Diagnosing prostate cancer in asymptomatic patients

Screening tests are not currently recommended and should be approached with caution

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The pandemic has disrupted the diagnosis and treatment of cancer in health systems worldwide. In response, patients at risk of cancer have been encouraged to present to health services to support prompt diagnosis. 1 In England, this has included a collaboration between the NHS and Prostate Cancer UK to find the 14 000 men estimated to have not yet started treatment for prostate cancer because of the pandemic. 2

The heterogeneous behaviour of prostate cancers, along with the poor performance of prostate specific antigen (PSA) testing in identifying clinically important disease, remain obstacles to implementing beneficial strategies for early diagnosis. 3 4 A systematic review found that PSA screening has little or no effect on prostate cancer mortality (incidence rate ratio 0.96, 95% confidence interval 0.85 to 1.08) and can, at best, prevent one prostate cancer death for every 1000 patients tested over 10 years. 5

Multiparametric magnetic resonance imaging has the potential to ameliorate some of the harms of screening by reducing the proportion of patients with a raised PSA value who require biopsy and thereby limiting biopsy related complications, including sepsis, urinary incontinence, and erectile dysfunction. 6 These developments, combined with advances in identifying those with a higher genetic risk, may in time tip the balance of benefits and harms in favour of screening. 7 In the meantime, routine screening is not recommended by the UK’s National Screening Committee or the US Preventive Service Task Force. 8 9 In both countries, asymptomatic patients can opt for PSA testing after exploring the benefits and harms with a clinician. 8 10

The number of tests performed has increased markedly over the past two decades, 11 12 contributing to a higher incidence of prostate cancer but with uncertain benefits since a large proportion of screen detected cancers probably constitute overdiagnosis. 13 Given these uncertainties, UK general practitioners are advised that PSA testing should not be offered to asymptomatic patients unless specifically requested. 14

Risk checker

NHS England’s bid to “find the 14 000 men” seems to depart from this cautious approach. The campaign has warned that people shouldn’t wait for symptoms and encourages men to use a risk checker. This informs men older than 45 with particular risk factors (black or mixed black ethnicity, or a first degree relative who has had prostate cancer) and all men older than 50 that they may be at higher risk and suggests arranging a GP appointment to discuss this risk. Further prompts explain that the first step to finding early prostate cancer is a PSA test, 15 urging men to use the risk checker, NHS England’s national clinical director for cancer, Peter Johnson, said: “Prostate cancer often doesn’t show any symptoms at an early stage, so don’t delay—check your risk now. The simple check could be lifesaving.” 16

Arguably, this messaging is consistent with the established principle of allowing patients to decide for themselves on PSA testing, and the risk checker does provide some valuable information. However, the apparent presumption of benefit in detecting asymptomatic disease could lead people to believe that the NHS is promoting screening.

For GPs, ensuring that patients understand the pros and cons of PSA testing and arrive at a decision that is consistent with their values and priorities is vital, but making shared decisions is complex and time consuming. 17 The quality of such discussions is likely to be highly variable and, particularly where patients have a firm expectation of having a PSA test at the outset, GPs may find it expedient to accede without fully exploring the possible consequences. 18

Encouraging all asymptomatic men older than 50 to book a GP appointment to discuss their risk has resource implications, which resonates with concerns raised about a “heart age” test that encouraged people older than 30 to obtain a blood test for cholesterol. 19

If men choose screening, after what interval should they consider repeat testing? Should asymptomatic patients consider having digital rectal examination along with a PSA test? What resources should guide shared decision making, and is there a role for risk calculators? 20 Should GPs counsel men younger than 50 who have been flagged as higher risk by the risk checker that PSA is not supported by official guidance for their age group? 21

Clarity, consistency, and support

Information for the public should emphasise that although PSA testing is available on request for men older than 50, it is not currently recommended, and why. If asymptomatic men over 45 in certain risk categories should be eligible for PSA testing, this needs to be stated in the national guidance, which has not been updated for over six years. 21 GPs and patients need practical up-to-date guidance on PSA testing, including recommended evidence based tools and resources to support shared decision making. If a risk checker tool is to be promoted as part of an early detection strategy, the tool must be evidence

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based and evaluated appropriately. Meanwhile, efforts must continue to focus on ensuring prompt diagnosis of symptomatic patients and generating the evidence needed to satisfy the National Screening Committee of the clinical and cost effectiveness for any proposed screening programme.

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2 Prostate Cancer UK. Find the 14 000 men. https://prostatecanceruk.org/prostate-information/risk-campaign
15 Prostate Cancer UK. Check your risk in 30 seconds. https://prostatecanceruk.org/risk-checker.html