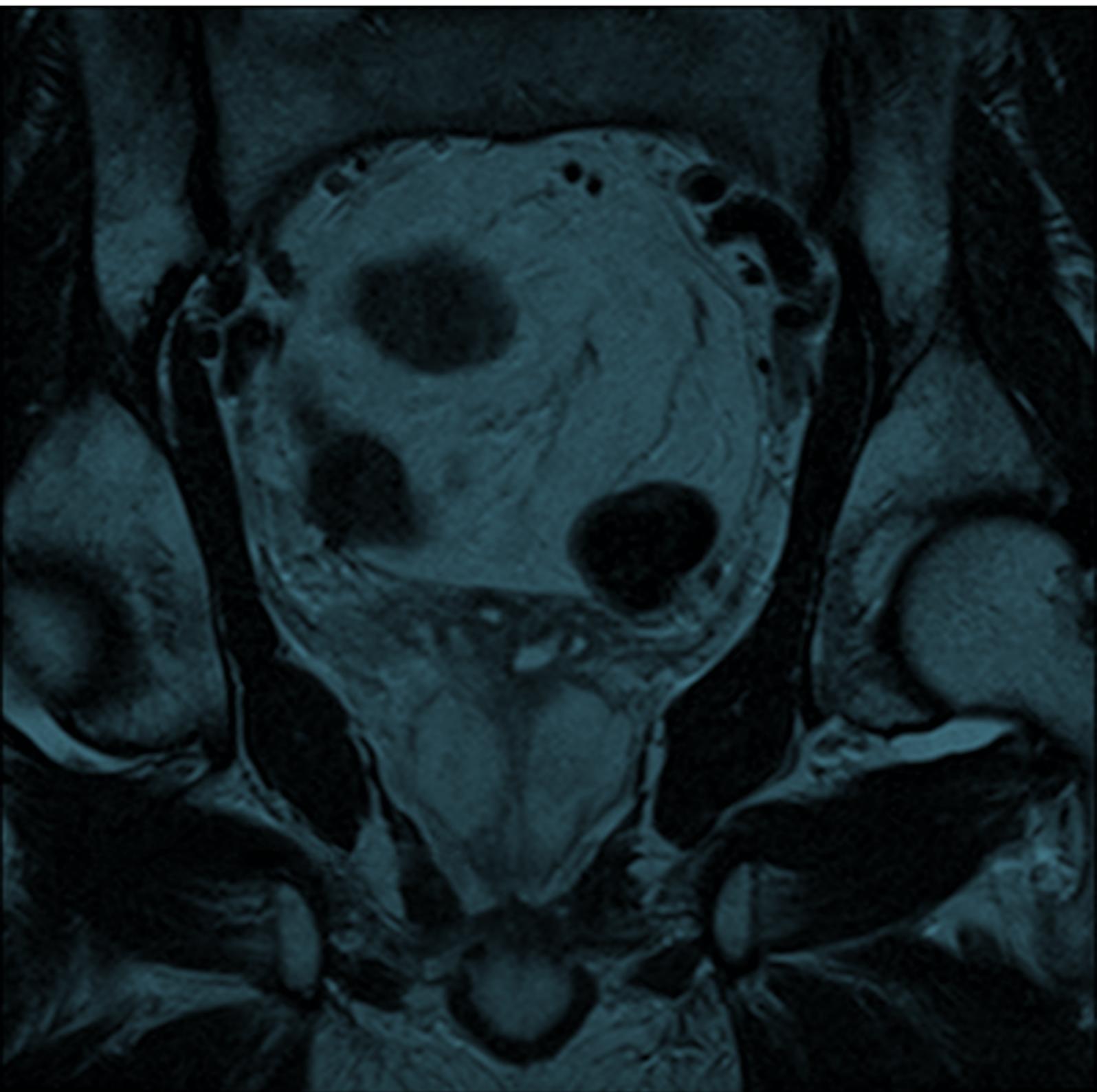


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**Third Year Annual Report –  
Results of the NPCA Prospective Audit  
and Patient Survey  
2016**



# National Prostate Cancer Audit

## Executive Summary

### Third Year Annual Report – Results of the NPCA Prospective Audit and Patient Survey

London: The Royal College of Surgeons of England, 2016.



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, 2015.

#### In partnership with:



THE BRITISH ASSOCIATION  
OF UROLOGICAL SURGEONS

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.



Public Health  
England

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.

The NCRAS 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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The NPCA Project Team would like to thank all men who completed the NPCA Patient Survey for sharing their views on the quality of care and the impact of radical treatment on their daily lives. A report summarising the key results in a patient friendly format will be published in February 2017.

The Project Team would also like to thank all urological and uro-oncological colleagues, and their clinical and non-clinical teams at NHS Trusts in England and Health Boards in Wales who collected and submitted data for the audit. Your continued support of the audit is essential to enable the NPCA to determine whether the care that men with prostate cancer receive is of high quality and is in keeping with recommended practice. The data will highlight areas where improvements are needed and where better patient care can be put in place.

We are grateful to the NPCA data collection partners including NCRAS, Public Health England and the Wales Cancer Network, Public Health Wales for supporting NPCA data submissions from Trusts and Health Board and for supplying data for this report.

We would like to thank the British Association of Urological Surgeons (BAUS) and the British Uro-Oncology Group (BUG) for their continued professional guidance and for raising awareness amongst urological and uro-oncological colleagues.

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# Executive Summary

## Background

Prostate cancer is the most frequently diagnosed solid cancer in men and the second most common cause of cancer-related death in the UK.<sup>1</sup> The National Prostate Cancer Audit (NPCA) was commissioned by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England and the Welsh Government with the aim of assessing the process of care and its outcomes in all men diagnosed with prostate cancer in England and Wales. This is the third Annual Report (2016) of the National Prostate Cancer Audit (NPCA).

The NPCA is based at the Clinical Effectiveness Unit (CEU) at the Royal College of Surgeons of England. In collaboration with its data collection partners, the National Cancer Registration and Analysis Service (NCRAS), Public Health England, and the Wales Cancer Network, Public Health Wales, the Audit has collected a large body of information which, in this and previous reports, provides important data regarding the provision and homogeneity of services and treatment in England and Wales in relation to the type and extent of prostate cancer. In this 2016 report the NPCA has taken things further by gathering information directly from patients about the benefits and side effects of treatment, in addition to consolidating prospectively collected data relating to treatment.

This third Annual Report presents preliminary results of the first year of the prospective audit for men diagnosed with prostate cancer between 1st April 2014 and 31st March 2015 in England. We also present results of the prospective audit in Wales, where NPCA data collection started one year later, for men diagnosed between 1st April 2015 – 31st September 2015. Patient-reported outcomes and experience measures (PROMs and PREMs) following radical local treatment of prostate cancer were collected using a survey distributed to individual patients in England 18 months after diagnosis and subsequent treatment. These results, representing one of the largest individual patient treatment surveys undertaken in the UK, are presented for the first time in this Annual Report. They will provide valuable information enabling clinicians to assess the overall effects of treatment and health care providers to study and understand variation in practice and outcomes in different geographical areas.

The report is primarily written for clinicians, providers of prostate cancer services, commissioners and health care regulators. A version presenting the results to patients and the wider public is being produced separately and will be available on the NPCA's website ([www.npca.org.uk](http://www.npca.org.uk)) in Spring 2017.

It is important to note that the NPCA is an evolving audit and one of the NPCA's key priorities is to improve data completeness in collaboration with the NCRAS, the NPCA's data collection partner in England. The NPCA uses data from multiple sources and as such the complexity of available data can produce inconsistencies with respect to crucial data items such as date of diagnosis, cancer stage and prostate cancer service provider. Further development of the approach taken to resolve these inconsistencies is a priority area for the NPCA. Despite these limitations, the NPCA presents provider-level results based on data without adjustment for differences in case mix in the current Annual Report. This provides a "blueprint" demonstrating the potential of the NPCA as a source of information for the assessment of prostate cancer services. Improved data completeness will allow robust provider comparisons that will be presented in the Annual Report in 2017.

## English Prospective Audit: Key Findings

### Trust participation, case-ascertainment and data quality

- 99% of 139 NHS Trusts in England that provide prostate cancer services submitted an NPCA record and were also considered to be participating (defined on the basis of submitting at least one staging data items for at least 5 patients).
- The NPCA received 36,048 patient records which could be linked to an NHS provider resulting in an overall case ascertainment of 93%.
- Completeness of staging items (Gleason score & prostate specific antigen [PSA] level) has improved but other key data items are completed poorly (eg. performance status and American Society of Anaesthesiologists (ASA) score [ASA]). Disease status could be determined in 82% of men (ranging from 34% to 97% across specialist multidisciplinary teams (MDTs)).
- Radical prostatectomy key data items were completed poorly with only 13 of the 55 surgical centres providing more than 50% of data for key NPCA data items. External beam radiotherapy (EBRT) items were also poorly completed with only three of the 50 centres submitting more than 50% of the data.

### Prostate Cancer Diagnostics

- New biopsy methods using template based approaches have been introduced but transrectal ultrasound (TRUS) biopsy still remains the most commonly utilised nationwide (85% of men).

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<sup>1</sup> Cancer Research UK, Prostate Cancer Statistics 2014

- There has also been an increase in prostate multiparametric MRI use compared with preliminary data presented in the Annual Report 2015 (from 21% to 44%) but this is still low. Of the 44% of men who had a record indicating that a staging multiparametric MRI scan had been performed, more than half of these scans (55%) were performed prior to biopsy.

### Performance Indicators

- The level of “over-treatment” (proportion of men with low-risk localized disease undergoing radical prostate cancer therapy) varied amongst specialist MDTs. The overall proportion (12%) was about the same as the percentage we reported in 2010-13 data (13%) (Annual Report 2015). This maintains the shift which was seen between 2006-08 and 2010-13 where a reduction in “over-treatment” was observed.
- There was also considerable variation across specialist MDTs in the level of “under-treatment” (proportion of men with locally advanced disease who were reported as not having received radical treatment) with an overall proportion of 39% which is an improvement compared to 2010-13 when 53% of men were potentially “under-treated” (Annual Report 2015).
- The proportion of patients with a length of stay of more than 3 days following radical prostatectomy has fallen from 22% to 14% compared with 2010-13 data (Annual Report 2015). However, variation existed between surgical centres in relation to the proportion of patients staying in hospital for longer than 3 days following radical prostatectomy.

## Welsh Prospective Audit: Key Findings from preliminary data

### Trust participation, case-ascertainment and data quality

- All six Health Boards participated in the NPCA with an overall case ascertainment rate of 65% (based on a definition of the expected number of patients for whom an NPCA record was submitted containing at least one tumour staging item).
- All Health Boards achieved data completion rates of 100% for all NPCA data items apart from PSA and Gleason score which were still high (89% for both across all Health Boards).

### Prostate Cancer Diagnostics

- TRUS biopsy was the commonest prostate biopsy technique (92% of men), a result which mirrored that

seen in England but multiparametric MRI was used more frequently. Of the 65% of patients who received multiparametric MRI scans as part of staging, 22% of these were before biopsy which may improve prostate cancer detection.

## Patient-reported outcomes and experience measures: Key Findings from preliminary data in England

- The response rate for the patient survey of men 18 months after diagnosis who underwent radical treatments was excellent (73%) in comparison with other national PROMs studies.

### Patient experience of care following diagnosis of prostate cancer

- The overall picture regarding men’s experience of care post-diagnosis is very positive with 90% of men undergoing radical treatment for prostate cancer rating their care as 8 or above on a scale of 0 (‘very poor’) to 10 (‘very good’).
- In keeping with recommended standards<sup>2</sup> the majority of men were given the name of a clinical nurse specialist (CNS) to support them throughout their treatment (83% of radical prostatectomy patients and 85% of EBRT patients).

### Patient outcomes following radical treatment for prostate cancer

- Overall, radical treatment had the strongest impact on the sexual functioning EPIC-26<sup>3</sup> domain with very low scores for both radical prostatectomy and EBRT.
- Patients undergoing either radical treatment reported good outcomes with regards to urinary irritation or bowel functioning with high domain scores obtained. Relatively lower urinary incontinence scores were observed following radical prostatectomy and lower hormonal domain scores for patients undergoing radical radiotherapy predominantly in combination with androgen deprivation therapy.

### Variation by provider

- Overall, there was limited variation in patient functional outcomes across providers of radical prostatectomy or radiotherapy with some variation in sexual functioning and urinary incontinence across surgical providers.
- Patient-reported experience was good overall. There was limited variation across providers in contrast to the findings of the National Cancer Patients Experience Survey 2015, which reported high levels of variation.

<sup>2</sup> NICE, 2015. Prostate Cancer. NICE Quality Standard 91. Quality Statement 1: ‘Men with prostate cancer have a discussion about treatment options and adverse effects with a named nurse specialist.’

<sup>3</sup> The Expanded Prostate Cancer Index Composite 26-item version (EPIC 26) is a validated instrument to measure prostate cancer related quality of life (QoL). Scores range from 0 to 100 with higher scores representing a better QoL.

## Implications & Key Recommendations for clinical practice

- The initial results of the NPCA Prospective Audit in England demonstrate the potential to evaluate practice using both existing core and newly developed performance indicators. However, there is a **need for further improvements in data quality and completeness of each section of the NPCA minimum dataset<sup>4</sup> in order to enable the rigorous risk-adjustment required to identify outlying performance of providers.**
- **Providers should consider if and when (before or after biopsy) to use multiparametric MRI for the diagnosis of prostate cancer. Improved data completeness is required to reliably monitor use of multiparametric MRI in the future.**
- **The trend seen towards a reduction in the potential “under-treatment” of locally advanced prostate cancer is encouraging and is in line with current guidelines.** In future reports, the NPCA will provide more detailed information on the types of multi-modal treatments received by these men in line with current recommendations.<sup>6</sup>
- **The proportion of men with low-risk disease being potentially “over-treated” is stable at about one in eight men.** This level of “over-treatment” of low-risk localized disease still remains an area of concern and further work is required to evaluate treatment pathways for these men and whether active surveillance is being offered appropriately in line with current standards.<sup>5</sup>
- **The high level of data completeness for preliminary Welsh NPCA data** was very encouraging and is likely to be due to the mandated input of a health care professional in the clinical-sign off. Similar strategies engaging health care professionals may help to improve data completeness in England.
- **The high response rate for the NPCA patient survey indicated the successful engagement of patients in the collection of NPCA PROMs and PREMs** and we hope this is repeated with the next patient survey which will include all men who are candidates for radical treatment.
- **Overall, men report a good experience of care and our preliminary results demonstrate that there is limited variation in the experience that patients reported across specialist MDTs.** In some specialist MDTs the provision of information about treatment options and the making of decisions about treatment may need further improvement.

- Men undergoing radical treatment (surgery or radiotherapy) experience significant sexual dysfunction. **All men undergoing radical prostatectomy or radical radiotherapy treatment for prostate cancer should be counselled honestly about this issue and they should have early and ongoing access to erectile dysfunction services after treatment in keeping with national recommendations<sup>7</sup>**

## Implications for the NPCA & Future Plans

- The NPCA will continue engagement with Trusts to achieve improved data completeness and will work with NCRAS to remove data inconsistencies.
- The Audit will perform risk-adjusted prospective audit and PROMs analyses for presentation in the 2017 Annual Report.
- In 2017 the Audit will develop plans with HQIP for the inclusion of appropriate NPCA performance measures as part of the Clinical Outcomes Programme (COP).
- The NPCA will work with the Care Quality Commission (CQC), the independent regulator of health and adult social care in England, to explore the utilisation of NPCA data and key measures to inform their inspection processes.
- The findings from the NPCA will be presented at key professional conferences and stakeholder meetings.
- The Audit will carry out a review of the performance indicators that have been developed to compare providers.
- A website is under development which will provide easy access to the performance indicators for individual providers of prostate cancer care in England and Wales.

<sup>4</sup> <http://www.npca.org.uk/prospective-audit-tools/>

<sup>5</sup> NICE, 2015. Prostate Cancer. NICE Quality Standard 91. Quality Statement 3: ‘men with intermediate- or high-risk localised prostate cancer who are offered non-surgical radical treatment are offered radical radiotherapy and androgen deprivation therapy in combination.’

<sup>6</sup> NICE, 2015. Prostate Cancer. NICE Quality Standard 91. Quality Statement 1: ‘men with low-risk prostate cancer for whom radical treatment is suitable are also offered the option of active surveillance’

<sup>7</sup> NICE, 2015. Prostate Cancer. NICE Quality Standard 91. Quality Statement 4: ‘Men with adverse effects of prostate cancer treatment are referred to specialist services’