How practical assessment guides LUTS treatment

TReatIng Urinary symptoms in Men in Primary Healthcare
PLanning Appropriate Nocturia Evaluation and Treatment
Nocturia Evaluation & Treatment: Implementing Assessment, Consolidating Therapy
Urodynamics for Prostate Surgery: Randomised Evaluation of Assessment Methods

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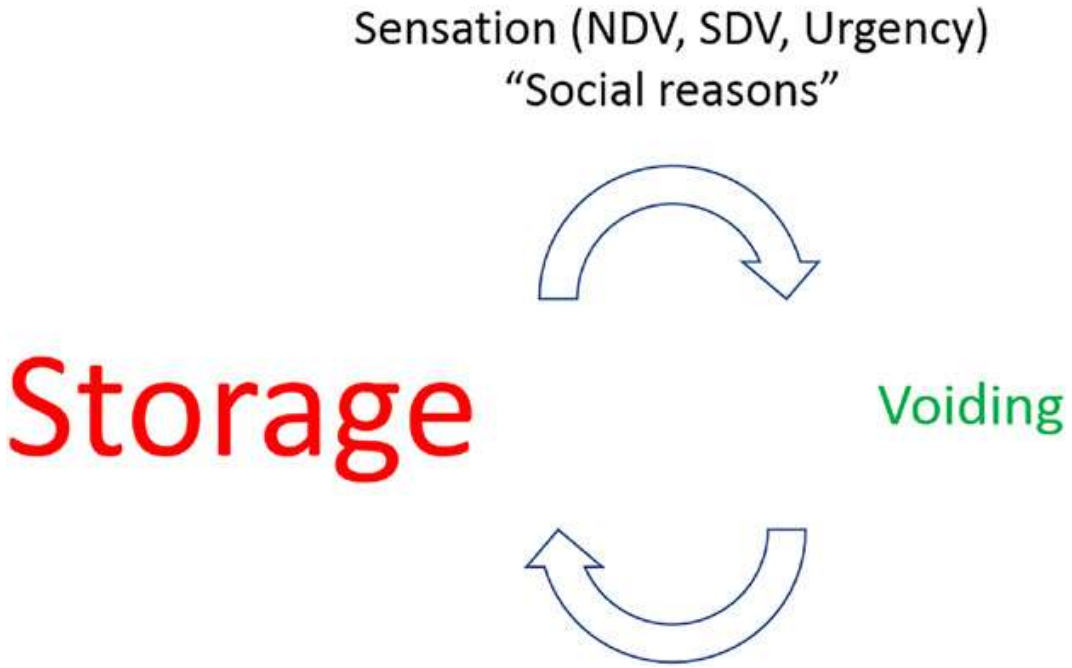

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SOUNDING BOARD

WILEY Neurourology Urodynamics ICS SUFU

Fundamentals of terminology in lower urinary tract function

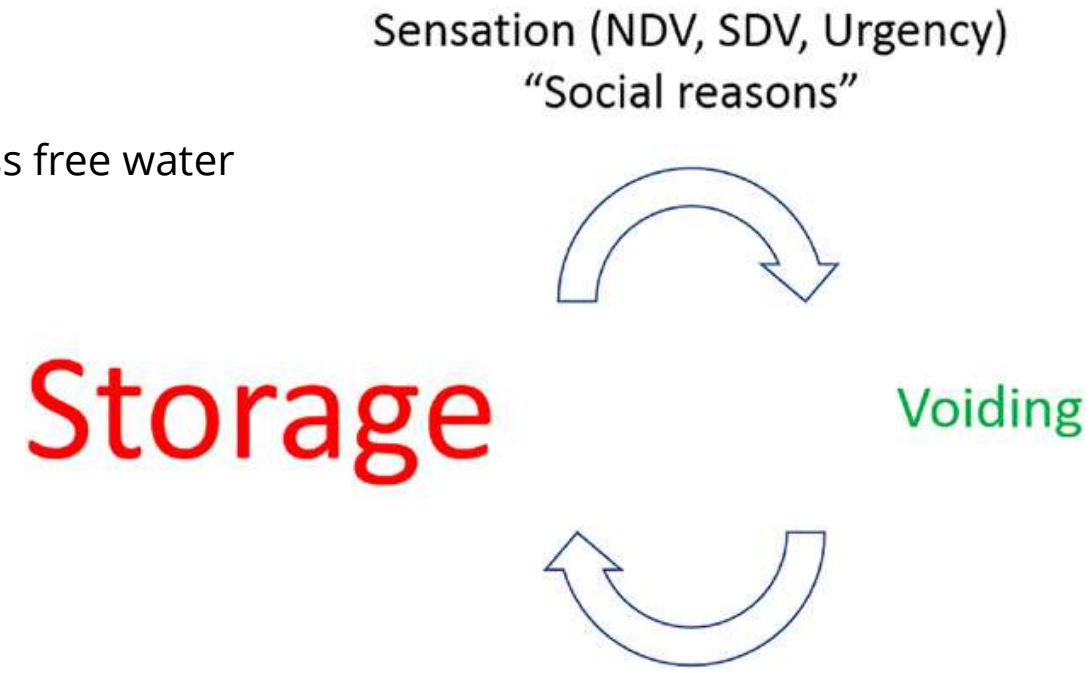
Marcus J. Drake[1,2]

<u>Increased daytime frequency</u> (IDF) i**s the complaint by the patient who considers that he/she voids too often by day**. *There is no minimum voiding frequency serving as a threshold for the symptom, since it is highly subjective, and there is a wide overlap between normal and symptomatic.*

<u>Nocturia</u> is waking at night to pass urine. *If a person typically passes urine once per night, they should be documented as having nocturia even if it does not cause them impairment of quality of life.*

"Day" and "night" for IDF and nocturia refer to the patient's sleeping pattern,
not environmental daylight and night-time.

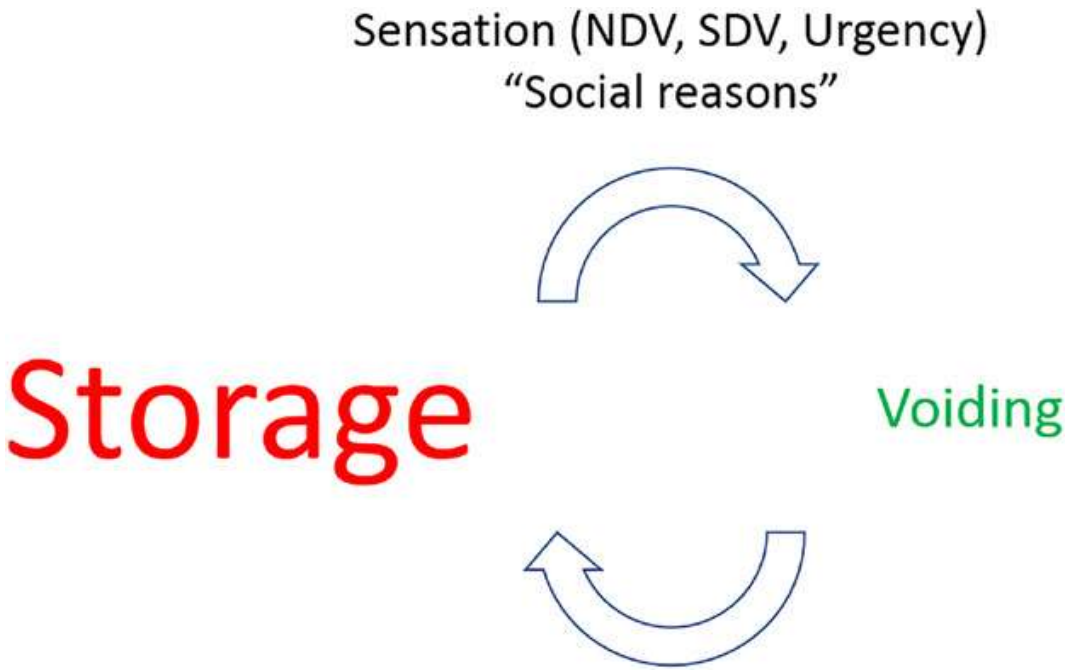
These symptoms may be LUTD, or physiological (excess free water or salt, or pathological (eg chronic kidney disease).



<u>Urgency</u> is a sudden compelling desire to pass urine which is difficult to defer.

<u>OAB</u> is urgency, with or without urgency incontinence, usually with increased daytime frequency and nocturia.

Exclude other causes of similar symptoms, e.g. UTI



Treatment of lower urinary tract symptoms in men in primary care using a conservative intervention: cluster randomised controlled trial

Marcus J Drake,[1] Jo Worthington,[2] Jessica Frost,[2] Emily Sanderson,[2] Madeleine Cochrane,[2] Nikki Cotterill,[3] Mandy Fader,[4] Lucy McGeagh,[5] Hashim Hashim,[6] Margaret Macaulay,[4] Jonathan Rees,[7] Luke A Robles,[8] Gordon Taylor,[9] Jodi Taylor,[2] Matthew J Ridd,[10] Stephanie J MacNeill,[2] Sian Noble,[11] J Athene Lane[2]

BMJ. 2023 Nov 15:383:e075219. doi: 10.1136/bmj-2023-075219.

Background

- Urinary symptoms can include:
  - Increased urinary frequency
  - Nocturia (waking at night to pass urine)
  - Urgency
  - Incontinence
  - Sensation of incomplete emptying
- Half of men over 40 years old experience at least one urinary symptom

- Significant impact on quality of life for many men

NICE recommend….

Key symptom assessments

Excluding serious underlying conditions

Conservative therapies

(e.g. fluid advice, bladder training, PFME)

- Prescription of medication
- Inappropriate urological referral
- Persistent symptoms

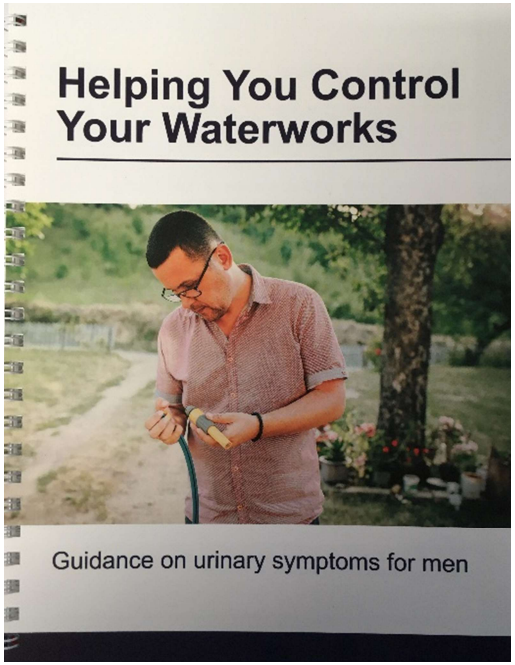
- Conservative therapies are first-line treatment of LUTS, yet there is a lack of evidence on effectiveness, just a small single centre RCT.
- NICE Clinical Guideline 97 recommended a multicentre RCT to determine effectiveness.
- The TRIUMPH study was funded by the UK National Institute of Heath Research (HTA 16/90/03).
- Objective: To determine whether a standardised and manualised intervention for LUTS delivered in primary care achieves superior symptomatic improvement versus usual care.

Can a standardised booklet providing conservative care, tailored by a nurse, achieve a superior symptom outcome to usual care?

TRIUMPH overview

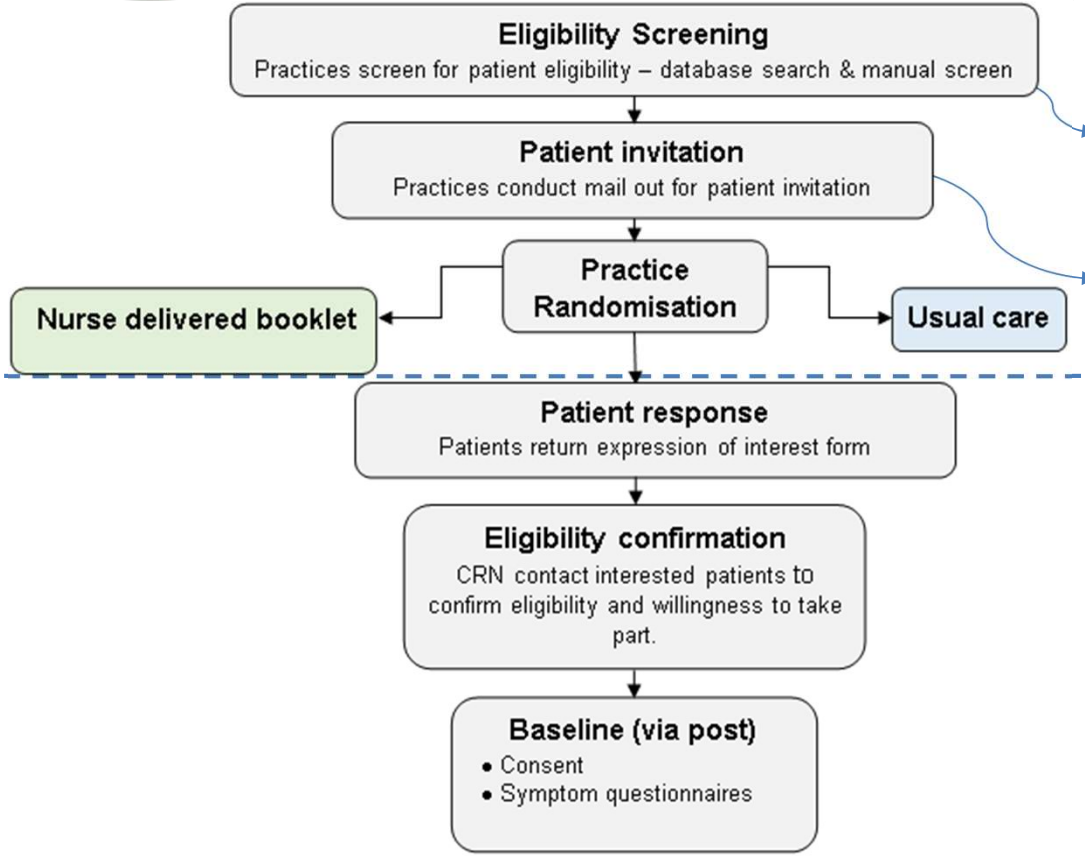
- Design: 2-arm cluster RCT in 30 NHS General Practice sites in England.
- Participants: 1,077 adult men (≥18) with bothersome LUTS.
  - 524 men consented at sites randomised (1:1 ratio) to the intervention arm (n=17) and 553 at sites in the usual care arm (n=13)
- Primary outcome IPSS 12 months post-participant consent
- Secondary outcomes; quality of life, urinary symptoms and LUTS perception, referrals to hospital, adverse events

The TRIUMPH standardised advice booklet for self-management of LUTS was developed with patient and expert input.
GPs or research nurses/ healthcare assistants directed participants to relevant sections following assessment (manualised element)
Follow-up contacts over 12 weeks to assist adherence



“Prevalent LUTS”

Patient recruitment



- Minimised GP practice activity

Single screening process for practices – prevalent cases only

Single mail out conducted using Docmail

Remainder of screening & consent conducted centrally

Baseline Data – balance across arms for all variables

	Intervention		Usual care	
	n[a]		n[a]	
Total number of participants; n		524		553
Demographic characteristics				
Age (years); mean (SD) [min – max]	524	68.95 (9.27) [32 – 94]	553	68.44 (9.25) [30 – 95]
Ethnicity; n(%)	522		550	
White		513 (98.28)		542 (98.55)
Black/African/Caribbean/Black British		1 (0.19)		1 (0.18)
Mixed/Multiple ethnic groups		2 (0.38)		2 (0.36)
Asian/Asian British		3 (0.57)		2 (0.36)
Other ethnic group		2 (0.38)		
Disclosure declined		1 (0.19)		3 (0.55)
Marital status; n(%)	517		543	
Single		21 (4.06)		25 (4.60)
Married		429 (82.98)		440 (81.03)
Civil partnered		7 (1.35)		15 (2.76)
Divorced		31 (6.00)		32 (5.89)
Widowed		27 (5.22)		28 (5.16)
Disclosure declined		2 (0.39)		3 (0.55)
IMD score; median (IQR) [min – max]	506	8.80 (5.75, 13.71) [1.18 – 60.30]	525	9.89 (6.21, 15.45) [1.64 – 55.13]
IMD quintile ; n(%)	506		525	
Quintile 1 (most deprived)		17 (3.36)		21 (4.00)
Quintile 2		33 (6.52)		37 (7.05)
Quintile 3		67 (13.24)		106 (20.19)
Quintile 4		141 (27.87)		136 (25.90)
Quintile 5 (least deprived)		248 (49.01		225 (42.86)
Total IPSS score; mean (SD) [min – max]	501	13.62 (5.83) [1, 33]	541	14.59 (6.58) [2, 34]
IPSS QoL score; mean (SD) [min – max]	516	3.47 (1.19) [0, 6]	551	3.55 (1.13) [0, 6]

Primary outcome: mean and difference in mean patient-reported urinary symptom (IPSS) score at 12 months

	n	Mean	SD	Min - Max	Difference in means[a]	95% CI	p-value	Difference in means[c]	95% CI	p-value
Intervention	442	11.60	6.21	1 - 35	-1.81	(-2.66, -0.95)	<0.001	-1.79	(-2.56, -1.01)	<0.001
Usual care	473	13.88	6.84	0 - 32						
Total N	915	12.78	6.64	0 - 35						
ICC (95% CI)					0.011 (0.001, 0.086)			0.004 (<0.001, 0.251)		

[a] ITT analysis adjusted for baseline IPSS score and minimisation variables

[c] ITT analysis adjusted only for baseline IPSS score

- **Difference in mean IPSS score at 12 months.**
- **The adjusted difference in means is -1.81 IPSS score points, 95% CI: (-2.66, -0.95).**
- **The MCID is thought to be 3.0 score points and the 95% confidence interval does not include this.**

Subgroup analyses

Interaction with treatment arm	N of participants in each level of subgroup	P-value	Interpretation
Nature of LUTS at baseline	Continuous ; Usual care; N=470 Intervention; N=435	**0.971**	There is no evidence that there is a difference in treatment effect in any of the subgroups.
Intervention delivery	TRIUMPH nurse; N= 249 Practice nurse; N= 190 Usual care; N=473	**0.387**	
Preferred method of contact	Phone; N= 310 Text; N= 13 Email; N= 108 Usual care; N=473	**0.245**	

Dose: Difference in mean IPSS compared to those who had no contact visits (usual care + those who didn't have follow-up contacts in intervention arm; N= 478 [473 + 5])	**N of participants in each level of subgroup who provided IPSS at 12 months**	**Difference in means (95% CI)**	**p-value**	Interpretation
One follow-up contact	5	-0.68 (-5.07, 3.70)	0.760	We do not have sufficient data to say anything about treatment effect for those who had one or two follow-up contacts. However, the results for those who had 3 follow-up contacts reflect the primary results
Two follow-up contact	25	-1.27 (-3.41, 0.86)	0.242	
Three follow-up contacts	**407**	**-1.84 (-2.69, -0.99)**	**<0.001**	

TRIUMPH conclusions

- This study developed an intervention which provides a practical resource to support symptom assessment and conservative treatment for LUTS in primary care.
- The TRIUMPH intervention showed a sustained benefit (one year) for men's LUTS and quality of life across a range of outcome measures in a UK primary care setting.
- Difference between treatment groups in mean IPSS score at 12 months is supported by all sensitivity analyses.
- Difference between treatment groups in mean ICIQ-UI-SF and IPSS QoL
- No evidence of a difference between treatment groups in the proportion of patients who had a referral to secondary care for urology.
- The numbers of adverse events were balanced across arms.
- A follow on impact study is introducing these materials into standard GP consultation systems to make them routinely available in all consultations.

European Association of Urology

EUROPEAN UROLOGY 62 (2012) 877–890

A Contemporary Assessment of Nocturia: Definition, Epidemiology, Pathophysiology, and Management—a Systematic Review and Meta-analysis

Jean-Nicolas Cornu [a,], Paul Abrams [b], Christopher R. Chapple [c], Roger R. Dmochowski [d], Gary E. Lemack [e], Martin C. Michel [f], Andrea Tubaro [g], Stephan Madersbacher [h]*

Sleep disorders

Primary sleep disorders: insomnia, periodic leg movements, narcolepsy, arousal disorders (ie, sleepwalking, nightmares)
Secondary sleep disorders: cardiac failure, chronic obstructive pulmonary disease, endocrine disorders
Neurologic conditions: Parkinson disease, dementia, epilepsy
Psychiatric conditions: depression, anxiety
Chronic pain disorders
Alcohol or drug use (consumption or withdrawal)
Medications (corticosteroids, diuretics, β-adrenergic antagonists, thyroid hormones, psychotropics, antiepileptics)

Nocturnal polyuria

Peripheral edema/ANF secretion: Congestive heart failure, autonomic neuropathy, venous stasis, lymphostasis, hepatic failure, hypoalbuminemia/malnutrition,nephrotic syndrome
Excessive evening fluid intake
Nighttime drinking
Circadian defect in secretion or action of AVP (including CNS lesions of the hypothalamic-pituitary axis, Parkinson disease, MS)
Drugs: diuretics, ethanol, steroids
Renal tubular dysfunction (including diabetes mellitus and albuminuria)
Obstructive sleep apnea

No abnormality on FVC

NPI >20–33%

Nocturia

24-h urine volume >40 ml/kg

NBCi >0

24-h polyuria

Diabetes mellitus
Diabetes insipidus
Primary polydipsia
Hypercalcemia
Drugs (diuretics, selective serotonin reuptake inhibitors, calcium channel blockers, tetracycline, lithium, carbonic anhydrase inhibitors)

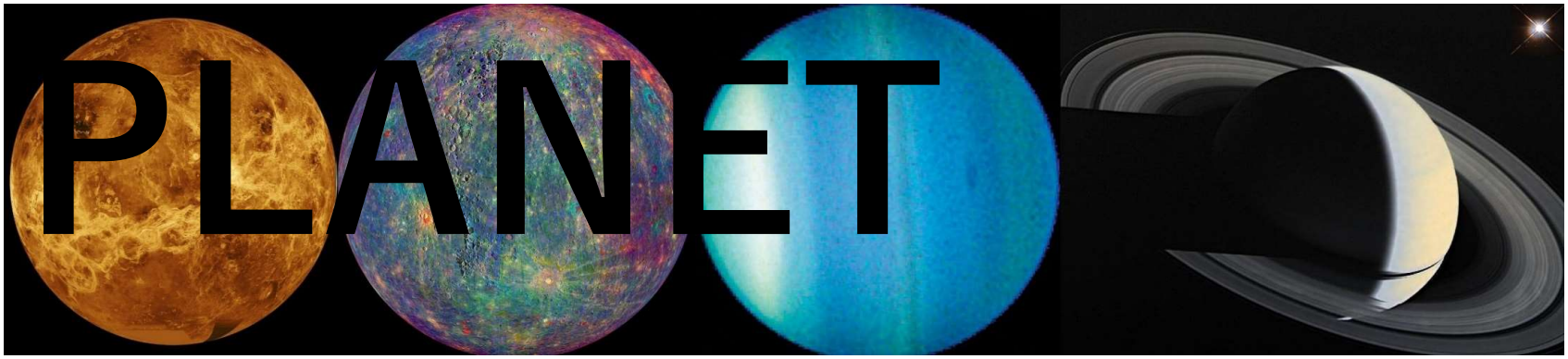
Reduced bladder capacity (functional or extrinsic)

Bladder pain syndrome, BOO, OAB
Neurogenic bladder (Parkinson disease, MS, SCI, stroke)
Lower urinary tract cancer
Lower urinary tract calculi
Bladder aging
Voiding dysfunction with high postvoid residual

Cornu J-N et al.
Eur Urol 2012

PLANET: What is the most appropriate way to assess and treat nocturia?

- For most cases of nocturia, simple advice and behavioural therapy is appropriate
- For some, a medical condition may be the cause
- GPs are often uncertain on the appropriate course of action
  - Referrals to urology, where specialist insight into medical causes is lacking
- Risk of poor treatment selection, cost and adverse outcomes
- ***How can the extensive scope of possible medical causes of nocturia be evaluated efficiently and effectively?***



- **Systematic reviews** searching four databases (Jan 2000-April 2020), **Expert/ public consensus** derived with Nominal Group Technique (NGT)
  - **Endocrine/ Cardiovascular/ Renal** *(due to polyuria)*
  - **Sleep medicine/ Neurological** *(due to sleep disturbance or polyuria)*
- Supplemented by already-published urological SRs to develop an **Overarching Algorithm** using expert/ public NGT consensus,

available at www.sciencedirect.com
journal homepage: www.europeanurology.com/eufocus

EUROPEAN UROLOGY FOCUS 8 (2022) 89–97

Guidelines

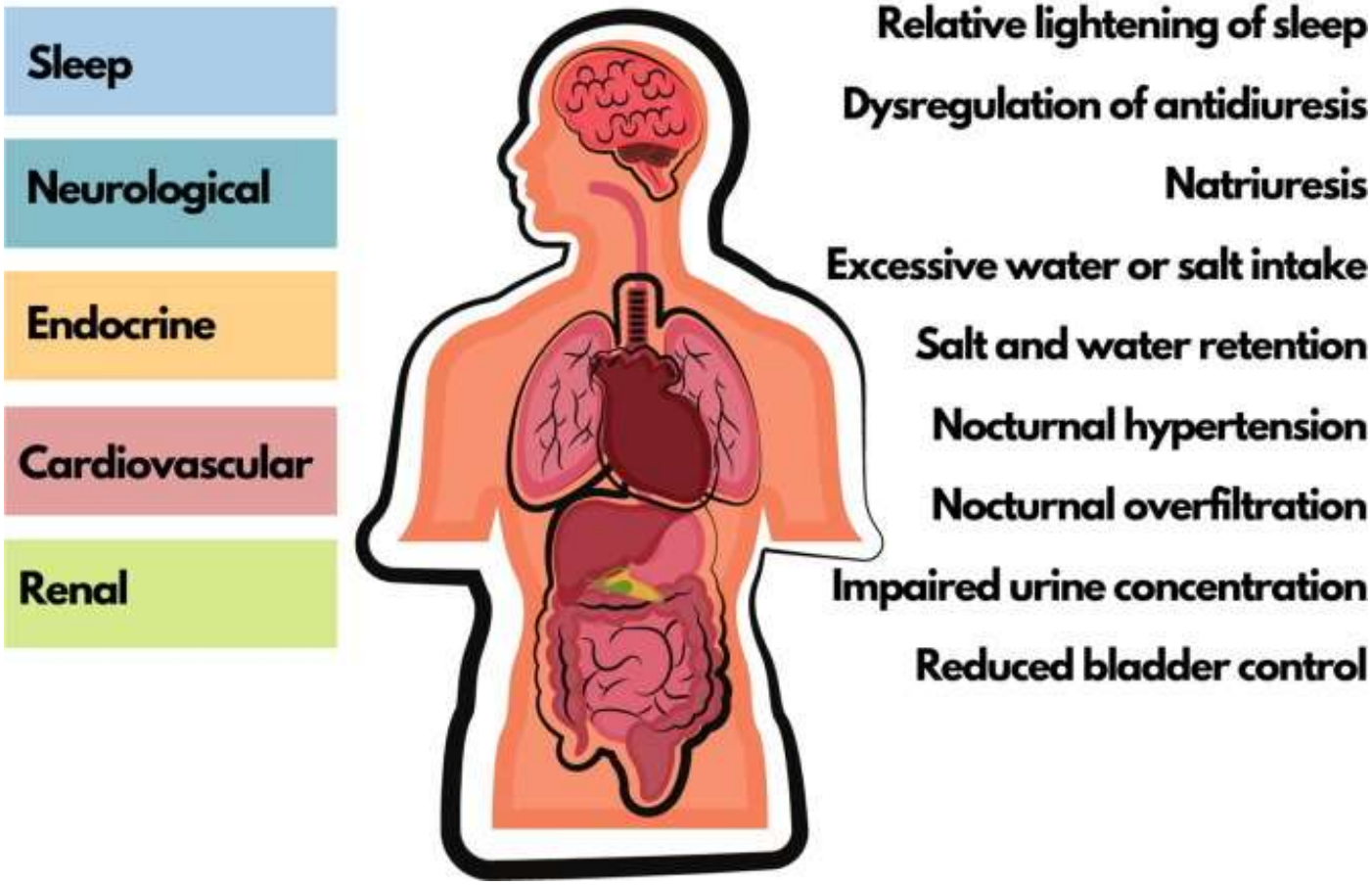
Evaluation and Treatment in Urology for Nocturia Caused by Nonurological Mechanisms: Guidance from the PLANET Study

Matthew Smith [a], Shoba Dawson [a], Robert C. Andrews [b], Sofia H. Eriksson [c], Hugh Selsick [d], Andrew Skyrme-Jones [e], Udaya Udayaraj [f,g], Jonathan Rees [h], Edward Strong [a], Emily J. Henderson [a,i], Marcus J. Drake [j,k,]*

Results; general points

- Nocturia is a multifactorial symptom crossing many medical specialities
- Often there is no single reason easily identified for an individual patient
- The ***medical history can be indicative, but an undiagnosed condition could be present*** (e.g. obstructive sleep apnoea)
- Influence on nocturia can result from ***the condition, from the treatment or from insufficient control*** (e.g. peripheral oedema/ diuretics)
- Positive findings in one system (e.g. restless legs syndrome) should not end ***consideration of all systems***
- Presence of a well-controlled condition (e.g. NIDDM) may be incidental rather than causative
- Rarely, nocturia is a screening opportunity (e.g. CKD), but this is not generally advocated, due to absence of supportive evidence

PLANET: Mechanisms underlying nocturia



Smith M et al. Eur Urol Focus 2022;8:89-97

General treatment points

1. Fluid and diet advice
2. Sleep hygiene advice
3. Medication review. *Review the timing and type of relevant medications*

- Initial treatment may address the “predominant” cause of nocturia
- Any ***drug adjustment generally needs discussion with the prescriber***
- Partnership is needed with the primary care physician

Specific treatment points

Sleep disorders; Primary care therapy of suspected ***obstructive sleep apnoea*** or ***insomnia***

Cardiovascular; Primary care therapy of ***hypertension*** or suspected ***cardiac failure***

Renal; Primary care therapy of ***CKD***

- Evening diuretic or anti-hypertensive can be trialled in exceptional circumstances

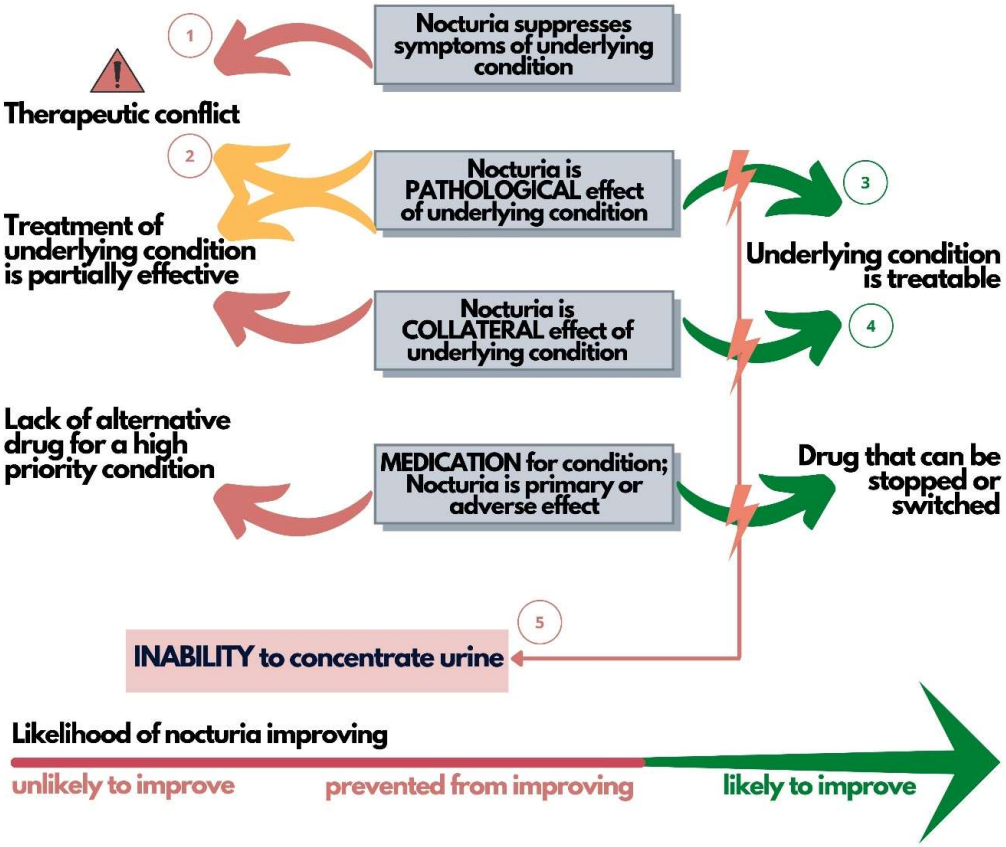
Endocrine system; Correction of specific dysfunction

- Address any cause of excessive thirst (e.g. xerostomia)

Neurological; Improve circumstances that may affect reaching the toilet. Physiotherapy or occupational therapy

- Manage any concomitant ***constipation***

There are many situations in which nocturia cannot be improved



Drake MJ et al. Eur Urol Focus 2022;8:1-3

Should urologists manage nocturia?

- Inherent presumption that urologists should manage nocturia
- “If getting nowhere with treatment, review the diagnosis”
- Can urologists realistically lead on this review?
- If not, who should?

journal homepage: www.europeanurology.com/eufocus

EUROPEAN UROLOGY FOCUS xxx (2022) xxx

Editorial

Nocturia Is an Orphan Symptom Seeking Caring Specialties Willing To Adopt

Marcus J. Drake [a,b,*], *Jonathan Rees* [c], *Emily J. Henderson* [d,e]

Drake MJ et al. Eur Urol Focus 2022;8:1-3

Nocturia conclusions

- No one specialty covers all the potential contributors for nocturia
- Even specialists may not know how conditions they manage could influence urine production
- Five SR/ consensus statements
- Overarching guideline

Smith M et al. Eur Urol Focus 2022;8:89-97

Imperial College London

Net Impact Project

Nocturia Guidance for GPs & primary care professionals

Austen El-Osta & Eva Riboli-Sasco
Self-Care Academic Research Unit (SCARU)
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Professor Marcus Drake
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NET ImpACT

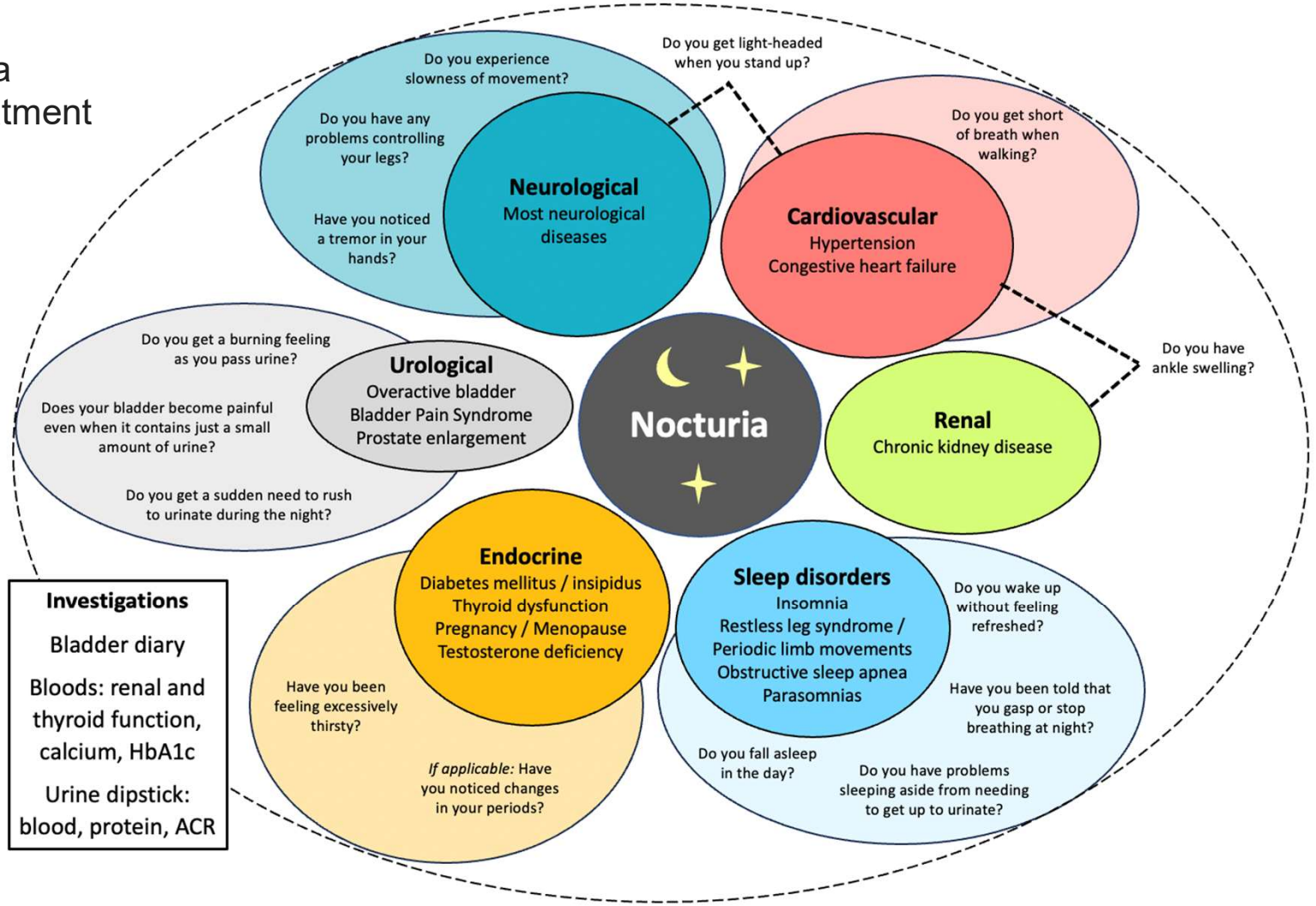
Nocturia may be present if the rate of urine production by the kidneys is increased, either at night or all the time

Nocturia may be driven by **problems in several body systems** affecting urine production or sleep quality

There may be **no clear reason** for an individual patient experiencing nocturia, or it can be **multifactorial**

PLANET diagram: Assessment of Nocturia

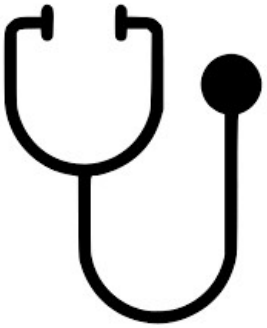
PLANET: PLanning
Appropriate Nocturia
Evaluation and Treatment



How to assess Nocturia?

Review of the patient's **medical history & physical examination** are essential to assess the potential cause(s) of nocturia.

However, they should be supplemented with the following resources…

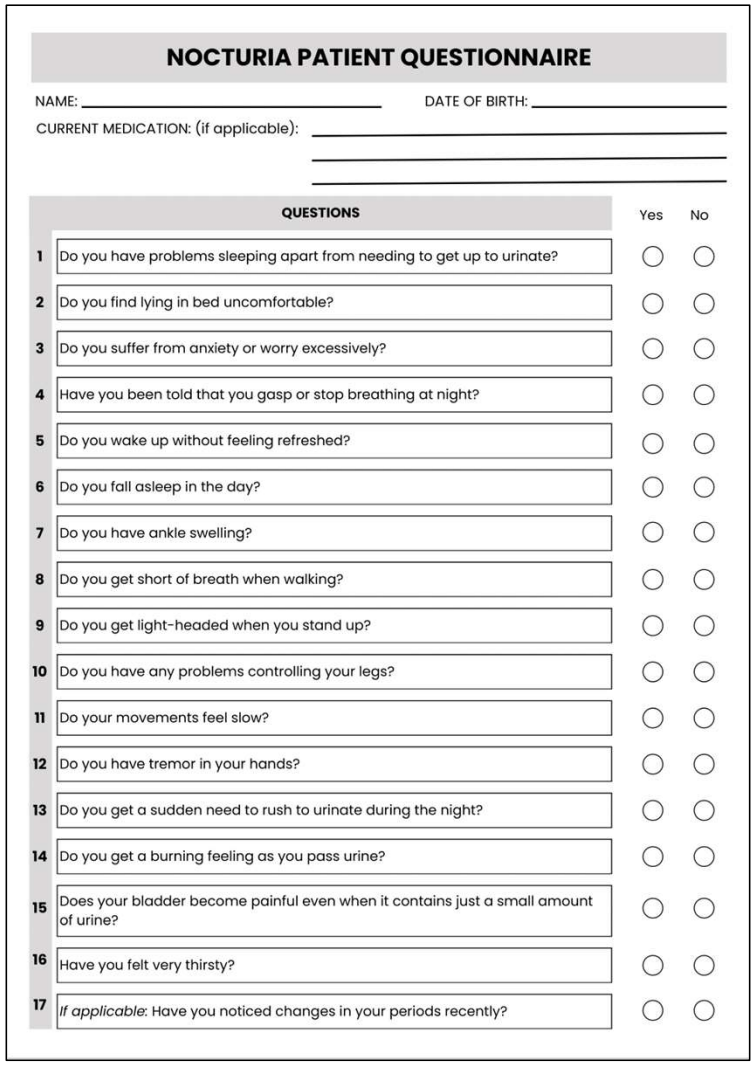


Medical record

Resource 1: Nocturia Patient Questionnaire

Option 1 (Recommended)

Fill in **during the consultation** by asking the questions directly to the patient



NOCTURIA PATIENT QUESTIONNAIRE

NAME: _____ DATE OF BIRTH: _____

CURRENT MEDICATION: (if applicable): _____

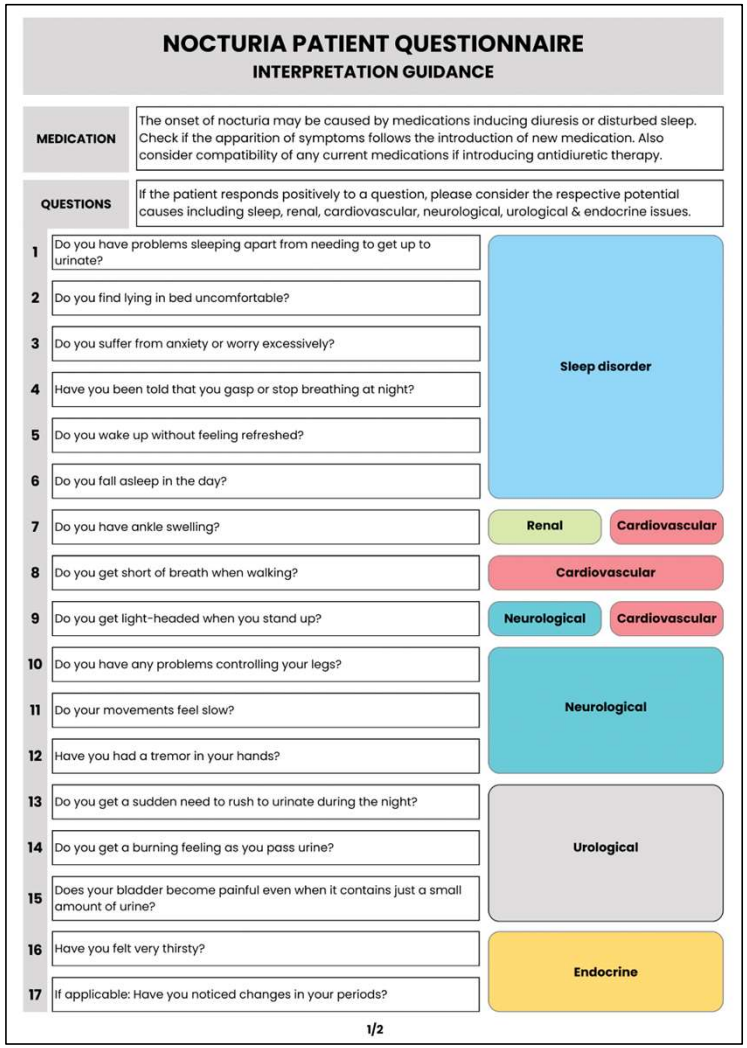
	QUESTIONS	Yes	No
1	Do you have problems sleeping apart from needing to get up to urinate?	○	○
2	Do you find lying in bed uncomfortable?	○	○
3	Do you suffer from anxiety or worry excessively?	○	○
4	Have you been told that you gasp or stop breathing at night?	○	○
5	Do you wake up without feeling refreshed?	○	○
6	Do you fall asleep in the day?	○	○
7	Do you have ankle swelling?	○	○
8	Do you get short of breath when walking?	○	○
9	Do you get light-headed when you stand up?	○	○
10	Do you have any problems controlling your legs?	○	○
11	Do your movements feel slow?	○	○
12	Do you have tremor in your hands?	○	○
13	Do you get a sudden need to rush to urinate during the night?	○	○
14	Do you get a burning feeling as you pass urine?	○	○
15	Does your bladder become painful even when it contains just a small amount of urine?	○	○
16	Have you felt very thirsty?	○	○
17	*If applicable*: Have you noticed changes in your periods recently?	○	○

Option 2

Print or send to the patient for them to fill in **at home**

Nocturia Patient Questionnaire – Interpretation guidance

The patient's responses can guide the identification of the **medications & body system(s)** causing nocturia



NOCTURIA PATIENT QUESTIONNAIRE
INTERPRETATION GUIDANCE

MEDICATION	The onset of nocturia may be caused by medications inducing diuresis or disturbed sleep. Check if the apparition of symptoms follows the introduction of new medication. Also consider compatibility of any current medications if introducing antidiuretic therapy.	
QUESTIONS	If the patient responds positively to a question, please consider the respective potential causes including sleep, renal, cardiovascular, neurological, urological & endocrine issues.	
1	Do you have problems sleeping apart from needing to get up to urinate?	Sleep disorder
2	Do you find lying in bed uncomfortable?	
3	Do you suffer from anxiety or worry excessively?	
4	Have you been told that you gasp or stop breathing at night?	
5	Do you wake up without feeling refreshed?	
6	Do you fall asleep in the day?	
7	Do you have ankle swelling?	Renal, Cardiovascular
8	Do you get short of breath when walking?	Cardiovascular
9	Do you get light-headed when you stand up?	Neurological, Cardiovascular
10	Do you have any problems controlling your legs?	Neurological
11	Do your movements feel slow?	
12	Have you had a tremor in your hands?	
13	Do you get a sudden need to rush to urinate during the night?	Urological
14	Do you get a burning feeling as you pass urine?	
15	Does your bladder become painful even when it contains just a small amount of urine?	
16	Have you felt very thirsty?	Endocrine
17	If applicable: Have you noticed changes in your periods?	

1/2

Sleep disorder

Renal

Cardiovascular

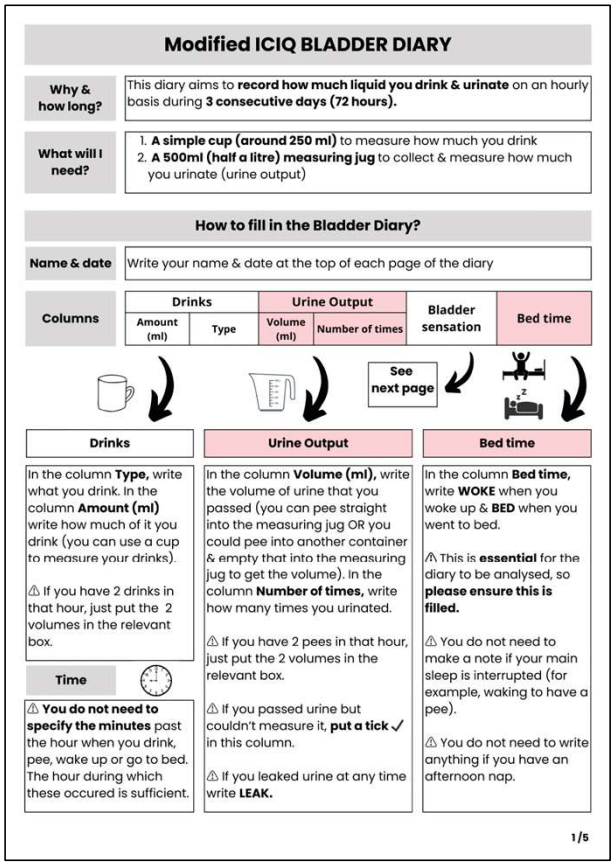
Neurological

Urological

Endocrine

Resource 2: Modified ICIQ Bladder Diary

The Bladder Diary must be filled at home by the patient during **3 consecutive days**



Modified ICIQ BLADDER DIARY

Why & how long?	This diary aims to **record how much liquid you drink & urinate** on an hourly basis during **3 consecutive days (72 hours).**
What will I need?	1. **A simple cup (around 250 ml)** to measure how much you drink 2. **A 500ml (half a litre) measuring jug** to collect & measure how much you urinate (urine output)

How to fill in the Bladder Diary?

Name & date	Write your name & date at the top of each page of the diary

Columns

Drinks		Urine Output		Bladder sensation	Bed time
Amount (ml)	Type	Volume (ml)	Number of times		

See next page

Drinks

In the column **Type,** write what you drink. In the column **Amount (ml)** write how much of it you drink (you can use a cup to measure your drinks).

⚠ If you have 2 drinks in that hour, just put the 2 volumes in the relevant box.

Time

⚠ **You do not need to specify the minutes** past the hour when you drink, pee, wake up or go to bed. The hour during which these occured is sufficient.

Urine Output

In the column **Volume (ml),** write the volume of urine that you passed (you can pee straight into the measuring jug OR you could pee into another container & empty that into the measuring jug to get the volume). In the column **Number of times,** write how many times you urinated.

⚠ If you have 2 pees in that hour, just put the 2 volumes in the relevant box.

⚠ If you passed urine but couldn't measure it, **put a tick** ✓ in this column.

⚠ If you leaked urine at any time write **LEAK.**

Bed time

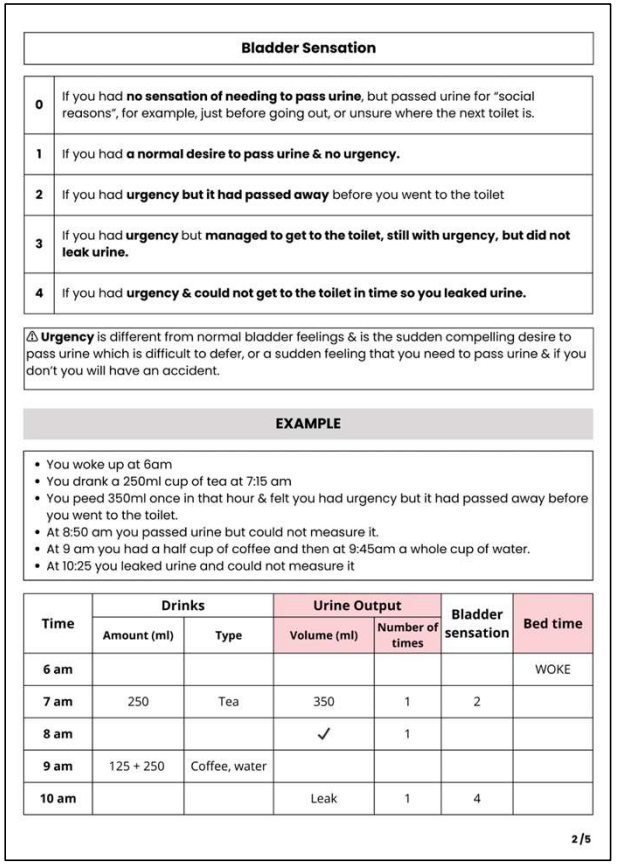
In the column **Bed time,** write **WOKE** when you woke up & **BED** when you went to bed.

⚠ This is **essential** for the diary to be analysed, so **please ensure this is filled.**

⚠ You do not need to make a note if your main sleep is interrupted (for example, waking to have a pee).

⚠ You do not need to write anything if you have an afternoon nap.

1/5



Bladder Sensation

0	If you had **no sensation of needing to pass urine**, but passed urine for "social reasons", for example, just before going out, or unsure where the next toilet is.
1	If you had **a normal desire to pass urine & no urgency.**
2	If you had **urgency but it had passed away** before you went to the toilet
3	If you had **urgency** but **managed to get to the toilet, still with urgency, but did not leak urine.**
4	If you had **urgency & could not get to the toilet in time so you leaked urine.**

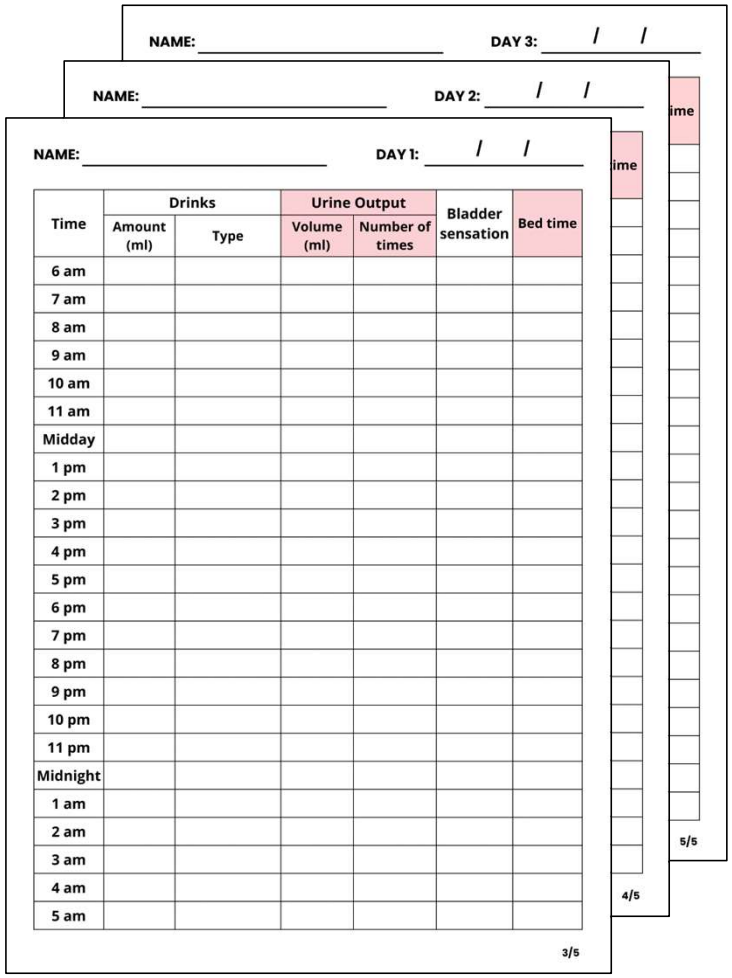
⚠ **Urgency** is different from normal bladder feelings & is the sudden compelling desire to pass urine which is difficult to defer, or a sudden feeling that you need to pass urine & if you don't you will have an accident.

EXAMPLE

- You woke up at 6am
- You drank a 250ml cup of tea at 7:15 am
- You peed 350ml once in that hour & felt you had urgency but it had passed away before you went to the toilet.
- At 8:50 am you passed urine but could not measure it.
- At 9 am you had a half cup of coffee and then at 9:45am a whole cup of water.
- At 10:25 you leaked urine and could not measure it

Time	Drinks		Urine Output		Bladder sensation	Bed time
	Amount (ml)	Type	Volume (ml)	Number of times		
6 am						WOKE
7 am	250	Tea	350	1	2	
8 am			✓	1		
9 am	125 + 250	Coffee, water				
10 am			Leak	1	4	

2/5



NAME: _____ DAY 3: / /

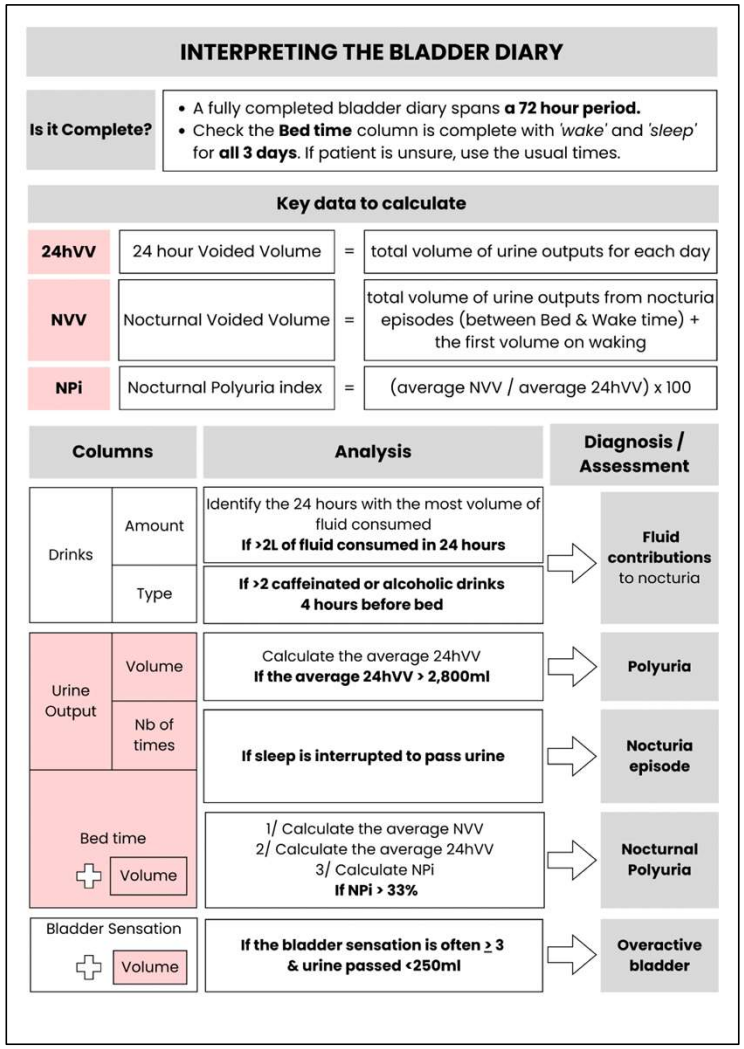
NAME: _____ DAY 2: / /

NAME: _____ DAY 1: / /

Time	Drinks		Urine Output		Bladder sensation	Bed time
	Amount (ml)	Type	Volume (ml)	Number of times		
6 am						
7 am						
8 am						
9 am						
10 am						
11 am						
Midday						
1 pm						
2 pm						
3 pm						
4 pm						
5 pm						
6 pm						
7 pm						
8 pm						
9 pm						
10 pm						
11 pm						
Midnight						
1 am						
2 am						
3 am						
4 am						
5 am						

3/5

Modified ICIQ Bladder Diary – Interpretation guidance



INTERPRETING THE BLADDER DIARY

Is it Complete?	• A fully completed bladder diary spans **a 72 hour period.** • Check the **Bed time** column is complete with *'wake'* and *'sleep'* for **all 3 days**. If patient is unsure, use the usual times.

Key data to calculate

24hVV	24 hour Voided Volume	=	total volume of urine outputs for each day
NVV	Nocturnal Voided Volume	=	total volume of urine outputs from nocturia episodes (between Bed & Wake time) + the first volume on waking
NPi	Nocturnal Polyuria index	=	(average NVV / average 24hVV) x 100

Columns		Analysis	Diagnosis / Assessment
Drinks	Amount	Identify the 24 hours with the most volume of fluid consumed **If >2L of fluid consumed in 24 hours**	**Fluid contributions** to nocturia
	Type	**If >2 caffeinated or alcoholic drinks 4 hours before bed**	
Urine Output	Volume	Calculate the average 24hVV **If the average 24hVV > 2,800ml**	**Polyuria**
	Nb of times	**If sleep is interrupted to pass urine**	**Nocturia episode**
Bed time + Volume		1/ Calculate the average NVV 2/ Calculate the average 24hVV 3/ Calculate NPi **If NPi > 33%**	**Nocturnal Polyuria**
Bladder Sensation + Volume		**If the bladder sensation is often ≥ 3 & urine passed <250ml**	**Overactive bladder**

A completed Bladder Diary can help you:

- Identify nocturia episodes
- Identify the fluid contributions to nocturia
- Diagnose polyuria & nocturnal polyuria
- Assess whether the patient has an overactive bladder

Referrals

Referral to urology is inappropriate if the nocturia is due to a non-urological medical problem affecting urine production or sleep

Referrals to secondary care should be **in line with guidance for the causative condition**

NET ImpACT considerations

- Patient self-care can make a big difference for some, but not all
- If nocturia isn’t bothersome, don’t investigate in detail or aim to treat
- Some causes of nocturia cannot be treated effectively or safely

2010	Oxybutynin 5 mg
2011	Tamsulosin 400 mcg
2011	Finasteride 5 mg (4 months)
2012	Indapamide 2.5 mg
2012	Desmopressin 200 mcg x 2
2013	Furosemide 20 mg
2013	Solifenacin 5 mg
2013	Fesoterodine 4mg
2014	Furosemide 20 mg (again)
2014	Trospium Chloride 60mg
2014	Mirabegron 50mg

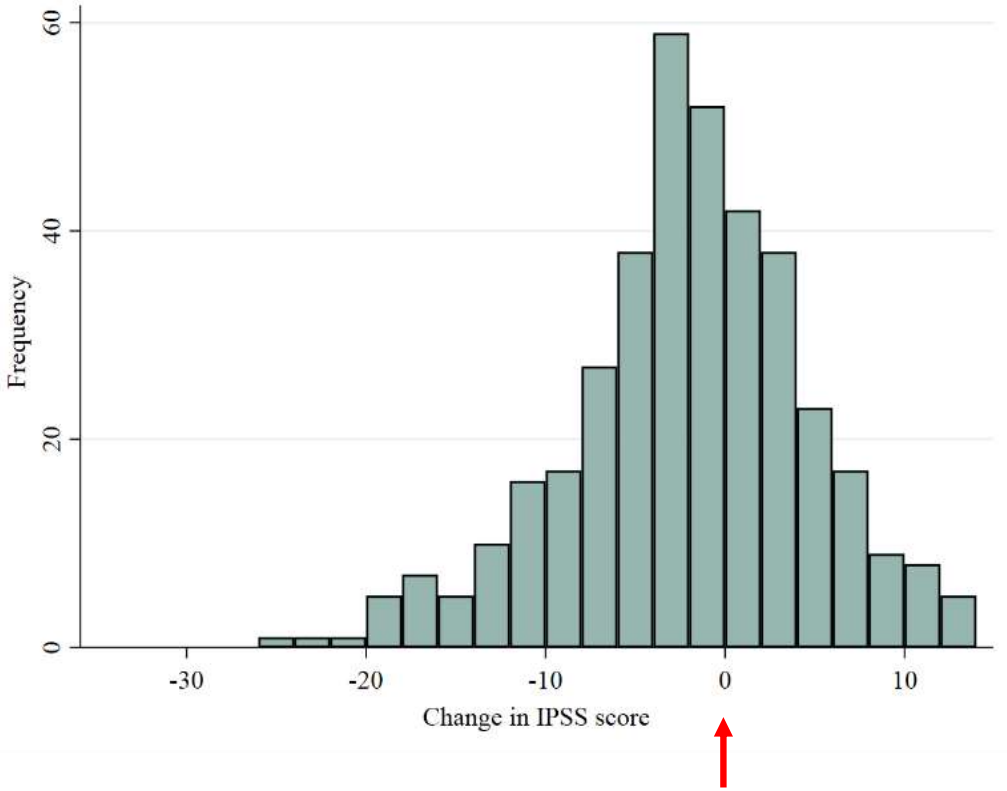
Routine care arm

- History/ Exam
- Symptom score
- Urinalysis
- Flow rate
- Bladder diary

Urodynamics arm

- Routine care tests + urodynamics

IPSS scores after surgery



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Platinum Priority – Voiding Dysfunction

Editorial by Gopal H. Badlani on pp. 711–712 of this issue

Diagnostic Assessment of Lower Urinary Tract Symptoms in Men Considering Prostate Surgery: A Noninferiority Randomised Controlled Trial of Urodynamics in 26 Hospitals

Marcus J. Drake [a,b,], Amanda L. Lewis [c,d], Grace J. Young [c,d], Paul Abrams [b], Peter S. Blair [c,d], Christopher Chapple [e], Cathryn M.A. Glazener [f,†], Jeremy Horwood [c,d], John S. McGrath [g], Sian Noble [d], Gordon T. Taylor [h,], J. Athene Lane [c,d]*

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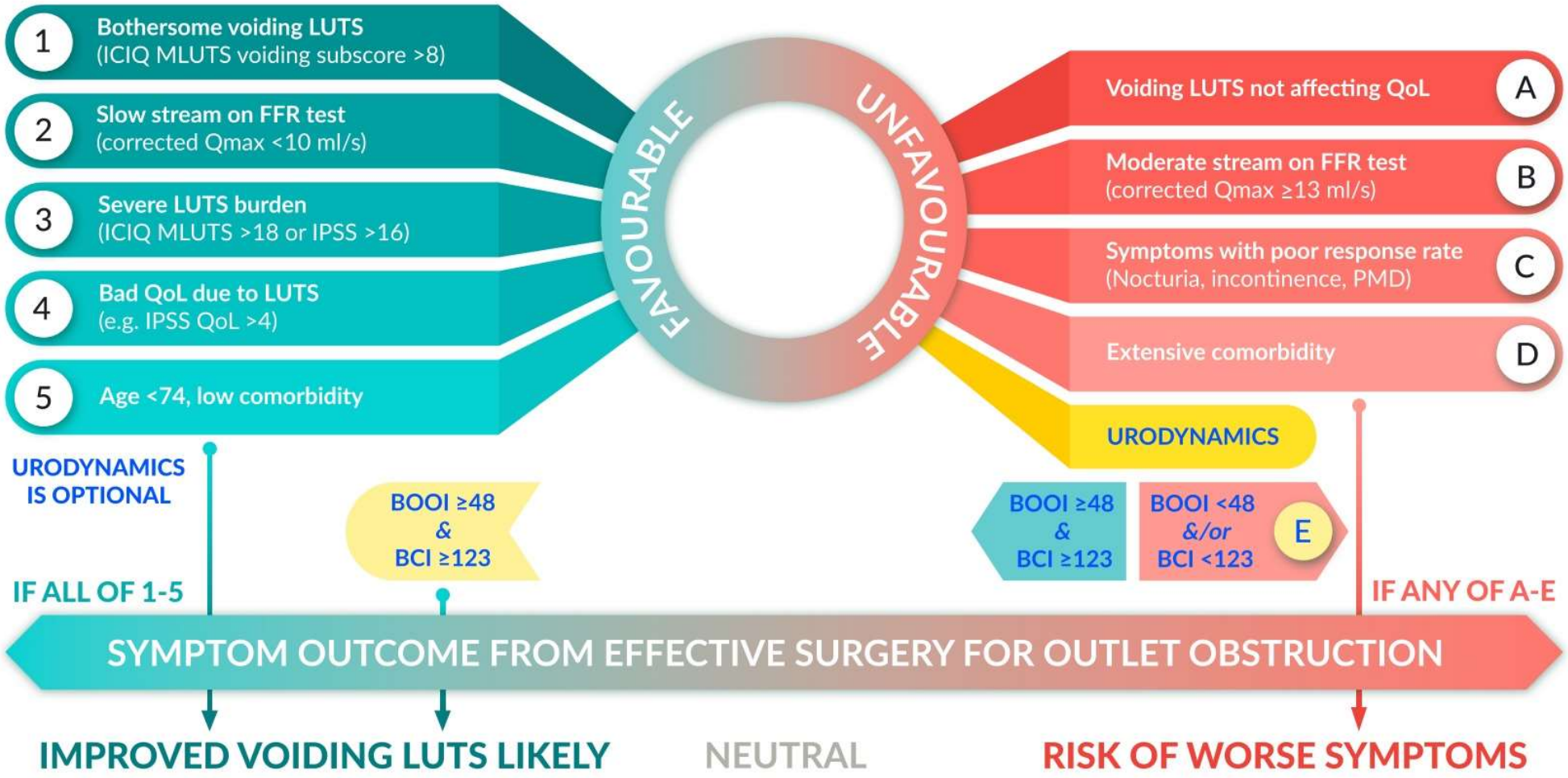
BASELINE ASSESSMENT

PREDICTING SURGERY OUTCOME FOR MALE LUTS



Conclusions

- “LUTS” might be a misleading term for increased frequency and/or nocturia- *urology may not be suitable*
- History, symptom score and bladder diary can suggest issues of fluid handling and sleep disturbance
- NET ImpACT resources for assessing people with nocturia to help consider a range of influence
- Self care; the TRIUMPH booklet for men with LUTS shows sustained reduction in LUTS vs standard care

https://www.imperial.ac.uk/department-surgery-cancer/research/surgery/groups/functional-urology/