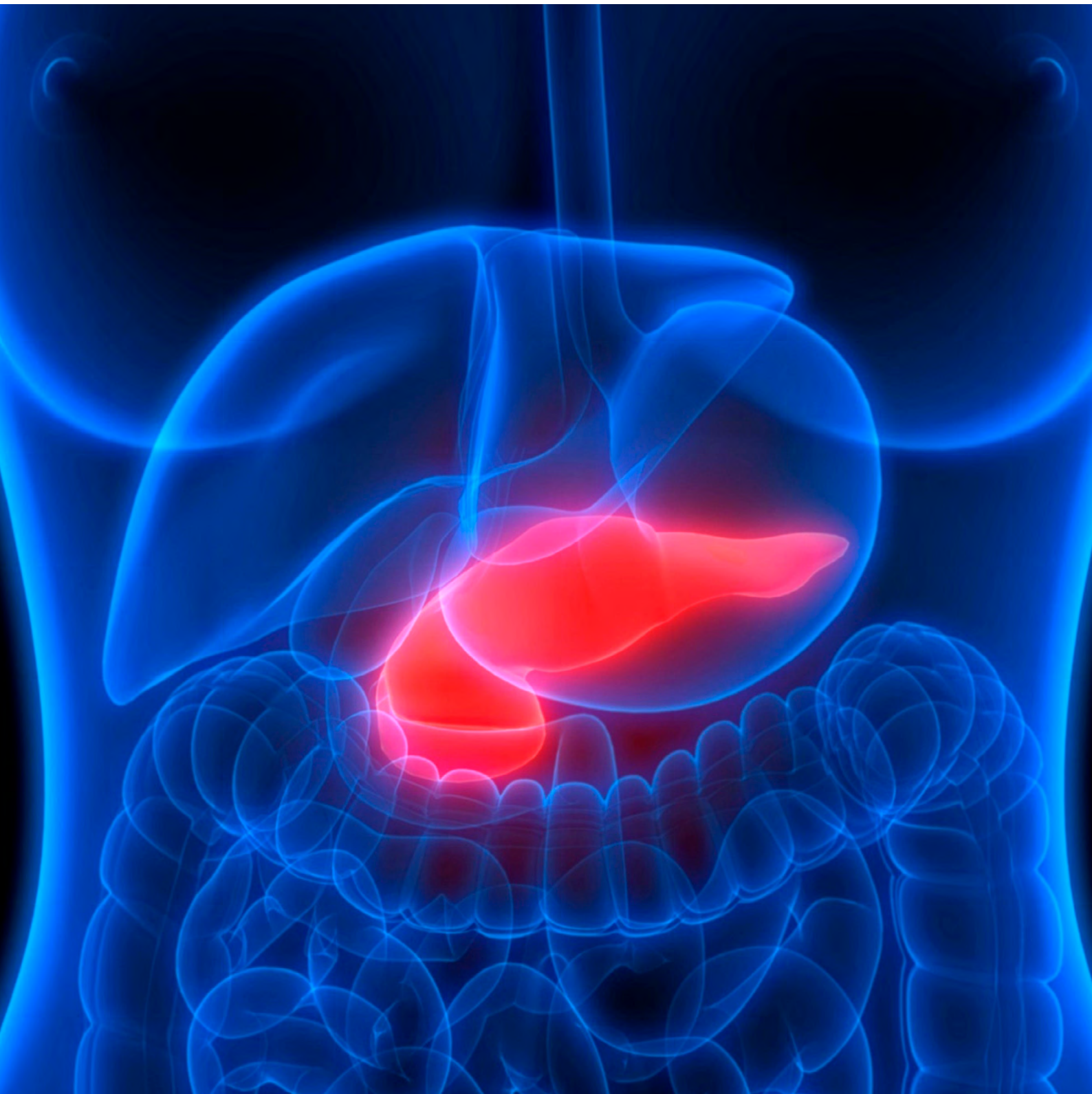


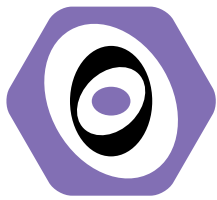
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# National Pancreatic Cancer Audit State of the Nation Report 2024

An audit of care received by people diagnosed with pancreatic cancer  
in England (2020-2021) and Wales (2022)

Published September 2024





# NPACA

National Pancreatic  
Cancer Audit

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Royal College  
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The National Cancer Audit Collaborating Centre (NATCAN) is commissioned by the **Healthcare Quality Improvement Partnership (HQIP)** as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). NATCAN delivers national cancer audits in non-Hodgkin lymphoma, bowel, breast (primary and metastatic), oesophago-gastric, ovarian, kidney, lung, pancreatic and prostate cancers. HQIP is led by a consortium of the Academy of Medical Royal Colleges and the Royal College of Nursing. Its aim is 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 holds the contract to commission, manage and develop the National Clinical Audit and Patient Outcomes Programme (NCAPOP), comprising around 40 projects covering 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 projects, other devolved administrations and crown dependencies.

<https://www.hqip.org.uk/national-programmes>



**Association of Upper Gastrointestinal Surgery of Great Britain and Ireland** is the speciality society that represents upper gastrointestinal surgeons. It is one of the key partners leading the Audit. Registered Charity no: 1093090



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This work uses data that has been provided by patients and collected by the NHS as part of their care and support. For patients diagnosed in England, the data is collated, maintained and quality assured by the National Disease Registration Service (NDRS), which is part of NHS England. Access to the data was facilitated by the NHS England Data Access Request Service.



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Network

NHS Wales is implementing a new cancer informatics system. As a result, the quality and completeness of data from Wales is likely to have been impacted due to implementation of this new system across multiple NHS organisations (Health Boards), which has resulted in data being supplied by both old and new systems. Additionally, and reflecting the uncertainty of data quality, the data submitted to the audit may not have undergone routine clinical validation prior to submission to the Wales Cancer Network (WCN), Public Health Wales.

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# Contents

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<b>1.</b>	<b>Introduction</b>	<b>4</b>
<b>2.</b>	<b>Infographic</b>	<b>5</b>
<b>3.</b>	<b>Recommendations</b>	<b>6</b>
<b>4.</b>	<b>Results for England (2020-2021)</b>	<b>7</b>
4.1	Data completeness	7
4.2	Patient characteristics	7
4.3	Diagnosis, staging and treatment planning	8
4.4	Time from referral to start of treatment	9
4.5	Disease-targeted treatment for pancreatic cancer	10
4.6	Supportive care for pancreatic cancer	11
4.7	Survival outcomes for people with pancreatic cancer	11
4.8	Changes over time	12
<b>5.</b>	<b>Results for Wales (2022)</b>	<b>13</b>
5.1	Data completeness and patient characteristics	13
5.2	Diagnosis, staging and treatment planning	14
5.3	Time from referral to start of treatment	14
5.4	Disease-targeted treatment for pancreatic cancer	14
5.5	Survival outcomes for people with pancreatic cancer	14
<b>6.</b>	<b>Commentary</b>	<b>15</b>

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# 1. Introduction

The [National Pancreatic Cancer Audit \(NPaCA\)](#) evaluates patterns of care and outcomes for people with pancreatic cancer in England and Wales. It highlights regional variations in care and supports NHS services to identify and address areas for improvement. The Audit's quality improvement goals and key performance indicators are outlined in its [Quality Improvement Plan](#).

In this first NPaCA State of the Nation Report, we present information on the care received by adults diagnosed with pancreatic cancer during a two-year period in England (2020-2021) and one year in Wales (2022). We also include people diagnosed with some cancers of the biliary tract (ampulla of Vater and extrahepatic bile duct), who will follow similar diagnostic and surgical pathways to those with pancreatic cancer. We report a two-year period for England to ensure sufficient patient numbers to enable reporting of indicators at organisation level; similarly, indicators on surgical outcomes are reported for a three-year period (2019-2021) for England to ensure there are enough procedures for analysis by patient subgroups. For Wales, data for only one year were available. Due to the different periods covered, and differences in the construction of some indicators, results for England and Wales are presented separately. Where results are reported at organisation level (for NHS Trusts in England or Local Health Boards in Wales), these are typically based on people who were diagnosed at that hospital (see supplementary tables). Some results, including surgical-focussed indicators, are presented for the 23 hepatopancreatobiliary (HPB) specialist centres in England and one surgical specialist centre in Wales.

The Audit uses information that is routinely collected by the NHS as part of the care and support given to patients. For people treated in England, the data are collated, maintained and quality assured by NHS England's [National Disease Registration Service \(NDRS\)](#). For patients treated in Wales, data are provided by Wales Cancer Network (WCN).

Additional materials that accompany this report are available at: [www.natcan.org.uk/audits/pancreatic/reports-2](http://www.natcan.org.uk/audits/pancreatic/reports-2). These include a methodology supplement with details about the Audit's data sources and methods, an [online glossary](#) that explains some of the terms used in this report, and resources to support local quality improvement, such as [data tables](#) including organisation-level results and a [local action plan template](#). A summary of this report for patients and the public will be made available on the Audit's webpages.

The State of the Nation Report uses [National Cancer Registration Data](#) ("gold standard" registration data) for England, which is currently available for people diagnosed up to the end of 2021.<sup>1</sup> The "gold standard" data has better case ascertainment and completeness of key variables compared to more recent registration data. We receive the data linked to several datasets including [Medicines Dispensed in Primary Care](#) and the [Diagnostic Imaging Dataset](#) to enable reporting of key indicators. However, to further support quality improvement activities, NPaCA publishes quarterly reports of data quality metrics and a subset of performance indicators (from October 2024, England only), which use more timely Rapid Cancer Registration Data (time lag 4-6 months), available here: [www.natcan.org.uk/audits/pancreatic/reports-2](http://www.natcan.org.uk/audits/pancreatic/reports-2). A number of national clinical guidelines inform the management of pancreatic cancer. The NPaCA evaluates patterns of care against standards outlined in the following key publications:

- [NICE Guideline NG85](#): Pancreatic cancer in adults: diagnosis and management
- [NICE Quality Standard QS177](#): Pancreatic cancer quality standard
- [NHS England 2024](#): HPB best practice timed diagnostic pathway

The NPaCA is one of ten national cancer audits delivered by the National Cancer Audit Collaborating Centre (NATCAN) which is commissioned within the [National Clinical Audit and Patient Outcomes Programme \(NCAPOP\)](#) and funded by NHS England and the Welsh Government. NATCAN delivers national cancer audits in non-Hodgkin lymphoma, bowel, oesophago-gastric, ovarian, kidney, lung, and prostate cancers as well as audits in primary and metastatic breast cancer. More information about the national cancer audits for England and Wales can be found at: [www.natcan.org.uk](http://www.natcan.org.uk). Information about the outlier process can be found in our [FAQs](#) (Q.17).

<sup>1</sup> The audits in NATCAN do not 'collect' clinical data. The cancer audits utilise the nationally mandated flows of data from hospitals to the National Disease Registration Service (NDRS) in NHSE and the Wales Cancer Network in Public Health Wales, thereby minimising the burden of data collection on provider teams

## 2. Infographic

NPACA reports on all adults with a new diagnosis of pancreatic cancer in NHS hospitals in England (2020-2021) and Wales (2022)

### Diagnosis and staging

**19,308**

diagnoses of pancreatic cancer in England in 2020-21

**480**

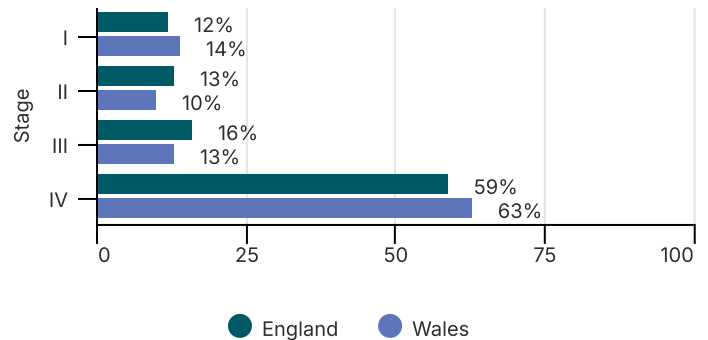
diagnoses of pancreatic cancer in Wales in 2022

**England:**  
51% Men  
49% Women

**Wales:**  
50% Men  
50% Women

**74 years** median age at diagnosis

#### Stage at diagnosis\*



### Work up and waiting times

**76%**

of people had a record of an Multi-Disciplinary Team discussion in England



#### Percentage of people diagnosed within 28 days of referral\*\*:

England: 67%  
Wales: 70%

#### Median time (IQR\*\*\*) from referral to first treatment:

England: 75.5 (57-99) days  
Wales: 82 (63 - 125) days

### Treatment

#### Percentage of people receiving any form of disease-modifying treatment

Stage I - III: All treatments: England 55%; Wales 41%

Treatment	England	Wales
Surgery	28%	19%
Chemotherapy	47%	29%
Radiotherapy	10%	10%

Stage IV: All treatments: England 25%; Wales 16%

Treatment	England	Wales
Chemotherapy	24%	14%
Radiotherapy	3%	3%

### Supportive care

**51%**

of people diagnosed during 2020-21 were prescribed PERT.

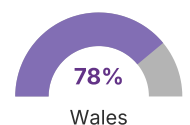
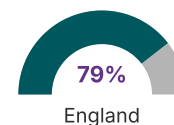
**86%**

of people with new diagnoses of pancreatic cancer were seen by a Clinical Nurse Specialist in England\*\*\*\*

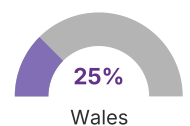
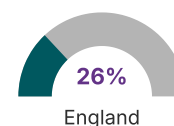
### Survival

Percentage of people who **survived** for 30 days or 1 year after diagnosis in England and Wales

**30 days**



**1 year**



\* Based on people with complete staging information available

\*\* For England, the figure is based on people diagnosed after GP referral. For Wales, we include all routes to diagnosis

\*\*\* Interquartile range

\*\*\*\* Information available for only 46% of people



### 3. Recommendations

Recommendation	Audience	Audit Findings	Quality Improvement Goal	National guidance/standards/resources
1. Review referral pathways in centres which diagnose pancreatic cancer to ensure that all people who receive a diagnosis of pancreatic cancer, including those with non-resectable disease, are discussed by a multidisciplinary team (MDT).	England: Cancer Alliances working with trusts  Wales: Health boards	England: 76% of people diagnosed during 2020-21 had a record of being discussed at an MDT meeting.	Increase the percentage of people who have diagnostic procedures and a process of diagnosis consistent with national recommendations for pancreatic cancer.	<a href="#">NICE 2018: A specialist pancreatic cancer multidisciplinary team should decide what care is needed, and involve the person with suspected or confirmed pancreatic cancer in the decision. Care should be delivered in partnership with local cancer units.</a>
2. Ensure that all NHS pancreatic cancer service providers review their diagnostic pathways and implement hepatopancreatobiliary (HPB) cancer pathway guidance, which sets out recommended sequencing of events for the diagnostic process.	England: ICBs working with trusts  Wales: Health boards	England: 56% of people diagnosed following an urgent suspected cancer GP referral were diagnosed within 21 days of referral; 35% were treated within 62 days of referral.  Wales: 65% of people with pancreatic cancer were diagnosed within 21 days of referral; 25% were treated within 62 days of referral.	Optimise diagnostic and treatment pathways to reduce the time between referral and start of disease-targeted treatment.	<a href="#">NHSE 2024: HPB best practice timed diagnostic pathway</a>  <a href="#">NHS Wales National Optimal Pathway for pancreatic cancer</a>  <a href="#">PCUK Optimal Care Pathway report</a>
3. Ensure a personalised approach is taken to optimise a person's fitness, nutrition and medication to prevent deconditioning prior to starting treatment. This may include the implementation of prehabilitation, oncogeriatric services and dietetic support.	England: ICBs working with trusts  Wales: Health boards	England: 55% of people diagnosed with non-metastatic cancer and 25% of those with metastatic disease received any form of disease-targeted treatment. Rates of treatment amongst people with non-metastatic disease were strongly related to performance status (PS): 80% of those with PS 0 received treatment, compared to 59% and 26% for PS 1 and PS 2, respectively.  Wales: 41% of people diagnosed with non-metastatic cancer and 16% of those with metastatic disease received any form of disease-targeted treatment.	Increase the percentage of people with pancreatic cancer (who are fit enough for treatment) who receive disease targeted treatment (surgery, chemotherapy, radiotherapy - both curative and palliative).	<a href="#">NHS England HPB cancer service specification</a>  <a href="#">NHS Wales Cancer Network Service Specification for HPB surgery services</a>  <a href="#">PCUK Optimal Care Pathway report</a>
4. Review provision of clinical nurse specialists (CNS) in organisations which have a shortfall of newly diagnosed people being reviewed by a CNS, and ensure that everyone diagnosed with pancreatic cancer has access to a specialist CNS, ideally from the point of diagnosis.	England: ICBs working with trusts  Wales: Health boards	England: Information about CNS involvement was missing for 54% of people diagnosed with pancreatic cancer during 2020-21. Of those with complete data, 86% were reported to have been seen by a CNS.	Increase the percentage of people with pancreatic cancer who receive supportive care (care that helps the person to live as well as possible with their cancer and its treatment) in line with national recommendations.	<a href="#">NHSE 2024: HPB best practice timed diagnostic pathway</a>  <a href="#">PCUK Optimal Care Pathway report: NHS systems should ensure that everyone with pancreatic cancer, regardless of where they are treated or cared for, has an HPB or upper gastrointestinal CNS as their lead point of contact to oversee their care.</a>
5. Consider implementing protocols to ensure that all people diagnosed with pancreatic cancer are assessed for eligibility for pancreatic enzyme replacement therapy (PERT), and that PERT is offered as recommended in national guidance.	England: Cancer Alliances working with trusts  Wales: Health boards	England: 51% of people diagnosed during 2020-21 were prescribed PERT in primary care. A higher proportion of people diagnosed at HPB specialist centres had a PERT prescription (59%) compared to those diagnosed at other trusts (47%).	Increase the percentage of people with pancreatic cancer who receive supportive care (care that helps the person to live as well as possible with their cancer and its treatment) in line with national recommendations.	<a href="#">NHSE 2024 HPB best practice timed diagnostic pathway: Cancer Alliances and local stakeholders should take action to improve local healthcare professional awareness of PERT.</a>  <a href="#">NHS England HPB cancer service spec</a>  <a href="#">NHS Wales Cancer Network Service Specification for HPB surgery services</a>

## 4. Results for England (2020-2021)

### 4.1 Data completeness

**Key messages:** Completeness of data items on stage at diagnosis, performance status and involvement of clinical nurse specialists in patient care needs to be improved in national cancer data (England). NHS Trusts, with support from Data Improvement Leads at NDRS, should review and work to improve the completeness of submitted cancer data.

The Audit results for England are derived using National Cancer Registration Data, [linked to several other datasets](#) which capture information about patient care delivered in NHS settings and outcomes. Several data items are essential for the NPaCA to identify patient subgroups and produce performance indicators. Whilst information on patient demographics was very complete, completeness of data items on the stage at diagnosis, performance status and clinical nurse specialist (CNS) involvement was below target levels (Table 1) and showed substantial variation across NHS trusts.

**Table 1.** Completeness of key data items for people diagnosed during 2020-21 in the National Cancer Registration Dataset and Cancer Outcomes and Services Dataset, England

Data item	Completeness (%)	Range of completeness (%) across trusts (n=122*)	Target level (%)	No. of NHS trusts above target (n=122*)
Stage at diagnosis	76	26 - 100	90	22
Performance status	52	0 - 100	90	3
CNS involvement	46	0 - 87	90	0

\*Trusts providing cancer services and with at least 5 diagnoses during 2020-21. NOTE: Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021.

### 4.2 Patient characteristics

**Key messages:** The majority (59%) of people diagnosed with pancreatic cancer in England during 2020-21 had metastatic (stage 4) disease at diagnosis.

Among people diagnosed during 2020-21 who had stage information recorded, the majority (59%) had metastatic (stage 4) disease. Information on stage was missing for a quarter of the cohort. Over two-thirds of people with a recorded performance status (PS) had PS 0-1 (fully active or active), but information on performance status was missing for almost half of the cohort.

The NPaCA analysed cancer registration data for 19,308 people diagnosed with pancreatic cancer during a two year period from 1 January 2020 to 31 December 2021 (9,480 in 2020 and 9,828 in 2021) at 122 NHS trusts that provided pancreatic cancer services in England.

Table 2 summarises the characteristics of people included in the Audit. The median age at diagnosis was 74 years (IQR 66 to 81), and there were similar proportions of men and women. A slightly larger proportion of diagnosed individuals came from the least deprived areas compared to the most deprived areas of England. The large majority (93%) of people diagnosed with pancreatic cancer were of white ethnicity. People with cancers of the biliary tract (ICD-10 codes C24.0 or C24.1) made up 12% of the cohort.

**Table 2.** Characteristics of people diagnosed with pancreatic cancer in England during 2020-2021 (n=19,308)

	Percentage		Percentage
<b>Sex</b>		<b>Tumour site</b>	
Male	51	Pancreas (C25), excl. neuroendocrine	88
Female	49	Extrahepatic bile duct (C24.0) or ampulla of Vater (C24.1)	12
<b>Age at diagnosis (years)</b>		<b>TNM Stage at diagnosis</b>	
<60	13	1	12
60-69	21	2	13
70-79	35	3	16
≥80	31	4	59
		Unknown (n=4,589)	
<b>Ethnicity</b>		<b>Performance status</b>	
White	93	0 - fully active	36
Asian or Asian British	3	1	32
Black or Black British	2	2	17
Mixed	<1	3	12
Other ethnic group	1	4 - bedbound	3
Unknown (n=856)		Unknown (n=9,357)	
<b>Index of Multiple Deprivation quintile</b>			
1 - most deprived	17		
2	19		
3	21		
4	22		
5 - least deprived	21		

NOTE: Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021.

### 4.3 Diagnosis, staging and treatment planning

#### Key messages:

- Three-quarters (76%) of people diagnosed with pancreatic cancer in England had a record of being discussed at an MDT meeting.
- Use of preoperative FDG-PET/CT<sup>2</sup> was recorded for 45% of people undergoing surgical resection for pancreatic cancer during 2019-21 in England. This figure has increased substantially (5% in 2015), but there was variation by HPB specialist centre (IQR 21% to 71%) in the use of FDG-PET/CT in 2019-21.
- The use of preoperative biliary drainage (biliary stent) is variable across England, ranging from 28% to 69% across the 23 HPB specialist centres with an overall national figure of 53%.

People with suspected pancreatic cancer should have their diagnosis and care agreed by a

specialist pancreatic cancer multidisciplinary team (MDT) (NICE 2018). Three-quarters (76%) of those diagnosed during 2020-21 had a record of being discussed at an MDT meeting. In 21 of 122 NHS trusts, over 90% of patients had a record of MDT discussion; however, this figure was less than 70% in 29 trusts. The percentage of people with a record of an MDT meeting was similar for those diagnosed at an HPB specialist centre as for those diagnosed at other trusts.

NICE (2018) recommend that FDG-PET/CT<sup>2</sup> should be offered to people with localised pancreatic cancer to stage their disease before cancer treatment (surgery, radiotherapy, chemotherapy). Among people undergoing surgical resection for pancreatic cancer diagnosed during a three-year period (2019-21), 45% had a record of FDG-PET/CT prior to surgery. This percentage increased over time, from 5% in 2015 (the earliest year for which the Audit has [Diagnostic Imaging Dataset data](#)) to 48% in 2021, and showed substantial variation across HPB specialist centres. MRI of the liver may be appropriate before surgery to identify small liver metastases.<sup>3</sup> In the surgical cohort, 13% had a record of a liver MRI before surgery. Few people undergoing surgery (5%) had both an FDG-PET/CT and liver MRI.

<sup>2</sup> Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography

<sup>3</sup> Pancreatic cancer: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up, 2023; DOI: <https://doi.org/10.1016/j.annonc.2023.08.009>



NICE guidance (2018) recommends that people who have resectable pancreatic cancer and obstructive jaundice, and who are fit enough for surgery, should proceed directly to surgery rather than have preoperative biliary drainage, to avoid delays to operating. Half (53%) of people undergoing the Whipple procedure for pancreatic cancer diagnosed during 2019-2021 had a biliary stent placed prior to the surgery. This figure ranged from 28% to 69% across the 23 HPB specialist centres.

#### 4.4 Time from referral to start of treatment

**Key messages:** In England, one-third (35%) of people diagnosed following an urgent suspected cancer GP referral were treated within the target 62 days from referral to treatment. Two-thirds (67%) of people were diagnosed within the 28-day faster diagnosis standard following urgent suspected cancer GP referral, and over half (56%) were diagnosed within 21 days (as recommended in the HPB faster diagnosis best practice timed pathway).

Among people diagnosed with pancreatic cancer following an urgent suspected cancer GP referral who went on to receive disease-targeted treatment (n=2,254), only 35% were treated within the target 62 days from referral to treatment; 56% of people referred by a GP (n=5,345) were diagnosed within the recently recommended 21 days from referral<sup>4</sup> and 67% were diagnosed within the 28-day faster diagnosis standard.

People who were diagnosed via other referral pathways<sup>5</sup> (n=5,342) typically had shorter waiting times, but a smaller percentage went on to have disease-targeted treatment (38% compared to 43% of those diagnosed via urgent suspected cancer GP referral).

**Table 3.** Waiting times for people diagnosed in England during 2020-2021, by treatment and route to diagnosis

	Median (interquartile range), days			% diagnosed within 21 days of referral	% diagnosed within 28 days of referral	% treated within 62 days of referral
	Referral to diagnosis	Diagnosis to first treatment	Referral to first treatment			
GP referral	18 (9 to 35)	42 (28 to 63)	75.5 (57 to 99)	56%	67%	35%
Other referral*	4 (0 to 15)	44 (28 to 66)	63 (43 to 89)	82%	87%	50%

\* Sources of referral other than GP, including following an emergency admission, referred from emergency care department, following an emergency care attendance, referrals by a consultant from a non-emergency setting; includes all referral priority types. NOTE: Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021

4 NHS England: [Implementing a timed HPB cancer diagnostic pathway, 2024](#)

5 Sources of referral other than GP, including following an emergency admission, referred from emergency care department, following an emergency care attendance, referrals by a consultant from a non-emergency setting; includes all referral priority types

## 4.5 Disease-targeted treatment for pancreatic cancer

**Key messages:** Around half (55%) of all people diagnosed with non-metastatic pancreatic cancer in England and one-quarter (25%) of those with metastatic disease received any form of disease-targeted treatment (surgery, chemotherapy, radiotherapy). Low rates of treatment were linked to poor performance status.

Of people diagnosed with non-metastatic (stage 1-3) pancreatic cancer during 2020-21 (n=5,985), 55% received a form of disease-targeted treatment: 28% underwent surgery, 47% received chemotherapy/other systemic anti-cancer therapy (referred to as chemotherapy within this report) and 10% radiotherapy.

Among those with metastatic (stage 4) disease (n=8,734), 25% received disease-targeted treatment: 1% surgery, 24% chemotherapy, 3% radiotherapy.

Rates of treatment were strongly related to performance status, across all stages (Figure 1):

- Among those who were fully active (PS 0), 80% of those with non-metastatic disease and 47% of those with metastatic disease received disease-targeted treatment.
- Among those with poor performance status (PS 3 or 4), rates of treatment were 6% among those with non-metastatic disease and 2% among those with metastatic disease.

**Figure 1.** Percentage of people with pancreatic cancer diagnosed in England 2020-2021 who received a form of disease-targeted treatment (surgery, chemotherapy, radiotherapy), by stage and performance status

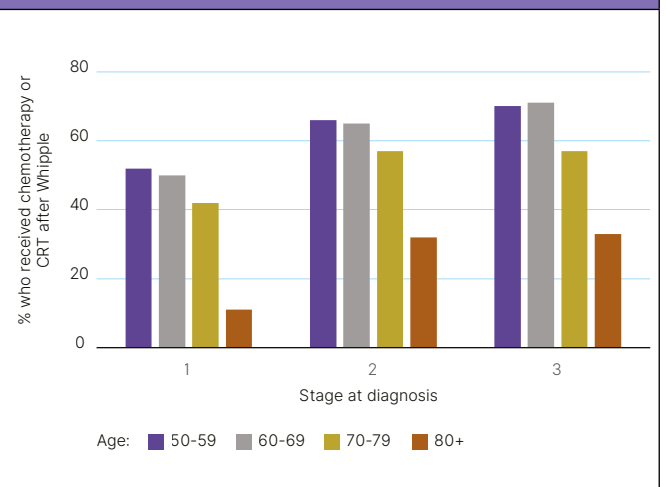


NOTE: Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021

Currently, neoadjuvant therapy is recommended only for people with pancreatic cancer if it is given as part of a clinical trial (NICE 2018), although there is growing evidence for its use in tumours that are borderline resectable at diagnosis ([PCUK Optimal Care Pathway Report](#)). Among those undergoing surgical resection for pancreatic cancer diagnosed during 2019-2021 (n=3,226), 9% received chemotherapy or chemo-radiotherapy (CRT) prior to surgery. This figure has increased from 5% to 11% between 2015 and 2021.

Adjuvant therapy is recommended for those people who are well enough after surgery to tolerate treatment (NICE 2018). Over half of people undergoing a Whipple procedure (56%) received chemotherapy or CRT within 14 weeks after surgery. These rates have steadily increased over time, from 48% in 2015 to 58% in 2021, and vary across HPB specialist centres (range: 31% to 80%).

**Figure 2.** Percentage of people undergoing a Whipple procedure for pancreatic cancer in England during 2019-21 who received chemotherapy or chemotherapy+radiotherapy (CRT) after surgery, by stage and age at diagnosis



NOTE: Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021

## 4.6 Supportive care for pancreatic cancer

### Key messages:

- Information about CNS involvement was missing for 54% of people diagnosed with pancreatic cancer (England). Of those with complete data, 86% were seen by a CNS around the time of diagnosis. There is substantial variation in the proportion of CNS involvement by trust of diagnosis.
- Only half (51%) of people with pancreatic cancer in England had a prescription for pancreatic enzyme replacement therapy (PERT) and the rates of prescribing varied across NHS trusts. A higher proportion of people diagnosed at HPB specialist centres had a PERT prescription (59%) compared to those diagnosed at other trusts (47%).

Among people who had complete information about clinical nurse specialist (CNS) involvement, 86% were reported to have been seen by a CNS. In 66 trusts with CNS information for at least 5 people, over 90% of patients had a record of being seen by a CNS, whilst this figure was less than 70% in 13 NHS trusts.

Around half of people who were diagnosed with pancreatic cancer during 2020-21 (51%) were prescribed PERT (IQR 41 to 59% across trusts). There was a stark difference in PERT prescribing between people who underwent surgery (93% had a PERT prescription) compared to people who did not undergo surgery (46% had a PERT prescription).

## 4.7 Survival outcomes for people with pancreatic cancer

**Key messages:** Survival among people diagnosed with pancreatic cancer in England is poor, with only 26% surviving at least one year from diagnosis and 13% surviving two years. Nearly half (45-50%) of people diagnosed with non-metastatic disease (stage 1-3) were alive one year after being diagnosed, compared to only 10% of those with metastatic cancer.

Among all people diagnosed with pancreatic cancer in England during 2020-2021, 26% survived to one year from diagnosis, while 13% survived at least two years. There was a dramatic difference between survival for those diagnosed with stage 1-3 vs. stage 4 cancer: nearly half (45-50%) of people diagnosed at stage 1-3 survived to one year after diagnosis, compared to 10% of people diagnosed at stage 4. Survival following Whipple procedure was 97% at 90 days post-surgery, 81% at one year post-surgery and 56% at two years post-surgery.

**Table 4.** Survival of people diagnosed with pancreatic cancer in England during 2020-2021, overall and by stage at diagnosis

Survival from diagnosis, % (95% CI)	Overall (n=19,308)	Stage				
		1 (n=1,755)	2 (n=1,913)	3 (n=2,317)	4 (n=8,734)	Unknown (n=4,589)
<b>30-day</b>	79% (78 to 79)	93% (92 to 94)	93% (91 to 94)	93% (92 to 94)	71% (70 to 72)	75% (74 to 76)
<b>90-day</b>	55% (54 to 56)	81% (79 to 83)	82% (80 to 84)	80% (79 to 82)	37% (36 to 38)	54% (53 to 56)
<b>1 year</b>	26% (25 to 26)	50% (47 to 52)	50% (48 to 52)	45% (43 to 47)	10% (9 to 11)	26% (25 to 27)
	<b>(n=18,885)</b>	<b>(n=1,610)</b>	<b>(n=1,808)</b>	<b>(n=2,316)</b>	<b>(n=8,463)</b>	<b>(n=4,688)</b>
<b>2 year*</b>	13% (12 to 13)	29% (27 to 31)	30% (28 to 33)	22% (20 to 24)	3% (2 to 3)	13% (12 to 14)

\*Calculated for diagnoses in 2019-2020 to ensure sufficient follow-up. NOTE: Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021

## 4.8 Changes over time

Figure 3 shows changes in the performance indicators over four calendar years, and summarises patterns of care for people diagnosed in 2018 (n=9,307), 2019 (n=9,405), 2020 (n=9,480), and 2021 (n= 9,828).

There was a doubling of the percentage of people who had an FDG-PET scan prior to surgery, from 24% in 2018 to 48% in 2021, which likely reflects NICE guidance issued in 2018 recommending this practice. The percentage of people treated within 62 days of GP referral has decreased over time, from 40% in 2018 to 31% in 2021. Finally, the use of

neoadjuvant therapy before surgery roughly doubled from 6% in 2018 to 11% in 2021. All other indicators show small variations between years. The impact of the current national shortage of PERT and [Serious Shortage Protocol](#) issued in May 2024 will be monitored in future audit cycles.

The impact of the COVID-19 pandemic on the delivery of pancreatic cancer care is not a strong feature across any of the selected performance indicators. The most noticeable impact was a small decrease in the percentage of people who received disease-targeted treatment in 2020 compared to the preceding years.



## 5. Results for Wales (2022)

### Key messages:

- The majority (63%) of people diagnosed with pancreatic cancer in Wales during 2022 had metastatic (stage 4) disease at diagnosis.
- Among people undergoing surgical resection for pancreatic cancer in Wales, 41% had a record of PET scan prior to surgery; 50% of people undergoing Whipple procedure (no neoadjuvant chemotherapy) had a biliary stent placed prior to surgery.
- 70% of people with pancreatic cancer in Wales were diagnosed within 28 days of referral, and 25% were treated within 62 days of referral.
- In Wales, 41% of people diagnosed with non-metastatic (stage 1-3) pancreatic cancer and 16% of those with metastatic disease received any form of disease-targeted treatment.
- Survival among people diagnosed with pancreatic cancer in Wales is poor, with only 25% surviving at least one year from diagnosis.

### 5.1 Data completeness and patient characteristics

The NPACA results for Wales were derived using standard datasets collected through the Cancer Network Information System Cymru (CANISC). Some key data items, notably record of MDT discussion, involvement of a CNS and prescribing of PERT, were not provided in this data extract for Wales. Among the data items available to the Audit, most were very complete but there were key data items with <90% completeness: 76% for stage at diagnosis and 88% for performance status.

We included information about 480 people diagnosed with pancreatic cancer during 2022 at six local health boards in Wales.

**Table 5.** Characteristics of people diagnosed with pancreatic cancer in Wales during 2022 (n=480)

	Percentage		Percentage
<b>Sex</b>		<b>Tumour site</b>	
Male	50	Pancreas (C25), excl. neuroendocrine	94
Female	50	Extrahepatic bile duct (C24.0) or ampulla of Vater (C24.1)	6
<b>Age at diagnosis (years)</b>		<b>Stage at diagnosis</b>	
<60	13	1	14
60-69	23	2	10
70-79	37	3	13
≥80	26	4	63
Unknown (n=17)		Unknown (n=117)	
<b>Deprivation quintile</b>		<b>Performance status</b>	
1 – most deprived	21	0 – fully active	34
2	22	1	30
3	22	2	17
4	18	3	15
5 – least deprived	17	4 - bedbound	3
Unknown (n=43)		Unknown (n=56)	



## 5.2 Diagnosis, staging and treatment planning

Among people undergoing surgical resection for pancreatic cancer diagnosed in Wales during 2022 (n=44), 41% had a record of PET scan<sup>6</sup> in the 6 months prior to surgery. Of people undergoing Whipple procedure without neoadjuvant chemotherapy, 50% had a biliary stent placed prior to surgery.

## 5.3 Time from referral to start of treatment

Among all people diagnosed with pancreatic cancer in Wales during 2022, 70% were diagnosed within 28 days of referral and 25% were treated within 62 days from referral. Information on route of referral was not provided for the audit cohort.

**Table 6.** Waiting times for people diagnosed with pancreatic cancer in Wales during 2022

Median (interquartile range), days			% diagnosed within 21 days of referral	% diagnosed within 28 days of referral	% treated within 62 days of referral
Referral to diagnosis (n = 452)	Diagnosis to first treatment (n = 129)	Referral to first treatment (n = 132)			
11 (1 to 37)	46 (21 to 75)	82 (63 to 125)	65%	70%	25%

## 5.4 Disease-targeted treatment for pancreatic cancer

Of people diagnosed with non-metastatic (stage 1-3) pancreatic cancer (n= 135), 41% received a form of disease-targeted treatment: 19% underwent surgery, 29% received chemotherapy and 10% radiotherapy.

Among those with metastatic (stage 4) disease (n= 229), 16% received disease-targeted treatment: 0% surgery, 14% chemotherapy, 3% radiotherapy.

Rates of treatment were strongly related to performance status. Among those with non-metastatic disease, 67% of people with PS 0 received treatment, compared to none of those with PS 3 or 4.

Among those undergoing surgical resection for pancreatic cancer diagnosed during 2022 (n= 44), 7% received chemotherapy or chemo-radiotherapy (CRT) prior to surgery. Of those undergoing a Whipple procedure, 44% received chemotherapy or chemoradiotherapy after surgery.

## 5.5 Survival outcomes for people with pancreatic cancer

Among people diagnosed with pancreatic cancer in Wales during 2022, 25% survived to one year from diagnosis; 39% of those diagnosed at stage 1-3 survived to one year, compared to 9% of people diagnosed at stage 4. Survival following Whipple procedure was 100% at 90 days post-surgery.

**Table 7.** Percentage of people diagnosed with pancreatic cancer in Wales during 2022 surviving up to one year from diagnosis, by stage

Survival	Overall (n=480)	Stage	
		1-3 (n= 135)	4 (n= 229)
30-day	78%	92%	69%
90-day	50%	77%	29%
1 year	25%	39%	9%

6 Note that data analysed for Wales did not specify the type of PET or MRI to enable identification of FDG-PET/CT and liver MRI.

## 6. Commentary

In this first State of the Nation report from the National Pancreatic Cancer Audit, we describe the care received by people diagnosed with pancreatic cancer in England during 2020-21 and Wales in 2022. Whilst we have reported national figures in this report, supplementary tables provide more information about organisation-wide variation for our key indicators ([link to supplementary tables](#)).

We note that this report covers the period from April 2020 to July 2021 in England, a time when the COVID-19 pandemic resulted in major disruption to both primary and secondary healthcare. However, the results for each year for England prior to and during the pandemic on the key indicators suggest these aspects of the care pathway managed to continue reasonably unchanged during this period.

People with pancreatic cancer present late due to initial non-specific symptoms causing delays in referral. The diagnostic pathway can be long due to the challenges of obtaining histology from the pancreas and the need for multiple tests. The Audit figures suggest that those referred from primary care typically wait 18 days (median) from urgent suspected cancer GP referral to diagnosis in England. Along with this, we observed a decline in the proportion of people treated within 62 days of cancer referral in England, from 40% (2018) to 31% (2021). In Wales, the median time from referral to diagnosis was shorter (11 days), but only 25% of people were treated within 62 days of referral (2022). These findings highlight a need to reduce delays in diagnosis and treatment pathways. With the implementation of the HPB cancer diagnostic pathway (NHSE 2024) and National Optimal Pathway for pancreatic cancer (NHS Wales 2020), we should see a reduction in waiting times over the next few years, while [non-specific symptoms pathways](#) for people at risk of being diagnosed with cancer could reduce delays in referral.

In England, 76% of people with newly diagnosed pancreatic cancer were discussed in an MDT meeting. This figure has remained largely static over the years. Those found to have localised disease should be referred promptly to a specialist HPB MDT to formulate management plans. For everyone diagnosed with pancreatic cancer, including those with non-resectable disease, MDT care planning should include assessment of pain, comorbidities, nutrition and psychological support. The data analysed for this report is not sufficiently detailed for the Audit to explore who was discussed at local versus specialist MDTs, whilst information on MDT meetings was unavailable for people diagnosed in Wales; these are potential areas for future work in order to understand regional variations in diagnostic and referral pathways.

Since 2018, there have been incremental increases in the use of pre-operative chemotherapy or chemoradiotherapy in England. Whilst rates are slightly lower in Wales, this change over time is likely to reflect a growing body of evidence for pre-operative chemoradiotherapy to reduce cancer stage for people with borderline resectable pancreatic tumours. Current NICE guidance should be updated to reflect this new evidence. Again, a [streamlined pathway](#) with early specialist MDT discussion is important to ensure prompt commencement of neoadjuvant therapy.

The majority of people with pancreatic cancer in England (59%) and Wales (63%) are diagnosed with stage 4 metastatic disease. Only 26% of those with metastatic disease in England and 16% in Wales received active disease-modifying treatment over the Audit period. Unfortunately, two-thirds of these patients die within three months of diagnosis. People with metastatic pancreatic cancer usually exhibit significant symptoms. The Audit will explore how to assess the provision of specialist palliative and enhanced supportive care services for people with pancreatic cancer, to identify gaps and regional variation. Other areas that warrant investigation, but are not captured in current datasets, include access to specialist dietetic support and prehabilitation.

Since the publication of [NICE guidance](#) on the management of pancreatic cancer in 2018, the [Optimal Care Pathway \(OCP\) initiative](#), led by the charity [Pancreatic Cancer UK](#), has brought together experts in pancreatic cancer to build consensus on what optimal diagnosis, treatment and care should look like for people with pancreatic cancer. Over future audit cycles, NPaCA will provide information that can help to assess changes and understand the evolving care pathway for pancreatic cancer.

This report establishes a baseline picture of pancreatic cancer care in England and Wales. In future cycles, the NPaCA will build on this, developing more detailed analyses and feeding back into quality improvement plans, in consultation with the Audit's Clinical Reference Group and Patient and Public Involvement Forum. Our ability to perform more detailed analyses will depend on providers submitting accurate and complete information about people diagnosed with pancreatic cancer. Providers should review the completeness of their submitted cancer data and work to improve this as necessary.