THE BRITISH ASSOCIATION OF UROLOGICAL SURGEONS

RCS ADVANCING SURGICAL STANDARDS

2013

Commissioning guide:

Lower urinary tract symptoms

Sponsoring Organisation: The British Association of Urological Surgeons
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NICE has accredited the process used by Surgical Speciality Associations and Royal College of Surgeons to produce its Commissioning guidance. Accreditation is valid for 5 years from September 2012. More information on accreditation can be viewed at www.nice.org.uk/accreditation

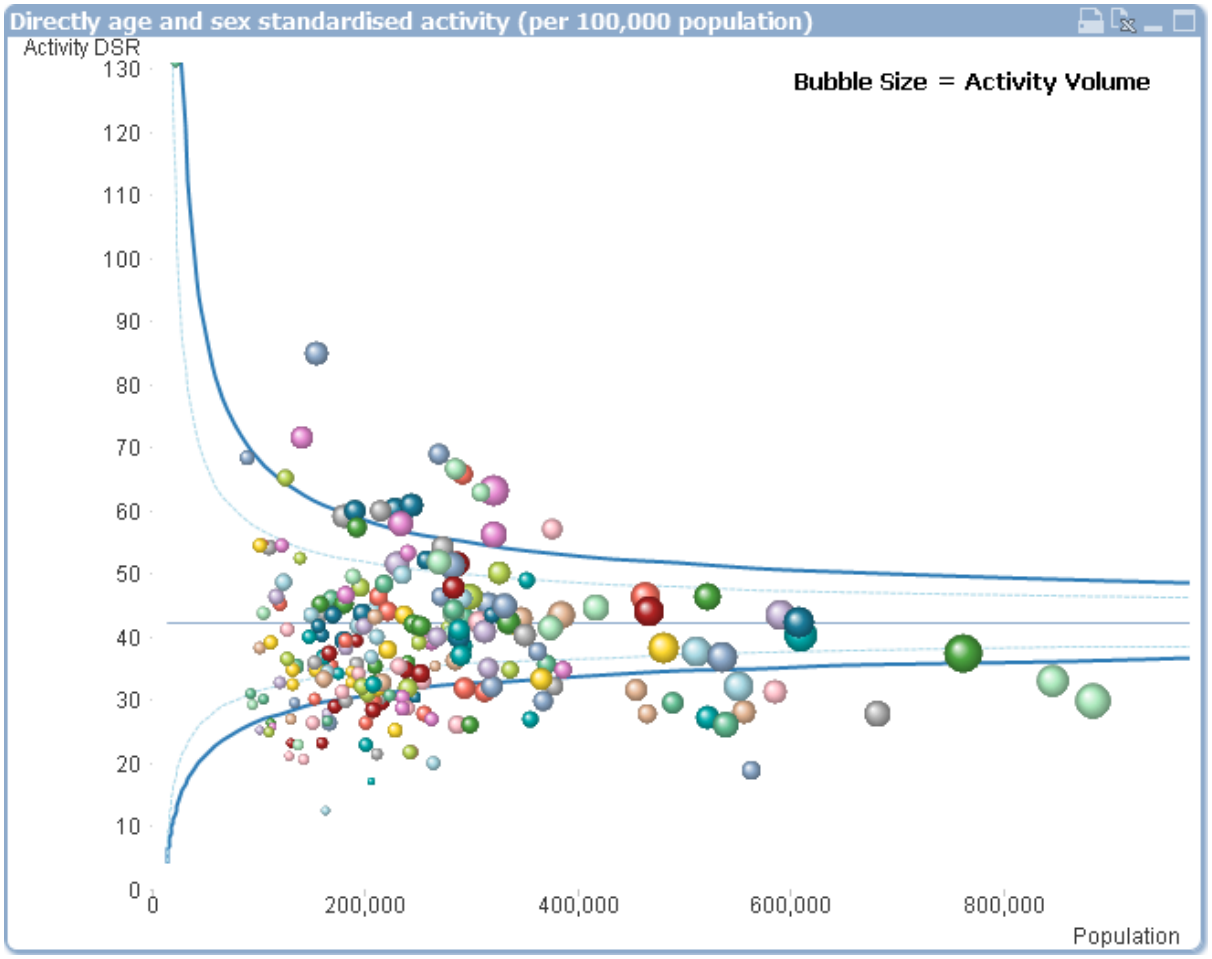
Contents

Glossary

Term	Definition
TURP	Transurethral Resection of the Prostate
TUVP	Transurethral electrovaporization of the prostate
HoLEP	Holmium Laser Enucleation of the prostate
BPE	Benign prostatic enlargement
U&E	Urea and Electrolytes
eGFR	Estimated glomerular filtration rate
PSA	Prostate-specific antigen
TUIP	Transurethral incision of the prostate

Introduction

- Lower urinary tract symptoms (LUTS) comprise storage, voiding and post-micturition symptoms affecting the lower urinary tract. There are many possible causes of LUTS such as abnormalities or abnormal function of the prostate, urethra, bladder or sphincters.
- There were over 35,000 procedures for LUTS in England in 2011/12.
- Patient with mild to moderate LUTS and a low 'bother' score should be reassured and offered fluid intake/ lifestyle advice and access to help with relevant physical, emotional, psychological, sexual and social issues.
- Patients should not be referred for uncomplicated LUTS before a trial of conservative management/ drugs.
- Minimally invasive treatments should not be offered as an alternative to TURP, TUVP or HoLEP for LUTS presumed secondary to BPE unless assessed and approved within the NICE process.
- There is over 3 fold variation in procedure rates for LUTS per 100,000 population by clinical commissioning groups (CCGs) across England (see variation plot on adjacent page).



National Variation Plot by CCG for LUTS 2011/12

This graph shows the number of LUTS procedures per 100,000 population per CCG across England. Each bubble represents a CCG, with the size of the bubble representing the number of procedures undertaken. This information is available in an interactive web based tool allowing CCGs to drill down into their own data.

Email: admin@baus.org.uk
www.baus.org.uk

1 High Value Care Pathway for lower urinary tract symptoms

This High Value Care pathway sets the process of treatment for lower urinary tract symptoms, including criteria for referral to specialist, community and/or secondary care.

1.1 Primary Care

Assessment

The initial assessment should include:

- The patient's medical history, including emotional, physical, psychological, sexual, social issues
- A review of all current medication (including herbal/over the counter medicine)
- An abdominal, external genital, and digital rectal examination
- A urine dipstick
- U&E/ eGFR, if you suspect renal impairment
- PSA test (postpone the PSA test for at least one month after treatment of proven UTI)
- Frequency volume chart
- International prostate symptom score (IPSS)

Refer on two-week wait to a team specialising in the management of urological cancer if any of the following symptoms are present:

- A hard, irregular prostate
- A high (or rising) age-specific PSA
- Significant haematuria

Offer all patients:

- Reassurance, fluid intake and lifestyle advice
- Access to help with relevant physical, emotional, psychological, sexual and social issues
- Advice about relevant support groups.

Treatment for bothersome LUTS:

Storage-predominant LUTS (eg frequency and urgency)

For an overactive bladder:

- supervised bladder training
- containment products
- consider anticholinergic drugs

For urinary incontinence:

- temporary containment products (eg pads/ collecting devices)
- external collecting devices (sheath appliances, pubic pressure urinals), or indwelling catheterisation

Voiding-predominant LUTS (eg hesitancy and poor flow)

Consider an alpha blocker or, if the prostate is enlarged (>30g or PSA >1.4ng/ml) 5-alpha reductase inhibitor +/- alpha blocker.

For persistent storage symptoms, consider:

- alpha blocker + anticholinergic
- intermittent bladder catheterisation or indwelling/ suprapubic catheterisation

Refer to specialist community or secondary care provider if:

- bothersome LUTS do not respond to conservative management/ drugs
- retention continues
- LUTS are complicated by recurrent or persistent urinary tract infection
- you suspect renal impairment caused by lower urinary tract dysfunction
- patient expresses preference for surgery

1.2 Specialist community or secondary care provider

Perform an assessment (see above) and

- take a flow-rate and post-void residual volume measurement
- complete a urinary frequency volume chart

Arrange imaging of the upper urinary tract for: **recurrent infection, sterile pyuria, haematuria, profound symptoms, pain, chronic retention.**

For chronic retention (painless large residual volume or palpable/percussable bladder):

- impaired renal function/ hydronephrosis – catheterise, intermittent urethral catheterisation (or indwelling

catheterisation/ surgery)
- normal renal function/ imaging, no LUTS active surveillance or catheterisation – intermittent urethral catheterisation (or indwelling catheterisation/ surgery)
- normal renal function/ imaging, bothersome LUTS – refer to secondary care for consideration of bladder outlet surgery .

Provide management of post-surgical patients in the community.

1.3 Secondary care provider

Surgery for LUTS secondary to BPE

If symptoms are severe or conservative management/ drug treatment is unsuccessful, the following surgical options are available:

- transurethral resection of the prostate (TURP)
- transurethral vaporisation of the prostate (TUVP)
- holmium laser enucleation of the prostate (HoLEP)
- if <30g – transurethral incision of the prostate (TUIP) if <30g
- if >80g – consider open prostatectomy or HoLEP.

Surgery for storage symptoms

If conservative management/ drug treatment is unsuccessful:

For cases of detrusor overactivity:
- bladder wall injection with botulinum toxin (NB Not yet licensed in UK)
- implanted sacral nerve stimulation
- cystoplasty (NB risk of serious complications).

For cases of stress urinary incontinence:
- implantation of an artificial sphincter.

For cases of intractable symptoms:
- urinary diversion .

Discuss the alternatives to and outcomes from surgery. Effectiveness, side effects and long-term risks of surgery are uncertain.

2 Procedures explorer for lower urinary tract symptoms

Users can access further procedure information based on the data available in the quality dashboard to see how individual providers are performing against the indicators. This will enable CCGs to start a conversation with providers who appear to be 'outliers'.

The Procedures Explorer Tool is available via the Royal College of Surgeons website.

3 Quality dashboard for lower urinary tract symptoms

The quality dashboard provides an overview of activity commissioned by CCGs from the relevant pathways, and indicators of the quality of care provided by surgical units**.**

The quality dashboard is available via the Royal College of Surgeons website.

Example Quality Dashboard for Nottingham City CCG:

Lower Urinary Tract Symptoms (Prostatism)	Period	Value	National Mean	Chart	Trend
Activity rate per 100,000 population (DSR)	RY Q4 1112	27.51	36.06		
Average Length of Stay (Days)	RY Q4 1112	2.40	2.80		
7 Day Re-admission rate (%)	RY Q4 1112	7.35%	8.5%		
30 Day Re-admission rate (%)	RY Q4 1112	22.06%	27.88%		
Re-operations within 30 Days (%)	RY Q4 1112	22.06%	27.78%		
Day case rate (%)	RY Q4 1112	0.00	3.01		
In Hospital Mortality Rate (per 1,000 provider spells)	RY Q4 1112	0.00	0.73		

4 Levers for implementation

4.1 Audit and peer review measures

	Standard	Description	Data specification (if required)
Primary care	Assessment	Use the IPSS to assess severity and 'bother' and monitor response to treatment. Do not routinely offer cystoscopy/imaging to men with no evidence of bladder abnormality or flow-rate/post-void residual volume measurement.	
	Referral	Do not refer uncomplicated LUTS before a trial of conservative management +/- drugs unless the patient expresses a preference for surgery.	
	Patient information	Patients should be directed to appropriate information and support groups.	
Community provider	Access	Access to community provider for specialist assessment and non-surgical management of LUTS.	
Secondary care	Intervention	Do not offer minimally invasive treatments (including transurethral needle ablation, transurethral microwave thermotherapy, high-intensity focused ultrasound, transurethral ethanol ablation of the prostate and laser coagulation) as an alternative to TURP, TUVP or HoLOP for LUTS presumed to be secondary to BPE unless assessed and approved within the NICE process.	

4.2 Quality Specification/CQUIN

Measure	Description	Data specification (if required)
Length of stay	Length of stay after TURP	
Emergency readmission	Emergency readmission after TURP	
Reoperation rate at five years		
Mortality rate at 90 days		

5 Directory

5.1 Patient Information for lower urinary tract symptoms

Name	Publisher	Link
Shared decision making	NHS Right Care	http://sdm.rightcare.nhs.uk
Incontinence, urinary	NHS Choices	www.nhschoices.nhs.uk
Lower urinary tract symptoms in men	EMIS	www.patient.co.uk
Prostate symptoms	BAUS	www.baus.org.uk/patients/symptoms/luts.htm
Hyperplasia		http://www.nhs.uk/conditions/Prostate-enlargement/Pages/Introduction.aspx
Benign prostatic	NHS Choices	http://www.nhs.uk/conditions/Prostate-enlargement/Pages/Introduction.aspx

5.2 Clinician information for lower urinary tract symptoms

Name	Publisher	Link
The management of LITS in men (CG97)	NICE	www.nice.org.uk
LUTS in men	NHS Clinical Knowledge Summaries	www.cks.nhs.uk
Male LUTS clinical pathway	Map of Medicine	http://healthguides.mapofmedicine.com
Shared decision making	NHS Right Care	http://sdm.rightcare.nhs.uk

6 Benefits and risks of implementing this guide

Consideration	Benefit	Risk
Patient outcome	Ensure access to effective conservative, medical and surgical therapy	Clinical deterioration
Patient experience	Improve access to patient information, support groups	
Equity of access	Improve access to effective procedures	
Resource impact	Reduce unnecessary referral and intervention	Resource required to establish community specialist provider

7 Further information

7.1 Research recommendations (PICO: Population, Intervention, Comparison, Outcome)

- Cohort study – untreated LUTS
- Value of frequency/volume charts in primary/community care
- Use of IPSS or other validated scores to guide referral and management
- PROMS – SHEFFPAT after non-operative and operative intervention
- TURP – comparison of techniques, early discharge with catheter
- Impact of a community LUTS service on referrals to secondary care

7.2 Other recommendations

- Improved patient information: to include information about relevant physical, emotional, psychological, sexual and social issues.

7.3 Evidence base

1. National Clinical Guideline Centre at the Royal College of Physicians. The management of lower urinary tract symptoms in men (full guidance) 2010.
2. National Institute for Health and Clinical Excellence. CG97: The management of lower urinary tract symptoms in men. (2010)
3. Clinical Knowledge Summaries. LUTS in men.

4. Hoffman RM, Monga M, Elliott SP, MacDonald R, Wilt T. Microwave thermotherapy for benign prostatic hyperplasia. Cochrane Database of Systematic Reviews 2007, Issue 4. Art. No.: CD004135. DOI: 10.1002/14651858.CD004135.pub2.
5. Tacklind J, Fink HA, MacDonald R, Rutks I, Wilt TJ. Finasteride for benign prostatic hyperplasia. Cochrane Database of Systematic Reviews 2010, Issue 10. Art. No.: CD006015. DOI: 10.1002/14651858.CD006015.pub3.
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9. Wilt T, Howe RW, Rutks I, MacDonald R. Terazosin for benign prostatic hyperplasia. Cochrane Database of Systematic Reviews 2000, CD003851
10. Duthie JB, Herbison GP, Wilson DI, Wilson D. Botulinum toxin injections for adults with overactive bladder syndrome. Cochrane Database of Systematic Reviews 2007, CD005493

7.4 Guide development group for lower urinary tract symptoms

A commissioning guide development group was established to review and advise on the content of the commissioning guide. This group met once, with additional interaction taking place via email.

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Caroline Wise	Clinical Development Manager	NEMs
Malcolm Qualie	Head of Health Policy,	EMSCG
Shirley Harris	Lay representative	

7.5 Funding statement

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- DH Right Care funded the costs of the guide development group, literature searches and contributed towards administrative costs.
- The Royal College of Surgeons of England and the British Association of Urological Surgeons provided staff to support the guideline development.

7.6 Conflict of Interest Statement

Individuals involved in the development and formal peer review of commissioning guides are asked to complete a conflict of interest declaration. It is noted that declaring a conflict of interest does not imply that the individual has been influenced by his or her secondary interest. It is intended to make interests (financial or otherwise) more transparent and to allow others to have knowledge of the interest.

- No interests were declared by the group.