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# Evaluation report Transperineal Biopsy Machine

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# Background

The Charitable Funds Committee approved funding for a £50,000 state of the art Transperineal Biopsy machine at its meeting on 9 March 2021, following a £30,000 donation from the West Wales Prostate Cancer Support Group. The funding request is available to view here: <https://hduhb.nhs.wales/about-us/governance-arrangements/board-committees/charitable-funds-committee-cfc/charitable-funds-committee-meeting-9th-march-2021/item-3-2-approval-of-charitable-funds-expenditure-over-50-000/>

# Benefits

- The purchase of the Transperineal biopsy machine allows Hywel Dda to undertake transperineal biopsies, an **advanced biopsy** which is **safer and has a lower rate of infection** due to not having to undertake the biopsy rectally as is the standard process.
- It also means that **diagnostic rates** are improved in addition to increasing capacity for prostate biopsies in Hywel Dda.
- Transperineal biopsy achieves improved cancer detection rates in cases where prior transrectal prostate (Trus) biopsies have been undertaken. This is especially important for surveillance patients who may require multiple biopsies whilst on a surveillance prostate cancer pathway.
- Trans perineal biopsy can be performed **with local anaesthesia** and are feasible in an outpatient setting. This is as yet unrealised potential but future plans are outlined in our Next Steps.



# Volume

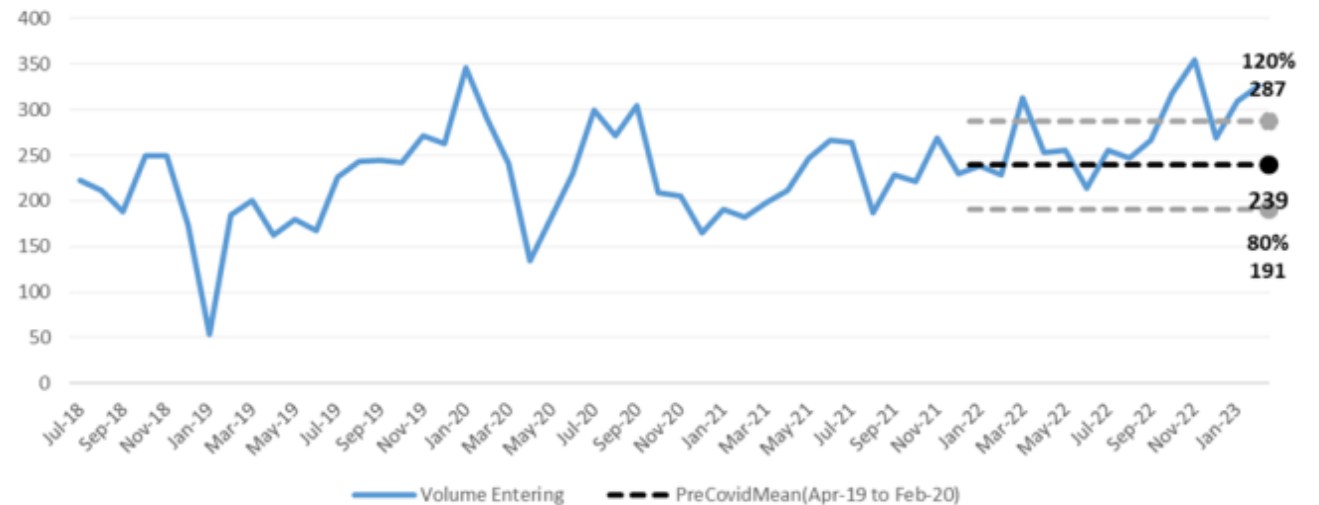
- In the past 12 months, 902 inpatient procedures have been undertaken in Urology
- 90 Trus biopsies vs 20 Transperineal biopsies
- These are low volumes due to a number of factors:
  - The transperineal procedures only restarted 10 months ago following recovery from the COVID-19 pandemic
  - They currently require a General Anaesthetic with associated bed space and recovery time
  - Theatre time is at a premium with all specialities looking to treat high volumes of patients



# Diagnostic Capacity

- Total Urology diagnostics requirements for the single cancer pathway have increased from 60 to 82 since February 2023 and is predicted to require 100+ in May 2023.
- Approximately **10%** of New Unscheduled Care (USC) referrals currently require a **prostate Biopsy**. This equates to 40 patients in May 2023.
- The Transperineal process is allowing us to increase capacity somewhat. However, the next step of establishing its use in an outpatient setting under Local Anaesthetic will truly ramp up capacity.
- Options are being explored to use endoscopy rooms in Prince Philip Hospital (PPH) for Local anaesthetic transperineal prostate biopsy (LATP) and Trus biopsies and also use the Decision Support Unit (DSU) for diagnostic lists.
- Longer term plan is to establish a dedicated Urology Investigation Unit to overcome the staffing estates challenge.

Monthly Referred(USC)/Diagnosed(NUSC)/Entering Pathway(SCP) Volumes  
Hywel Dda UHB



# Next Steps

- Roll out of local anaesthetic Transperineal biopsies
- Investigation of dedicated clinical space (PPH previous endoscopy area identified as possible site of new Urology Investigation Unit)
- If secured, funding will be sought to help develop this space.
- Purchase of patient couch
- Purchase of precision point consumables for biopsy
- Rollout of training for urology staff beyond Messrs Saad, Lau, Ng, Moosa.



## Next Steps: 2-Step Prostate Clinic

- The LA Trans perineal process will be ideal for further improving patient outcomes due to the aforementioned benefits.
- A recent Cancer Research UK bid has been successful and is aimed at improving the Prostate cancer pathway. This includes a dedicated Magnetic resonance imaging (MRI) and same day reporting for the USC prostate patients with a prostate biopsy few days later if required.
- Work is underway with Radiology colleagues aimed at scanning our New pre-biopsy MRI patients in dedicated morning lists. Likely to be in Bronglais General Hospital and Withybush General Hospital due to newer scanning equipment.
- Dedicated prostate clinics are being established in June 2023. These will be hybrid clinics held on the afternoon of the MRI scan.
- Typically 6 patients per week will benefit from this Innovative approach.

