Worcestershire Acute Hospitals NHS Trust

Intrapartum and Postpartum Bladder Care Guideline 2018

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Key Documents Owner/Lead:	Dr Hillman	Consultant Obstetrician
Approved by:	Maternity Governance Meeting	
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Key Amendments

Date	Amendments	Approved by

Introduction

Childbirth has the potential to cause long-term damage to the pelvic floor, affecting bladder or bowel function.

Most women have the urge to void urine ≤ 6 hours postpartum. 10-15% of women experience voiding dysfunction to some degree and for some time following delivery. 5% have significant and longer lasting dysfunction.

Within the first 24-48 hours following delivery women should pass copious amounts of urine. This diuresis rapidly reduces the plasma volume and is caused by the withdrawal of oestrogen along with a fall in progesterone levels which helps to reduce fluid retention and reduce the haemodilution of pregnancy. Urine output is further increased as a result of the autolysis of the uterine muscle fibres. Women must be educated and advised to empty their bladder every 4 to 6 hours during the intrapartum and early post natal periods.

Most women will experience supra pubic discomfort as their bladder distends but lack of this sensation does not mean the bladder is not full.

Micturition following delivery may be difficult for some women and the bladder can easily become over distended if care is not taken. **If it is not dealt with promptly, over-distension of the bladder can lead to long term damage to the bladder muscle and function which may require permanent life-long catheter use.**
Urinary retention with bladder distension must therefore be avoided.

Bladder sensation may be temporarily affected by childbirth and regional anaesthetics, so lack of sensation does not indicate that the bladder is not full. Multiple small voids may also suggest a degree of urinary retention.
Midwives should assess every woman for pain or difficulty in passing urine postnatally. This includes all patients delivering in the Meadow Birth Centre.

Women at highest risk of bladder dysfunction

- Primigravida
- Prolonged labour, especially prolonged second stage
- Epidural for labour and delivery
- Frequent catheterisation during labour

- Assisted vaginal delivery
- Caesarean section
- Perineal injury
- Big baby >4.5kgs
- Previous bladder problems (required individualised management plan for labour and puerperium)
- Voided volumes over 500ml can put post natal patients at increased risk of incomplete bladder emptying

Symptoms and signs

- Urinary frequency / urgency
- Lower abdominal pain or distension
- Prolonged voiding pattern
- Poor or interrupted flow of urine
- No sensation to void
- Inability to void despite feeling of full bladder
- Palpable bladder
- Urinary incontinence which may be overflow

Intrapartum Bladder Care

See intrapartum bladder care flowcharts for care without or with epidural (appendices 1 & 2).

First Stage of Labour

Start a fluid balance chart for all women in labour

A. During first stage for all women in established labour without an epidural: (see Appendix 1)

- Educate patient about bladder emptying and encourage bladder emptying every 4 hours.
- Each void should be measured and, where possible, tested with urinalysis including for ketones. If ketones present, review fluid intake or refer to medical staff.
- Record all urine volumes with timings on partogram, fluid balance chart and intrapartum notes.
- If <200ml voided review fluid intake and check for palpable bladder. If no bladder palpable increase fluid intake and allow 2 hours further to pass urine.
- If patient has palpable bladder she needs in/out catheterisation and document the volume.
- If in-out catheter drains over 500ml patient needs an indwelling catheter (IDC) eg Foley inserted.
- Document volume drained when indwelling catheter inserted. (Complete Datix if volume drained > 1 litre).
- If voids over 200ml revisit pathway every 4 hours.
- If spontaneously voids more than 500ml in any void, empty bladder more frequently.
- Maintain adequate hydration during labour.

B. During first stage for all women in established labour <u>with an epidural</u>: (see Appendix 2)

- Educate patient about bladder emptying and offer indwelling catheter (IDC) to all women with regional analgesia eg epidural or spinal in labour.
- If patient declines, document reasons and encourage bladder emptying every 4 hours or sooner.
- Each volume of urine passed should be measured, documented and, where possible, tested with urinalysis including for ketones. If ketones present, review fluid intake or refer to medical staff.

- Record all urine volumes with timings on partogram, fluid balance chart and intrapartum notes.
- If <200ml voided review fluid intake and check for palpable bladder. If no bladder palpable increase fluid intake and allow 2 hours further to pass urine.
- If patient has palpable bladder she needs catheterisation. Offer IDC again. If declines (against medical advice) drain bladder using in-out catheter and document the volume.
- Document volume drained when indwelling catheter inserted. (Complete Datix if volume drained > 1 litre).
- If voids over 200ml revisit pathway every 4 hours.
- If spontaneously voids more than 500ml in any void, empty bladder more frequently.
- Maintain adequate hydration during labour.

NB: Indwelling catheters <u>should not</u> be used unless medically indicated e.g. voiding difficulty, epidural, spinal or hourly urometer for women with pre-eclampsia.

<u>Second Stage of Labour</u>

A full bladder may hinder descent of the presenting part

- Ensure bladder is empty at beginning of active second stage.
- Prior to any operative delivery always remove indwelling catheter or empty bladder with in-out catheter.
- The timing and volume of urine drained by catheterisation in theatre at the time of caesarean section or assisted delivery must be measured and recorded in the intrapartum care notes.
- All women who have had an instrumental delivery or obstetric procedure with a spinal/epidural regional block should be recommended to have an indwelling catheter to remain for at least 12 hours after entering recovery to avoid asymptomatic bladder over-distension.

<u>Postpartum Bladder Care and Management</u>

See postpartum bladder care flowcharts for care without or with epidural (appendices 3 & 4)

Postnatal advice / discussion
Provide advice on:

- Diet and fluids
- Importance of avoiding constipation
- Pelvic floor exercises
- Simple analgesia
- Ask again if woman has ever experienced problems with bowel/bladder function and document response in healthcare records
- Mother alerts should be completed for all cases where there has been an:
    - indwelling catheter
    - assisted delivery
    - when there are risk factors for urinary retention

This should be documented on page 3 with a management plan documented on page 5 of the postnatal notes.

If a problem is highlighted, document a management plan and refer to appropriate healthcare professional for advice and or input e.g. physiotherapist, uro-gynaecology specialist.

Neurological complications

- Women with a loss of bladder or bowel control or a loss of sensation when passing urine must have an urgent neurological assessment by a senior member of the obstetric team (middle grade or consultant) with urgent discussion with the obstetric consultant if "red flag" signs / symptoms. The duty obstetric anaesthetic consultant should also be informed.
- **Senior obstetric and duty anaesthetic staff must be informed on the ward round if a woman has an indwelling Foley catheter for post-partum urinary retention. Any patient with an indwelling catheter needs to be referred to Urogynaecology Nursing Team and Physiotherapy Team.**

Post Partum Bladder Regime

(i) For women who have had no regional analgesia and no catheter (see Appendix 3)

- Educate patient about bladder emptying regimen and encourage women to void within 1 hour after delivery.
- A measured urine void should have occurred within 4- 6 hours of last bladder emptying.
- If a woman has not passed urine within 4 hours, efforts to assist voiding should be advised - such as taking a warm bath or shower, optimising oral fluid intake and providing or optimising analgesia. This should help to ensure that most patients have voided by 6 hours.
- Timing and volume of first void should be recorded on Athena and the relevant section in the "Postnatal Notes for Mother" on page 5.
- If void volume is between 200ml and 500ml and the patient feels her bladder is empty, experiences no difficulty in micturition or any other urinary symptoms, cease recording. Advise the patient to be aware of her bladder function in terms of approximate voided volume, frequency and feeling of bladder emptiness and to alert staff if she has any concerns.
- If voided volume is less than 200ml or over 500ml a post void bladder scan needs to be done to assess how well the bladder has emptied and assess the post void residual volume of urine – see Appendix 3.
- If voided volume is greater than 500ml patient may need to empty her bladder more frequently eg 2-3 hourly.

- If a bladder scan is necessary, commence a fluid balance chart and document voided volumes, bladder scan volumes and volumes of any post void residuals drained at catheterisation.
- The second voided volume and second post void residual on bladder scan should also be measured.
- Other indications for bladder scan and assessment of residual include:
    - symptoms of incomplete bladder emptying or retention
    - poor or slow flow
    - poor sensation of bladder filling
    - feeling of pelvic discomfort or full bladder

(ii) For women who have had spinal anaesthesia or epidural anaesthesia or trial without catheter (TWOC) (see Appendix 4)
(this includes those with an indwelling catheter who have had a vaginal delivery without a regional block and now need a TWOC)

- Patients with regional anaesthesia are at increased risk of urinary retention and it is recommended that an indwelling catheter (IDC) is to be kept in place for at least 12 hours after delivery or 12 hours following transfer to recovery in the case of an obstetric procedure to prevent asymptomatic bladder over distension. NICE recommendations suggest TWOC is carried out once a woman is mobile after a regional anaesthetic and not sooner than 12 hours following the last epidural 'top up' dose.
- If IDC is declined, record in notes and ensure bladder emptied every 4 hours (by measured void and scan regime or in-out catheter drainage).
- On removal of indwelling catheter, educate patient about bladder emptying and ensure patient voids by 4-6 hours – see flow chart Appendix 4.
- Commence or continue fluid balance chart commenced in labour. Record all voided volumes, all scan volumes and all post void drained residual volumes on the fluid balance chart. Patients should be encouraged to record fluid input on the fluid balance chart.
- PATIENTS NEED TO VOID TWICE AND HAVE A SCAN TO ASSESS POST VOID RESIDUAL BLADDER VOLUME ON 2 CONSECUTIVE VOIDS
- If patient does 2 voids with volumes over 200ml and has residuals less than 200ml on both occasions she can be reassured and discharged. She should be given the contact details for Maternity Triage (less than 6 weeks postnatal) or the Emergency Gynaecology Assessment Unit (over 6 weeks postnatal) in case of bladder emptying concerns.
- If residual urine volume on bladder scan is >200ml empty bladder by **in-out catheter in first instance**. Record volume of urine drained by catheter and time of catheterisation on fluid balance chart.
- Dip urine drained and send CSU if indicated by dipstick to rule out infection. If dipstick positive discuss with doctor. If infection suspected e.g. nitrites present on dipstick, commence antibiotics.
- After the second void, if patient is not voiding well (eg less than 200ml) and is retaining relatively large volumes (eg more than 200ml) OR IS VOIDING LESS THAN SHE IS RETAINING then she is at risk of worsening distension and should be offered to learn clean intermittent self-catheterisation or have an indwelling catheter inserted and attend later for another TWOC. Involve the UG nursing team and refer to physiotherapy team. Inform the duty Anaesthetic Team.

- If any post void bladder scan shows a volume >400ml OR if a post void residual obtained by catheter is > 400ml an indwelling catheter should be inserted for 2-7 days. Dip urine, send CSU and involve doctor if dipstick positive as above. Involve UG nursing team and refer to physiotherapy team. Inform the duty anaesthetic team.
- **A Datix incident form should be submitted if the volume of urine drained via an in–out catheter is greater than 1000ml**
- **The UG nursing team are available on Ext 36799, Ext 30304 (clinic) or by email wah-tr.urogynaenursingteam.nhs.net**
- **UG follow up will be arranged for patients who fail a TWOC**

Catheter insertion

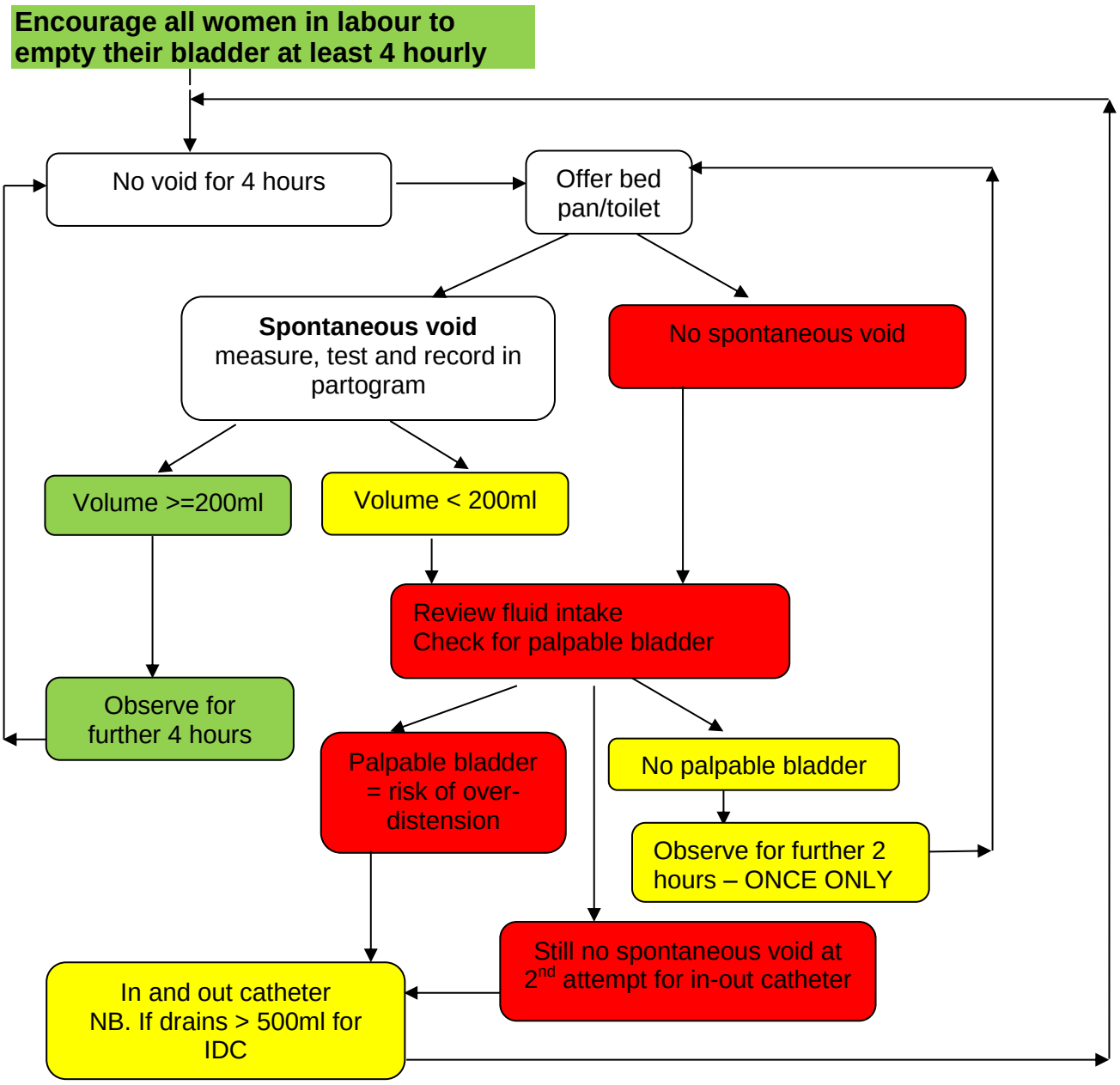
All catheterisations should be performed using aseptic technique (see below) and Instillagel must be used. Instillagel takes 5 minutes to have an effect and this will last for 30 minutes. Instillagel can be repeated after 30 minutes if recatheterisation is needed. (No more than 40ml of Instillagel should be used in 3 hours). Date and time of insertion of catheter should be recorded in the partogram, Athena and case notes as appropriate. Commence a fluid balance chart with catheter insertion.

Aseptic technique for catheterisation

- Put on apron and set up catheter tray
- Clean hands with a bactericidal alcohol hand rub
- Put on sterile gloves
- Count swabs
- Remove plastic sheath from catheter and place sterile catheter in receiver
- Place sterile towels across the patient's thighs
- Using low-linting swabs and an antiseptic solution clean the outer labia, separate the labia minora so that the urethral meatus is seen. One hand should be used to maintain labial separation until catheterization is completed, keeping the dominant hand free and sterile to insert Instillagel and handle the catheter and insert without contamination.
- Clean around the urethral orifice using single downward strokes.
- Insert the nozzle of the Instillagel into the urethra. Squeeze the gel into the urethra, remove the nozzle and discard the tube.
- Place the receiver, with the catheter in, between the patient's legs.
- Introduce the tip of the catheter into the urethral orifice in an upward and backward direction. Advance the catheter until 5–6 cm has been inserted.
- Either remove the catheter gently when urinary flow ceases or, if indwelling catheter, advance the catheter 6–8 cm. Inflate the balloon according to the manufacturer's directions, having ensured that the catheter is draining adequately.
- Measure and record the volume which is drained at the time of in out catheter, or within the next 10 minutes if an indwelling catheter is inserted. Record on the partogram or fluid balance chart as appropriate**.**
- If a patient has an indwelling catheter for postpartum voiding difficulty inform the Urogynaecology Nursing Team Ext 36799, Ext 30304 (clinic) or by email **wah-tr.urogynaenursingteam.nhs.net** for advice and for follow up care or treatment to be arranged.
- The woman can go home and return for review on postnatal ward. Issue catheter passport and supply hospital to home catheter bag pack.

Appendix1

INTRAPARTUM BLADDER CARE FLOW CHART – WITHOUT EPIDURAL IN SITU



Important:

Always measure, test and record urine output in partogram and on Fluid Balance Chart.
Keep bladder volume less than 500ml. If voids more than 500ml in one void empty bladder more frequently to prevent over distension.
Always use Instillagel for in-out catheter and indwelling catheter (IDC)

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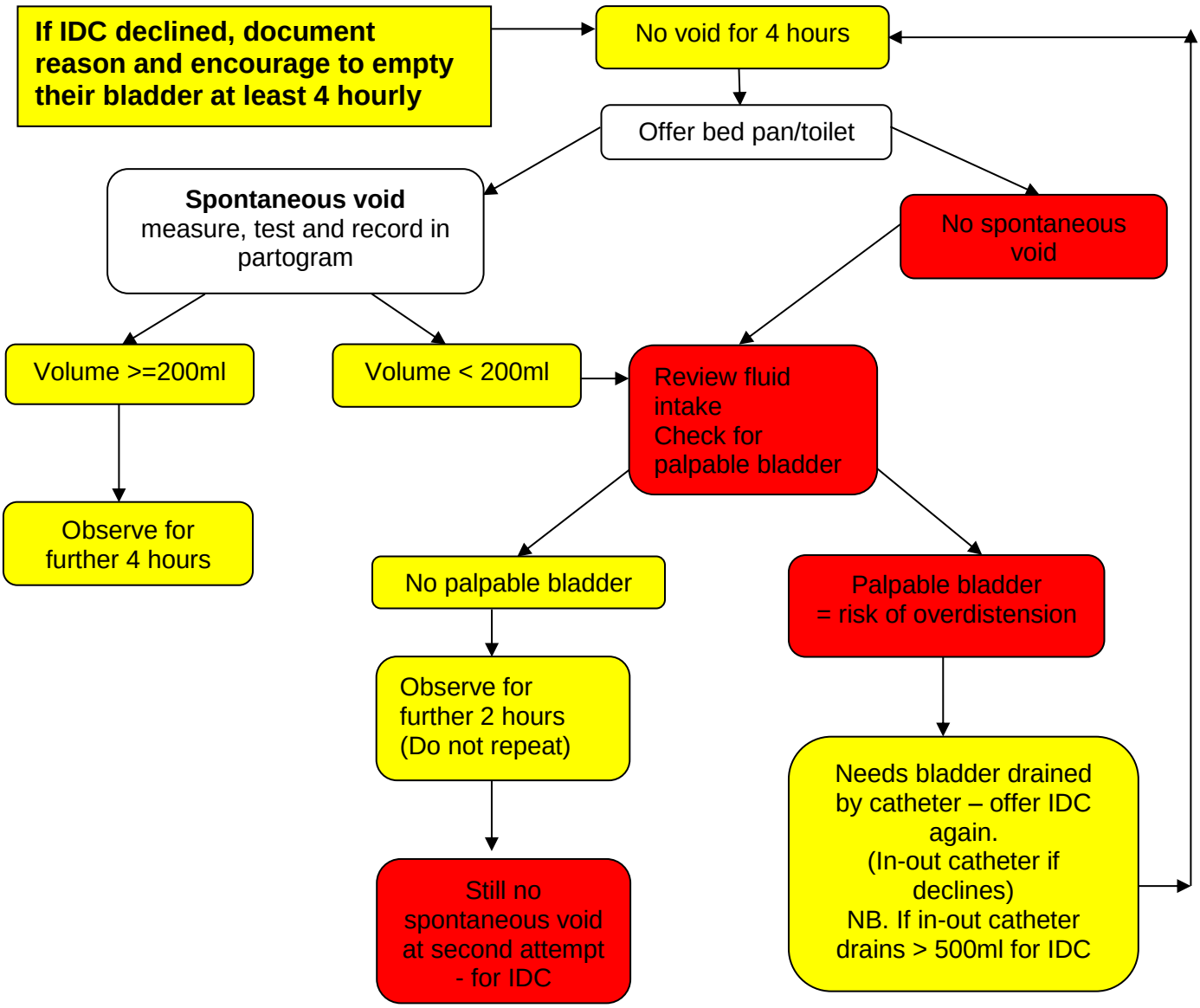
Appendix 2

INTRAPARTUM BLADDER CARE FLOW CHART – WITH REGIONAL ANALGESIA EG EPIDURAL OR SPINAL IN SITU

Offer indwelling catheter (IDC) to all women and TWOC at 12 hours after end of epidural infusion or spinal (see Appendix 4 for TWOC pathway)



Important:
Always measure, test and record urine output in partogram and on Fluid Balance Chart.
Keep bladder volume less than 500ml. If voids more than 500ml in one void empty bladder more frequently to prevent over distension.
Always use Instillagel for in-out catheter and indwelling catheter (IDC)

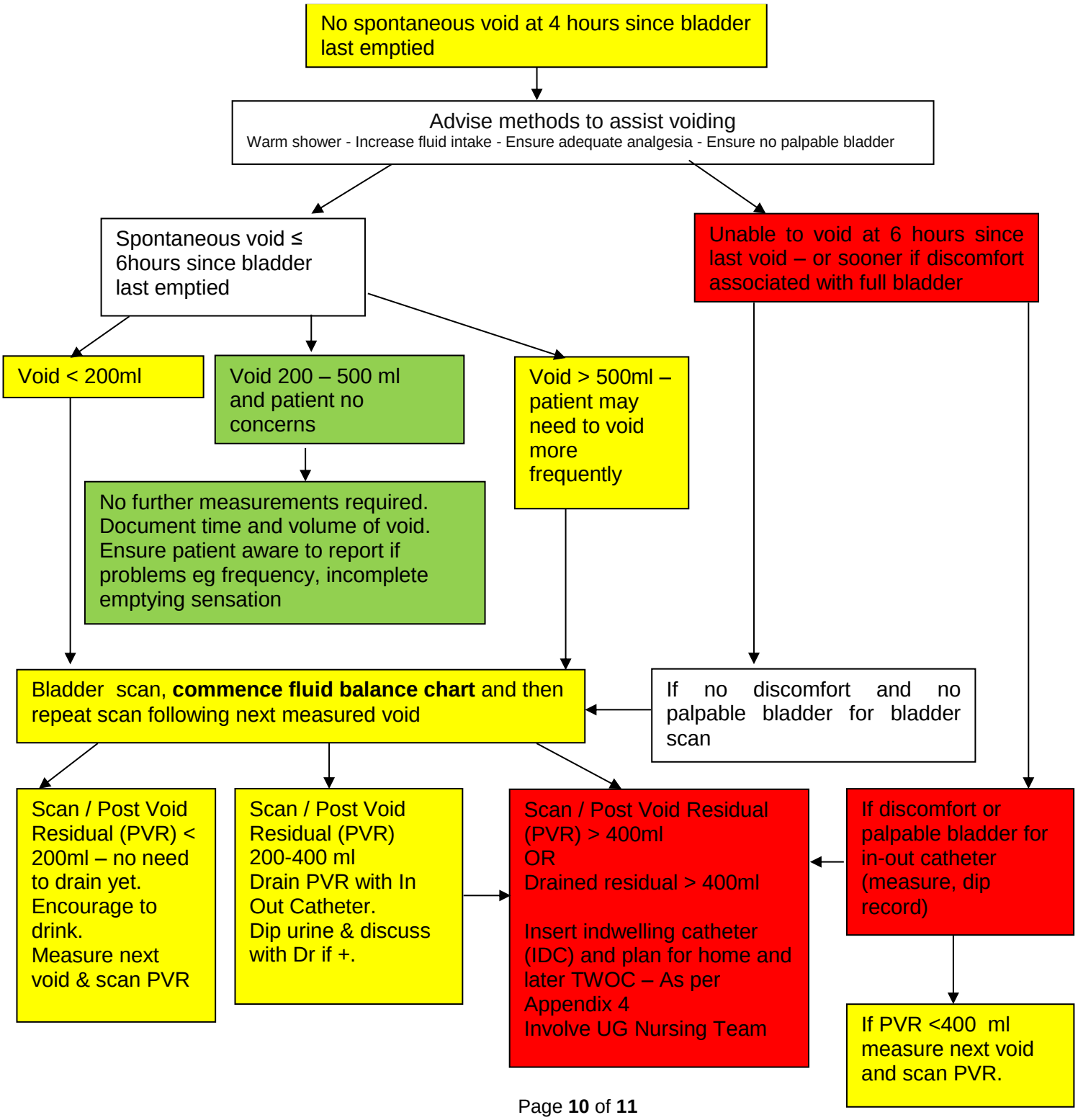
Appendix 3

POST PARTUM BLADDER CARE FLOW CHART NO REGIONAL BLOCK

RECORD ALL VOIDED VOLUMES, BLADDER SCAN VOLUMES AND VOLUMES DRAINED BY CATHETER IN ATHENA AND POST NATAL NOTES

COMMENCE FLUID BALANCE CHART WHEN BLADDER SCANNING COMMENCED - RECORD ALL VOIDED VOLUMES, BLADDER SCAN VOLUMES AND VOLUMES DRAINED BY CATHETER

Encourage all women in labour to empty their bladder at least 4 hourly



Appendix 4

POST PARTUM BLADDER CARE FLOW CHART AFTER REGIONAL BLOCK OR TWOC

RECORD ALL VOIDED VOLUMES, BLADDER SCAN VOLUMES AND VOLUMES DRAINED BY CATHETER ON FLUID BALANCE CHART, IN ATHENA AND POST NATAL NOTES.