Bladder Care during and after Labour and Delivery

University Hospitals of Leicester NHS Trust

Trust ref:C67/2004

1. Introduction and who the guideline applies to:

This guideline is aimed at all Health Care Professionals involved in the care of pregnant women during labour, delivery and in the postnatal period.

It should be recognised that some women will require an individualised bladder care plan which deviates from this guideline - this should be documented in the woman's healthcare record.

Contents

Background:

Urinary retention occurs in about 1 in 10[1,2] women postpartum and up to 80%[3,4,5,14] of women will suffer some form of urinary dysfunction in the first year postpartum, which may make recovery and caring for their new baby difficult. In some women, voiding difficulties may continue for the rest of their lives or recur later on in life. These conditions can be difficult to manage, causing significant distress and embarrassment.

During pregnancy several changes may increase the risk of voiding dysfunction. Changes to the body's hormones increase bladder capacity, making it able to hold up to four times its usual volume. Increased fluid retention and changes in fluid management, accompanied by increased risk of urinary infections and an increasing uterine size, change the usual conditions under which the bladder normally functions.

The process of labour further challenges the bladder and urethra, with more changes to fluid management, sustained pressure on blood and nerve supplies and injury to their support structures in the pelvic floor with passage and delivery of the baby. Pre-existing conditions and medical interventions can further exacerbate these challenges and leave the bladder vulnerable to injury.
Apart from overt urinary retention, early signs of bladder dysfunction can be difficult to spot. However, stringent bladder care, early recognition and management of voiding difficulties in this relatively short period of a woman's life, may reduce short and long-term morbidity.

Related documents:

Caesarean Section UHL Obstetric Guideline
Elective Caesarean Section Enhanced Recovery UHL Obstetric Guideline
Epidural Analgesia and Anaesthesia UHL Obstetric Guideline
Intrapartum Care UHL Obstetric Guideline
Perineal or Genital Trauma Following Childbirth UHL Obstetric Guideline

What's new?

- Risk factors added, constipation, nulliparous, UTI, prolonged 2nd stage, natural diuresis esp following oxytocin cessation
- Signs updated, frequency down from <2 hrs to 30-60 mins, volume down from <200 to <150, lack of sensation to urinate added
- For women who have had an **epidural and no other risk factors**, the catheter should be removed **6 hours after last top-up and/or when full sensation returns**.
- For women who have had **an epidural**, **in the presence of other risk factors** like instrumental delivery, and simple perineal trauma (simple first/second degree tear/episiotomy not associated with multiple perineal laceration/other vaginal tears), the catheter **should not be removed for at least 6 hours**.
- For women who had an **epidural and other risk factors** like: pre-existing urinary dysfunction, midcavity/rotational instrumental deliveries, anterior/complex perineal trauma/oedema/haematoma, the catheter should **not be removed for at least 12hours** after delivery.
- Caesarean section: Offer removal of the urinary bladder catheter once a woman is **mobile** after a regional anaesthetic for caesarean birth, but **no sooner than 12 hours after the last 'top-up' dose**.
- For women who are receiving enhanced recovery care please refer to enhanced recovery guidelines.
- If the timing for removal of catheter falls after 00:00hrs, this should be delayed until 06:00hrs, to avoid disturbing the woman's sleep and retention occurring unnoticed overnight. (This is in line with Trust guidance).
- If a void is less than 150ml, encourage oral hydration of 300-500ml, try conservative measures and void again within 2 hours
- Sitting in a warm bath/shower: **assess post-void residual with an in and out catheter.**
- If the woman has a **residual volume of 500ml or more,** insert an indwelling catheter, to remain insitu for **24hours** and inform medical staff.

2. Recommendations:

Women are at particularly high risk of retention in the presence of any of the following factors:

- History of voiding dysfunction prior to or during pregnancy
- History of Female Genital Mutilation
- Constipation
- Nulliparous
- Urinary tract infection
- Regional anaesthesia
- Instrumental delivery
- Prolonged active second stage
- Perineal, vaginal or vulval trauma
- Caesarean section
- Manual removal of placenta
- Natural diuresis especially following oxytocin cessation

Suspect urinary retention in the presence of the following symptoms and signs:

Table 1: Signs & Symptoms of urinary retention

Symptoms	Signs
Frequency - Constant sensation of needing to void	Needing to void every 30-60mins
Urgency	
Hesitancy -	Difficulty starting urine flow
Poor stream -	Dribbling, etc
Passing small volumes -	<150ml
Feeling of incomplete voiding	
Lack of sensation of need to void	
New onset urinary incontinence -	poor control
Inability to void -	Inability to void within 4-6 hours of last void or catheterisation
Visible or palpable - suprapubic mass	Separate from the uterus
Lower abdominal pain	

URINARY RETENTION *CAN BE ASYMPTOMATIC.*

Voiding alone is not an adequate indication of normal bladder function and needs to be combined with input/output chart monitoring and vigilance.

2.1 INTRAPARTUM

- Manage fluid input as per intrapartum guidance, according to the woman's needs, in conjunction with the medical team.
- Encourage the woman to empty her bladder at least every 4 hours in established labour. Women with a regional block should be encouraged to void into a bedpan at the same time intervals.
- The amount of urine passed should be measured and volume, time, whether void was spontaneous or catheterised and urinalysis documented on the partogram.
- Inability to pass urine for 4-6 hours OR any other signs of urinary retention as documented above, should be clearly documented on the partogram and the woman should be offered catheterisation using an indwelling Foley's catheter size 12ch.
- An in-and-out catheter is an alternative. If catheterisation is required more than once, an indwelling Foley's catheter size 12ch should be inserted.
- Offer an indwelling catheter to women with an epidural, particularly those who have other risk factors.
- In the second stage of labour, the bladder should be emptied either by catheterisation or by asking the woman to void.
- If there is an indwelling catheter insitu, deflate the balloon and remove the catheter before commencing active second stage. After delivery, if required, re-insert a clean catheter.
- Catheterisation should be carried out as per trust policy, with indication and procedure documented in the care records. A green UHL catheterisation sticker must be placed in the notes and completed, and a green UHL catheter care pathway completed and filed in the woman's notes.
- Residual volume - drained in the first 15minutes after catheter insertion should be recorded.
- In women who have an indwelling catheter, the volume in the catheter bag needs to be recorded every 4 hours unless there is a clinical indication for more frequent monitoring.
- A fluid balance chart should be commenced if the woman has an indwelling catheter following delivery.

2.2 INSTRUMENTAL DELIVERY / CAESAREAN SECTION / MANUAL REMOVAL OF PLACENTA / EUA / PERINEAL REPAIR

- The bladder must be emptied with an in and out catheter prior to Instrumental delivery unless an indwelling catheter is in situ.
- If an indwelling catheter is in situ, the balloon should be deflated and catheter removed prior to instrumental delivery. If required, a clean catheter should be re-inserted once delivery is accomplished.
- With the exception of non-rotational low/outlet (+2 spines and below) vacuum deliveries, all women who have an instrumental delivery should be offered an indwelling catheter.
- All women who have an instrumental delivery with regional anaesthesia/analgesia should be offered an indwelling catheter.
- An indwelling catheter should be inserted prior to any grade Caesarean section.
- An indwelling Foley's catheter should be inserted prior to a manual removal of the placenta.
- An indwelling catheter should be inserted prior to **ANY procedures needing a regional or general anaesthesia in theatre, like laparotomies, EUAs, repair of complex or 3rd/4th degree tears, vaginal packing, etc**.
- Consider inserting an indwelling foley's catheter when there is **complex or anterior perineal trauma,** especially in the presence of **oedema** or **haematoma**.

2.3 POSTPARTUM BLADDER CARE

- Remove all catheters as specified in this guideline or in special circumstances, as specified in the notes.
    - For women who have had an **epidural and no other risk factors**, the catheter should be removed **6hours after last top-up and/or when full sensation returns**.
    - For women who have had an epidural, **in the presence of other risk factors** like instrumental delivery, and simple perineal trauma (simple first/second degree tear/episiotomy not associated with multiple perineal laceration/other vaginal tears), the catheter **should not be removed for at least 6hours**.
    - For women who had an **epidural and other risk factors** like: pre-existing **urinary dysfunction, midcavity/rotational instrumental deliveries, anterior/complex perineal trauma/oedema/haematoma**, the catheter should **not be removed for at least 12hours** after delivery.

- **Caesarean section**: Offer removal of the urinary bladder catheter once a woman is **mobile** after a regional anaesthetic for caesarean birth, but **no sooner than 12 hours after the last 'top-up' dose**.
    - For women who are receiving enhanced recovery care please refer to enhanced recovery guidelines.
- Perineal trauma or other peripartum procedures requiring indwelling catheter: Catheter should be removed once the woman is mobile and not sooner than**12 hours** post-delivery.

- **If the timing for removal of catheter falls after 00:00hrs, this should be delayed until 06:00hrs, to avoid disturbing the woman's sleep and retention occurring unnoticed overnight.**
- All women should be encouraged to pass urine within 4hours of delivery/last void/removal of catheter.
- All initial voids with volumes and times should be documented in the patient's notes as follows:
    - Women who had a vaginal delivery without regional block need to have first void documented. If this is over 150ml with no other concerns, no further action is needed.
    - Women who needed an indwelling catheter in the postnatal period need to have all voids documented on a fluid balance chart until three voids of 150ml or more, without voiding dysfunction or other concerns.
    - If a void is **less than 150ml,** encourage oral hydration of 300-500ml, try conservative measures and void again within **2hours**.
- No woman should be allowed to go past 6 hours post-delivery without voiding. If a woman has not passed urine within 4 hours, she should be encouraged to go to the toilet to void urine. Try conservative measures such as:
    - Privacy
    - Ensure she is pain free
    - Assisting the woman to stand and walk
    - Leaning forward
    - Sitting in a warm bath/shower: assess post-void residual with an in and out catheter.
- If the woman is unable to void at 6hours or has symptoms or signs of voiding dysfunction, a post-void residual volume (PVR) should be ascertained using an in and out catheter.
- If the woman has a **residual volume of 500ml or more,** insert an indwelling catheter, to remain insitu for **24hours** and inform medical staff.

- If the woman has a **residual volume of 150-500ml on 2 occasions**, she should have an indwelling catheter inserted for **24 hours** and medical staff should be informed.

- If urinary retention persists or the woman develops signs/symptoms as described in table 1above, alert the obstetric medical team and follow the flowcharts below.

    - Catheterisation should be carried out as per trust policy, with indication and procedure documented in the care records. A **green UHL catheterisation sticker** must be placed in the notes and completed, and **a green UHL catheter care pathway** completed and filed in the woman's notes.

    - **Residual volume** - drained in the first 15minutes after insertion should be recorded, if this was not preceded by an in and out catheter.

    - In women who have an indwelling catheter, the volume in the catheter bag needs to be recorded every 4 hours from catheter insertion unless there is a clinical indication for more frequent recording.

    - A **fluid balance chart** should be commenced if the woman has an indwelling catheter following delivery.

3. Education and Training

Dissemination of changes to guideline via guideline group and newsletters.

4. Monitoring compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Bladder care in labour	Audit of practice		1 year, repeat cycle as needed	Audit meeting
Bladder care in postpartum period	Audit of practice		1 year, repeat as needed	Audit meeting
Missed/delayed diagnosis and/or mismanagement of urinary retention in postpartum	Incident reporting Complaints Claims		Ongoing	Newsletter

5. Supporting References

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6. Keywords

Intrapartum, postpartum, labour, postnatal, bladder care, urinary retention

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The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

Contact and review details

Guideline Lead (Name and Title)	Executive Lead
A Doshani – Consultant A Ivare - SPR	**Chief Nurse**

Details of Changes made during review:

Background and reason for providing bladder care management expanded

- Risk factors added, constipation, nulliparous, UTI, prolonged 2nd stage, natural diuresis esp following oxytocin cessation
- Signs updated, frequency down from <2 hrs to 30-60 mins, volume down from <200 to <150, lack of sensation to urinate added

Intrapartum –

- Manage fluid input as appropriate,
- offer catheter if any signs of retention,
- if indwelling present remove before commencing active 2nd stage.

Instrumental –

- With the exception of non-rotational low/outlet (+2 spines and below) vacuum deliveries, all women who have an instrumental delivery should be offered an indwelling catheter.
- An indwelling catheter should be inserted prior to ANY procedures needing a regional or general anaesthesia in theatre, like laparotomies, EUAs, repair of complex or 3rd/4th degree tears, vaginal packing, etc.
- Consider inserting an indwelling foley's catheter when there is complex or anterior perineal trauma, especially in the presence of oedema or haematoma.

Postpartum -

- For women who have had an **epidural and no other risk factors**, the catheter should be removed **6 hours after last top-up and/or when full sensation returns**.
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- For women who had an **epidural and other risk factors** like: pre-existing urinary dysfunction, midcavity/rotational instrumental deliveries, anterior/complex perineal trauma/oedema/haematoma, the catheter should **not be removed for at least 12hours** after delivery.
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    - For women who are receiving enhanced recovery care please refer to enhanced recovery guidelines.
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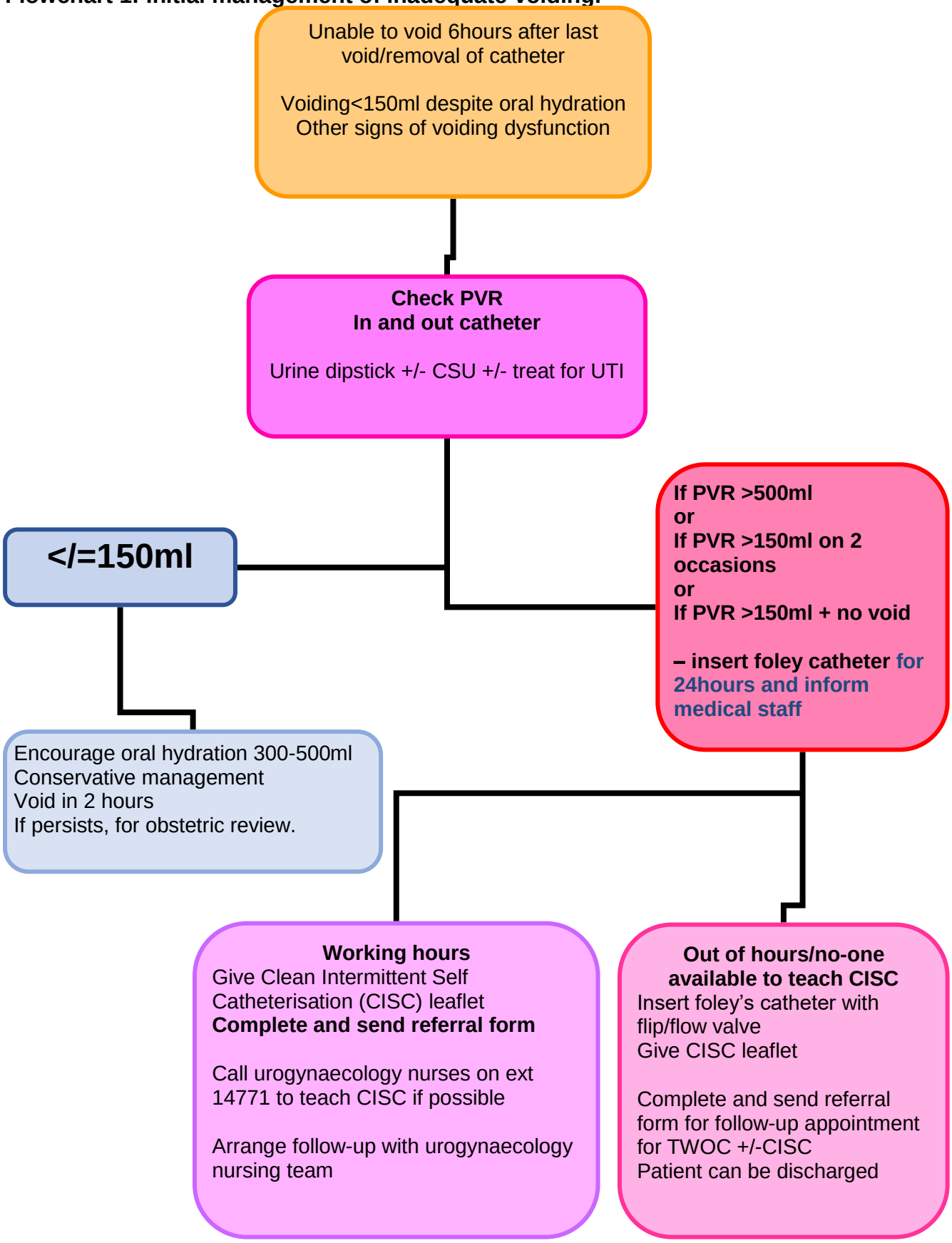
- If the timing for removal of catheter falls after 00:00hrs, this should be delayed until 06:00hrs, to avoid disturbing the woman's sleep and retention occurring unnoticed overnight. (This is in line with Trust guidance).

Voiding –

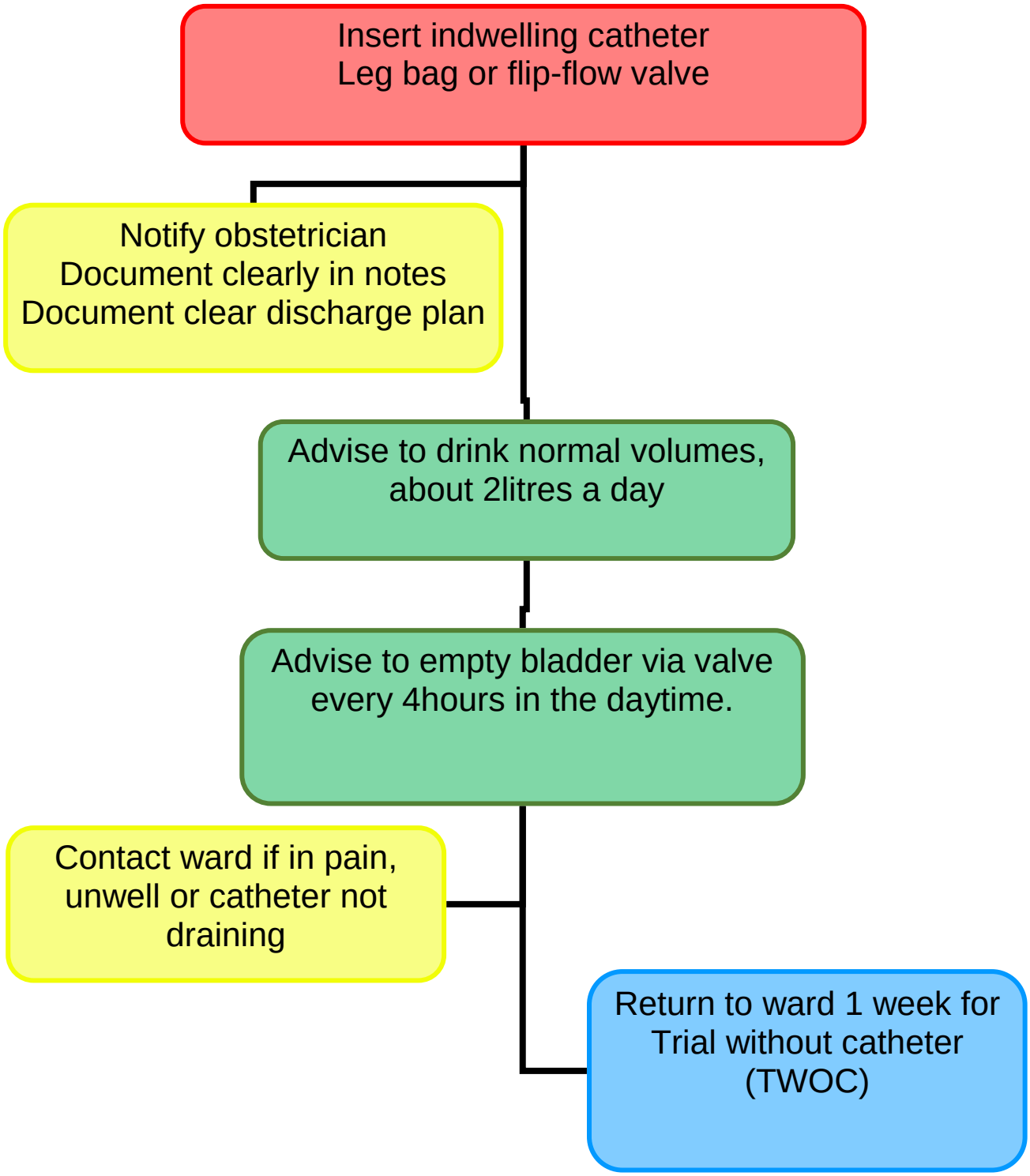
- If a void is less than 150ml, encourage oral hydration of 300-500ml, try conservative measures and void again within 2 hours
- Sitting in a warm bath/shower: **assess post-void residual with an in and out catheter.**
- If the woman has a **residual volume of 500ml or more,** insert an indwelling catheter, to remain insitu for **24hours** and inform medical staff.

Added initial management of inability to void flow chart

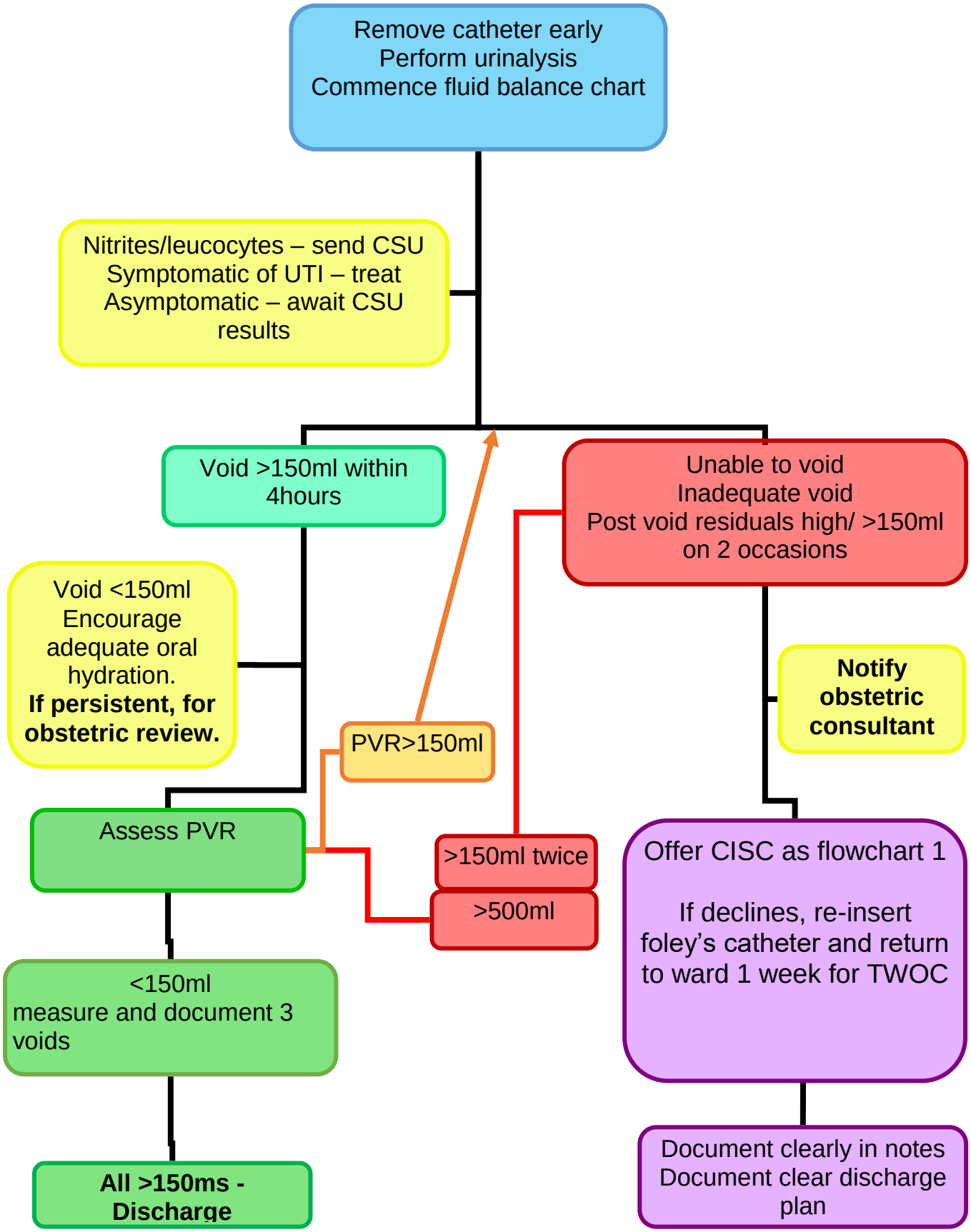
Flowchart 1: Initial management of inadequate voiding.



Flowchart 2: Patient declines/unable to perform CISC.



Flowchart 3: Trial without catheter (TWOC)



Referral to Urogynaecology for post-natal retention patients

Referral to Urogynaecology for Post-natal Retention Patients

Patient information sticker

Date:

Referred From: LRI LGH
(Please circle)

Referred By:

Referred To:

Date of delivery:

Mode of delivery:

Additional details of delivery:

Volume in bladder prior to catheter insertion (measured with catheter):

Date and time catheter inserted:

Flip flow or Leg bag:

TWOC 1 - Date and time:

Residuals 1: ..... Residuals 2: ..... Residuals 3: .....

TWOC 2 - Date and time:

Residuals 1: ..... Residuals 2: ..... Residuals 3: .....

TWOC 3 - Date and time:

Residuals 1: ..... Residuals 2: ..... Residuals 3: .....

Has ISC been discussed with the patient? Yes ☐ No ☐

Is the patient willing to learn ISC / if TWOC fails? Yes ☐ No ☐

Additional information:

Please fax referral to Gemma Wright-Curtis / Teresa Shalloe,
Medical Secretaries, Gynaecology: 0116 2731620