Skills Stations

- Non-Invasive Prenatal Testing (NIPT)
- Abdominal Examination/Standardised Fetal Growth Charts
- HealthPathways
- Weight Gain Charts
- Q&A with Dr Meg Cairns and guests
Physiotherapy Services

Cara Masterson
Team Leader Physiotherapist
Women’s and Newborn Services
Royal Brisbane and Women’s Hospital
Overview of services

Antenatal

• Antenatal Education Classes
• Musculoskeletal conditions of pregnancy
• Hydrotherapy in pregnancy
• Pelvic Floor Dysfunction
• TENS for labour
• Varicose Vein management
Antenatal education classes

- Physiotherapists and Midwives run a coordinated program of classes – booked through maternity bookings
- Physios hold 2 of these classes
  - Active Pregnancy
  - Active Birth
- YPP (young parents program)
Active pregnancy class

- Pelvic floor exercises and their benefit
- Back care during pregnancy
- Avoidance of supine
- Comfortable sleeping positions
- Perineal massage
- General exercise advice – SMA guidelines
Active birth class

• Labour focused
• Aims to reduce fear of childbirth and provide strategies to cope with labour pain
• Practice of active pain relief strategies for use in labour

Images source: Women’s and Newborn Services RBWH
Specific conditions of pregnancy suitable for physiotherapy management

- Back and Pelvic Girdle Pain - hydrotherapy
- Varicose veins
- Carpal tunnel syndrome
- Diastasis of the Rectus Abdominus Muscle (DRAM)

GP referral accepted for women booked into RBWH
Inpatient Services

- Post natal ward review
- Chest treatment prn
- Mobility assessment and treatment
- Referral to classes after d/c home
Postnatal classes

• Postnatal pelvic floor class
  – OASIS (3rd and 4th degree tear)
  – Urinary/faecal incontinence
  – NBF

• Postnatal class
  – DRAM
  – LBP
  – General progression of postnatal exercises
  – Self referral
Neonatal services

• Outpatient appointments
  – 0 – 12 months
  – Musculoskeletal – talipes, torticollis, plagiocephaly, Erb’s palsy
  – Neurological / Developmental review

• Baby massage classes – self refer

• Playgroup for preterm babies
  – (0 – 12 months CA)

• Infant Follow up clinic
  – review babies post discharge from maternity ward and neonatal unit
Breastfeeding

Kat Ross
Clinical Midwife/Lactation Consultant (IBCLC)
RBWH
Recommendations

• Exclusive breastfeeding until around 6 months
• Continued breastfeeding for at least 12 months with addition of appropriate complementary foods at around 6 months (NHMRC)
Recommendations

Australasian Society of Clinical Immunology and Allergy (ASCIA) May 2016

• When your infant is ready, at around 6 months, but not before 4 months, start to introduce a variety of solid foods, starting with iron rich foods, while continuing breastfeeding.

• All infants should be given allergenic solid foods including peanut butter, cooked egg and dairy and wheat products in the first year of life. This includes infants at high risk of allergy.

• Hydrolysed (partially and extensively) infant formula are not recommended for prevention of allergic disease.

Incidence

- Initiation rate approximately **90%**
- At 1 month **40%** of women have introduced some formula
- At 6 months - only **15%** of breastfed babies are exclusively breastfed
Why is breastfeeding important?

<table>
<thead>
<tr>
<th>Health outcome associated with breastfeeding</th>
<th>No. Studies</th>
<th>Pooled Effect</th>
<th>95% CI</th>
<th>Interpretation: odds (OR) / risk (RR) of outcome is</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in intelligence tests</td>
<td>17</td>
<td>3.44 points</td>
<td>2.30–4.58</td>
<td>increased</td>
</tr>
<tr>
<td>Overweight/obesity in later life</td>
<td>113</td>
<td>OR: 0.74</td>
<td>0.70–0.78</td>
<td>reduced</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>11</td>
<td>OR: 0.65</td>
<td>0.49–0.86</td>
<td>reduced</td>
</tr>
<tr>
<td>Malocclusion</td>
<td>18</td>
<td>OR: 0.34</td>
<td>0.24–0.48</td>
<td>reduced</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>OR: 0.54</td>
<td>0.38–0.77</td>
<td></td>
</tr>
<tr>
<td>Dental caries</td>
<td>5</td>
<td>OR: 1.99</td>
<td>1.36–2.96</td>
<td>increased</td>
</tr>
<tr>
<td>If breastfed beyond 12 months</td>
<td>7</td>
<td>OR: 0.50</td>
<td>0.25–0.99</td>
<td>reduced</td>
</tr>
<tr>
<td>If breastfed up to 12 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute otitis media (until 2 years)</td>
<td>5</td>
<td>OR: 0.57</td>
<td>0.44–0.75</td>
<td>reduced</td>
</tr>
<tr>
<td>If exclusive breastfeeding for first 6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More versus less breastfeeding</td>
<td>12</td>
<td>OR: 0.65</td>
<td>0.59–0.72</td>
<td></td>
</tr>
<tr>
<td>Childhood leukaemia</td>
<td>18</td>
<td>OR: 0.81</td>
<td>0.73–0.89</td>
<td>reduced</td>
</tr>
<tr>
<td>Any breastfeeding for 6 months of longer</td>
<td>15</td>
<td>OR: 0.89</td>
<td>0.84–0.94</td>
<td></td>
</tr>
<tr>
<td>Ever versus never breastfed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIDS</td>
<td>8</td>
<td>OR: 0.27</td>
<td>0.24–0.31</td>
<td>reduced</td>
</tr>
<tr>
<td>Exclusive breastfeeding</td>
<td>16</td>
<td>OR: 0.40</td>
<td>0.35–0.44</td>
<td></td>
</tr>
<tr>
<td>Any breastfeeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe respiratory infections</td>
<td>16</td>
<td>RR: 0.68</td>
<td>0.60–0.77</td>
<td>reduced</td>
</tr>
<tr>
<td>Mortality due to infectious diseases</td>
<td>9</td>
<td>OR: 0.48</td>
<td>0.38–0.60</td>
<td>reduced</td>
</tr>
<tr>
<td>Protection against diarrhoea morbidity/hospital admission</td>
<td>15</td>
<td>RR: 0.69</td>
<td>0.58–0.82</td>
<td>reduced</td>
</tr>
<tr>
<td>Maternal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast cancer</td>
<td>98</td>
<td>OR: 0.78</td>
<td>0.74–0.82</td>
<td>reduced</td>
</tr>
<tr>
<td>Ovarian cancer</td>
<td>41</td>
<td>OR: 0.70</td>
<td>0.64–0.77</td>
<td>reduced</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>6</td>
<td>RR: 0.68</td>
<td>0.57–0.82</td>
<td>reduced</td>
</tr>
<tr>
<td>BMI in postmenopausal women</td>
<td>1</td>
<td>0.22 kg/m²</td>
<td>0.21–0.22</td>
<td>reduced</td>
</tr>
</tbody>
</table>

Breastfeeding not recommended

- Galactosaemia
- Maple syrup urine disease. Some BF may be possible with careful monitoring
- Phenylketonuria (PKU). Some BF may be possible with careful monitoring
- Human immunodeficiency virus (HIV) positive refer World Alliance for Breastfeeding Action (WABA)
- Active TB while the mother is infectious
- Illicit drugs and some medication
Medications

• Very few contra-indications
• Individualise care
• Refer to a breast milk pharmacopeia e.g.
  – LactMed - U.S. National Library of Medicine
  – Medications and Mothers' Milk Online
    http://www.medsmilk.com/
  – Queensland Medicines Advice & Information Service (QMAIS) for Health Professionals at RBWH ph 36467599 or 36467098
During pregnancy

• Discuss and encourage
  – Many women decide how they will feed their baby before or early in pregnancy
  – More likely to initiate and continue to breastfeed if their doctor encourages them to

• Check for hormonal problems or chronic disease. e.g. Diabetes, Thyroid disease, PCOS

• Check breasts and nipples if appropriate
  • Refer if required
Postnatal check day 5 to 7

• Ask targeted questions to ascertain if feeding is progressing normally

• Weigh baby- if not seen regularly in first 5-10 days

• Review baby input/output

• Discuss health promotion
  – Safe sleeping
  – Role of child health nurse/community midwife
  – Access to local Hospital/Community Lactation support
  – ABA
Breastfeeding is going well when…

- Feeding on cue 8-12 times every 24 hours
- 6-8 wet nappies and 3-4 yellow stools each day
- Mother can hear baby gulping or swallowing milk
- Breastfeeding is comfortable
- Baby is receiving only breast milk
## Input/output checklist

<table>
<thead>
<tr>
<th>Age (hours)</th>
<th>Breast milk intake</th>
<th>Number of breastfeeding</th>
<th>Number of wet nappies</th>
<th>Stooling</th>
<th>Stool colour</th>
<th>Stool consistency</th>
<th>Baby weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–24</td>
<td>0–5 mL colostrum at first feed 2–10 mL per feed Average of 7 ml per feed 7–123 mL of colostrum in first 24 hours</td>
<td>First 8 hours: 1 or more Second 8 hours: 2 or more Third 8 hours: 2 or more</td>
<td>1 or more</td>
<td>1–2</td>
<td>black</td>
<td>tarry/sticky</td>
<td>Loses 7% average 10% maximum</td>
</tr>
<tr>
<td>24–48</td>
<td>5–15 mL per feed Increasing volumes</td>
<td>8–12</td>
<td>2 or more</td>
<td>1–2</td>
<td>greenish/black then brownish 'transitional'</td>
<td>softening</td>
<td></td>
</tr>
<tr>
<td>48–72</td>
<td>15–30 mL per feed Increasing volumes</td>
<td>8–12</td>
<td>3 or more</td>
<td>3–4</td>
<td>greenish/yellow</td>
<td>soft</td>
<td></td>
</tr>
<tr>
<td>72–96</td>
<td>30–60 mL per feed 395–800 mL per day</td>
<td>8–12</td>
<td>4 or more</td>
<td>4 large or 10 small</td>
<td>yellow/seedy</td>
<td>soft/liquid</td>
<td></td>
</tr>
<tr>
<td>End of first week</td>
<td>395–800 mL per day Increasing volumes 440–1220 mL per day by one month</td>
<td>8–12</td>
<td>6 or more</td>
<td>4 large or 10 small</td>
<td>yellow/seedy</td>
<td>soft/liquid</td>
<td>Weight loss plateaus then starts to regain weight</td>
</tr>
</tbody>
</table>

- Between 4–6 days of age, babies start to regain weight and by two weeks will have returned to birth weight
- Most babies have returned to birth weight by 10 days of age
- Average weekly weight gain of 150 to 200 grams to three months of age
- Babies usually double their birth weight by six months of age, and triple their birth weight by 12 months of age
- Weight gain or loss is only one aspect of wellbeing—assess every mother and baby on an individual basis
- Urates may be present before secretory activation when milk flow increases—urates not expected after 96 hours of age
- Number of bowel motions of breastfed babies tends to decrease between six weeks and three months of age

6 week check

• Discuss
  – Mother’s satisfaction with baby’s progress
  – Feeding including patterns and growth
  – Continuing breastfeeding – supply/demand
  – When to introduce solids
  – Stool changes
  – Mothers lifestyle - nutrition, physical activity, alcohol, contraception
Common presentations to GP

- Need for information, affirmation and reassurance
  - Tell mothers not to wait if worried
- Baby not attaching to breast
- Painful feeding/nipple trauma
- Concerns about milk supply
- Blocked ducts/Mastitis

Source: Breastfeeding Concerns at 3 and 7 Days Postpartum and Feeding Status at 2 Months Erin A. Wagner et al, PEDIATRICS Volume 132, Number 4, October 2013
Recommendations for common concerns

<table>
<thead>
<tr>
<th>Concern</th>
<th>Signs/Consideration</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleepy baby not exhibiting feeding cues</td>
<td>Prolonged periods of not feeding require investigation</td>
<td>Reassure mother this is usually temporary</td>
</tr>
<tr>
<td></td>
<td>Exclude causes such as effects of maternal analgesia during labour and birth, effects of the birth process and illness</td>
<td>Refer to Flow Chart: Sleepy baby</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refer to Queensland Clinical Guideline: Neonatal laundice</td>
</tr>
</tbody>
</table>

Alert baby who is exhibiting feeding cues but unable to attach
- Reason may not be apparent
- Can be distressing for both the mother and her baby as baby may back arch, cry when approaching the breast and push away
- Woman related reasons include:
  - Inverted or flat nipples, areola engorgement/oedema
  - When nipple is flat or inverted, or areola engorged, it obliterates nipple and makes grasping nipple/areola difficult
  - Impossible for baby
  - Reverse pressure softening (RPS) uses gentle positive pressure to soften areola and surrounding tissue by temporarily moving swelling slightly backward and upward the breast
- Baby related reasons include:
  - Birth trauma
  - Ankyloglossia (tongue-tie)

Delay in secretory activation or poor milk transfer
- Common cause of poor milk transfer is sub-optimal attach
- Possible causes of delay in secretory activation include:
  - Postpartum haemorrhage, diabetes, obesity
- Possible causes of low milk production at stage of initiation include, breast surgery, hypoplastic breasts, chronic disease or medical conditions

Nipple pain and trauma
- Nipple discomfort in the first few days is common
- Commonly cited reason for ceasing breastfeeding
- Sub-optimal positioning is the most common cause
- Other causes include tongue-tie, flat or retracted nipples, poor skin health (e.g. eczema, bacterial, thrush, herpes), nipple vasospasm
- Regardless of treatment used, most women report a reduction in nipple pain to mild levels approximately 7–10 days' after birth
- Sore nipples occurring beyond the first weeks of breastfeeding may be caused by:
  - Infections such as staphylococcus aureus and candida
  - Vasospasm

Breast engorgement
- Physiologic breast fullness when 'milk comes in' is normal
- Engagement:"swelling and distension of the breasts usually early days of initiation of lactation, caused by vascular dilatation as well as arrival of the early milk"
- More frequent breastfeeding (or expressing, if baby is not feeding at the breast) in first 48 hours with less engorgement
- Symptoms occur most commonly between days 3–5
- In the presence of oedema reverse pressure softening shown to improve attachment

Blocked duct or mastitis
- Blocked duct presents as a tender lump in otherwise well women
- Mastitis may or may not involve bacterial infection
- Staphylococcus aureus is most common pathogen in milk of women with mastitis
- Clinical presentation:
  - Tender, hot, swollen, wedge-shaped area of breast, temperature of 38.5°C or greater, chills, flu-like aching, systemic illness
  - Common during first six weeks
- Predisposing factors are those which result in milk stasis (e.g. nipple damage, infrequent feeding and poor attachment)
- A continuum exists from blocked duct or engorgement to mastitis to breast abscess

<table>
<thead>
<tr>
<th>Concern</th>
<th>Signs/Consideration</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nipple discomfort in the first few days is common</td>
<td>Reassure if nipples tender but no sign of compression after a feed</td>
</tr>
<tr>
<td></td>
<td>Commonly cited reason for ceasing breastfeeding</td>
<td>Review and optimise positioning and attachment</td>
</tr>
<tr>
<td></td>
<td>Sub-optimal positioning is the most common cause</td>
<td>Soften areola sufficiently to enable baby to grasp adequately</td>
</tr>
<tr>
<td></td>
<td>Other causes include tongue-tie, flat or retracted nipples, poor skin health (e.g. eczema, bacterial, thrush, herpes), nipple vasospasm</td>
<td>Review nipple care</td>
</tr>
<tr>
<td></td>
<td>Regardless of treatment used, most women report a reduction in nipple pain to mild levels approximately 7–10 days' after birth</td>
<td>Avoid soaps and synthetic bras</td>
</tr>
<tr>
<td></td>
<td>Sore nipples occurring beyond the first weeks of breastfeeding may be caused by:</td>
<td>Change breast pads frequently</td>
</tr>
<tr>
<td></td>
<td>- Infections such as staphylococcus aureus and candida</td>
<td>Expose breasts to air briefly after breastfeeding</td>
</tr>
<tr>
<td></td>
<td>- Vasospasm</td>
<td>Wash daily</td>
</tr>
<tr>
<td></td>
<td>- Allow expressed breast milk to dry on the nipple after breastfeeding</td>
<td>Allow expressed breast milk to dry on the nipple after breastfeeding</td>
</tr>
<tr>
<td></td>
<td>- Limited evidence exists about the effectiveness of treatment for nipple pain and/or trauma</td>
<td>Refer if pain/trauma persists beyond first week or infection suspected</td>
</tr>
<tr>
<td></td>
<td>- Best management is prevention</td>
<td>Give anticipatory guidance regarding possibility of engorgement to women prior to hospital discharge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve milk removal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Increase feed frequency, optimise positioning and gentle massage during feeds from the blocked and/or tender area toward the nipple, express after feed if required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Apply heat (shower, warm cloth, heat pack) to facilitate milk ejection reflex</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supportive/comfort measures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Rest, adequate fluids and nutrition, antalgia and cold packs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Antibiotics indicated if symptoms not improving within 12–24 hours or if acutely ill</td>
</tr>
</tbody>
</table>

Infant feeding support

• Hospital based Community Midwifery Service (CMS)

• Hospital-based Lactation Service
## Child Health Service Brisbane north side

### Early feeding and support drop-in clinics

For parents in the first four weeks after discharge from hospital, No appointment required.

Child health nurses provide help, support and advice on:
- Infant feeding and sleep
- Breastfeeding support, assistance and helpful advice
- Referral to other support services for specific needs.

### Clinic days and hours

All clinics are open between **9am** and **noon** on the days specified in the table below (closed on public holidays).

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acland</td>
<td>Acland</td>
<td>Acland</td>
<td>Acland</td>
<td>Acland</td>
</tr>
<tr>
<td>Caboolture</td>
<td>Caboolture</td>
<td>Caboolture</td>
<td>Caboolture</td>
<td>Caboolture</td>
</tr>
<tr>
<td>Deception Bay</td>
<td>Deception Bay</td>
<td>Kallangur</td>
<td>Deception Bay</td>
<td>Indooroopilly</td>
</tr>
<tr>
<td>Kallangur</td>
<td>Nundah</td>
<td>Nundah</td>
<td>Strathpine</td>
<td>Kallangur</td>
</tr>
<tr>
<td>Redcliffe</td>
<td>Redcliffe</td>
<td>Redcliffe</td>
<td>Strathpine</td>
<td>Redcliffe</td>
</tr>
</tbody>
</table>

### Clinic locations

- Acland
- Caboolture
- Deception Bay
- Kallangur
- Nundah
- Redcliffe
- Strathpine

### Our services:

- Early feeding support

Early feeding and support drop-in clinics are available for parents of newborns over the first four weeks after discharge from hospital. Information is available at select locations including:
- Acland
- Caboolture
- Deception Bay
- Kallangur
- Nundah
- Redcliffe
- Strathpine

### Please note:

- Clinic times may vary
- Contact your nearest Child Health Centre for more information

---

Source: Children’s Health Queensland Hospital and Health Service

Resources for families

• Pregnancy, Birth and Baby  

• Breastfeeding Queensland Health  

• Australian Breastfeeding Association  
  https://www.breastfeeding.asn.au/

• Raising Children Network  
  https://www.raisingchildren.net.au
Resources for health professionals

• Queensland Clinical Guideline: Establishing breastfeeding

• Academy of Breastfeeding Medicine
  http://www.bfmed.org/
Queensland Milk Bank

- Established 2012 (RBWH Milk Bank)
- More than 1891 babies fed (RBWH)
- Pasteurised 6656 litres donor milk
- Priority given to babies:
  - < 34 weeks
  - < 1500 grams
- 745 milk donors
- Contracts to supply with 19 hospitals
- For more information
  - p: 36460542 e: Milk_Bank_RBWH@health.qld.gov.au

Current as @ July 2019
Since 2012

• Mortality reduced by 69%
• NEC reduced by 50%
Infant formula feeding

- Respect informed decision not to breastfeed
- Cow’s milk-based formula suitable for newborn for first 12 months
- Special formulas under medical supervision
- Changing type of formula because of minor rashes and irritability is usually of no benefit
- Show parents how to safely prepare formula and how to bottle feed (refer to Child Health book)
Newborn examination - DVD

Authors:
Dr David Cartwright
Dr Mark Davies
Case Studies: Postnatal care
Blue group – postnatal care

- **Laura** - G1P1 had an uncomplicated pregnancy, a straightforward birth and post partum course
- She is now 6 days post partum and presents for a routine postnatal check, along with baby Jack
- She has two appointments booked, 15 min for herself and 30 min for Jack
- **What do you complete for Laura’s checkup?**
Post partum care – Day 5-10

• Review
  - birth & complications
  - vaginal blood loss
  - feeding & breasts
  - immunisations (MMR, Pertussis)
  - contraception & intercourse resumption
  - psychological wellbeing
  - ongoing follow up (GP, Child Health)

• Check
  - bowel & bladder function
Post partum care – Day 5-10

• Examine
  – BP/abdomen/perineum/Caesarean section wound/breasts/nipples
  – baby as per personal health record

• Offer
  – contraception

https://pathways.nice.org.uk/pathways/postnatal-care
Contraception

• Options at 5 – 10 days post partum include:
  - Abstinence
  - Condoms
  - Lactation amenorrhoea method (LAM)
  - Minipill
  - Depo/Implanon
  - NOT COCP, even if not planning to breastfeed
  - NOT IUCD
Neonatal examination by day 7

If baby is discharged from hospital within 72 hours of birth this examination should be conducted by a GP.

Date    /    /    Age    Weight    NNST* (see page 13)    Done now    Done previously

Head Circ    Feeding    Signature

Hearing screen (see 17)    Further assessment indicated    No further assessment indicated    Screen not done

Family history (including deafness)

Mother’s medication/supplements

Baby’s medication/supplements

Feeding concerns

Birth marks

Examination

✔️ = normal,  ✗️ = abnormal (explain in comments),  ❌ = not examined.

☐ jaundice    ☐ spine    ☐ respiratory

☐ fontanelle/sutures    ☐ genitalia    ☐ cardiac (auscultation)

☐ eyes & red reflexes    ☐ anus    ☐ cardiac (femoral pulses)

☐ face/palate/ears    ☐ meconium within 24 hours    ☐ hips

☐ limbs    ☐ abdomen and umbilicus    ☐ neurological/reflexes

Comments

Recommendations, follow ups, medication

Health promotion issues discussed with parents or care giver

☐ Feeding    ☐ Safe infant sleeping information    ☐ Injury prevention    ☐ Hearing and ear health

☐ Role of GP    ☐ Vaccinations funded/non-funded    ☐ Roles of child health nurse/community midwife/health worker

Doctor’s signature    Name

* NNST = Neonatal Screening Test
Red group – postnatal care

- Megan - G1P1 had well controlled GDM, a vaginal birth and third degree perineal tear
- Now 6 weeks post partum, she presents for her routine visit
- Baby Jasmine has the following appointment for 6 week check and immunisations
- What do you complete for Megan’s checkup?
Post partum care – Week 6

• Review
  – birth & complications
  – vaginal blood loss
  – feeding & breasts
  – immunisations
  – contraception & intercourse resumption
  – medical issues (e.g. OGTT if GDM)
  – psychological wellbeing of mother & partner (EPDS)
  – ongoing follow up (GP, Child Health)
  – need for referrals
Post partum care – Week 6

• Check
  – bladder & bowel function

• Examine
  – BP/abdomen/perineum/Caesarean section wound/breasts/nipples
  – baby as per personal health record

• Offer
  – Cervical Screening Test if due
  – contraception

https://pathways.nice.org.uk/pathways/postnatal-care
Perineal care

OASIS (Obstetric Anal Sphincter Injuries)

• Dedicated perineal clinic
• Obstetrician
• Physiotherapist
• Continence Nurse

Perineal care

• If incontinence or pain, consider referral to gynaecologist, uro-gynaecologist or colorectal surgeon

• Consider:
  – endoanal ultrasound
  – anorectal manometry
  – secondary sphincter repair
  – referral to physiotherapist for assessment and individualised PFMT

Perineal care - resources

Perineal care - resources

Continence advisory service

Referral reasons may include:

<table>
<thead>
<tr>
<th>Lower urinary tract symptoms:</th>
<th>Bowel symptoms:</th>
<th>Issues with 3rd and 4th degree tears</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency; urgency; urge incontinence; stress incontinence; voiding difficulties; poor stream; feeling of incomplete emptying</td>
<td>Constipation; diarrhoea; faecal soiling; flatus incontinence</td>
<td></td>
</tr>
</tbody>
</table>

Pre work up for referral acceptance:
- Bladder symptoms – MSU M/C/S
- Bowel symptoms – Stool M/C/S if indicated

Referrals
Fax: 07 3646 0888 – attention to **Continence Advisory Service WNS**
Email: [RBWH-Continence-Advisor-WNBS@health.qld.gov.au](mailto:RBWH-Continence-Advisor-WNBS@health.qld.gov.au)
Green group – postnatal care

- **Sarah** - G1P1. She had a healthy pregnancy and uncomplicated vaginal birth
- She presents at 5 weeks requesting a checkup, looking pale and tired
- She reports that she is still bleeding very heavily, with pain, blood clots and regular flooding
- Sarah also complains of pain in her left thigh
- What do you check?
Postpartum haemorrhage (PPH)

• Secondary PPH = excessive bleeding that occurs between 24 hours post birth and 6 weeks

• Primary PPH = excessive bleeding in first 24 hours post birth

Secondary PPH

• Common causes:
  – Endometritis +/- Retained products of conception (RPOC)

• Rare causes:
  – Bleeding diathesis
  – Pseudo aneurysm / AV malformations of uterine artery
  – Choriocarcinoma
Secondary PPH

• Investigations:
  – FBE/iron studies/coagulation screen
  – Infection screen
  – Pelvic USS and Doppler flow
  – BHCG levels

• Treatment:
  – Antibiotics +/- uterotonics
  – If excessive / continued – investigate for RPOC (irrespective of USS findings)
  – Check histology
VTE Postnatal Assessment

Antenatal therapeutic anticoagulation

High Risk Factors
- Antenatal LMWH prophylaxis (refer to antenatal VTE prophylaxis flow chart)
- Any previous personal history of VTE (not current pregnancy*)

Known Risk Factors
- Socio-demographic
  - Age ≥ 35 years
  - BMI ≥ 30 kg/m²
  - Cigarette smoker (>10/day)

- Medical history
  - Asymptomatic thrombophilia (inherited or acquired)
  - Family history VTE + weak thrombophilia
  - Systemic lupus erythematosus
  - Cardiac or lung disease
  - Sickle cell disease
  - Gross varicose veins
  - Inflammatory conditions
  - Nephrotic syndrome
  - Cancer
  - Pre-existing diabetes
  - Antiphospholipid antibodies

- Birth
  - Emergency CS in labour
  - Elective CS
  - Prolonged labour (>24 hrs)
  - Operative vaginal birth
  - Stillbirth
  - Preterm birth
  - Postpartum haemorrhage (>1L)

- Postpartum
  - Immobility (long distance travel, prolonged bed rest)
  - Preeclampsia/eclampsia
  - Gestational diabetes
  - Infection
  - Any surgical procedure

Postnatal therapeutic anticoagulation

High Risk
- GCS
- *LMWH prophylaxis for 6 weeks
- Consider IPC if hospitalised

Emergency CS in labour

Moderate Risk
- Discuss GCS
- *LMWH prophylaxis for 5 days
- Consider IPC if hospitalised

≥ 3 risk factors

Lower Risk
- Discuss GCS
- Consider *LMWH prophylaxis until discharge or fully mobile

1-2 risk factors

All Risk
- Clinical surveillance
- Early mobilisation
- Avoid dehydration

No risk factors

Orange group - post partum

- **Joanne** - G2 P2 OGTT was positive at 28 weeks; she was referred back to ANC and you haven’t seen her since
- She had a caesarean birth, and has a healthy baby girl weighing 4900g
- She presents at 5 days post partum, looking flushed and moving slowly. She is accompanied by her husband and her mother is caring for the baby at home
- Your preliminary observations reveal a temperature of 39.2, BP 105/68 and PR of 112
- What is your approach?
Post Partum Pyrexia

• Definition:
  – Oral temperature of 38.0°C or more on any two of the first 10 days postpartum, exclusive of the first 24 hours

• Common Causes:
  – UTI / endometritis / mastitis / breast abscess / pneumonia / pharyngitis/gastroenteritis
  – Surgical site infection / septic thrombophlebitis
  – Drug reaction
  – Clostridium difficile diarrhoea
  – Infections related to regional anaesthesia

https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_64b.pdf
Post Partum Pyrexia - Management

• Refer urgently if any ‘Red flags’:
  – appears seriously ill, anxious, distressed
  – temperature >38°C
  – sustained tachycardia (>90 bpm)
  – breathlessness (RR>20 breaths/minute)
  – abdominal or chest pain
  – diarrhoea and/or vomiting
  – uterine or renal angle pain
Post Partum Pyrexia - Management

- History, examination and investigations to identify cause and direct optimal therapy
- Amoxycillin with Clavulanic Acid, Metronidazole, Clindamycin, Carbapenems, Piperacillin-Tazobactam, Gentamicin

https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_64b.pdf
SOMANZ (Society of Obstetric Medicine Australia and New Zealand) guideline aims to provide evidence-based guidance for the investigation and care of women with sepsis in pregnancy or the postpartum period. The guideline is evidence-based and incorporates recent changes in the definition of sepsis.

SOMANZ Guidelines for the Investigation and Management of Sepsis in Pregnancy

Pink group - post partum

• Olivia - G1P1 had an uncomplicated pregnancy, a straightforward birth and post partum course
• She is 5 days post partum and presents for her routine visit, along with baby Trinity
• As you commence your routine post partum check, you enquire about feeding and Olivia reports “Trinity is unsettled and not breastfeeding well, so this morning I gave her some formula”.

• How do you manage Olivia’s checkup?
In conclusion…
Take home messages

- Complete history, examination & investigations
- Promptly send referral to CPI
- Document in Pregnancy Health Record at every visit, including results
- Notify Antenatal Clinic of adverse events such as a miscarriage
Medical Indemnity

• Adhere to Metro North HHS Maternity GP Shared Care Guideline

• All appropriate ante-natal screening tests must be performed and results followed up

• Woman must be referred to Obstetric Hospital/Clinic, Consultant Obstetrician or GP Obstetrician before 20 weeks gestation

• Obstetric Hospital/Clinic, Consultant Obstetrician or GP Obstetrician must see woman at 36/40 (or as dictated by relevant Shared Care Guidelines) & again at term, providing ante-natal course is uneventful
Medical Indemnity

• Should problems occur before 36 weeks (or as dictated by relevant Shared Care Guidelines), Obstetric Hospital/Clinic, Consultant Obstetrician or GP Obstetrician must be advised & consulted.

• GPs may continue to see pregnant women for ante-natal visits or for intercurrent medical problems, but in shared care, **obstetric care and delivery of baby** must rest with **Obstetric Hospital/Clinic, Consultant Obstetrician or with a GP Obstetrician**.

Contact information

Metro North GP Alignment Program

Phone: (07) 3646 6852

Email: MetroNorthGPLO@health.qld.gov.au
Mater Mothers’ Hospital Alignment Options

- *Metro North GP Alignment Program - Maternity* is affiliated with *Mater Mothers Hospital GP Maternity Shared Care Alignment*.

- Completion of MN GP Alignment Program – Maternity + MMH Online Bridging Program will meet the Mater Mothers Hospital alignment requirements

- For more information
  - Phone: 3163 1500
  - Email: mscadmin@mater.org.au
This is a joint initiative between Metro North Hospital and Health Service and Brisbane North PHN

*2015 MNHHS Staff Excellence Award – Highly Commended – Excellence in Clinical Education and Training
*2016 Queensland Health Award for Excellence – Highly Commended – Connecting Healthcare

Metro North GP Alignment Program

Gynaecology Workshop

Saturday 26 October 2019

Clinical Skills Development Service, Level 5, Block 6, Royal Brisbane and Women’s Hospital

About the Workshop

The GP Alignment Program is an award-winning* series of free workshops hosted by Women’s and Children’s Stream, Metro North Hospital and Health Service.

The six hours of education for the gynaecology program covers a number of important topics including:

- Gynaecology referral processes
- Cervical screening
- Menopause hormone therapy
- Pelvic organ prolapse/Incontinence
- Pelvic floor physiotherapy
- Vaginal pessaries
- Endometriosis and chronic pelvic pain
- Heavy menstrual bleeding
- Fertility

Presenters

Presenters/facilitators include:

- Gynaecologists
- Fertility Specialists
- GPs with a Special Interest
- Gynaecology Nurses
- Continence Clinical Nurse Consultant
- Physiotherapist

By registering, you agree to participate in the full program, including completion of a predisposing and reinforcing activity.

Closely aligned with the Metro North GP Alignment Program Maternity Workshop.

Allocated 40 points (once per triennium)

Activity ID: To be advised

Workshop Details

Date: Saturday, 26 October 2019
Venue: Clinical Skills Development Service
Level 5, Block 6
Royal Brisbane and Women’s Hospital
Herston, Brisbane

Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30am</td>
<td>Registrations open and tea and coffee</td>
</tr>
<tr>
<td>9am-4.15pm</td>
<td>Workshop(catered)</td>
</tr>
<tr>
<td>4.15pm</td>
<td>Workshop concludes</td>
</tr>
</tbody>
</table>

Rsvp

Please complete and fax to 07 3630 7841 or email administration.integration@brisbanenorthphn.org.au

There is no cost to register. Morning tea and lunch will be provided. Registrations will close Tuesday, 22 October 2019

GP name: ___________________________________________ RACGP No: ______________________________
Practice:  ________________________________________________________________
Contact phone: _______________________________ Contact email: _______________________________
Diet or access requirements: ______________________________________________________________

For all enquiries, please contact Sandra Balfour on 07 3646 6852 or email MNGPLO@health.qld.gov.au

By providing your email address you consent to receiving updates from the HHS and PHN about local education events or system news. If you do not wish to receive this communication, tick box □
Thank you!