Reference Number: UHBOBS015 **Version Number: 5**	**Date of Next Review: 6th Feb 2029** **Previous Trust/LHB Reference Number: N/A**

Bladder Care in Labour and the Postpartum period

Introduction and Aim

To maintain normal bladder function and minimise the risk of damage to the bladder and urethra during childbirth and in the immediate postnatal period.

To increase the awareness of postpartum urinary retention among healthcare professionals and new mothers, to develop an appropriate management plan, and thus prevent long term urinary dysfunction.

Objectives

To maintain bladder function and to provide appropriate management to women/birthing people with postpartum voiding dysfunction.

To minimise the risk of prolonged voiding dysfunction in the puerperium and prevent its long-term sequelae.

Scope

This policy applies to all clinicians working within maternity services including temporary staff, locums, bank and agency / annualised hours staff and visiting clinicians.

Equality Health Impact Assessment	*An Equality Health Impact Assessment (EHIA) has not been completed.*
Documents to read alongside this Procedure	*Postnatal Care Guidelines*
Approved by	*Maternity Professional Forum*

Accountable Executive or Clinical Board Director	*Ruth Walker, Executive Nurse Director*
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Primary Reviewer: Ruba Halabi, Consultant Obstetrician

Disclaimer

If the review date of this document has passed, please ensure that the versi you are using is the most up to date either by contacting the document auth or the Governance Directorate.

Summary of reviews/amendments

Version Number	Date of Review Approved	Date Published	Summary of Amendments
1	*2008*	*2008*	Authors JD/KB/LS/PA
2	April 2011	April 2011	Authors JD/KB/AD
3	Feb 2015	Feb 2015	Reviewed and updated
4			Reviewed and Updated by K Bisseling/ A Darbhamulla/ K.Bhal /Jo Davies /Annie Burrin
5	November 2021	Apr 2022	Reviewed and Updated by Sarah Wolujewicz/ J.Jones/ A Darbhamulla
6	February 2026		Reviewed and updated by A Grimwood/ A Darbhamulla/ K Bhal/ J Jones/ S Wolujewicz

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2 Introduction

The combination of trauma to the bladder, pelvic floor muscles and nerves during birth, along with the hormonal changes during pregnancy causing reduced detrusor muscle tone, leave the bladder vulnerable to the retention of urine.

Intrapartum and postpartum bladder care is crucial to the early recognition of urinary retention and prevention of long-term damage to the bladder.

A full bladder in labour can delay the descent of the presenting part and can reduce the efficiency of the uterine contractions. Urinary retention in labour will predispose to postpartum urinary retention.

If postpartum voiding dysfunction is unrecognised, it may result in long term sequelae such as denervation and bladder atony associated with long term voiding problems, recurrent urinary tract infections, pelvic organ prolapse and possible urinary incontinence. These problems may require long term management via intermittent self-catheterisation which has a significant impact on a woman's quality of life.

Although there is little documented research evidence, expert opinion states that once the bladder has had a single episode of over distension, chronic changes occur due to irreversible damage to the detrusor muscle.

Women/birthing people may be asymptomatic especially following regional analgesia or following stretch trauma to the pelvis from prolonged second stage or instrumental birth. Bladder sensation following regional analgesia may not return until 8 hours following the last "top up" increasing the risk of retention, unless steps are taken to actively manage voiding. It is therefore important to monitor high risk women/birthing people more closely to identify problems early and prevent permanent damage to bladder function.

We must aim to identify all women/birthing people who are unable to pass urine within 6 hours of birth or catheter removal *and* all women/birthing people who are symptomatic of voiding dysfunction.

The importance of prompt diagnosis and appropriate management of these women/birthing people cannot be over-emphasised. Early intervention is key to ensuring rapid return to normal bladder function.

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2.1 Definitions

Postpartum voiding dysfunction is defined as failure to pass urine spontaneously within 6 hours of vaginal birth or catheter removal after birth and may be overt or covert (see below). According to the literature, the estimated incidence of postpartum urinary retention has a wide range between 0.05% and 37% depending on the definitions used. For instrumental births, approximately one in five (20.6%) women/birthing people develop postpartum urinary retention.

Key definitions are as follows:

- Overt urinary retention is the complete inability to void postpartum.
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- Covert urinary retention occurs when there is an elevated postvoid residual volume (PVRV) of >150mL urine *without* obvious symptoms of urinary retention. Urine output volume of <0.5ml/kg/hr may be a sign of covert urinary retention.

Post-void residual volume (PVRV) is the amount of urine left in the bladder after a person urinates. It is used as a diagnostic tool to assess bladder function problems. It is typically measured using intermittent catheterisation.

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3 Risk Factors for Postpartum Voiding Dysfunction

Many risk factors have been identified for the development of postpartum voiding dysfunction. These are listed in Table 1.

Postpartum voiding dysfunction can develop in women/birthing people without any identifiable risk factors, regardless of mode of delivery or analgesia. Good bladder care in labour and postpartum is therefore necessary in all women/birthing people.

Risk Factors for Postpartum Voiding Dysfunction
Primiparity
Assisted Vaginal Birth
Epidural analgesia
Prolonged 2nd stage of labour (>4h)
Perineal trauma
History of voiding dysfunction
Large fetal head circumference
High birth weight (>4Kg)
Caesarean birth
Manual removal of placenta
Rapid diuresis following discontinuation of oxytocin
Obesity

Table 1 Risk Factors for Postpartum Voiding Dysfunction

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4 Intrapartum bladder care

Prevention of postpartum voiding dysfunction starts with good bladder management intrapartum which includes the documentation of frequency and volume of bladder emptying. It is important that women/birthing people recognise the importance of bladder care at this stage, and they should be encouraged to empty their bladder at regular intervals, every 2-4 hours, in labour.

If they are unable to pass urine spontaneously, intermittent catheterisation should be used. Ideally this is done at the time of vaginal examination. If catheterisation is likely to be used more than twice during labour, an indwelling catheter should be considered. An indwelling catheter should be removed during pushing to prevent trauma to the bladder and urethra.

Fluid balance should be monitored as per protocol (see GAIN guideline and Intrapartum Care guidelines)

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5 Postpartum bladder care

Consider (re-)inserting an in-dwelling urinary catheter in women/birthing people after:

- Regional anaesthesia and prolonged labour
- Mid-cavity instrumental birth
- Urethral trauma
- Severe perineal trauma
- Women/birthing people receiving High Dependency Care
- For all births and procedures in theatre, who have spinal anaesthesia (including combined spinal-epidural) or who have had epidural anaesthesia "topped up".

Regional anaesthesia can affect bladder sensation and therefore the indwelling catheter should not be removed until the woman is mobile as a minimum, unless specified otherwise in the operation note. It may be appropriate to leave an indwelling catheter in place for a longer period for example if there is significant perineal trauma/oedema or if there is a need for accurate measurement of the urine output.

- All women/birthing people should be encouraged to pass urine ideally within 4 hours of birth, or removal of an indwelling catheter to allow time for conservative measures to be attempted (analgesia, mobilisation, bath or shower, privacy).
- **All women/birthing people should void within 6 hours maximum of birth, or removal of an indwelling catheter.** The Royal College of Obstetricians and Gynaecologists (RCOG) study group on incontinence recommends that no woman should be allowed to go longer than 6 hours without voiding or catheterisation postpartum.
- **Clinical action MUST be taken if a woman has not voided within 6 hours of birth or following indwelling catheter removal.** Please refer to section *6.2.3 Flowchart for Diagnosis and Initial Management of Postpartum Voiding.* Dysfunction.

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5.1 Hospital birth

- Document **time and volume of first void** with a desired volume of 30-50ml/hr after birth or after removal of the indwelling catheter on the postnatal pathway. Always request a senior obstetric review if there are concerns regarding voided volume. It is important to ask the woman about her voiding pattern as this could point towards voiding dysfunction (see Table 2). See example questions
- In women/birthing people with indwelling catheter, time of removal of the catheter must also be documented.
- Avoid removing the catheter unless the woman is fully mobile and aware of the importance of voiding ideally within 3-4 hours. The woman **MUST** void by 6 hours and this must be measured and documented in the *"Bladder Care"* note on BadgerNet.

Indwelling catheters should not be removed sooner than 12 hours after the last intrathecal opiate dose or until the woman is fully mobile.

5.2 Home Birth

Following a homebirth, the woman should be instructed to make a note of the time of the first void and contact the Midwife Led Unit (MLU). The midwife must document the **DATE** and **TIME** of the first void and enquire regarding any signs or symptoms of voiding dysfunction (See example questions in Section 6.1). The woman must be referred in to the Obstetric Assessment Unit for further assessment if:

- They have not passed urine within 6 hours
- There are any symptoms of voiding dysfunction

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6 Management of Postpartum Voiding Dysfunction

6.1 Symptoms of Postpartum Voiding Dysfunction

Signs and symptoms that should raise the alert to voiding dysfunction are listed in Table 2.

It is important to recognise that acute retention can be **painless** in the postpartum period especially in the first 24 hours following regional analgesia.

Signs or Symptom	Comment
An inability to pass urine within 6 hours of birth or removal of indwelling catheter.	
Slow urinary stream	Including difficulty initiating a stream or dribbling
Small, frequent voids (less than 150mls)	Voiding every 30-60 minutes
Feeling of incomplete bladder emptying	Woman will report the sensation of this and the feeling of needing to go back soon after, to try and empty again.
Urinary incontinence	Including episodes of overflow leakage i.e. a large leak usually when standing up / getting out of bed without the urge to void or constant dripping.
Discomfort due to bladder distension	Constant sensation of needing to void.
Lack of bladder filling sensation	No awareness that the bladder is full
Increase in vaginal bleeding	
Uterine fundal displacement	

Table 2 Signs and Symptoms of Postpartum Voiding Dysfunction

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Clinicians should ask questions such as:

- Do you have any feeling of incomplete emptying?
- Are you straining to pass urine?
- Do you feel a normal sensation in your bladder when it is filling up?

6.2 Diagnosis and Initial Management

6.2.1 Diagnosis and initial management of postpartum voiding dysfunction

Please refer to the 6.2.3 Flowchart for Diagnosis and Initial Management of Postpartum Voiding Dysfunction

1. Midwifery assessment on the postnatal ward should include questions regarding normal bladder control and sensation, feeling of complete bladder emptying and urinary incontinence.

2. Insert an in/out catheter for post void residual volume (PVRV) if any of the above symptoms are experienced, to exclude bladder dysfunction. The in/out catheter should be completed within 10 minutes of that void.

Clearly document time and volume drained.

3a. If PVRV 150-500ml, measure the next voided volume (within 3-4 hours) and PVRV:

- If the subsequent PVRV ≤150mls or less than half the voided volume: no further intervention is needed in an asymptomatic woman.
- If the subsequent PVRV >150mls: insert an indwelling catheter for 24 hours followed by trial without catheter (TWOC). This can be done as an outpatient.

3b. If PVRV is 500ml or more: insert an indwelling catheter for 24 hours followed by TWOC. This can be done as an outpatient. A senior member of the obstetric team should be informed and attend to review.

All patients with postpartum bladder dysfunction should have a Datix form completed.

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6.2.2 Investigations following the diagnosis of postpartum voiding dysfunction

Further management aims to identify any factors contributing to delayed bladder emptying and to ensure adequate bladder drainage while waiting for normal function to return. Following the diagnosis of urinary retention or voiding dysfunction, the following actions should be taken and documented in the hospital notes:

- Perform urinalysis and send a sample for microscopy, culture and sensitivity (MC&S) as the presence of infection is an important contributory factor to prolonged voiding dysfunction.
- If a urinary tract infection is suspected, prompt antibiotic therapy should be initiated as per hospital antimicrobial guidelines.
- The perineum should be examined and if significantly swollen or painful, a catheter should be sited until the swelling and pain have settled.
- Ensure and provide adequate analgesia, as perineal pain is a significant factor in development of retention.
- Avoid and treat constipation if required.
- Offer information leaflet on postpartum health

All women/birthing people experiencing voiding dysfunction must have follow up after discussion with the responsible consultant or senior registrar. They can be reassured that bladder dysfunction rarely lasts >72h, and if managed appropriately there is no significant increase in long term problems. Factors increasing the chance of longer-term problems include:

- Late detection of voiding dysfunction
- > 1000ml distension
- Repetitive over-distension

It is the responsibility of the midwife who discharges the woman from the postnatal area to ensure that appropriate referrals to Urogynaecology are made where indicated

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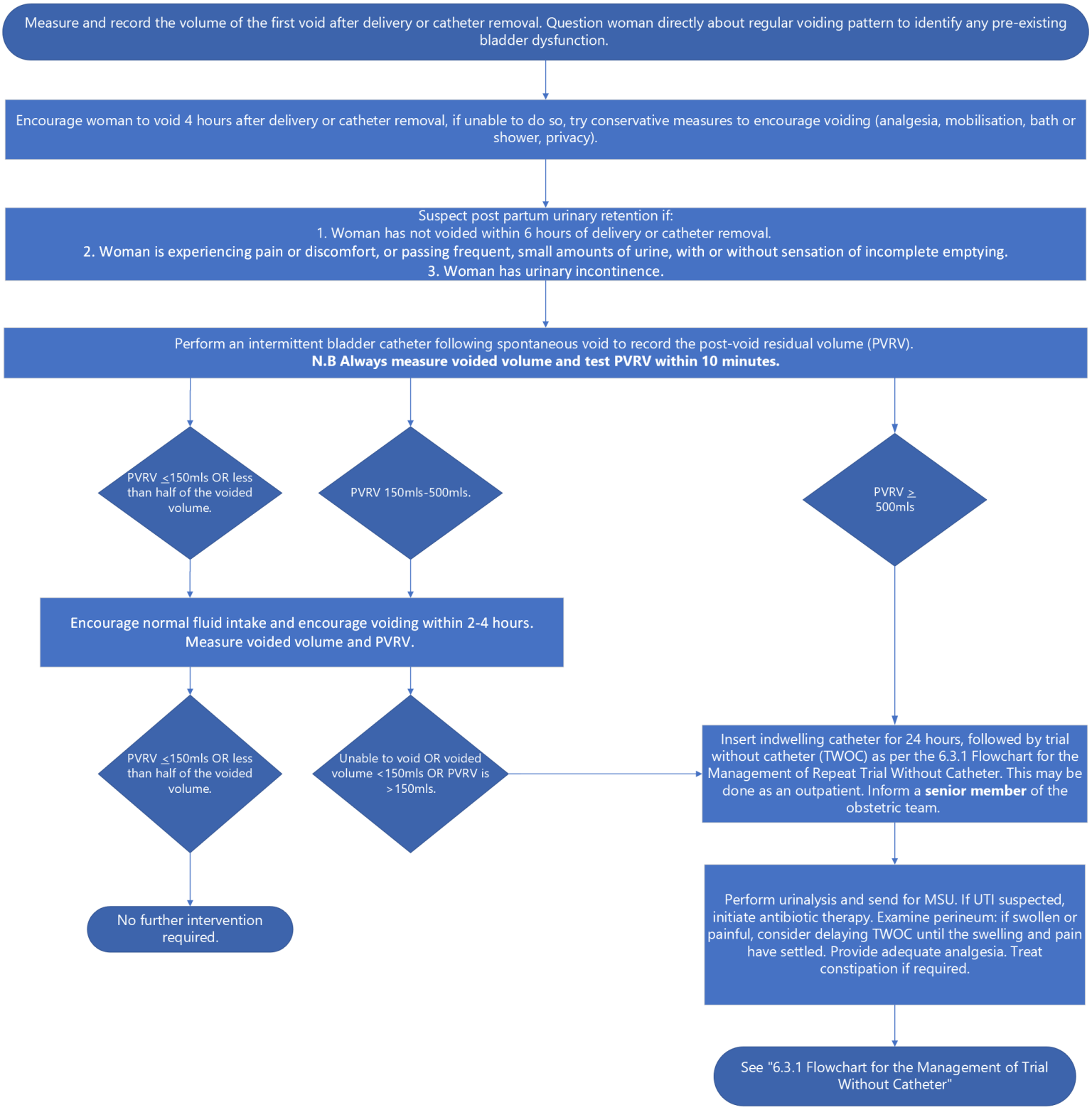
6.2.3 Flowchart for Diagnosis and Initial Management of Postpartum Voiding Dysfunction



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6.3 Management of Repeat Trial Without Catheter (TWOC)

The following steps are included in the "*6.3.1 Flowchart for the Management of Repeat Trial Without Catheter (Following unsuccessful initial TWOC)*"

1. If at TWOC the woman is either unable to void within 6 hours or has a PVRV more than half of their voided volume, re-catheterise. If PVRV is ≤150mL or less than half of the voided volume: record the next 2 voids. If PVRV is ≥ 150mL or more than half of the voided volume after the 2nd void then re-catheterise the woman for 1 week. Leave the catheter on free drainage. TWOC should be attempted after 1 week. (This can be done as an outpatient)

2. At 2nd TWOC record 2 voids and if the woman is either unable to void within six hours or has a PVRV more than half of their voided volume after 2nd void; re-catheterise for 10 days. Fit a flip-flow valve for daytime use and keep the catheter on free drainage at night. After 10 days a TWOC is attempted (as an outpatient).

3. If at 3rd TWOC the woman is either unable to void within 6 hours or has a PVRV more than half of their voided volume after 2nd void; re-catheterise and refer to Urogynaecology via BadgerNet.

In all of these cases, the time and volume of voiding must be documented in the "Bladder Care" note on BadgerNet. The voided volumes and the PVRV must also be recorded. Measurement of intake and output volumes needs to be recorded on a fluid balance chart in these cases.

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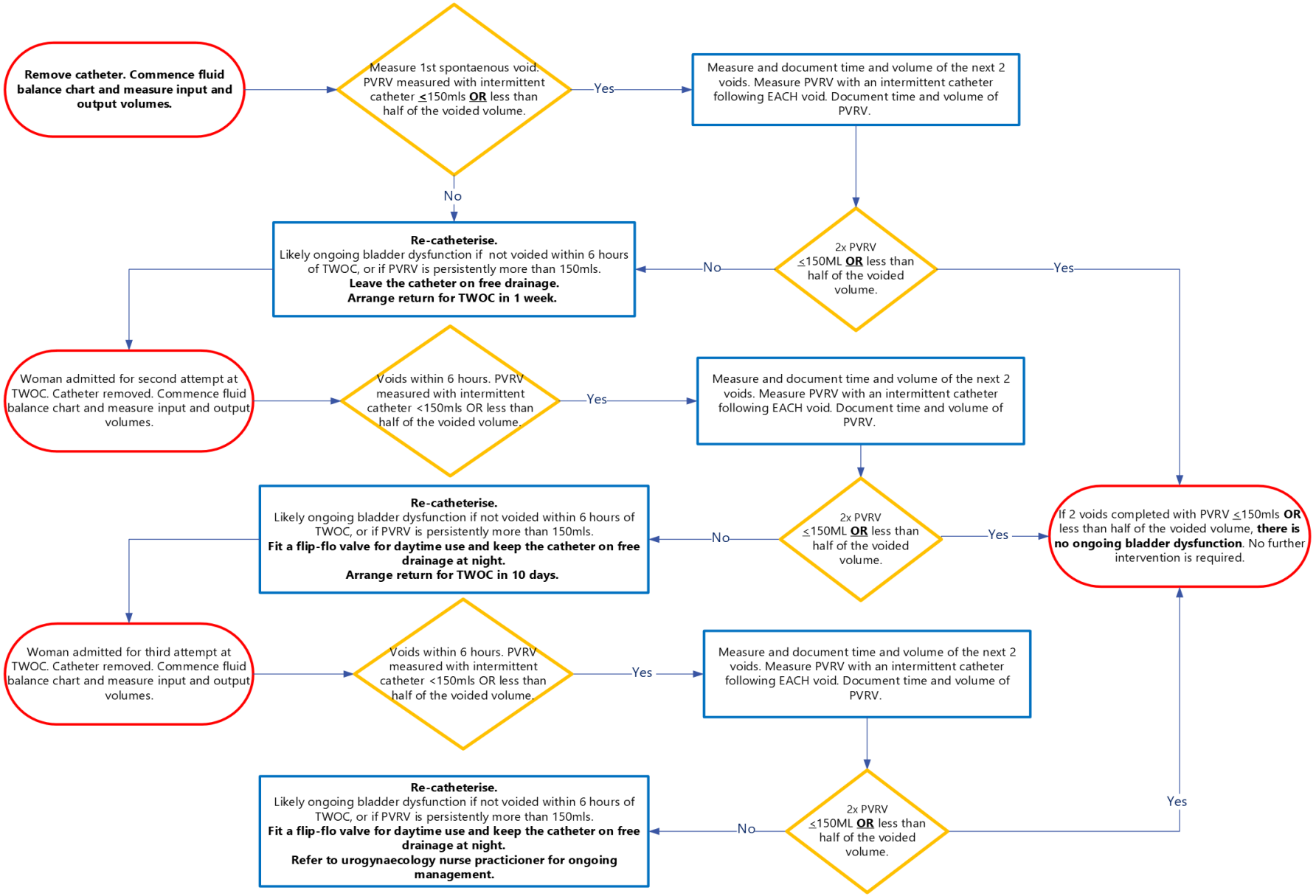
6.3.1 Flowchart for the Management of Repeat Trial Without Catheter (Following unsuccessful initial TWOC)



6.3.2 Referral To Urogynaecology Nurse Practitioner

Please complete a referral to Urogynaecology using the *"Referrals"* section on BadgerNet.

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