

Roberts M.¹, Perera M.¹, Papa N.², Ranasinghe S.¹, Joshi A.¹, Scott S.¹, Bolton D.², Lawrentschuk N.², Yaxley J.¹

¹Queensland Health, Dept. of Urology, Brisbane, Australia, ²Austin Health, Dept. of Urology, Melbourne, Australia

Introduction & Objectives: Surgical patterns of prostate cancer (PCa) care have changed due to increased utilization of active surveillance for low risk PCa and increased use of radical prostatectomy (RP) with or without pelvic lymphadenectomy (PLND) for high risk, locally advanced disease. We sought to describe surgical patterns of PCa care in Australia.

Materials & Methods: Publicly accessible Medicare claims data using item numbers for RP and RP with PLND were accessed for the period 2001-2016 and described per 100,000 (10^5) men aged 45-84 years and among the PCa population. Overall, age-related and geographical trends were analysed.

Results: Total RPs performed increased from 2001, peaked in 2009 and subsequently decreased until 2016. Since 2009, the age-specific rate of RPs in men aged 75-84 increased by 2.3-fold, while the rates for men aged 55-64 and 45-54 reduced by 44% and 55%, respectively. The fraction of yearly PC incidence treated by RP in the private sector has been stable from 2009 to 2013 at around 30%, except for men aged 75 to 84 where the fraction increased from 3.4% to 6.5%. The rate of PLND at time of RP relative to RP without PLND fell until 2009 with subsequent stabilisation (ratio 1.05 – 1.14) through to 2016. RP with PLND is performed less than RP without PLND in most Australian states, except in New South Wales where it is still performed at twice the rate.

Conclusions: Since the peak in 2009, the frequency of RP per 10^5 men is performed less in men <65 years and more in men ≥65 years. PLND at the time of RP is performed less commonly nationwide, except in New South Wales. Medicare claims registry data describes evolution in Australian surgical patterns of PCa care.