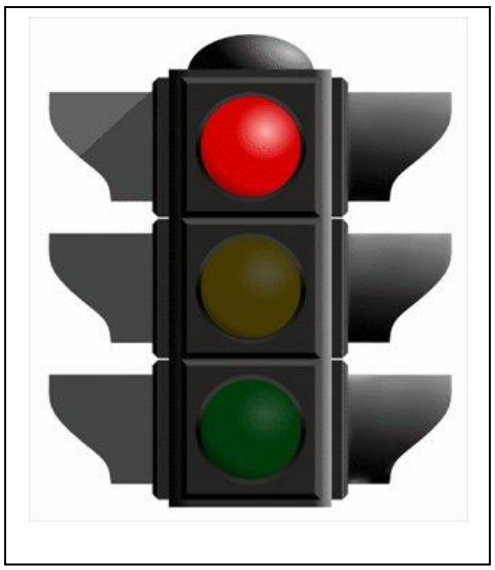
Guidelines for Consultation and Collaborative Maternity Care Planning



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Aim:

To provide timely, well planned and well communicated maternity care in a collaborative multi-professional manner, where the women is the centre-point.

Background:

In 2009, Eastern Health recognised the need to improve continuity of care, collaboration, communication, care planning and documentation throughout the maternity service.

Eastern Health's 'Expected Pathways of Care for Pregnant Women' project was developed incorporating the 'Green Collaborative Maternity Care Pathway', 'Guidelines for Consultation and Collaborative Maternity Care Planning' and the 'Eastern Health Handheld Maternity Record'.

The project was piloted at Yarra Ranges Health and the Angliss Hospital Family Birth Centre antenatal clinics from June - December 2010, and following evaluation, full implementation was approved for launch in 2011.

Levels of clinician in Eastern Health:

Level of Maternity Care	Experienced	Trainee	Eastern Health Code
Primary	• Registered Midwife • GP (shared care)	• Graduate Midwife • Obstetric Trainee Level 1 • RMO	**1**
Secondary	• GP Obstetrician • Specialist midwife* • Consultant Midwife* *Condition specific	• Paediatric Registrar (neonates) • Obstetric Registrar	**2**
Tertiary	• Consultant Obstetrician • Consultant Paediatrician (neonates)	• Senior Registrar (Level 5 or 6)	**3**

Instructions for use:

An **amber** indication requires assessment by the appropriate level of clinician indicated in this guide, followed by a **decision** on which pathway the woman is now assigned. The pathway options are either **green pathway** if the indication is not complicating this pregnancy or **red pathway** if the indication is complicating this pregnancy.

The management plan should identify amber indications, especially if deemed appropriate to continue care in the green pathway. This is to enable effective communication and awareness of potential risk factors.

A **red** indication usually means ongoing care in the **red pathway.** The level of clinician appropriate for leading ongoing care is defined in this document.

The red pathway

The frequency of visits in the red pathway will vary, depending on the individual needs of the woman.

Red pathway antenatal care will be **planned** by the lead clinician, as indicated in this guide, and this plan will be documented and accessible to other clinicians caring for the woman.

An appropriate schedule of visits for the woman's clinical needs should be decided, using the skills of both midwives and doctors taking into account the scope of practice of all clinicians. Indications for re-referral to the lead clinician should be considered.

Key visits with the lead clinician, or specific re-referral indications should be clearly defined, particularly for planning for labour and birth.

This plan should be documented and recorded in the 'management plan' section on the electronic maternity record eg. Birthing Outcomes System (BOS). A copy of this plan should be printed for the hand held maternity record.

If BOS in inaccessible, a copy of the management plan should be sent to EH Health Information Services (HIS) and scanned into Clinical Patient Folder (CPF) to ensure effective communication, transfer of information and appropriate clinical care.

1 Indications at booking

1.1 Medical conditions

1.1.1	**Anaesthetic difficulties**	EH Code
	• Previous failure or complication (e.g. difficult intubation, failed epidural	**2**
	• Malignant hyperthermia or neuromuscular disease	**3**
1.1.2	**Connective tissue / System diseases**	
	• Auto immune disease	**2**
	• Rare maternal disorders such as: Systemic Lupus Erythematosus (SLE) Anti-phospholipid syndrome Scleroderma Rheumatoid arthritis, Periarteritis nodosa Marfan's syndrome Raynaud's disease Other systemic and rare disorders	**3**
1.1.3	**Cardiovascular**	
	• Cardiovascular disease	**2**
	• Essential hypertension	**2**
1.1.4	**Drug dependence or misuse**	
	• Use of alcohol and other drugs	**2**
	• Medicine use	**2**
1.1.5	**Endocrine**	
	Diabetes mellitus	
	• Pre-existing insulin dependent or non-insulin dependent	**3**
	• Gestational diabetes requiring insulin	**3**
	Thyroid disease	
	• Hypothyroidism	**2**
	• Hyperthyroidism	**3**
	• Addison' Disease • Cushing's disease • Other endocrine disorder requiring treatment	**3**
1.1.6	**Gastro-intestinal**	
	• Hepatitis B with positive serology (Hep B S AG+)	**2**
	• Hepatitis C (Hep C Antibody +)	**2**
	• Inflammatory bowel disease including ulcerative colitis Crohn's disease	**2**
1.1.7	**Genetic**	
	• Genetic- any condition	**3**
1.1.8	**Haematological**	
	• Haemoglobinopathy	**2**
	• Thrombo-embolic process: Of importance is the underlying pathology and the presence of a positive family history and/or past history	**3**

1.1.8	**Haematological (continued)**	
	• Coagulation disorders	**3**
	• Anaemia at booking defined as Hb <10g/dl	**2**
	• Anaemia at booking defined as Hb <9g/dl	**3**
1.1.9	**Infective diseases detected on booking serology**	
	• HIV infection	**3**
	• Rubella (non-immune/rubella susceptible)	**2**
	• Rubella (active)	**3**
	• Cytomegalovirus (active)	**3**
	• Parvo-virus infection (active)	**3**
	• Varicella / Zoster virus infection (active)	**2**
	• Herpes genitalis: primary infection	**2**
	• Herpes genitalis: recurrent infection	**2**
	• Tuberculosis: active or a history of	**3**
	• Toxoplasmosis	**2**
	• Any recent history of viral, microbial or parasitic infections	**2**
1.1.10	**Maternal age**	
	• Under 16 years • Over 42 years	**2**
1.1.11	**Maternal weight at conception**	
	• BMI <17	**2**
	• BMI 30-35	**1**
	• BMI 35-40	**2**
	• BMI >40	**3**
1.1.12	**Mental health**	
	• History of mental health disorders Care during pregnancy and birth will depend on the severity and extent of the mental health disorder- consider referral to Specialized Support Services and communication with GP	**2**
1.1.13	**Musculo-skeletal**	
	• Pelvic deformities including previous trauma, symphysis rupture, rachitis	**3**
	• Spinal deformities (e.g. scoliosis, slipped disc etc)	**2**
1.1.14	**Neurological**	
	• Epilepsy, without medication and no seizures within last 12 months • Epilepsy in the past without treatment and no seizures within last 12 months	**1**
	• Epilepsy, with medication or seizure in last 12 months	**2**
	• Subarachnoid haemorrhage, aneurysms	**3**
	• Multiple sclerosis	**3**
	• AV malformations	**3**
	• Myasthenia gravis	**3**

1.1.14	**Neurological (continued)**	
	• Spinal cord lesion (paraplegia or quadriplegia)	**3**
	• Muscular dystrophy or myotonic dystrophy	**3**
1.1.15	**Renal function disorders**	
	• Disorder in renal function, with or without dialysis	**3**
	• Urinary tract infections	**2**
	• Pyelitis	**2**
1.1.16	**Respiratory disease**	
	• Mild asthma	**1**
	• Moderate asthma (i.e. oral steroids in the past year and maintenance therapy)	**2**
	• Severe lung function disorder	**3**
1.1.17	**Social**	
	• Late booking / no prenatal care before 30 weeks	**3**
	• Concealed pregnancy	**3**
	• Previous DHS involvement (woman or partner)	**3**

1.2 Pre-existing gynaecological disorders

1.2.1	**Cervical abnormalities**	
	• Cervical surgery/ cone biopsy	**3**
	• Cervical surgery with subsequent vaginal birth	**1**
	• Abnormalities in cervix cytology (diagnostics/ follow up)	**2**
1.2.2	**Pelvic floor reconstruction**	
	• Colpo-suspension following prolapsed uterus? • Fistula and/or previous rupture and vaginal repair	**3**
1.2.3	**Uterine abnormalities**	
	• Myomectomy/ hysterotomy	**3**
	• Bicornuate uterus	**2**
1.2.4	**Other gynaecological**	
	• Intra Uterine Contraceptive Device (IUCD) insitu	**3**
	• Infertility treatment (this pregnancy)	**2**
	• Female genital mutilation (FGM)	**3**

1.3 Previous obstetric history

1.3.1	**Fetal growth disturbance**	
	• Previous baby >4.5kg	**2**
	• Previous baby diagnosed IUGR, or <2.5kg	**3**
1.3.2	**Grand multiparity**	
	• Parity >5 previous births	**2**
1.3.3	**Haematological disorders**	
	• Active blood group incompatibility (Rh, Kell, Duffy, Kidd)	**3**
	• ABO-incompatibility	**2**
1.3.4	**Hypertensive disorders**	
	• Hypertension in the previous pregnancy	**2**
	• Pre-eclampsia in the previous pregnancy	**2**
	• Eclampsia/ HELLP syndrome	**3**
1.3.5	**Obstetric Emergency or Assisted birth**	
	• Forceps or vacuum extraction	**1**
	• Caesarean section	**2**
	• Septate uterus with previous CS	**3**
	• Shoulder dystocia	**2**
1.3.6	**Poor perinatal outcomes**	
	• Asphyxia (defined as an APGAR score of <7 at 5 minutes)	**2**
	• Perinatal death	**3**
	• Child with congenital and/or hereditary disorder	**2**
	• Previous baby with serious birth trauma requiring ongoing care	**3**
1.3.7	**Postpartum depression (consider referral to Specialized support services)**	
	• Not requiring medication	**1**
	• Requiring medication	**2**
	• Postpartum psychosis	**3**
1.3.8	**Postpartum haemorrhage as a result of:**	
	• Episiotomy	**1**
	• Cervical tear	**3**
	• Other causes (>1000mls)	**2**
1.3.9	**Pregnancy abnormalities**	
	• Recurrent miscarriage (3 or more times)	**3**
	• Pre-term birth (<37 weeks) in a previous pregnancy	**3**
	• Cervical incompetence (and/or Shirodkar-procedure)	**3**
	• Placental abruption	**3**
	• Cholestasis of pregnancy	**3**
	• Symphysis pubis dysfunction	**1**

1.3.10	**Severe perineal trauma**	
	• 3rd degree	**2**
	• 4th degree	**3**
1.3.11	**Third stage abnormalities**	
	• Manual removal of placenta	**1**
	• Placenta accreta/ morbidly adherent placenta	**3**

2. Indications developed / discovered during pregnancy.

2.1.1	**Antenatal screening**	
	• Risk factors for congenital abnormalities.	**1**
	• (Suspected) fetal abnormalities	**1/2/3**
	Cervical Cytology	
	• Cervical cytology - High grade (CIN II & III)	**3**
	• Cervical cytology – low grade (CIN I)	**1**
2.1.2	**Early pregnancy disorders**	
	• Hyperemesis gravidarum	**2**
	• Suspected ectopic pregnancy	**3**
	• Recurring vaginal blood loss prior to 16 weeks	**1**
	• Vaginal blood loss after 16 weeks	**2**
2.1.3	**Endocrine disorders**	
	Diabetes Mellitus	
	• Gestational diabetes requiring insulin	**3**
	• Gestational diabetes requiring oral medication	**2**
	• Gestational diabetes stable on diet control	**1**
	Thyroid disease	
	• Hypothyroidism	**2**
	• Hyperthyroidism	**3**
	• Addison's disease, Cushing's disease, or endocrine disorder requiring treatment	**3**
2.1.4	**Fetal presentation/ growth concerns**	
	• Non-cephalic presentation at full term	**3**
	• Breech presentation ≥34 weeks	**2**
	• Multiple pregnancy	**3**
	• Failure of head to engage at full term (primigravida)	**2**
	• Symphysis fundal height >3cm or <3cm above gestational age	**2**
	• IUGR	**3**
2.1.5	**Gastroenterology**	
	• Hepatitis B with positive serology (Hbs-AG+)	**2**
	• Hepatitis C	**2**
	• Inflammatory bowel disease o This includes ulcerative colitis and Crohn's disease	**3**
2.1.6	**Haematological disorders**	
	• Coagulation disorders	**3**
	• Blood group incompatibility	**3**
	• Thrombosis	**3**
	• Anaemia close to term (defined as Hgb <10g/dl)	**2**

2.1.7	**Hypertensive disorders**	
	• Gestational hypertension (GH) (>20 weeks gestation)	**2**
	• Pre-eclampsia	**3**
	• Eclampsia	**3**
	• Chronic hypertension	**2**
2.1.8	**Infectious diseases**	
	• HIV infection	**3**
	• Rubella	**3**
	• Toxoplasmosis	**3**
	• Cytomegalovirus	**3**
	• Parvo virus infection	**3**
	• Varicella/Zoster virus	**3**
	• Tuberculosis: an active tuberculosis process	**3**
	• Herpes genitalis- primary infection	**2**
	• Herpes genitalis- infection late in pregnancy	**2**
	• Herpes genitalis- recurrent infection	**1**
	• Syphilis- Positive serology and treated	**2**
	• Syphilis -Positive serology and not yet treated	**3**
	• Syphilis- Primary infection	**3**
2.1.9	**Medical/surgical issues**	
	• Laparotomy during pregnancy	**3**
2.1.10	**Mental health disorders**	
	• Development of neuroses / psychoses (consider referral to specialised support services)	**2**
2.1.11	**Musculo-skeletal**	
	• Hernia nuclei pulposi (slipped disc)	**2**
	• Pelvic instability (Symphysis pubis dysfunction)	**1**
2.1.12	**Placental abnormalities**	
	• Low lying placenta ≥34 weeks	**2**
	• Placenta praevia	**3**
	• Placenta accreta/ percreta/ increta	**3**
	• Vasa praevia	**3**
	• Suspected placental abruption	**3**
2.1.13	**Post-term pregnancy**	
	• amenorrhoea lasting up to 41 completed weeks	**1**
	• amenorrhoea lasting longer than 41 completed weeks	**2**

2.1.14	**Renal function disorders**	
	• Urinary tract infections	**2**
	• Pyelitis	**2**
2.1.15	**Respiratory disease**	
	• Asthma	**1**
	• Acute respiratory illness	**3**
2.1.16	**Threat of or actual pre-term birth**	
	• Incompetent cervix	**3**
	• Pre-term rupture of membranes (<37 weeks amenorrhoea)	**2**
	• 34-37 weeks gestation	**2**
	• <34 weeks	**3**
2.1.17	**Uncertain duration of pregnancy**	
	• Amenorrhoea >20 weeks and uncertain of dates	**2**
2.1.18	**Uterine abnormalities**	
	• Fibroids	**2**
2.1.19	**Other high risk pregnancy issues**	
	• No prior prenatal care (± full term)	**3**
	• Concealed pregnancy	**3**
	• Baby for adoption	**2**
	• Fetal death in utero	**3**

3. Indications during labour and birth

3.1.1	**Hypertensive disorders**	
	• Gestational hypertension in labour	**2**
	• Pre-eclampsia	**3**
3.1.2	**Labour complications**	
	• Meconium stained liquor	**2**
	• Maternal pyrexia	**2**
	• Suspected maternal sepsis	**3**
	• Active genital herpes in late pregnancy or at onset of labour	**3**
	• Abnormal fetal heart rate with non reassuring features	**2**
	• Prolapsed cord or cord presentation	**3**
	• Vasa praevia	**3**
	• Transfer in labour from alternate hospital / home birth	**3**
	• Suspected placenta abruption and /or praevia	**3**
	• Fetal death during labour	**3**
	• Shock/ maternal collapse	**3**
	• Prolonged first stage of labour	**2**
	• Prolonged second stage of labour	**2**
	• Prolonged third stage of labour	**2/3**
	• Post partum haemorrhage >500 mls	**2/3**
3.1.2	**Labour complications (continued)**	
	• Retained placenta	**2/3**
	• Shoulder dystocia	**2/3**
	• Suspected uterine rupture	**3**
3.1.3	**Malpresentation/ multiple pregnancy**	
	• Abnormal fetal presentation	**3**
	• Breech presentation	**3**
	• Unengaged head in active labour in primipara	**3**
	• Multiple pregnancy	**3**
3.1.4	**Preterm labour <37 weeks**	
	• < 34 weeks gestation	**3**
	• 34-37 weeks gestation	**2**
3.1.5	**Pre-labour rupture of membranes (PROM)**	
	• Pre-term PROM <34 weeks gestation	**3**
	• Pre-term PROM >34-37 weeks gestation	**2**
	• Term PROM >18 hours	**2**
3.1.6	**Severe adverse maternal morbidity**	
	• Third or fourth degree perineal tear	**3**
	• Retained placenta	**2/3**

3.1.6	**Severe adverse maternal morbidity (continued)**	
	• Uterine inversion	**3**
	• Post partum haemorrhage >1000mls	**3**

4. Indications during the post-partum period

4.1 Maternal Indications

4.1.1	**Abnormal post natal observations**	
	• Suspected maternal infection	**2**
	• Suspected retained products/ abnormal fundal height	**2**
	• Temperature over 38^{C} on more than one occasion	**2**
	• Persistent hypertension	**2**
4.1.2	**Social/ mental health problems**	
	• Serious psychological disturbance	**3**
	• Significant social isolation and lack of social support	**2**
4.1.3	**Severe adverse maternal morbidity**	
	• Thrombophlebitis	**2**
	• Thromboembolism	**3**
	• Haemorrhage >1000mls	**3**
	• Postpartum eclampsia	**3**
	• Uterine prolapse	**3**

4.2 Infant Indications

4.2.1	**Suspected birth asphyxia**	
	• Apgar less than 7 at 5 minutes	**3**
4.2.2	**Neonatal complications / abnormalities noted at birth**	
	• Infant less than 2500g	**2**
	• Less than 3 vessels in umbilical cord	**2**
	• Excessive moulding and cephalhaematoma	**2**
	• Abnormal findings on physical examination	**2**
	• Excessive bruising, abrasions, unusual pigmentation and/or lesions	**2**
	• Birth injury requiring investigation	**2**
	• Birth trauma	**2**
	• Congenital abnormalities, for example: cleft lip or palate, congenital dislocation of hip, ambiguous genitalia	**3**
	• Major congenital anomaly requiring immediate intervention, for example: omphalocele, myomeningocele	**3**
4.2.3	**Neonatal complications/ abnormalities noted following birth**	
	• Abnormal heart rate or pattern	**2**
	• Abnormal cry	**2**
	• Persistent abnormal respiratory rate and/ or pattern	**2**
	• Persistent cyanosis or pallor	**3**
	• Jaundice in first 24 hours	**3**
	• Suspected pathological jaundice after 24 hours	**2**
	• Temperature instability	**3**
	• Temperature less than 36C, unresponsive to therapy	**3**
	• Temperature more than 37.4C, axillary, unresponsive to non-pharmaceutical therapy	**3**
	• Vomiting or diarrhoea	**3**
	• Infection of umbilical stump site	**2**
	• Feeding problems	**2**
	• Significant weight loss in first week (usually more than 10% of body weight)	**2**
	• Failure to regain birth weight in three weeks	**2**
	• Failure to thrive	**2**
	• Failure to pass urine or meconium by 24 hours of birth	**2**
	• Suspected clinical dehydration	**2**
	• Suspected seizure activity	**3**
4.2.4	**Prematurity**	
	• <34 weeks	**3**
	• 34-37 weeks	**2**

Related documents:

- Eastern Health Handheld Maternity Record
- Eastern Health Guidelines for Consultation and Collaborative Maternity Care Planning
- Eastern Health Quick Reference Algorithms
- 'Green' Collaborative Maternity Care Pathway

Disclaimer

This document has been developed having regard to general circumstances. It is the responsibility of every clinician to take account of both the particular circumstances of each case and the application of these guidelines. In particular, clinical management must always be responsive to the needs of the individual woman and particular circumstances of each pregnancy. These guidelines have been developed in light of information available to the authors at the time of preparation. It is the responsibility of each clinician to have regard to relevant information, research or material which may have been published or become available subsequently