PRETERM BIRTH CLINIC REFERRAL GUIDELINES

PURPOSE OF THIS DOCUMENT

This document describes the principles and overview of the Preterm Birth (PTB) clinic that will be run at Christchurch Women's Hospital, servicing the Health NZ Waitaha Canterbury area. This document provides the referral criteria for the PTB clinic, the process for consultation and the management that will be provided through the clinic. It is designed to provide information on the PTB clinic to lead maternity carers (LMCs), hospital midwives, GPs and anyone else who may be providing care to pregnant wāhine/persons at risk of preterm birth.

BACKGROUND

Preterm birth (delivery before 37 weeks gestation) occurs in 7-10% of pregnancies; approximately two thirds of these are associated with spontaneous preterm labour and/or spontaneous preterm pre-labour rupture of membranes (PPROM). The remaining 25-30% are the result of health providers intervention (provider-initiated, iatrogenic or medically indicated).

In women at high risk of spontaneous preterm birth, there are many strategies we can employ that are of benefit and help to gain gestation in each pregnancy. These include offering a detailed clinic assessment of pre-existing risk factors and serial surveillance of cervical length in the second trimester. Prevention strategies that can help to reduce this health burden include: modification of risk factors, cervical cerclage, vaginal progesterone therapy and targeted treatment of infection[1].

Designated clinics for women at high risk of spontaneous preterm birth are becoming standard of care in many countries and provide an opportunity for a holistic multidisciplinary approach to management of women with a variety of risk factors who may benefit from a combination of prediction and prevention strategies. There is evidence from PTB clinics in the UK and US which demonstrate high levels of patient satisfaction and significant reductions in the preterm birth rate[1]. The Australian Preterm Birth Alliance has done a huge amount of work on strategies to reduce preterm birth and evidence has demonstrated reductions in rates of preterm birth when PTB clinics have been included in packages of preventative care[2].

In NZ, there has been a dedicated PTB clinic in Te Toka Tumai (Auckland) since 2013 and evidence from this service has demonstrated high levels of patient satisfaction in PTB care in line with other international clinics[3,4]. Across NZ more preterm birth clinics and advisors are being established in accordance with the expected recommendation from Taonga Tuku Iho, the new national best practice guide for preterm birth care[5]. PTB clinics provide continuity of care, a supportive network and reassurance for women, at a time in their pregnancy which is often fraught with anxiety and uncertainty.

PRINCIPLES OF THE PRETERM BIRTH CLINIC

This is a dedicated multidisciplinary clinic providing an intensive level of clinical care for women at high risk of spontaneous preterm birth, predominantly during the second trimester of pregnancy. The clinic aims to use the latest evidence and innovative care strategies to maximise outcomes and avoid unnecessary interventions. Care will be provided in conjunction with the main maternity

care provider/referrer (Canterbury clinics, LMCs and other health care providers). The responsibility of on-going care will remain with the main maternity care provider/referrer unless a formal handover of care occurs. The clinic is dedicated to enhancing knowledge in this field.

Research is integral to this process and so women attending this clinic may be eligible for research projects being undertaken in the clinic. Eligible women may be approached and asked to consider participation. All women will be assured that this is voluntary, and that their decision to take part will not affect the rest of their maternity care, but that it may be beneficial to them and for women in the future. We will use audit for on-going review of clinic practice and outcomes.

The PTB Clinic is also committed to teaching and training of health care professionals providing care for women at high risk of PTB. On occasions doctors, midwives and sonographers will be present in the clinic in a training capacity. This will be identified to women attending the clinic.

REFERRAL CRITERIA

Women with multiple gestation (twins or higher order) as their only risk factor for spontaneous preterm birth are not eligible for PTB Clinic review. However, women with multiple gestation and other referral criteria are eligible for review and should be offered referral.

If women have any of the below risk factors then we recommend early referral after consultation with the woman:

- Previous spontaneous PTB/PPROM < 34+0
- Previous spontaneous miscarriage > 16+0 weeks
- Previous pregnancy requiring ultrasound-indicated or rescue cerclage (without preterm birth)
- Two or more LLETZ procedures
- History of knife cone biopsy or trachelectomy (for primiparous women, or since last term birth for multiparous women)
- Congenital uterine and/or cervical anomaly (including corrected/resected anomalies), eg. uterine didelphys/double cervix and unicornuate uterus
- Short cervix in current pregnancy ≤ 25mm at ≥ 23 +6 weeks
- Previous caesarean section in labour with documented tears through cervix or into upper vagina

We recommend referral for written advice after 12 week scan on how to appropriately manage the following women in pregnancy and what extra care and surveillance we could offer them. Likely recommendations will be cervical length surveillance in the community at 16, 20 and 23 weeks gestation.

- Caesarean section at full dilatation
- Connective tissue disorders, eg. Ehlers-Danlos syndrome
- >2 uterine instrumentations (STOPs, RPOC, D&Cs, treatment of Asherman's syndrome)

ACCOMPANYING DOCUMENTATION

We recommend referral as soon as applicable in the pregnancy, particularly for women that have multiple risk factors. To accompany the referral so that it can be actioned in a timely manner, we recommend the following have been offered to the women:

- Criteria for referral
- Antenatal booking bloods
- Named LMC who will provide ongoing care in the pregnancy to allow collaboration
- MSSI/NIPT results
- MSU and vaginal swabs – MC&S and STI screen (self-swabs)

- USS at 12 weeks
- Completed maternity booking form
- Details regarding previous deliveries (and location of these)

Please ensure the above investigations are completed. We will aim to see women for their first visit at 12-14 weeks gestation, and then fortnightly thereafter.

Please note that wāhine and whānau may be offered investigations and referral to our clinic but decline. We are also happy to provide written advice for ongoing care in the community. Our care is women centred and we want to ensure all wāhine choose what is best for them and their babies, whilst having the information to make those informed decisions.

PRE-PREGNANCY COUNSELLING

We are happy to see women for pre-pregnancy counselling where they have had a poor outcome in a previous pregnancy or are very high risk for a preterm birth; to go through risk factors and address any concerns or issues that we may be able to correct and/or treat prior to conception. These may include:

- Previous early (<30 weeks) PTB/second trimester miscarriage and no postnatal follow up (debrief/counselling) done at the time
- Multiple pregnancy losses < 28 weeks
- Previous unsuccessful transvaginal cerclage (with birth <28 weeks)
- Previous trachelectomy

Returning to Christchurch Women's Hospital may be triggering for some wāhine and whānau after the loss of a baby or a traumatic experience and thus we are very happy to offer phone or zoom consultations in these instances.

HOW TO REFER

- Fill in an obstetric clinic referral form electronically (or paper based if no access to electronic referrals) and tick **PRETERM BIRTH CLINIC**.
- Make sure to list the criteria for which the women meet to be seen in the clinic
- If women have a short cervix as an incidental finding on mid trimester USS (<25mm) then **URGENT** referral via electronic form.
- If cervical length at any stage is found to be <10mm then please accompany electronic referral with an **URGENT** phone call to
  - Gynaecology Registrar (027 702 8189) if the woman is < 22 weeks or
  - Obstetric Registrar (027 886 2305) if > 22 weeks as we will endeavour to see the patient within 24 hours.

MANAGEMENT IN THE PRETERM BIRTH CLINIC

- Carosika Whānau information 'What is a Preterm Birth Clinic' will be provided with details regarding appointment
- Initial visit 12-14 weeks gestation (30min consult)
  - Ensure has been offered appropriate investigations in early pregnancy including: antenatal serology, MSU, STI screen, cervical screening, NT scan with cervical length, MSS or NIPT, comprehensive history and examination if needed
  - Offer to perform transvaginal cervical length if not performed at NT and/or within one week of clinic visit
  - Discuss aspirin and calcium if appropriate
  - Discuss progesterone therapy (200mg nocte PV)
  - Discuss elective cervical cerclage if appropriate
  - Counselling around risk of preterm birth
  - Discuss lifestyle factors such as smoking and weight management
  - Carosika Whānau information 'Treatment Options to Prevent Preterm Birth' will be provided
- Subsequent visits (20mins), will usually be fortnightly until 24 weeks gestation with an ultrasound for cervical length and fetal wellbeing. There is limited evidence to guide the frequency of follow up visits and ultrasound surveillance of cervical length, and thus some appointments may occur weekly or three weekly depending on clinical situation and in consultation with wāhine and her whānau.
- Final clinic visit at 23-24 weeks. May be discharged to LMC care or referred for ongoing care in a general antenatal clinic.
  - At this final visit, input data into the QUiPP app. If risk of birth is considered sufficiently high in the next 7 days then discussion of admission/transfer and corticosteroid administration will be made
  - Carosika Whānau information 'Exiting the Preterm Birth Clinic' will be provided

** Of note if women are being seen through the Fetal Medicine Clinic for their care for other reasons, then they will continue in this clinic and will not also be seen in the PTB clinic due to resourcing. Cervical length management will be done through FMM***

COLLABORATIVE CARE

All women seen in the preterm birth clinic will have a letter issued outlining investigations and management, that will be available on Health Connect South, the hospital clinical management system. A copy will be sent to the patient, LMC, GP and any other providers that are involved with the patient's care with their knowledge and permission. If a patient requires urgent treatment or investigations then we will endeavour to update the LMC with a phone call. Reducing preterm birth and improving outcomes for women and their babies, relies on collaborative care and we aim to provide a holistic and multidisciplinary approach to care.

REFERENCES

1. Newnham J, Dickinson J, Hart R, Pennell C, Arrese C, Keelan J. Strategies to prevent preterm birth. *Frontiers in Immunology* 2014; 5:584
2. Morris J, Brown K, Newnham J. The Australian Preterm Birth Prevention Alliance. *ANZJOG* 2020; 60(3): 321-323
3. Dawes L, Waugh JJS, Lee A, Groom KM. Psychological well-being of women at high risk of spontaneous preterm birth cared for in a specialised preterm birth clinic: a prospective longitudinal cohort study. *BMJ Open* 2022; 12(3)
4. Dawes L Restall A, de Sousa J, Pole JR, Waugh J, Groom K. The experience and outcomes of a specialised preterm birth clinic in New Zealand. *ANZJOG* 2020: 60:6; 904-13
5. Carosika Collaborative: Taonga Tuku Iho, a best practice guide for equity in preterm birth in Aotearoa https://bestpracticeguide.carosikacollaborative.co.nz

This guideline is based on the Preterm Birth Referral Guidelines developed and used by the National Women's Health PTB clinic as part of Te Toka Tumai (Auckland City Hospital) Maternal Fetal Medicine (MFM) service and from the Carosika Collaborative 'Establishing a Preterm Birth Clinic/Advisory Service' Standard Operating Procedure. We acknowledge their help, support and collaboration.