

Management Pathway for LUTS & BPH

Modernized Clinical Flow Chart in Alignment with NICE NG59 & Suspected Cancer (mpMRI) Protocols

Patient Presentation

- Seeking reassurance for prostate health / cancer risk
- Reporting storage, voiding, or post-micturition symptoms

1. Initial Comprehensive Assessment (Primary Care)

Clinical Workup:

- Validate history (storage/voiding) & review drugs
- Complete **IPSS Score** (Severity & QoL)
- Complete **Urinary Frequency-Volume Chart**

Physical Exam & Labs:

- **Digital Rectal Exam (DRE)** & Abdomen exam
- **Urine Dipstick** (Rule out UTI / Haematuria)
- **PSA Blood Test** (Offer after formal counselling)

▼ TRIAGE BASED ON CLINICAL FINDINGS & AGE-RELATED PSA ▼

A. Immediate / Urgent Referral

2WW / Urgent Criteria

- **Malignancy Suspicion (2WW):**
 - DRE findings suspicious for cancer
 - PSA above age thresholds:
 - 50-59 yrs: ≥ 3.0 ng/ml
 - 60-69 yrs: ≥ 4.0 ng/ml
 - 70+ yrs: > 5.0 ng/ml
- **Complicated LUTS (Urgent):**
 - Chronic or acute urinary retention
 - Palpable bladder or nocturnal enuresis
 - Recurrent/Persistent UTI with haematuria
 - Renal impairment due to lower urinary tract dysfunction

B. Mild Symptoms / Unbothered

IPSS ≤ 7 (Mild)

- Benign, symmetrical DRE findings
- Impalpable bladder & clear dipstick
- PSA within safe age-adjusted range
- Low impact on Quality of Life

Conservative Management

- Lifestyle & fluid intake modification (reduce caffeine, alcohol, evening fluids)
- Bladder training for storage symptoms
- Teach **urethral milking** for post-micturition dribble

C. Moderate to Severe LUTS

IPSS 8-19 to ≥ 20

- Normal or benign enlarged DRE
- PSA normal (or cancer formally excluded)
- Patient significantly bothered by symptoms

Tailored Medical Management

- **Voiding:** First-line **Alpha-blocker** (Tamsulosin). Review in 4–6 weeks.
- **Progression Risk:** (Prostate $>30g$ or PSA >1.4 ng/ml): Add **5-Alpha-reductase Inhibitor (5-ARI)** (Finasteride). Review in 3–6 months.
- **Storage/OAB:** Add **Antimuscarinic** or Mirabegron if single therapy fails.

Refer to Secondary Care Urology

Suspected Cancer Pathway (NG131): Pre-biopsy **Multiparametric MRI (mpMRI)** first. Biopsy is executed only if mpMRI Likert/PI-RADS score ≥ 3 .

Watchful Waiting

Review in 12 Months

Re-assess IPSS score and symptoms. Escalate to medical track or refer if deterioration occurs.

Structured Primary Care Review

- If on a 5-ARI for >6 months, **double the raw PSA value** for accurate threshold matching.
- **Refer to Urology if:** Inadequate symptom relief on dual therapy, or confirmed PSA rise $>20\%$ while on 5-ARI.

Management Pathway for LUTS & BPH (Continued)

2. Secondary Care Diagnostic & Surgical Interventions

Advanced Urology Diagnostics:

When primary care treatment fails, or if baseline presentation indicates severe complications, patients undergo advanced objective assessment in secondary care. This includes specialized **Flow studies (uroflowmetry)**, ultrasonic **Post-Void Residual (PVR)** tracking, multi-channel **Urodynamic profiling**, and targeted, transperineal **multiparametric MRI (mpMRI)-guided template needle biopsies** if cancer tracking thresholds are crossed.

Modern Surgical Interventions:

Indicated for severe or progressive LUTS refractory to maximum medical management, or when structural bladder outflow obstruction causes recurrent infection, stones, or high-pressure retention. Options are mapped carefully to prostate gland tissue size and anatomy:

- Standard **Transurethral Resection of the Prostate (TURP)**
- **Holmium Laser Enucleation (HoLEP)** for large glands (>80g)
- Minimally invasive options: **Rezum** steam ablation or **Urolift** mechanical implants for preservation of ejaculatory function

Clinical & Evidence Sources: Recompiled for medical accuracy based on the British Association of Urological Surgeons (BAUS) data models, regional NHS integrated care board (ICB) guidelines, and national standards from **NICE Clinical Guidelines NG59** (Lower urinary tract symptoms in men: assessment and management) and **NICE Clinical Guidelines NG131** (Prostate cancer: diagnosis and management).