

Standard Operating Procedure (SOP)

SOP Title	Urinalysis in pregnancy and screening for asymptomatic bacteriuria (including antibiotic treatment)		
SOP Number	027		
Care Group	Women and Children's		
Version Number	2.2		
Effective Date	17 th May 2024	Review Date	April 2026
Author	Michelle Gordon, Matron community and MLU		
Approved by	Maternity Governance		
Approval date	November 2017		
Distribution	All maternity departments		
Location	Maternity services		

Document Control

Version	Date	Author	Status	Comments
1.0	27/11/2017	Guideline Midwife	New	Evidence from NICE Clinical Knowledge Summary Urinary Tract infection (lower)-Women and Scottish Intercollegiate Guidelines Network (SIGN) Management of suspected urinary tract infection in adults
2.0	24 th April 2023	Matron Community and MLU	Full review	Full version review update to PGDs Midwives to supply antibiotics for asymptomatic UTI only
2.1	July 2023			Audit & Monitoring paragraph update to reflect new process
2.2	17 th May 2024	Michelle Gordon, Matron for Community and MLU	Minor Update	Update to reflect that symptomatic UTIs should be referred to triage or clinic for obstetric review and prescription of antibiotics

SOP Objectives	<ul style="list-style-type: none"> ▪ To provide a procedure for offering asymptomatic bacteriuria screening in pregnancy. ▪ To provide a standard for routine urinalysis in pregnancy based on national guidance. ▪ To provide a standard procedure for additional urine testing when positive samples are obtained. ▪ To provide a standard procedure for treatment of confirmed asymptomatic bacteriuria.
Scope	The incidence of asymptomatic bacteriuria during pregnancy ranges between 2-10%. Approximately 20% of pregnant women with untreated asymptomatic bacteriuria develop pyelonephritis later in pregnancy.

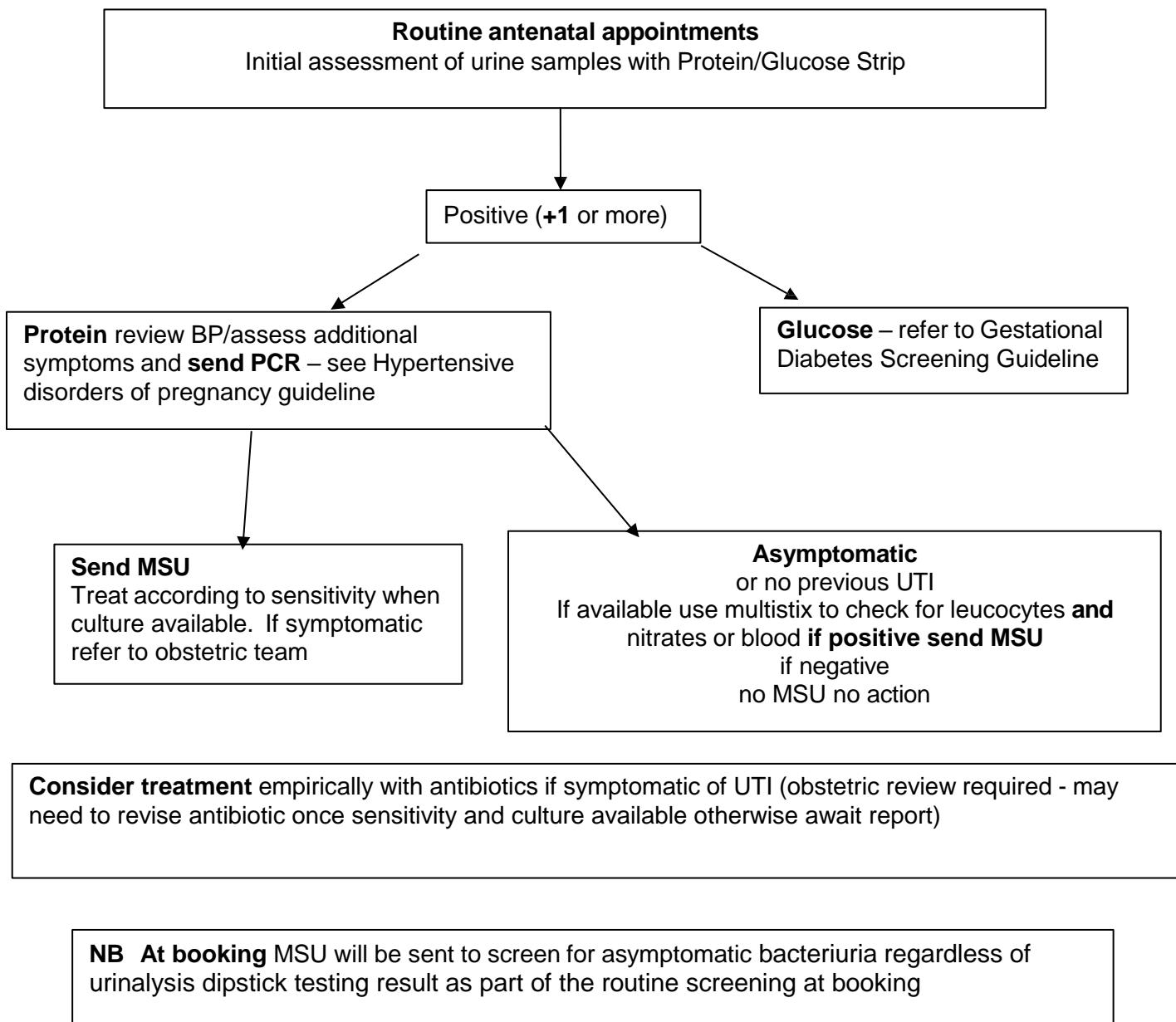
Audit/Monitoring	Compliance with this guideline / SOP will be audited as part of the Shrewsbury and Telford Hospital NHS Trust's five-year rolling programme of NICE and local guideline audits, unless circumstances require an earlier or more frequent audit. The audit will be carried out against the auditable standards
	and the results of the audit will be reported and acted on in accordance with the Trust Clinical Audit Policy (CG25).
References	<p>NICE Antenatal Care Guideline (2019) Recommendations Antenatal care Guidance NICE</p> <p>Urinary tract infection (lower) antimicrobial prescribing (2018) Recommendations Urinary tract infection (lower): antimicrobial prescribing Guidance NICE</p> <p>NHS England Saving Babies Lives Version 2 (2019) saving-babies-lives-care-bundle-version-two-v5.pdf (england.nhs.uk)</p>

Number	Brief	Responsibility
1	<p>Initial consultation –booking Offer all women testing for asymptomatic bacteriuria at the initial consultation-booking appointment by sending a Mid-Stream specimen of Urine (MSU).</p>	Midwife
2	<p>MSU Sample procedure Refer women to the SaTH Internet site at the following link https://www.sath.nhs.uk/wards-services/a-z-services/pathology/advice-info/</p> <ol style="list-style-type: none"> 1. Hand washing prior to urinating 2. Ideally wash labia prior urinating 3. Hold the labia apart when urinating 4. Initially pass urine into the toilet then without stopping the flow pass urine into the sterile bottle/or suitable container <p>NB use of the slim red top primary urine containers. It may be useful to catch the sample in a clean plastic cup/cardboard container or jar (washed and rinsed with boiled water) then decant into the slim red top primary urine container.</p>	Midwife
3	<p>Urinalysis during pregnancy</p> <p>Routine testing for protein and glucose is recommended by NICE during antenatal contacts with women.</p> <p>For routine antenatal contact with women use of a protein and glucose strip will be used.</p> <p>Women who are attending for non-routine contacts i.e. attending Triage, Delivery Suite/ Day Assessment Units (DAU) or are attending due to symptom specific e.g. unwell, headache, oedema the automated urine devise machine with the multistix x8 reagent strip will be used.</p> <p>Visual Assessment using protein/glucose strips Refer to Flowchart Appendix 1</p> <p>Automated urine devise or multistix x 8 Refer to Flowchart Appendix 1</p> <p>Additionally review blood pressure to exclude pre-eclampsia</p> <p>All other positive results from the reagent strip discuss with the woman any symptoms that may indicate need for vaginal swab.</p>	Midwife
4	<p>PCR sample Use yellow top urine collection tube Review request form for Protein:creatinine Maternal weight at time of the test must be written on the form for an accurate assessment of PCR. If access to scales are not available in the community setting arrange for a PCR to be taken at the local community base.</p>	Midwife
5	<p>Symptomatic UTI – referral to Obstetric Team via obstetric triage or outpatient clinic for treatment to ensure appropriate empirically antibiotics are prescribed. Midwives may supply antibiotic treatment for asymptomatic UTI only</p>	Midwife

6	<p>Obtaining microbiology MSU result Result paper reports are sent to the area that generated the request.</p> <p>Asymptomatic bacteriuria test at initial consultation/booking Urine sent for asymptomatic bacteriuria testing during the initial consultation 'booking' appointment results are sent to the area that generated the request. Action for follow up or additional testing is the responsibility of the area generating the initial request.</p> <p>Samples sent during routine antenatal contacts that are positive on dipstick but asymptomatic checking and action of these tests are the responsibility of the area that initiated the request.</p>	Midwife
7	<p>Positive culture results – asymptomatic treatment</p> <p>GBS positive result –Antenatal treatment for GBS positive will be commenced on a first sample of $>10^5/\text{mL}$ a second sample is not required prior to treatment if GBS is isolated (RCOG 2017). Refer to section 8 for treatment options. Samples $<10^5/\text{mL}$ refer to local and RCOG guidance to offer IAP and update risk factors on the electronic system. Also refer to The Prevention of Early onset neonatal Group B streptococcal disease guideline and SaTH Maternity Guideline</p> <p>Other organism positive results Review microbiology report for treatment if other organisms present repeat sample if this is suggested (squamous epithelial cells should make you doubt the quality of the urine sample – refer to section 2 MSU sample procedure). Treatment on 1st sample may be indicated refer to the report and discuss with obstetric team if required.</p> <p>If a 2nd sample if recommended by the report request an additional MSU sample from the woman this should be organised with the local community team.</p>	Midwife
8	<p>Outpatient treatment Refer to Pharmacy page on the intranet <u>SaTH Intranet - Midwifery PGDs</u></p> <ul style="list-style-type: none"> ▪ Cephalexin (caution with penicillin allergy) use alternative treatment option if suitable. Refer to Obstetric Team to discuss treatment options if penicillin allergy. ▪ Nitrofurantoin (not suitable if >36 weeks gestation) ▪ Trimethoprim (not suitable if <12 weeks gestation) ▪ Amoxicillin – not treatment option if allergic to penicillin <p>Refer to the individual antibiotic PGD as treatment will be dependent on the organism detected and the corresponding sensitivity report along with the gestation and any allergies that the woman may have.</p> <p>Antibiotic packs are available within community areas the woman must attend the local community base for a full consultation in order to receive treatment and antibiotic pack.</p> <p>The midwife must discuss treatment with the woman and review allergies, indications and contraindications. The woman will be advised to contact with maternity services if there are concerns or side effects. Complete the medication administration on the electronic records.</p>	Midwife

	<p>A letter will be sent to the GP to confirm that the woman has received treatment for information only. – <u>clinical services and departments</u> <u>→womens services→ maternity→ supporting documents and forms</u></p> <p>GP letter antibiotics.</p> <p>Two health professionals (1 must be a midwife) will check the antibiotic pack and confirm the woman's details, review and confirm any known allergy(ies) and that the appropriate antibiotic is being supplied based on microbiology sensitivity results and gestation.</p> <p>NB Any concerns for treatment options/sensitivity or cautions related to current medication/medical condition refer to microbiology or an obstetrician before supplying the antibiotic.</p>	
9	<p>Follow up MSU</p> <p>Also refer to section 2 MSSU sample procedure</p> <p>An MSSU will be sent following completion of the antibiotic course to confirm treatment has been successful. Provide a sterile bottle, Review Request form (indicating which antibiotic treatment has been used) and advise the woman to provide an MSSU as soon as the antibiotic treatment is completed NB follow up sample is not required if treatment for GBS.</p>	Midwife
10	<p>Referral</p> <p>If MSU follow up sample once a course of antibiotic treatment has been completed has not cleared the organism refer to Obstetric Team for further review.</p>	Midwife

Appendix 1



Appendix 2

REFER TO THE SUPPORTING DOCUMENTS AND FORMS ON INTRANET

From homepage select Clinical Services and Departments –

Women's Services- Maternity – Supporting Documents and Forms

FOR WORD FORMAT AND CURRENT VERSION OF THIS TEMPLATE LETTER



Patient sticker/details

Date: ___/___/___

Dear Doctor

This letter is for information only.

We have commenced antibiotic treatment for a positive MSSU result.

The microbiology sensitivity report has recommended antibiotic treatment with

Amoxicillin 500mg TDS Cephalexin 500mg BD

Nitrofurantoin 50mg QDS Trimethoprim 200mg BD

We have discussed treatment options with the patient and reviewed allergies. The patient has been provided with a 7 day course of treatment.

As recommended by national guidance we will arrange a further MSSU 7 days after antibiotic treatment has been completed as a test of cure (with the exception when GBS has been isolated).

Please use the contact details below if you require further information.

MLU/Community Team
INSERT YOUR
CONTACT DETAILS
HERE FOR THE GP

Midwife
Shrewsbury and Telford NHS Trust