Document Control

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Bladder Care Guideline			
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Directorate Clinical Support & Specialist Services		**Department** Maternity Services	
Version	**Date Issued**	**Status**	**Comment / Changes / Approval**
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0.2	July 2009	Draft	Comments included after consultation.
0.3	Aug 2009	Draft	Approved at August Maternity Services Guideline Group.
1.0	Sep 2009	Final	Ratified and Published on BOB
1.1	Feb 2010	Revision	Amended to include the recommendations made by the CNST assessor.
2.0	Feb 2010	Final	Approved at February Maternity Services Guidelines Group and Maternity Services Patient Safety Forum.
2.1	Feb 2012	Revision	This is a new guideline. Initial version for consultation.
2.2	Jun 2012	Revision	Amended version for further consultation.
3.0	Aug 2012	Final	Approved by the Maternity Services Guideline Group on 31/10/12. This is a new guideline. This harmonised guideline includes guidance for the care of a woman requiring catheterization previously found in Bladder Care Guidelines V1.1
3.1	May 2013	Revision	Minor amendments by Corporate Governance to version control, document control report, formatting for document map navigation.
3.2	Sep 2013	Revision	Minor amendments by Corporate Governance,
4.0	Nov 2016	Final	Approved by the Maternity Services Guideline Group. This newly modified guideline incorporating up to date guidance.
5.0	July 2020	Revision	Minor amendments as per track changes. Removal of previous appendices A and B
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CONTENTS

1. Introduction & Purpose

This document sets out Northern Devon Healthcare NHS Trust's best practice guidelines for bladder care. A small number of women experience long term bladder dysfunction following the birth of their baby. This can cause embarrassment and distress [7]. A single episode of bladder over-distention can lead to irreversible damage to the detrusor muscle and injury to the parasympathetic nerve fibres within the bladder wall. For some women this can result in urinating difficulties .

During the first days after delivery, retention of urine with bladder distension can be a frequent phenomenon, caused by several factors, which are as follows:

1. During the second stage of labour the presenting part of the fetus, usually the head, presses against the urethra and the bladder and may cause oedema.
2. Some women may be reluctant to pass urine due to perineal lacerations and pain in the vulva region.
3. After delivery the production of urine is increased, because extra-cellular fluid is excreted (postpartum diuresis) which may induce bladder distension in the first 12-24 hours
4. Temporary loss of sensation, for women who have had epidural anaesthesia together with physiological postpartum diuresis increases the risk of asymptomatic over-distension of the bladder.[4] It can take up to eight hours for bladder sensation to return to normal after the last epidural top up, during which up to a litre of urine may be produced. As the normal capacity of the bladder is 500ml this can result in significant bladder dysfunction .

5. Normal spontaneous vaginal delivery (without epidural) may lead to temporary partial denervation of the pelvic floor. This can lead to over distension of the bladder in some women, resulting in significant bladder dysfunction .

Urinary retention is most likely to occur in the first 8 to 12 hours following delivery because its onset may be slow and asymptomatic. The pudendal nerve and muscles can be damaged during childbirth through direct trauma from forceps or fetal head compression stretching or traction from a prolonged 2nd stage and following an epidural top up prior to delivery or spinal anaesthesia. Early diagnosis, intervention and treatment are necessary to prevent permanent bladder damage .

The following general principles can be applied in order to improve bladder care:

- Acknowledge that bladder care is an integral part of care in labour.
- Post-delivery bladder emptying must be documented In accordance with best practice guidance Nice guidelines, RCOG.

This guideline applies to all clinicians within the maternity services and must be adhered to. Non-compliance with this guideline may be for valid clinical reasons only. The reason for non-compliance must be documented clearly in the patient's notes.

2. Definitions

Definition

Trial without catheter (TWOC) post void residual (PVR)

3. Responsibilities

Role of the Midwife

The Midwife is responsible for:

- Ensuring that bladder care is an integral part of care in labour.
- Ensuring that bladder care after delivery is monitored and documented in accordance with this guidance.
- Ensuring that timely and appropriate referrals are made and followed up.

Role of the Obstetrician

The Obstetrician is responsible for:

- Ensuring that bladder care is an integral part of management plan for labour, instrumental and LSCS delivery.
- Ensuring there is a clearly documented management plan for bladder care after delivery.
- Ensuring that timely and appropriate referrals are made and followed up.

4. General principles of bladder care

Intrapartum bladder care

Aim
During labour the aim is to maintain normal bladder function and to minimise the risk of damage to the bladder and urethra during childbirth which may cause urinary retention in the postpartum period.

Causes:

- Possible causes and pre-disposing factors for intra-partum retention include:
- Prolonged labour
- Analgesia/anaesthesia – epidural top up prior to delivery/spinal
- Infection
- Constipation
- Immobility
- Lack of privacy

Presentation:

- Inability to void
- Passing small amounts frequently +/- palpable bladder
- Palpable bladder
- Inco-ordinate uterine action

General principles

Any woman requiring catheterisation should have the catheter inserted using an aseptic technique following the Trust's *Standard Operating Procedure for performance of Female Urethral Catheterisation* ***(09/031).***. Swabs must be counted before and after the procedure. **Cotton wool balls must not be used.**

Normal labour

Ensure adequate fluid intake – oral/IV. All women in labour should be encouraged to void 2 hourly. This must be documented in the labour records. If unable to void after 4 hours or if there is a palpable bladder, pass an intermittent catheter using aseptic technique. Record the volume and time urine was passed in the maternal records.

NB: Oxytocin causes a very strong anti-diuretic effect until it is stopped, after which there will be a prompt excretion of the accumulated fluid. Large doses of oxytocin can result in excessive fluid retention.

Women in labour with an epidural in situ

All women with an epidural who are unable to void after 4 hours should have an indwelling catheter inserted to prevent over distension of the bladder. It may be prudent to offer an indwelling catheter if there is a heavy epidural block on assessment. A fluid balance chart should be commenced if the woman has an indwelling catheter.

Instrumental Delivery:

Women who have had a spinal or epidural anaesthetic that has been topped up for a trial should have an indwelling catheter inserted and a fluid balance chart commenced.

Women who have an instrumental delivery with a pudendal block or an epidural where they have successfully passed urine in labour should be assessed at the time of delivery regarding the need for an indwelling catheter. It may be prudent to avoid catheterisation if the woman has a good range of mobility/sensation. The extent of perineal and vaginal tissue trauma should be taken in to consideration.

DELIVERY

Where an indwelling catheter has been in situ in labour, it must be removed prior to vaginal delivery. It is <u>not acceptable</u> to deflate or partially deflate balloon during delivery. This is to prevent trauma occurring to the urethra and bladder neck and <u>must be documented</u>. It is <u>not acceptable</u> to re-insert the same catheter after delivery, a new catheter must be used. If a catheter has been in-situ during delivery, re-catheterisation after delivery must take place.

Caesarean section:

All women should have a catheter inserted and a fluid balance chart commenced.

Post-partum bladder care

Aim
The aim is to maintain normal bladder function and to minimise the risk of damage to the bladder.
Causes:
Possible causes and pre-disposing factors for post-partum retention include:

- Prolonged labour
- Prolonged 2nd stage
- Operative delivery
- Urine retention during 1st stage of labour
- Larger than average baby
- Perineal trauma/haematoma
- Analgesia/anaesthesia – epidural top up prior to delivery or spinal
- Infection
- Medication e.g. Oxytocin used in labour
- Constipation

Presentation:

- Inability to void
- Passing small amounts urine frequently with or without pain/discomfort. This could indicate urinary retention with overflow.
- Palpable bladder and/or displaced uterus

Bladder Care after delivery:
The woman should be monitored closely to ensure the return of normal bladder function returns. To ensure normal bladder function resumes [5], women should be left no more than 6 hours following delivery without voiding .

The **time** and **volume** of the first void following delivery must be recorded in the maternal records. This will alert the clinician to any potential problems with urinary retention. **No further action** is required if the **void is >200mls**.

Following delivery, the handover to postnatal ward staff should include information on use of oxytocin during labour, use of an epidural and the time and volume of the first void if occurred on the labour ward.

In the case of a home birth, the midwife will record the time and volume of the first void in the maternal records. If the woman has not passed urine prior to the midwife leaving the home the woman will be asked to make a note of the time and volume of the first void and equipment left to facilitate this, documenting in maternal notes. The woman must be informed that if she does not pass urine successfully by 6 hours following delivery she must contact the maternity unit immediately.
General principles

Ensure adequate fluid intake – oral/IV. Record the volume and the time urine was passed in the maternal records. If unable to void after 6hrs or if unable to void with a palpable bladder, efforts to assist urination should be advised, such as taking a warm bath or shower . If measures to encourage micturition are not immediately successful, refer to the obstetric team for prompt assessment of bladder volume and catheterisation.

See Appendix A: Bladder Management Plan after Delivery (no catheter) and Appendix B: Bladder Management Plan after Delivery (Catheter in-situ).

Timing of catheter removal after delivery:

Caesarean section:
Catheter should be removed once the woman is mobile and not sooner than 12 hours post-delivery.
Instrumental Delivery:
Catheter should be kept in place for a least 12 hours following delivery .
Epidural for normal labour:
Catheter should remain in situ for a minimum of 6 hours or until full sensation has returned .
NB: If the timing of removal of indwelling catheter falls after 22:00, it should be removed at 06:00 the next morning to avoid disturbing the woman's sleep and retention occurring unobserved overnight.

When to catheterise post-delivery and timing of removal

Although it is possible to identify potential factors which may pre-dispose certain women to develop urinary retention post-natal, these risk factors are so varied it is almost impossible to predict who will go into retention. Women should be offered physiotherapy-directed strategies to prevent urinary incontinence.

Any woman requiring catheterisation should have the catheter inserted using an aseptic technique following the Trust's *Standard Operating Procedure for performance of Female Urethral Catheterisation* ***(09/031).***. Swabs must be counted before and after the procedure. **Cotton wool balls must not be used.**
Delivery with <u>no indwelling catheter</u> in labour

If the woman has had a first void >200mls; no further action is required.

If the woman has;

- been unable to void 6hrs after delivery and there is no palpable bladder

<u>OR</u> she has

- had a post-delivery void <200mls

<u>THEN</u>

- encourage fluids 300-500mls and void again within 2 hours.
- document the findings and actions in the maternal record and escalate to the Obstetric team.

If the woman has a second void >200mls; no further action is required.

If the woman has;

- been unable to void 6hrs after delivery or prior to 6hrs and has a palpable bladder

OR she has

- had a second void <200mls

THEN

- document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.
- insert intermittent catheter and measure volume drained
- OR get a bladder scan to estimate PVR

If the post void residual (PVR) is <500mls the next void should be measured along with the PVR.

- If the next void has a PVR <150mls, no further action is required.
- If there is a PVR >150mls OR the woman is unable to void, an indwelling catheter should be inserted for 24hours. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.

If the PVR is >500mls;

- An indwelling catheter should be inserted for 24hours. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.

After 24 hours;

- Trial without catheter (TWOC) should be undertaken.
- Obstetric review is required.

If the PVR>150mls, the indwelling catheter should remain in situ for one week. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request a prompt review using SBAR.

After one week;

- Trial without catheter (TWOC) should be undertaken.
- If the PVR>150mlS, the indwelling catheter should remain in situ for one week. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.
- . Discuss with senior obstetric team and onward referral , if required to either Petter ward team or Urology nurse specialist(a.manoj1@nhs.net) for instruction in CISC and subsequent UG follow up.

Delivery WITH indwelling catheter in labour

Remove indwelling catheter as directed previously on page 8.

If the woman has had a first void >200mls; no further action is required.

If the woman has;

- been unable to void 6hrs after catheter removal and there is no palpable bladder

OR she has

- had a post-catheter removal void <200mls

OR she has

- been unable to void 6hrs after catheter removal or prior to 6hrs and has a palpable bladder

THEN

- document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.
- insert intermittent catheter and measure volume drained OR get a bladder scan to estimate PVR

If the post void residual (PVR) is <500mls;

- the next void should be measured along with the PVR.
    - If the next void has a PVR <150mls, no further action is required.
    - If there is a PVR >150mls OR the woman is unable to void, an indwelling catheter should be inserted for 24hours. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.

If the PVR is >500mls;

- an indwelling catheter should be inserted for 24hours. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.

After 24 hours;

- Trial without catheter (TWOC) should be undertaken.
- Obstetric review is required.
- If the PVR>150mls, the indwelling catheter should remain in situ for one week. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.

After one week;

- Trial without catheter (TWOC) should be undertaken.
- If the PVR>150mls, the indwelling catheter should remain in situ for one week. Document the findings and actions in the maternal record and escalate to the Obstetric team. Request prompt review using SBAR.
- . Discuss with senior obstetric team and onward referral , if required to either Petter ward team or Urology nurse specialist(a.manoj1@nhs.net) for instruction in CISC and subsequent UG follow up.

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The appropriate referral process

A consultant obstetrician should be informed to review a woman who has required an indwelling catheter due to urinary retention for a minimum of 24 hours.

Refer to a consultant obstetrician if at any time there are concerns about the woman's ability to pass urine, or if there is inadequate diuresis following catheterisation.

Refer to a consultant obstetrician if the patient is unable to void urine satisfactorily after 48 hours of indwelling catheterisation.

The consultant obstetrician will document a management plan, which may include referral to an urologist.

5. Monitoring Compliance with and the Effectiveness of the Guideline

Standards/ Key Performance Indicators

Key performance indicators comprise:

- Bladder void measurement and documentation within guidance
- Catheterisation within guidance

Process for Implementation and Monitoring Compliance and Effectiveness

The author consulted with all relevant stakeholders. Please refer to the Document Control Report. Final approval was given by the Maternity Services Guideline Group.

These guidelines will be reviewed every 3 years. The author will be responsible for ensuring the guidelines are reviewed and revisions approved by the Maternity Service Guideline Group in accordance with the Document Control Report. All versions of these guidelines will be archived in electronic format by the author within the Maternity Team policy archive. Any revisions to the final document will be recorded on the Document Control Report. To obtain a copy of the archived guidelines, contact should be made with the Maternity Team/ author

Monitoring of implementation, effectiveness and compliance with these guidelines will be the responsibility of the Lead Clinician for the maternity services. Where non-compliance is found, it must have been documented in the patient's medical notes.Detail here the monitoring process:

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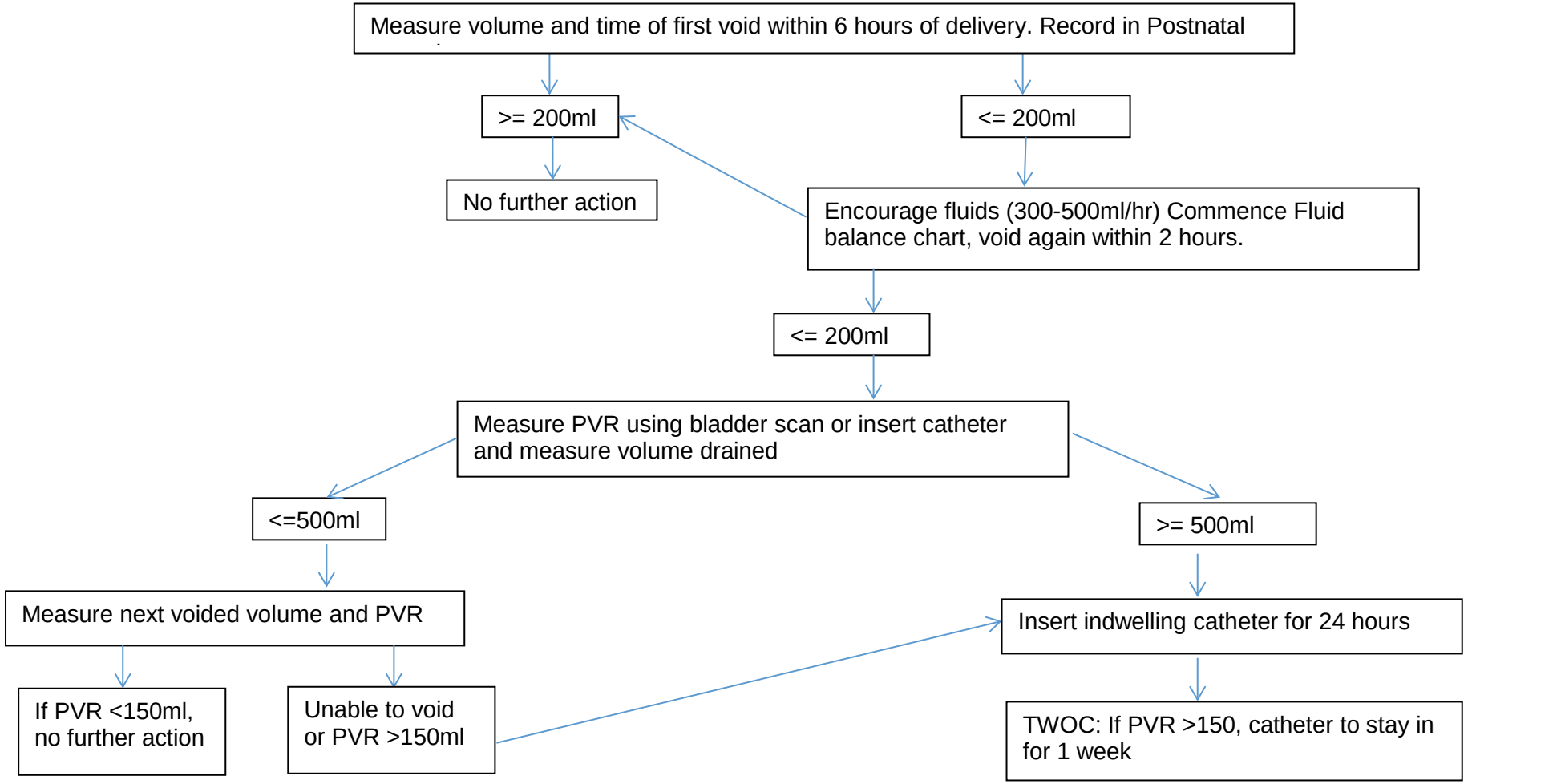
7. Associated Documentation

- Antenatal and Postnatal Screening Guideline.

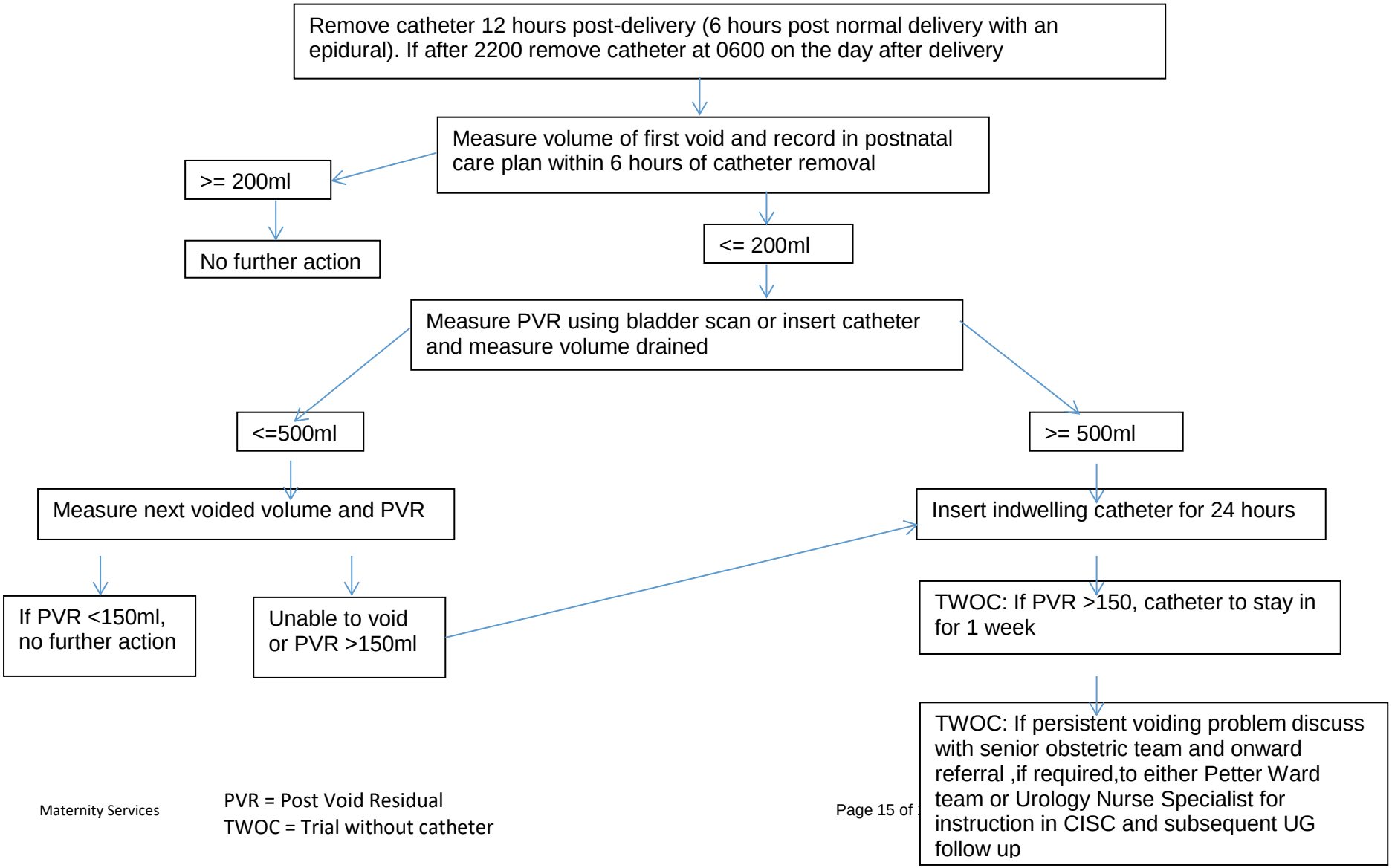
- Caesarean Section Guideline.
- Hypertensive disorders in pregnant women guidelines.
- Identifying a woman with a raised BMI guidelines.
- Recovery of women under an Obstetrician Guideline.
- Severely Ill Pregnant Women and High Dependency Care Guideline

Appendix A: Bladder Management Plan after Delivery (no catheter)



PVR = Post Void Residual
TWOC = Trial without catheter

Appendix B: Bladder Management Plan after Delivery (Catheter in-situ)



PVR = Post Void Residual
TWOC = Trial without catheter