# UK prostate cancer care outcomes: A comparison with Europe



## What is prostate cancer?

Prostate cancer only affects men. It develops at different speeds in different people: for some the cancer develops and spreads quickly whilst for others, it spreads much more slowly. If the cancer spreads from the prostate to other parts of the body, it is known as advanced prostate cancer.<sup>1</sup>

In the UK, over 47,000 men are diagnosed with prostate cancer each year.¹ Symptoms for prostate cancer can include: burning pain or discomfort during urination; difficulty urinating; and loss of bladder control. However, for many men with localised prostate cancer, there are often no symptoms at all.

Current treatment options can either prevent the cancer from growing further or eradicate it altogether. In the former case, the cancer will be regularly monitored by health professionals.<sup>2</sup>

This briefing provides an overview of prostate cancer outcomes in the UK and Europe informed by the findings from the Institute of Health Economics' *Comparator Report on Access to cancer medicines in Europe revisited*.<sup>3</sup>

## UK patient outcomes for prostate cancer



The UK's prostate cancer statistics compare poorly in relation to those of its European neighbours. The incidence rate for prostate cancer is 111.1 per 100,000 in the UK, compared to a European average of 105.5 per 100,000.<sup>3</sup> Furthermore, the rate of newly diagnosed cases of prostate cancer in the UK is 3% higher than the European average of 23%.

Incidence of prostate cancer is increasing across the whole of Europe. The report from the IHE states that demographic factors contribute to this increase.<sup>3</sup> However, this alone does not explain the relatively higher incidence rate in the UK, as similar demographic changes are taking place across Europe.<sup>4</sup>

The mortality rate for prostate cancer in the UK is also higher than the European average. Whilst the mortality rate in the UK is 22.8 per 100,000, it is 18.9 per 100,000 in Europe.<sup>3</sup> The UK has a disproportionately higher share of cancer deaths due to prostate cancer than the EU, with the share of deaths caused by the condition standing at 13% and 9% respectively.

Chances of survival for UK patients five years after diagnosis are considerably lower than in Europe. Whilst over 84% of patients with prostate cancer in Europe will survive for five years, in the UK only 78% will survive with the condition for five years after diagnosis.<sup>3</sup>



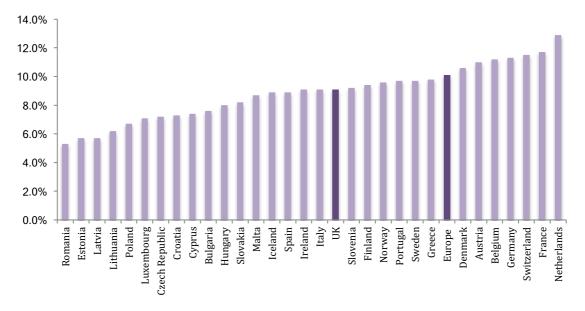
Men with prostate cancer in the UK face a higher mortality rate than many of their European counterparts<sup>3</sup> In the UK, every man over the age of fifty has the right to a prostate-specific antigen (PSA) test. Whilst this helps to explain the high level of incidence, earlier detection does not translate into higher five year survival usually associated with early diagnosis. Other factors, such as timely referral and patient access to treatment and care, may therefore play a part in the UK's poorer outcomes for prostate cancer.

"More than two out of every ten men with prostate cancer in the UK will not live for five years with the condition"<sup>3</sup>

## **Cancer spending**

The UK's spending on healthcare overall, as well as on cancer and prostate cancer specifically, fall below the European average. According to the IHE report, the UK spend on healthcare as a percentage of GDP is 1% lower, and per capita spending on cancer in the UK is €41 lower, than the European average.<sup>3</sup>

### Health spending as percentage of GDP, 2014<sup>3</sup>





Germany spends more than double the amount per capita on prostate cancer compared to the

The UK spends €497 million per year on prostate cancer.³ This equates to €7.68 per capita.³ This is significantly lower than the highest spending countries in Europe such as Germany or the Netherlands, which only have marginally higher incidence rates than the UK. Whilst the Netherlands spends nearly €5 more per capita on prostate cancer than the UK, Germany spends more than double the amount on the condition with €20.40 per capita.³

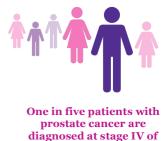
Although the UK spends a similar amount per capita on prostate cancer as Finland, this is not reflected in outcomes. Finland's five year survival rate is higher, suggesting that further improvements can be made to the way in which the UK spends its resources.<sup>3</sup>

## The patient journey

#### Diagnosis

The main route of diagnosis for prostate cancer patients in England is via GP referral.<sup>5</sup> Compared to other cancers, diagnosis via emergency presentation is comparatively low, with 9% of patients diagnosed with prostate cancer via this route compared to 22% of all cancer patients.<sup>5</sup>

However, UK prostate cancer patients are more likely to be diagnosed later than stage I. Seven in every ten men are diagnosed with prostate cancer at stage II or higher, with about one out of every five patients being diagnosed when the cancer is already at stage IV.<sup>6</sup> For these patients, there is a 15% lower chance of surviving one year or more than those diagnosed at an earlier stage.<sup>7</sup>



the illness.6

#### Access to new treatments



Traditionally, the UK's uptake of new medicines has been relatively low compared to other European countries, which has meant that options for cancer patients in the UK have lagged behind.<sup>3</sup> However, in recent years, UK spending on cancer medicines has increased and this has helped to encourage more uptake of prostate cancer medicines.

In 2005 the UK only spent €14.50 per capita on cancer medicines but, by 2014, this had increased to €36.80 per capita.³ This is still below the European average spend per capita, which is €38.00, but a considerable improvement.

Since 2000, seven treatments for prostate cancer have been approved through NICE. <sup>8</sup> The introduction of the Cancer Drugs Fund (CDF) has also helped to improve patient access to treatment with three treatments for prostate cancer being made available through the Fund. <sup>9</sup> Following recent reforms to the CDF, these treatments are now available to patients through routine commissioning.

#### Patient experience

When compared to other cancers, patient experience for prostate cancer patients in England presents a mixed picture.<sup>10</sup>

According to the 2015 National Cancer Patient Experience Survey, which surveyed over 100,000 cancer patients in England, prostate cancer patients rated their understanding of their condition better than patients with other types of cancer.<sup>10</sup>

"One in five prostate cancer patients in England did not understand the treatment options available to them"<sup>10</sup>

However, one in five men with prostate cancer stated that they did not understand the treatment options available to them, suggesting that further improvements need to be made in increasing patient awareness of the advantages and disadvantages of different treatments options.<sup>10</sup>

## The future of prostate cancer care

In the UK, 130 men are diagnosed with prostate cancer every day.¹ Outcomes for people with prostate cancer in the UK are worse than the rest of Europe, but there has been an encouraging uptake of innovative treatments that have the potential to help address some of the issues patients face.

However, in order to ensure the health system is ready to tackle the future challenges of prostate cancer, it is important that in the UK:

- **Focus on early diagnosis and timely referral** is continued and built upon to help improve prostate cancer survival rates in the UK
- Understanding of how resources can be spent more efficiently is increased to help the UK close the gap to the best performing countries in Europe
- Patient awareness of treatment options is improved
- **Reimbursement and funding** for innovative treatments is clarified in line with the implementation of the reforms to the CDF

#### About this briefing

This briefing has been developed following the publication of the *Comparator Report on patient access to cancer medicines in Europe revisited* by the Swedish Institute for Health Economics. It aims to highlight the key findings of the report in relation to the UK's prostate cancer outcomes in the European context. Whilst the briefing primarily draws on the findings of the report, it also brings together additional relevant data sources.

#### References

<sup>&</sup>lt;sup>1</sup> Prostate Cancer UK, *About prostate cancer*, 2016, available at: <a href="http://prostatecanceruk.org/prostate-information/about-prostate-cancer">http://prostatecanceruk.org/prostate-information/about-prostate-cancer</a>, accessed January 2017

<sup>&</sup>lt;sup>2</sup> Prostate Cancer UK, *Treatments*, 2016, available at: <a href="http://prostatecanceruk.org/prostate-information/treatments">http://prostatecanceruk.org/prostate-information/treatments</a>, accessed January 2017

<sup>&</sup>lt;sup>3</sup> The Swedish Institute for Health Economics, *Access to cancer medicines in Europe revisited*, 2016, available at: <a href="http://ihe.se/wp-content/uploads/2016/08/IHE-Report\_2016\_4.pdf">http://ihe.se/wp-content/uploads/2016/08/IHE-Report\_2016\_4.pdf</a>, accessed February 2017

<sup>&</sup>lt;sup>4</sup> Eurostat, *Population Structure and Ageing*, 2016, available at: <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php/Population\_structure\_and\_ageing">http://ec.europa.eu/eurostat/statistics-explained/index.php/Population\_structure\_and\_ageing</a>, accessed January 2017

<sup>&</sup>lt;sup>5</sup> National Cancer Registration and Analysis Service, *Routes to diagnosis*, 2016, available at: http://www.ncin.org.uk/publications/routes\_to\_diagnosis, accessed February 2017

<sup>&</sup>lt;sup>6</sup> Cancer Research UK, *Prostate Cancer Incidence Statistics*, 2014, available at: <a href="http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer/incidence">http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer/incidence</a>, accessed January 2017

<sup>&</sup>lt;sup>7</sup> Cancer Research UK, *Prostate Cancer Survival Statistics*, 2016, available at: <a href="http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer/survival">http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer/survival</a>, accessed January 2017

<sup>&</sup>lt;sup>8</sup> NICE, Summary of technology appraisal decisions, 2017, available at: <a href="https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/summary-of-decisions">https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/summary-of-decisions</a>, accessed February 2017

<sup>9</sup> NHS England, Cancer Drugs Fund list, 2016, available at: <a href="https://www.england.nhs.uk/cancer/cdf/cancer-drugs-fund-list/">https://www.england.nhs.uk/cancer/cdf/cancer-drugs-fund-list/</a>, accessed February 2017

<sup>&</sup>lt;sup>10</sup> Quality Health, 2015 National cancer Patient Experience Survey, 2016, available at: <a href="https://www.quality-health.co.uk/surveys/national-cancer-patient-experience-survey">https://www.quality-health.co.uk/surveys/national-cancer-patient-experience-survey</a>, accessed February 2017