	Increase in exclusive and fully breastfeeding rates at six weeks to maintain Ministry of Health target	July 2013-June 2014
Utilisation of workforce	• Develop education strategies to ensure practitioners maintain competency • Identify recruitment and retention strategies to attract maternity hospital and community based practitioners	CDHB WCDHB	Safe effective care is provided to women and babies	Performance reviews and staff feedback	May 2013-June 2014
	• Evaluate models of maternity care	WCDHB			
Implement a regional safe sleeping policy	• Develop a safe sleeping policy as part of the South Island Alliance Programme Office	CDHB WCDHB	Women receive consistent safe sleeping information	Safe sleep policy is implemented across all sites Hospital and community based practitioners receive education	Feb 2013-June 2014
Implement a primary birthing unit guideline	• Establish guidelines for admission in labour to primary birthing units	CDHB WCDHB	Wherever possible, only women who meet the guideline criteria labour and birth at the primary maternity facilities	Women labouring and birthing at primary birthing units meet the criteria for acceptance at these units	May 2013-November 2013

Appendix 1

CDHB and WCDHB Maternity Clinical Governance Committee
Terms of Reference

1. Purpose

The CDHB and WCDHB Maternity Clinical Governance Committee will support the achievement of the respective Boards' Quality and Safety Plans through:

1.1 Assessing, reviewing and identifying improvements to the quality and safety of maternity care across Canterbury and West Coast DHB MoH contracted services[10]

1.2 Facilitating discussion and collaboration between service providers regarding significant issues in relation to clinical quality and safety within Maternity services.

2. Functions

The functions of the CDHB and WCDHB Maternity Clinical Governance Committee are to:

2.1 Provide governance and clinical leadership.

2.2 Ensure that systems are in place to provide a safe environment for women, babies and staff.

2.3 Oversee maternity quality and safety programme and ensure consistency across all areas.

2.4 Identify opportunities for changes to clinical practice to reduce future risk and improve clinical standards.

2.5 Initiate further investigation of clinical safety and quality issues, where appropriate.

2.6 Ensure the instigation of actions designed to improve patient and staff safety and monitor the outcome of actions taken.

2.7 Make decisions about quality improvement activities.

2.8 Contribute to discussions and decisions about maternity care at Executive Management Team and DHB Board levels.

2.9 Support the implementation of recommendations from national bodies.

2.10 Monitor annual benchmarking information as well as clinical indicators.

2.11 Determine the reporting requirements (content and frequency) of the committees reporting to the CDHB and WCDHB Maternity Clinical Governance Committee.

2.12 Produce an annual maternity quality and safety programme (MQSP) report.

3. Standing Orders

3.1 Agenda and papers to be circulated by mail/email at least five (5) business days prior to meeting.

3.2 Material tabled at the meeting will be for information or discussion only, not for decision.

3.3 Minutes and items to be actioned from the previous meetings will be forwarded to the membership by email within 5 business days.

[10] Ref: - DHB funded maternity services Tier Level One Service specification (2011)
- Secondary and tertiary maternity services and facilities (2011)
- Draft DHB funded primary maternity facility service specification (2011)
- DHB funded primary maternity services (2011) tied level two service specification
- Pregnancy and parent education tier level 2 service specification (2010)
- Primary maternity services notice (2007)

3.4 The Chairperson shall be responsible for keeping the final copy of the Terms of Reference and meeting minutes.

3.5 There will be a maximum time allocation of 1 ½ hours for the meeting unless otherwise agreed by the committee.

4. Powers

The CDHB and WCDHB Maternity Clinical Governance Committee will have the power to:

4.1 Seek advice from external experts

4.2 Consult appropriately in order to obtain information relevant to the functions of the committee

4.3 Liaise with the Ministry of Health and its committees where appropriate and other DHBs in order to obtain information relevant to the functions of the committee

4.4 Accept/reject or further discuss recommendations from the various committees reporting to the CDHB and WCDHB Maternity Clinical Governance Committee

5. Chairperson

Director of Midwifery, CDHB

6. Membership

6.1 The membership of the CDHB and WCDHB Maternity Clinical Governance Committee will include 17 members that comprise:

- Clinical Director, Obstetrics and Gynaecology, CDHB;
- Director of Midwifery, CDHB;
- Service Manager, Women's Health, CDHB;
- Team Leader Safety and Quality Unit, CDHB;
- Director of Nursing, Ashburton and Rural, CDHB;
- Manager Quality and Safety WCDHB;
- Nurse Manager Clinical Services, WCDHB;
- Clinical Midwife Manager, WCDHB;
- Head of Obstetrics and Gynaecology, WCDHB;
- Maternity Services Manager, St George's Hospital;
- LMC Liaison;
- GP Liaison;
- Planning and Funding Service Development Manager, CDHB;
- Consumer Representatives x 2;
- Māori Representative;
- Clinical Director, Neonatal Services.

6.2 It is expected that members will arrange a proxy to attend meetings where they cannot attend themselves. Each member is responsible for ensuring the proxy is adequately briefed prior to the meeting and that relevant information and actions are communicated back to the committee member

6.3 An attendance register will be maintained, and an absence for three subsequent meetings without proxy will prompt discussion with the Chair re that person's ongoing membership.

6.4 Other positions or individuals may be co-opted to meetings as required

7. Voting Rights of Members

7.1 Decisions should be reached where possible by consensus. When this is not possible, decisions may be carried by a simple majority of voting members present and a minority opinion will be recorded

7.2 Members must declare a conflict of interest to the Chairperson as soon as they are aware of a conflict or the potential for a conflict. Ideally this should occur at the commencement of the meeting. The member must disclose the nature and extent of the interest to the committee for the record and refrain from voting

7.3 Co-opted positions or individuals do not form part of the membership and therefore do not have voting rights, nor affect the quorum

8. Other Recipients of Agendas & Minutes

Clinical Director of Anaesthetics - CDHB
Head of Department Anaesthetics –WCDHB
General Manager, Medical - Surgical and Women's & Children's, CDHB
General Manager Hospital Services, Grey Base Hospital, WCDHB
General Manager Ashburton and Rural Services, CDHB

9. Quorum

A quorum will consist of Chair plus six of the current voting members.

10. Meetings

The committee will meet on the 4th week of the month from February to December, as determined by the requirements of the agenda.

11. Accountability

Through the W&CH Clinical Governance Committee to the General Manager Medical-Surgical and Women's & Children's, CDHB, General Manager, CDHB Planning and Funding, Programme Director, WCDHB, General Manager Hospital Services, Grey Base Hospital, WCDHB.

12. Reporting Mechanism

A quarterly written report will be provided by the chair to the:

- W&CH Clinical Governance Committee
- CDHB Clinical Board
- WCDHB Clinical Board
- CEO of CDHB/WCDHB

The report will also be copied to the membership and tabled at the next meeting.

The committee will have an external reporting line to the National Maternity Monitoring Group, on behalf of the Ministry of Health.

Within the DHBs reporting will also extend to the respective General Managers and on to the Executive Management Team as required.

A Maternity Quality & Safety Programme (MQSP) annual report will be submitted to the Ministry of Health as well as to the General Manager Medical & Surgical and Women's and Children's CDHB, General Manager Rural Hospitals and Ashburton and Programme Director, WCDHB, General Manager Hospital Services, Grey Base Hospital, WCDHB.

13. Performance Indicators

The following measures will monitor the performance of the Governance group:

- Maternity Quality & Safety Programme report will be produced and submitted each year by 30th June;
- The required elements of the Maternity Quality and Safety Programme will be implemented within timeframes set by the Ministry of Health.

Appendix 2

Canterbury District Health Board
Te Poari Hauora ō Waitaha

CDHB Maternity Operational Group
Terms of Reference
(DRAFT)

1. Purpose

The CDHB Maternity Operational Group will operationalise the agreed objectives from the CDHB & WCDHB Maternity Clinical Governance Committee and to inform the CDHB & WCDHB Maternity Clinical Governance Committee of clinically pertinent matters.

2. Functions

The functions of the CDHB Maternity Operational Group are to:

2.1 Review significant trends and individual adverse events that are identified through the O&G incident report review meeting.
2.2 Initiate further investigation of clinical safety and quality issues where appropriate.
2.3 Identify changes to be made to clinical practice to reduce future risk and improve clinical standard.
2.4 Make recommendations for ongoing development of policies and guidelines for maternity and obstetric care.
2.5 Develop and implement systems to provide a safe environment for women, babies and staff.
2.6 Make recommendations for audit to the W&CH Clinical Audit Committee.
2.7 Other actions as determined by the current W&CH service quality plan.

3. Standing Orders

3.1 Agenda and papers to be circulated by mail/email at least five (5) business days prior to meeting.
3.2 Tabled material will be for information or discussion only, not for decision.
3.3 Minutes and items to be actioned from the previous meetings will be forwarded to the membership by email within 5 business days.
3.4 The Chairperson shall be responsible for keeping the final copy of the Terms of Reference and meeting minutes.
3.5 There will be a maximum time allocation of 1 and ½ hours for the meeting unless otherwise agreed by the committee.
3.6 Meetings are to be held every 2nd Tuesday of the month with calendar appointments sent out 3 months in advance.

4. Powers

The CDHB Maternity Operational Group will have the power to:

4.1 Seek advice from external experts
4.2 Consult appropriately in order to obtain information relevant to the functions of the committee
4.3 Implement quality changes

5. Chairperson

Clinical Director Obstetrics & Gynaecology

6. Membership

6.1 The membership of the CDHB Maternity Operational Governance Group will include 14 members that comprise:

- Clinical Director Obstetrics & Gynaecology;
- SMO Clinical Lead Birthing Suite;
- SMO Maternity Safety & Quality;
- Anaesthetic representative (TBC);
- Charge Midwife Manager, Birthing Suite;
- Charge Midwife Manager, Maternity;
- Charge Midwife Manager, Maternity Outpatients Department;
- Charge Midwife Representative Rural Services;

- Charge Midwife Manager, Primary Birthing Units;
- NZCOM representative x1;
- LMC Liaison x1;
- Quality Co-ordinator Maternity;
- Neonatal Clinical Nurse Manager;
- Allied Health representative (TBC);
- Consumer representative;
- Co-opted individuals as required.

6.2 It is expected that members will arrange a proxy to attend meetings when they cannot attend themselves. Each member is responsible for ensuring the proxy is adequately briefed prior to the meeting and that relevant information and actions are communicated back to the committee member.

6.3 Other positions or individuals may be co-opted to meetings as required.

7. Quorum

A quorum will consist of 50% plus one member.

8. Decision Making

Decisions will be reached where possible by consensus and the perspective of each professional group given appropriate weighting. Members must declare the nature and extent of any actual or potential conflict of interest to the Chairperson as soon as they become aware of it, ideally prior to the start of the meeting. In the event of failure to reach a decision, the matter will be investigated further by the Chair, including obtaining further expert advice, and the issue re-tabled. If consensus cannot then be reached, the issue will be taken to the CDHB & WCDHB Maternity Clinical Committee for resolution.

9. Meetings

The committee will meet every 2nd Tuesday of the month from February to December, as determined by the requirements of the agenda.

10. Accountability

Through the CDHB and WCDHB Maternity Clinical Governance Committee.

11. Reporting Mechanism

A quarterly written report will be provided by the Chair to the CDHB and WCDHB Maternity Clinical Governance Committee. The report will also be copied to the membership and tabled at the next meeting.

12. Performance Indicators

The following measures will monitor the performance of the Maternity Operational Governance Group:

- The objectives set out in the Maternity Service Quality Plan will be implemented within the set timeframes.

13. Other Recipients of Agendas & Minutes

Service Manager Women's Health
General Manager Women's & Children's Health and Medical Surgical
Clinical Director Neonatology
Director of Midwifery

14. Sub-Committees

Nil, but may be established as required to complete projects.

15. Functional Relationships

The CDHB Maternity Operational Group will have functional relationships with the following committees:

- CDHB & WCDHB Maternity Clinical Governance Committee;
- W&CH Clinical Governance Committee, CDHB;
- The Obstetrics & Gynaecology Incident Report Review Group;
- W&CH Clinical Audit Committee;
- Maternity Clinical Guidelines Group;
- Perinatal and Maternal Mortality Committee.

Appendix 3

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Ashburton & Rural Health Services
Maternity Continuum Team
Terms of Reference

Scope

All Ashburton & Rural Health Services Hospitals/Wards/Departments relating to the team.

Purpose

- To provide interdisciplinary co-ordination, direction and leadership for clinical activities relating to the maternity service.
- To ensure that requirements to meet the Maternity Quality and Safety Programme are implemented and maintained.
- To ensure that the requirements of the Health and Disability Sector Standards for Certification are met.
- To provide advice to the Director of Nursing and General Manager on service issues, planning and
- quality activities.
- To provide an annual report to the Maternity Clinical Governance Committee.
- To make decisions at discretion of chairperson within delegated authority.

Objectives

1 To identify and take action or make recommendations on service and health and safety issues and develop business plans and actively monitor performance against the plan.
2 To ensure Ashburton and Rural Health Services maintains its accreditation and certification status.
3 To provide interdisciplinary support, co-ordination and monitoring of quality activities with the aim of ensuring and improving patient care.
4 To review and develop policies and procedures where appropriate.
5 To ensure interdisciplinary retrospective clinical case reviews are undertaken where appropriate.
6 To initiate, progress and register specific projects and activities to achieve the above.
7 To ensure Maternity Centre meets the Baby Friendly Hospital Initiative requirement.
8 To facilitate ongoing education for all maternity health professionals within the Ashburton and Rural Health Services.
9 To review incident forms and track trends.

Accountability

General Manager

Membership

Director of Nursing and Clinical Services (Chairperson), Midwife, Quality Co-ordinator, Staff Nurse/Enrolled Nurse, Senior Medical Officer, Cultural Advisor, Consumer Representative, Duty Nurse Manager Representative, LMC Representative, Charge Midwifery Manager – Ashburton, Nurse Managers from Kaikoura, Waikari, Darfield and Akaroa Hospitals.
Co-opted (as a minimum annually):

- Physiotherapist
- Obstetrician/Gynaecologist

	• Patient Advocate • Dietitian • General Practitioner • General Practitioner Kaikoura and Director of Midwifery to be invited to attend by teleconference.
Chairperson	Director of Nursing & Clinical Services
Quorum	50% of core members in attendance +1.
Meetings	As a minimum, every second month (NB: co-opted membership)
Agenda	An agenda will be emailed 5 days prior to the meeting.
Minutes	Minutes of all meetings will be emailed to all Committee members and General Manager.
Functional Relationships with Other Committees	Functional relationship with other committees/staff including Access Agreement Holders Forum and Maternity Clinical Guidance Committee.
Date: **Revised Date:**	June 2001 November 2003; October 2005, May 2007, March 2009, May 2013

Appendix 4

DEPARTMENT:
Management
MANUAL:
Organisation Wide
APPROVED BY:

ST GEORGE'S HOSPITAL
A Tradition of Excellence

Page # 1 of 2
File Name: ToR: Quality Improvement
Intranet No: 3454
Date Approved: Nov 2012
Review Date: Nov 2014

Quality Improvement Committee Terms of Reference

PURPOSE

To initiate, facilitate and monitor all Quality Improvement activities.

AIM

- To promote St George's Hospital's unique positioning statement 'A Tradition of Excellence' and the organisational mission statement and values.
- To ensure optimum performance by continual monitoring, reviewing, evaluating and improving the standard of service and work practices to meet best or evidence based practice
- To identify organisational problems or issues that arise and taking corrective action.
- To uphold the Quality Health New Zealand Equip4 Accreditation, MOH Certification Standards and other legislative requirements

1. MEMBERSHIP

- Chief Executive
- Director of Nursing
- Patient Care Manager
- Finance Manager
- Quality Improvement Co-ordinator / Nurse Educator
- Infection Control Nurse
- Support Services Manager
- Standing Invitations to: The Facilities Manager
- Appropriate other persons may be invited to attend the committee for their expert knowledge as required.

2. MEETING STRUCTURE

- **Chair:** The Chief Executive Officer.
- **Minutes**: Taken by the Quality Improvement Co-ordinator and circulated no later than one week after the meeting. They will be discussed and confirmed at the following meeting
- **Meeting frequency**: Meetings will be held on alternate months or as required.
- **Quorum**: Four.
- **Length of meeting**: Approximately one hour.
- **Notice of meeting and the agenda**: Will be circulated one week prior to meeting.
- **Terms of Reference**: Reviewed 2 yearly and as required.

3. FUNCTION OF THE COMMITTEE

1. To discuss quality improvement issues raised by Hospital Committees, staff, patients or visitors.
2. Oversee and monitor action taken to meet the recommendations for
    - Quality Health Equip4 Accreditation
    - Ministry of Health Certification process,
    - ACC Workplace Safety Management Programme.
3. Ensure the Quality Improvement focus is maintained is all aspects of management, service and care delivery.
4. Discuss the following monthly reports tabled by the QI Co-ordinator, identify trends and make recommendations for action as appropriate.
    - Incident reports: Health & Safety and Patient Safety
    - Emergency Management: Fire, Disaster, Pandemic
    - Hazard identification
    - Patient Satisfaction Surveys
    - Suggestion Box
    - Quality initiatives /change processes
5. Review, discuss or develop policies or procedures referred to this committee
6. Review audits and quality improvements taking place in departments.
7. Identify and suggest specific auditing requirements and prioritise audit topics as required.
8. Identify benchmarking opportunities with other similar organisations.
9. Provide representation on all Hospital Committees to feedback recommendations or plans of action
10. Risk Management issues will be discussed and the committee may liaise with the Risk Management Committee as appropriate.
11. Recognise staff for quality initiatives

Appendix 5

West Coast
DISTRICT HEALTH BOARD
TE POARI HAUORA A ROHE O TAI POUTINI

WCDHB Maternity Quality and Safety Group Terms of Reference
(DRAFT)

1. Purpose

The West Coast District Health Board (WCDHB) Maternity Quality and Safety Group will ensure that the WCHB initiates and maintains quality improvement processes which align with the Maternity Quality and Safety Programme. The group will have functional relationships with maternity providers, professional groups and non-governmental groups, as required.

2. Functions

The functions of the WCDHB Maternity Quality and Safety Group are to:

2.1 Review significant trends and individual adverse events that are identified through the incident report review meetings and monitor the outcome of actions taken.
2.2 Identify changes made to clinical practice to reduce future risk and improve clinical standard and where relevant, initiate further investigation of clinical safety and quality issues.
2.3 Make recommendations for audit to the Clinical Quality Improvement Team.
2.4 Make recommendations for ongoing development of policies and guidelines for maternity and obstetric care.
2.5 Ensure that systems are in place to provide a safe environment for both women and staff.
2.6 Ensure the instigation of actions designed to improve patient and staff safety.
2.7 Develop a communication strategy to inform stakeholders of initiatives and outcomes.

3. Standing Orders

3.1 Agenda and papers to be circulated by mail/email at least five (5) business days prior to meeting.
3.2 Material tabled at the meeting will be for information or discussion only, not for decision.
3.3 Minutes and items to be actioned from the previous meetings will be forwarded to the membership by email within 5 business days.
3.4 The Chairperson shall be responsible for keeping the final copy of the Terms of Reference and meeting minutes.
3.5 There will be a maximum time allocation of 1 ½ hours for the meeting unless otherwise agreed by the committee.

4. Powers

The WCDHB Maternity Quality and Safety Group will have the power to:

4.1 Seek advice from external experts.
4.2 Consult appropriately in order to obtain information relevant to the functions of the committee.

5. Chairperson

To be appointed by the WCDHB Maternity Quality and Safety Group at the commencement of the financial year.

6. Membership

6.1 The membership of the WCDHB Maternity Quality and Safety Group will include 11 members that comprise:

- Quality Co-ordinator Hospital Services
- Nurse Manager Clinical Services,
- Clinical Midwife Manager,
- Senior Medical Officer, Obstetrics and Gynaecology
- Lead Maternity Carer representative
- Lactation Consultant
- Clinical Nurse Manager, Paediatrics
- Consumer representative
- Maori representative
- Pacific Island representative
- Allied Health representative (Maternity Social Worker)

6.2 It is expected that members will arrange a proxy to attend meetings where they cannot attend themselves. Each member is responsible for ensuring the proxy is adequately briefed prior to the meeting and that relevant information and actions are communicated back to the committee member.

6.3 Other positions or individuals may be co-opted to meetings as required.

7. Voting Rights of Members

7.1 Decisions should be reached where possible by consensus. When this is not possible, decisions may be carried by a simple majority of voting members present and a minority opinion will be recorded.

7.2 Members must declare a conflict of interest to the Chairperson as soon as they are aware of a conflict or the potential for a conflict. Ideally this should occur at the commencement of the meeting. The member must disclose the nature and extent of the interest to the committee for the record and refrain from voting.

7.3 Co-opted positions or individuals do not form part of the membership and therefore do not have voting rights, nor affect the quorum.

8. Other Recipients of Agendas & Minutes

- General Manager Hospital Services, Grey Base Hospital
- Director of Nursing and Midwifery
- Head of Obstetrics and Gynaecology
- Clinical Manager, Primary Health Organisation

9. Quorum

A quorum will consist of 50% plus one of the current voting members.

10. Meetings

The committee will meet quarterly, on the second Wednesday of the month.

11. Accountability

Through the WCDHB Clinical Board.

12. Reporting Mechanism

A quarterly written report will be provided by the Chair to the WCDHB Clinical Board; the Clinical Quality Improvement Team, and the CDHB & WCDHB Maternity Clinical Governance Committee.
The report will also be copied to the membership and tabled at the next meeting.

13. Performance Indicators

The following measures will monitor the performance of the WCDHB Maternity Quality and Safety Group:

- The objectives set out in the WCDHB Maternity Service Quality Plan will be implemented within the set timeframes.

14.Sub-Committees

May be established as required to complete projects.

15. Functional Relationships

The WCDHB Maternity Quality and Safety Group will have functional relationships with the following committees:

- WCDHB Clinical Board
- Clinical Quality Improvement Team
- Incident Review Group
- CDHB and WCDHB Maternity Clinical Governance Committee

Appendix 6

New Zealand Maternity Clinical Indicators

	Indicator	Numerator	Denominator
1	Standard primiparae who have a spontaneous vaginal birth	Total number of standard primiparae who have a spontaneous vaginal birth	Total number of standard primiparae who give birth
2	Standard primiparae who undergo an instrumental vaginal birth	Total number of standard primiparae who undergo an instrumental vaginal birth	Total number of standard primiparae who give birth
3	Standard primiparae who undergo caesarean section	Total number of standard primiparae who undergo Caesarean section	Total number of standard primiparae who give birth
4	Standard primiparae who undergo induction of labour	Total number of standard primiparae who undergo induction of labour	Total number of standard primiparae who give birth
5	Standard primiparae with an intact lower genital tract (no 1st – 4th degree tear or episiotomy)	Total number of standard primiparae with an intact lower genital tract	Total number of standard primiparae who give birth vaginally
6	Standard primiparae undergoing episiotomy and no 3rd – 4th degree perineal tear	Total number of standard primiparae undergoing episiotomy and no 3rd−4th-degree perineal tear while giving birth vaginally	Total number of standard primiparae who give birth vaginally
7	Standard primiparae sustaining a 3rd – 4th degree perineal tear and no episiotomy	Total number of standard primiparae sustaining a 3rd−4th-degree perineal tear and no episiotomy	Total number of standard primiparae who give birth vaginally
8	Standard primiparae undergoing episiotomy and sustaining a 3rd – 4th degree perineal tear	Total number of standard primiparae undergoing episiotomy and sustaining a 3rd−4th-degree perineal tear while giving birth vaginally	Total number of standard primiparae giving birth vaginally
9	General anaesthesia for caesarean section	Total number of women having a general anaesthetic for a Caesarean section	Total number of women having a Caesarean section
10	Blood transfusion after vaginal birth	Total number of women who give birth vaginally who require a blood transfusion during the same admission	Total number of women who give birth vaginally
11	Blood transfusion after caesarean section	Total number of women who undergo Caesarean section who require a blood transfusion during the same admission	Total number of women who undergo Caesarean section
12	Premature births (delivery between 32 and 36 weeks)	Total number of babies born at between 32 weeks 0 days and 36 weeks 6 days gestation	Total number of babies born in hospital

Appendix 7

CDHB and WCDHB Annual Plan - Our Performance Story 2012/13			
OBJECTIVE		**ACTIVITY**	**IMPACT**
Implement a collaborative and integrated approach to the delivery of maternity services.	**CDHB**	Work with NZ College of Midwives to increase the number of women who register with a Lead Maternity Carer (LMC) by week 12 of their pregnancy. Support the 'Find a Midwife' web-system to enable women to identify a LMC who best meets their needs. Work with primary care to ensure pregnant woman are enrolled with a PHO and registered with a GP. Fund LMC referrals to general practice for women in need of additional support for medical, mental health or social concerns. Work with Lead Maternity Carers (LMCs) to support the provision and recording of smoking cessation interventions for pregnant women who smoke. Enhance pregnancy/parenting courses to better meet the needs of a wider range of women – particularly Māori and Pacific women and younger mothers.[11]	Increased number of visitors to Find a Midwife site. Progress towards 90% of women who identify as smokers at confirmation of pregnancy being offered ABC Q4. >30% of new mothers access DHB-funded pregnancy and parenting education courses Q4.
	WCDHB	The Child and Youth Health Workstream and the Maternity Quality and Safety Group will work to: ▪ Identify processes and strategies to increase the number of women registered with a LMC by week 12 of their pregnancy; ▪ Identify processes and strategies to support the PHO to ensure pregnant woman are enrolled with a general practice; ▪ Improve the capture and collection of maternity data that will support planning and improve outcomes; and ▪ Review pregnancy and parenting programmes for first-time mothers with a focus on enhancing programmes to better meet the needs of vulnerable groups.[12] Continue to fund LMC to GP referrals for women in need of additional support for medical, mental health or social concerns. Continue to work with and support LMCs and general practice to offer pregnant women who smoke brief advice and support to quit.	Maternity Quality and Safety Programme underway Q1. Increased number of pregnant women registered with a LMC by 12 weeks – base 15%. >30% of new mothers access DHB-funded parenting and pregnancy courses Q4. Progress towards target of 90% of women who identify as smokers at confirmation of pregnancy offered ABC.
Support quality improvement across all services	**CDHB**	Consolidate the Maternity Quality and Safety Programme (MQSP) as business as usual by June 2015: Implement recommendations from first MQSP Report. Consolidate the MQSP approach across Canterbury and West Coast DHBs to align direction. Enhance Maternity Governance structures within and between DHBs to engage LMCs, primary care and consumers in the development and implementation of the programme. Review data collection and data quality to identify gaps and opportunities to improve service delivery. Establish a mechanism for review of NZ Maternity Clinical Indicators and a process for identifying opportunities to improve clinical care and reduce unnecessary variation in practice.	Combined Maternity Governance structure in place Q1. Review of data completed Q2. Second MQSP Annual Report completed Q4. Process for disseminating Maternity Clinical Indicators embedded Q4.
	WCDHB	Consolidate the Maternity Quality and Safety programme (MQSP) and identify actions to be undertaken in 2013/14 to embed MQSP as business as usual by June 2015. Support a Canterbury/West Coast approach to ensuring alignment and improving quality outcomes with MQSP.	Second annual Maternity Quality and Safety Programme report delivered Q4.

[11] The Ministry of Health is currently reviewing content and service specifications for pregnancy and parenting education; the DHB will align service delivery with national requirements once this review is complete.
[12] The Ministry of Health is currently reviewing content and service specifications for pregnancy and parenting education nationally; once national recommendation from this review have been released the DHB will review its own service delivery against these.

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Glossary of Terms

Assisted vaginal birth	A vaginal birth that needs assistance (e.g. forceps, vacuum extraction).
Caesarean section	An operative birth through an abdominal incision. This includes emergency and elective, lower segment and classical and it is identified by the presence of any caesarean section clinical code.
Caseloading midwife	A midwife who carries a full clinical primary workload including antenatal, intra-partum and postnatal care. Used to describe salaried position in DHB as opposed to LMC midwife who claims off the Section 88 Notice.
Epidural	An injection of analgesic agent outside the dura mater that covers the spinal canal. It includes lumbar, spinal (inside the dura mater) and epidural anaesthetics.
Episiotomy	An incision of the perineal tissue surrounding the vagina at the time of birth to facilitate delivery, identified by the presence of an episiotomy clinical code.
Exclusive Breastfeeding	The infant has never, to the mother's knowledge, had any water, formula or other liquid or solid food. Only breast milk, from the breast or expressed, and prescribed medicines (as per the Medicines Act 1981) have been given from birth.
Fully breastfeeding	The infant has taken breast milk only, no other liquids or solids except a minimal amount of water or prescribed medicined, in the past 48 hours.
Induction of labour	An intervention to stimulate the onset of labour by pharmacological or other means, identified by induction of labour clinical codes.
Instrumental vaginal birth	A vaginal birth requiring instrumental assistance with no concurrent clinical code indicating a caesarean section. Interventions include forceps and/or vacuum (ventouse) extraction. Failed trial of forceps or vacuum extraction are excluded.
Intact lower genital tract	Identified by an absence of clinical codes indicating an episiotomy or a tear of any degree (first to fourth, and including unspecified degree).
Lead maternity carer	A person who a) is a general practitioner with a Diploma in Obstetrics (or equivalent), a midwife or an obstetrician and b) is either a maternity provider in his or her own right; or an employee or contractor of a maternity provider; and c) had been selected by the women to provide her lead maternity care.
Live birth	The complete expulsion or extraction from its mother of a product of conception, irrespective of duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as breathing, beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered liveborn (WHO 1975).

Maternity facility

A facility that provides labour and birth services and inpatient postnatal care.

Midwife

A person who has successfully completed a midwifery education programme that is duly recognised in the country where it is located and that is based on the International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice and the framework of the ICM Global Standards for Midwifery Education who has aquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery.

NZDep2006

The New Zealand Deprivation Index (2006 version) is a measure the socioeconomic deprivation in small geographic areas of New Zealand (meshblocks). It was created using 2006 Census data about care and telephone access, receipt of means-tested benefits, unemployment, household income, sole parenting, educational qualifications, home ownership and home living space. The index ranges from 1 to 10, with 1 indicating people are living in the least deprived 10 percent (decile) of New Zealand, while 10 indicates people are living in the most deprived 10 percent.

The New Zealand Deprivation Index is based on data referring to the average socioeconomic circumstances of the *whole* population of a meshblock, not to individuals. Therefore caution is needed when interpreting NZDep data.[13]

Dimension of deprivation	Variable description
Income	People aged 18-64 receiving a means tested benefit
Income	People living in equivalised* households with income below an income threshold
Owned home	People not living in own home
Support	People aged <65 living in a single parent family
Employment	People aged 18-64 unemployed
Qualifications	People aged 18-64 without any qualifications
Living space	People living in equivalised* households below a bedroom occupancy threshold
Communication	People with no access to a telephone
Transport	People with no access to a car

Note * Equivalisation: methods used to control for household composition

Parity

The number of times a woman has given birth, including stillbirths.

Postnatal

All pregnancy-related events following birth.

Post-term birth

A birth at 42 or more completed weeks gestation.

[13] Source: NZDep2006 Index of Deprivation User's Manual. Salmond C., Crampton P., and Atkinson J. Department of Public Health, University of Wellington, 2007

Preterm birth, preterm labour	Birth or labour before 37 completed weeks gestation.
Premature birth	The birth of a baby born between 32 weeks 0 days and 36 weeks 6 days gestation.
Primary maternity facility	A facility that does not have inpatient secondary maternity services or 24-hour on-site availability of specialist obstetricians, paediatricians and anaesthetists. This includes birthing units.
PROMPT	A one day course managing obstetric emergencies and trauma as part of a multi-disciplinary team.
Secondary maternity care facility	A facility that provides additional care during the antenatal, labour and birth and postnatal periods for women and babies who experience complications and who have a clinical need for either consultation or transfer (Health Funding Authority 2000).
Spontaneous vaginal birth	The birth of a baby without obstetric intervention (i.e. without caesarean section, forceps or vacuum), identified by the presence of a spontaneous vaginal birth clinical code with no concurrent instrumental/caesarean section code. These may include births where labour has been induced or augmented.
STABLE Course	A neonatal education programme focussed on the post-resuscitation/pre-transport stabilisation care of sick infants.
Standard primiparae	A group of mothers considered to be clinically comparable and who are expected to require low levels of obstetric intervention. Standard primiparae are defined as women who meet all of the following inclusions: • Aged between 20 and 34 years (inclusive) at delivery; • Pregnant with a single baby presenting in labour in cephalic position; • Have no known prior pregnancy of 20-plus weeks' gestation; • Have no recorded obstetric complications in the present pregnancy that are indications of specific obstetric interventions; • Deliver a live or stillborn baby at term gestation: 37 to 41 weeks inclusive.
Tertiary maternity care facility	A facility that provides a multidisciplinary specialist team for women and babies with complex or rare maternity needs; for example, babies with major fetal disorders requiring prenatal diagnostic and fetal therapy services, or women with obstetric histories that significantly increase the risks during pregnancy, labour and delivery (e.g. those who have already had two placental abruptions). Includes neonatal intensive care units.
Third and fourth- degree tear	A third or fourth degree perineal laceration during birth, identified by the presence of a third or fourth degree of tear clinical code.

Abbreviations

AOU	Acute Observation Unit
BFHI	Baby Friendly Hospital Initiative
CDHB	Canterbury District Health Board
CPIT	Christchurch Polytechnic Institute of Technology
CTG	Cardiotocograph
CWH	Christchurch Women's Hospital
GP	General Practitioner
LC	Lactation consultant
LMC	Lead Maternity Carer
MEOWS	Modified Early Obstetric Warning Score
MoH	Ministry of Health
MMPO	Midwifery and Maternity Providers Organisation
MQSP	Maternity Quality and Safety Programme
NICU	Neonatal Intensive Care Unit
NZCOM	New Zealand College of Midwives
O&G	Obstetrics and Gynaecology
PHO	Primary Health Organisation
PROMPT	Practical Obstetric Multi-Professional Training
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
RCA	Root cause analysis
RMO	Resident medical officer
SANDS	Stillbirths and Neonatal Death Society
SIDS	Sudden Infant Death Syndrome
SMO	Senior medical officer
STABLE	**S**ugar and safe care, **T**emperature, **A**irway, **B**lood pressure, **L**ab work and **E**motional support course
SUDI	Sudden Unexpected Death of an Infant Syndrome
TOR	Terms of Reference
VBAC	Vaginal birth after caesarean section
W&CH	Women's and Children's Health
WCDHB	West Coast District Health Board