

Male lower urinary tract symptoms (LUTS)
Based on NICE 2015, EAU 2018, NHS Lanarkshire (2020)

Dear Doctor,

Many thanks for referring this gentleman with lower urinary tract symptoms (LUTS). We have created this leaflet to aid in the early management of this common presentation to both primary and secondary care. We hope this guidance and associated patient aids are useful for this and other similar patients. Please work through this guidance with your patient in the first instance. In the event onward referral for speciality opinion becomes necessary, please can you kindly encourage the patient to kindly bring filled in questionnaires that are at the end of this document.

For men >40years of age, LUTS are categorised as follows:

- 1) Storage – urgency, daytime frequency, nocturia, incontinence
- 2) Voiding – hesitancy, poor flow, incomplete emptying, terminal dribble

The differential diagnoses include: benign prostatic enlargement, overactive bladder, urinary retention – acute, chronic, acute-on-chronic, urinary tract infection and malignancy.

- **Any patient with frank haematuria: please refer urgently to the haematuria clinic**

Indications for urgent referral to high PSA clinic

- Raised PSA (x2) (after counselling a patient on the advantages and limitations of PSA)
- A suspicious digital rectal examination of prostate
- Concerning weight loss or back pain in the context of a very high PSA/suspicious DRE

Information specifically for patients regarding PSA testing and prostate cancer can be found on the Prostate Cancer UK website (www.prostatecanceruk.org). The paragraph below is from Scottish Referral Guidelines for Suspected Cancer (<http://www.cancerreferral.scot.nhs.uk>) which aims to facilitate appropriate referral between primary and secondary care for patients whom a GP suspects may have cancer may help to identify patients who are most likely to have cancer and who therefore require urgent assessment by a specialist.

Prostate cancer:

- Evidence from digital rectal examination of a hard, irregular prostate
- Elevated or rising age-specific PSA. Rough guide to normal PSA levels (ng/ml):
 - Less than 60 years < 3
 - Aged 60-69 years < 4
 - Aged 70-79 years < 5

These figures are a pragmatic aid based on clinical consensus. The principles of Realistic Medicine should be applied when considering referral and, in older men, routine or no referral may be appropriate for PSA levels of:

- Aged 80-85 years > 10
- Aged 86 years and over > 20

A PSA test may be raised within three days of ejaculation or six weeks of a proven UTI, catheterisation or other invasive procedure, such as prostate biopsy. 5 alpha reductase inhibitors such as finasteride may reduce the PSA level. Please refer men with more than one PSA to stratify whether referral should proceed along a cancer pathway or otherwise. It should be noted that the majority of men with prostate cancer have no symptoms at all.

Initially, a urine infection and urinary retention should be ruled out and other medical conditions or medications which result in LUTS should be optimised e.g. diabetes, cardiac failure, renal failure and neurological conditions.

The severity of LUTS and response to treatment is categorised using the International Prostate Severity Scoring (IPSS) tool (see below). Many patients can be managed in the community with the following recommendations from NICE and European Association of Urology (EAU) guidelines.

Conservative management – trial for 3 months:

- Fluid intake: at least 1.5L per day to maintain adequate hydration, limiting fluid intake to thirst, 2-3 hours before bedtime.
- Avoid caffeinated/fizzy drinks/alcohol as these can cause bladder irritation and worsen urgency.
- Pelvic floor exercises at least 3x per day and bladder retraining exercises can help with incontinence and urgency symptoms. These should be continued for a minimum of 6 weeks.
- Maintain a normal BMI to reduce the pressure on the pelvic floor.
- Avoid constipation

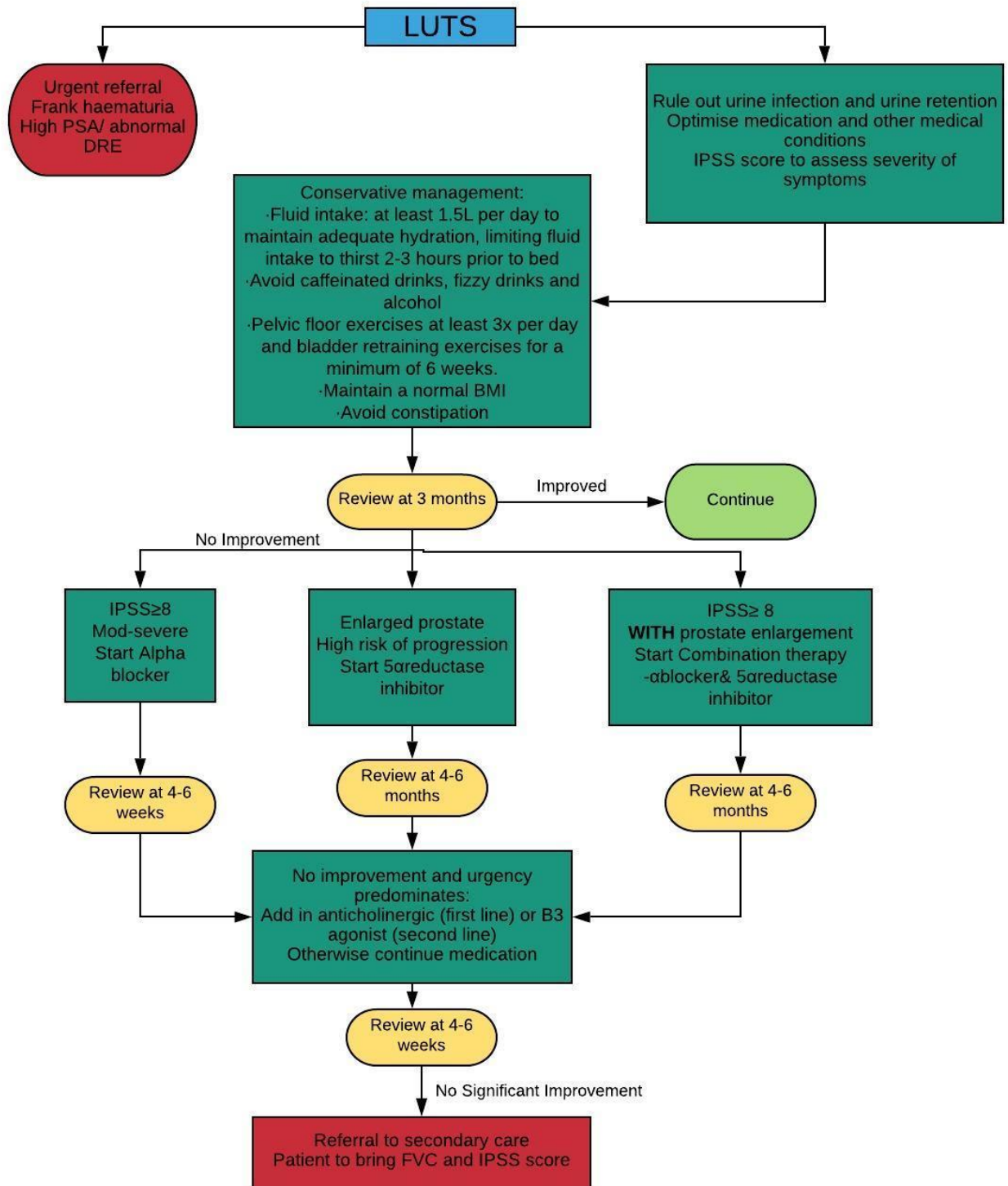
Medication:

- Moderate-severe LUTS: Alpha blocker such as Tamsulosin 400mcg OD.
 - Side effects include: dizziness, drowsiness, weakness, nausea, diarrhoea
 - headache, chest pain, abnormal ejaculation, decreased amount of semen
 - back pain, blurred vision, fever, chills, body aches, flu symptoms.
- Enlarged prostate or high risk of progression of symptoms: 5 alpha reductase inhibitor – review at 6months
 - Side effects include: Sexual dysfunction, breast abnormalities; skin reactions
 - Rare side effects: Angioedema; severe depression; infertility male; palpitations; testicular pain
- Moderate – severe LUTS with prostatic enlargement: Combination therapy of above
- Storage LUTS: Add an anti-cholinergic or B3 agonist (Mirabegron 50mg OD) to the above - review at 6weeks
- Risk factors for progression of symptoms - older men, poor urinary flow, higher symptom score, bladder decompensation (chronic urinary retention), larger prostates, or higher PSA levels.

If medical management fails, and the patient wishes to pursue further treatment please refer to secondary care. This may include further tests, including a flow test, post void residual scan and potentially invasive urodynamics to guide further management including surgery.

Yours Sincerely

Urology Consultants, NHS Lanarkshire



Bladder Diary/Treatment Plan

Name: Date:

Fluid intake - record how much fluid you drink. P/U- Passed Urine - record the amount or volume of urine passed. Wet - record any wet episodes

Section below for office use only:	Day 1			Day 2			Day 3			
	Time	Fluids (mls)	P/U	Wet	Fluids (mls)	P/U	Wet	Fluids (mls)	P/U	Wet
Fluids - drink 1.5-2litres <input type="checkbox"/>	9am									
Reduce Caffeine slowly <input type="checkbox"/>	10am									
Don't go just in case <input type="checkbox"/>	11am									
Try to hold on <input type="checkbox"/>	12pm									
Bladder Training <input type="checkbox"/>	1pm									
Distraction Therapy <input type="checkbox"/>	2pm									
Double Void <input type="checkbox"/>	3pm									
Last Drink 2 hours prior to bed <input type="checkbox"/>	4pm									
Elevation of Legs early evening <input type="checkbox"/>	5pm									
Pelvic Floor Exercise Regime <input type="checkbox"/>	6 pm									
Brace Technique <input type="checkbox"/>	7 pm									
Bowel Regime <input type="checkbox"/>	8 pm									
Medication <input type="checkbox"/>	9 pm									
Other comments:	10 pm									
	11 pm									
	12 am									
	1 am									
	2 am									
	3 am									
	4 am									
	5 am									
6 am										
7 am										
8am										
Totals										

This chart above is a very important part of the preparation you need for your appointment with your health professional. It will help provide them with information that may relate to your symptoms and may be useful in making a diagnosis and providing treatment.

Please keep the diary for a minimum of 3 days and continue your normal eating/drinking patterns as well as daily activities. This will give a record of how much you normally drink (fluid intake), how much urine you pass, and how often you empty your bladder on a daily basis as well as any leakage you have. Bring this form with you when you next attend the clinic.

Please record as accurately as possible on this form the quota of fluids you drink and volume of urine you pass. Please record the fluids in millilitres (1 fluid ounce = 30ml). Each time you pass urine you will need to catch it in a container calibrated in volumes.

What you need to do

For a minimum of 3 days and nights record how much you drink (intake) and how much urine you pass (output) - they DO NOT have to be 3 days in a row. • Pick days which will be convenient for you to measure and record everything

- A plastic jug which measures in millilitres (mls) or ounces (oz)
- If you pass urine but cannot measure put a √ in the appropriate column

International Prostate Symptom Score (I-PSS)

Patient Name: _____ Date of birth: _____ Date completed _____

In the past month:	Not at All	Less than 1 in 5 Times	Less than Half the Time	About Half the Time	More than Half the Time	Almost Always	Your score
1. Incomplete Emptying How often have you had the sensation of not emptying your bladder?	0	1	2	3	4	5	
2. Frequency How often have you had to urinate less than every two hours?	0	1	2	3	4	5	
3. Intermittency How often have you found you stopped and started again several times when you urinated?	0	1	2	3	4	5	
4. Urgency How often have you found it difficult to postpone urination?	0	1	2	3	4	5	
5. Weak Stream How often have you had a weak urinary stream?	0	1	2	3	4	5	
6. Straining How often have you had to strain to start urination?	0	1	2	3	4	5	
	None	1 Time	2 Times	3 Times	4 Times	5 Times	
7. Nocturia How many times did you typically get up at night to urinate?	0	1	2	3	4	5	
Total I-PSS Score							

Score: 1-7: *Mild*

8-19: *Moderate*

20-35: *Severe*

Quality of Life Due to Urinary Symptoms	Delighted	Pleased	Mostly Satisfied	Mixed	Mostly Dissatisfied	Unhappy	Terrible
If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that?	0	1	2	3	4	5	6

PLEASE FILL THIS IN THIS VALIDATED QUESTIONNAIRE TO HELP GUIDE YOUR TREATMENT