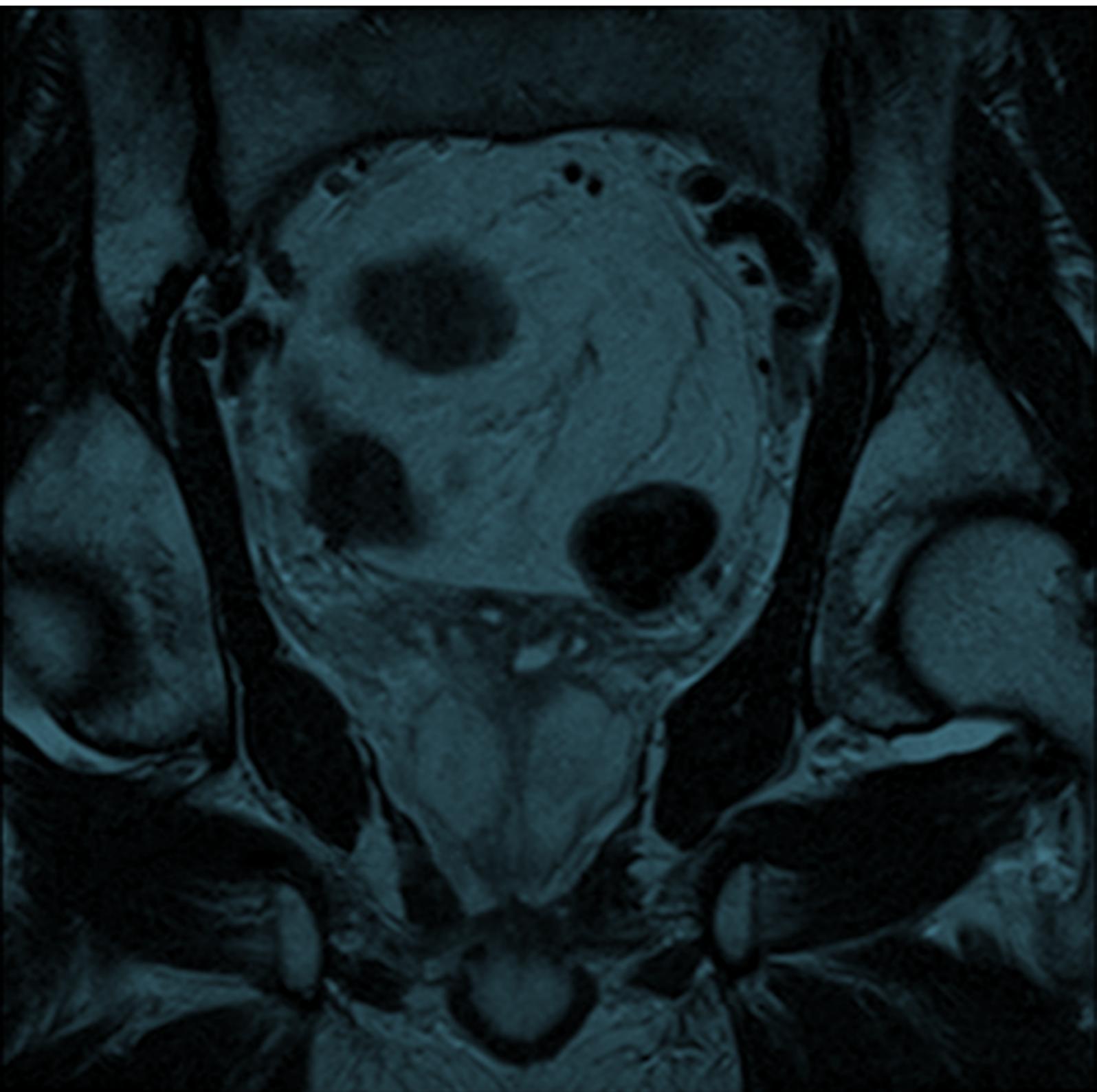


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**First Year Annual Report –  
Organisation of Services and Analysis  
of Existing Clinical Data**



# National Prostate Cancer Audit

## Executive Summary

### First Year Annual Report – Organisation of Services and Analysis of Existing Clinical Data.

#### London: The Royal College of Surgeons of England, 2014.



Registered Charity No: 212808

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, 2014.

#### 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.



The National Cancer Registration Service (NCRS), 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.

The NCRS is the data collection partner for the NPCA.

#### 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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This report was prepared by members of the NPCA Project Team.

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# Executive Summary

The first National Prostate Cancer Audit (NPCA) was commissioned by the Healthcare Quality Improvement Partnership (HQIP)\* as part of the National Clinical Audit Programme with the aim of assessing the process of care and its outcomes in men diagnosed with prostate cancer in England and Wales.

The NPCA started on 1st April 2013 and will continue for a minimum of five years. The audit is based at the Clinical Effectiveness Unit (CEU) at the Royal College of Surgeons of England and is managed in partnership with the British Association of Urological Surgeons (BAUS), the British Uro-Oncology Group (BUG) and the National Cancer Registration Service (NCRS).

The NPCA consists of the following components:

1. An organisational audit of service delivery and prostate cancer care in England and Wales
2. An analysis of existing datasets to provide comparative baseline data for the prospective audit
3. A prospective audit of all men newly diagnosed with prostate cancer in England and Wales
4. An audit of patient-reported outcome and experience measures for all patients with localised prostate cancer who are candidates for radical treatment
5. An evaluation of the feasibility of a PSA testing audit in primary care

The first annual report covers the work undertaken since April 2013. It includes a preliminary analysis of the NPCA's organisational audit, an analysis of existing data sets including patients with prostate cancer in England, and the design of the NPCA's prospective audit dataset.

## Organisational audit

All NHS providers of prostate cancer services in England and Wales were surveyed to determine the availability of essential diagnostic, staging and therapeutic facilities, how prostate cancer services are organised and delivered, and the functioning of local and specialist multidisciplinary teams (MDTs). The report presents key findings at a national level.

All providers of prostate cancer services in England and Wales participated. In England, 143 NHS trusts in England provide prostate cancer services with 131 local and 48 specialist MDTs coordinating patient management. In Wales, 10 NHS hospitals provide prostate cancer services in Wales with six local and four specialist MDTs.

## Diagnostic access

142 (99%) of trusts in England and all NHS hospitals providing prostate cancer services in Wales have access to onsite MRI imaging. 75% of NHS providers in England and 60% in Wales have access to multiparametric MRI, which has been recommended for men who have a negative transrectal biopsy to determine if a second biopsy is necessary and for men with a positive histological diagnosis to get further information about T and N staging.<sup>1</sup>

92% of English trusts and 100% of relevant Welsh hospitals have isotope bone scanning facilities on site. All specialist MDTs have access to this staging modality in keeping with recommendations.<sup>1</sup>

## Radical treatment

Surgical treatment for prostate cancer is centralised in line with national guidelines with 61 NHS trusts in England and five NHS hospitals in Wales offering radical surgical treatments for prostate cancer. Of these, 43% in England and 20% in Wales offer robot-assisted laparoscopic prostatectomy. NICE recommend that this technique should be based at only those centres performing  $\geq 150$  procedures/year.<sup>1</sup>

Radiation services are also centralised for prostate cancer with 54 English centres and three Welsh centres offering radical radiotherapy. 91% of centres in England and all centres in Wales can offer Intensity modulated radiotherapy (IMRT), increasingly considered to be the new standard.<sup>2</sup> High-dose rate brachytherapy in combination with external beam radiotherapy is recommended as a means of dose escalation for men with intermediate and high-risk localised or locally advanced prostate cancer,<sup>1</sup> but this is being provided only by 11 (20%) of the 54 radiation centres in England. At present, high-dose brachytherapy is not offered at centres in Wales.

## Support Services

50% of NHS trusts in England and 60% of hospitals in Wales can provide the full array of personal support services including cancer advisory centres, sexual function and continence services, and psychological/counselling services.

Urological clinical nurse specialists (CNS) are available at most NHS trusts in England (97%) and NHS hospitals in Wales (90%) providing prostate cancer care in keeping with national recommendations.<sup>3</sup> However, patients have access to oncological CNSs in less than half of the same NHS providers in England (46%) and Wales (40%).

15% of the local MDTs in England are attended by a member of the palliative care team. However, lack of

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attendance at meetings of the MDT does not reflect the potential involvement in the extended multidisciplinary team. 83% of local MDTs in Wales are attended by a member of the palliative care team. In addition, 24-hour access to specialist advice on palliative care is available in 78% of English NHS trusts and 80% of Welsh Hospitals providing prostate cancer care.

### Clinical infrastructure: specialist clinics

54% of specialist MDTs in England and 50% in Wales offer specialist clinics that allow patients a joint consultation with a surgeon, oncologist and a CNS. Almost all specialist MDTs in England have consultant-led follow-up clinics after radical treatment (post-surgery, 96% and post-radiotherapy, 98%). The corresponding figures for Wales are lower (post-surgery, 75% and post-radiotherapy 50%).

### Duration of follow-up after radical treatment according to specialist MDTs in England and Wales

Approximately 30% of prostate cancer patients with low-risk disease who receive radical treatment are currently expected by specialist MDTs in England to be followed up for longer than 5 years, despite the low risk of relapse. The number of specialist MDTs in Wales is too low to investigate the impact of disease risk on the follow-up duration.

Encouragingly, the results from the organisational audit indicate that, overall, NHS providers in England and Wales are following guidelines for the management of prostate cancer services.

### Analysis of existing datasets including patients with prostate cancer in England

It was not possible to carry out the planned analysis of 2008-2010 Urological Cancer Registry data linked to the English Hospital Episode Statistics (HES) as the linkage could not be carried out by the Health and Social Care Information Centre in time for this report. Welsh data was unavailable whilst an appraisal was undertaken of data release regulations and procedures.

To minimise the impact on the audit's progress, alternative analyses were carried out using an earlier extract of Cancer Registry data linked to HES (patients diagnosed between April 2006 and March 2008) and a later extract of unlinked Cancer Registry data (patients diagnosed in 2012). The report presents an analysis of data completeness among the 28 English Cancer Networks that existed at the time these data were collected to determine data completeness and disease status and to introduce key performance indicators.

The completeness of recording cancer stage and tumour grade varied markedly across the Cancer Networks. At national level, cancer grade and tumour stage was available for only 53% of patients diagnosed between 2006 and 2008. However, there was a considerable improvement in the most recently available Cancer Registry data (corresponding percentage was 71% for patients diagnosed in 2012). The analysis demonstrated that English Cancer Registry records can be linked to the HES database and used to provide a comparative baseline dataset for the prospective audit.

Six key performance indicators were introduced, which will be used in the NPCA's prospective audit. These indicators reflect indicators of stage at diagnosis (proportion of men diagnosed with locally advanced and proportion with advanced disease), indicators of possible over- and under-treatment (proportion with low-risk localised cancer undergoing radical prostate cancer treatment and proportion with locally advanced disease undergoing radical prostate cancer treatment), and indicators of short-term outcome after radical surgery (proportion with an in-hospital length of stay longer than 3 days or proportion readmitted as an emergency within 90 days of radical prostate cancer surgery).

### NPCA Prospective Audit

The NPCA prospective audit has started to collect the following data on men who were diagnosed with prostate cancer from 1st April 2014:

- The characteristics of the prostate cancer, how it was detected, and the referral pathway.
- The crucial steps in the diagnostic and staging process.
- The planning of initial treatment.
- Initial treatments that were planned (e.g. active monitoring/surveillance, surgery, radiotherapy, hormonal therapy, and novel treatments including cryotherapy and HIFU).

The NPCA is the first national cancer audit to work with the NCRS as data collection partner in England. A guiding principle of the NPCA's prospective audit design was to keep the burden of data collection on staff and patients to a minimum. The mechanism for data collection and submission of prospective data for the NPCA in England mirrors that in place within each trust for the Cancer Outcomes and Services Dataset (COSD) with a continuous monthly flow of data to local NCRS offices.

The NPCA dataset is a true 'minimum dataset' consisting of three categories with only 50 data items in total (20 of which are new NPCA data items, one is part of the BAUS dataset and the rest are part of COSD). The first category concerns initial diagnosis, staging, and planned treatment. These items should be collected for **all men with newly diagnosed prostate cancer** at meeting(s) of the MDT during the initial phase of management.

The second focuses on surgery for prostate cancer and includes method of surgery and pathological outcome of surgery. These data items are only collected for patients who have **undergone radical prostatectomy**.

The third concerns planned radiotherapy. These items are only collected for men for whom **external beam radiation therapy or brachytherapy, is planned with or without hormone deprivation therapy**. Data items should be collected before actual treatment takes place.

The mechanism for data collection in Wales is currently in development and is anticipated to commence in 2015.

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## Recommendations

**On the basis of this first Annual Report, we have the following recommendations for providers of prostate cancer services in England and Wales:**

**With respect to the delivery and organisation of prostate cancer services:**

- NHS providers should ensure that multiparametric MRI is more widely available to decrease the likelihood of unnecessary re-biopsy and to improve staging and treatment decision making for patients with potentially curable disease where indicated.
- The availability of high-dose rate brachytherapy should be increased for men with intermediate and high-risk localised or locally advanced prostate cancer.
- The availability of personal support services including cancer advisory centres, sexual function and continence advice, and psychological counselling should be improved.
- Patients with prostate cancer should have access to a CNS with an appropriate background in uro-oncology.
- NHS providers should ensure that patients have access to a joint clinic with a surgeon, an oncologist and a CNS to discuss their treatment options.

**With respect to data collection for the prospective audit:**

- Senior clinicians and other members of the MDT should ensure that complete and accurate data can be submitted to the NPCA for every patient with newly diagnosed prostate cancer, including data on cancer stage and tumour grade.