Introduction
Prostate cancer will affect one in eight men in the UK during their lifetime. It’s the most common cancer in men in the UK, with over 40,000 new cases diagnosed each year.

As prostate cancer is one of the less aggressive forms of cancer, diagnosing it correctly and treating it is complex. The technology and innovation that have been developed to increase accuracy and speed in diagnosis and treatment often mean men have multiple options when choosing their preferred treatment.

The prostate cancer team at University College London Hospitals NHS Foundation Trust (UCLH) has been the leader in prostate cancer diagnosis and innovation for the last decade.

Trials such as the Prostate MRI Imaging Study (PROMIS) have challenged the way that men with prostate cancer are diagnosed. Previously men who had suspected prostate cancer would be sent for a biopsy via the rectum, guided by ultrasound. However, the PROMIS research, led by UCLH, has shown that over a quarter of men with a clinical suspicion of prostate cancer can avoid biopsy if undergoing an MRI first. This research is shaping prostate cancer diagnosis and treatment globally. Using innovative technology and new research, the UCLH prostate team, along with UCLH Cancer Collaborative, has been looking at how this good practice and new techniques can be rolled out across north central and east London. Working together, they are looking at ways to reduce delays in diagnosis, improve accuracy, help with patient choice and help improve quality of life beyond treatment.

The prostate cancer pathway accounts for the highest number of patients waiting more than 62 days from referral to treatment across the UK. It is estimated that 30 per cent of those delays happen during the diagnostic phase. Implementing best practice pathways and guidelines across the sector, training staff and optimising scanners are a priority for our male population.

This case study details some of the work we are undertaking to reduce waiting times and improve treatment options.

One stop clinic and MRI diagnostics
One of the ways UCLH Cancer Collaborative is helping to reduce waiting times is by implementing a world-leading prostate cancer one stop clinic which reduces patient visits from five to two, and time to diagnosis from six weeks down to one. These clinics were initially piloted at UCLH and are being rolled out across the region.

In the one stop clinic, magnetic resonance imaging (MRI) is used to identify more accurately fast-growing prostate cancers that need treatment, whilst allowing men without suspicion of lethal cancer to avoid biopsy. Those who scans indicate possible cancer present will go on to have a targeted biopsy. This is carried out through the skin of the perineum and virtually eliminates the risk of sepsis or infection.

This reduces a six week process to one week. It works better for everyone. It doesn’t cost the hospital any more to speed up the process, and it’s better for patients. No-one gets stuck on a lingering pathway, and there’s less chance of missing something.
Research has shown by implementing one stop diagnostic services fewer men are biopsied, resulting in less harm to patients and reduced costs, and trusts are able to achieve an improvement of between 19 and 51 per cent in 62 day waiting time, from referral to treatment, compliancy.

We are supporting trusts across our region as well as nationally to implement one stop clinics through the one stop ‘how to guide’. This guide, written in collaboration with Royal Free NHS Foundation Trust who have set up a successful one stop service, offers trusts a step by step guide to setting up a similar service. It has been estimated that, if all trusts across our network ran an effective one stop service 100 breaches could be saved every quarter.

MRI reporting training and scanner optimisation

UCLH Cancer Collaborative has helped sponsor a masterclass in prostate diagnosis for urologists and radiologists across the region.

The two-day interactive MRI masterclass was developed by the specialist prostate team that includes Veeru Kasivisvanathan, Clare Allen, Caroline Moore and Mark Emberton. Urologists and radiologists, with a special interest in prostate cancer, working across north central and east London, participated in the course to develop the consistent use of high quality MRI across the region to the benefit of patients.

Clinicians’ performance was measured at the beginning and the end of the course and showed a significant improvement in MRI reporting, with urologists as well as radiologists benefitting from the course.

“This was a fantastic opportunity for us to share our clinical expertise in using MRI to diagnose and manage prostate cancer. The course helped colleagues to understand how MRI imaging can influence treatment as well as how MRI can help guide prostate biopsy.”

Veeru Kasivisvanathan, UCL

National ‘best practice pathway’

As part of the national Cancer Vanguard we are working with colleagues in Greater Manchester and RM Partners to develop and implement a best practice timed pathway for prostate cancer. The aim of this is to develop a new optimal timed pathway that can be adopted nationally and reduce the variation of diagnostic services across the NHS. The focus of this pathway will be to ensure all patients have access to high quality diagnostic services (mentioned above) in a short space of time. This pathway aims to provide patients with a confirmed diagnosis within 3 weeks of referral to hospital.

Robotic surgery

We are also leading the way in prostate cancer treatment. The UCLH Cancer Collaborative area has the largest centre for robotic prostatectomy, a surgical procedure which removes the prostate.

Surgeons at UCLH have reached a significant milestone this #Movember – they’ve recently performed the 500th prostatectomy this year using robotic technology. This makes UCLH the largest centre in the UK, enabling more men to live normal, fully functioning lives beyond prostate cancer. As robotic surgery is minimally invasive, patients can expect to leave hospital the day after their surgery and be back to their day-to-day lives in two weeks.

“The conventional prostatectomy is a major procedure taking three to four hours and involving a two to three night stay in hospital and a lengthy recovery. Robotic surgery has changed that – it gives us the precision to remove the cancerous tumour preserving the tissues and functions around it. It’s given men their lives back after prostate cancer.”

Professor John Kelly (UCLH)

Next steps

UCLH Cancer Collaborative is making great strides in improving prostate cancer diagnosis and treatment across the region providing financial and project management support, as well as access to training and expert support. As global leaders of prostate cancer innovation it is great to see this expertise expanding nationally as well as across Europe.

www.uclh.nhs.uk/cancercollaborative