The critical importance of understanding prognosis from prostate cancer in increasing uptake of active surveillance

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University of Cambridge

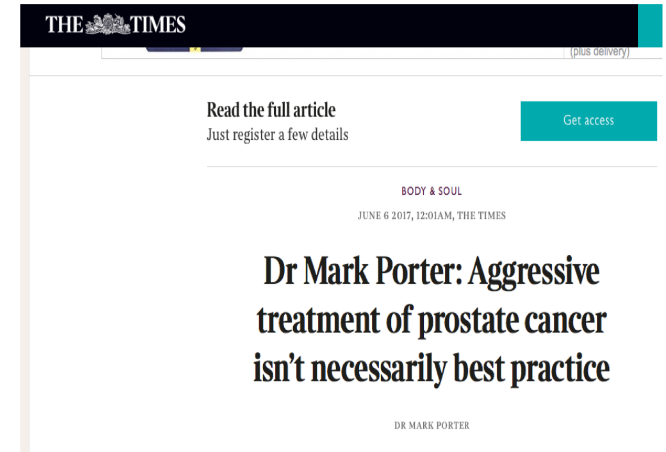
Why NOT treating prostate cancer 'is best for most men': Thousands with slow-growing tumours are undergoing unnecessary treatment

- Some slow-growing tumours will not spread and 'can never cause harm'
- But treatment can be debilitating and lead to depression and anxiety in patients
- Prostate cancer treatment can result in incontinence and loss of sex drive

Daily Mail

Prostate cancer survival rates very high regardless of treatment, study finds

The Sunday Post


THE TIMES

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BODY & SOUL
JUNE 6 2017, 12:01AM, THE TIMES

Dr Mark Porter: Aggressive treatment of prostate cancer isn't necessarily best practice

DR MARK PORTER

Vs

Prostate cancer - the low key killer that must be stopped.

ITV REPORT 16 January 2020 at 12:01am

Number of men dying from prostate cancer hits all-time high

Prostate cancer now kills more in UK than breast cancer

By Ben Tinker, CNN
Updated 1815 GMT (0215 HKT) February 2, 2018

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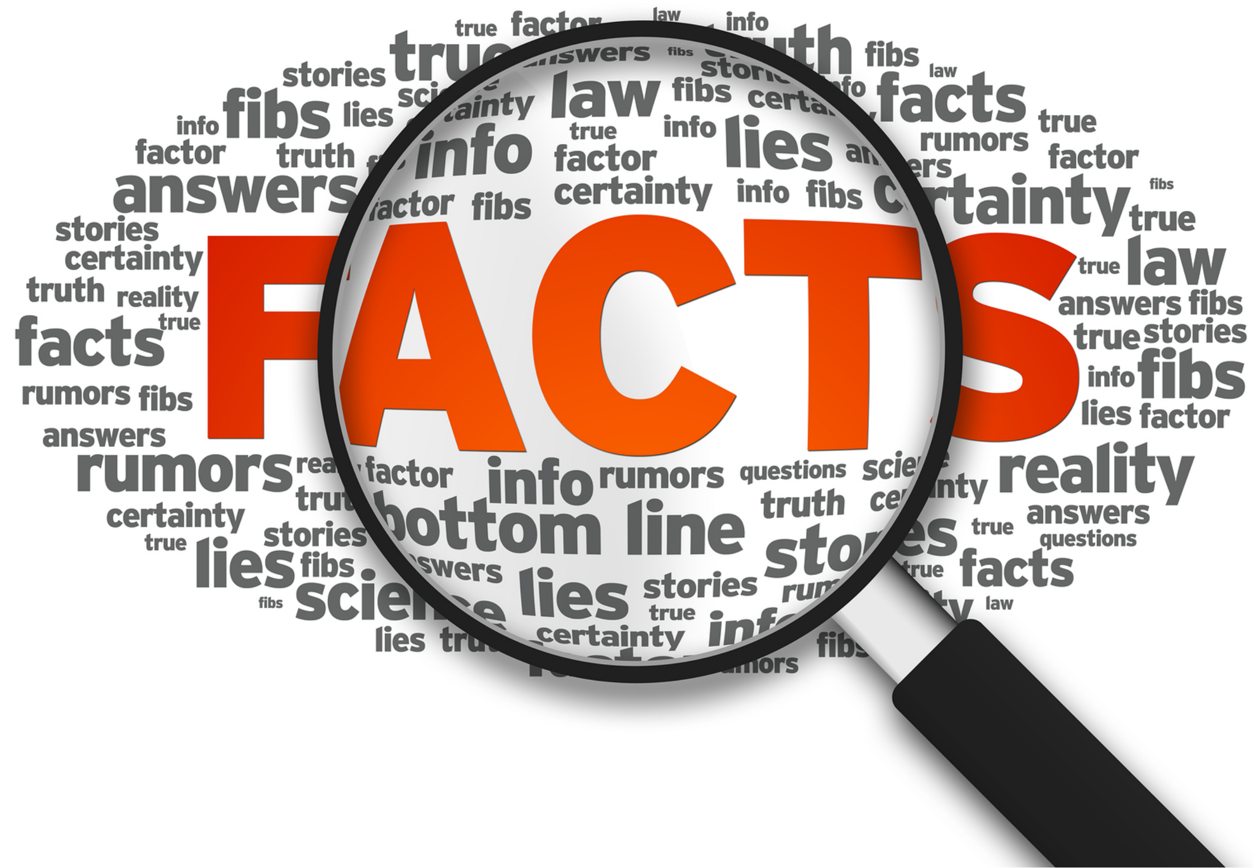
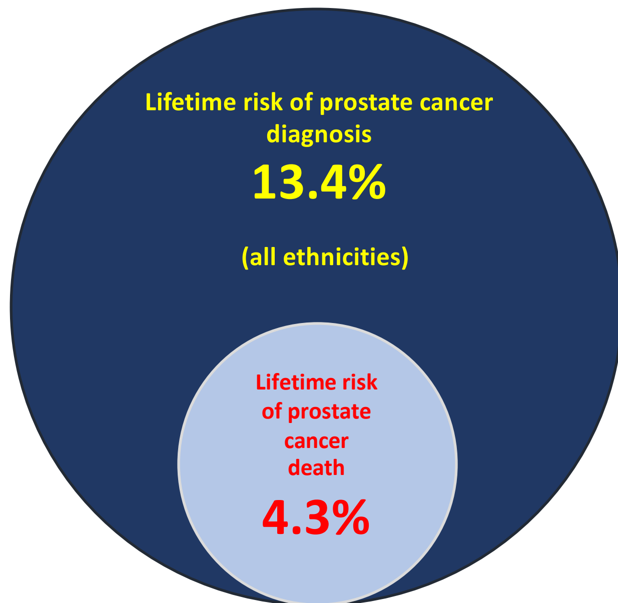
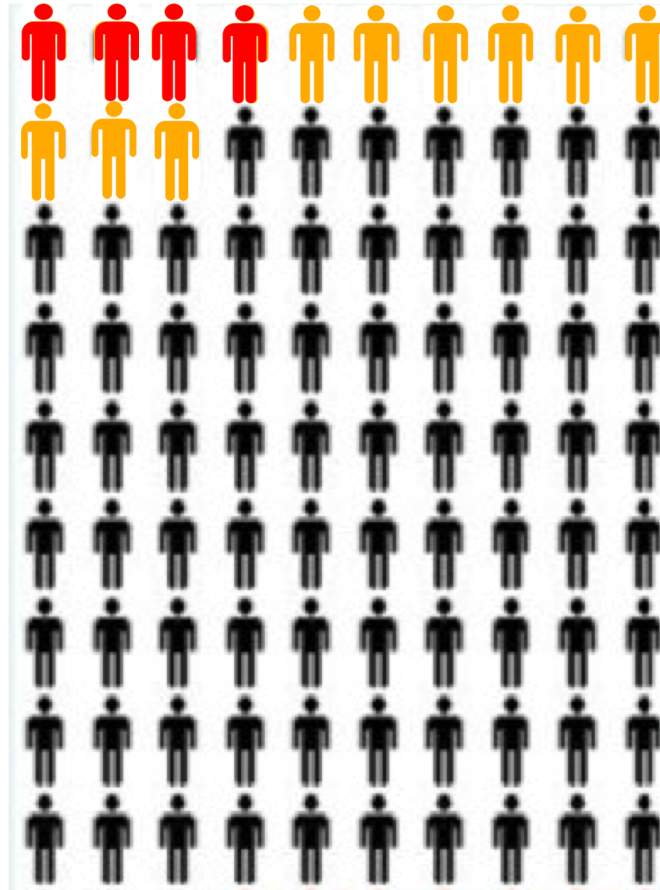


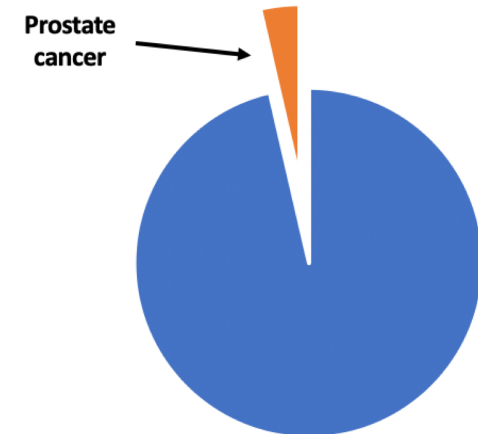
Cambridge PROSTATE CANCER

How lethal is prostate cancer in the male population? Only 4% of all male deaths



Lloyd *et al* 2015





<0.01% male 30-49y

0.9% male 50-59y

2.7% male 60-69y

4.2% male 70-79y

4.7% male 80-89y

4.5% in males >90

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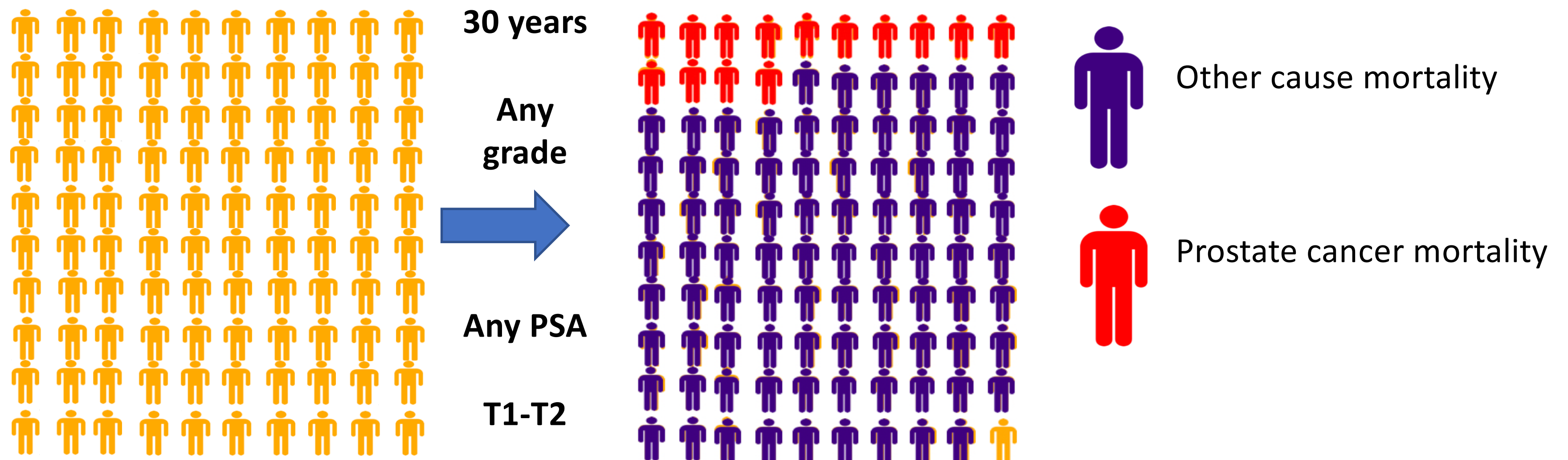
How lethal is prostate cancer?
What happens if you **don't treat** i.e. natural history

Natural History of Early, Localized Prostate Cancer: A Final Report from Three Decades of Follow-up

Marcin Popiolek[a,†], Jennifer R. Rider[b,c,†,*], Ove Andrén[a], Sven-Olof Andersson[a], Lars Holmberg[d,e], Hans-Olov Adami[c,f], Jan-Erik Johansson[a]

85% men died of other causes

Only 14% died due to prostate cancer



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The ProtecT Trial

Prostate Testing for Cancer and Treatment

CONCLUSIONS

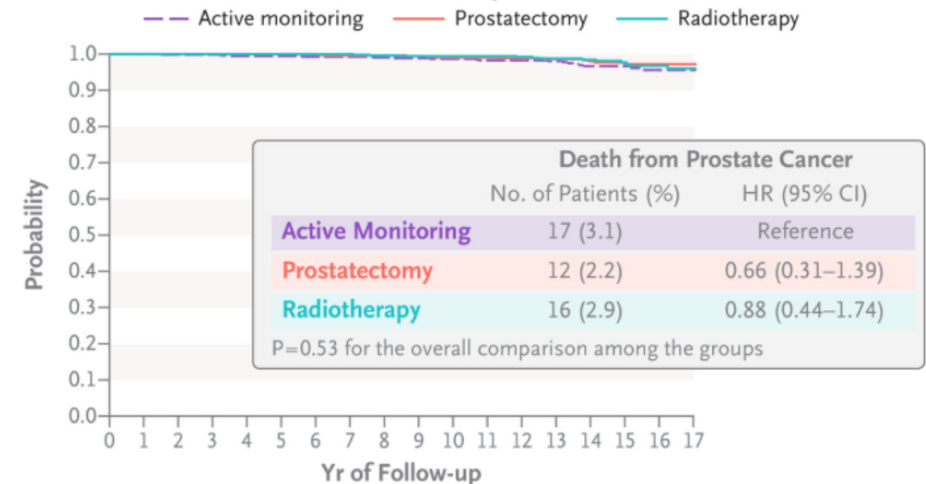
Men with PSA-detected, localized prostate cancer who had been randomly assigned to active monitoring, prostatectomy, or radiotherapy had similarly low rates of death due to prostate cancer during a median 15 years of follow-up.

Treatment Strategies for Prostate Cancer

Active Monitoring
N=545

Prostatectomy
N=553

Radiotherapy
N=545



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Prostate cancer is a cancer that is all about benefits and risks and personalized choice

Cambridge PROSTATE CANCER

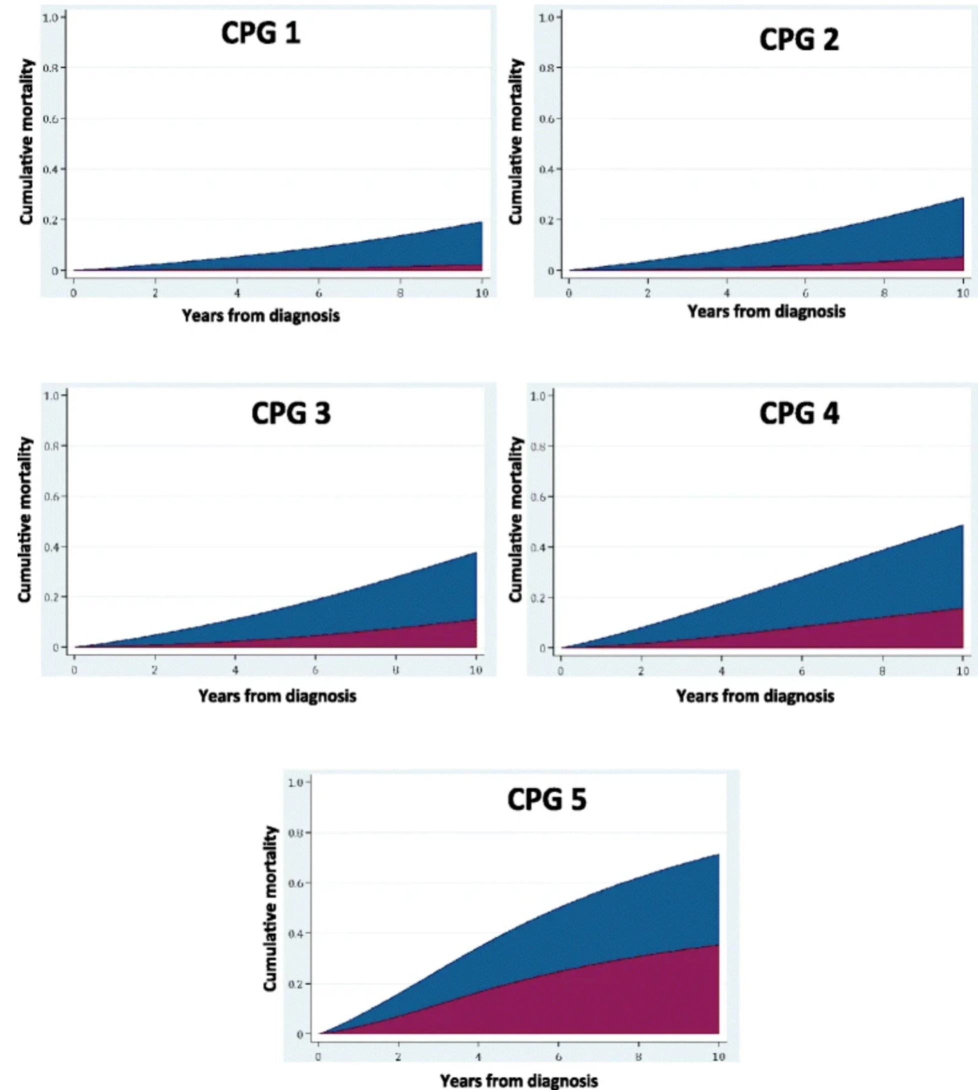
NICE National Institute for Health and Care Excellence

Cambridge Prognostic Groups (CPG)

NICE stratifies prostate cancer into 5 groups to link management to the risk of the disease causing death/mortality

Versus other causes of mortality

CPG1 and CPG2 - 40% of all new cancer diagnosis in the UK each year (15-20,000 men)



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If not treatment then what management ?

NICE National Institute for Health and Care Excellence

Active surveillance

A strategy to avoid over-treatment of disease which is unlikely to cause harm.

1.3.8 For people with CPG 1 localised prostate cancer:

- offer active surveillance
- consider radical prostatectomy or radical radiotherapy if active surveillance is not suitable or acceptable to the person. **[2019, amended 2021]**

1.3.9 For people with CPG 2 localised prostate cancer, offer a choice between active surveillance, radical prostatectomy or radical radiotherapy if radical treatment is suitable. **[2019, amended 2021]**

1.3.10 For people with CPG 3 localised prostate cancer:

- offer radical prostatectomy or radical radiotherapy **and**
- consider active surveillance (in line with recommendation 1.3.14) for people who choose not to have immediate radical treatment.

[2019, amended 2021]

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NICE National Institute for Health and Care Excellence

predict prostate

Home | About Predict Prostate | Predict Prostate Tool | Contact | Legal | Change Language

Predict Prostate

An individualised prognostic model for men newly diagnosed with non-metastatic prostate cancer

Endorsed by the National Institute for Health and Care Excellence in the UK

Recommended by the European Association of Urology Prostate cancer guidelines

Start Predict | Change Language

Did you mean to visit Predict Breast Cancer?

As Predict's usage grows, we have moved to a new URL. Please adjust your bookmarks.

What is Predict Prostate for?

Predict Prostate is a tool where the outcomes from conservative management (or monitoring) are compared with radical treatment (surgery or radiotherapy).

How do I use Predict Prostate?

Enter the details about yourself and your prostate cancer, and then select conservative management or radical treatment to see estimates of survival with each.

We recommend patients read the About Predict section before using the tool. Predict Prostate is only intended for use amongst men for whom both conservative management and radical treatment could both be appropriate options.

What will Predict Prostate tell me?

The Predict Prostate tool shows you how different initial management strategies affect the percentage of men that survive ten and fifteen years after diagnosis. Non-individualised data is also shown on the potential harms of each treatment type. This short video may help explain how Predict Prostate works.

Predict Prostate is a UK developed personalised prognostic tool to balance the risk from prostate cancer versus other competing risks to inform the need for treatment

Developed and validated in >350,000 men

Multiple ethnicities and age groups

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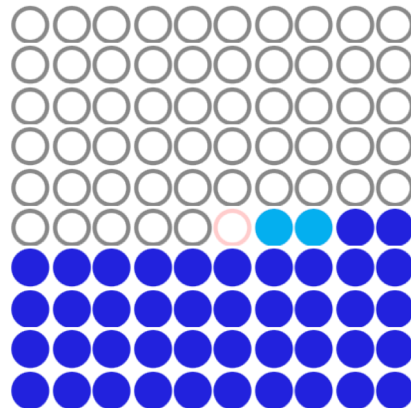
This table shows the percentage of men who survive at least 10 15 years after diagnosis, based on the information you have provided.

Treatment	Additional Benefit	Overall Survival %
Initial conservative management	-	42%
Radical treatment	1%	44%

If deaths from prostate cancer were excluded 45% would survive 10 years.

This display shows the outcomes for 100 men. These results are based on the inputs and treatments you selected 10 15 years after diagnosis



55 deaths due to other causes

1 prostate cancer related death

2 extra survivors due to radical treatment

42 survivors with initial conservative management

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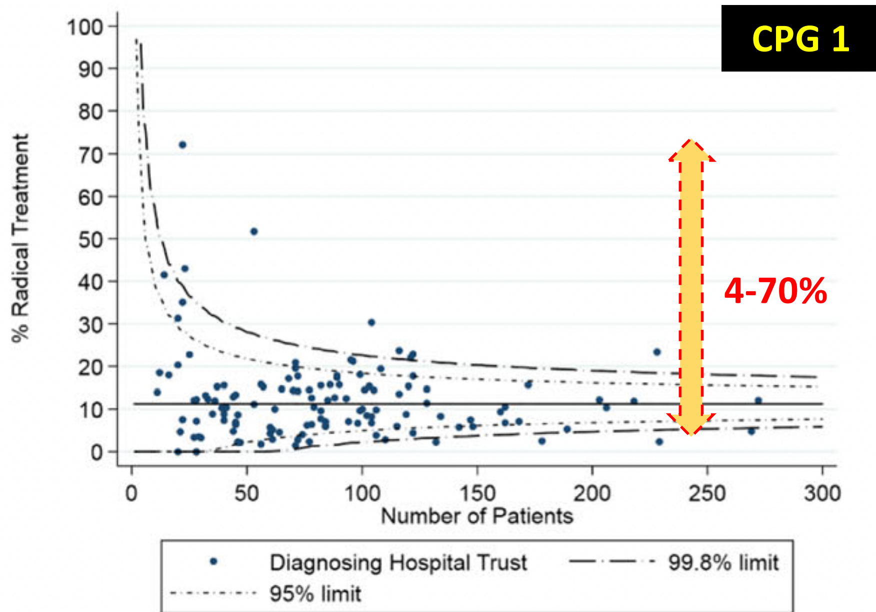
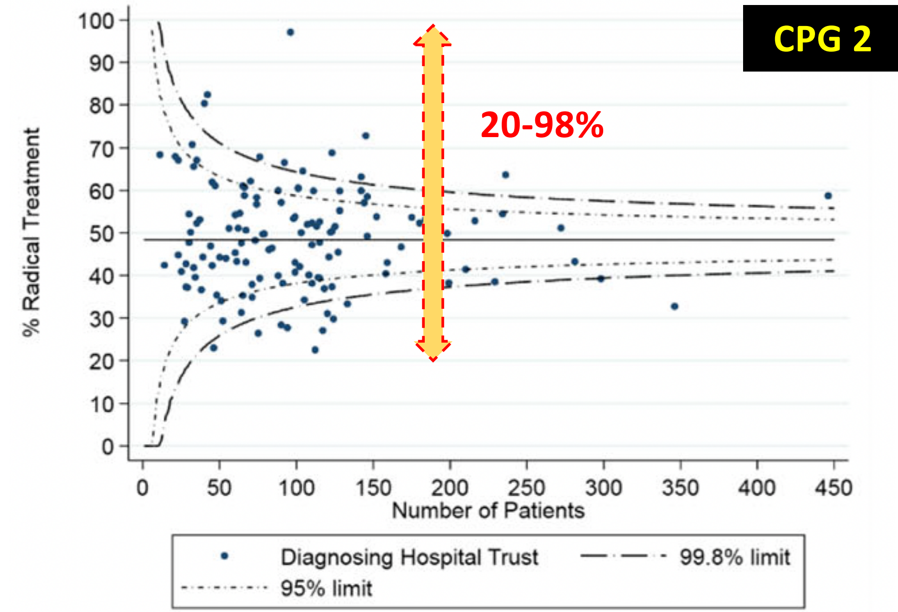
There is a huge variations in NHS treatment rates

Significant over-treatment depending on where/by whom a man is seen

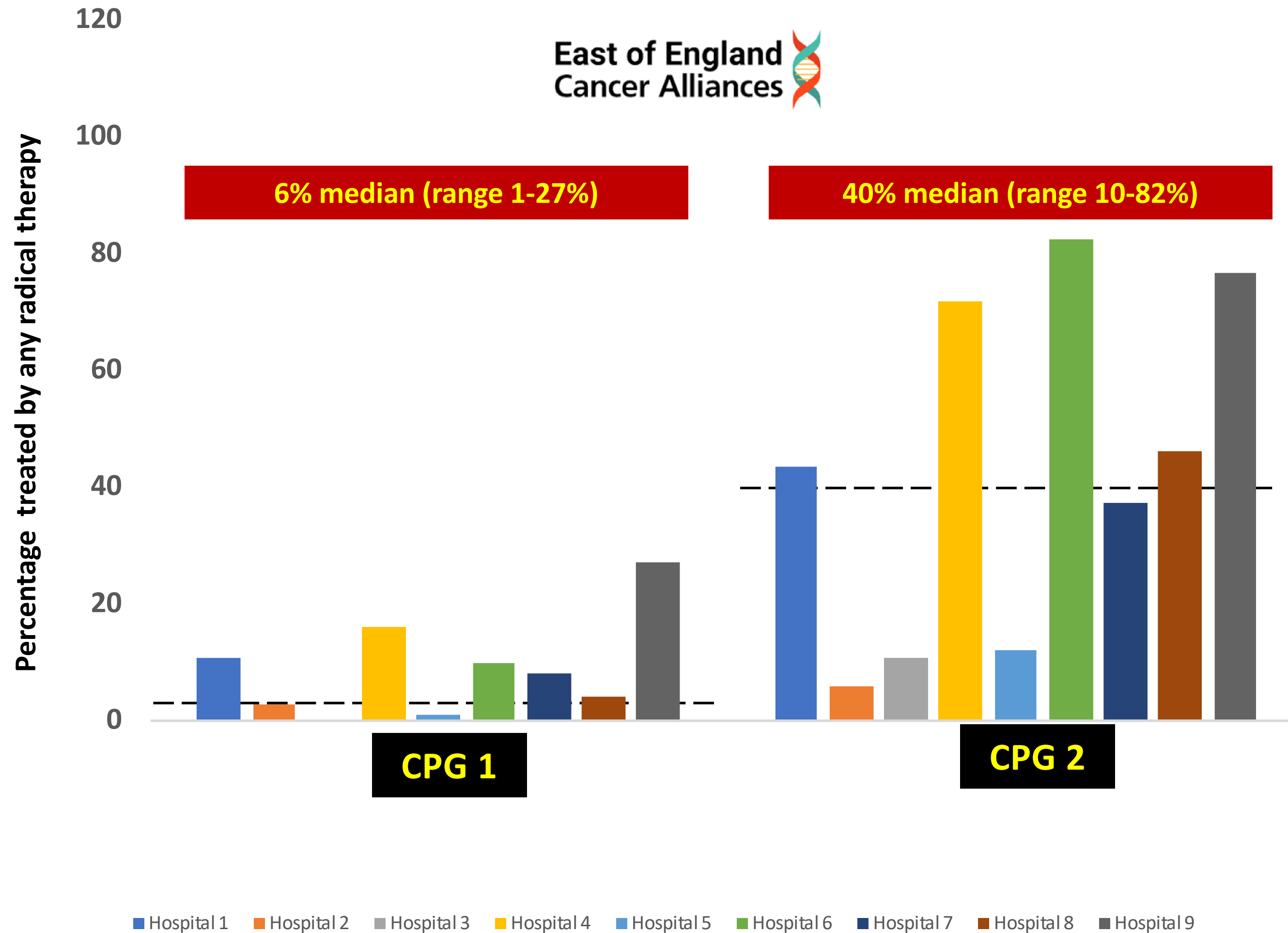




NPCA
National Prostate Cancer Audit

Cambridge PROSTATE CANCER

Radical Treatment by CPG 2024 audit – 10 hospitals



A critical determinant of whether a man with early cancer gets advised to have treatement is where and by whom they have been seen – not their disease type

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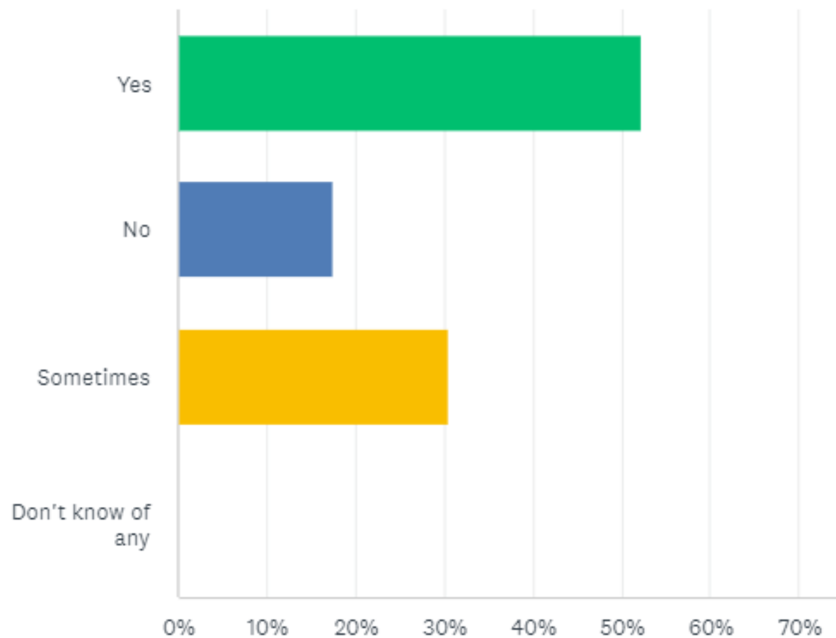
There is no UK standard for how men are counselled for prostate cancer and what tools are used

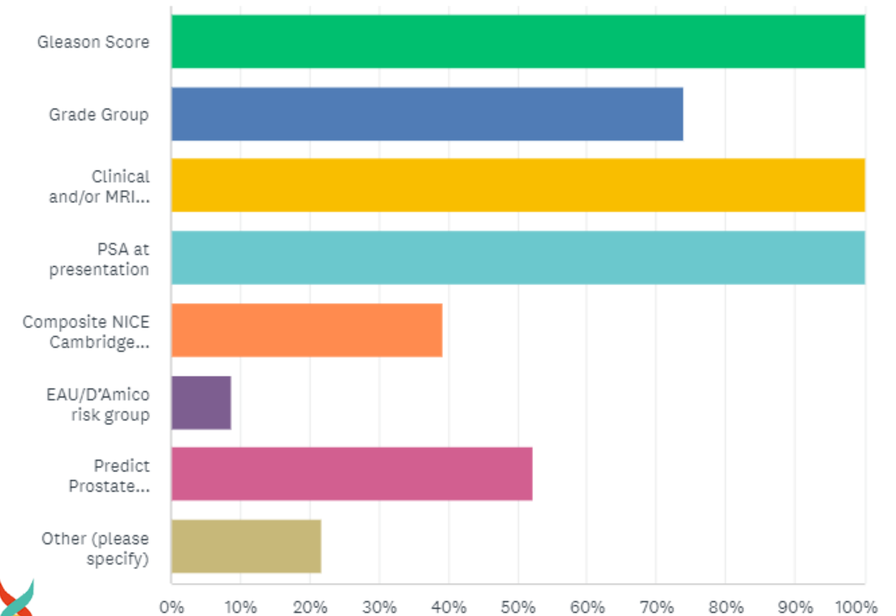
Despite NICE guidance on using CPG and Predict - Large variability in uptake

POSTCODE LOTTERY

Do you use prognostic tools in your counselling?



What information do you give your patients?



East of England Cancer Alliances

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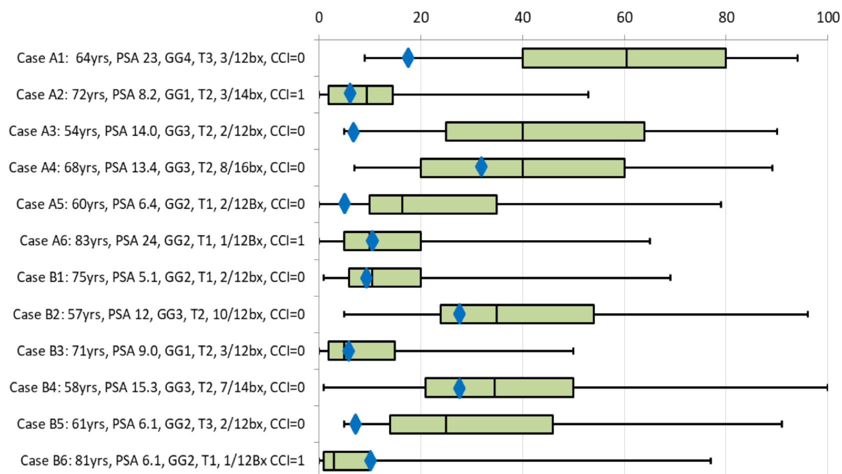
BJC British Journal of Cancer www.nature.com/bjc

BRIEF COMMUNICATION
Clinical Study

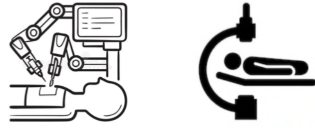
Understanding of prognosis in non-metastatic prostate cancer: a randomised comparative study of clinician estimates measured against the PREDICT *prostate* prognostic model



Using CPG and Predict prognostic tools is proven to

Reduce variations in clinician likelihood of recommending over-treatment

58%



The reduction impact in clinicians changing their recommendations to have treatment after using the Predict Prostate estimates

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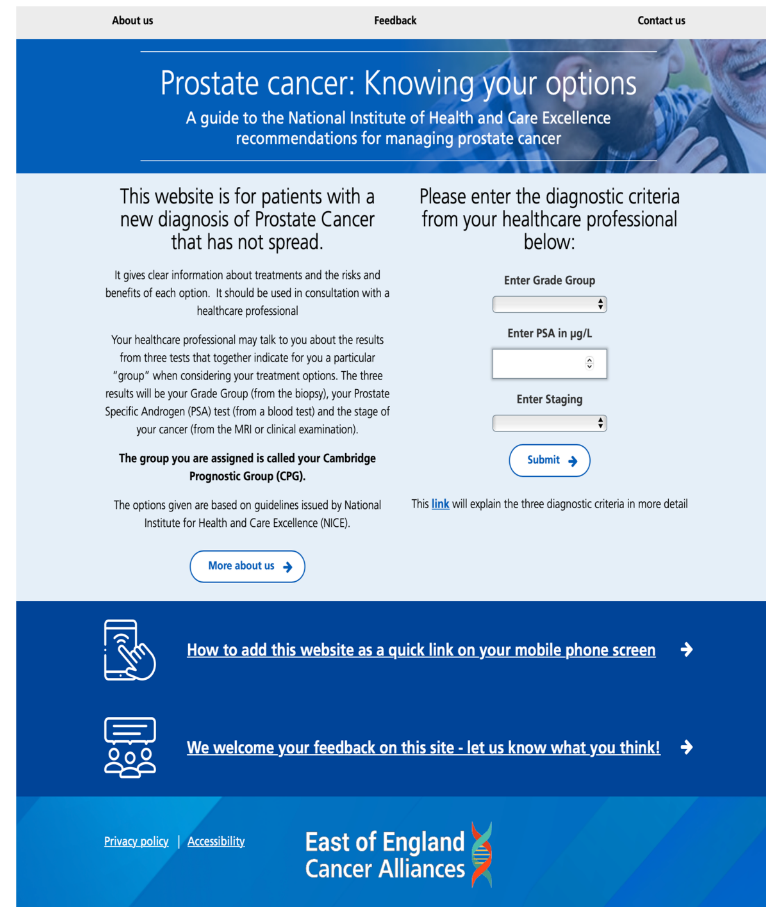
To reduce over-treatment and national variations We need

- Adherence and compliance with NICE recommendations and tools
- A standardized method to provide information and counselling
- A national program of clinician re-education
- Patient empowerment to access National Guidance **without** the arbitrary knowledge base of who they may see and where



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The solution of every problem is another problem

~ Johann Wolfgang von Goethe

AZ QUOTES

If we dont need to offer radical treatment then we need to have something else just as good to monitor men

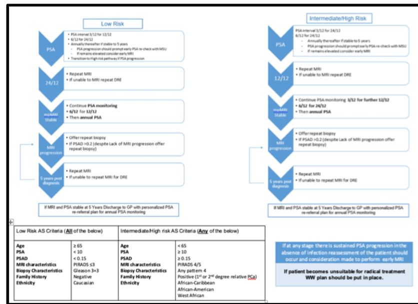
BUT……Active Surveillance

the Wild West of prostate cancer management

Cambridge PROSTATE CANCER

East Lancashire Hospitals NHS Trust
TRUST WIDE/DIVISIONAL DOCUMENT

Delete as appropriate	Standard Operational Procedure
DOCUMENT TITLE:	Administrative Procedure for patients entering Prostate Personalised Stratified Follow-up
DOCUMENT NUMBER:	(Provided by Quality and Safety Unit)
DOCUMENT REPLACES Which Version	
LEAD EXECUTIVE DIRECTOR DGM	Director of Operations (Cancer Services Exec Lead)
AUTHOR(S): Note should not include names	Macmillan Right by You Project Manager
TARGET AUDIENCE:	Urology Cancer Team within East Lancashire Hospitals NHS Trust Out-Patient / Reception Clinic Outcome Booking Teams
DOCUMENT PURPOSE:	This procedure has been developed to enable the Trust to deliver the elements of the NHS Long Term Plan which are key to the Personalised Care agenda It includes details of the administrative process to enable Prostate cancer patients to enter personalised stratified follow-up pathways



GMCA GREATER MANCHESTER COMBINED AUTHORITY
NHS in Greater Manchester
Greater Manchester Cancer
Urology Pathway Board

PROPOSED REVISION TO ACTIVE SURVEILLANCE GUIDELINES

Procedure reference:		Version:	Version 7
Document owner:	Jeremy Oates / Satish Maddineni	Accountable committee:	Greater Manchester Cancer Urology Pathway Board
Date approved:	24th March 2021	Date ratified:	24th March 2021
Review date:	2024		
Parent policy:			
Other associated policies:			
Target audience:	Greater Manchester Urology Clinical staff		
Active Surveillance Task and Finish Group members	Jeremy Oates, Maryna Lewinski, Noel Clarke, Vincent Tang, Maurice Lau, Richard James Brough, Vijay Ramani		

NHS Northern Cancer Alliance

Northern Cancer Alliance Follow up guidelines for prostate cancer patients

2019/2020

Developed and endorsed by the Northern Cancer Alliance Urology Pathway Board

Cheshire & Merseyside Cancer Alliance

Protocol for Supported Self-Management in the follow up of Breast, Colorectal and Prostate cancer

Healthier Lancashire & South Cumbria | Cancer Alliance

CLINICIANS GUIDE TO PROSTATE CANCER PERSONALISED STRATIFIED FOLLOW UP (PSFU) - SUPPORTED SELF MANAGEMENT

			*Unless PSA threshold for re-referral has been stated by the urologist. If PSA rising, refer back to oncology
Active Surveillance	Maximum focus 2mm or less GS ≤3+4 on template biopsy (>1 focus permissible, maximum focus 5mm) Benign DRE Multiparametric (Mp) MRI no dominant lesion or small lesion (≤5mm) matching biopsy location suitable for monitoring Stable PSA	• Year 1-2: PSA every 3 months • Year 3 onwards: PSA every 6 months • Annual MRI • Annual HNA *Health MOT with every PSA	• PSA velocity 1ng/ml per year or doubling time less than 4 months or 3 consecutive rises • Change in MRI findings • Symptomatic: Troublesome LUTS, visible haematuria, weight loss, bone pain lasting >6 weeks • Patient request

Dartford AS protocol

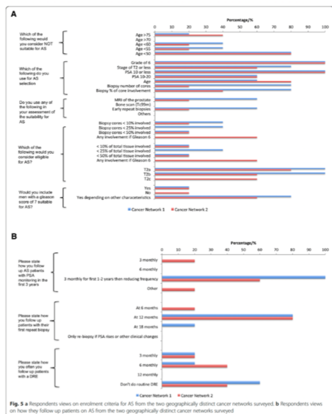
Inclusion criteria
- GS 3+3
- Favourable 3+4 after MDM discussion
- PSA≤10
- Max core length < 6mm
- Number of cores involved <33%
- Clinically T2 and MRI shows organ confined disease
- Confirmation in MDM

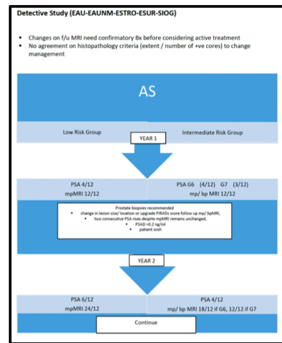
Follow up
At enrolment: TP systematic biopsy unless already performed
Year 1:
- PSA every 3 month
- DRE every 6 month

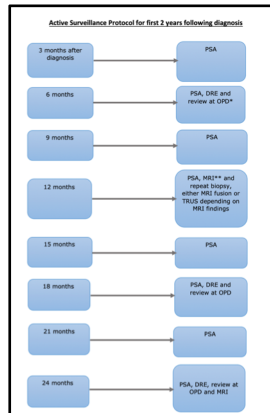
MRI at 12-18 month
Year 2 onwards:
- PSA every 6 month
- DRE every 1 year
- MRI every 2-3 years

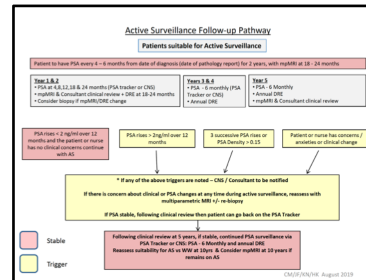
If rising PSA – consider repeat MRI ± re-biopsy
If MRI progression – consider repeat Bx

Indication for intervention
- Consistent PSA rise
- MRI progression
- Bx upgrade
- Patient choice









Active Surveillance Protocol for Low and Intermediate Risk Prostate Cancer at WHHT

CANCER ALLIANCE — South Yorkshire and Bassetlaw Integrated Care System

Active surveillance regimens for localised prostate cancer for SYB Cancer Alliance

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Active surveillance does not have a quality benchmark

NO well evidenced standard

NO set protocol

NO quality control

NO measurable outcome

NO agreed budget/resources

NO investment

NOT a PRIORITY for cancer targets

NO dedicated team/staff

Any interventional treatment for prostate cancer

Active surveillance

Cambridge PROSTATE CANCER

To have good active surveillance practice

We need

A national **standardized way to do active surveillance** with clear guidelines and outcome measures

Empower men to be aware of their management and what to look out for

Have a **clear evidence based protocol** with end points and triggers for better management

Ensure **men are supported** while on AS and equally be aware early of disease progression that needs treatment

Patient confidence

Active Surveillance for Early Prostate Cancer:
Recommended Risk stratified follow-up schedule.

Active surveillance refers to monitoring of early prostate cancer. The aim of active surveillance is to avoid treatment unless the cancer develops to a stage where it may cause harm. In formal comparison studies it has been found to be as good as immediate treatment in terms of survival (the risk of dying of prostate cancer).

In men with Cambridge Prognostic Group (CPG) 1 or CPG2 prostate cancer, active surveillance is a recommended option for managing prostate cancer by the UK National Institute for Health Care Excellence (NICE). To read about the NICE recommendations and what CPG means, please access the East of England Cancer Alliance website and NICE Guidance Information website – links found on this page.

Visit the NICE Cambridge Prognostic Group website

The Stratified Cancer Surveillance (STRATCANS) programme has been developed to provide a personalised schedule for monitoring as part of active surveillance. The evidence for this webtool and recommendations come from the Department of Urology, Cambridge University Hospital and University of Cambridge. The references for this work can be accessed below. STRATCANS tailors the intervals for PSA test, repeat MRI scans and need for repeat biopsies based on the risks of a cancer progressing to a stage where treatment is usually recommended. This is based on the NICE guidelines and defined as reaching a stage of Cambridge Prognostic Group 3 or higher. It also assumes all diagnosis biopsies were using MRI guidance to sample from targets as well as systematic cores and that there is no disease reclassification from a re-biopsy within 1 year of diagnosis.

Use of this STATCANS webtool is entirely the responsibility of the health care team involved and assumes full counselling and that all

Please enter the data to derive the optimal follow-up schedule based on individual prognosis and risks. If you are a patient you can get this information from your health care provider.

PSA at diagnosis or level at the point surveillance follow-up intensity is changed	*
Grade Group	Grade 1 / Grade 2
MRI stage at diagnosis	T1 / T2 / T3
MRI PIRADS/LIKERT SCORE at diagnosis or if an updated score is given during surveillance	No Lesion / 3 / 4 / 5
Prostate Volume (mls)	
PSA Density	
NICE Cambridge Prognostic Group	

STRATCANS schedule | Reset form

(* if the patient is on 5 Alpha reductase inhibitors, use the corrected PSA as the guide)

Active Surveillance Hub

Personalised Risk Stratified Active Surveillance

Implementation toolkit for men with Cambridge Prognostic Group 1 (CPG1) or CPG2 prostate cancer.

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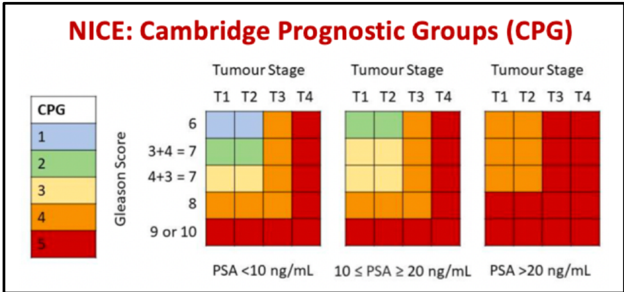
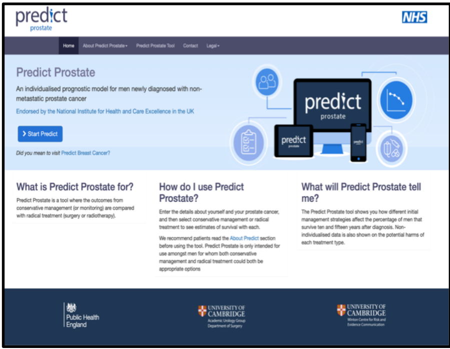
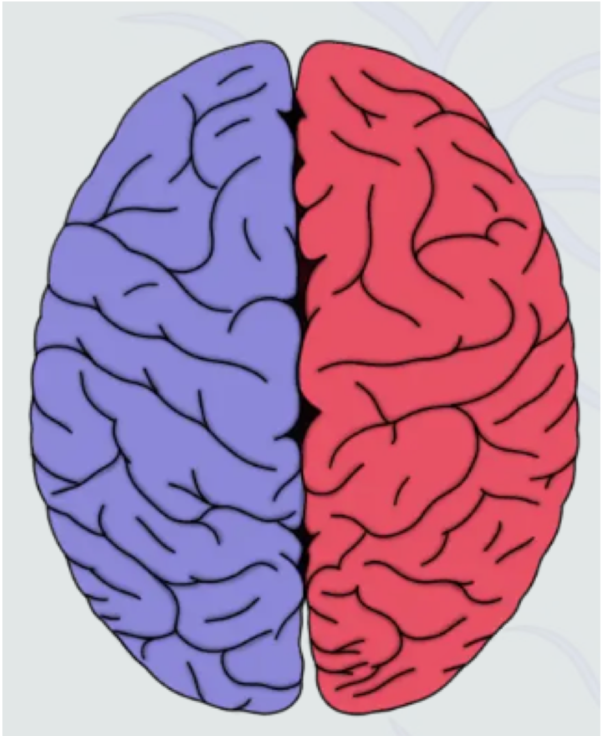
To reduce over-treatment of prostate cancer
We need both



Educated doctors and nurses to understand prognosis and use national endorsed guidance and tools.





NICE National Institute for Health and Care Excellence

Active surveillance

Robust, standardized and well resourced Active Surveillance programmes in the NHS

IT'S IMPOSSIBLE TO MAKE AN INFORMED DECISION WHEN YOU'RE IN THE DARK
Willett