



National Pancreatic Cancer Audit State of the Nation Patient and Public Report 2025

An audit of care received by people diagnosed with pancreatic cancer in England (2021-2022) and Wales (2022-2023)





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This document was prepared by members of the NPaCA project team (see below) and has been developed in close collaboration with NPaCA Patient and Public Involvement (PPI) forum members. Input was also received from our charity partners at Pancreatic Cancer UK (PCUK) and Pancreatic Cancer Action.

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The National Cancer Audit Collaborating Centre (NATCAN) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England and Welsh Government as part of the NATCAN Description (NCAPOP). NATCAN delivers national audits in bowel, breast (primary and metastatic), kidney, lung, non-Hodgkin lymphoma, oesophago-gastric, ovarian, pancreatic and prostate cancers.



The 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.



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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Acronyms

CEU - Clinical Effectiveness Unit

CNS - Clinical Nurse Specialist

GP - General Practitioner

HPB – hepatopancreatobiliary or hepatobiliary and pancreatic

ICD - International Classification of Diseases

MDT - Multi-Disciplinary Team

NET - Neuroendocrine Tumour

NHS - National Health Service

NPaCA - National Pancreatic Cancer Audit

PERT - Pancreatic Enzyme Replacement Therapy

PS - Performance Status

1. The National Pancreatic Cancer Audit (NPaCA)

The NPaCA reviews pancreatic cancer services in England and Wales and aims to improve the quality of care for people with pancreatic cancer.

The audit uses information collected by NHS hospitals about the care they provide. These data are analysed to build a picture of pancreatic cancer care across England and Wales. More information about the NPaCA can be found on our webpages at: https://www.natcan.org.uk/audits/pancreatic.

We use national guidelines on the diagnosis and treatment of people with pancreatic cancer to assess the care provided. In this year's report, we give an overview of pancreatic cancer care and what happened for people diagnosed with pancreatic cancer during 2021-2022 in England and 2022-2023 in Wales. The audit's annual State of the Nation reports can be accessed via the NPaCA web pages.

2. Introduction to pancreatic cancer

The pancreas has two main roles in the body:

- i. Making enzymes to break down food ('exocrine' role)
- ii. Making hormones to control your blood sugar ('endocrine' role)

Pancreatic cancer develops when cells in the pancreas grow out of control, forming a lump (usually referred to as a tumour, lesion or mass). As these abnormal cells grow, they take up space in the pancreas, which can stop it functioning in its usual way. These cells can spread quickly to the areas around the pancreas (local spread of the tumour) and to other areas in the body (distant spread of the tumour, also known as metastatic disease).

There are different types of pancreatic cancer based on the type of pancreatic cell affected:

- Pancreatic ductal adenocarcinoma (most common) formed when the cells which produce pancreatic enzymes grow abnormally
- **Neuroendocrine tumours (NETs)** formed when the cells which produce pancreatic hormones grow abnormally

As these two cell types are different, the treatments for these tumours also differ. Most people are diagnosed with pancreatic ductal adenocarcinoma and we focus on these tumours in this audit.

Characteristics of people diagnosed with pancreatic cancer

Our audit included information about people diagnosed with pancreatic cancer over a two-year period for England (2021-2022) and Wales (2022-2023). The infographics that follow describe the characteristics of people diagnosed with pancreatic cancer during the audit period.



Characteristics of people diagnosed with pancreatic cancer in England (2021-2022)



Number of diagnoses

17,328 people diagnosed in 2021-22



Age at diagnosis

Under 60 years: 13% 60-69 years: 22% 70-79 years: 35% 80 years and over: 30%



Stage at diagnosis

Stage 1 (localised disease): 12% Stage 2 (locally advanced): 13% Stage 3 (locally advanced): 14% Stage 4 (metastatic): 62%



51% male50% female



A measure of how 'fit' someone is, and how able they are to look after themselves.

68% of people are performance status 0-1 at time of diagnosis.

PS 0 (most fit): 36%
PS 1: 32%
PS 2: 17%
PS 3: 12%
PS 4 (least fit): 3%

Measures of deprivation

1 (most deprived): 17%

2: 19%

3: 21%

4: 22%

5 (least deprived): 22%





Note: Percentages may not add up to 100% due to rounding.



Characteristics of people diagnosed with pancreatic cancer in Wales (2022-2023)



Number of diagnoses

926 people diagnosed in 2022-23



Age at diagnosis

Under 60 years: 12% 60-69 years: 22% 70-79 years: 40% 80 years and over: 27%



Stage at diagnosis

Stage 1 (localised disease): 11% Stage 2 (locally advanced): 11% Stage 3 (locally advanced): 13% Stage 4 (metastatic): 65%





A measure of how 'fit' someone is, and how able they are to look after themselves.

64% of people are performance status 0-1 at time of diagnosis.

PS 0 (most fit): 34%
PS 1: 30%
PS 2: 16%
PS 3: 17%
PS 4 (least fit): 4%

Measures of deprivation

1 (most deprived): 21%

2: 19%

3: 22%

4: 19%

5 (least deprived): 18%





Note: Percentages may not add up to 100% due to rounding.

3. Diagnosing pancreatic cancer

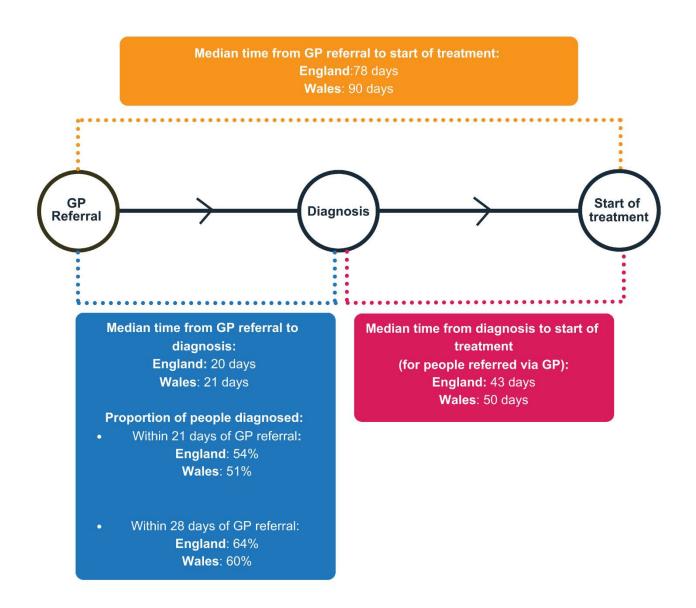
3.1 Review of waiting times

People are usually referred to pancreatic cancer healthcare services through these routes:

- i. Urgent referral from a GP for suspected cancer
- ii. 'Other' referral routes usually through an emergency hospital admission

The NHS target for diagnosing cancer is 28 days from referral for a suspected cancer (in England, the target applies only to urgent GP referrals). However, because pancreatic cancer grows rapidly, a faster 21-day target has been recommended by the NHS in England. For more information see: NHS England: Implementing a timed HPB cancer diagnostic pathway, 2024.

For people who go on to have treatment for their pancreatic cancer, such as surgery to remove the cancer, chemotherapy or radiotherapy, the target is for treatment to start within 62 days of an urgent referral from the GP.



3.2 Multi-disciplinary team (MDT) meetings

An MDT is a multi-disciplinary team formed of members of the pancreatic cancer healthcare team. They meet regularly to discuss each person's cancer care. The team is usually made up of surgeons, gastroenterologists, oncologists, radiologists, specialist nurses, palliative care, dietitians and therapy staff who specialise in diagnosing, treating and caring for people with pancreatic cancer.

The aims of these meetings are to confirm a person's diagnosis and to agree on the next steps in their care plan.

National guidelines recommend that every person with pancreatic cancer should have their care discussed at an MDT meeting, to ensure they receive specialist input from health professionals.

A member of the team will usually update the person on the outcome of this meeting either on the phone or during a face-to-face clinic appointment.

76% of people in England with pancreatic cancer had a record of their care being discussed at an MDT meeting.

Note: We did not have this information for people diagnosed in Wales.



Key findings from NPaCA 2025

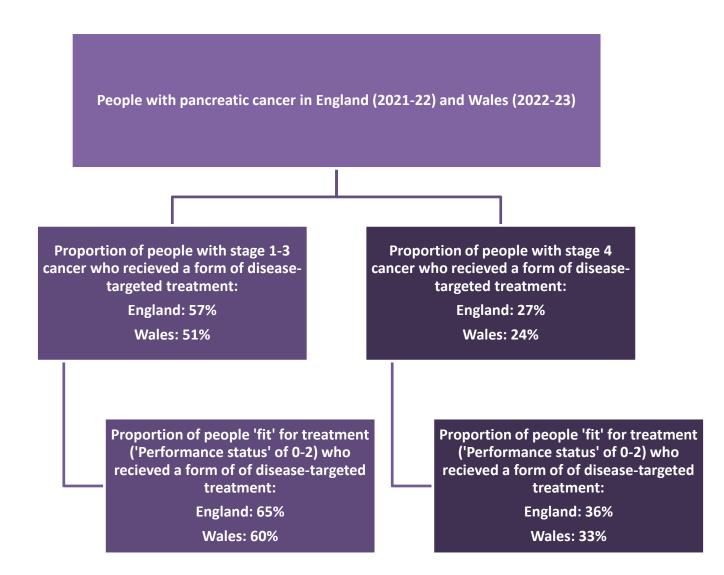
4. Treating pancreatic cancer

4.1 Cancer treatments

Pancreatic cancer is treated using a combination of surgery to remove the cancer, chemotherapy and radiotherapy. The type of treatments offered will depend on a person's cancer stage, fitness levels and other health conditions.

In this audit, we separated people into two groups as they will be offered different forms of treatment:

- People diagnosed with stages 1, 2, or 3 pancreatic cancer: the cancer has not spread to other organs in the body
- People diagnosed with stage 4 pancreatic cancer: the cancer has spread into other organs of the body (metastatic disease)

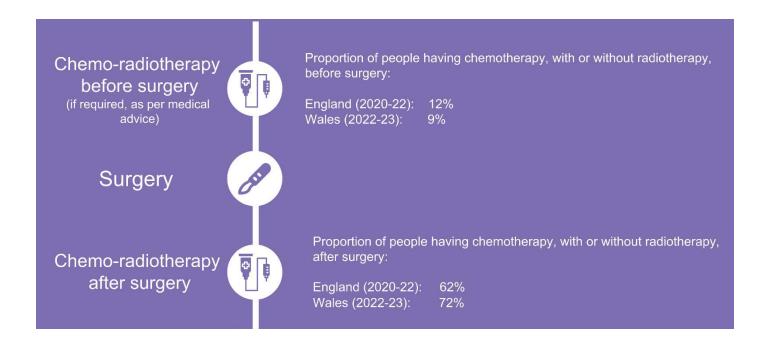


4.2 Treatments before or after surgery

Surgery to remove the pancreatic cancer tumour is an essential treatment to potentially cure pancreatic cancer. The most common surgery for treating pancreatic cancer involves removing parts of the pancreas, bile duct and the small intestine. It is known as a 'Whipple procedure'. Only people who are fit enough and whose cancer has not spread to other organs will be candidates for this major surgery. Other forms of surgery (where only the pancreas may be removed, for example) may also be an option which the surgical team may discuss if appropriate.

Often, the pancreatic tumour may be too big to be fully removed by the surgical team. People may have chemotherapy and/or radiotherapy in an attempt to shrink the tumour so that surgery may become an option (see Appendix 1).

People should be offered chemotherapy and/or radiotherapy after surgery to reduce the chances of the cancer coming back, however we know that in reality this may not happen for many people. (see Appendix 2).



5. Supporting people with pancreatic cancer

5.1 Pancreatic enzyme replacement therapy (PERT)

The pancreas plays an important role in digestion, producing enzymes that help to break down, and absorb the nutrients from food. When a person has a tumour in the pancreas, the pancreas may not produce enough of these enzymes to break down food. People can lose weight and become weak if they are not absorbing food properly.

Pancreatic enzyme replacement therapy (PERT) is a medication which replaces the digestive enzymes that your pancreas would normally make. The enzymes come in capsules that you take with food. Most people with pancreatic cancer will need to take PERT.

In England, 54% of people with pancreatic cancer were prescribed PERT. Those who received a form of disease-targeted treatment had a much higher proportion of PERT prescriptions (84%) compared to people who did not have treatment (38%).



Key findings from NPaCA 2025

5.2 Clinical Nurse Specialists (CNS)

Clinical nurse specialists (CNSs) are nurses who specialise in a particular area of healthcare. The NHS have cancer CNSs who support people during their cancer care.

Data on CNS involvement was missing for around half of people (48%). However, for those we did have data for, the audit found that 87% of people were seen by a CNS in England.



Key findings from NPaCA 2025

We do not have data on PERT prescriptions or CNS involvement for people with pancreatic cancer in Wales.

6. Survival

The audit reports information on the survival of people diagnosed with pancreatic cancer in England (2021-22) and Wales (2022-23).

6.1 Overall survival results

	30 days	90 days	1 year	2 years
England	78%	53%	23%	10%
Wales	79%	52%	23%	data not available

6.2 Survival by cancer stage at one year after diagnosis

Survival at one year was higher for those who had stage 1-3 cancer compared to those with stage 4 cancer.



6.3 Survival at 90 days after Whipple procedure

For people who underwent a Whipple procedure, 96% of people in England and 100% of people in Wales survived for at least 3 months after their surgery.

90 days after Whipple procedure

England



Wales



7. Care pathways for people with extrahepatic bile duct and ampullary tumours

In addition to people with pancreatic cancer, the audit analysed data on 2,500 people with extrahepatic bile duct and ampullary tumours, who were diagnosed between January 2021 and December 2022 in England. Information on people diagnosed with these cancers in Wales has not been presented due to the low numbers of people diagnosed with these tumours.



Characteristics of people diagnosed with extrahepatic bile duct and ampullary cancers in England (2021-2022)



Number of diagnoses

2,500 people diagnosed in 2021-22



Age at diagnosis

Under 60 years: 13% 60-69 years: 22% 70-79 years: 36% 80 years and over: 30%



Stage at diagnosis

Stage 1 (localised disease): 16% Stage 2 (locally advanced): 19% Stage 3 (locally advanced): 31% Stage 4 (metastatic): 34%





Performance status (PS)

A measure of how 'fit' someone is, and how able they are to look after themselves.

75% of people are performance status 0-1 at time of diagnosis.

PS 0 (most fit): 43% PS 1: 32% PS 2: 16% PS 3: 8% PS 4 (least fit): 1%

Measures of deprivation

1 (most deprived): 17%

2: 18%

3: 22%

4: 22%

5 (least deprived): 21%





Note: Percentages may not add up to 100% due to rounding.

The proportion of people diagnosed with metastatic (stage 4) disease is lower for extrahepatic bile duct and ampullary cancers compared to pancreatic cancer in England (34% vs 62%).



Key findings from NPaCA 2025

Rates of disease-targeted treatment in this group were higher than in those with pancreatic cancer:

Stage 1-3 cancer: 67%Stage 4 cancer: 34%



Key findings from NPaCA 2025

Supportive care for extrahepatic bile duct and ampullary cancer people:

Proportion seen by a CNS: 88%Proportion receiving PERT: 44%



Key findings from NPaCA 2025

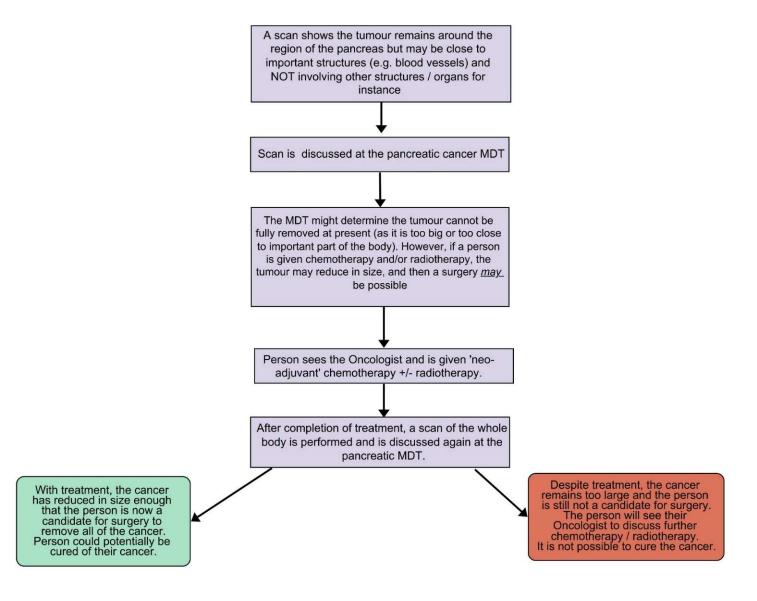
8. Recommendations from the audit

The goal of the NPaCA is to make care better for people with pancreatic cancer. In our 2025 State of the Nation report, we made five key suggestions to help improve important parts of that care:

- Every person with a new diagnosis of pancreatic cancer should be discussed at an MDT meeting to ensure people are receiving specialist care. Hospitals where diagnoses are made should look into their diagnostic pathways to make sure this happens and should report this information back to the National Cancer Disease Registry service to capture this data better.
- 2. Diagnosing pancreatic cancer can be a long process due to multiple investigations which need to take place. All hospitals should review their diagnostic process and ensure it is in line with the nationally recommended hepatopancreatobiliary (HPB) cancer pathway. If a person has a particularly long pathway, hospitals should look into this to understand what areas of care could be improved.
- People need to be physically fit to receive and tolerate pancreatic cancer treatments.
 Specialist members of the pancreatic cancer team should work with people to get them as fit as possible, for example improving their nutrition, exercise capacity and stabilising other medical conditions.
- 4. All people with pancreatic cancer should be seen by a Clinical Nurse Specialist and, ideally, they should be available to help people from the time they receive their diagnosis. This information should be reported back to the National Cancer Disease Registration Service.
- 5. All people with pancreatic cancer should be assessed to see if they would benefit from pancreatic enzyme replace treatment (PERT). PERT should be given to all eligible people if they are able to take medicines orally.

Appendix 1 – Chemotherapy and radiotherapy before surgery

The diagram below outlines how doctors may decide that chemotherapy +/- radiotherapy is required before a person has pancreatic cancer surgery:



There is no national guidance on implementing this treatment outside of a clinical trial setting; however, there are positive results from clinical trials which suggest this is a good strategy for people whose tumours are too big to remove initially.

Appendix 2 – Chemotherapy +/- radiotherapy after surgery ('Adjuvant' treatment)

Surgery to remove pancreatic tumours is a big strain on the body and a person will need a good amount of time to rest and recover from this procedure. During this time, the pancreatic cancer MDT will look closely at the tumour which they have removed during the operation, including:

- The size of the tumour
- How many lymph nodes were found to have cancer in them
- Whether the surgeon was able to remove the tumour fully, or if there is cancer still remaining

After surgery, it is difficult to know if there are any small cancer cells left behind as all cells, including cancer cells, are too small to see individually on scans. It is only when a cancer cell starts to grow and rapidly multiply in number to form a little lump of cells that we can detect it on scans. If there are cancer cells still present after surgery, there is potential for these to grow and spread quickly. Therefore, if a person has not received chemotherapy before their operation, the MDT usually recommends a course of chemotherapy after surgery to kill any of these remaining cancer cells, in line with national guidance. The course of chemotherapy starts as soon as a person is well enough after their surgical procedure and may be given with or without radiotherapy.

For a person that has received chemotherapy before their operation, there is no evidence to support additional chemotherapy after surgery. People may not receive chemo-radiotherapy treatment after surgery if they are not fit enough to tolerate the side effects.

Appendix 3 - Glossary

Adjuvant therapy – cancer treatment such as chemotherapy or radiotherapy that is given after primary treatment (typically surgery, for pancreatic cancer), to maximise effectiveness and reduce the chance of cancer recurrence.

Ampulla of Vater – a small structure within the wall of the duodenum (first part of the small bowel) where the common bile duct meets the pancreatic duct

Bile duct – a small tube-like structure that carries bile (digestive fluid) from the liver and gall bladder to the small bowel

Biliary drainage – a procedure that aids in clearing blockages from the bile ducts

Biliary stent – a small tube (either made from plastic or metal) that is placed into a bile duct to relieve obstruction or narrowing of the ducts, which keeps bile ducts open and allows bile to flow normally

Clinical nurse specialist – a registered nurse with an advanced nursing role to provide specialist care and advice to patients in a certain medical speciality

Disease-targeted treatment – various treatments given with the aim of killing or removing the cancerous tissue (such as surgery, chemotherapy, radiotherapy)

Extrahepatic bile duct – bile ducts (see above) which are located outside of the liver. They carry bile (digestive fluid) from the liver and gallbladder to the small bowel.

FDG-PET/CT – a Positron Emission Tomography (PET) scan combined with Computerised Tomography (CT) using 18F-fluorodeoxyglucose (FDG) as the tracer. A PET-CT scan is a type of imaging technique where a patient is injected with a small amount of radioactive tracer to assess metabolic activity in the body. Cancer cells have a very high metabolic rate, so show up brightly on this test. The images from a PET-CT scan give us a more detailed picture of tumour activity than a routine CT scan.

Gy/F or Grays/Fractions – External beam radiotherapy treatment is usually delivered over several treatment sessions. A course of radiotherapy is described as the full planned dose of radiation in Grays (Gy), and the number of treatment sessions (fractions, F) over which the dose is delivered. For example, 30Gy/15F would describe a course of 30 Grays of radiation delivered over 15 sessions.

HES – Hospital Episode Statistics is a database which contains data on all in-patients treated within NHS trusts in England. This includes details of admissions, diagnoses and treatments.

HPB (hepatopancreatobiliary or hepatobiliary and pancreatic) – a term used to collectively refer to some of the organs of the digestive system, namely the liver, pancreas, gallbladder, bile ducts and small intestine.

ICD-10 – the 10th revision of the International Classification of Diseases (a medical classification list). The list of medical codes in this comprehensive list is used to identify and categorise medical diagnoses.

IMD (Index of Multiple Deprivation) - a measure of relative deprivation in a particular small area (of ~1,500 residents or 650 households)

Jaundice – a medical condition where high levels of bilirubin (a chemical in your body) cause your skin, eyes and inside of your mouth to turn yellow. In the context of pancreatic cancer, this can occur due to the cancer blocking the drainage of bilirubin

Metastatic – a term used to refer to the spread of disease from an initial or primary site to a different secondary site

MDT (multi-disciplinary team) – teams consisting of individuals drawn from various disciplines who come together to achieve a common goal: to meet and agree the diagnosis and treatment plan. These can be categorised as

- a. **specialist** (multi-disciplinary teams with particular expertise in certain areas, eg. Specialists in pancreatic cancer surgery who are often based in specialist cancer centres) or
- b. local (multi-disciplinary teams within local hospitals)

MRI (Magnetic resonance imaging) - a medical imaging technique used in radiology to form pictures of the body using strong magnetic fields.

NATCAN - The National Cancer Audit Collaborating Centre (NATCAN) is a national centre of excellence which will shine a spotlight on the care and treatment of patients who are diagnosed with cancer in England and Wales. It has been commissioned to deliver new cancer audits by the Healthcare Quality Improvement Partnership (HQIP), on behalf of NHS England and the Welsh Government. NATCAN is part of the Clinical Effectiveness Unit (CEU) in London – a collaboration between the Royal College of Surgeons of England (RCSEng) and the London School of Hygiene & Tropical Medicine (LSHTM).

NCRD (National Cancer Registration Data) - the "gold standard" cancer registration data for England. It contains information on all aspects of the cancer registration for everyone diagnosed with cancer in England. Undergoes extensive quality control by NDRS before release.

NDRS (National Disease Registration Service) – a service that collects and analyses data on cancer and rare diseases in the UK as part of NHS England.

Neoadjuvant therapy – a term used to describe anti-cancer treatment (such as chemotherapy, hormones or radiation) given before the main treatment (such as surgery). The intent of this treatment is to reduce the size of the tumour, to improve the success of the main treatment or reduce the need for a more extensive procedure.

Neuroendocrine tumours – tumours that start from cells which produce hormones in the body. In pancreatic cancer this is very relevant as the pancreas has several cell types which produce hormones – these cells can become cancerous and the tumours will secrete hormones in an uncontrolled fashion. The treatments for these tumours are mainly hormone-based, and therefore they are managed quite differently from other pancreatic cancer tumour types.

NHS (National Health Service) – the publicly funded healthcare system in the UK.

NHS Trust – an organisational unit within the NHS that delivers healthcare services to people within a particular area.

NICE – The National Institute for Health and Care Excellence is an independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health.

Pancreas – an organ in the human digestive system within the abdomen, which plays a major role in digesting food and regulating blood sugar.

PERT (Pancreatic Enzyme Replacement Therapy) – medication used to replace enzymes which would normally be made within the pancreas. When patients have pancreatic cancer, or part of the pancreas is removed in a surgical procedure, the pancreas is unable to produce these enzymes which help to break down food, so PERT is required to aid digestion.

Performance status – a classification system to describe a patient's functional status whilst performing routine activities of daily living. Scores range from 0 (fully active with no restrictions) to 5 (dead). Note: only scores of 0-4 will be included in the audit.

Radiotherapy– a treatment that uses radiation to kill tumour cells and so shrink the tumour. It can be used together with surgery or chemotherapy to reduce disease.

'Rapid' cancer registration dataset – a dataset produced monthly by NDRS which provides a more current, but less detailed, source of cancer data compared to the gold standard NCRD.

RCS – The Royal College of Surgeons of England 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.

Stage / TNM (Tumour / Nodal / Metastatic) stage – an international classification system to classify the extent of a cancer using information on the tumour size, lymph node status, and the presence or absence or metastatic disease. Overall cancer stages range from 1 (localised disease) to 4 (advanced disease) which is determined by the extent of the tumour size, the nodal disease burden and the presence or absence of metastatic disease.

Supportive treatment – a term used to refer to various treatments which can be given alongside medical treatment, or alone, to aid in managing treatment side effects or cancer-related symptoms

Surgical resection – a medical treatment that involves surgically removing all, or part, of a tissue, structure or organ

Systemic anti-cancer therapy (Systemic Anti-Cancer Therapy) – a term used to refer to medication given to treat cancer (e.g. Chemotherapy or immunotherapy)

Whipple procedure – also known as pancreaticoduodenectomy – a complex surgical procedure whereby the head of the pancreas is removed (along with the gallbladder, bile duct the first part of the small intestine) most often performed to remove cancerous lesions located at the head of the pancreas