

Brisbane South Antenatal Shared Care

Process

Pre-Conception Unique role for GPs!

- Folate and iodine supplementation for all
- Rubella serology +/- vaccination
- Varicella serology if no history +/- vaccination
- Influenza Vaccination in season + and COVID (follow current guidelines)
- Cervical screening if due
- Chlamydia test/treat <30yrs
- Smoking cessation
- Alcohol cessation
- Discuss and offer reproductive carrier screening e.g., CF, SMA & FXS (or extended panel)
- Consider referral to preconception clinic e.g., Mater, Logan Pre-pregnancy assessment.

First GP Visit(s) (May take more than one consultation)

- Confirm pregnancy & dates. Scan after 6/40
- Scan if dates uncertain **or** risk of ectopic (previous ectopic, tubal surgery) **or** previous pregnancy complications/medical risks
- Folate and iodine supplementation for all
- Review medical, surgical, psych, family history, medications, allergies etc. - update GP records ± create My Health Record shared health summary.
- Identify risk factors for pregnancy.
- Discuss and offer genetic carrier testing, anomaly screening +/- NIPT.
- BP, weigh, calculate BMI, Physical examination.
- Discuss smoking, nutrition, alcohol, physical activity; dietary advice (listeria) & drug avoidance; Assess emotional well-being and screen for DFV if safe to do so.
- Consider early Aspirin use if risk factors for pre-eclampsia/IUGR – before 16 weeks (see over)
- Offer influenza and COVID (follow current guidelines) vaccination as soon as practical.
- Discuss models of care

First Trimester Screening Tests (cc. to ANC on all request forms please)

- FBC, Ferritin, blood group and antibodies, rubella, Hep B, Hep C, HIV, syphilis serology, MSU (treat asymptomatic bacteriuria)
- Discuss and offer Genetic Carrier Screening to all - SMA/CF/FXS (or extended panel)
- Discuss and offer screening for anomalies:
 1. Nuchal Translucency Scan + First Trimester Screen (free hCG, PAPP) K11-13⁶ **OR**
 2. Non-Invasive Prenatal Testing > K9 (Higher failure rate in multiple pregnancy, not Medicare funded, first trimester scan recommended) **OR**
 3. Triple Test (AFP, Oestriol, hCG) K15-22 if desired or if presents too late for first trimester testing. Not if twins or diabetes
 Discuss/ offer CVS/Amniocentesis if appropriate.
- Cervical screening test if due
- Varicella serology (if no varicella history /vaccination)
- OGTT (or HbA1c) if high risk for Diabetes (**see box below**)
- ELFT, TFTs, Vit D, chlamydia **only recommended for at risk women (see over)**

Uncomplicated pregnancy

- Refer privately for detailed scan (placenta, morphology, cervical length) at 18-20 weeks.
- First Midwifery Booking visit at 14-16/40 with medical visit at 14-20/40 (18-20/40 combined RM/doctor visit MMH)
- **You are responsible for her care until she is seen by the hospital, after which the responsibility is shared.**
- GP visits to be scheduled around hospital appointments to ensure timely review of results.
- **All investigations to be reviewed by referring clinician and required follow up taken or referrals made.**

GP Visits: 14, 24, 28, 31, 34, 38, 40 weeks

(More frequent if clinically indicated)

- Record or place printed copy of notes and results in Pregnancy Health Record (PHR)
- Schedule, education, and assessment as per the PHR
- K26-28 GTT, FBC, Ferritin, Syphilis Serology, Blood group and antibody screen
- K36 Hb, (Ferritin if indicated), Syphilis serology (further syphilis serology as clinically indicated)
- Offer influenza & COVID vaccinations (any time) & pertussis vaccination (20-32 weeks in each pregnancy)
- **Routine hospital review at 36 and at 40-41 weeks**
- **Be sure to cc pathology and radiology to the ANC.**

Rh Negative Mothers

- If antibody negative, offer 625 IU anti-D at 28 & 34 weeks and for sensitising events.
- Dose can be given at local Hospital, OR by GP—order via Fax from QML or Mater Blood Bank, delivered via courier to surgery.
- QML 3371 9029
- Mater 3163 8179
- AntiD not indicated for threatened miscarriage ≤ 12/40 (or ToP ≤ 10/40)

CONTACTS	Beaudesert	Logan	Redland	Mater
Secure e-Referral	SMART Referrals or Medical Objects/Health Link			
	Central Referral Hub: 1300 364 248			3163 8053
Updated information to be sent via Smart Referral or ANC Fax	5541 9132	3299 8202	3488 3436	3163 8053
ANC phone	5541 9144	2891 8527	3488 3434	3163 1861
Perinatal Mental Health Services	3089 2734	3089 2734	3825 6214	3163 7990
GP Liaison Midwife	0482 677 281 or GPLO GP- 2891 5754			3163 1861
For Urgent Referral or Advice				
O&G Registrar	-	2891 8027	3488 3758	3163 6611
Obstetrician/GP Obs on call	5541 9174	3089 6963	3488 3111	3163 6612
Triage Midwife	5541 9181	2891 8811	3488 3044	3163 1861
For urgent MH referral/advice	1300 642255 (1300 MHCALL) for all centres			
Pregnancy Complications				
Complications e.g., bleeding, pain, incomplete miscarriages, altered fetal movts. PHONE 24/7	On-Call GP Obstetrician 5541 9174	<20w 2891 8456 >20w 2891 8900 EPAU FAX 3089 2016 ED: 2891 8899	On-Call Obstetrician 3488 3111	Pregnancy Assessment Centre (PAC) 3163 6577
Haemodynamically unstable women? Direct to ED/PAC				

High Risk for Diabetes in Pregnancy?

- Previous GDM or baby > 4500g, PCOS, strong family hx, BMI > 30, maternal age ≥ 40, previous perinatal loss, multiple preg, high risk ethnicity, glycosuria, Medications – steroids/antipsychotics
- **OGTT by 12 weeks (or HbA1c if OGTT not tolerated). URGENT Hospital ANC referral if abnormal (Fasting ≥ 5.1 mmol or 1-hr ≥ 10 mmol or 2-hr ≥ 8.5 mmol; HbA1c ≥5.9)**
- Please specify reason and include a copy of the results in the referral letter to your local service.

Medical or Obstetric Complications? EARLY or URGENT ANC referral:

- GP referral letters are triaged by consultant within same week. Please specify urgency and reasons in the referral letter
- Refer to local service - will liaise or make further referrals if required.
- **Be sure to cc pathology and radiology and give women a copy of their results.**
- Cervical length < 35mm transabdo USS – arrange TVS; If < 25mm (TVS) commence 200mg vaginal progesterone daily; If < 10mm, URGENT referral? cerclage

Maternity GP Shared Care

Additional Information and Advice

Additional Tests – chlamydia, ELFT, TSH/TFTs, Vit D, TORCH serology

- Chlamydia--test women < 30 years old and other high-risk women by first-pass urine PCR.
- ELFTs recommended for obese women (BMI > 30), hypertension or known or suspected renal or liver disease.
- Routine TFTs *are not* recommended in low-risk pregnant women. TSH generally drops in first trimester with the rise in HCG. If a woman has a TSH lower than the lab reference range, check free T4/T3—if these are normal, the woman *does not* need referral, if elevated, they will need clinical review, possibly referral – liaise with your local team.
- Women with pre-existing hypothyroidism should have a TSH <2.5 in first trimester and <3.0 in the rest of the pregnancy. Lab reference ranges will reflect pregnancy recommendations if the woman is identified as being pregnant. Weekly doses usually need to go up by 30% during pregnancy, which is an extra 2 doses/week. Advise women to commence the higher dose as soon as they know they are pregnant.
- Vitamin D levels or supplementation are recommended for obese or dark-skinned women or those with little sun exposure or who cover themselves for religious or cultural reasons. Levels <50 may require supplements of 2000 IU/day. Levels <15 require higher doses and re-test after 3 months.
- Toxoplasma, cytomegalovirus, and herpes serology should *not* be performed routinely. If risk factors indicate a need for testing, please include risk in your referral as follow-up tests or other investigations or management may be needed.

Nutrition and Supplements

- Folate - 0.5 mg for all low risk, 5 mg if high risk (diabetic, obese, previous, or familial neural tube defect, anticonvulsants). Start one month before conception & continue to 12 weeks.
- Iodine 150mcg/day - recommended preconception, during pregnancy and while breastfeeding (folate + iodine supplement is available)
- 2-3 serves daily of calcium-rich food/drink (1g/day) OR add 500mg minimum daily supplement. RANZCOG recommend universal 400IU/day Vitamin D (e.g., 600mg Ca + 1000IU Vit D)
- Iron only needed if deficiency is identified however low dose is included in all pregnancy supplements. Avoid Vit A in pregnancy.
- Added supplements needed for women post Bariatric Surgery – seek Dietitian input.
- Avoid or limit intake of large/predatory fish due to mercury content (Orange Roughy /Sea Perch, Shark/Flake, Swordfish, Marlin etc.)

Preventing Infections

- Toxoplasmosis - Avoid feeding raw/undercooked meats to pets, avoid cat faeces/litter, wear gloves when gardening.
- Cytomegalovirus - Good hand hygiene; Care with urine, saliva, nappies of young children
- Influenza and COVID Vaccination at any stage antenatally and pertussis vaccinations between 20-32 weeks (but up to time of delivery if missed; requires two weeks to be fully effective)
- Listeriosis - Avoid soft cheeses, un-pasteurised milk, pate, raw eggs, hot dogs, undercooked and deli meats, reheated leftovers, precut fruit, bean sprouts.

Early Low Dose Aspirin (100-150mg)

Commence before 16/40, stop at 36/40 to reduce incidence of placental disorders such as Pre-eclampsia & fetal growth restriction (FGR), preterm birth & perinatal mortality in those at increased risk. Take in the evening.

High Risk Factors - recommend if patient has one or more of:

- Hypertension
- Renal disease
- Auto-immune diseases e.g., SLE or anti-phospholipid syndrome
- Diabetes (Type 1 or Type 2)
- Previous History of pre-eclampsia

Moderate Risk Factors – consider if two or more are present:

- Primiparous
- BMI > 35
- Age > 40
- Multiple pregnancy
- Family history of pre-eclampsia (mother or sister)
- More than 10 years since last pregnancy

More Online Information and Education for GPs interested in Antenatal Care are available through:

- General Practice Liaison Officer (GPLO) Program webpage: <https://metrosouth.health.qld.gov.au/referrals/general-practice-liaison-officer-gplo-program>
- Mater Mothers www.materonline.org.au (Click on Shared Care Alignment for a range of resources for GPs) www.matermothers.org.au (Click on Mater Mothers' Hospital for resources for women)
- www.maternity-matters.com.au has consumer and clinician resources and links to reputable websites.

Early Pregnancy Complications (<20 weeks)

- Nausea and vomiting - decrease iron (but continue iodine and folate), try ginger, acupuncture, pyridoxine 75 mg/day in divided doses, doxylamine (Cat A) Metoclopramide (Maxolon Cat A) and Phenothiazines like Prochlorperazine (Stemetil Cat C, po/pr/iv, safe in first trimester); Ondansetron may be effective but is relatively expensive. Even mild dehydration/ketonuria may benefit from IV fluids.
- Bleeding: check blood group and antibodies. Threatened miscarriage in rhesus-negative women without antibodies after 12 weeks requires anti-D, before 12 weeks anti-D is not required unless the miscarriage completes, or you are concerned the woman may not re-present.
- Bleeding and pain: consider ectopic pregnancy!
- Consider advice from, or referral to, early pregnancy assessment unit (EPAU), pregnancy assessment centre (PAC) or emergency department at booking hospital (appointments may be required)

**Beaudesert 5541 9111; Logan MAC 2891 8811
Redlands 3488 3111; Mater PAC 3163 6577**

Late pregnancy complications (>20 weeks)

- Bleeding – can do spec exam but avoid PVE. Exclude cervical dilatation. Re-check placental site on original morphology scan, Rhesus negative mums need anti-D.
- Abdominal pain - can do spec exam but no PVE. Exclude cervical dilatation. Anti-D may be required for abruption.
- Ruptured membranes - Review at hospital preferred. Can do spec exam but no PVE.
- Fundal height > 3cm above or below expected for gestational age – arrange USS & if IUGR confirmed, refer to ANC by Fax and Phone Obstetrician/Registrar; if LGA confirmed, refer back through ANC
- Perceived change in fetal movements beyond 28 weeks or no FH detected – arrange IMMEDIATE hospital review.
- Most should be referred to booking hospital birth suites, pregnancy/maternity assessment/observation units or Emerg. Dept.

**Beaudesert 5541 9111; Logan MAC 2891 8811
Redlands 3488 3111; Mater PAC 3163 6577**

For feedback on this document, please email MSHHS GPLO Maternity Team at GPLO_Maternity_Share_Care@health.qld.gov.au