

# Addressing Increasing Demand for the Prostate Cancer Diagnostic Pathway at Tertiary Centre: Extending the Physician Associate Role

Reece Williams, Physician Associate

Urology Department, Norfolk and Norwich University Hospital

## Background

There has been a national increase in referrals to the 2ww prostate cancer pathway since COVID-19, and our centre is receiving on average 120 referrals per month. To cope with the higher demand for appointments and prostate biopsies, the urology department aimed to find a sustainable solution while maintaining service quality. They recognised the potential of their physician associates (PAs) to help achieve these goals.

Nurse practitioners and various other healthcare professionals routinely deliver local anaesthetic transperineal (LAMP) prostate biopsy clinics in the UK. Consequently, a strategy was devised to provide training to a PA within our department in performing LAMP prostate biopsies. The PA committed to a structured training program and attended an external course to acquire proficiency in the procedure. A formal standard operating procedure (SOP) and a competency verification document were developed. During the training period, the PA completed more than 50 cases under the supervision of a consultant.

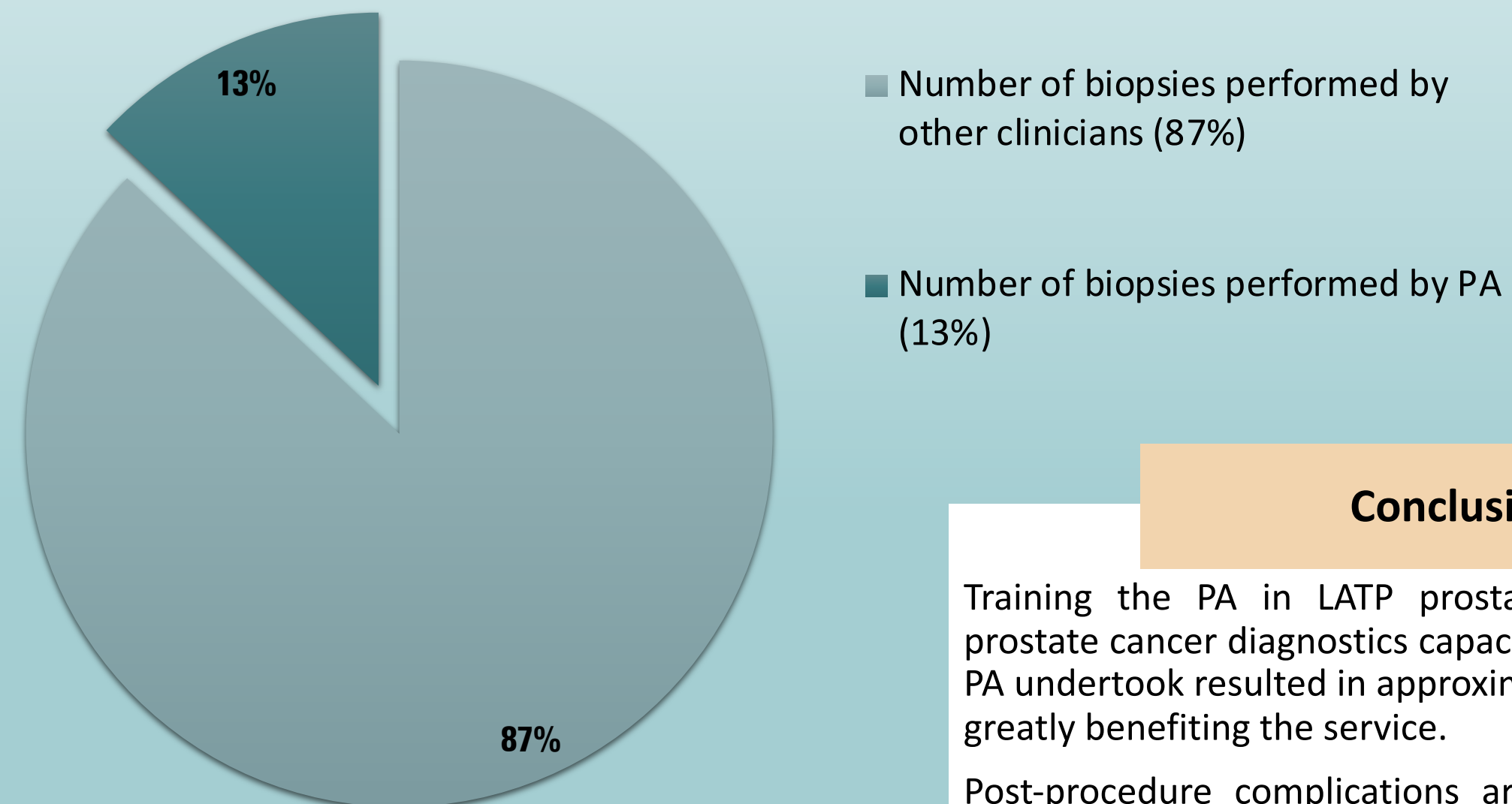
## Aims

The project's primary objectives were to assess the impact of PAs on the prostate cancer diagnostic pathway and to evaluate the outcomes of PA-led LAMP prostate biopsy clinics.

## Methods

The PA maintained a logbook of LAMP prostate biopsy cases between 1 April 2022 and 31 March 2023, comparing it with the department's total cases. Each case recorded the number of tissue cores sampled. Prostate MRI reports documenting Prostate Imaging-Reporting and Data System (PI-RADS) 4 or 5 target lesions were reviewed. Histopathology reports were accessed to assess core and target biopsy results for prostate tissue and cancer, respectively. Electronic records were also examined for any post-procedure complications or readmissions.

**Figure 1. Number of LAMP prostate biopsies performed by the PA as a percentage of total number undertaken**



## Results

During the stated period, the department performed a total of 513 LAMP prostate biopsies, of which the PA conducted 66, accounting for 13% of the total (Figure 1). There were no post-procedure complications or readmissions reported for the PA's patients. Histopathology reports revealed an average of 20 cores sampled per procedure, all containing prostate tissue. Additionally, 93% of targeted biopsies for PI-RADS 4 or 5 lesions showed positive results for prostate cancer.

## Conclusions

Training the PA in LAMP prostate biopsies increased the prostate cancer diagnostics capacity by 15%. The 66 cases the PA undertook resulted in approximately 22 extra half-day lists, greatly benefiting the service.

Post-procedure complications are rare, and the PA's data aligned with other clinician's reports. Histopathology reports indicated that the number of cores sampled and the biopsy cancer detection rate for PI-RADS 4 or 5 lesions were consistent with those observed within the department and as reported in the literature<sup>1,2</sup>, thus validating the clinic's quality.

The PA can potentially increase clinics by adjusting their job plan and expanding diagnostic capacity to include another local hospital's new biopsy service. Their experience sets a model for further growth and potential involvement of other colleagues in supporting the service.

## References

1. Kasivisvanathan, V. et al. (2018) "MRI-targeted or standard biopsy for prostate-cancer diagnosis," *The New England journal of medicine*, 378(19), pp. 1767-1777. doi: 10.1056/nejmoa1801993.
2. Wang, Z.-J. et al. (2023) "Improving the understanding of PI-RADS in practice: characters of PI-RADS 4 and 5 lesions with negative biopsy," *Asian journal of andrology*, 25(2), p. 217. doi: 10.4103/aja202212.