Sunshine Coast Hospital and Health Service

Maternity and GP shared care guideline
2016
Sunshine Coast Hospital and Health Service (SCHHS)
Maternity and GP shared care guideline 2016

For further information contact:

A/Professor Edward Weaver
Deputy Head Sunshine Coast Clinical School
School of Medicine University of Qld
Nambour General Hospital
PO Box 547 Nambour QLD 4560
Phone: 07 5470 5833


Copyright © The State of Queensland, Sunshine Coast Hospital and Health Service 2015

This document is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. In essence, you are free to copy and communicate the work for non-commercial purposes, as long as you attribute the authors: Sunshine Coast Hospital and Health Service and abide by the licence terms. You may not alter or adapt the work in any way.

To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/3.0/au/deed.en
## Contents

- Acknowledgements ................................................................................................................. 4  
  - Forward ................................................................................................................................. 4  
  - Maternity GP shared care ...................................................................................................... 4  
  - The pregnancy health record ................................................................................................. 5  
  - Medical indemnity recommendations ..................................................................................... 5  
  - Preferred provider program .................................................................................................... 6  
  - Suitability for maternity shared care ...................................................................................... 7  
  - Booking a birthing facility ....................................................................................................... 14  
  - Maternity shared care visit schedule ..................................................................................... 15  
  - Screening tests ....................................................................................................................... 15  
  - Supplements ............................................................................................................................ 17  
  - Antenatal services ................................................................................................................... 17  
  - Abnormal results and findings ................................................................................................. 21  
  - Management of Rh D negative women .................................................................................... 24  
  - Infections ............................................................................................................................... 24  
  - Smoking and other harmful substances .................................................................................... 25  
  - Normal weight, overweight and obesity ................................................................................... 25  
  - Nutrition and physical activity ................................................................................................ 26  
  - Postnatal care and supports ..................................................................................................... 26  
  - Feeding support ....................................................................................................................... 26  
  - Home visiting .......................................................................................................................... 26  
  - Postnatal GP appointment (5 - 10 days) ................................................................................... 27  
  - Postnatal GP appointment at 6 weeks ..................................................................................... 28  
  - Appendix 1 Antenatal share care flowchart ........................................................................... 29  
  - Appendix 2 Abbreviations ....................................................................................................... 30  
  - Appendix 3 Definitions ........................................................................................................... 31  
  - Appendix 4 Community resources and contacts .................................................................... 32  
  - References ............................................................................................................................... 33
Acknowledgements

This guideline was initially prepared by the Sunshine Coast Hospital and Health Service (SCHHS) GP Preferred Providers Program Working Party in close collaboration with the Sunshine Coast Medicare Local (SCML) and other key clinicians in the public and private sector.

The aim was to develop a best practice model for a general practitioner (GP) maternity shared care program that included uniform guidelines to assist GPs and hospitals to care for women.

The following organisations are acknowledged for their input into developing the initial SCHHS guideline:

- Women’s and Newborn Services, Metro North Hospital and Health Service (for providing the Metro North Maternity GP Shared Care Guideline document as a template);
- Metro North Medicare Local;
- Mater Hospital and Greater Metro South Brisbane Medicare Local (for providing the Mater Mother’s Hospital GP Maternity Shared Care Guideline (August 2013) document based on the SA Statewide model: GP Obstetric Shared Care Protocols. A Statewide Model);
- Maternity Choices;
- Senior maternity care and GP liaison staff, SCHHS.

Forward

The National Maternity Plan (2011) sets out the Federal Government’s vision for maternity services that “Maternity care will be woman-centred, reflecting the needs of each woman within a safe and sustainable quality system. All Australian women will have access to high-quality, evidence-based, culturally competent maternity care in a range of settings close to where they live”. It recognised the significant contribution that General Practitioners (GPs) make as part of collaborative networks necessary to ensure effective delivery and continuity of maternity care particularly in the context of those most at risk of poor outcome and those living in rural communities. Developing collaborative care was further underpinned in 2013 by the Queensland Government’s Blueprint for better healthcare in Queensland which stated a commitment to closer working relationships between GPs and the hospital system.

In order to support this shared delivery it is essential that we develop robust clinical pathways between primary, secondary and tertiary care. This document complements the existing Queensland Maternity and Neonatal Clinical Guidelines Program Operational Frameworks: Maternity shared care and non-urgent referral for antenatal care. Together these important tools provide GPs with relevant information to support the delivery of safe and effective maternity care.

Maternity GP shared care

Shared care in this context is a co-operative arrangement between a public birthing facility and a community-based primary maternity carer (PMC) who is not employed by the birthing facility. The PMC provides the majority of the antenatal and postnatal care while the public birthing facility provides some antenatal and intrapartum care and care in the immediate puerperium prior to the woman and her baby being discharged from hospital.

Women who attend a SCHHS birthing facility during pregnancy and in childbirth have an option of GP shared care.

The Queensland Maternity and Neonatal Operational Framework Maternity shared care has been developed to support effective communication and clear understanding of roles and responsibilities of health care professionals involved in maternity shared care.

This framework is also available from the Queensland clinical guidelines internet site - http://www.health.qld.gov.au/qcg/.
The pregnancy health record

The pregnancy health record (PHR) is the current Queensland Health endorsed document for effective information sharing between service providers, including GPs.

The PHR is an evidenced based tool designed to empower the woman to be involved in and informed of her antenatal care with all providers she accesses (see section 3.3 of the framework Maternity shared care.)

It is thus imperative that a woman takes her PHR to each antenatal visit so that a record of each visit can be made and any concerns of the treating practitioner at that visit are recorded.


PHRs may be ordered via fax (07) 54705723 or E-mail SC-Nambour-Antenatal@health.qld.gov.au.

Medical indemnity recommendations

The risk of litigation in the practice of obstetrics mainly relates to the conduct of labour. Litigation has also occurred when antenatal screening tests have failed to be performed and serious medical problems or obstetric complications have not been detected during the pregnancy, there has been a delay in referral to a more appropriately skilled practitioner, or there has been a delay in appropriate management by a particular practitioner.

To be indemnified for the practice of maternity shared care the following guidelines must be applied:

- GPs who intend to provide shared antenatal care should check with their professional indemnity insurance provider if their policy covers such care. Generally GPs insured with a Medical Defence Organisation (MDO) are covered for claims arising out of care provided (including any major antenatal complications) up until labour, but are not covered for any intra-partum care or treatment. To be covered for intra-partum care the GP must have GP obstetric cover.

- Ensure all appropriate antenatal screening tests are performed and followed up.
  - All pregnant women (of any age) should be offered prenatal screening tests that can detect fetal abnormalities.
  - Any investigations requested for any pregnant woman under their care must be followed up by the GP who orders the tests in a timely fashion.
  - While part of appropriate follow-up is communicating relevant results to the shared care hospital, it is still necessary for the GP to check that the woman has been notified of an abnormal result, appropriate action organised, including urgent referral to a hospital based service, if required.
  - The GP will not be relieved of all medico-legal liability by simply sending the results to the hospital, in the assumption staff there will act on the results and organise appropriate interventions.
  - It is recommended that GPs contact the obstetric registrar on call (5470 5131 all hours) if they have a woman who requires urgent review in these circumstances.

- Ideally women with abnormal prenatal screening results will be referred to an antenatal clinic before 12 weeks and triaged for consultation with an obstetrician/obstetric registrar at an appropriate time.
  - If shared care is deemed appropriate, the obstetrician/obstetric registrar or midwife should see the woman at 36 weeks and again at 41 weeks, provided that the antenatal course is otherwise uneventful. Should problems occur at any time, the on-call obstetric registrar should be consulted.
  - GPs may continue to see pregnant women for antenatal visits or for concurrent medical problems, but in shared care the responsibility for the obstetric care and the delivery of the baby must rest with the consultant obstetrician.
In an emergency situation, e.g. antepartum haemorrhage or imminent pre-term birth, any doctor irrespective of their insurance cover must render whatever emergency assistance they can, and will be indemnified.

If a GP undertaking shared care is planning to be away their practice, the woman's care including responsibility for follow-up of tests must be handed over to another GP who is adequately qualified to provide antenatal care and is suitably indemnified. Alternatively, the woman's results should be sent to the antenatal clinic, with a letter specifically requesting that the hospital follows up any abnormal results. It is recommended that GPs contact their indemnifier for information about this situation, if they are uncertain of the correct procedure to follow in these circumstances.

Preferred provider program

GPs who choose to join the preferred provider program (PPP) will have access to high quality education and improved lines of communication with SCHHS birthing facilities.

In return, GPs participating in the PPP will commit to providing:

- Referrals with an agreed minimum amount of clinically relevant information to facilitate safe provision of care. Hard copy or electronic templates have been created for GP use. Referrals are to include copies of relevant pathology and radiology reports;
- The antenatal clinic with copies of all pathology and radiology requests;
- Timely communication with the appropriate clinician/s in the event of developing antenatal problems;
- Documentation of any care provided in the Pregnancy Health Record;
- Commitment to meeting their continuing professional development (CPD) requirements;
- High quality patient care as per RACGP and RANZCOG guidelines.

SCHHS is committed to supporting all GPs who wish to share care to maintain their obstetric skills and familiarity with new protocols and approaches to care. The PPP is designed to be as flexible as possible for GPs and aims to minimise risks inherent in delayed consultation with the hospital, facilitate timely antenatal bookings and to reduce the numbers of missing antenatal investigations and information when women first attend the antenatal clinic (ANC).

To become a PPP shared care GP with the SCHHS a GP must fulfil the requirements listed below:

- Must be a registered medical practitioner with current medical indemnity insurance;
- Whilst it is not necessary that the GP wishing to conduct shared care holds the DRANZCOG/ Certificate in Women’s Health, they should, at a minimum, have up to date knowledge about current obstetric care and be familiar with the policies and procedures of the participating birthing facility;
- Attendance at relevant education sessions and PPP education updates with a minimum of one evening update per quarter and attendance at the full day workshops 1 and 2 per CPD triennium and completion of any associated knowledge assessments;

To maintain preferred provider status the GP must either:

- Repeat the standard workshop including assessment; OR
- Attend two relevant antenatal or postnatal/ neonatal CPD events per year AND complete the online education including submission of the completed assessment (the online component is currently under development).

The three year cycle is run in parallel with the triennium set down by the RACGP and the Australian College of Rural and Remote Medicine (ACRRM) for GP Vocational Registration.

Preferred providers for shared ante-natal care will be listed on the SCHHS website.
Suitability for maternity shared care

"Most women are suitable for GP shared antenatal care. The decision to participate in shared care is a joint one made by the woman, her PMC and the SCHHS maternity health care professionals, all of whom share responsibility.

Women who have complex care needs may still be provided with maternity shared care providing all health care providers:

- Are familiar with relevant risk factors
- Follow appropriate consultation and referral/management guidelines
- Collaborate in a timely fashion with each other
- Accurately document each visit, with sufficient detail, in the PHR;
- Recognise the assessment of risk is a continuing process throughout the pregnancy
- Notify significant concerns to the on call O&G Registrar in a timely fashion"¹

For more information and to complement existing consultation and referral guidelines refer to the Queensland Maternity and Neonatal Clinical Guidelines operational framework: Non-urgent referral for antenatal care


This document:

- Describes the process required to facilitate effective communication and continuity of collaborative shared care;
- Provides a standardised approach to the clinical coordination of non-urgent antenatal referral for consultation and/ or transfer of care to a higher level facility
- Should be read in conjunction with the related supplement

Indications at booking history

Table 1 lists specific indications for discussion, consultation and/or transfer of care when discussing a woman’s needs during an initial antenatal visit. The main purpose of the list is to provide a guide for risk assessment in early pregnancy.

Table 1: Medical conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Key: A = Discuss; B = Consult; C = Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anaesthetic difficulties</strong></td>
<td></td>
</tr>
<tr>
<td>Previous failure or complication (e.g. difficult intubation, failed epidural)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Previous adverse anaesthetic drug reaction</td>
<td>A</td>
</tr>
<tr>
<td>Malignant hyperthermia or neuromuscular disease</td>
<td>C</td>
</tr>
<tr>
<td><strong>Cardiovascular disease</strong></td>
<td></td>
</tr>
<tr>
<td>Pre existing Cardiac disease</td>
<td>B/ C</td>
</tr>
<tr>
<td>Hypertension</td>
<td>C</td>
</tr>
<tr>
<td>Chronic hypertension, with or without medication</td>
<td>C</td>
</tr>
<tr>
<td>Arrhythmia</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Drug dependency and prescription medicine</strong></td>
<td></td>
</tr>
<tr>
<td>Use of alcohol and other drugs</td>
<td>B/ C</td>
</tr>
<tr>
<td>Medicine use (category B or higher)</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Endocrine</strong></td>
<td></td>
</tr>
<tr>
<td>Pre-existing Type 1 or Type 2 diabetes</td>
<td>C</td>
</tr>
<tr>
<td>Impaired glucose tolerance</td>
<td>B/ C</td>
</tr>
<tr>
<td>Gestational diabetes requiring insulin</td>
<td>C</td>
</tr>
<tr>
<td>Thyroid conditions</td>
<td>B</td>
</tr>
<tr>
<td><strong>Gastroenterology</strong></td>
<td></td>
</tr>
<tr>
<td>Inflammatory bowel disease including ulcerative colitis and Crohn’s disease</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Genetic – any condition</strong></td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Haematological</strong></td>
<td></td>
</tr>
<tr>
<td>Thrombo-embolic disease</td>
<td>C</td>
</tr>
<tr>
<td>Coagulation disorders</td>
<td>C</td>
</tr>
<tr>
<td>Anaemia from any cause</td>
<td>B/ C</td>
</tr>
<tr>
<td>Thrombophilia</td>
<td>B</td>
</tr>
</tbody>
</table>
### Infectious diseases

<table>
<thead>
<tr>
<th>Condition</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-infection</td>
<td>C</td>
</tr>
<tr>
<td>Rubella</td>
<td>B/ C</td>
</tr>
<tr>
<td>Toxoplasmosis</td>
<td>B/ C</td>
</tr>
<tr>
<td>Cytomegalovirus</td>
<td>B/ C</td>
</tr>
<tr>
<td>Parvo virus infection</td>
<td>B/ C</td>
</tr>
<tr>
<td>Varicella Zoster virus infection</td>
<td>C</td>
</tr>
<tr>
<td>Hepatitis from all causes</td>
<td>B/ C</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
</tr>
<tr>
<td>Herpes genitalis - primary infection and recurrent</td>
<td>B/ C</td>
</tr>
<tr>
<td>Syphilis</td>
<td>B/ C</td>
</tr>
</tbody>
</table>

### Mental health disorders

- Care during pregnancy and birth will depend on severity and extent of psychiatric disorder: B/ C

### Renal function disorders

- Disorder in renal function, with or without dialysis: B/ C
- Recurrent urinary tract infections: B/ C
- Pyelonephritis: B/ C

### Neurological

- Epilepsy: B/ C
- Subarachnoid haemorrhage, aneurysms: C
- Multiple sclerosis: B/ C
- AV malformations: C
- Myasthenia gravis: C
- Spinal cord lesion: C
- Muscular dystrophy or myotonic dystrophy: C

### Respiratory disease

- Mild: A/ B
- Moderate – requiring maintenance therapy: B/ C
- Severe: C

### Autoimmune disease

- System/ connective tissue diseases (including rare maternal disorders such as systemic lupus erythematosus (SLE), anti-phospholipid syndrome (APS), scleroderma, rheumatoid arthritis, periarteritis nodosa, Marfan’s syndrome, Reynaud’s disease and other systemic/ rare disorders): C
### Table 2: Pre-existing gynaecological disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Key: A = Discuss; B = Consult; C = Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelvic floor reconstruction</td>
<td>B/ C</td>
</tr>
<tr>
<td>This refers to colposuspension following prolapse, fistula and previous rupture</td>
<td></td>
</tr>
<tr>
<td>Cervical abnormalities</td>
<td></td>
</tr>
<tr>
<td>Cervical amputation</td>
<td>C</td>
</tr>
<tr>
<td>Cervical cone biopsy</td>
<td>B/ C</td>
</tr>
<tr>
<td>Cervical surgery with or without subsequent vaginal birth</td>
<td>B/ C</td>
</tr>
<tr>
<td>Abnormal cervical cytology</td>
<td>B/ C</td>
</tr>
<tr>
<td>Myomectomy/hysterotomy</td>
<td>B/ C</td>
</tr>
<tr>
<td>Infertility treatment</td>
<td>B/ C</td>
</tr>
<tr>
<td>Pelvic deformities (trauma, symphysis rupture)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Female genital mutilation</td>
<td>B/ C</td>
</tr>
</tbody>
</table>

### Table 3: Previous obstetric history

<table>
<thead>
<tr>
<th>Condition</th>
<th>Key: A = Discuss; B = Consult; C = Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal antibodies against red blood cells or platelets</td>
<td>C</td>
</tr>
<tr>
<td>e.g. Rhesus isoimmunisation and alloimmune thrombocytopenia</td>
<td></td>
</tr>
<tr>
<td>ABO-incompatibility</td>
<td>B/ C</td>
</tr>
<tr>
<td>Hypertension</td>
<td>A/ B</td>
</tr>
<tr>
<td>Pre-eclampsia</td>
<td>B/ C</td>
</tr>
<tr>
<td>Eclampsia</td>
<td>C</td>
</tr>
<tr>
<td>Recurrent miscarriage (three or more)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Pre-term birth (&lt;37 weeks)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Cervical incompetence and cervical rupture</td>
<td>C</td>
</tr>
<tr>
<td>Fetal growth concerns</td>
<td></td>
</tr>
<tr>
<td>Fetal growth restriction</td>
<td>B/ C</td>
</tr>
<tr>
<td>Small for gestational age (SGA) &lt;10th centile or &lt;2.5 kg after 37 completed weeks gestation</td>
<td>B/ C</td>
</tr>
<tr>
<td>Large for gestational age (LGA)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Key: A = Discuss; B = Consult; C = Transfer</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Previous difficult birth</strong></td>
<td></td>
</tr>
<tr>
<td>Shoulder dystocia</td>
<td>B/ C</td>
</tr>
<tr>
<td>Forceps or vacuum extraction, or where a woman has required or requires extensive de-briefing about her previous birth experience</td>
<td>A/ B</td>
</tr>
<tr>
<td>Asphyxia (defined as an APGAR score of &lt; 7 at 5 minutes)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Caesarean section – lower segment</td>
<td>B/ C</td>
</tr>
<tr>
<td>Caesarean section - other</td>
<td>C</td>
</tr>
<tr>
<td><strong>Perinatal death</strong></td>
<td>B/ C</td>
</tr>
<tr>
<td>Previous intra uterine fetal death (IUFD)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Prior child with congenital and/or hereditary disorder</td>
<td>B</td>
</tr>
<tr>
<td>Postpartum haemorrhage &gt; 1000 mLs</td>
<td>B/ C</td>
</tr>
<tr>
<td>Placental abruption</td>
<td>B/ C</td>
</tr>
<tr>
<td>Placental accreta</td>
<td>C</td>
</tr>
<tr>
<td>Manual removal of placenta</td>
<td>A/ B</td>
</tr>
<tr>
<td><strong>Third or fourth degree perineal laceration</strong></td>
<td></td>
</tr>
<tr>
<td>Functional recovery</td>
<td>B</td>
</tr>
<tr>
<td>No/poor function recovery</td>
<td>C</td>
</tr>
<tr>
<td>Symphysis pubis dysfunction</td>
<td>A/ C</td>
</tr>
<tr>
<td>Postnatal depression</td>
<td>A/ B</td>
</tr>
<tr>
<td>Postpartum psychosis</td>
<td>C</td>
</tr>
<tr>
<td>Grand multiparity – defined as parity &gt; 6</td>
<td>A/ B</td>
</tr>
<tr>
<td><strong>Extremes of body mass</strong></td>
<td></td>
</tr>
<tr>
<td>BMI &gt; 35</td>
<td>B/ C</td>
</tr>
<tr>
<td>BMI &lt; 18</td>
<td>B/ C</td>
</tr>
<tr>
<td>Lack of social support</td>
<td>A/ B</td>
</tr>
</tbody>
</table>
Table 4 provides a list of indications for discussion, consultation and/or transfer of care in response to conditions or abnormalities that are identified during pregnancy. The main purpose of the indication list specific is to provide a guide for risk-selection.

**Table 4: Indications developed/discovered during pregnancy**

<table>
<thead>
<tr>
<th>Indication</th>
<th>Key: A = Discuss; B = Consult; C = Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertain dates after 20 completed weeks</td>
<td>B/ C</td>
</tr>
<tr>
<td>Laparotomy during pregnancy</td>
<td>C</td>
</tr>
<tr>
<td>Abnormal cervical cytology – CIN II or higher</td>
<td>B/ C</td>
</tr>
<tr>
<td>Mental health disorders</td>
<td>B/ C</td>
</tr>
<tr>
<td>Hyperemesis gravidarum requiring hospital admission</td>
<td>B/ C</td>
</tr>
<tr>
<td>Suspected fetal abnormality or increased risk for fetal abnormality</td>
<td>B/ C</td>
</tr>
<tr>
<td>Spontaneous rupture of membranes before 37 completed weeks</td>
<td>C</td>
</tr>
<tr>
<td>Hypertension arising in pregnancy (systolic BP &gt;140 and/or diastolic &gt;90 mmHg)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Eclampsia</td>
<td>C</td>
</tr>
<tr>
<td>Significant cardiovascular symptoms</td>
<td>B/ C</td>
</tr>
<tr>
<td>Coagulation disorders</td>
<td>B/ C</td>
</tr>
<tr>
<td>Vaginal bleeding in the 2nd or 3rd trimester or suspected placental abruption</td>
<td>B/ C</td>
</tr>
<tr>
<td>Placental abruption</td>
<td>C</td>
</tr>
<tr>
<td>Size/date discrepancy (symphysis fundal height &gt;3 cm or &lt;3 cm for gestational age)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Small for dates</td>
<td>B/ C</td>
</tr>
<tr>
<td>Large for dates</td>
<td>B/ C</td>
</tr>
<tr>
<td>Post term pregnancy &gt;41 completed weeks</td>
<td>B/ C</td>
</tr>
<tr>
<td>Threatened preterm labour</td>
<td>B/ C</td>
</tr>
<tr>
<td>Suspected cervical incompetence</td>
<td>C</td>
</tr>
<tr>
<td>Multiple pregnancy</td>
<td>C</td>
</tr>
<tr>
<td>Abnormal presentation at 36 completed weeks</td>
<td>B/ C</td>
</tr>
<tr>
<td>Breech presentation, consideration for ECV at 37 weeks</td>
<td>C</td>
</tr>
<tr>
<td>Suspected cephalic pelvic disproportion</td>
<td>B/ C</td>
</tr>
<tr>
<td>No antenatal care prior to 28 completed weeks</td>
<td>B/ C</td>
</tr>
<tr>
<td>Fetal death in utero</td>
<td>C</td>
</tr>
<tr>
<td>Endocrine disorders</td>
<td></td>
</tr>
<tr>
<td>Diabetes, including gestational diabetes</td>
<td>C</td>
</tr>
<tr>
<td>Thyroid disease or other endocrine disorders</td>
<td>B/ C</td>
</tr>
<tr>
<td>Key: A = Discuss; B = Consult; C = Transfer</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Gastroenterology</strong></td>
<td></td>
</tr>
<tr>
<td>Cholestasis</td>
<td>C</td>
</tr>
<tr>
<td>Inflammatory bowel disease</td>
<td>B/ C</td>
</tr>
<tr>
<td>Abnormal liver function tests (LFTs)</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Haematological</strong></td>
<td></td>
</tr>
<tr>
<td>Thrombosis</td>
<td>B/ C</td>
</tr>
<tr>
<td>Coagulation disorders</td>
<td>B/ C</td>
</tr>
<tr>
<td>Anaemia</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Infectious diseases</strong></td>
<td></td>
</tr>
<tr>
<td>Hepatitis (all causes)</td>
<td>B/ C</td>
</tr>
<tr>
<td>HIV infection</td>
<td>C</td>
</tr>
<tr>
<td>Rubella</td>
<td>B/ C</td>
</tr>
<tr>
<td>Toxoplasmosis</td>
<td>B/C</td>
</tr>
<tr>
<td>Cytomegalovirus</td>
<td>B/ C</td>
</tr>
<tr>
<td>Parvo virus infection</td>
<td>B/ C</td>
</tr>
<tr>
<td>Varicella Zoster virus infection</td>
<td>C</td>
</tr>
<tr>
<td>Tuberculosis (active TB process)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Genital herpes (primary or recurrent infection)</td>
<td>B/ C</td>
</tr>
<tr>
<td>Syphilis</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Renal function disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Recurrent urinary tract infections</td>
<td>B/ C</td>
</tr>
<tr>
<td>Pyelonephritis</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Respiratory disease</strong></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>A/ B</td>
</tr>
<tr>
<td>Severe chest infection</td>
<td>B/ C</td>
</tr>
<tr>
<td><strong>Pyrexia of unknown origin</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Abdominal pain of unknown origin</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Baby for adoption</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Symphysis pubis dysfunction</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fibroids</strong></td>
<td>B/ C</td>
</tr>
</tbody>
</table>
Booking a birthing facility

Complete the relevant maternity referral form available from the SCHHS website – Maternity and obstetrics referrals. Completed referral forms are triaged by SCHHS midwife on a daily basis. If forms are incomplete or there is insufficient information for triage, the referral will be returned to the GP.

Appointments are allocated based on referral advice of urgency and the woman's due date. GPs must indicate if:

- They consider that the woman is at high risk,
- GP shared care has been offered and requested;
- The woman has a preference for a particular model of care.

Order initial antenatal screening tests. Refer to the Appendix 1 flowchart for Antenatal Shared Care guide to initial tests required.

SCHHS birthing facilities provide detailed information on available models of care to women at booking in the Congratulations information booklet provided to all new parents. SCHHS birthing facilities have a responsibility to inform GPs when changes occur in a woman’s chosen model of care.

Information sheet regarding available models of care is mailed to women with their booking in appointment letter.

To enable women to make an informed choice about a suitable model of care, GPs should discuss the risks and benefits of the available models of care with the woman and know where to send women for further information.

On receipt of the GP’s referral, an initial appointment with a hospital midwife will be arranged and an appointment with an obstetrician will be scheduled.

Following the midwife appointment the referring GP will be sent a Notification of Visit advice (NGH and Gympie Hospitals).

All facilities require the GP to commence and complete relevant sections of the Pregnancy Health Record (PHR) and give it and any relevant results of blood tests and ultrasounds to the woman to bring to her first antenatal clinic visit.

Women who require or request invasive testing, i.e. CVS or amniocentesis, should be referred to either the Antenatal Clinic, Advanced Women’s Imaging or the Maternal Fetal Medicine Service at the RBWH to discuss options. Referral details are located at https://www.health.qld.gov.au/rbwh/services/maternal_fetal_med.asp.
Maternity shared care visit schedule

“Determine the schedule of antenatal visits based on the individual woman’s needs. For a woman’s first pregnancy without complications, a schedule of ten visits should be adequate. For subsequent uncomplicated pregnancies, a schedule of seven visits should be adequate”.

The maternity shared care visit schedule may differ slightly between facilities. As a general guide; at/or following the hospital booking-in visit before 18 weeks, the woman may require a consultation with an obstetrician (if need identified in chart review) or otherwise will see her GP:

- Every 4 weeks between 12 – 28 weeks (more often if required);
- Then as per the PHR (more often if required);
- At 36 and 41 weeks, SCHHS should review the woman in the antenatal clinic.

All other visits should be with the GP who will (as per the PHR):

- Conduct a routine antenatal assessment which should include;
  - Maternal weight (where indicated), BP, significant edema, presentation/ position of the fetus (from 3rd trimester), completion of growth chart (fundus to symphysis pubis measurement from 24 weeks), fetal movement, fetal heart rate, amniotic fluid volume assessment and a urine dipstick as required, and
  - Reassessment of previously identified risks, e.g. smoking, alcohol, depression and assessment of any newly emerging risk.
- Provide information and facilitate discussion about any pregnancy or other concerns;
- Offer and provide flu vaccine in early pregnancy if the woman consents;
- Offer and provide dTPa immunisation as soon as practical after 28 weeks if the woman consents;
- Offer and provide Anti-D to Rh neg women at 28 & 34 weeks if the woman consents. If she refuses Anti D prophylaxis, she should be referred back to ANC for further discussion;
- Order and review tests as required;
- Document accurately in the PHR, noting any significant issues;
- Re-assess the planned schedule of care and identify women who may require additional care as per guidelines for consultation and referral;
- If computerised, print an updated antenatal record summary and attach to the PHR.

For additional information related to antenatal care processes, refer to the PHR and SCHHS antenatal share care flowchart.

Screening tests

Tests for fetal chromosome abnormalities, e.g. Down syndrome

Screening for fetal chromosome abnormalities should be discussed and offered to women of ALL ages. Screening tests for fetal chromosome abnormalities are dependent upon accurate gestational age dating. If dates are uncertain a ‘dating scan’ should be performed prior to scheduling appropriate screening tests (refer to Table 5).
**Biochemical tests** in 1st and 2nd trimester are available at all pathology providers. The timing of tests is outlined in Table 5.

**First trimester combined screen** consisting of Papp-A, B-HCG and nuchal translucency ultrasound.

When requesting a nuchal translucency scan, indicate the pathology provider on the scan referral so that a combined result can be calculated on the day of the scan. When ordering the 1st trimester combined screen, the blood test should be performed before the nuchal translucency scan so that the result is available to be combined into a single adjusted risk on the day of the scan. The result should not be given with separate biochemistry and nuchal translucency risks but always as a ‘combined’ adjusted risk only.

- A risk of >1 in 300 is considered high risk for a chromosomal abnormality and the woman should be referred to the antenatal clinic; in the first instance, so counselling about options for invasive diagnostic testing or non-invasive prenatal testing (NIPT) may be arranged.  

- Risks between 1:300 and 1:100 are considered to be at intermediate risk and women should be counselled about their options for further investigations eg non-invasive prenatal testing NIPT or invasive eg Chorionic Villus Sampling (CVS) or amniocentesis, and the risks of these.

- NIPT is an option for those women who are able to self-fund their testing, after appropriate pre-test genetic counselling. NIPT are tests for aneuploidy based on the detection of free fetal DNA in the maternal circulation. Compared to other screening tests available they are highly accurate for trisomy 21 with an overall sensitivity of 99.5% and specificity of 99.8%. However, they are still considered screening tests and a positive test should be followed up by a diagnostic test. There are several tests offered through different providers. All offer screening for T21, T18 and T13. Some also offer sex determination, screening for monosomy X, triploidy and micro- deletions (eg. 22q11.2 Di George).

NIPT is not covered by Medicare and as such will incur cost to the pregnant woman ($550-$595 at January 2015). For more information refer to:

- RANZCOG College communiqués *DNA-based non-invasive prenatal testing for fetal aneuploidy.*

- RANZCOG Scientific Impact Paper No. 15 March 2014 *Non-invasive prenatal testing for chromosomal abnormality using maternal plasma DNA.*

- The ‘triple test’ consisting of B-HCG, AFP and oestradiol is an alternative test in 2nd trimester. (Note for optimal triple test screen a dating scan is required).

### Table 5: Screening for fetal chromosome abnormalities

<table>
<thead>
<tr>
<th>Screening test</th>
<th>Appropriate timing—gestational age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st trimester biochemistry: Papp-A, B-HCG</td>
<td>9+0 to 13+6 weeks</td>
</tr>
<tr>
<td>Nuchal translucency scan</td>
<td>11+0 to 13+6 weeks</td>
</tr>
</tbody>
</table>
| Non-invasive prenatal testing (NIPT)                | ≥ 9+0 or ≥ 9+0  
  - (Panorama™ through Qld. Fertility Group)  
  - i-GeneScreen™ through QML  
  - verify™ through SNP  
  - MaterniT21™ through Healthscope  
  - Harmony™ through SOGI and AWI |
| 2nd trimester triple test: B-HCG, AFP, oestradiol   | 15 to 22+6 weeks (optimal time 16 weeks)                              |
Routine morphology ultrasound screening

All pregnant women should be offered a morphology ultrasound scan performed between 18+0 and 20+6 weeks gestation.

The routine morphology scan is not endorsed as a screening test for Down syndrome and if screening for Down syndrome is requested by the woman then the only endorsed screening tests at this gestation is the triple test or NIPT (refer to Table 5).

Supplements

Vitamin and minerals

Vitamin D should not be offered routinely but screening should be offered to women who are at risk for vitamin D deficiency, ie.

- Limited exposure to sunlight;
- Dark skin;
- Veiled women;
- A pre-pregnancy BMI of >30.

Advise women that taking vitamins A, C or E supplements confers no benefit in pregnancy and may cause harm. Do not routinely offer iron supplementation to women during pregnancy.

Iodine

The current recommendation is for women who are pregnant to take an iodine supplement of 150 micrograms each day. Women with pre-existing thyroid conditions should seek advice from their medical practitioner before taking a supplement.

Folate

Dietary supplementation with folic acid, from 12 weeks before conception and throughout the first 12 weeks of pregnancy, reduces the risk of having a baby with a neural tube defect. The recommended dose is 500 micrograms per day.

Women with pre-existing diabetes (Type 1 or Type 2) and women taking antiepileptic medication should ideally be commenced on high dose folate supplementation of 5 mg per day in the pre-conception period as they have very high requirements in the 1st trimester.

Antenatal services

Imaging - Sunshine Coast radiology services

Various radiology groups practise on the Sunshine Coast and offer prenatal screening and obstetric ultrasound. The majority of obstetric imaging needs will be met by these practices and GPs should have ready access to radiologists working in these practices for clarification about abnormalities found on antenatal scans. It is important that the results of any pregnancy scans performed in the private sector are copied to the ANC.

If an abnormality is found on ultrasound examination requiring further evaluation, it is recommended this be done either at an imaging practice on the Sunshine Coast that offers tertiary level obstetric ultrasound services, e.g. Advanced Women’s Imaging, or through the Maternal Fetal Medicine Department at RBWH.

Imaging – Royal Brisbane and Women’s Hospital (RBWH)

RBWH offers a comprehensive Maternal Fetal Medicine (MFM) service, delivered by the Centre for Advanced Prenatal Care (CAPC), located at the RBWH.

Visit the website for further information, referral forms and contact details at https://www.health.qld.gov.au/rbwh/services/maternal_fetal_med.asp.
Early pregnancy assessment

The Maternity Assessment Unit (MAU) at Nambour General Hospital provides a pregnancy assessment service for women who are less than 14 weeks pregnant. This service operates Monday to Friday between 07:30am – 08:30pm and is located on the 2nd floor of Block 3 NGH, opposite the Birth Suite entrance.

This is not a walk-in clinic and all patients must have a written referral (see guideline below). If a woman has an acute pregnancy problem with potential haemodynamic compromise, she should be referred to the Department of Emergency Medicine (DEM).

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST have a positive pregnancy test</td>
<td>Heavy bleeding/ pain or clinically unstable</td>
</tr>
<tr>
<td>Diagnosed miscarriage (incomplete or missed)</td>
<td>Presenting with acute gynaecological or medical/surgical conditions in early pregnancy</td>
</tr>
<tr>
<td>&lt;14 weeks pregnancy size on ultrasound or by dates</td>
<td>Patients who request routine pregnancy confirmation or dating scan</td>
</tr>
<tr>
<td>Pregnancy of unknown location or molar pregnancy requiring follow-up</td>
<td>Patient who requests to have a termination of pregnancy</td>
</tr>
<tr>
<td>A confirmed stable ectopic pregnancy for conservative or medical management</td>
<td>Patients NOT agreeable with returning at an appointed time for assessment in the MAU</td>
</tr>
<tr>
<td>Threatened miscarriage</td>
<td>Pregnancy &gt;14 weeks</td>
</tr>
</tbody>
</table>

GPs should inform the woman “If you have heavy bleeding (>1 pad/hour), severe pain or develop a fever prior to scheduled appointment, present to your nearest hospital emergency department.”

Referral guideline for early pregnancy loss

- Women may be referred to the MAU by the DEM, their GP or gynaecologist or may self-refer.
- Women should be given the options of both attending the DEM immediately and waiting for the next available appointment in the MAU.
- Women electing to be seen in the MAU should be advised to re-present sooner if significant bleeding or significant pain (unrelieved by simple analgesia).
- Women seen in DEM who are suitable for care in MAU should be offered the next available appointment by contacting the MAU co-ordinator on 5370 3808 (07:00am – 07:00pm) or afterhours the obstetric and gynaecology resident on 5470 5133.
- A maximum of 2 women can be booked on any one day (except Mondays).
  
  Monday – Friday appointments times are 07:15am and 08:00am. On Mondays an additional appointment time of 12:30pm is available (to be made by Nambour General Hospital only).
- Women should be advised they need to be fasted when attending for their appointment.

2nd and 3rd trimester assessment

Criteria for referrals

Pregnant women ≥20 weeks who are haemodynamically stable and require assessment due to conditions such as:

- Reduced fetal movements;
- Gestational hypertension/ pre-eclampsia symptoms;
- Prolonged pregnancy>42 weeks;
- Suspicion of fetal growth restriction;
- Pre-labour rupture of membranes;
- Breech presentation requiring external cephalic version;
- Prolonged rupture of membranes declining labour induction;
- Requirement for antenatal corticosteroid administration;
- Antepartum haemorrhage in women who are clinically stable;
- Abdominal pain;
- History of trauma, eg. MVA, fall, direct trauma to abdomen.

The Maternity Assessment Unit is located in Maternity Services on Level 2, Nambour General Hospital. The hours of operation are:

Monday to Friday 10:00am – 05:30pm: Saturday 08:00am – 04:30pm.

Enquiries and referrals should be directed to the midwife – 5370 3808.

Other contacts:

- Birth Suite 5470 6810
- Antenatal Clinic 5470 6701
- O&G resident 5470 5133

Perinatal mental health support

The recognition of mental health disorders in the antenatal period is important as treatment may be required during pregnancy. Antenatal depression is a strong predictor for postpartum depression.

Use the Edinburgh Postnatal Depression Scale (EPDS) to screen for the risk of antenatal and subsequent postnatal depression\(^2\). This screening occurs at the first midwifery visit and the 36 week visit and should be repeated by the GP routinely 6 weeks postpartum and at any time concerns are identified. It is the GP’s responsibility to arrange appropriate referrals if needed for women who are sharing care and to document significant findings in the PHR.

For support and information contact the appropriate Sunshine Coast Perinatal Mental Health Liaison Service on 5470 5662. For urgent referrals out of business hours contact the DEM at the nearest hospital and ask for the psychiatry registrar on call.
Aboriginal and Torres Strait Island antenatal service

The Aboriginal and Torres Strait Island antenatal service offers care for women who are Aboriginal and/or Torres Strait Islander and/or whose partner identifies as Aboriginal and/or Torres Strait Islander. A midwife visits these women at home during pregnancy with a health worker who links with services for the postnatal period.

It is important to identify on the antenatal referral form those women who are Aboriginal or Torres Strait Islander or women whose baby will be Aboriginal or Torres Strait Islander to enable this service to be offered to the woman.

At the first hospital visit women will be offered all models of care available with the hospital and also the additional support of this service.

Antenatal lactation support

GP’s play an important role in encouraging and supporting women to breastfeed. The initial antenatal interview between a woman and her doctor or midwife should include a careful assessment of the woman’s (and her partner’s) attitudes, beliefs, expectations, knowledge and experience in relation to infant feeding.

Throughout the pregnancy the PHR prompts discussion on topics such as:

- Normal breast changes;
- Reasons why breastfeeding is important;
- The importance of early skin to skin contact;
- How to position baby for effective breastfeeding;
- The importance of rooming-in;
- Expressing and safe storage of breast milk.

Refer to Appendix 4 (page 32) for a list of breastfeeding resources for health professionals and consumers.

Breastfeeding education is included in the childbirth education program and classes may be booked at antenatal clinics. All women are offered and encouraged to attend these classes. Written resources are also available to reinforce learning.

Women who have risk factors for breastfeeding difficulty and are booked into the SCHHS can be referred to the SCHHS Lactation Service for both antenatal and postnatal support.

An antenatal consultation enables assessment, advice and care planning with an International Board Certified Lactation Consultant (IBCLC). Antenatal contact also enables relationship building between the woman and the lactation team to streamline postnatal support.
Obstetric medicine unit referrals

The Obstetric Medicine Unit (OMU) is part of the Departments of Maternity Services and Internal Medicine and provides an inpatient and outpatient consultative service for pregnant women with medical conditions specific to pregnancy or coincidental to pregnancy.

Services include:
- General obstetric medicine clinics;
- Specialised endocrine, epilepsy and cardiac clinics;
- Preconception counselling.

Referrals to the OMU are currently via the obstetric clinic consultant ONLY. Contact the on-duty obstetric registrar on 5470 5131 who will liaise with the OMU and arrange any appointments, as required.

Allied health services

SCHHS birthing facilities provide essential allied health support which includes:
- Pharmacy;
- Physiotherapy;
- Dietetics;
- Social Work.

Other antenatal specialist services NGH

As Nambour Hospital is a secondary teaching hospital, many specialist services and clinics are provided including:
- Obstetric anaesthesia clinics;
- Addiction Services;
- Genetics;
- Prenatal paediatric medical and surgical consultation.

Abnormal results and findings

Any investigations requested by a GP for a pregnant woman under their care must be followed up by the GP concerned. It is the GP’s responsibility to follow up all abnormal results irrespective of whether a copy has been sent to the hospital.

Complete blood picture

Consider iron studies if the haemoglobin is 100g/L or less and the MCV is low or red blood cells are microcytic. Check B12/ folate levels if the red blood cells are macrocytic.

Testing for thalassaemia (haemoglobin electrophoresis) should also be considered where appropriate. Low white cell or platelet counts should prompt discussion with the obstetric registrar, and/ or referral to hospital antenatal clinic.

Blood group and antibody screen

Any positive test for blood group antibodies should prompt immediate referral to hospital antenatal clinic.
Rubella titre

A ‘non-immune’ level should prompt a note to discuss immunisation with the woman post-birth. Under no circumstances should immunisation be given in pregnancy. Contact with young children with rubella should be avoided.

Syphilis serology

A positive result should prompt referral to hospital antenatal clinic.

Hepatitis B and C, and HIV tests

A positive result should prompt referral to the hospital antenatal clinic. The obstetrician will refer to the appropriate specialist services.

Maternal serum screening

Abnormal maternal serum screening results must be referred urgently to the participating hospital for counselling with a view to offering further appropriate investigations, which could include either Chorionic Villous Sampling or amniocentesis.

Morphology ultrasound

Any abnormality should prompt a phone discussion with the hospital antenatal clinic 5470 6701. Referrals to be faxed to the antenatal clinic - 5470 6341 and should include the ultrasound report and previous results, e.g. nuchal translucency, with a cover letter. For consultation or advice phone the obstetric registrar on 5470 5131.

Oral glucose tolerance test (OGTT)

An oral glucose tolerance test (OGTT) should be performed at 26-28 weeks on all women. The diagnosis of gestational diabetes should prompt immediate referral to the antenatal clinic. Fax a referral letter and a copy of the OGTT result to the ANC – 5470 6341. Highlight that this referral is for the management of gestational diabetes in a previously booked shared care woman. (Do not use the antenatal new patient referral form if the woman is already booked into the facility.)

Women who are identified pre-conception as high risk for diabetes in pregnancy eg. previous gestational diabetes, morbid obesity, southern Asian should also be offered an OGTT in the 1st trimester.

Intrauterine growth restriction (IUGR)

Fundal height (in cms) should approximately equal gestational age. To measure fundal height:

1. Mother semi-recumbent with an empty bladder
2. Palpate to determine the fundus with two hands
3. Secure tape with hand at top of fundus
4. Measure to top of symphysis pubis
5. Measure along longitudinal axis of the uterus

Image source: Perinatal Institute, Birmingham
Other considerations include transverse lie, multiple pregnancies and obesity.

If serial symphysis-fundal height (SFH) measurements are flattening (>2cm behind gestational age) the woman should be referred for an ultrasound and request:

- Fetal size/ growth compared with previous ultrasound (biparietal diameter, abdominal circumference);
- Doppler of umbilical artery flow;
- Amniotic fluid index (ask for normal range).

If any parameters are abnormal refer to hospital by communicating with the obstetric registrar.

**Reduced fetal movements**

If fetal movements are reduced check fundal height and fetal heart rate and refer to hospital for assessment of fetal wellbeing.

If fetal movements are appropriate but either the GP or the woman is concerned, or there is a previous history of stillbirth or fetal death in utero, contact the obstetric registrar on 5470 5131 for referral to the hospital.


**Hypertension**


If elevation of blood pressure (BP) persists or there is any suggestion of pre-eclampsia or growth restriction, contact the obstetric registrar on 5470 5131 to arrange hospital assessment. The following should be noted by the practitioner providing shared care:

- Headache of sufficient severity to seek medical advice at any stage during pregnancy is pre-eclampsia until proven otherwise;
- Epigastric pain requiring medical assessment ≥20/40 is pre-eclampsia until proven otherwise;
- Measure BP and urinalysis and notify any abnormalities to the on duty obstetric registrar.

**Vaginal bleeding ≥20 weeks and low lying placentas identified at morphology scan**

Refer to MAU for advice re bleeding <20 weeks. For women who are haemodynamically stable:

- Perform a physical assessment of the woman and record fetal heart rate;
- Review ultrasound result for placenta site (clear of os). If no scan refer for one, if stable;
- A speculum examination can be performed if placenta praevia has been excluded, but avoid digital examination;
- Use a speculum to view cervix and PAP if no normal PAP result in last two years⁷;
- Consider need for anti D if Rhesus negative and Kleihauer count to ascertain amount to give;
- If spotting ceased and examination is normal, reassure and encourage observation at home;
- For ongoing bleeding or anything other than light spotting contact Birth Suite and/ or obstetric registrar on call.
- If heavy blood loss and/ or patient appears clinically compromised obtain IV access, arrange urgent transfer to hospital and contact on call obstetric registrar/ consultant.
If a woman has a low lying placenta identified on her morphology scan (10% of women), it is recommended that she have a repeat scan at 32 weeks gestation, unless one is clinically indicated before this time, eg. for PV bleeding. Scans done at 28 weeks to check placental migration will be done too early and should not be performed.

Abnormal presentation

If 36 weeks or more and suspected breech or transverse lie contact the antenatal clinic to discuss an ultrasound and arrange an obstetric assessment as soon as possible.

Management of Rh D negative women

Pregnant women who are Rh D negative fall into two categories: Those with and those without anti-D antibodies. Women with pre-formed Rh D antibodies are not suitable for shared care and should be referred early in pregnancy to ANC.


The National Blood Authority guidelines

- Patient blood management guidelines Module 5 Obstetrics and maternity, endorsed by the RANZCOG council in July 2015.
- Guidelines on the prophylactic use of Rh D immunoglobulin (anti-D) in obstetrics.

Additional information is available from http://www.rcog.org.uk/guidelines.

To obtain Anti D contact QML (delivered free as part of their routine courier service). Order forms may be downloaded from www.qml.com.au and faxed to the QML blood bank on 33719029.

Infections

Pregnancy may be complicated by any of the common infections. Many impact adversely on fetal well-being. Discussion with a consultant obstetrician initially is required when infections are suspected or there is a history of exposure.

For current evidence based information related to perinatal infections refer to:

Smoking and other harmful substances

Although abstinence early in pregnancy will produce the greatest benefits to the mother and fetus, smoking cessation at any point during the pregnancy will be beneficial.

Effective smoking cessation intervention should be offered to pregnant smokers at the first antenatal visit and throughout pregnancy and postpartum. This includes not only advice to quit but extended psychosocial interventions.

A lowest dose intermittent nicotine replacement therapy can be considered after the first trimester using a risk/benefit approach.

If the woman is identified as a smoker, the PHR prompts assessment using the Tobacco Screening Tool on page 10 of the PHR.

Whilst mothers who smoke whilst breastfeeding are encouraged and supported to stop, they are concurrently educated about the benefits of breastfeeding and encouraged to continue breastfeeding.\(^{10}\)


Information and support is available for patients from the Alcohol, smoking and drugs website http://www.qld.gov.au/health/staying-healthy/atods/index.html.

Contact details

Email: 13QUIT@health.qld.gov.au

Phone: Quitline 13 QUIT (13 7848) for free information, practical assistance and support. Trained counsellors are available seven days a week to help with the process of quitting.

Normal weight, overweight and obesity

At the initial visit record height, pre-pregnancy weight, and calculate the BMI.\(^{11,2}\) Inter-pregnancy weight gain should also be documented.

It is recommended that women with a BMI > 35 or < 18 be referral for hospital care and discussion about antenatal care and place of birth.

Table 8: Target weight gains\(^{11}\)

<table>
<thead>
<tr>
<th>Pre-pregnancy BMI (kg/m2)</th>
<th>Rate of gain 2(^{nd}) and 3(^{rd}) trimester (kg/week)*</th>
<th>Recommended total gain range (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18.5</td>
<td>0.45</td>
<td>12.5 to 18</td>
</tr>
<tr>
<td>18.5 to 24.9</td>
<td>0.45</td>
<td>11.5 to 16</td>
</tr>
<tr>
<td>25.0 to 29.9</td>
<td>0.28</td>
<td>7 to 11.5</td>
</tr>
<tr>
<td>≥ 30.0</td>
<td>0.22</td>
<td>5 to 9</td>
</tr>
</tbody>
</table>

* Calculations assume a 0.5-2 kg weight gain in the 1\(^{st}\) trimester.

Nutrition and physical activity

Pregnant women are advised to eat a healthy diet as per the “Australian Guide to Healthy Eating 2013”.

Pregnant women are encouraged to undertake safe general exercise (i.e. walking, swimming) or a specific pregnancy exercise class in the community.

Postnatal care and supports

The care of the woman during labour and birth will be the responsibility of the hospital health care team. Prior to discharge, all women are offered home visits from the Extended Midwifery Team.

At discharge, the perinatal summary of the pregnancy and birth outcome will be given to the woman to hand to the GP.

A postnatal appointment with the GP is advised for mother and baby at 5-10 days and 6 weeks.

Some women may be offered a postnatal hospital outpatient appointment if specific problems have been experienced during pregnancy or birth, e.g. 3rd or 4th degree tear.

During the postnatal period, the GP may identify problems that require referral back to the hospital.

Feeding support

GP s have an important role in encouraging and supporting breastfeeding and in supporting women to overcome breastfeeding difficulties.

Timely support and management is the key to overcoming feeding problems to ensure continued breastfeeding.

Postnatal breastfeeding support can be provided by a private lactation consultant, the BF hotline listed in their Congratulations booklet provided by the hospital, or by the Child and Youth Community Health Service.

Contact the central intake service on 1300 366 039 (8:30am to 5:00pm, Monday to Friday, excluding public holidays).

Home visiting

Following birth, support is continued in the community by midwives and child health nurses. Depending on geographical boundaries and circumstances, contact is normally by a home visit or occasionally a telephone consult.

A home visit is arranged with the woman prior to leaving hospital to occur within the first 14 days after discharge. Women are offered 2 home visits by midwives through the extended midwifery service and then linked with Child Health Services.

GP s may contact a home visiting midwife by phoning the maternity ward on 5470 6805.
Postnatal GP appointment (5 - 10 days)

**Mother:** Early contact is encouraged to assess wellbeing, social risk factors and level of support.

**Examine/ review**
- BP
- Lochia
- Perineum (if indicated)
- Abdominal wound if caesarean section (CS)
- Bladder and bowel function
- Medical conditions (hypertension, diabetes mellitus etc.)
- Calves for deep vein thrombosis (DVT)
- Breasts
- Mobility. Enquire about back pain and refer women who are experiencing musculoskeletal pain and/or pelvic floor dysfunction to hospital physiotherapy department or a Women’s Health Physiotherapist in the community.
- Feelings. Apply Edinburgh Postnatal Depression Scale if indicated and review and assess mother baby bonding and attachment
- Review any change in plan for women linked with the Department of Child Safety.

**Discuss**
- Relevant parenting and health education topics
- Feelings and family support
- Birth and any complications
- Contraception and intercourse resumption
- Routine tests
- Infant feeding
- Healthy hearing
- NNST
- Role of the GP, hospital community midwife, child health nurse, lactation consultant
- Risk of injury
- SIDS
- Requirement for 6 week baby check
- Use of the Infant Personal Health Record including information contained within
- Immunisations and immunisation schedule (offer mother MMR and/or pertussis immunisation as indicated).

**Refer (if indicated)**
- Child and Youth Community Health Service.
- Lactation Service.
- Paediatrician.
- Allied Health Services (Physiotherapy, social worker, dietetics).
- Perinatal Mental Health Liaison Service.
- Child Safety as required.

**Baby:** Review by GP between 5 - 10 days of age if baby discharged from hospital <72 hours of age.

To assist newborn follow-up and assessment refer to:

- Infant Personal Health Record (red book);

**Postnatal GP appointment at 6 weeks**

**Mother**

Assess wellbeing, social risk factors, and level of support. Apply Edinburgh Postnatal Depression Scale. Observe and assess mother baby attachment. Poor attachment can lead to long term health and social issues and require urgent intervention.

**Examine/ review**

- BP.
- Breasts and nipples.
- Abdomen; palpate uterus unless CS, check wound if CS, refer to physiotherapist if abdominal diastases.
- Perineum if tear or episiotomy.
- Perform Pap smear if due
- Enquire about urinary or fecal incontinence.
- Enquire about back problems and refer women who are experiencing musculoskeletal pain and/or pelvic floor dysfunction to hospital physiotherapy department or a Women’s Health Physiotherapist in the community.
- Review any medical conditions/ concerns, e.g. gestational diabetes, hypertension.

**Discuss**

- Family planning/ contraception/ intercourse.
- Feeding and mother’s / parent satisfaction with baby’s progress.
- Immunisation schedule.
- Community supports, i.e. child and youth community health service, Australian Breastfeeding Association.
- Future pregnancy intentions and the need for any pre-conception care.

**Baby**

Complete relevant sections of the Infant Personal Health Record (Red book).
Appendix 1  GP and SCHHS antenatal share care flowchart

Copies of all investigation reports should be forwarded to the ANC immediately after the test

GP visits

Initial GP visit
- Refer high risk from 6 weeks
- Refer routine from 10 weeks

Hospital visits
- History, observations, examination, drug history, prenatal diagnosis discussion
- Pap smear if >18 months since last test
- If cervical intraepithelial neoplasia in pregnancy
- Colposcopy clinic or private referral

Week
- 14-16 weeks midwife booking visit
- 16-20 weeks visit obstetrician (or combine with booking visit)
- 16-20 weeks visit obstetrician
- 20
- 25
- 28
- 31
- 34
- 36 weeks visit, hospital midwife
- 38
- 40
- 41 weeks visit, (>40yrs, IOL @ 40 wks) hospital obstetrician

Investigations
- FBC, blood group, antibodies, Hep B and C, syphilis, HIV serology, rubella, MSU M&C, GTT if previous GIDDM, BMI >35, ethnicity or >2 close relatives with T2 diabetes
- Copies of reports to ANC
- Ultrasound at 19-20 weeks, morphology and placental location
- Copies of report to ANC
- Investigations at 26-28 weeks
- GTT, FBC, blood group + antibodies
- Investigations at 34-36 weeks
- FBC
- If Rh neg, needs prophylactic anti-D at 28 and 34 weeks.
- Antibody screen 3-5 days prior to administration of 28 weeks anti-D only
- Phone 3838 9010 to order, or contact QML or S&N (will deliver)

Immediate assessment at hospital if:
- Intractable vomiting
- Threatened premature labour (<37 weeks)
- Premature rupture of membranes
- Undiagnosed abdominal pain or severe backache
- Unusual migraine, visual disturbance
- Seizures/ faints with no clear diagnosis
- Antepartum haemorrhage
- Phone Registrar 5470 5131 or Birth Suite 5470 6810

SCHHS Maternity and GP shared care guideline
20016

Page: 29 of 33 Date approved: 23/06/2016
### Appendix 2 Abbreviations

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRRM</td>
<td>Australian College of Rural and Remote Medicine (ACRRM)</td>
</tr>
<tr>
<td>CMS</td>
<td>Community Midwifery Service</td>
</tr>
<tr>
<td>CVS</td>
<td>Chorionic Villi Sampling</td>
</tr>
<tr>
<td>DRANZCOG</td>
<td>Diploma of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists</td>
</tr>
<tr>
<td>MAU</td>
<td>Maternity Assessment Unit</td>
</tr>
<tr>
<td>EPDS</td>
<td>Edinburgh Postnatal Depression Scale</td>
</tr>
<tr>
<td>EPPM</td>
<td>Eligible Private Practice Midwife</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HBeAg</td>
<td>Hepatitis B &quot;e&quot; antigen</td>
</tr>
<tr>
<td>HBIG</td>
<td>Hepatitis B Immune Globulin</td>
</tr>
<tr>
<td>HBV</td>
<td>Hepatitis B Virus</td>
</tr>
<tr>
<td>MFM</td>
<td>Maternal Fetal Medicine</td>
</tr>
<tr>
<td>NIPT</td>
<td>Non-Invasive Prenatal Testing</td>
</tr>
<tr>
<td>NBA</td>
<td>National Blood Authority</td>
</tr>
<tr>
<td>PHR</td>
<td>Pregnancy Health Record</td>
</tr>
<tr>
<td>PMC</td>
<td>Primary Midwifery Carer</td>
</tr>
<tr>
<td>PPP</td>
<td>Preferred Providers Program</td>
</tr>
<tr>
<td>RACGP</td>
<td>Royal Australian College of General Practitioners</td>
</tr>
<tr>
<td>SANDS</td>
<td>Stillbirth And Neonatal Death Support</td>
</tr>
<tr>
<td>ATODS</td>
<td>Alcohol Tobacco &amp; Other Drug Services</td>
</tr>
<tr>
<td>SIDS/SUDI</td>
<td>Sudden Infant Death Syndrome / Sudden Unexpected Deaths in Infants</td>
</tr>
</tbody>
</table>
### Appendix 3 Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>A discussion between health care professionals or health care professionals and the woman for the purpose of providing clinical care. Consultation can occur face to face, by videoconference, telephone, or email.</td>
</tr>
<tr>
<td>Obstetrician</td>
<td>Local facilities may as required, differentiate the roles and responsibilities assigned in this document to an “obstetrician” according to their specific practitioner group requirements; for example to general practitioner obstetricians, specialist obstetricians, consultants, senior registrars and obstetric fellows.</td>
</tr>
<tr>
<td>Primary maternity carer (PMC)</td>
<td>The health care professional, chosen by the woman, who provides and coordinates the majority of the woman’s maternity care</td>
</tr>
<tr>
<td>Referral</td>
<td>Communication, preferably in writing from the health care professional making the referral:</td>
</tr>
<tr>
<td></td>
<td>• For consultation (e.g. request for an opinion or specialised service where responsibility for the maternity care remains with the PMC) or</td>
</tr>
<tr>
<td></td>
<td>• For transfer of care (e.g. responsibility for maternity care is transferred from the PMC to an obstetrician). The PMC may continue to provide care within their scope of practice, in collaboration with the obstetrician.</td>
</tr>
<tr>
<td></td>
<td>Referrals should be accompanied by relevant personal and clinical information to enable an informed consultation or safe and timely transfer of care.</td>
</tr>
<tr>
<td>Shared care</td>
<td>A co-operative arrangement between a public birthing facility and a PMC not employed by the birthing facility and located in the community (e.g. GP or private practice midwife). The PMC provides the majority of the antenatal and postnatal care with the public birthing facility health care professionals providing care during labour and the intrapartum period.</td>
</tr>
</tbody>
</table>
Appendix 4  Community resources and contacts


Child and Youth Community Health Service, Ph 1300 366 039 Central Intake Service, Hours: 08:30am to 05:00pm Mon to Fri (excl. public holidays) http://www.health.qld.gov.au/rch/professionals/brochures/cchs_parent_info.pdf


Queensland Centre for Mothers and Babies (QCMB) http://www.qcmb.org.au/

13HEALTH—Queensland Health help-line, Ph 13 43 25 84


Queensland Medicines Advice and Information Service (QMAIS) Email: QMAIS@health.qld.gov.au Ph 36467098 or 36467599, hours 0830-1700 Mon – Fri (excl. public holidays)

SANDS is a support organisation for all bereaved parents and families who have suffered the death of a baby anytime from conception through to 28 days following birth. This includes miscarriage, neonatal death, stillbirth, ectopic pregnancy and genetic/medically advised termination. http://www.sands.org.au/

SIDS provides educational resources about SIDS prevention as well as access to bereavement support. Ph 1300 308 307 http://www.sidsandkids.org/

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) is dedicated to the establishment of a high standard of practice in obstetrics and gynaecology and women's health. The college trains and accredits doctors throughout Australia and New Zealand in the specialties of obstetrics and gynaecology so that they are professionally and psychologically capable of providing the highest standards of health care. www.ranzcoq.edu.au

The Society of Obstetric Medicine of Australia and New Zealand (SOMANZ) aims to advance clinical and scientific knowledge of hypertensive diseases and medical disorders in pregnancy and to foster collaboration with other regional and international societies interested in hypertension in pregnancy and obstetric medicine. http://somanz.org/

The Australian College of Midwives (ACM) is a national, not-for-profit organisation that serves as the peak professional body for midwives in Australia. http://www.midwives.org.au/scripts/cqiip.exe/WService=MIDW/ccms_r
References


