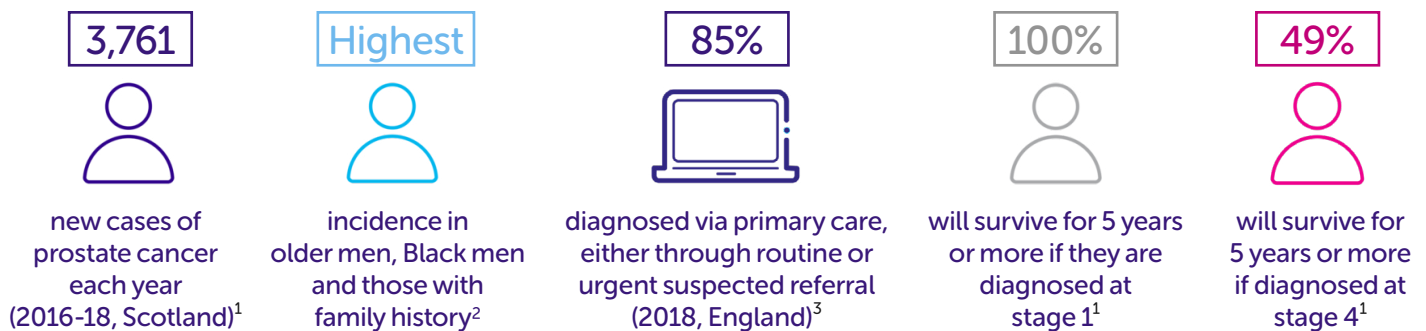




## Recognition and referral of suspected prostate cancer in Scotland



### Key prostate cancer statistics



### What you need to know about the PSA test

The PSA test is a blood test that detects the level of a protein called prostate specific antigen (PSA) in the blood. PSA is a protein produced by both normal and cancerous prostate cells and it is normal for all people with a prostate to have some PSA in their blood. The PSA test is used in asymptomatic and symptomatic contexts.

Considerations if you request a PSA test:

- people can have a higher PSA as they get older
- cancer can be present with lower PSA levels
- PSA levels can be increased by a number of things including UTIs, exercising vigorously and ejaculation
- before offering a PSA test discuss the benefits and limitations of the test to enable the person to make an informed choice



### Benefits & limitations of PSA testing

**Scottish Referral Guidelines for Suspected Cancer** highlight the factors that can raise and lower PSA levels<sup>4</sup>. NICE recommends providing the following information prior to offering a PSA test to enable informed decision making<sup>5</sup>:

Benefits of PSA testing include:

- prostate cancer may be detected before symptoms develop and may extend life or facilitate a complete cure

Limitations and risks of PSA testing include:

- **false-negative PSA tests** – about 15% of asymptomatic people with a normal PSA level may have prostate cancer
- **false-positive PSA tests** – about 75% of people with a raised PSA level have a negative prostate biopsy
- **false-positive PSA test may lead to invasive investigations**, such as prostate biopsy, and there may be adverse effects
- **unnecessary treatment** – slow growing tumours are common and may not cause any symptoms or shorten life



### Why don't we have a prostate cancer screening programme?

The UK National Screening Committee doesn't currently recommend screening for prostate cancer because<sup>6</sup>:

- it is unclear how PSA screening impacts prostate cancer outcomes, specifically death due to prostate cancer
- there are many harms of PSA screening, such as incorrect diagnosis and complications from further testing and treating
- there is not enough evidence at present to show that there are better tests than PSA
- there is no single treatment that is definitely better for patients with early-stage prostate cancer

CRUK have produced an infographic summarising the evidence for **Prostate Cancer Screening** (2022)

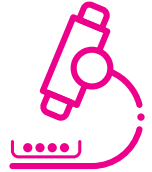
## Diagnosing prostate cancer: where are we now?

The diagnostic pathway for prostate cancer has been changing with the implementation of multiparametric MRI (mpMRI). mpMRI is increasingly used before biopsy in the UK.

There is some evidence to suggest that mpMRI can detect more clinically significant prostate cancers than the PSA test, which could help mitigate some of the risks associated with the PSA test, such as biopsy complications, overdiagnosis, and overtreatment.

Research is ongoing to explore:

- optimising the PSA test, e.g. by combining with other patient factors or test results
- risk prediction models, including genetic risk scores
- using AI to support current diagnostics
- a screening trial to address current evidence gap



## What can health professionals do to support the timely referral of suspected prostate cancer?



Act on clinical suspicion with consideration of risk factors such as family history and Black ethnicity



Be aware of the potential challenges associated with remote consultation



Conduct face to face appointments/testing with patients if there is suspicion



Consider a digital rectal examination (DRE) and a suspected cancer referral for patients with an abnormal DRE. A normal DRE does not rule out prostate cancer



Consider a discussion with a urologist if you feel it would be helpful



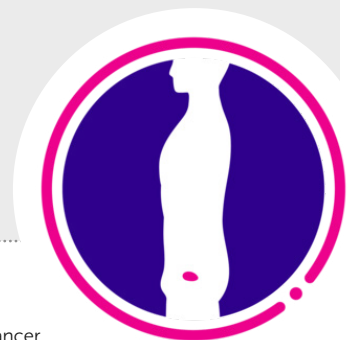
Be aware of and feel confident discussing the benefits and limitations of the PSA test with patients



Be aware if mpMRI is available in your area as it can detect more clinically significant prostate cancers than the PSA test



Safety-netting is vital for all patients, whether they're being referred for tests or specialist advice, or not



### References

- 1 Cancer Research UK, Prostate cancer statistics. Accessed November 2022
- 2 Delon, C., Brown, K.F., Payne, N.W.S. et al. Differences in cancer incidence by broad ethnic group in England, 2013–2017. *Br J Cancer* 126, 1765–1773 (2022)
- 3 For England, where route to diagnosis is known. CRUK, Early Diagnosis Data Hub. Accessed November 2022
- 4 NHS Scotland. Scottish Referral Guidelines for Suspected Cancer. Accessed November 2022
- 5 NICE. How should I assess a person with suspected prostate cancer. Accessed November 2022
- 6 UK National Screening Committee (2021) Rapid Review Screening Prostate Cancer

If you want to hear more about this or have any comments please get in touch at [earlydiagnosis@cancer.org.uk](mailto:earlydiagnosis@cancer.org.uk)