NPCA
National Prostate Cancer Audit

Patient Summary of Annual Report 2019

Results of the NPCA Prospective Audit in England and Wales for men diagnosed from 1 April 2017 to 31 March 2018

National Prostate Cancer Audit

Patient Summary of Annual Report 2019 (Published June 2020)

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The Royal College of Surgeons of England (RCS) is an independent professional body committed to enabling surgeons to achieve and maintain the highest standards of surgical practice and patient care. As part of this it supports Audit and the evaluation of clinical effectiveness for surgery.

The NPCA is based at the The Clinical Effectiveness Unit (CEU). The CEU is an academic collaboration between The Royal College of Surgeons of England and the London School of Hygiene and Tropical Medicine, and undertakes national clinical audits and research. Since its inception in 1998, the CEU has become a national centre of expertise in methods, organisation, and logistics of large-scale studies of the quality of surgical care. The CEU managed the publication of the NPCA Annual Report, 2019.

In partnership with:

The British Association of Urological Surgeons (BAUS) was founded in 1945 and exists to promote the highest standards of practice in urology, for the benefit of patients, by fostering education, research and clinical excellence. BAUS is a registered charity and qualified medical practitioners practising in the field of urological surgery are eligible to apply for membership. It is intended that this website will be a resource for urologists, their patients, other members of the healthcare team and the wider public.

The British Uro-oncology Group (BUG) was formed in 2004 to meet the needs of clinical and medical oncologists specialising in the field of urology. As the only dedicated professional association for uro-oncologists, its overriding aim is to provide a networking and support forum for discussion and exchange of research and policy ideas.

National Cancer Registration and Analysis Service (NCRAS), Public Health England collects patient-level data from all NHS acute providers and from a range of national data feeds. Data sources are collated using a single data processing system ('Encore') and the management structure is delivered through eight regional offices across England.

This report uses data that has been provided by patients and collected by the NHS as part of their care and support. The data is collated, maintained and quality assured by NCRAS. Access to the data was facilitated by the PHE Office for Data Release. http://www.ndrs.nhs.uk/

Commissioned by:

The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular to increase the impact that clinical audit has on healthcare quality in England and Wales. HQIP holds the contract to manage and develop the National Clinical Audit Programme, comprising more than 30 clinical audits that cover care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh Government and, with some individual audits, also funded by the Health Department of the Scottish Government, DHSSPS Northern Ireland and the Channel Islands.

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Contents

Foreword 4

Annual Report 2019 Infographic 5

Patient Summary of Annual Report 2019 6

- Prostate Cancer: Facts & Figures 6
- What is the National Prostate Cancer Audit? 6
- Who is undertaking the National Prostate Cancer Audit? 6
- How is data collected for the Audit? 6
- Which patients are included in the NPCA? 6
- What data is in the 2019 Annual Report? 6

Key Findings in England and Wales 7

- Data quality 7
- What are the characteristics of men who are diagnosed with prostate cancer? 7
- What techniques are being used to diagnose prostate cancer? 7
- What treatments are patients receiving? 8
- What are the possible complications of radiotherapy or surgery? 9

Recommendations for public and patients 9

Annual Report 2019 10

- In the future 10

Glossary 11

Organisations 13

The glossary at the end of this report gives further explanations of the clinical terms used in this report.

Foreword

Welcome to the Patient Summary of the 6th Annual Report from the National Prostate Cancer Audit. We are pleased to report that many of the results included here, of how Trusts and Health Boards are diagnosing and treating men, show encouraging improvements from previous years.

For example, you will read that **multiparametric MRI** scans are available onsite at 98% of Trusts/Health Boards and three quarters are able to perform **trans-perineal biopsies**. For the first time we report on the national uptake of docetaxel, a form of **chemotherapy**, in newly diagnosed men presenting with **metastatic** prostate cancer. We have shown that it is now being used in one in every four men presenting for the first time with metastatic disease.

Significant changes have been made in how **radiotherapy** is delivered for prostate cancer and we have incorporated these changes into this year's report. We report on the use of **hypofractionated radiotherapy** (radiotherapy given more intensively over a shorter time period) which has been adopted widely for intermediate-risk disease. Another significant finding was the availability of high dose rate **brachytherapy boost (HDR)** for **high-risk/locally advanced** disease: approximately one in two specialist MDTs have a referral pathway for this therapy. It is hoped that this treatment to become more widely accessible in the future.

The rates of active surveillance for low-risk disease are now the highest in Europe and the use of combination hormone and radiotherapy treatment high-risk/locally advanced disease has increased year-on-year since 2014. This should improve the outcome for patients with this type of prostate cancer in the long-term. The proportion of men experiencing a gastrointestinal complication within two years of radiotherapy has remained at 10% but two-year genitourinary complications following surgery have improved slightly since last year (9% down from 11%).

It will be important to continue measuring these trends to see if further improvements can be made. In December 2019, the NPCA team ran its first Quality Improvement workshop to discuss areas for improvement, to share good practice among clinicians and Trusts, and to help us refine and improve the audit for the future.

This year we are also fortunate that the newly formed NPCA Patient and Public Involvement Forum met for the first time. This meeting was conducted "virtually" given the current COVID crisis and it has given us feedback, helping us to produce this Patient Summary and the infographic. We look forward to working with them to improve the work of the audit and the ways in which we disseminate information.

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NPCA
National Prostate Cancer Audit

Annual Report 2019 Infographic

DIAGNOSIS AND STAGING

42,668

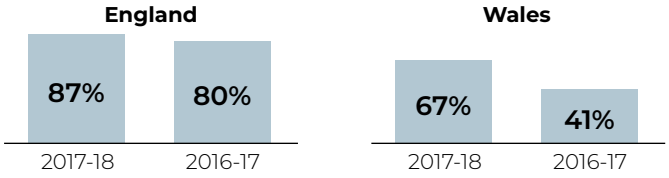
men were diagnosed with prostate cancer in England and Wales between **1st April 2017 and 31st March 2018**

56%

OF MEN WERE 70 YEARS OR OLDER

16% of men presented with metastatic disease – no change from 16/17

Of the men having a **multiparametric MRI**, more are having this carried out **pre-biopsy**



The use of **transperineal biopsy** is increasing **17%** in 17/18 compared with **12%** in 16/17 **7%** in 17/18 compared with **4%** in 16/17

TREATMENT ALLOCATION

Low-risk, localised disease

4% of men had radical treatments and were potentially **'over-treated'** - no change from 16/17

Intermediate-risk disease

91% of men having radical radiotherapy in England had a hypofractionated regimen*

High-risk/locally advanced disease

32% of men did not have radical treatments and were potentially **'under-treated' - 33%** of men in 16/17

In England **5%** of men having radical radiotherapy also had a brachytherapy boost*

Metastatic disease

27% of men had primary docetaxel chemotherapy in England*

* data currently unavailable in Wales

TREATMENT OUTCOMES

14%

of men diagnosed 17/18 were **readmitted** within 3 months **following surgery**

This short-term outcome is stable compared with 16/17

Medium term outcomes are also stable – no change for men undergoing treatment in 2016 compared with 2015

Within **2 years of treatment** 1 in 10 men experienced a **severe genitourinary complication after surgery** or a **severe gastrointestinal complication after radical radiotherapy**

NURSE SPECIALISTS

98% of trusts/health boards have clinical nurse specialists (CNS)

91% have a **dedicated prostate cancer CNS**

SUPPORT SERVICES

100% of specialist MDTs have **psychological counselling** available

98% have **sexual function** and **continence services**

Patient Summary of Annual Report 2019

Prostate Cancer: Facts & Figures

Over 47,500 men are diagnosed with prostate cancer each year in the UK and around 400,000 men are living with and after prostate cancer. Around 1 in 8 men will be diagnosed with prostate cancer in their lifetime and over 11,500 men die because of the disease each year. This makes prostate cancer the second most common cause of cancer-related death for men in the UK.

What is the National Prostate Cancer Audit?

This is a national clinical audit of the quality of services and care provided to men with prostate cancer in England and Wales.

The National Prostate Cancer Audit (NPCA) collects information about the treatment and outcomes (what happens after treatment) of all patients newly diagnosed with prostate cancer. This includes information collected from hospital records about patients diagnosed with prostate cancer and about the care and treatment they received. The information is analysed to see if hospitals are following national clinical standards, such as those published by the National Institute for Health and Care Excellence (NICE) and to determine whether hospitals are responding to new information from clinical studies which facilitate and inform clinicians on better ways to diagnose and treat prostate cancer. These findings are used to help define new standards for diagnosis and treatment outcomes, and to give us a better understanding of how people are being looked after. This will help NHS hospitals and other medical and healthcare practices to improve the care they provide to patients with prostate cancer..

Who is undertaking the National Prostate Cancer Audit?

The Audit is run by a team of clinicians, audit experts and cancer information specialists based at the Royal College of Surgeons of England (RCS), the British Association of Urological Surgeons (BAUS) and the British Uro-oncology Group (BUG).

How is data collected for the Audit?

- The Audit collects a range of different anonymised medical information from various hospital sources, which are then combined for analysis.
- NHS Trusts and Health Boards provide information about the diagnosis, treatment and outcomes for patients with prostate cancer to official organisations in England and Wales such as the National Cancer Registration and Analytical Service (NCRAS) and the Wales Cancer Network. These organisations are allowed to collect data on patients diagnosed with cancer. Individuals can choose to exclude themselves from this process if they wish. Information on how to opt out of data collection is provided here.
- The Audit works within strict rules covering data protection and confidentiality. The data we collect on individuals is anonymised and individual patients are not identifiable in the information provided to us.

Which patients are included in the NPCA?

The NPCA started on the 1st April 2013. All men diagnosed with prostate cancer have been included since 1st April 2014 in England and since 1st April 2015 in Wales.

What data is in the 2019 Annual Report?

The data in the 2019 Annual Report are for men diagnosed with prostate cancer between 1st April 2017 and 31st March 2018. This includes over 40,000 men diagnosed in England, and over 2,000 men diagnosed in Wales during this time period.

We report on all aspects of the care pathway for men with prostate cancer. We also compare the performance of NHS Hospital Trusts and Health Boards to identify any differences in patterns of care and to highlight where improvements may be needed.

132 NHS Hospital Trusts in England and 6 Health Boards in Wales provide prostate cancer services. All submit data for the National Prostate Cancer Audit.

Key Findings in England and Wales

Data quality

- Data on the **stage** of prostate cancer at diagnosis has been recorded well by hospitals across England and Wales. This can help the Audit measure and display information relating to the risks associated with having prostate cancer, depending on the **risk profile** of the disease.

- Data related to both the general health status of patients and whether they had imaging tests to help provide their diagnoses remains less complete in England than in Wales. Data on other investigations to help with diagnosis remain well completed in both England and Wales.

- We are continuing to work closely with hospitals to find the best ways to help improve the quality of this information.

What are the characteristics of men who are diagnosed with prostate cancer?

- The number of men diagnosed with prostate cancer has not increased this year. There is a higher incidence of the disease in older men (at the time of diagnosis over one third of men were aged between 70 and 80) but much younger men can develop the condition: one third were aged between 60 and 70 and approximately 1 in 10 men were younger than 60.

- Two thirds of men diagnosed in England, and over half of men diagnosed in Wales, were otherwise in very good health i.e. functioning normally in everyday life. In both nations fewer than 3% of men were in very poor health (i.e. symptomatic from other medical conditions and needing help in everyday life).

- 7% of men in England and 8% of men in Wales presented with **low risk** localised disease. 36% of men in England and 45% of men in Wales had **intermediate-risk** localised disease. 41% of men in England and 34% of men in Wales had disease which was **high-risk localised** or **locally advanced** (prostate cancer that had spread just outside the prostate but not to other areas of the body). 17% of men diagnosed with prostate cancer in England and 13% of men in Wales presented with **metastatic disease** (disease which had spread beyond the site of primary origin in the prostate). Overall these figures are comparable to last year's findings.

What techniques are being used to diagnose prostate cancer?

- **Trans-rectal Ultrasound (TRUS) Guided Biopsy** is the most common method used to take samples of the prostate, as it has been in previous years. It is used in approximately 80% of patients having prostate biopsies. This type of biopsy is performed by passing a small ultrasound scanner into the rectum (back passage) and taking a series of small tissue samples from the prostate after the area has been numbed using an injection of local anaesthetic.

- 17% of patients in England and 7% of patients in Wales had biopsies performed via the perineum, which is the area of skin between the back of the scrotum and the anus (**trans-perineal biopsy**). The number of men diagnosed using this method of taking biopsies has increased over the last year compared to the number of men having trans-rectal biopsies. The trans-perineal method is able to target specific areas of the prostate more accurately in some men and this may help to improve diagnosis and make subsequent treatment more accurate. However, it is more complicated for patients and some will need to have a general anaesthetic for this procedure.

- Trans-perineal biopsies are now being performed in three quarters of all Trusts. This year we have shown that the trans-perineal approach has led to a small reduction in the risk of men developing an infection (such as sepsis) after their biopsy compared to the trans-rectal approach. This risk reduction, however, is balanced by a higher risk of men being unable to pass urine after the procedure (urinary retention) and possibly needing a catheter temporarily. Regardless of the approach, these risks remain low, with fewer than 3% of men experiencing these side effects.

- **Multiparametric magnetic resonance imaging (mpMRI)** of the prostate (a non-invasive scanning technique that combines different types of image to look at the prostate in detail) helps to improve diagnostic accuracy in men undergoing investigation for prostate cancer. 62% of men are now getting this scan before their prostate biopsy as part of their investigations (compared to around 50% three years ago), and mpMRI scanning is now available at 98% of the hospitals diagnosing prostate cancer in England and Wales.

Current recommendations are that MRI scans should occur before prostate biopsies are undertaken. Having an MRI before the biopsy helps the doctors to plan treatment, including active surveillance more effectively. In England 87% of MRI scans and in Wales 67% of MRI scans were performed before a prostate biopsy. These figures are significant improvements from the NPCA audit of the previous year.

What treatments are patients receiving?

- Most men with **low risk** prostate cancer (prostate cancer unlikely to spread beyond the prostate) should be managed with **active surveillance**, a treatment programme that includes careful monitoring to detect early signs of disease progression. A key concern is the possibility that patients with low-risk prostate cancer may have potentially unnecessary treatment which will result in an avoidable side-effect. These include sexual, urinary or bowel dysfunction. The current results show that active treatment of patients with this type of disease is very low and that most men are treated first with active surveillance.
    - Only 1 in 25 men with low-risk prostate cancer received **radical treatment**, which is low, as it should be. The results this year are better still than the previous year with fewer men in this low risk group now receiving potentially unnecessary treatment.
- Over two thirds of men with **locally advanced** prostate cancer are being treated with surgery to remove the prostate gland or **radiotherapy** techniques combined with hormone therapy to destroy all the cells in the prostate. However, there remains a concern, particularly for otherwise healthy older men with locally advanced disease, who are treated with hormone treatment alone. There may be very good reasons for this but in men who are otherwise fit and well, notwithstanding their age, this might represent "under treatment". Combined radiotherapy / hormone treatment rates have improved slightly from the previous year but substantial improvements may still be required.
    - "Under treatment" varied greatly according to the hospitals where men were treated. Some hospitals performed well, with fewer than 15 in every 100 men being found not to have combined therapy. Other hospitals were found to have more than half of men with locally advanced prostate cancer not receiving **radical treatment** (such as surgery or radiotherapy and hormone treatment combined) that they might be eligible for.
    - Four hospitals also performed significantly better than the average, outperforming the other hospitals, demonstrating that tackling under treatment is possible and that other hospitals should be able to learn from these centres.
- In response to the updated national guidelines from NICE in May 2019, this year's report looked at the use of **chemotherapy** using a drug called docetaxel.* In prostate cancer, docetaxel is recommended for men with newly diagnosed advanced (**metastatic**) disease who are otherwise well and without other health problems. It is used in combination with other medications that work by blocking male hormones (ADT) which trigger prostate cancer cells to grow and divide. Currently only a quarter of men with advanced (metastatic) disease are receiving this treatment. Information was unavailable in Wales. However, it is important to emphasise that this reflects practice from before the change to the NICE guidelines in May 2019. It is hoped, therefore, that more men will receive this medication in the future.
- The NICE guidelines published in May 2019 also recommended that the majority of men with intermediate risk localised prostate cancer who are undergoing radical radiotherapy should receive **hypofractionated radiotherapy*** (safe delivery of the overall dose of radiation in fewer daily treatments) rather than **hyperfractionated radiotherapy** (radiotherapy delivered over a longer period and with many more individual "treatments" or "fractions"). The guidelines say that hypofractionated radiotherapy should be the preferred choice because it is more convenient for patients because it is given over a fewer number of weeks, is as effective as conventional radiotherapy and is cheaper because it is less resource intensive. Our data demonstrate that for men with localised prostate cancer, 9 in every 10 men receiving radical radiotherapy are receiving the recommended hypofractionated treatment.
- For men with **high-risk** locally advanced prostate cancer opting for radiotherapy, NICE has also endorsed the use of an additional treatment to supplement their radiotherapy, called **brachytherapy boost.*** This works by putting a radioactive source into the prostate via the skin in front of the anus. This gives an extra dose of radiotherapy to the prostate. Currently only 1 in 20 men potentially eligible for this treatment are receiving this additional therapy.

* Information for use of docetaxel, hypofractionated radiotherapy and brachytherapy boost available for England only.

What are the possible complications of radiotherapy or surgery?

90-day readmission

- Just over 1 in 10 men who had surgery for their prostate cancer in 2017/18 needed readmission to hospital within 90 days of their operation. The vast majority of surgical centres had readmission rates which were similar to each other.

Severe urinary complication

- Examples of urinary complications include bleeding, infection, narrowing or blockage of the urinary tract. A severe urinary complication is defined as a patient needing a procedure for any of these problems within two years of their operation.
- Our results show that the rate of experiencing these severe complications following prostate cancer surgery is low. Fewer than 1 in 10 men who had surgery in 2016 experienced this type of complication.
- The proportion of side effects and secondary procedures is consistent across all NHS Hospital Trusts in England and Wales which perform surgery.

Bowel complications

- Examples of side effects to the bowel include diarrhoea, bleeding, infection, ulceration, and rarely, **fistula** formation or strictures. A severe bowel complication is defined as a patient needing a procedure for any of these problems within two years of their **external beam radiotherapy (EBRT)**.
- The rate of experiencing a bowel side effect following radiotherapy is also low. One in 10 men who had radiotherapy in 2016 experienced these side effects.
- The procedures used to examine and treat these side effects may involve a camera test, known as an endoscopy, to examine the cause of rectal bleeding (one of the commoner post-treatment complications) or rarely, and only in the very worst cases, bowel surgery. The proportion of side effects and secondary procedures is consistent across all radiotherapy centres in England and Wales.

Recommendations for public and patients

1. Seek advice from a doctor if you experience any of the following: urinary symptoms, erectile problems, blood in your urine or persistent unexplained back pain.
2. Men with a family history of prostate, breast or ovarian cancer should have a higher vigilance for seeking advice from their GP about their prostate cancer risk.
3. Men who are referred to a specialist for suspected prostate cancer should ask about whether they should have a **multiparametric MRI (mpMRI)** scan before having a prostate biopsy.
4. Men with low-risk prostate cancer ensure should be offered monitoring or **active surveillance** in the first instance as treatment is only needed if your cancer progresses. This protects men against the side-effects of treatment, discussed above.
5. Men newly diagnosed with **metastatic disease** should be considered for **chemotherapy** according to new prostate cancer guidelines.
6. Men with localised prostate cancer who are offered prostate cancer treatment with combined radiotherapy and hormone treatment or radical prostatectomy should be made aware of the potential side effects including: loss of libido, problems getting or keeping erections, loss of ejaculatory function, a worsening of sexual experience, urinary incontinence and/or bowel side effects.
7. Specialist support services should be available for any man experiencing physical or psychological side effects during or following prostate cancer treatment. There should be early and ongoing access to these services, in keeping with national recommendations.
8. Sources of further information and support are available for men with prostate cancer and carers. These are accessible via GP services and from prostate cancer charities including Prostate Cancer UK (**www.prostatecanceruk.org**) and Tackle Prostate Cancer (**www.tackleprostate.org**). Both of these charities operate nationwide support networks.

   Information can also be found on the NHS website (**www.nhs.uk/conditions/prostate-cancer/**) and via Cancer Research UK (**www.cancerresearchuk.org/about-cancer/prostate-cancer**) and Macmillan Cancer Support (**www.macmillan.org.uk/cancer-information-and-support/prostate-cancer**). **Clinical Nurse Specialists,** who should be assigned to every patient, are also an excellent source of information.

Annual Report 2019

The National Prostate Cancer Audit released the Sixth Annual Report in January 2020. This provides an in-depth analysis of the Audit's findings. This report, as well as previous Annual and Patient Reports, can be accessed here.

In the future

- The National Prostate Cancer Audit will continue to work with NHS Hospital Trusts in England and NHS Health Boards in Wales to improve completeness of all data required by the National Prostate Cancer Audit.
- Working directly with individual care providers will help improve data quality and completeness to ensure the reliability of all the results we present.
- We will continue to publish our findings and highlight areas for improvement to clinicians, stakeholders, patients and the wider public to offer a benchmark of care for those receiving treatment for prostate cancer. The NPCA results are also utilised by other national initiatives including the Clinical Outcomes Programme (COP).
- In last year's report, the Audit recorded the outcomes reported by men after treatment such as their views on their side effects after radical local treatment. These Patient Reported Outcome Measures (PROMs) included the side effects of sexual dysfunction, leakage of urine and issues related to bowel function.
- The next round of PROMs data collection for the NPCA Patient Survey is in progress for men diagnosed between April and September 2018 who underwent radical surgery or radiotherapy and we plan to highlight this information in next year's report. We would like to say a particular thank you to all the men who are currently participating with in the NPCA Patient Survey. More information can be found on our website.
- As more data becomes available the Audit will aim to develop new methods to measure additional performance indicators from individuals with prostate cancer. These will include looking at disease progression, the risks of recurrence and assessing the outcomes from alternative treatments. As the data matures this will also include the reporting of mortality rates from prostate cancer. Additional time for patient follow up will be required before this can be assessed properly. The time scale for this is expected to be at least 5 years.

The next results will be published in the Audit's seventh Annual Report in January 2021 and the corresponding Patient Summary in March 2021.

Glossary

Active Surveillance
This treatment is a way of monitoring prostate cancer that has a low risk of spreading and is contained within the prostate. Doctors monitor your cancer closely and they can begin active treatment with surgery or radiotherapy with or without hormone therapy if the cancer starts to grow.

Brachytherapy
A treatment for prostate cancer using either the placement of permanent radioactive seeds into the prostate (termed low dose rate brachytherapy) or the temporary insertion of a source of radiation through needles temporarily placed in the prostate (termed high dose rate brachytherapy). Brachytherapy can deliver a high radiation dose to the prostate gland whilst avoiding radiation to the surrounding healthy tissue. This treatment can be used as the sole treatment but it is used more commonly in combination with conventionally delivered external beam radiotherapy in higher risk disease, known as a "brachytherapy boost".

Chemotherapy
A type of anti-cancer drug treatment, also known as "cytotoxic chemotherapy". These drugs act throughout the body (systemically) to target and kill the cancer cells. The cytotoxic drug used most commonly and effectively in prostate cancer is Docetaxel.

Clinical Nurse Specialist (CNS)
These are experienced senior nurses who have undergone specialist training in Urology. They help to administer treatment and they play an essential role in improving communication with cancer patients. They act as the first point of contact for the patient following prostate cancer diagnosis, coordinating and facilitating the patient's treatment.

Clinical Audit
Clinical audit is a method that health care professionals use to look at and improve patient care by comparing how patients are treated and studying the outcomes of care against set accepted standards and guidelines. In a clinical audit, information on the care received by patients is collected and analysed to see if individual clinicians and hospitals are following national clinical standards, such as those published by the National Institute for Health and Care Excellence (NICE). These audits also produce information for hospitals to compare their outcomes with other hospitals. The aim is to allow quality improvement to take place where it will be most helpful and will potentially improve outcomes for patients.

External Beam Radiotherapy (EBRT)
The use of high energy X-ray beams directed at the prostate to kill cancer cells. It is used to treat localised or locally advanced prostate cancer. It may be hyper- or hypo-fractionated (see below).

Fistula
An abnormal opening between organs or other structures in the body. Fistulas are rare in prostate cancer treatment. If they occur they are usually in the pelvic area.

Functional Outcomes
How a patient's sexual function, urinary continence, bowel function and overall well-being is affected by treatment.

Gleason Score
The grade of the cells in the prostate tissue (how they look under the microscope) and the pattern of the cells. The Gleason score makes up part of the risk profile that helps to inform treatment decisions.

Hypofractionated Radiotherapy
Radiotherapy delivered using a regime of treatment during which a smaller number of high intensity radiotherapy treatments (fractions) are administered over a shorter period of time. It is used to treat intermediate risk localised prostate cancer.

Hyperfractionated Radiotherapy
Radiotherapy with a longer regime of treatment during which radiotherapy treatments (fractions) are administered at a lower dose and on more visits. It is used to treat localised or locally advanced prostate cancer, usually in combination with hormone treatment.

Localised Disease
When cancer is contained within the prostate gland and has not spread to any other parts of the body. Localised prostate cancer is classed into 3 risk groups depending on how likely it is that the cancer will grow quickly or spread. These risk groups depend on the following:

- the tumour distribution in the prostate (T stage)
- the grade of the cells in the prostate tissue (how they look under the microscope) (Gleason score)
- the prostate specific antigen blood test (PSA) blood test

Locally Advanced Disease
When cancer has spread to areas immediately outside the prostate. This may also be associated with early spread of cancer in to surrounding lymph nodes in the pelvic region close to the prostate gland itself.

Metastatic Disease
When cancer has spread away from the prostate to distant areas of the body, mainly to the bones and lymph nodes outside the pelvic region.

Multiparametric MRI (mpMRI)
A special type of Magnetic Resonance Imaging (MRI) scan that provides detailed images of the prostate.

Prostate Specific Antigen blood test (PSA)
PSA is a protein that is produced by prostatic tissue. The blood test determines the level of PSA in the blood. This indicates if further investigations are needed and makes up part of the risk profile that helps to inform treatment decisions.

Radical Treatment
Any treatment aimed at getting rid of the cancer in the prostate completely, for example surgery or external beam radiotherapy for prostate cancer.

Radiotherapy
The use of radiation to destroy cancer cells. There are different ways in which radiotherapy can be delivered, including external beam radiotherapy and brachytherapy.

Risk profiles:

Low risk prostate cancers
- are unlikely to grow or spread for many years and have all of the following:
    - a T stage of T1 to T2a
    - a Gleason score no higher than 6
    - a PSA level less than 10 ng/ml

Medium (intermediate) risk prostate cancers
- May grow or spread but many do not do so for some years. The Gleason score is the most important determinant of this.
    - a Gleason score of 7 (Gleason 3+4 behaves more indolently than Gleason 4+3)
    - a PSA level between 10 and 20 ng/ml

High-risk prostate cancers
- might grow or spread within a few years and have one of the following:
    - a T stage of T2c or above
    - a Gleason score between 8 and 10
    - a high PSA level is usually but not always associated with this

Staging/stage
The anatomical extent of a cancer, in other words, how far it has spread within and around the prostate and in metastatic cases, where the disease is elsewhere in the body.

Trans-rectal Ultrasound (TRUS) Guided Biopsy
This involves using thin needles put into the prostate, after numbing the area with local anaesthetic, to take around 10-12 small samples of tissue. The biopsy is done using an ultrasound scanning probe placed in the rectum (back passage). The precise placement of these needles is enabled by the use of this ultrasound scanner.

Trans-perineal Biopsy
Taking biopsies of the prostate through the perineum (the area between the back of the scrotum and the rectum). This is performed under general anaesthetic.

Organisations

British Association of Urological Surgeons (BAUS)
A professional association for urological surgeons. Registered charity no: 1127044.

British Uro-oncology Group (BUG)
A professional association for clinical and medical oncologists specialising in the field of urology. Registered charity no: 1116828.

Clinical Outcomes Programme (COP)
An NHS initiative, managed by the Healthcare Quality Improvement Partnership (HQIP), to publish quality measures at the level of each individual consultant, team and unit using national clinical and administrative data.

Health Board
A local health organisation that is responsible for delivering all healthcare services within a regional area in Wales. Currently, there are seven Health Boards in Wales and six of these provide prostate cancer services.

Healthcare Quality Improvement Partnership (HQIP)
The Healthcare Quality Improvement Partnership (HQIP) aims to promote quality improvement in patient outcomes, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP is led by a group of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices.

National Cancer Registration and Analytical Service (NCRAS)
A national body which collects, analyses and reports on cancer data for the NHS population in England.

NHS Trust
An NHS organisation (usually a hospital) that provides acute care services in England. A Trust can include one or more hospitals.

National Institute for Health and Care Excellence (NICE)
An organisation responsible for providing national guidance on the promotion of good health, and the prevention and treatment of ill health.

Royal College of Surgeons of England (RCS)
An independent professional body committed to enabling surgeons to achieve and maintain the highest standards of surgical practice and patient care. As part of this it supports audit and the evaluation of clinical effectiveness of surgery.

