What is pancreatic cancer?
Pancreatic cancer develops when there is an abnormal and uncontrolled growth of cells in the pancreas.1

Over 9,600 new cases of pancreatic cancer were diagnosed in 2014, making it the eleventh most common cancer in the UK.2 Over the past decade the incidence rate for pancreatic cancer has risen by ten percent whilst the survival rate has remained stubbornly low, having seen little improvement in over forty years. In the 1970s, 1% of people diagnosed with pancreatic cancer survived beyond their disease for ten years, now the figure is still only 1%.3

Many of the symptoms of pancreatic cancer go unrecognised. However, they include: new onset of diabetes not related to weight gain, jaundice and unexplained weight loss.3

This briefing provides an overview of pancreatic cancer outcomes in the UK and Europe informed by the findings from the Institute of Health Economics’ (IHE) Comparator Report on Access to cancer medicines in Europe revisited.4

UK patient outcomes for pancreatic cancer
Incidence and mortality for pancreatic cancer in the UK are both slightly below the European average.4 In the UK, pancreatic cancer incidence rates are 9.6 per 100,000 of the population, compared to the European average of 10.5 per 100,000.4

As expected with a lower incidence, the UK’s mortality rate is lower than the EU 27 average. The UK pancreatic cancer mortality rate is 9 per 100,000 compared to the European average of 10.1 per 100,000.4

Despite having a lower incidence and lower mortality rate in the UK, pancreatic cancer has a poorer five-year survival rate compared to the European average, standing at just 3.19%, compared to a European average of 5.84%.4

When compared to the other four largest EU economies, the comparison becomes even more unfavourable for the UK, which is the worst performer out of all five. The UK particularly lags behind Germany which has a five-year survival rate of over 7%.4
Cancer spending

The UK’s spending on overall healthcare falls below the European average. According to the IHE report, UK spending on healthcare as a percentage of GDP and per capita spending on cancer are 1% and €41 lower than the European average respectively.\(^4\)

Despite increases in spend on cancer treatments between 2005 and 2014, the UK spends only €36.80 per capita on cancer treatments compared to a European average of €38.00.\(^4\) The Netherlands spends even more on cancer treatments per capita, €38.80, whilst Germany spends over 50% more on cancer treatments per capita than the UK, spending €59.00.

The IHE report shows that the UK spends €249 million per year on upper gastrointestinal cancers, including pancreatic cancer.\(^4\) This spend equates to only €3.84 per capita. This is significantly lower than the highest spending countries in Europe, such as Germany or the Netherlands, which both spend more per capita on pancreatic cancer than the UK is spending on all upper gastrointestinal cancers. Germany spends double the amount spent by the UK per capita at €6.63 and the Netherlands spends €4.86\(^5\).

The patient journey

Diagnosis

For pancreatic cancer in England, the main route to diagnosis is emergency presentation, with almost half of all cases diagnosed via this route (47%).\(^5\) Compared to other cancers, diagnosis via emergency

\(^4\) Data for Germany and the Netherlands only includes pancreatic cancer spend whilst data for the UK is only broken down to upper gastrointestinal spending
presentation is notably high for pancreatic cancer patients, with the percentage of patients diagnosed through this route for all cancers standing at less than half, at just 22%.

In contrast, the percentage of patients diagnosed following referral by their GP to a specialist under the ‘two week wait’ is comparatively low, at just 14% for pancreatic cancer compared to 30% for all cancers.\(^5\)

Survival at each stage of diagnosis is very low for pancreatic cancer. For instance, the median survival rate following a surgical resection for pancreatic cancer is between 11-20 months and patients with stage 3 pancreatic cancer have a survival rate of between 6 and 11 months.\(^6\) Finally, patients who have a metastatic form of the disease have a median survival of only 2-6 months.

**Access to new treatments**

Traditionally, the UK’s uptake of new medicines has been relatively low compared to other European countries, which has meant cancer patients in the UK have had fewer treatment options.\(^4\) For the last decade, innovation in medicines for pancreatic cancer has lagged behind other cancers, with no new medicines being licenced by the EMA until 2015\(^4,7\).

This lack of innovation alone does not explain the differences in survival rates between the UK and the rest of Europe. The lower spending on pancreatic cancer in the UK than in Europe could help explain why the UK has experienced small improvements in survival outcomes since the 1970s and also why survival rates in the UK are lower than in Europe.

The Cancer Drugs Fund (CDF) in England, which was designed to improve access to cancer medicines in England, approved one treatment for pancreatic cancer in 2016.\(^8\) Recent reforms introduced to the CDF should be monitored to ensure patients continue to have timely access to new pancreatic cancer treatments.

**Patient experience**

The patient experience for those with upper gastrointestinal cancers is varied but tends to be around the average for all cancers in England.\(^10\)

According to the 2015 National Cancer Patient Experience Survey, which surveys over 100,000 cancer patients in England, over one in five pancreatic cancer patients felt that their illness was not well explained to them, which is higher than the average for all cancers.\(^10\) More positively, however, only 16.6% of patients did not understand the treatment they were given. This is better than the average for all cancers, which was 17.3%.

Pancreatic cancer patients diverged most from those with other types of cancer on waiting times. Patients with pancreatic cancer more frequently reported that they had to wait too long before receiving appropriate diagnostic tests compared with other cancers, (17.1% vs. 13.4% for all cancers).\(^10\)
Given the difficulty in diagnosing pancreatic cancer as opposed to other cancers, it is important that the NHS in England focuses on earlier diagnosis and treatment.

**The future of pancreatic cancer care**

In the UK around 26 people are diagnosed with pancreatic cancer every day. Survival outcomes for people with pancreatic cancer in the UK are worse than the rest of Europe.

In order to ensure the system is ready to tackle the future challenges that the UK faces for pancreatic cancer, it is important that:

- **Focus on early diagnosis** is increased to improve five-year survival rates for pancreatic cancer given the higher chance of survival at an earlier stage of the disease
- **Inequalities in funding of services** for pancreatic cancer patients between the UK and the rest of Europe are addressed
- **Introduction of incentives** to encourage the development of treatments in areas of unmet need, such as pancreatic cancer

**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 pancreatic 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**