



TRANSFORM

Recruiting Marginalised groups to a Randomised Control Trial: TRANSFORM(ing) methods and approaches for the prostate Screening Trial

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SAPC North Seminar 17/06/25

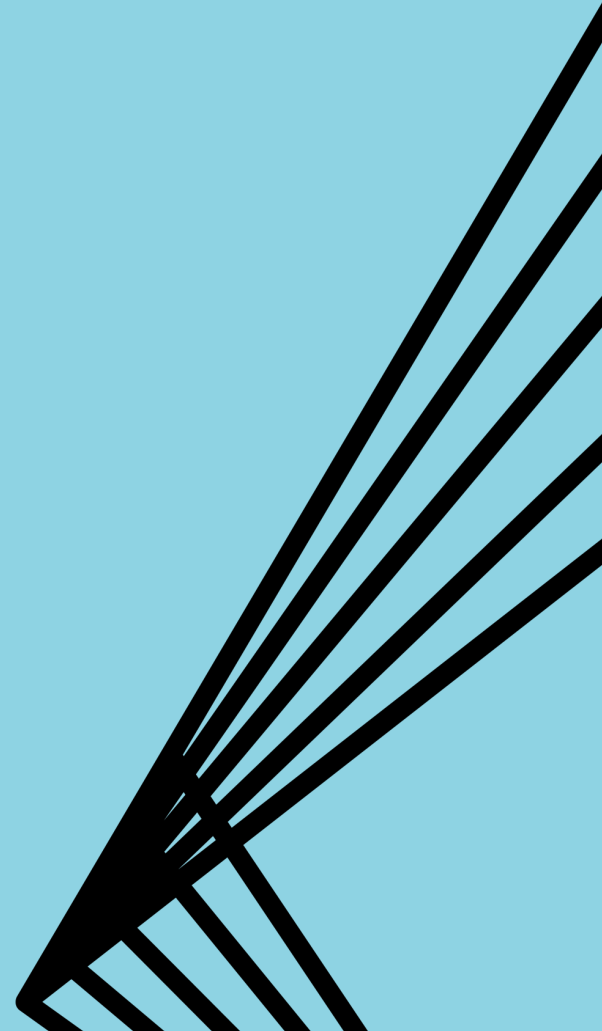
SCALE OF THE PROBLEM: PROSTATE CANCER IS ENGLAND'S MOST COMMON CANCER



55,000 diagnoses a year

12,000 deaths – second biggest cancer killer

**The only cancer among those of highest incidence
without an approved screening programme**



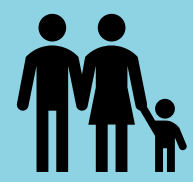
Increase in diagnoses: 9% rise in England (2023) and 26% rise in Wales (2022).

16% rise in Scotland (2022) (Prostate Cancer UK).

Overtreatment rates (January–December 2021): Remained stable in the latest available data. However, trends for more recent years are yet to be seen.

Ethnic and social disparities: Black men, older men, and deprived populations have higher late-stage diagnosis and face barriers to radical treatment.

RISK FACTORS FOR PROSTATE CANCER



A man is between 2 and 4 times more likely to be diagnosed if he has 1 or more first degree relative with prostate cancer



A man's risk of prostate cancer may be increased if he has a close relative with breast cancer – if the breast cancer is linked to faults in the genes **BRCA1 or BRCA2**

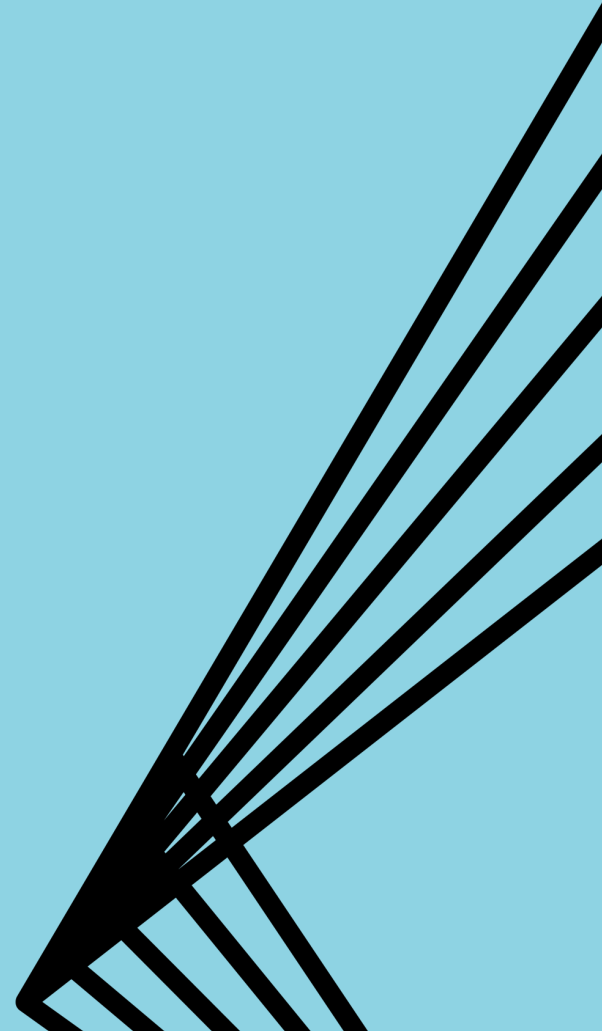


Black men are more likely to get prostate cancer than other men. In the UK, about **1 in 4 Black men** will get prostate cancer at some point in their lives

More likely to die from Breast, Lung and Bowel Cancer

Access to screening (bowel, breast and cervical) is lower than the general population

Face barriers to treatment and lower cancer survival



CURRENT GUIDELINES

“The PSA test is available free to any well man over 50 who requests it”

PSA threshold $\geq 3\text{ng/mL}$ regardless of age

Is reactive i.e. men have to know about the PSA and ask for it

No specific guidance for high-risk men

<https://www.gov.uk/government/publications/prostate-specific-antigen-testing-explanation-and-implementation/advising-well-men-about-the-psa-test-for-prostate-cancer-information-for-gps>

Guidance

Advising men without symptoms of prostate disease who ask about the PSA test

Updated 13 May 2022

Contents

1. Prostate cancer
2. PSA test
3. Digital rectal examination (DRE)
4. Multiparametric MRI (mpMRI)
5. Biopsy
6. Management and treatment

 Print this page

This prostate cancer risk management programme (PCRMP) information helps GPs give clear and balanced information to asymptomatic men who ask about prostate specific antigen (PSA) testing. The PSA test is available free to any man aged 50 and over who requests it.

GPs should use their clinical judgement to manage asymptomatic men and those aged under 50 who they consider to be at increased risk of prostate cancer.

GPs should follow [National Institute for Health and Care Excellence \(NICE\) guideline NG12](#) for the management of men who have symptoms of prostate disease.

1. Prostate cancer

Each year in the UK about 50,000 men are diagnosed with prostate cancer and about 12,000 die from the disease. See [Cancer Research UK prostate cancer statistics](#).

Factors that increase the risk of prostate cancer include:

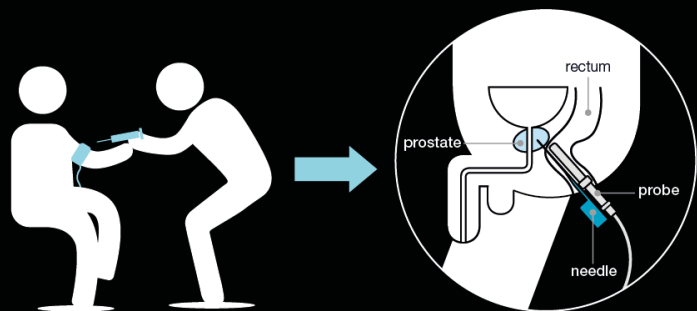
- age – prostate cancer is rare under the age of 50 and risk increases with age
- family history – if you have a close relative, for example brother or father, who has had prostate cancer
- ethnicity – the lifetime risk is 1 in 4 for men of black ethnic origin compared to 1 in 8 for white men

Prostate cancer is common and may not cause symptoms or shorten life. Some tested men may therefore face unnecessary diagnosis (overdiagnosis) of prostate cancer as well as associated anxiety, medical tests and treatments with side effects.

2. PSA test

TRANSFORMING THE DIAGNOSTIC PATHWAY

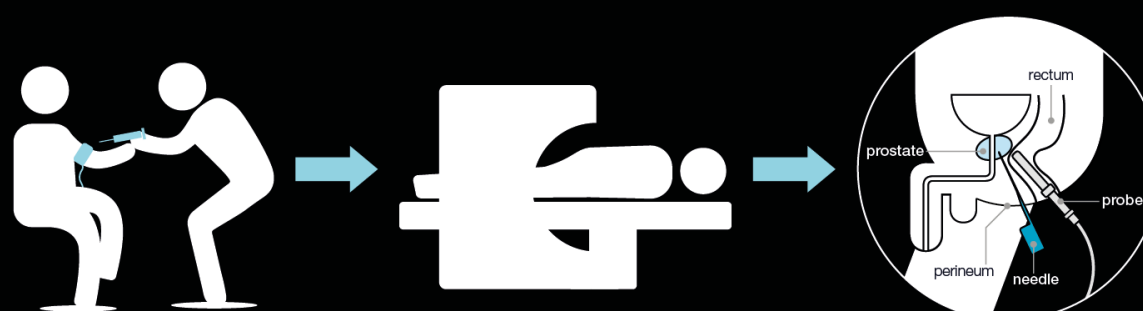
Before 2019



PSA blood
test

Transrectal
biopsy

TODAY



PSA blood
test

mpMRI scan

Transperineal
biopsy

SUMMARY OF EVIDENCE

- Repeat PSA testing can reduce prostate cancer death by around 20% at 10-15 years follow-up
- One-off PSA test almost no impact on survival
- No overall survival benefit in any RCT
- Significant harms of PSA screening
 - Overdiagnosis of indolent cancers -> anxiety, overtreatment
 - High false positive rate -> unnecessary biopsies, side-effects, health care burden

UK NSC screening recommendation

Based on the last UK NSC review of this condition that occurred in November 2020.

Screening is not currently recommended for this condition.



TRIAL OF RANDOMISED APPROACHES FOR NATIONAL SCREENING FOR MEN

THE LEAD RESEARCHERS



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ACADEMIC INSTITUTIONS & FUNDING PARTNERS

Academic Institutions

IMPERIAL



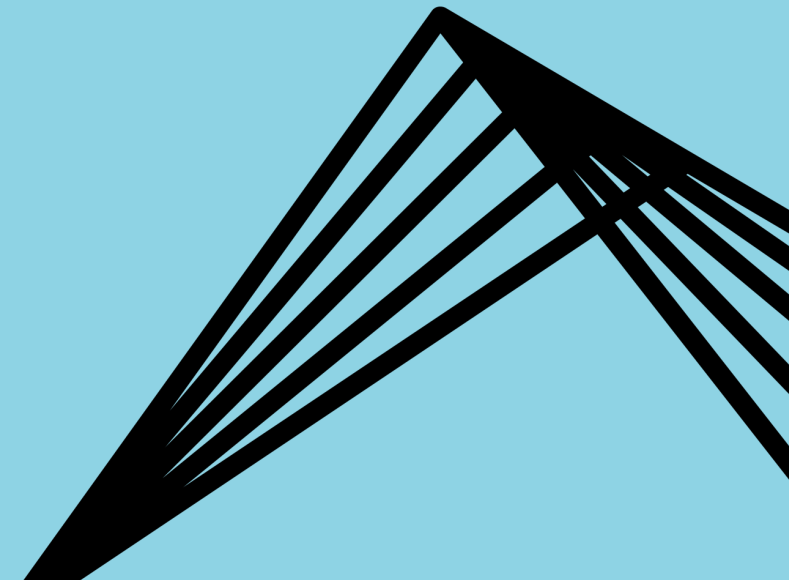
Founding Partners



Co-Applicants

Dr Afia Ali
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Dr Alex Freeman
Mrs Natalia Klimowska-Nassar
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Dr Heminder Sokhi
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Professor Fiona Walter

- **Multi-arm multi-stage platform randomised controlled trial**
- **Men will be invited to have a “Prostate Health Check” through direct letters from GP practices**
- **Pilot phase commencing Autumn 2025**
- **Pre-consent randomisation “Zelen” design**



1

Stage 1 (3 years)

- Pilot 4 screening interventions
- Evaluate how to deliver pivotal trial assessing key processes and assumptions
- Short-term outcomes
- Develop bio-digital twin protocols

17,000 men

2

Stage 2 (6 years)

- Main trial of optimal intervention
- Medium-term clinical outcomes
- PROMS: quality of life.
- Costs and resources
- Create bio-digital twin

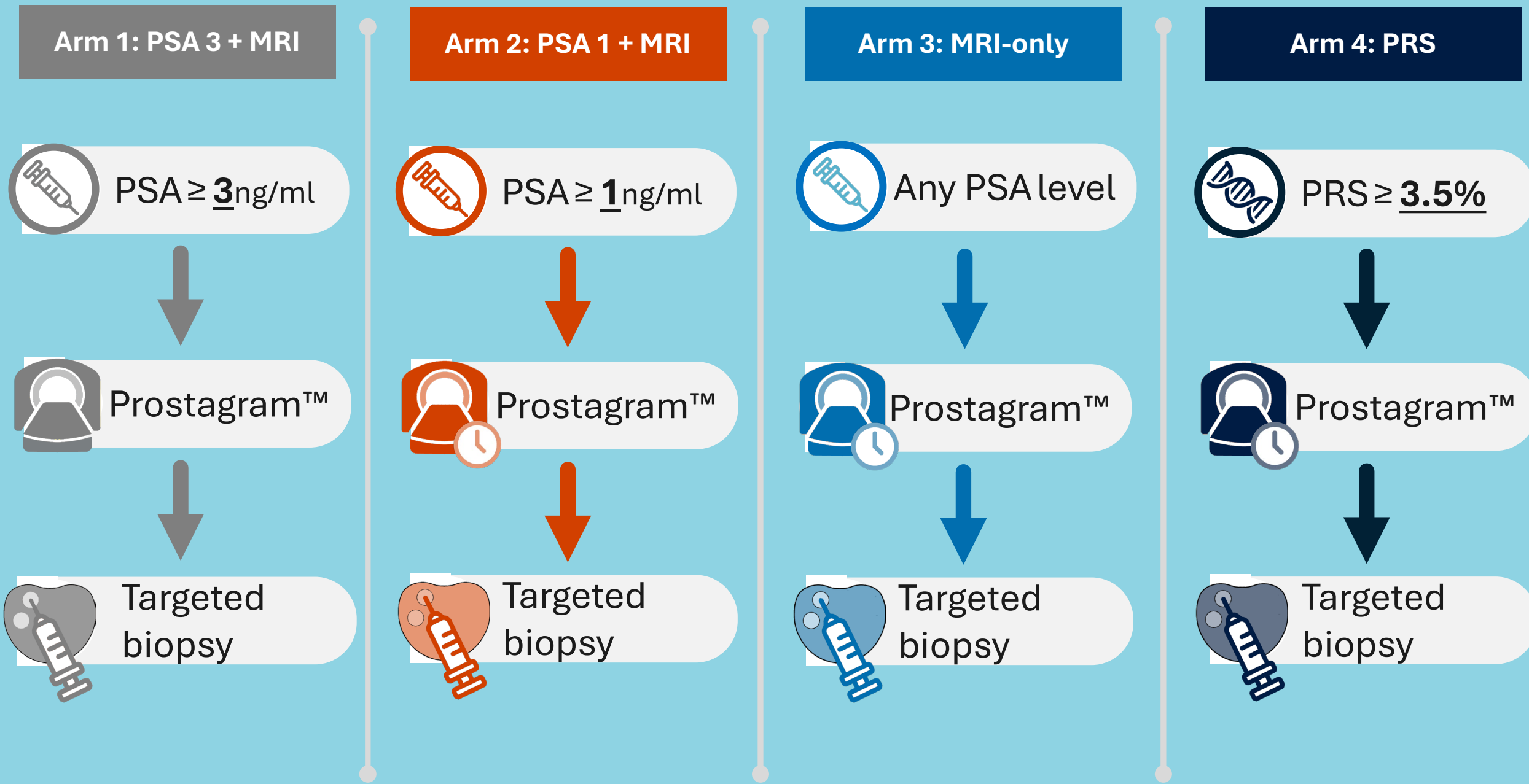
180,000– 500,000 men

3

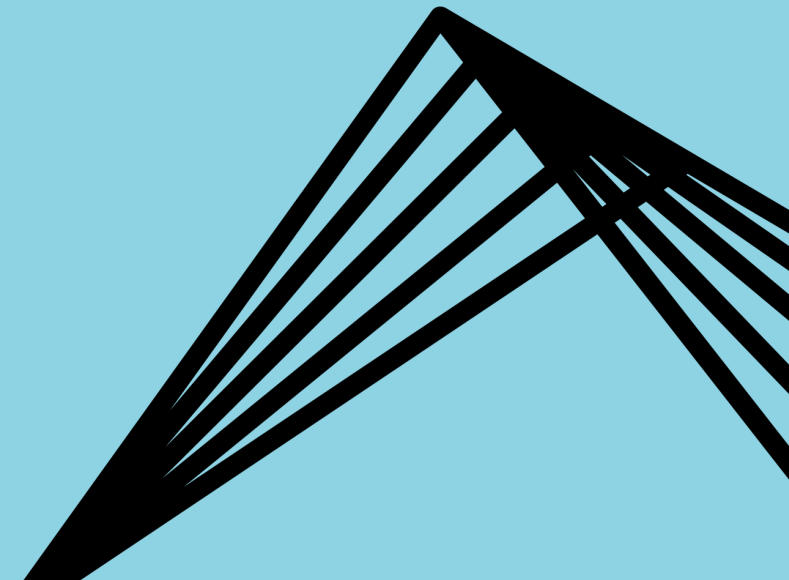
Stage 3 (10 years)

- Evaluate long-term primary outcomes through linkage to national databases

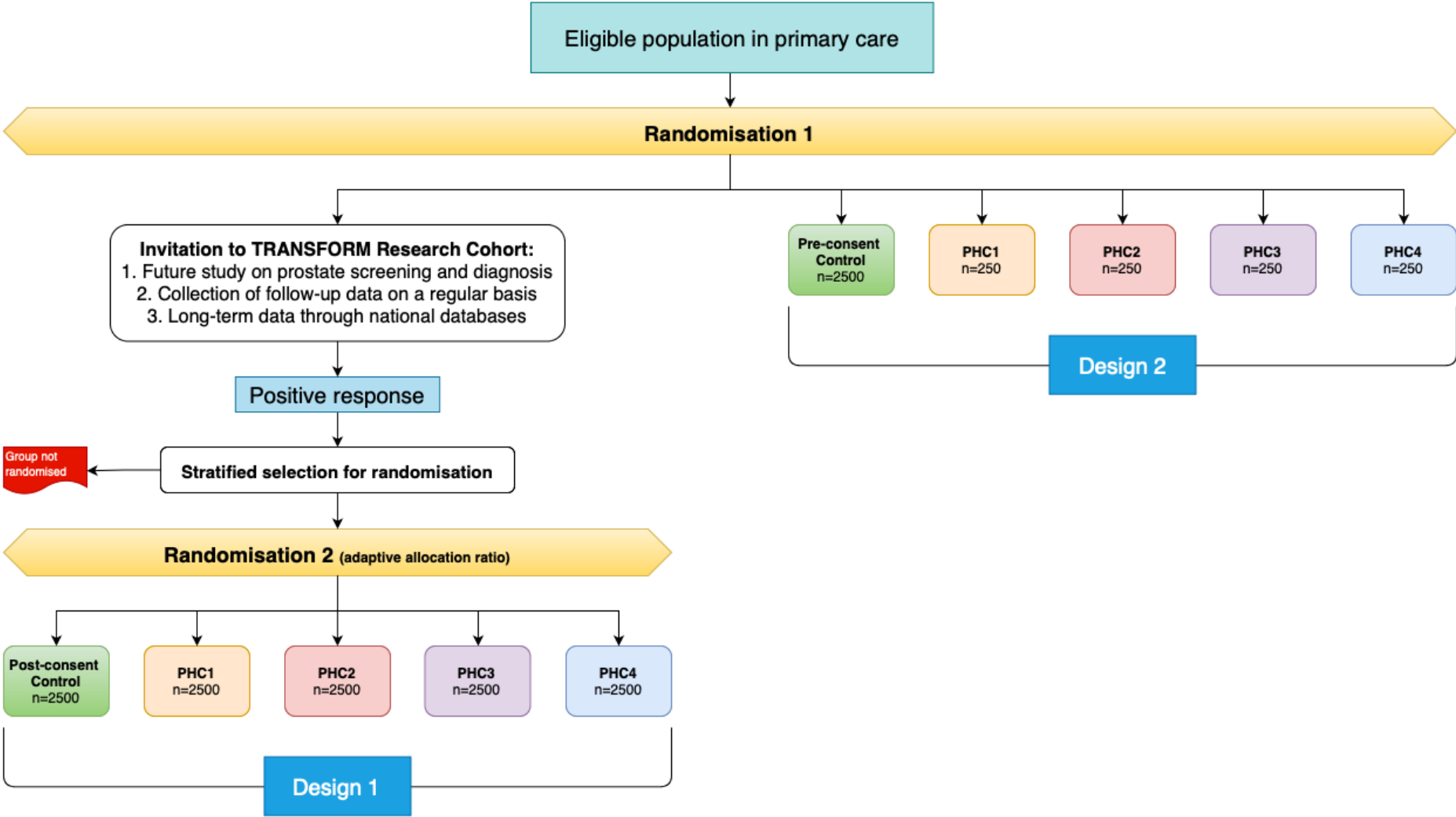
PROSTATE HEALTH CHECKS



- **Men are randomised to a Prostate Health Check or to a control group before invitation**
- **Most efficient design to avoid contamination**
- **Those randomised to control group not invited therefore not aware of involvement in trial, continue in usual care**
- **Learning from other disciplines e.g. Flexi Sig trial in colorectal cancer**
- **We will trial two designs in the pilot phase**



STAGE 1 TRIAL DESIGN OVERVIEW

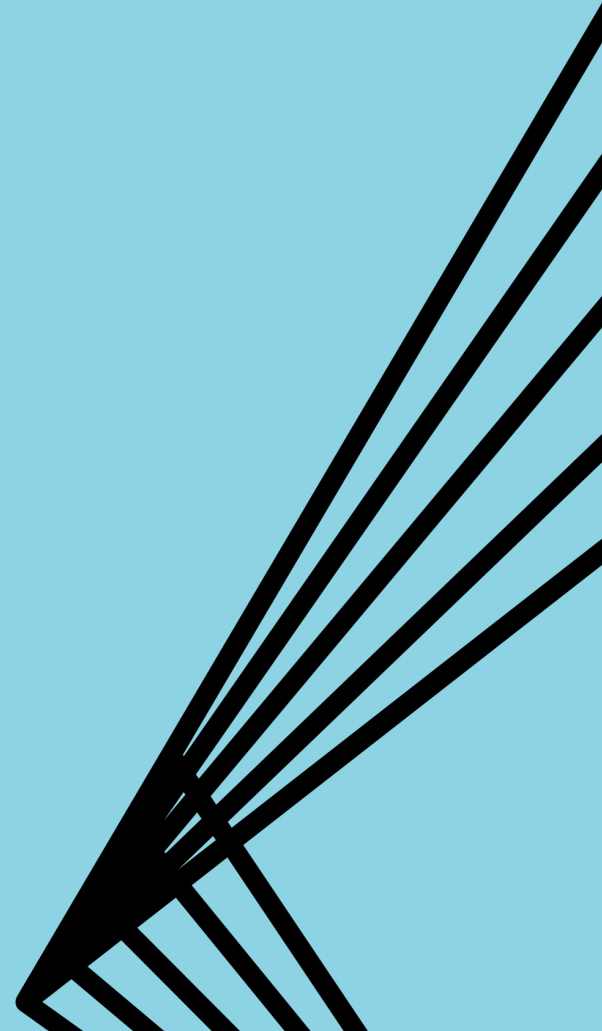


Eligibility criteria:

- **Men in the general population aged 50-74 years.**
- **Additionally, men aged 45-49 years who self-identify in GP practice lists as of Black ethnicity.**
- **Additionally, men aged 45-49 years who are on the GP learning disability Quality Outcome Framework (QOF) register.**

Exclusion criteria:

- **History of prostate cancer**
- **History of one or more prostate cancer tests in the preceding 5 years (PSA, MRI, biomarker).**
- **Androgen deprivation therapy**
- **Culture proven urinary tract infection in the 3 months prior to screening**
- **Significant co-morbidities or other cancers likely to impact on their life-expectancy in the next 10 years will be excluded.**



RECRUITMENT

People will be identified for the study through their local GP surgery only

Therefore, potential participants must be registered with a GP

People will be chosen based on “codes” for age, ethnicity & medical history

Plan to work with GP surgeries to ensure that records are accurate, important demographic data are available and make sure that this information is up to date & correct, if possible (i.e., correct age, correct ethnicity)

RECRUITING BLACK MEN INTO TRANSFORM

EUROPEAN UROLOGY OPEN SCIENCE 54 (2023) 56–64

available at www.sciencedirect.com

journal homepage: www.eu-openscience.europeanurology.com



European Association of Urology



Prostate Cancer

A Systematic Review of Patient Race, Ethnicity, Socioeconomic Status, and Educational Attainment in Prostate Cancer Treatment Randomised Trials—Is the Evidence Base Applicable to the General Patient Population?

Siddhant Patki^a, Julian Aquilina^b, Rebecca Thorne^c, Isaac Aristidou^d, Filipe Brogueira Rodrigues^e, Hannah Warren^e, Axel Bex^{e,f}, Veeru Kasivisvanathan^e, Caroline Moore^e, Kurinchi Gurusamy^e, Mark Emberton^e, Lawrence M.J. Best^{g,†}, Maxine G.B. Tran^{e,f,†,*}

DOI: 10.1016/j.euros.2023.05.015

JAMA | **Original Investigation**

Prostate-Specific Antigen Screening and 15-Year Prostate Cancer Mortality A Secondary Analysis of the CAP Randomized Clinical Trial

Richard M. Martin, BM, BS, PhD; Emma L. Turner, PhD; Grace J. Young, MSc; Chris Metcalfe, PhD; Eleanor I. Walsh, MSc; J. Athene Lane, PhD; Jonathan A. C. Sterne, PhD; Sian Noble, PhD; Peter Holding, MSc; Yoav Ben-Shlomo, MBBS, PhD; Naomi J. Williams, PhD; Nora Pashayan, MD, PhD; Mai Ngoc Bui, PhD; Peter C. Albertsen, MD; Tyler M. Seibert, MD, PhD; Anthony L. Zietman, MD; Jon Oxley, MD; Jan Adolfsson, MD; Malcolm D. Mason, MD; George Davey Smith, DSc; David E. Neal, MD; Freddie C. Hamdy, MD; Jenny L. Donovan, PhD; for the CAP Trial Group

DOI: [10.1001/jama.2024.4011](https://doi.org/10.1001/jama.2024.4011)

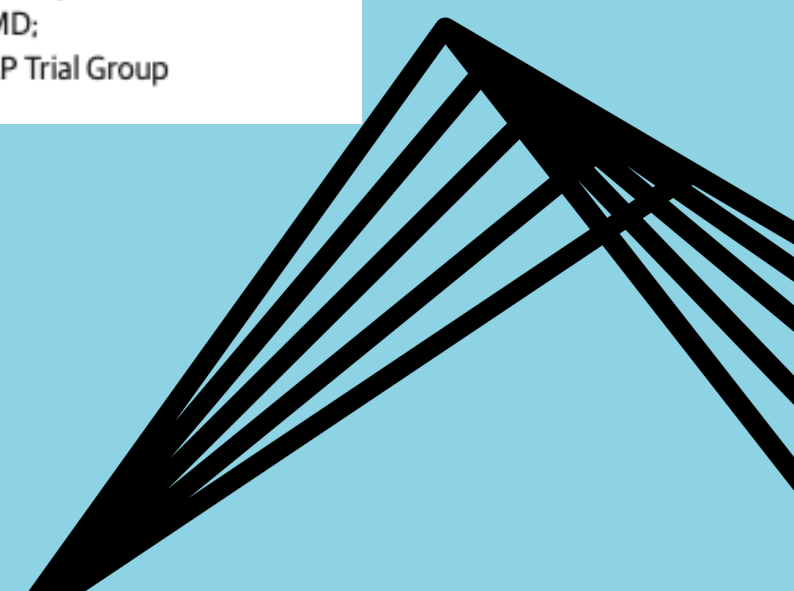


Table 1. Individual- and Practice-Level Characteristics at Baseline Among Consented Primary Care Practices and Men Included in the Analysis^a

Characteristic	Intervention group	Control group
Individual characteristics		
Men, No.	189 326	219 395
Age, median (IQR), y	58.5 (54.3-63.5)	58.6 (54.3-63.5)
Index of Multiple Deprivation score, median (IQR) ^b		
England	17.5 (10.1-33.2)	16.9 (9.8-32.4)
Wales	17.6 (9.2-29.5)	13.7 (7.1-29)
Urban area, % ^c	86	86
Race and ethnicity, %		
White	98	NA
Other ^d	2	NA

JAMA Oncology | **Original Investigation**

Population-Based Prostate Cancer Screening With Magnetic Resonance Imaging or Ultrasonography The IP1-PROSTAGRAM Study

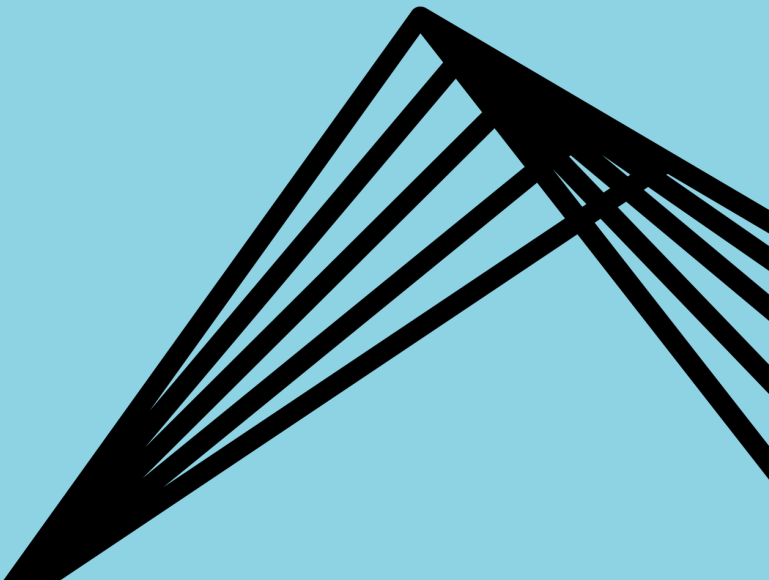
David Eldred-Evans, MBBS; Paula Burak, MSc; Martin J. Connor, MBBS; Emily Day, MSc; Martin Evans, Dip, RCM; Francesca Fiorentino, PhD; Martin Gammon, BA; Feargus Hosking-Jervis, BA; Natalia Klimowska-Nassar, MSt; William McGuire, BSc; Anwar R. Padhani, MBBS; A. Toby Prevost, PhD; Derek Price, MSc; Heminder Sokhi, MBChB; Henry Tam, MBBS; Mathias Winkler, MD; Hashim U. Ahmed, BM, BCh

DOI: [10.1001/jamaoncol.2020.7456](https://doi.org/10.1001/jamaoncol.2020.7456)

Table 1. Baseline Characteristics of the Study Participants (N = 408)

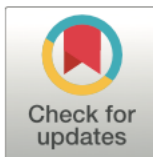
Characteristic	No. (%) of participants
Age group, y	
50-54	140 (34.3)
55-59	127 (31.1)
60-64	85 (20.8)
65-69	56 (13.7)
Racial/ethnic group	
White	155 (38.0)
Black	132 (32.4)
Asian	94 (23.0)
Other	18 (4.4)
Mixed race	9 (2.2)

DOI: 10.1001/jamaoncol.2020.7456





ELSEVIER



Journal of Clinical Epidemiology 149 (2022) 98–109

**Journal of
Clinical
Epidemiology**

ORIGINAL ARTICLE

Direct mail from primary care and targeted recruitment strategies achieved a representative uptake of prostate cancer screening

David Eldred-Evans^{a,b}, Paula Burak^{c,d}, Natalia Klimowska-Nassar^{c,d}, Henry Tam^e,
Heminder Sokhi^{f,g}, Anwar R. Padhani^g, Martin Connor^{a,b}, Derek Price^h, Martin Gammonⁱ,
Emily Day^{c,d}, Francesca Fiorentino^{c,d}, Mathias Winkler^{a,b}, Hashim U. Ahmed^{a,b,*}

DOI: 10.1016/j.jclinepi.2022.05.018

RECRUITMENT



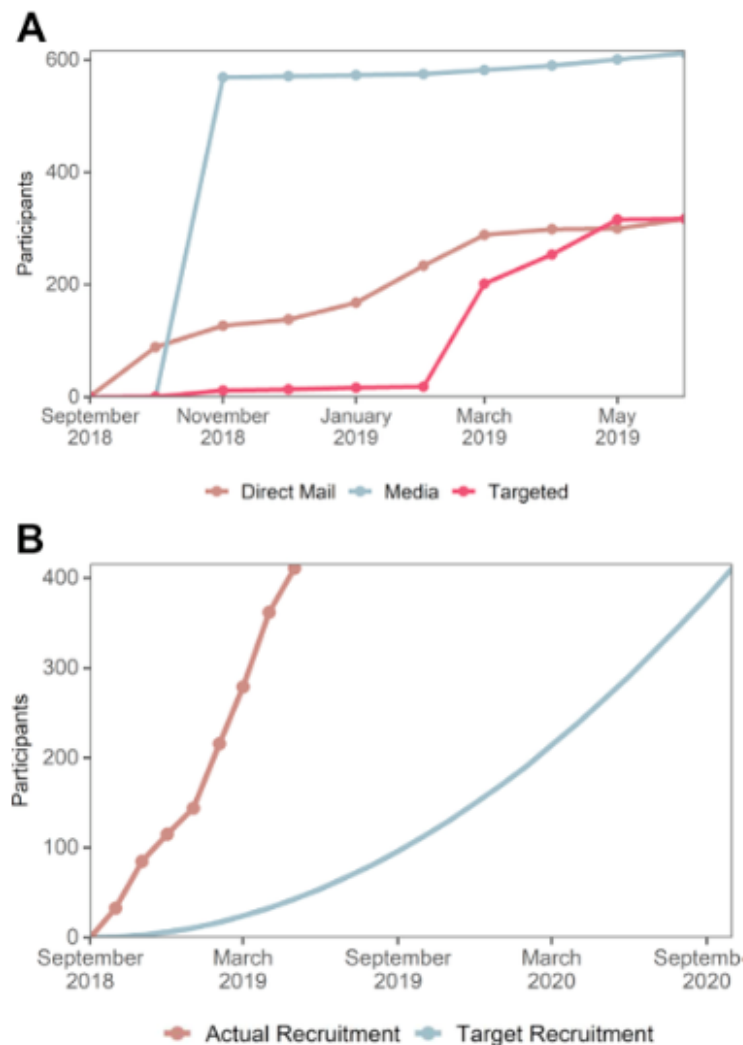


Fig. 3. (A) Cumulative expressions of interest received by each screening recruitment method and (B) Cumulative total study recruitment compared to expected recruitment.

Black men & deprived populations

Targeted recruitment > Direct mail or media strategy

White men & less deprived

Media strategy > Direct mail or targeted recruitment

RECRUITMENT

At least one in 10 of the men who receive an invitation letter to the trial will be Black

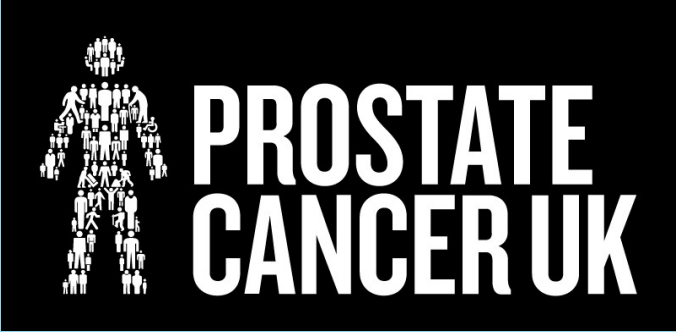
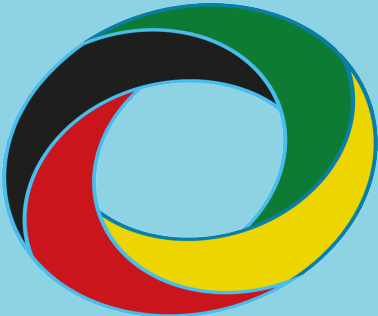
We are working with community groups and national networks to ensure we meet this target

Invite documents are appropriate, comprehensive & culturally sensitive to ensure that every person feels informed and able to uptake the invitation

Work with GP surgeries in high density areas

TRANSFORM COMMUNITY ENGAGEMENT

CAHN
Caribbean & African Health Network

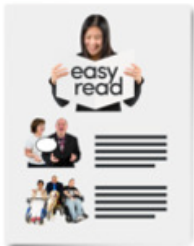


ADJUSTMENTS NEEDED FOR PEOPLE WITH A LEARNING DISABILITY

What is the study about?










- the study is about screening for prostate cancer



- the researcher can give you more information about the prostate

CONSENT FORM

Please answer by ticking YES or NO		YES 	NO 
	I have read the information sheet about the research		
	I can understand the things the information sheet told me		
	I was able to ask questions if I wanted to		
	I understand it is my choice if I want to take part in this further study		
	I understand that I can say NO at any time if I want to stop		

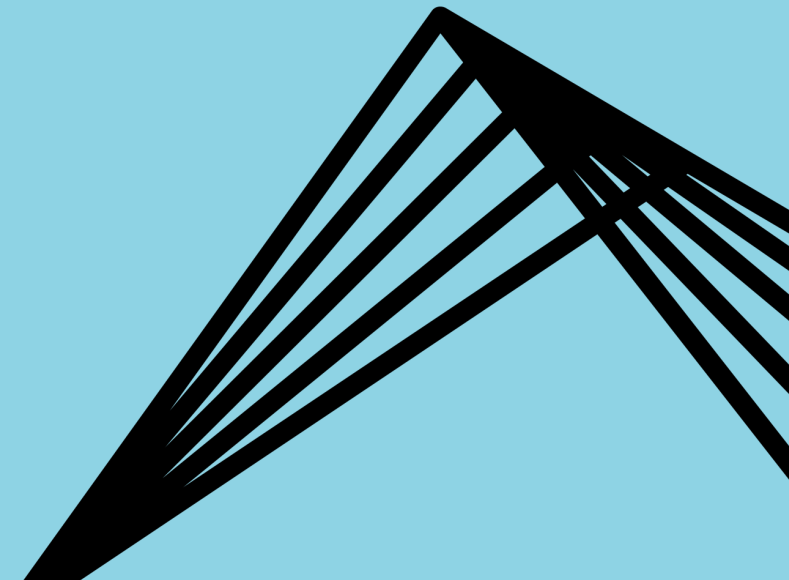
UNDERSTANDING PEOPLE'S EXPERIENCE

The research team will collect information at different time points from participants

We will measure things like:

- anxiety/ distress
- Satisfaction
- Levels of worry

We will also interview some black men (about 10) afterwards to get a deeper understanding of what their experience of the prostate health check was like, and how we can improve the process



UNDERSTANDING PEOPLE WITH A LEARNING DISABILITY EXPERIENCES

Working group of people with lived experience supported by

Charities and advocacy Groups



Dene Donalds (Pathways Associates)



Mark Shakleton (Co-Researcher)

TIMELINE

Stage 1 is due to begin in September 2025

Recruitment to the pilot trial will last 12-24 months

Pre- trial phase is the key time to engage with community groups & research networks to make sure we are aware of issues & barriers

Initial results from Stage 1 will be available in late 2027

QUESTIONS? & DISCUSSION