

New study shows UK may finally be ready for prostate cancer screening

Prostate Cancer UK study shows tens of thousands fewer men each year face unnecessary harm thanks to new screening techniques.



Dr Matthew Hobbs, lead researcher on the analysis and Director of Research at Prostate Cancer UK, said:

"We've known for some time now that testing more men reduces prostate cancer deaths, but there have always been concerns about how many men would be harmed to achieve this. However, our evidence shows that screening may now be a lot safer than previously thought. That's why we are so pleased that the committee is going to review the evidence once more. It's important that they consider this study and actual outcomes from the real-world NHS data and we hope they will find that we've reduced harm enough to be ready to launch a screening programme for prostate cancer. This will only be the first step in stopping prostate cancer being a killer. We know that even this modern pathway needs to be improved, and Prostate Cancer UK is committed to funding the research needed to make that happen, so we can save as many lives as possible."

New research by Prostate Cancer UK shows that the UK may finally be in a position to roll out a screening programme for prostate cancer. Screening has been shown to reduce deaths from prostate cancer by 20% [1] but was thought to harm too many men to be rolled out nationally. The study shows that the introduction of new scans and safer biopsies now means tens of thousands fewer men each year are experiencing harms such as unnecessary biopsy or sepsis during diagnosis [2].

The news comes after the UK's National Screening Committee last week announced its decision to review the evidence for screening – both population-wide and as a targeted intervention for Black men or men with a family history of the disease, who are at highest risk. Prostate Cancer UK welcomes those decisions and calls for the committee to consider all the latest evidence from the UK and Europe which points towards an ever-stronger case for screening. It also highlights the need for more research to improve the way men are diagnosed in the long-term.

Prostate Cancer UK presented its analysis of several clinical trials and current practice alongside real-world data from 16 NHS trusts in London and the South-West at the ASCO GU Conference in San Francisco.

It compared this to a screening trial from before these newer scans and biopsies were introduced that informed the committee's past decisions to rule out screening for prostate cancer.

It found that on average, **67% fewer men experienced harm** during the diagnostic process – amounting to 902 fewer men for every 10,000 PSA tests carried out and tens of thousands of men each year. This is thanks to:

- **A nearly 64% decrease in the number of unnecessary biopsies** (an average of 602 fewer men for every 10,000 men who have a PSA test).
- **A 55% reduction in the number of men who develop sepsis** (5 fewer men for every 10,000 men who have a PSA test).
- **A nearly 77% reduction in the number of men receiving a diagnosis of 'clinically insignificant cancer'** – meaning that it is very unlikely to ever spread and cause them harm (294 fewer men for every 10,000 men who have a PSA test).

Looking at real world outcomes based on actual NHS practice, the process of diagnosis using these new techniques was even better than would be expected, even when forecasting harm reduction based on clinical trials.

Two new techniques have been key to this reduction in harm – multiparametric MRI scans (known as mpMRI) and transperineal guided biopsies.

Before 2019, men with a high level of prostate specific antigen (PSA) in their blood were sent straight for a biopsy, which came with a risk of serious infection and could sometimes miss the cancer, leading to repeated biopsies. Prostate Cancer UK helped to fund research that showed having mpMRI scans beforehand could safely rule out 27% of biopsies as unnecessary, as well as improving their accuracy, making them more likely to detect the cancer the first time [3]. The charity worked closely with the NHS to make sure the innovative technique was rolled out across the country, which has been the biggest factor in reducing these unnecessary harms.

The increased use of transperineal biopsies in recent years, which carry lower risk of sepsis, has also helped to lower this risk further.

Meanwhile, data shared by the charity in January showed that 10,000 men are being

diagnosed with stage 4 incurable cancer while 12,000 continue to die each year [4], further highlighting the importance of a screening programme that could save thousands of lives.

Dr Matthew Hobbs said:

"It's really impressive that the NHS has been able to implement these changes so successfully, making it even more effective in practice than we predicted from looking at clinical trials. We're incredibly proud of the role we've played in improving diagnosis, and this new analysis shows we could soon be in a position to roll out screening for prostate cancer as a result. Our mission now is to make sure it doesn't end here, by working to provide the evidence needed for screening and by continuing to fund research into diagnosis that will save more lives and harm even fewer men in the process. Until we have an effective screening programme, men need to be aware of their risk, which is higher for men over 50. Black men and men with a family history of the disease are at even higher risk and should speak to their GP from the age of 45."

**Help fund vital research into prostate cancer diagnosis at:
www.prostatecanceruk.org
Men can check their risk in just 30 seconds using Prostate Cancer UK's online risk checker:
prostatecanceruk.org/riskcheck**

References

1. Hugosson J, Roobol MJ, Månsson M, et al.; ERSPC investigators. A 16-yr Follow-up of the European Randomized study of Screening for Prostate Cancer. *Eur Urol* 2019;**76**(1):43-51.
2. All analysis conducted by Prostate Cancer UK and presented at ASCO GU: <https://meetings.asco.org/2023-asco-gu-cancers-symposium/15167?presentation=217357#217357>
3. Ahmed HU, El-Shater Bosaily A, Brown LC, et al. Diagnostic accuracy of multi-parametric MRI and TRUS biopsy in prostate cancer (PROMIS): A paired validating confirmatory study. *The Lancet* 2017;**389**(10071):815-22.
4. 9,972 men are diagnosed with stage 4 prostate cancer every year in the UK based on averages taken from national stage at diagnosis data: England: Cancer registration statistics, England 2019 Wales: Cancer incidence in Wales, Public Health Wales, 2002-2019 Scotland: Cancer staging by deprivation, Public Health Scotland, 2014-2018 Northern Ireland: Northern Ireland Cancer Registry, Queen's University Belfast, 2020.

About Prostate Cancer UK

- Prostate Cancer UK has a simple ambition – to stop prostate cancer damaging the lives of men and their families.
- Investing in finding better treatments and tests that could save thousands of lives.
- Working with the NHS to make sure men get access to breakthrough tests and treatments.
- Spreading the word about who is at risk of prostate cancer, especially to those at higher risk.
- Supporting people dealing with prostate cancer and providing health information.
- Visit **prostatecanceruk.org** now to help beat this disease.