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Management Down Under: An Australian Perspective on Benign Prostatic Obstruction

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1. Introduction

Benign prostatic obstruction (BPO) typically presents with lower urinary tract symptoms (LUTS) such as nocturia and a slow urinary stream. It is defined by the International Continence Society as a "term to describe bladder outlet obstruction (BOO) secondary to benign prostatic enlargement, and therefore usually due to benign prostatic hypertrophy (BPH) [1]". It affects a wide range of patients regardless of age, ethnicity, education, and socio-economic status and is associated with increased rates of mental health issues such as depression, anxiety, social relationship impairment and reduced self-esteem [2]. Australia's healthcare system is currently a mix of public and private organisations, with Medicare as the universal health insurance scheme at its core. No health system is perfect, and although Australia's system makes it the envy of many other countries, it continues to face several ongoing challenges. This paper describes how Australia's healthcare system manages the treatment of men with BPO.

2. The Australian Healthcare Model

Australia uses the universal health insurance scheme, Medicare, to provide a wide range of health services including specialist consultations, and a range of prescription medications and surgical services, at little to no cost to Australian citizens, permanent residents, and some overseas visitors. Medicare, funded through a 2% levy on taxable income (with additional surcharges for high-income earners), spent an average of $9365 AUD per person between 2021 and 2022 [3]. Therefore, it is no surprise that the Australian public healthcare system is subject to limited resources, requiring strict prioritisation and waitlisting for non-urgent care based upon clinical acuity. If a non-life-threatening condition is urgent, it will be added to the waitlist for review within 30 days, whilst semi-urgent conditions may wait up to 90 days and non-urgent conditions may be reviewed in 365 days.

The alternative in Australia is the private healthcare system, whereby individuals purchase an insurance policy with an assigned premium that allows them their choice of treating doctor, time for treatment and a wide range of treatment options. It allows access to provision of care in private hospitals that are operated by independent companies that provide services partially funded by Medicare, with insurance policies providing capped hospital excesses and some out-of-pocket expenses for the individual, such as co-pays or deductibles.

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3. Benign Prostatic Obstruction

BPO secondary to BPH has a prevalence of 1.95% in Australia, which is lower than the 2.48% prevalence globally [4]. The typical prostate volume ranges between 24 and 38 cubic centimetres (cc) in men aged 50–80 [5]. In Australia, men suspected to have symptomatic BPO will be referred by their general practitioners to a urologist to have a comprehensive LUTS history taken, augmented by a bladder diary and validated questionnaires such as the International Prostate Symptom Score (IPSS) and ICIQ-MLUTS. Examination and investigations include a digital rectal examination, post-void residual test, urine analysis and culture, baseline renal function and ultrasound of the renal tract to assess for prostate volume and the upper tracts for severe obstruction [6]. Men are screened for prostate cancer after thorough discussion regarding the potential benefits and risks involved, and a shared decision is made with the patient [7].

4. Management of Benign Prostatic Obstruction in Australia

Australian management of BPH can be subdivided into stepwise options including conservative, medical, diversion, and surgical possibilities. Conservative management is most suitable for patients with mild, non-bothersome symptoms and involves close surveillance of symptoms through regular follow-ups. Medical therapies for BPO include 5α-reductase inhibitors, α1-adrenoceptor antagonists, or a combination of both. In Australia, combination therapy (dutasteride/tamsulosin) is preferentially prescribed, as it is subsidised by the Pharmaceutical Benefits Scheme (PBS) [8]. Diversion options include urethral or suprapubic catheter insertions for patients unable to undergo surgical management.

There are several techniques for the surgical management of BPO. The gold standard treatment is a transurethral resection of the prostate (TURP) via either bipolar or monopolar resection. Prostatic enucleation/ablation can also be achieved with the use of laser technology such as holmium (HoLEP), thulium (ThuLEP) and photo-selective vaporisation of the prostate (Greenlight™ and Evolve®). Transurethral incision of the prostate (TUIP) is an option in patients with small bi-lobar prostates. For very large prostatic glands, patients may be offered a simple prostatectomy via either an open or a robotic approach. Similarly, frail patients may be offered a prostatic artery embolisation. Within recent years, technologies and devices have become readily available that offer minimally invasive options such as water vapour therapy (Rezum®), prostatic urethral lift (Urolift®), and temporary implanted prostatic devices (iTInd®).

The options available for surgical intervention in Australia are dependent on patient factors, equipment availability and private health cover access. A total of 11,384 TURPs were performed in 2023, which approximated the same amount performed annually within the 10 years prior; however, the number performed per capita has been decreasing yearly since 2010 (Figure 1), despite the ageing Australian population [9]. This is likely due to the introduction of other technologies to the private sector. In March 2024, two new Medicare Benefits Schedule (MBS) codes for water vapour therapy and prostatic urethral lift were introduced, whilst the MBS codes for transurethral microwave thermotherapy (TUMT) and transurethral radio-frequency needle ablation (TUNA) were removed because of concerns about reduced efficacy and declining service volume [10]. This altered the range of previously privately funded treatment options available for patients in the public sector, with a noticeable increase in patients undergoing water vapour therapy and prostatic urethral lift (Figure 1).

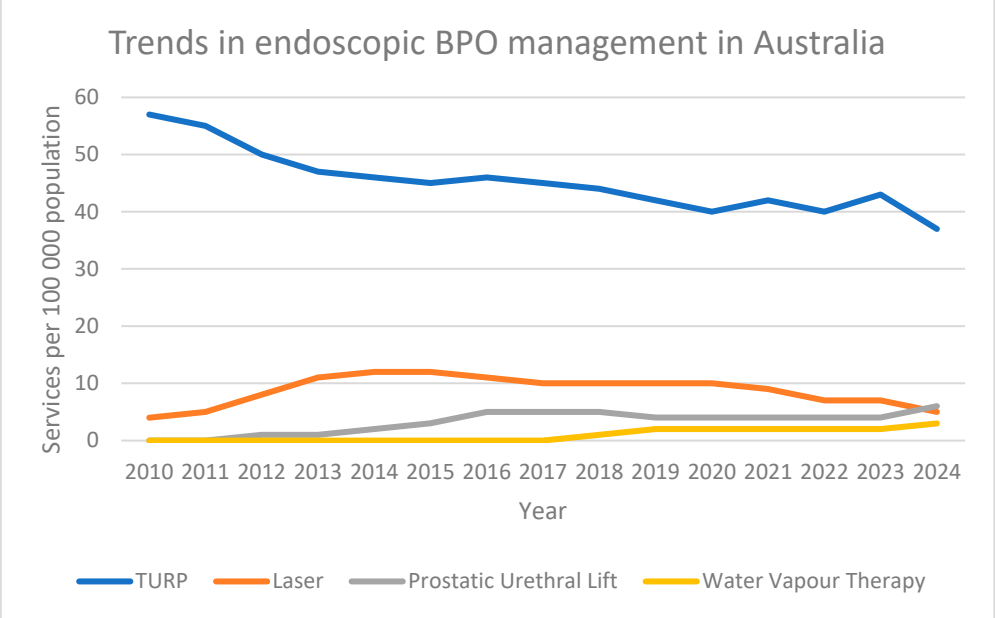

Figure 1. Trends in endoscopic BPO management in Australia [9].

5. Conclusions

BPO is a prevalent and impactful condition that intersects with Australia's dual healthcare system in unique and complex ways. Recent developments, such as the inclusion of water vapour therapy and prostatic urethral lift in the MBS, represent promising steps towards reducing disparities in access to innovative treatments. However, challenges persist, including the need for the equitable distribution of advanced technologies and addressing systemic barriers within the public healthcare system. Future efforts should focus on optimising resource allocation and improving integration between the public and private sectors to ensure that all Australian men with BPO can access timely and effective care.

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Conflicts of Interest: Amanda Chung is a proctor for Medtronic, Boston Scientific and Coloplast and advisory board member for Coloplast. The other authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

BOO	bladder outlet obstruction
BPH	benign prostatic hypertrophy
BPO	benign prostatic obstruction
cc	cubic centimetres
IPSS	International Prostate Symptom Score
LUTS	lower urinary tract symptoms
PBS	Pharmaceutical Benefits Scheme
TURP	transurethral resection of the prostate

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