Patient Mining Guide for Aquablation

CPT 0421T prior to 1/1/2026 CPT 52597 after 1/1/2026

Purpose: Identify male patients within a physician's practice who are clinically appropriate for Aquablation therapy for BPH, using structured and unstructured data from the EHR or PM system.

Step 1: Define Aquablation Clinical Eligibility Criteria

Include patients who meet the following:

- **Gender:** Male
- **Age:** ≥ 45 years old
- **Diagnosis Codes:**
  - N40.1 – Benign Prostatic Hyperplasia (BPH)
  - R33.8 – Urinary retention
  - R35.0 – Urgency
  - R39.14 – Feeling of incomplete emptying
- **Symptoms (in chart):**
  - Nocturia, urgency, frequency, weak stream, straining, or incomplete voiding
- **Objective Findings (if documented):**
  - Post-Void Residual (PVR) > 150 mL
  - Qmax < 15 mL/s (from uroflow study)
  - IPSS Score ≥ 18 (moderate to severe LUTS)

Step 2: Identify Failed Medical Management

Patients must have a history of failed or discontinued medical therapy, including one or more of the following drug classes:

Drug Class	Common Medications
Alpha-1 Blockers	Tamsulosin (Flomax), Alfuzosin, Doxazosin, Terazosin, Silodosin
5-Alpha Reductase Inhibitors (5-ARI)	Finasteride (Proscar), Dutasteride (Avodart)
Combination Therapy	Jalyn (Dutasteride + Tamsulosin)
Other (optional)	Mirabegron, Oxybutynin, Tolterodine – for patients with mixed LUTS

Patients who have **no symptom relief**, **stopped due to side effects**, or **remain catheter-dependent** qualify as **medication failures**.

Step 3: Run EHR or Practice Management System Queries

Ask your analyst or EHR specialist to extract the following data fields:

Field	Filter Criteria
Gender	Male
Age	≥ 45
Visit Date	Seen within last 12–24 months
ICD-10 Codes	N40.1, R33.8, R39.14, R35.0
Medication History	History of drugs listed in Step 2, marked discontinued, inactive, or non-effective
Qmax (Uroflow)	< 15 mL/s (if documented)
PVR	> 150 mL
IPSS Score	≥ 18
Prior Procedures	Exclude CPT: 0421T, 52597, 52601, 52648, 52649
Chart Keywords	"Nocturia," "failed Flomax," "urinary retention," "incomplete emptying," "catheter"

Step 4: Stratify and Export Your Patient List

Export your eligible list into an Excel file or EHR work queue with the following columns:

- Patient Name
- DOB / Age
- Last Visit Date
- Diagnosis Codes
- Symptoms / Keywords
- Medications Tried
- IPSS (if available)
- PVR / Qmax
- Flag for Prior Urology Consult

Optional: Color-code patients by priority (e.g., IPSS > 25, catheter use, multiple failed meds)

Step 5: Provider Validation

- Review the list with the urologist or care team.
- Remove any patients with contraindications or complex comorbidities.
- Flag those appropriate for outreach and follow-up.

Step 6: Outreach and Scheduling

Once validated:

- Send educational letters or portal messages.
- Schedule consults or telehealth to discuss treatment options.
- Track referral to procedure pathway.

Compliance Notes

- Ensure all data queries and outreach follow **HIPAA compliance standards**.
- Maintain audit trails for clinical documentation supporting medical necessity

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Tips for Using EHR and Practice Management Systems

EPIC (SlicerDicer or Reporting Workbench)

- Use **SlicerDicer** for quick cohort building based on demographics, diagnoses, and medication history.
- **Reporting Workbench** is better for custom queries using flow sheets, IPSS scores, and procedure exclusions.
- Utilize **SmartPhrases** or **SmartLists** for symptom documentation consistency.

CERNER (PowerInsight or Discern Analytics)

- Create a **PowerInsight report** for patients with BPH diagnosis and failed medications.
- Use **Discern Rules** to automate exclusion logic for patients who had TURP or Aquablation.
- Review scanned labs for uroflow/PVR values or use structured result fields if mapped.

ATHENA (Clinical Reporting or Quality Module)

- Use **Clinical Reporting** to filter by ICD-10 codes and medication history.
- **Visit Reason**, **Problem List**, and **Chart Note search** can reveal keywords like "nocturia" or "retention."
- Athena can export lists directly for bulk messaging through the patient portal or care team follow-up.