

# Wave Health (Digital Health Application) for Prostate Cancer Follow-up, Monitoring and Management Post-diagnosis: A Feasibility Study.

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## Background

Each cancer patient's journey is unique, making it challenging to monitor therapy progress, assess treatment efficacy, and minimize complications. Traditional methods of measuring quality of life, an important treatment effectiveness indicator, have limitations that result in fragmented data. Monitoring and assessing patient-reported outcomes (PROs) can improve overall survival and quality of life in cancer patients<sup>1</sup>.

In the UK, prostate cancer is the most common cancer in men, with increasing incidence. The varied treatment options lead to diverse support needs, straining NHS systems and resources as they work to optimize patient monitoring, follow-up care, and treatment management.

## Objectives

The purpose of this study was to analyse the unmet clinical need, explore stakeholder perspectives on perceived usefulness and investigate the clinical utility and barriers to adoption of Wave Health, a pioneering digital health tool, consisting of a patient app and care portal that uses electronic PROs to revolutionise cancer management post-diagnosis. The specific focus was the PC pathway as a first mover and the viability of its implementation in NHS England.

## Methods

- Feasibility study was conducted with Health Innovation Oxford using the Lean Assessment Process (LAP) methodology.
- Semi-structured interviews using questions combining qualitative and quantitative aspects were used in the LAP methodology.
- Fifteen end-users from 7 NHS trusts, who make treatment and management decisions within the PC pathway, were interviewed.

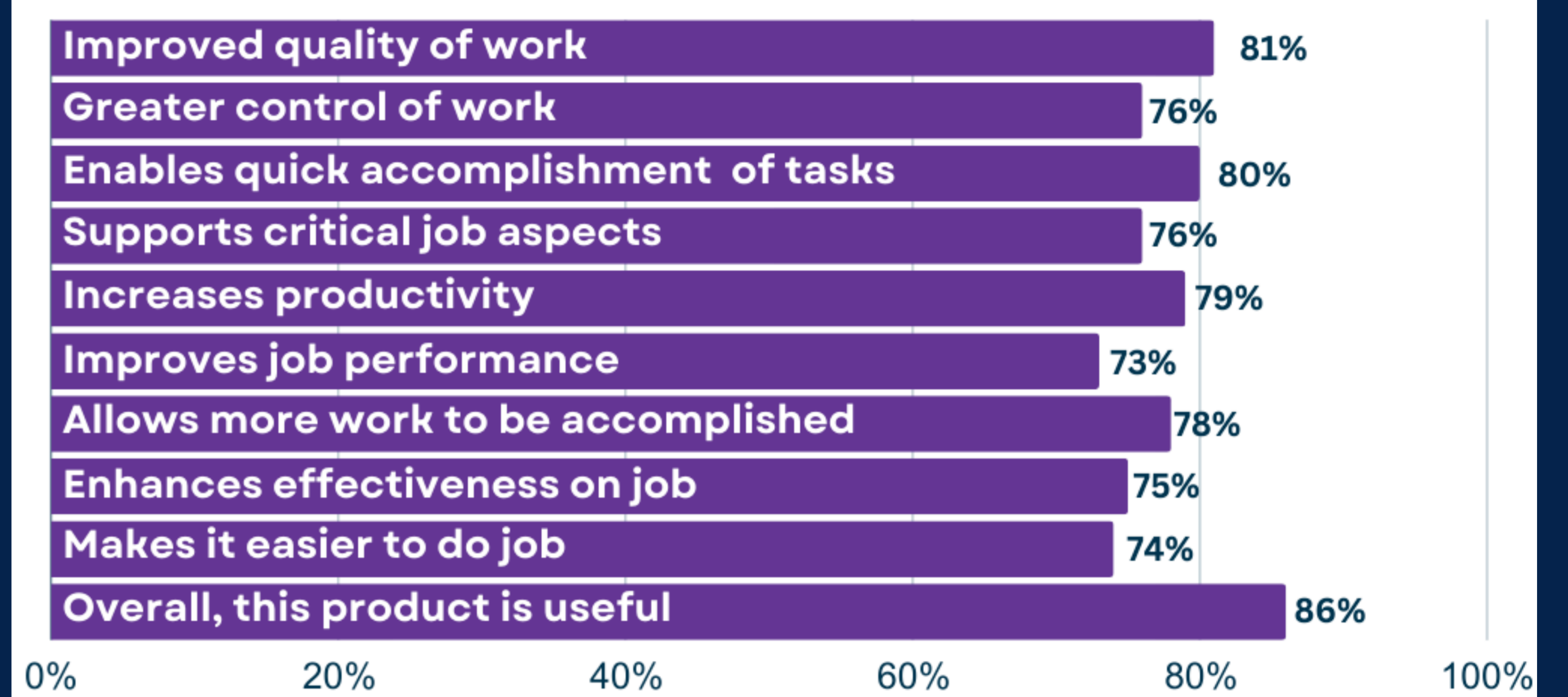


Figure 1: Job roles of respondents

## Results

Overall, the study showcased 86% HCP perceived usefulness, revealing NHS England stakeholder perception of Wave Health to enhance clinical efficiencies - notably reducing administrative workload and improving patient-centred care.

Figure 2: Perceived Usefulness



Specifically, as an effective self-management tool, improving patient experience through better patient monitoring to impact short- and long-term patient management. Highlights include:

- **ePRO TOOL** - All respondents agreed the NHS does not currently have standardized procedures for gathering PROs.
- **SELF MANAGEMENT** - Most respondents agreed there is an unmet need for PC self-management given the high volume of patients, and that Wave Health has the potential to enhance self-management and improve patient experiences. All were interested in having tailored patient feedback to support a patient's journey.
- **REMOTE MONITORING** - Clinicians thought it would be beneficial to receive triaged notifications of patient symptoms, and to be better informed on out-of-clinic experiences.

### PRIMARY CLINICAL USER-

Although patient management requires a multidisciplinary team, clinical nurse specialists were identified as the primary users of the technology.

### PRIMARY PATIENT USER-

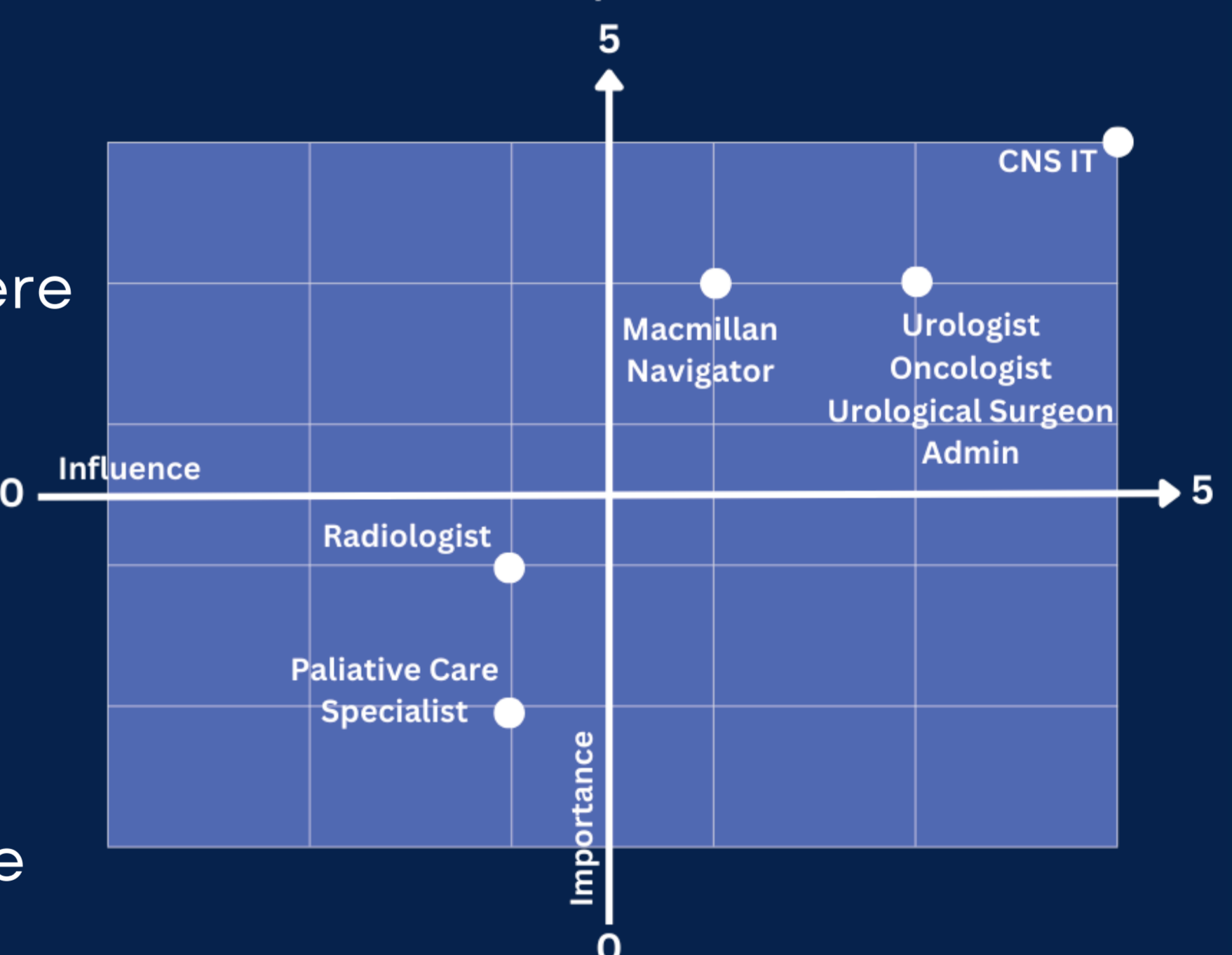
Most felt the app would be suitable for all patient groups, if tailored within the pathway.

- **NET PROMOTERS** - Majority would advocate for adoption of Wave Health.



Figure 4: Intention to Promote

Figure 3: Stakeholders per perceived level of influence and importance



## Conclusion:

The study revealed that NHS stakeholders are optimistic that incorporating Wave Health into established pathways will provide significant benefits for both patients and healthcare professionals. Next steps include integrating the product into the workflow and designing a clinical validation study to demonstrate the digital health platform value to end users.

### References:

1. Basch E, Deal AM, Ducek AC, Scher HI, Kris MG, Hudis C, Schrag D. Overall Survival Results of a Trial Assessing Patient-Reported Outcomes for Symptom Monitoring During Routine Cancer Treatment. JAMA. 2017 Jul 11;318(2):197-198. doi: 10.1001/jama.2017.7156. PMID: 28586821; PMCID: PMC5817466.

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Disclosures: Advisory Role - \*Bayer PLC and Treatment Technologies & Insights, Inc., parent company of Wave Health. Within this project, Bayer is deemed a co-promoter. This means that Bayer has previously provided funding to TTI Inc (manufacturers of Wave Health) for development of the software platform and is part of the co-promotional and marketing activities (for example, flyers or other promotional material). It should be noted that the information Bayer is providing is only descriptive and that TTI Inc is legally responsible for the functioning of the product.

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