Driving innovation in prostate cancer

Local best practice in improving patient outcomes

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Foreword from Prostate Cancer UK

Prostate cancer is now the most common cancer in England, with diagnoses growing year on year. The good news is that men diagnosed with incurable disease are living longer, with more treatment options. And more men with low-risk cancers are having active surveillance rather than radical treatment – enabling them to avoid the burden of side effects for longer – perhaps indefinitely. But the consequences for urology teams are an ever-growing cohort of patients to support, in a cash-strapped, time-poor NHS.

Doing things the way they have always been done results in long waits, poor support, and staff who are demoralised and burnt out. So, I am pleased to see this report celebrating local services that have reflected on the challenges they're facing and the opportunities to make meaningful changes to how care is delivered.

As well as understanding the support healthcare professionals need to deliver care, progress is only possible if the needs of people living with prostate cancer are front of mind in any service innovation – it's excellent to see that the local services included in this report have done just that.

Prostate Cancer UK has long believed that the best way we can improve care for men living with and beyond prostate cancer is by skilling up and empowering the clinicians who care for them. We run a range of Improvement Programmes – including training in leadership, change management, and communication skills – to ensure high-quality care and treatment is more widely available to everyone affected by prostate cancer. Our programmes provide opportunities for networking with like-minded healthcare professionals who want to deliver positive change to their trusts. I am pleased to see the work of some of our programme graduates celebrated in this report.

While each locality has unique challenges, there are universal lessons that can be learnt. Too often the 'National' Health Service instead acts like dozens of local silos, each having to invent from scratch a solution to problems that are universal. Reports like this enable areas to learn from each other – to see what can be adopted or simply adapted to make improvements for men in their clinics. Sharing these experiences and expertise with other areas grappling with the same challenges is essential for driving progress for all patients, no matter where they live.

At Prostate Cancer UK, we will continue to support the whole system to continuously improve care for men with prostate cancer – whether that's through clinical education programmes, direct support to men and their loved ones, or advocating for a system that can support improvement.

In 2022, Prostate Cancer UK submitted evidence to the National Screening Committee that made the case for targeted screening for the men at highest risk of prostate cancer – namely Black men and those with a family history. We are proud that our work has triggered a full evidence review, and we look forward to the outcome before the end of 2025.

Whether screening is approved or not, the next few years will present a pivotal opportunity to finally tackle the long-standing issues faced in prostate cancer care. The 10-Year Health Plan and national cancer plans, that will guide each UK nation's approach, offer an opportunity that must not be missed to deliver tangible improvements for every man impacted by prostate cancer and his loved ones.

Amy Rylance
Assistant Director of Health Improvement
Prostate Cancer UK

PROSTATE CANCER UK

Supported by the prostate cancer community

"Prostate cancer is a growing challenge that demands urgent attention, innovation, and investment. Across the country, local teams are already finding smarter ways to improve outcomes and tackle variation. By learning from what works, we can drive system-wide change and ensure every man gets a timely diagnosis, effective treatment, and equitable care."

David James
Director of Patient Projects and Influencing
Prostate Cancer Research

Prostate Cancer Research

"At Orchid, we recognise the urgent need for innovation in prostate cancer care. This report provides timely, practical guidance for healthcare professionals and system leaders, showcasing evidence-based approaches that support more efficient, adaptable, and patient-focused services. It is a valuable tool in driving forward meaningful reform and improving outcomes for men across the UK."

Ali Orhan
Chief Executive and Director
ORCHID

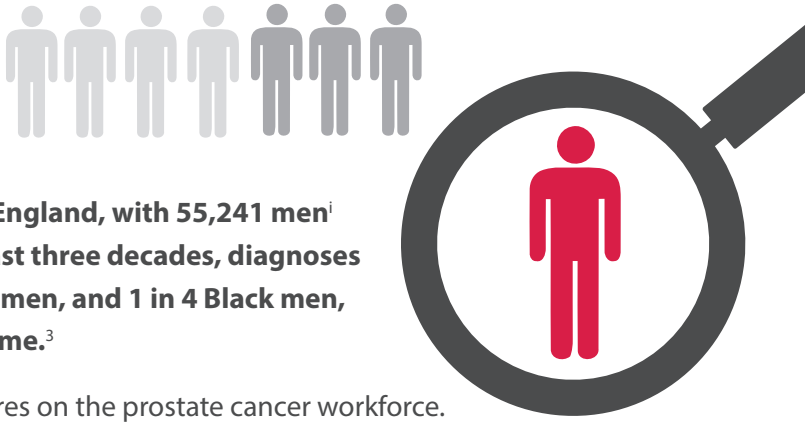
ORCHID
FIGHTING MALE CANCER

"At Tackle Prostate Cancer, we believe patients need clear, comprehensive information about all treatment options to make informed decisions. We support the report's call for Cancer Alliances to proactively identify successful innovations in cancer care and encourage the inclusion of patient groups, like ours, in this process. By incorporating models such as peer coaching, we can ensure care is both innovative and truly responsive to patient needs."

Sarah Gray
Director of Operations
Tackle Prostate Cancer

tackle
prostate cancer

Introduction



Prostate cancer is now the most common cancer in England, with 55,241 men[i] diagnosed in 2023 alone.[1] Across the UK, over the last three decades, diagnoses have increased by over 50%[2] – approximately 1 in 8 men, and 1 in 4 Black men, will be diagnosed with prostate cancer in their lifetime.[3]

Increasing incidence rates have placed growing pressures on the prostate cancer workforce. There is a **15% shortfall in oncology consultants** and in 2023 workforce shortages delayed patients starting radiotherapy in **92% of centres,** and **treatment in 95%.**[4]

Pressures on prostate cancer services include:

Diagnosis

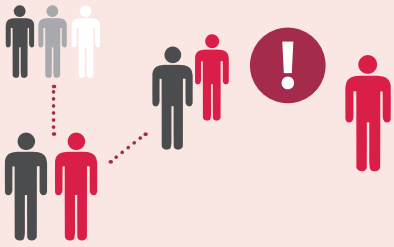
More patients are presenting in primary care with suspected prostate cancer,[2] but there is insufficient triaging of low and high-risk cases,[3] such as **men over 50, Black men, and those with a family history, who face a two- to five-fold increased risk,** depending on the number and closeness of affected relatives.[1]

Capacity

High referral volumes are straining local services, making it harder to meet the NHS 62-day referral-to-treatment standard. **In January 2025, only 67.8% of patients in England began treatment within 62 days of an urgent suspected cancer referral,** falling well below the 85% target, which has not been met since December 2015.[5]

Infrastructure

Many local areas lack sufficient capacity to move patients through the pathway efficiently, with particular challenges around imaging, such as Magnetic Resonance Imaging (MRI),[ii] and biopsy. **These delays are directly impacting the 62-day referral-to-treatment target, prolonging the time patients wait for life-saving cancer treatment.**[6]



[i]We use the term 'men' for simplicity, though it is important to note that prostate cancer can also affect transgender women and non-binary individuals.
[ii]Please refer to the glossary for definitions and abbreviations used in this document.

Recent national NHS publications have acknowledged the need to use the workforce differently across the health service through multidisciplinary working and professional skills development.[7,8] This need is particularly acute in prostate cancer care, with **incidence rates in the UK projected to rise by 15% from 2023-2025, and again from 2038-2040.**[2]

In response to Prostate Cancer UK submitting evidence of reduced harm and greater benefit of screening for men at highest risk, the UK National Screening Committee commissioned a full health economic model to examine the case for targeted screening.[9] Prostate Cancer UK is also funding and leading the TRANSFORM trial – to find the best ways to screen.[10] Astellas is proud to be supporting Prostate Cancer Research in its campaign to raise awareness of prostate cancer and advocate for targeted national prostate cancer screening in high-risk men. Please find further information **here**.

Looking ahead, emerging NHS priorities for the next decade in England include **re-engaging staff, empowering patients and innovating care delivery.**[11,12] National cancer priorities are being set out through existing and forthcoming cancer strategies across the four nations, helping to provide further direction.[13]

Addressing the challenges in prostate cancer care does not require the NHS to start from scratch. Some local areas have already taken significant steps in designing and implementing innovative solutions. In collaboration with leading healthcare professionals in prostate cancer, **Astellas has developed this report to explore six of these solutions, each focusing on a different aspect of the prostate cancer pathway.** The focus is on innovations that are particularly consequential in supporting patients in need of major interventions, through quick access to and management of their care and treatment through the Systemic Anti-Cancer Therapy (SACT) pathway.

This report is intended as a resource for healthcare professionals working in NHS trusts to support the development and implementation of service innovations. It also aims to support Cancer Alliances make the case for scaling innovations based on performance outcomes, while offering insights for ICBs and national stakeholders.

Astellas would like to thank all the healthcare professionals who contributed to this report for their time and insights. We hope this report serves as a constructive resource for local NHS stakeholders involved in service reform and for national policymakers considering how to manage current and future pressures on prostate cancer services.

For more information on this report, please contact Klark Mullen,
Government Affairs Lead, Astellas UK
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Six case studies: at a glance

The six areas explored are as follows, each demonstrating innovative approaches to service reform in prostate cancer care:

1 **TRAINING AND EDUCATION**

Guy's and St Thomas' NHS Foundation Trust, London

Shaping the future of education for advanced non-medical practitioners in prostate cancer

2 **DETECTION AND DIAGNOSIS**

The Royal Marsden NHS Foundation Trust, London

Improving prostate cancer outcomes with the Superior Prostate Experience and Efficient Diagnostics (SPEED) pathway

3 **DETECTION AND DIAGNOSIS**

Queen Elizabeth University Hospital, Glasgow

Improving prostate cancer triage with the Filters and Cascades model

4 **ACCESS TO TREATMENT**

Oxford University Hospitals NHS Foundation Trust, Oxford

Implementing non-medical prescriber clinics for prostate cancer

5 **TREATMENT ASSESSMENT AND MONITORING**

Velindre Cancer Centre, Cardiff

Redefining patient pathways with the Virtually Assessed Patient (VAP) clinic

6 **FOLLOW-UP CARE**

The Clatterbridge Cancer Centre NHS Foundation Trust, Liverpool

Adopting a multi-disciplinary team approach to patient care

Each case study is informed by interviews with healthcare professionals involved in the service reform and sets out:

The local circumstances that necessitated service change

Key features of the service change

Challenges in designing and implementing change

Outcomes of the service change for patients, staff and the local system

Lessons for other local areas

Recommendations

The following recommendations – agreed with the healthcare professionals who contributed to the report – are aimed at stakeholders involved in the delivery of cancer care and the broader adoption of service reform across the health system. These include national policymakers in the Department of Health and Social Care (DHSC), NHS trusts, ICBs and Cancer Alliances.

1 Invest in and find new ways to deliver workforce training and education

NHS trusts and ICBs should adopt new training approaches for advanced non-medical practitioners, oncology pharmacy technicians, and clinical practitioners, upskilling the existing workforce to support better access to and the adoption of innovation in cancer care, including new diagnostic tools, service models, and digital solutions

a. **Funding allocation:** DHSC should ensure that adequate funding is allocated to support ICBs in their investment in training programmes via trusts and cancer alliances

b. **Delivery of training:** NHS trusts, Cancer Alliances and ICBs should work collaboratively to design and deliver comprehensive training programmes for healthcare professionals, ensuring that training is accessible, effective, and aligned with the evolving needs of cancer care delivery

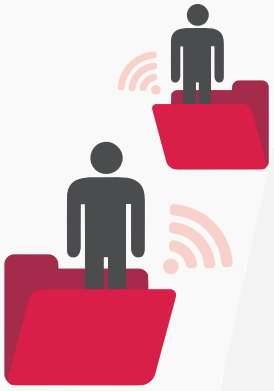
2 Improve flexibility in prescribing policies and service delivery

NHS trusts should encourage the delivery of flexible prescribing policies that allow non-medical prescribers to prescribe cancer treatments in remote consultations and local clinics, alleviating pressure on doctors and allowing patients to start treatment quicker. Expanding prescribing in community settings also improves patient convenience and reduces the need for unnecessary hospital visits, particularly benefiting those facing mobility challenges

3 Enhance the use of technology in virtual care models

NHS trusts should focus on optimising virtual care models by considering how best to integrate technology into cancer pathways

a. **Digital transformation:** DHSC should support NHS trusts in the shift from 'analogue to digital' – an ambition set out in the Government's 10-Year Health Plan, by investing in the digital infrastructure necessary to deliver on the reforms set out in this document – from improving the functionality and accessibility of virtual consultations, to expanding their role in diagnostics and follow-up care, particularly in underserved and rural areas

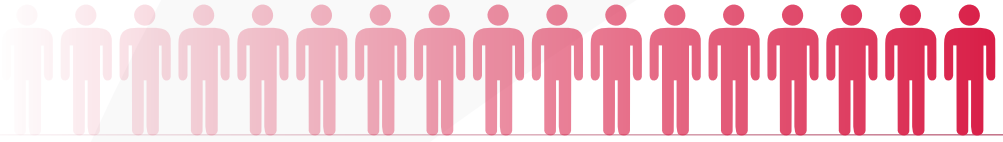


4 Leverage opportunities from advances in diagnosis and treatment

ICBs should support NHS trusts in adapting to the evolving landscape of cancer care, including new diagnostic tools and treatments, and encourage innovative, flexible workforce solutions for managing the oral SACT pathway, expanding the roles of advanced non-medical prescribers to meet rising demand

5 Scale successful local innovations across the system

Cancer Alliances should play a proactive role in identifying successful innovations or service changes that have had a positive impact on cancer care, such as new models of virtual care, workforce training initiatives, or advanced diagnostic tools. Once identified, Cancer Alliances should support NHS trusts and ICBs in scaling these initiatives across local systems to improve access, quality, and efficiency in cancer services regionally



Shaping the future of education for advanced non-medical practitioners in prostate cancer

Guy's and St Thomas' NHS Foundation Trust, London

Key points

- The Guy's Cancer Academy has developed a **bespoke online module for non-medical practitioners** to reflect changes to the way that care is delivered for prostate cancer patients
- Course material was developed in partnership with patients, as well as healthcare professionals, to ensure it captures what matters most to them
- The course is continuing to evolve to meet patients and practitioners' needs; material is adapted on an ongoing basis, building on learnings from participants
- The course can be accessed **here**

The need for change

- There was a recognition from Guy's Cancer Academy and Guy's and St Thomas' NHS Foundation Trust that the way care is delivered has changed, both due to **growing patient numbers** and **continued advances in treatment**
- **Nurse and pharmacist-led care is increasing,** and radiographers are now often prescribers delivering their own care and treatment
- While care delivery is changing across the country, Guy's Cancer Academy recognised the benefit of a **bespoke training** that was reflective of the Trust's own workforce

"The way care is delivered has changed dramatically and the need for education has changed as a result. This course has been developed in recognition of that, and the strong feedback we have received shows the desire learners have to improve their practices."

Louisa Fleure
Consultant Nurse
Guy's and St Thomas' NHS Foundation Trust

Overview of the service change

Guy's Cancer Academy, in partnership with Astellas through a joint working project, commissioned the development of an **advanced non-medical practitioner prostate cancer care course** to support multidisciplinary team learning.[iii]

The 12-week online course – launched in Spring 2022 – is open to any non-medical health professional working at an advanced practice level to support their delivery of care. It is affiliated with a higher education institution, so learners can be provided with master's credits alongside the course.

The development of the course was led by a steering group to set the objectives, the curriculum, and areas of expertise available within the Trust the course should utilise. As well as ensuring healthcare professional representation on the steering group, considerable focus was placed on **involving patients from the outset to understand their perspectives and experiences.**

The course provides **an interactive and engaging learning experience** that fits around learners' professional and personal commitments. It features video lectures, case studies and interviews with experts and live webinars for Q&A – the latter has been further developed based on feedback from learners on the value of peer support and shared learnings.

The course is now run every six months – three months for the duration of the course followed by a further three months for the Academy to reflect and act on learnings and feedback.

Challenges in designing and implementing change

Initial ambition for the course meant condensing content into an achievable amount of material for a 12-week course was difficult. This was overcome by:

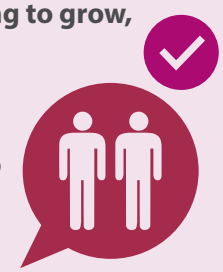
- Firstly, **going back to stakeholders within the Trust to prioritise the content.** Flexibility was key to securing advice and feedback, as well as working up and presenting ideas back for feedback at times convenient for the range of stakeholders involved
- Secondly, **creating two versions of the course, for localised or advanced prostate cancer,** with learners given access to both. While learners were only assessed on one module, most voluntarily went back to do the second for their own professional development

The role of the steering group was also key, helping to establish wider buy-in and in liaising with King's College London, the higher education provider affiliated with the course, to ensure it aligned with their academic healthcare criteria.

[iii] Astellas is no longer involved in the ongoing update or delivery of the course.

Outcomes of the service

The course has **received strong feedback from learners** as part of the end-of-course evaluation shared with all participants. The feedback has also uncovered some valuable insights about future prospective course participants – while it was assumed one of the main incentives for completing the course would be the higher education credits available, many learners have ended up only completing the non-academic sections, showing **the key motivation is often skills development and to improve their practice.** Word of mouth recommendations from past learners have led to **enrolments continuing to grow,** and shown how well received it has been to date.



The course was **designed with the intention of benefiting patient care.** This has been a priority and fostered through the inclusion of the **'patient voice'** in the steering group to develop the course, combined with ongoing sharing of best practice and learnings amongst participants, through the webinar element of the course.

Learners are able to share their experiences and advice on **how to talk to and engage effectively with different cohorts of patients** and has helped support the development of different types of resources for patients – with an emphasis on ensuring they are engaging and interactive. This has helped to demonstrate the need for and value in exploring how to **ensure all patients have a positive experience of care.** For example, a grant application is in place for a patient resource for gay and bisexual men.

Lessons for other areas

Early engagement of stakeholders: securing their input and support, and course development leads should use their networks to identify the right skill mix required to support course development. This is important as it is more difficult to secure engagement from people who feel they had been initially excluded.

Involve patients from the start: ensuring educational materials are guided by what matters to them. Patient involvement is key, as the course is ultimately intended to ensure they receive the best experience and quality of care – and patients have unique insights that cannot be gained elsewhere.

Create time to reflect on learnings: ensuring there is an opportunity to act on feedback and update course material, to ensure continuous relevance and improvement in the content and format of learning, in response to changes in care delivery.

For more information on this case study, please contact Louisa Fleure, Consultant Nurse at Guy's and St Thomas' NHS Foundation Trust
Louisa.Fleure@gstt.nhs.uk

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Improving prostate cancer outcomes with the SPEED pathway

The Royal Marsden NHS Foundation Trust, London

Key points

- The SPEED pathway at The Royal Marsden NHS Foundation Trust was designed to **improve the efficiency and thoroughness of prostate cancer assessments and diagnoses**
- The model is unique in its **nurse-led approach,** reducing pressure on the medical staffing group
- The pathway employs:
  - An initial face-to-face consultation, with bloods, lower urinary tract assessment and physical examination
  - Imaging within 72 hours (although the majority are on the same day) and biopsy offered within 3 days
  - All histology reported within 5 days
- The pathway has **improved cancer diagnosis rates, reduced waiting times, and enhanced patient satisfaction:**[14]
  - The sensitivity and specificity of prostate biopsy improved from 52% in the RAPID pathway to 67% in the SPEED pathway
  - Significant cancer diagnosis rates increased from 27% in RAPID to 52% in SPEED
  - The average time from referral to MRI decreased from 9 days in RAPID to just 3 days in SPEED

The need for change

- The rising number of suspected prostate cancer cases in the region was causing the **62-day wait target to be missed,** largely due to delays in the diagnostic process
- Using the RAPID straight to test triage model, radiology teams, already stretched, were faced with an **overwhelming number of MRI bookings (90% of referred patients required scans),** resulting in extended waiting times for patients

"Positioning the service change within the context of national healthcare goals, such as improving cancer care and addressing health inequalities, reinforced its importance to the Trust."

Dr Netty Kinsella
Uro-Oncology
Nurse Consultant
The Royal Marsden
NHS Foundation Trust

- Triage decisions were commonly based on **incomplete referral information,** leaving clinicians with **limited confidence** in their decisions. This uncertainty, paired with long waiting times and repeat testing, led to growing dissatisfaction among patients

Overview of the service change

A major barrier to swift prostate cancer diagnostic pathways is the **high volume of referrals,** a large proportion of which present with benign prostate symptoms. The **Rapid Access Prostate Imaging and Diagnosis (RAPID) pathway,** initially designed to expedite diagnostics through a 'straight to test' MRI approach, **proved to be costly,** lacking in clinical thoroughness, and unnecessary for all patients.

In response, the **SPEED pathway (Superior Prostate Experience and Efficient Diagnostics)** was designed by The Royal Marsden Foundation Trust. SPEED is intended to offer a **more comprehensive approach;** it is informed by detailed initial clinical history, physical examination, urinary assessment and treatment of symptoms, imaging and MRI Fusion Prostate Biopsy, and is supported by robust coordination and communication.

Clinical triage assessment ensures that only patients suitable for MRI proceed into ring-fenced slots. Those unsuitable for an MRI had an outpatient appointment within days of referral. Patients incorrectly referred to the pathway were immediately discharged back into primary care.

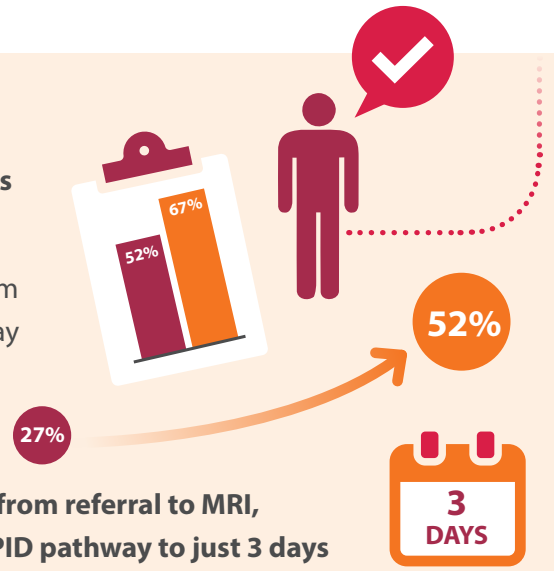
Unique in its nurse-led design, the SPEED pathway **empowers nurses to take central roles in patient assessments,** and in performing biopsies and providing vital patient education.

To further improve the accuracy of diagnoses and prioritise urgent cases, **AI tools were integrated into the imaging process,** helping to reduce wait times and ensure quicker, more precise diagnoses.

Challenges in designing and implementing change

- One of the main challenges was overcoming resistance from patients **uncertain about the nurse-led approach** and more accustomed to consultant-led care. This shift required **clear communication and education** to **build trust** and confidence that they would receive high-quality care
- Additionally, designing and implementing a comprehensive training programme for nurses to take on advanced roles – such as performing biopsies – proved to be complex. Balancing ongoing clinical work with the need for extensive training added further strain to an already busy team

Outcomes of the service



The SPEED pathway has delivered **significant improvements** in the diagnosis and treatment of prostate cancer:[14]

- Diagnosis rates for cancer after biopsy have increased from **52% in the RAPID pathway to 67%** in the SPEED pathway
- Significant cancer diagnosis rates improved, **from 27% in RAPID to 52% under the SPEED pathway**
- The SPEED pathway has **dramatically reduced the time from referral to MRI,** decreasing the average wait time **from 9 days in the RAPID pathway to just 3 days**

Qualitative feedback has also been **overwhelmingly positive:**[15]

- Patients have consistently **praised the speed and efficiency of the service,** with one patient stating, *"From getting PSA results to having an MRI scan was 3 days, including Saturday and Sunday. Excellent Service – NHS at its best!"*
- Many patients highlighted the **reduction in stress and uncertainty,** with one commenting, *"The speed of the appointment and the quick diagnosis was very important in reducing 'worry-time' and stress."*

The pathway has also informed the roll-out of the Royal Marsden Partners Cancer Alliance's **'Man Van'** project, a **bespoke mobile clinical unit** moved to community-based locations in areas of high deprivation in South West/North West London, with targeted invitations to high-risk men via primary care.

Lessons for other areas

Encourage clinical teams to take ownership: empower clinical teams to identify issues and propose solutions, to foster ownership and commitment to improving services.

Engage stakeholders early: involve all key stakeholders early in the planning and implementation process to ensure alignment and gain broad support.

Adapt to local needs: tailor strategies to meet the specific needs of each local area, as there is no one-size-fits-all solution.

For more information on this case study, please contact Dr Netty Kinsella, Uro-Oncology Nurse Consultant at The Royal Marsden NHS Foundation Trust
Netty.Kinsella@rmh.nhs.uk

Improving prostate cancer triage with the Filters and Cascades model

Queen Elizabeth University Hospital, Glasgow

Key points

- The Filters and Cascades pathway, developed in NHS Greater Glasgow and Clyde, is a **risk-based triage model** that improves the efficiency, safety and equity of prostate cancer referrals
- It combines **a new triage** model which can be nurse-led, with a **direct-to-test approach** with **rapid access to imaging,** using **risk stratification** based on PSA levels, patient factors and MRI findings where applicable
- The model has significantly reduced waiting times, improved treatment timelines for metastatic patients, and improved patient satisfaction:[16]
  - Referral-to-first-appointment time **reduced from 40 to 2 days**
  - Metastatic patients treated within the 62-day target **increased from 16.6% to 87.5%**
  - Time to hormone therapy for metastatic patients **reduced from 90 to 32 days**
- Work is ongoing to explore how the model can form the foundation of a national pathway in Scotland and has drawn interest from local centres in other areas of the UK

The need for change

Following the COVID-19 pandemic, NHS Greater Glasgow and Clyde was facing significant pressure, with diagnostic backlogs and growing waiting lists. The existing referral process sent many patients – often with benign causes of raised PSA - through urgent cancer pathways unnecessarily, creating delays for those with the highest risk.

The previous system's inefficiencies, including inappropriate referrals, lengthy delays to diagnostic testing and limited outpatient clinic capacity, highlighted the need for a smarter, safer and more equitable approach. A new model was needed to better stratify risk and fast-track those most likely to have aggressive disease, without overwhelming the service.

"We wanted a system where someone with aggressive cancer wasn't waiting behind someone who didn't need onward referral. The model filters safely and cascades smartly - and the data speaks for itself."

Jaimin Bhatt
Consultant Urological Surgeon, NHS Greater Glasgow and Clyde

Overview of the service change

In response, the Filters and Cascades pathway was designed – structured around **six simple, evidence-based algorithms: three 'Filters' to exclude low-risk patients from unnecessary tests, and three 'Cascades' to escalate those at highest risk.** All new GP referrals are reviewed by the prostate team, including clinical nurse specialists (CNSs), who apply these algorithms to determine the next steps.

Patients are contacted within 1-2 days of referral, which counts as their first appointment. Those requiring tests are sent directly to imaging, often within days, and only seen in clinic if necessary. High-risk patients are fast-tracked to CT/bone scans and/or MRI scans depending on their PSA levels, while normal imaging results are managed through automated letters and virtual follow-up.

Challenges in designing and implementing change

The team initially faced resistance with some stakeholders, who were reluctant to shift responsibilities away from consultants to CNSs, while others expressed concern that moving away from face-to-face appointments could compromise care or overload imaging services. To overcome this, the team launched a **three-month pilot** to demonstrate the model's value. Data quickly showed rapid improvements in wait times, diagnosis rates, and clinic efficiency, helping to address initial concerns. Robust training, clear protocols, and protected time for staff were critical to success.

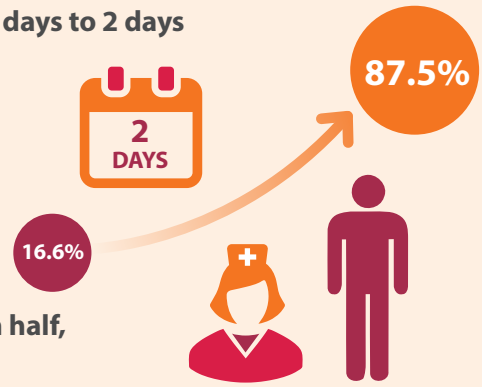
Concerns about workforce capacity also needed to be addressed. Job plans were adjusted to reflect the expanded role of clinical teams, including CNSs, in triage, and close coordination with administrative colleagues ensured smooth follow-up processes. The team also benefited from strong support from radiology, who helped integrate the new model into existing systems by standardising scan protocols and reporting formats.

The project lead was supported by Prostate Cancer UK's Clinical Champions Programme, a change leadership programme over 18 months, which provided tools and strategies for effecting productive change within NHS organisations.

Outcomes of the service

The Filters and Cascades pathway has delivered substantial improvements in prostate cancer triage at initial referral, helping to reduce delays, streamline diagnostics, and prioritise care for those most at risk:[1]

- **Median referral-to-first-appointment time** dropped from **40 days to 2 days**
- **Median time to MRI** was cut from **52 to 13 days**
- **Referral to biopsy decision** reduced from **72 days to 27 days**
- **Treatment within the 62-day target for metastatic patients** increased from **16.6% to 87.5%**
- Administrative workload for clinical staff was **cut by more than half,** freeing time for direct patient care



These changes have **freed up clinic capacity, reduced the burden on clinical and admin teams, and improved equity** by ensuring that patients incorrectly referred as 'routine' no longer face unsafe delays. Patient feedback has been **overwhelmingly positive,** with many sharing how they were contacted within 24 hours of referral and rapidly received a clear care plan.

The model has already informed practice across other Scottish regions and drawn interest from NHS sites in other UK nations and internationally. The team is also now exploring the use of AI to further enhance efficiency and outcomes in the next phase of development.

Lessons for other areas

Start with a pilot to build confidence and buy-in: testing early impact helps refine the model, secure buy-in, and generate the evidence needed for a strong business case.

Keep the model simple and scalable: straightforward, evidence-based design makes it easier to implement, replicate, and adapt.

Empower nurses to lead triage: with clear training protocols and support, CNSs can deliver safe, efficient, high-quality care.

For more information on this case study, please contact Jaimin Bhatt, Consultant Urological Surgeon at Queen Elizabeth University Hospital
Jaiman.Bhatt@nhs.scot

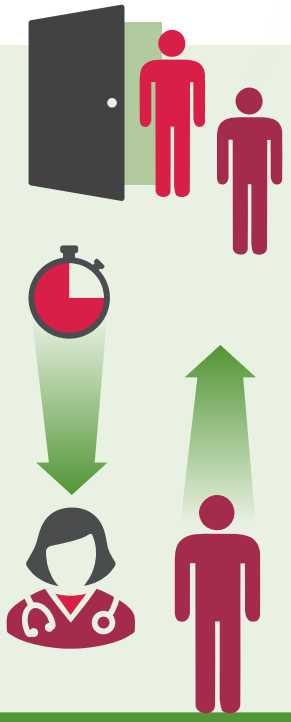
4

Implementing non-medical prescriber clinics for prostate cancer

Oxford University Hospitals NHS Foundation Trust, Oxford

Key points

- Oxford University Hospitals NHS Foundation Trust has led the way in **integrating non-medical prescribers and advanced cancer pharmacy technicians into its oncology team**
- This change helps manage increasing patient demand, staff shortages and the growing complexity of cancer treatments and their delivery
- Key outcomes have seen **reduced pressure on oncologists, better access for patients,** and **improved efficiency** across the service
- Plans are in place to **expand the service** further in the region to meet ongoing demand



The need for change

- Oxford University Hospitals NHS Foundation Trust faced significant pressures as the rate of **SACT delivery is rising by around 6-8% annually**[17]
- The increased workload is **compounded by workforce shortages** across the multidisciplinary team. Disruptions from the **COVID-19 pandemic further strained oncology services** with patients presenting late
- Against this backdrop, the **increasing complexity of cancer treatments** – such as advanced therapies and the associated need for personalised care plans – created a need for the existing service models to be adapted to meet national cancer treatment targets

"The success of this model, demonstrated through positive patient feedback and efficient management of backlogs, has set a precedent for other trusts to follow in adopting a pharmacy-led, multidisciplinary approach to oncology care."

Professor Nicola Stoner
Consultant Cancer Pharmacist
Oxford University Hospitals NHS Foundation Trust

- The Trust recognised this need, **implementing changes to address the increase in workload** using a **staffing skill mix,** while maintaining high standards of care

Overview of the service change

The Trust introduced two key changes: **introducing pharmacist and nurse non-medical prescribers, advanced cancer pharmacy technicians and expanding the use of telemedicine.**

Non-medical prescribers, including nurses, pharmacists, and other allied health professionals, **undertook specialist training to take on enhanced roles,** reducing reliance on consultant-led appointments and improving the skill mix and patient flow. This shift created **additional capacity within the service,** allowing for a more efficient and collaborative approach to care.

One of the central areas of focus was supporting the oral SACT pathway in response to the rise in prostate cancer incidence. Non-medical prescriber-led clinics now play a **critical role in delivering oral SACT services – providing high-quality, safe, and sustainable services at local clinics.** Non-medical prescribers identify potential issues early in the treatment process, reducing hospital admissions and ensuring patient experience aligns with expectations and cancer targets.

The **integration of telemedicine further enhanced service delivery,** enabling remote consultations that eased clinic capacity, reduced patient travel, and improved access to care. These changes not only strengthened efficiency in the oral SACT pathway but also ensured that **patients requiring or recovering from major interventions received continuous, comprehensive care** within a more flexible and responsive system, while also lowering the carbon footprint associated with in-person visits.

Challenges in designing and implementing change

- Challenges to implementing these changes were overcome through **early engagement with stakeholders and champions,** ensuring initiatives were piloted prior to rollout, demonstrating the benefits of the approach
- Clinic capacity, staffing levels and COVID-19 presented challenges, but these were mitigated by the **adoption of telemedicine and the implementation of cross-cover arrangements**

Outcomes of the service

Non-medical prescribing **improves patient care and optimises the skill mix of healthcare professionals,** enabling flexible working within multidisciplinary teams (MDTs).[18,19] The introduction of non-medical prescriber-led clinics has been a crucial response to the increasing demands and workload associated with the delivery of the oral SACT pathway. Pharmacists and Advanced Nurse Practitioners (ANPs) play an **essential role across the pathway,** in conducting toxicity reviews, monitoring blood tests and managing symptoms.

The integration of non-medical prescribers has been a **significant success in managing capacity pressures,** supporting patients, and the oral SACT pathway. By freeing up consultant-led clinic appointments, **consultants are able to focus on more complex cases,** including those requiring major interventions, and new patients. Plans are in place to **continue expanding these services** to meet the ongoing needs of cancer patients in the region.

Lessons for other areas

Strong support from consultants and the MDT: this is essential to the successful implementation of non-medical prescribers and developing effective working relationships. In Oxford, the flexibility of having a pool of non-medical prescribers available to meet increased service demand has ensured continuity of care. Ongoing professional development through training has also played a key role in maintaining a skilled workforce.

Early stakeholder engagement: this is also key to securing support from across the system. In Oxford, collecting and using outcomes data to demonstrate the initiative's success helped secure funding, as did the ability to adapt to changing funding models and unforeseen challenges. Cross-cover arrangements ensured continuity of service, while clear role definitions and streamlined protocols maximised team efficiency.

For more information on this case study, please contact Professor Nicola Stoner, Consultant Cancer Pharmacist at Oxford University Hospitals NHS Foundation Trust
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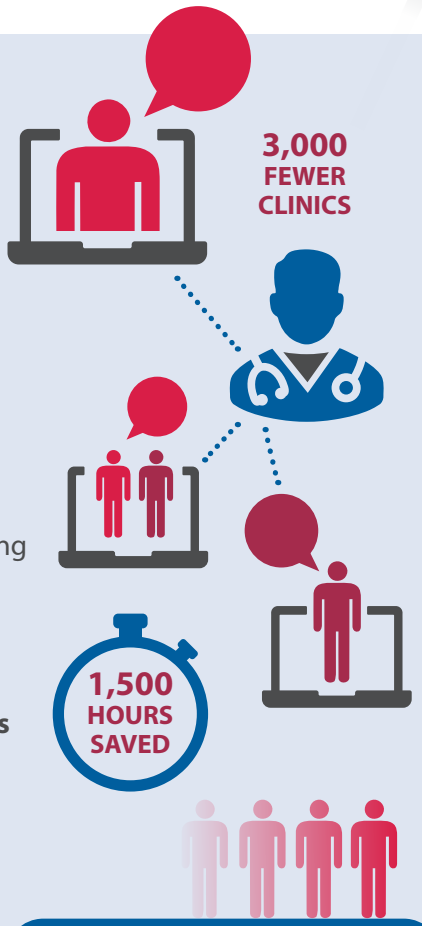
5

Redefining patient pathways with the VAP Clinic

Velindre Cancer Centre, Cardiff

Key points

- The award-winning **Virtually Assessed Patient (VAP) Clinic** at Velindre Cancer Centre provides **remote assessments** for prostate cancer patients as well as for other cancer sites, coordinated by nurses and pharmacy technicians
- The clinic covers a vast geographical area, reaching approximately **1.7 million people in South East Wales** – using the **Welsh Clinical Portal** to integrate patient data from local GP surgeries and district hospitals
- The clinic has **reduced the burden on consultant-led clinics,** enabling consultants to focus on more complex cases. **It has assessed over 17,000 patients in total, including approximately 3,000 patients receiving hormone therapies for advanced prostate cancer**[20]
  - For these patients, **the clinic has saved an estimated 1,500 hours in outpatient oncology time, resulting in 3,000 fewer urology clinic appointments**[20]
  - The clinic's work has also contributed to a **significant reduction in outpatient appointments** for other cancer sites within VAP, with a **total of 10,000 fewer outpatient clinic appointments**[21]



The need for change

- Velindre Cancer Centre has been **experiencing increasing demand,** primarily due to a **general rise in patient numbers** across various cancer types, including prostate, colorectal, breast, and skin cancers
- This demand has been further driven by the **introduction of new drugs,** which have **expanded the number of treatment options available,** contributing to a higher volume of patients

"The VAP clinic has consistently received positive feedback from patients, who appreciate the convenience and efficiency of the service."

Tej Quine
VAP Clinic Senior Nurse Lead
Velindre Cancer Centre

- As a result, the traditional model of face-to-face consultations across the pathway could no longer accommodate this increased demand. In addition, **patients from rural or remote areas** had long faced **significant barriers to accessing in-person consultations,** highlighting the need for a more flexible and accessible model of care

Overview of the service change

The VAP clinic model had been conceived as a **proof of concept** by Velindre Cancer Centre, set up in January 2020. The pandemic highlighted its **considerable and long-term potential.**

The new model enabled stable patients undergoing routine and well-tolerated SACT treatments to be transferred out of medical clinics and into the VAP clinic for **remote consultations.**

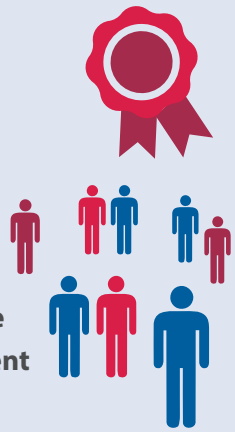
The clinic is led by nurse practitioners with advanced prescribing capabilities, supported by pharmacy technicians and nurses, who help **manage patient pathways, monitor side effects of treatments like SACT, and provide patient education.**

Blood tests are collected at local GP surgeries or district hospitals and uploaded to the Welsh Clinical Portal, where results can be reviewed by the VAP team. This approach **decentralises care,** making it **more accessible to patients across a large geographical area.**

Challenges in designing and implementing change

- There was some **initial scepticism from clinicians** over whether virtual consultations could deliver the same quality of care as face-to-face interactions
- Similarly, some patients, particularly older patients with **lower levels of digital literacy,** were **reluctant to agree to virtual consultations,** preferring to continue in-person appointments. To address this, significant efforts were made to **educate both staff and patients on the benefits of virtual assessments,** which included improved access and convenience
- **Recruiting and retaining skilled staff,** focusing on nurse prescribers and pharmacy technicians, presented another challenge. Demand for these roles across the NHS is high and there is only a limited pool of eligible applicants
- To expand the pool, the Clinic was able to **bring in retired chemotherapy nurses and pharmacy technicians,** leveraging their experience to strengthen the team. The **flexible nature of the roles – offering a variety of tasks rather than repetitive duties – was appealing** to experienced staff looking to return to work.

Outcomes of the service



The work of the VAP clinic has been recognised through its award for 'Innovation and Treatment' at the Moondance Cancer Awards in 2023. The VAP has **supported clinical prioritisation and flow of prostate cancer patients through the system,** reducing the reliance on consultant-led clinics for routine patients.

Since its inception, the clinic has assessed over **17,000 patients in total, including approximately 3,000 patients receiving hormone therapies for advanced prostate cancer.**[20] For these patients, the clinic has saved an estimated **1,500 hours in outpatient oncology time,** resulting in **3,000 fewer urology clinic appointments.**[20]

Additionally, the clinic's work has contributed to a **significant reduction in outpatient appointments** for other cancer sites within the VAP, with a total of **10,000 fewer outpatient clinic appointments.**[19] This has effectively reduced the burden on consultant-led clinics, enabling consultants to focus on more complex cases and improving capacity for new patients, those awaiting scan results, and enabling faster diagnoses and treatments

By decoupling assessments from intravenous treatments, the VAP clinic has **provided greater scheduling flexibility,** which has been **key in managing rising patient volumes** and reducing disruption to their lives. Patient feedback has been overwhelmingly positive, with many reporting lower stress levels and an improved experience of care.

Additionally, regular satisfaction surveys are conducted to ensure the clinic is providing a high-quality service, with **patient satisfaction scores consistently above 9.5/10.**[20] Patients particularly appreciate the flexibility of virtual appointments and reduced stress from avoiding issues like parking.

Lessons for other areas

Start small and scale gradually: the VAP clinic began with a small cohort of patients, which allowed the team to refine processes and troubleshoot any challenges before scaling up. This gradual expansion ensured that the clinic could handle increasing patient numbers without compromising on quality of care.

Invest in data management: accurate data collection and management are crucial for maintaining control over patient volumes and ensuring resource efficiency. Strict data monitoring protocols allowed the VAP clinic to manage patient referrals effectively and ensure that only those who met specific criteria were included in the service.

For more information on this case study, please contact Tej Quine,
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6

Adopting a multi-disciplinary team approach to patient care

The Clatterbridge Cancer Centre NHS Foundation Trust, Liverpool

Key points

- The Clatterbridge Cancer Centre has strengthened its multidisciplinary approach to prostate cancer care, developing the role of **consultant therapeutic radiographers** and integrating an ANP team
- This has enabled a **redistribution of tasks across the multidisciplinary team,** allowing oncologists to focus on more complex cases
- The service change has **improved patient experience, eased pressure on clinicians, and enhanced follow-up care**

The need for change

- As in many areas across the country, The Clatterbridge Cancer Centre was grappling with **growing patient numbers** whilst also **onboarding new advanced treatment options**
- The **increased availability of oral SACT treatment options,** which often require extensive monitoring and follow-up, **heightened the pressures** already facing clinicians. This was compounded by a shortage of registrars and doctors, leaving existing team members overstretched
- To maintain high care standards, The Clatterbridge Cancer Centre identified a need to **explore new ways of working** with its existing workforce

"Integrating consultant therapeutic radiographers and ANPs into the prostate cancer multidisciplinary team, tailored to local contexts, will be crucial in addressing the growing demands of prostate cancer care."

Phil Reynolds
Consultant Therapeutic Radiographer
The Clatterbridge Cancer Centre NHS Foundation Trust

Overview of the service change

The team explored ways to create a more flexible and efficient approach to delivering care. It was agreed that **expanding the role of therapeutic radiographers and incorporating ANPs into the multidisciplinary team** offered significant potential to **manage challenges and boost patient care** from initial diagnosis through to follow-up care. Key steps taken by the Centre included:

- **Treatment management and follow-up:** Therapeutic radiographers – trained in advanced communication and patient management – took on new responsibilities for the follow-up of patients on oral therapies and those whose cancer had relapsed. These changes were designed to ease the burden on oncologists, allowing them to focus on more complex cases while ensuring that patients who required routine care received timely and high-quality support from therapeutic radiographers using their specialist training in this area
- **Establishment of doctor-led clinics:** Clinics were introduced to ensure that scans and treatment options were discussed promptly during the critical follow-up period when patient support and information are particularly important
- **Introduction of a 24-hour helpline:** This enhanced patient support through the provision of reassurance and clinical guidance outside of clinic hours

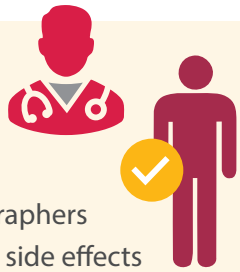
Challenges in designing and implementing change

Expanding the skill mix across the multidisciplinary team required **integrating new ways of working** at a time the workforce was already stretched.

Demonstrating the opportunities of reform to the existing clinical team was **important to manage any understandable hesitancy around changes to the delivery of care.** This required **careful planning, clear communication** about the expected benefits for the existing workforce and patients, and **ongoing collaboration** to ensure all team members understood how the new roles would complement their existing responsibilities.

To support this and instil confidence across the workforce, the Centre **invested in extensive training for therapeutic radiographers and ANPs** to ensure they were well equipped to take on responsibilities traditionally handled by oncologists, and **manage the demands of new treatments, side effects, and patient communication.** Training for the management of any adverse events linked to treatment was particularly important.

Outcomes of the service



The new approach has achieved a number of outcomes, including:

- **Timely care and improved follow-up for patients:** Consultant therapeutic radiographers and ANPs took on more responsibility for routine assessments, including managing side effects and monitoring patient progress around oral SACT. By allowing oncologists to focus on more complex cases and new diagnoses, patients have received timely, quality care
- **Reduction in clinician burnout:** The redistribution of responsibilities helped to balance workloads more effectively – addressing immediate service pressures while supporting a more sustainable model of care as patient numbers increase
- **Table 1** shows the number of **new patients consented for radical radiotherapy** from 2023-2024, broken down by healthcare professional. Compared to consultant colleagues Dr X and Dr Y, REYNOLP consistently consents a higher number of patients. By taking on a greater share of patient consent, REYNOLP helps free up consultants to focus on more complex cases and clinical decision-making, improving overall efficiency in patient management

Table 1: Annual Patient Consent Data for Radical Radiotherapy, The Clatterbridge Cancer Centre NHS Foundation Trust (2023-2024)

2024													
HCP	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**GRAND TOTAL**
Dr X	12	1	2	5	3	7	–	5	9	3	3	6	56
REYNOLP	11	14	19	6	7	6	9	7	7	8	12	10	116
Dr Y	3	1	1	6	1	2	3	3	2	3	5	7	37
2023													
HCP	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**GRAND TOTAL**
Dr X	7	3	4	7	3	7	6	6	7	5	7	5	67
REYNOLP	15	7	11	15	6	10	11	14	7	15	9	11	131
Dr Y	5	1	5	2	2	3	2	4	2	1	1	–	28

Lessons for other areas

Early engagement with management: clearly demonstrating anticipated benefits for patients, staff and the Centre is vital to secure the support needed for implementation.

Comprehensive training: this is required to ensure an effective transition and sustainable implementation long term – The Clatterbridge's investment in upskilling therapeutic radiographers and ANPs ensured that these professionals could effectively manage new treatment regimens and support patients throughout their care journeys.

For more information on this case study, please contact Phil Reynolds, Consultant Therapeutic Radiographer at The Clatterbridge Cancer Centre NHS Foundation Trust
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Conclusion

The case studies outlined in this report demonstrate the impact of local innovations in transforming the delivery of prostate cancer care for patients in need of major interventions – from improving diagnostic pathways to enhancing patient access and supporting a skilled, adaptable workforce.

These services, though varied in approach, share common goals: reducing delays, optimising resources, and improving the overall experience for both patients and healthcare professionals. Insights from the interviews we carried out with healthcare professionals offer valuable lessons for other areas, highlighting the importance of early engagement, a multidisciplinary approach, and targeted investment in training and technology.

We hope this report will be used by healthcare professionals in conversations with local system leaders to explore solutions and opportunities to advance care and treatment in their own areas. The solutions highlighted here can serve as a basis for discussions with policymakers at both local and national levels. They can be adapted to reflect local needs and the changing nature of cancer care and contribute to national objectives on workforce reform and productivity.

Astellas is committed to playing its part in supporting the ongoing transformation of cancer care – both in prostate cancer and other tumour types. By working closely with healthcare professionals on initiatives such as those set out above, Astellas will continue to support local systems to adopt innovation and drive better care and improved patient outcomes.

Glossary of acronyms

ANP (Advanced Nurse Practitioner)
A highly trained and experienced nurse who has completed advanced clinical education, enabling them to take on extended roles such as assessing, diagnosing, prescribing, and managing patient care, often independently or as part of a multidisciplinary team

MRI (Magnetic Resonance Imaging)
A medical imaging technique used to create detailed images of organs and tissues, often used in prostate cancer diagnosis

MDT (Multidisciplinary Team)
A group of healthcare professionals from different specialties who work together to provide comprehensive patient care

SACT (Systemic Anti-Cancer Therapy)
A treatment approach that includes chemotherapy, immunotherapy, hormone therapy, and other drug-based cancer treatments that affect the whole body

SPEED Pathway (Superior Prostate Experience and Efficient Diagnostics)
A streamlined diagnostic approach at The Royal Marsden NHS Foundation Trust aimed at improving the speed and accuracy of prostate cancer diagnosis

VAP (Virtually Assessed Patient) Clinic
A virtual healthcare model that allows remote assessment and monitoring of patients to improve access to care

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