

The National Bowel Cancer Audit (NBOCA) aims to improve patient care. The audit compares differences in bowel cancer treatments and patient outcomes across England and Wales and makes suggestions to improve future care for bowel cancer patients. This report aims to explain key findings from the NBOCA report for the general public and includes explanations of key terms (page 4).

Bowel cancer is the 4th most common cancer in the United Kingdom, with over 41,000 people diagnosed every year

Of all the cancers, bowel cancer is the second biggest killer

7 out of 10 people with bowel cancer have cancer of the colon, 3 out of 10 have cancer of the rectum (see diagram)

At the time of a bowel cancer diagnosis only 1 out of 5 people will have cancer that has spread to other parts of their body

## What is screening?

Screening looks for early signs that cancer may be present. The aim is to find the cancer as early as possible.

In England and Wales, screening is usually offered to people aged 60-74 years every 2 years.

Screening is done from home and involves providing a poo sample. A new screening method called FIT testing (faecal immunochemical testing) is being rolled out in England and Wales.

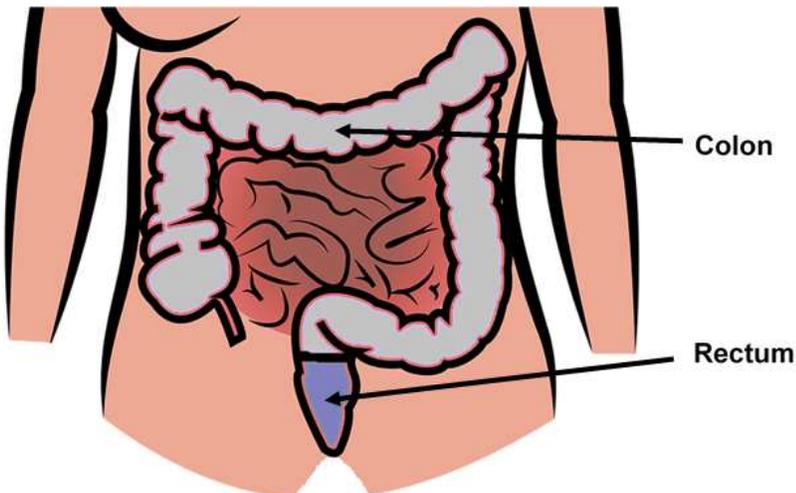
In some parts of England, people aged 55 were also being offered a one-off telescope examination of the bowel.

People diagnosed via screening are more likely to have their cancer found at an early stage and be cured.

Unfortunately, only half of people invited to bowel cancer screening in England and Wales took up the offer!\*

## What is bowel cancer?

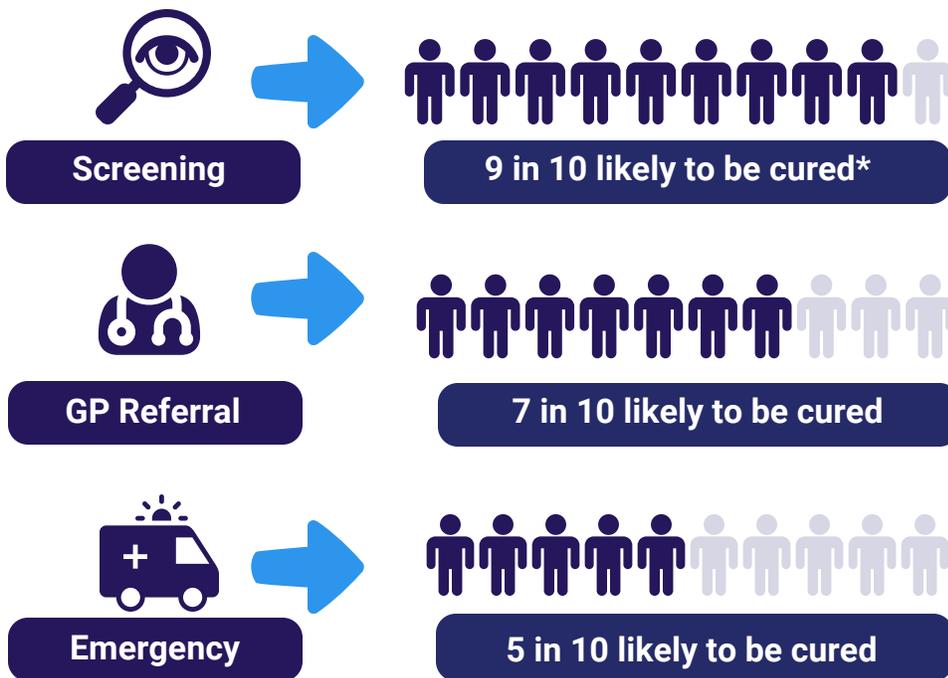
Bowel cancer includes colon cancer and rectal cancer



Non-cancerous growths (polyps) can form in the lining of the bowel. Over time, some of these polyps may develop into cancers. Once a cancer has formed, it can spread through the bowel wall and into blood vessels and lymph glands. The cancer can then sometimes spread to other parts of the body.

## How are people diagnosed with bowel cancer?

Bowel cancer can be diagnosed via a number of different ways. The diagrams below show the number of people that are likely to be cured depending on the means by which the diagnosis of bowel cancer was found.



# How is bowel cancer treated?

## Colon cancer

Colon cancer treatment is more straightforward than rectal cancer treatment. People often undergo surgery only. The part of the colon containing the tumour is removed along with the associated blood supply and lymph nodes. Those with colon cancer that is at high risk of coming back in the future ("recurrence") may be given chemotherapy after surgery.

## Rectal cancer

The treatment of rectal cancer is complex. People may receive various combinations of surgery, radiotherapy and chemotherapy. The boxes below show how many people get each type of treatment. Approximately one third of people with rectal cancer will also have radiotherapy before their surgery. People with rectal cancer that is at high risk of coming back in the future ("recurrence") may be given chemotherapy after surgery in addition to any treatments before surgery.

### "Local excision"



Early stage tumours can be removed using cameras and instruments put directly inside the bowel. There is no need to remove parts of the bowel, only the tumour.

### Surgery



This can involve two main procedures:  
 - "Anterior resection"  
 - "Abdominoperineal resection (APER)"  
 It involves removing the section of bowel that contains the tumour.

### Other procedures



A "stent" may be put inside the bowel or "stoma" formed in order to prevent blockages within the bowel. These are generally used for tumours which are incurable. The tumour is not usually removed.

### No surgery



Some patients may just have chemotherapy and/or radiotherapy which may or may not be curative.

## Surgery for bowel cancer

### Length of Stay



Prolonged stays in hospital after surgery can put people at increased risk of problems such as infections.

**Length of Stay**  
 Planned surgery - 6 days  
 Emergency surgery - 10 days

### Keyhole Surgery



This can help with a faster recovery after surgery. In the 2020 annual report more people had keyhole surgery than the previous year.

**7 in 10 people have keyhole ("laparoscopic") surgery**



### Readmissions



People may need to come back in to hospital after their surgery. This may be due to complications such as problems with their wounds.

**1 in 10 people are re-admitted within one month of their operation**



### Return to Theatre



Serious complications after surgery can mean that people need to have a second operation.

**1 in 10 people have to go back for another operation after their original surgery**



NBOCA reports the number of people who are alive at 90 days after their surgery. Some people may require an emergency operation for bowel cancer. Emergency surgery has more risks than planned surgery.



**98% of people are alive 90 days after planned surgery**



**91% of people are alive 90 days after emergency surgery**

The numbers of people alive at 90 days after surgery continue to improve in the 2020 annual report, especially for those undergoing emergency surgery.

## Stoma Formation

People that have surgery for rectal cancer may require a "stoma".



4 out of 10 people have an "Abdominoperineal resection (APER)" which leaves them with a permanent stoma. Most other people will have an "anterior resection". Having an "anterior resection" means that the two ends of bowel left after the tumour is removed are joined back together.



6 out of 10 people who have an anterior resection will have a temporary stoma made to protect their bowel join. This is called a "loop ileostomy". The "loop ileostomy" diverts poo in to a bag before the join to allow it to heal. This also means that if the join were to leak the consequences should be less serious. The stoma can be "reversed" (it is not permanent) once the join has healed.



7 out of 10 people who are given a temporary stoma during their "anterior resection" will have had it reversed 18 months after their surgery.

## How many people survive to 2 years with bowel cancer?

For most people, survival and cure remain the primary concern after diagnosis.

People may not have surgery for these reasons:

**'Too little' cancer** - early cancers are sometimes removed without major surgery

**'Too much' cancer** - their disease has spread too far to be cured. They will need palliative care.

**'Too frail'** - the person is not fit enough to have surgery due to other medical problems

If a bowel cancer returns after treatment, this is most likely to occur within the first 2 years. This is why NBOCA measures 2-year survival rate.

### Surgery



8 out of 10 people survive beyond 2 years if they have had their cancer removed by surgery

### No Surgery



3 out of 10 people survive beyond 2 years if they have not had their cancer removed

### Overall



7 out of 10 people survive beyond 2 years overall. This survival rate has remained stable over time.

## How might COVID-19 affect bowel cancer care?



The COVID-19 global pandemic is going to have an ongoing impact on bowel cancer care. The 2021 NBOCA annual report will include patients diagnosed with bowel cancer whose care might have been affected by the pandemic.

### Additional reading:

Bowel Cancer UK

<https://www.bowelcanceruk.org.uk/>

Cancer Research UK

<https://www.cancerresearchuk.org/about-cancer/bowel-cancer>

NHS Choices

<https://www.nhs.uk/conditions/bowel-cancer/>

Macmillan

<https://www.macmillan.org.uk/information-and-support/bowel-cancer>



## Recommendations for patients and the public

The full NBOCA report detailing care by hospital and region is available at [www.nboca.org.uk/reports/](http://www.nboca.org.uk/reports/)



If your bowel cancer is found early, your bowel cancer is more likely to be cured. Be aware of the signs and symptoms of bowel cancer and visit your GP promptly if you have concerns. You can find information about signs/symptoms of bowel cancer here: <https://www.nhs.uk/conditions/bowel-cancer/symptoms/>



You are more likely to have your bowel cancer cured if it is found via screening. More information can be found for England at [www.nhs.uk/conditions/bowel-cancer-screening/](http://www.nhs.uk/conditions/bowel-cancer-screening/) and Wales at <http://www.bowelscreening.wales.nhs.uk/> or provided by your GP.



Prior to COVID-19 outcomes for bowel cancer were improving. You can view individual trust/hospital/MDT results as well as which facilities are available at each site at <https://www.nboca.org.uk/trust-results/>

## Explanation of terms used in the Patient Report

**Abdomino-perineal excision of the rectum (APER)** - an operation to remove the entire rectum and anal canal.

**Anterior resection** - an operation to remove part, or all, of the rectum.

**Chemotherapy** - drug therapy used to treat cancer. It may be used alone, or in combination with other types of treatment (for example surgery or radiotherapy).

**FIT testing** - this involves providing a stool sample which is tested for blood. Abnormal levels of blood detected will require further investigation with a telescope examination of the bowel.

**Laparoscopic** - also called minimally invasive surgery or keyhole surgery, it is a type of surgical procedure performed through small cuts in the skin instead of the larger cuts used in open surgery.

**Local excision** - a procedure done with instruments inserted through the anus (often during a colonoscopy), without cutting into the skin of the abdomen to remove just a small piece of the lining of the colon or rectum wall.

**Loop ileostomy** - type of stoma involving small bowel, often used for people who have an anterior resection and is not necessarily permanent.

**Lymph nodes** - small bean shaped organs, also referred to as lymph 'glands', which form part of the immune system. They are distributed throughout the body and can be one of the first places to which cancers spread.

**Metastases** - cancer that has spread from where it started in the body. These can also be called secondary cancers.

**Open surgery** - an operation carried out by cutting an opening in the abdomen.

**Palliative care** - care given to people whose disease cannot be cured. It aims to improve quality of life rather than extending life.

**Radiotherapy** - the treatment of disease, especially cancer, using X-rays or similar forms of radiation.

**Robotic surgery** - this is a relatively new advancement in surgery and allows surgeons to control surgical instruments whilst sitting at a special console away from the patient during the operation.

**Screening** - the aim of screening is to try to detect cancers early. People aged 60-74 are invited to take part in bowel cancer screening every 2 years. They do this by providing a poo sample. In addition in some areas within England, people aged 55 are also now being offered a one-off telescope examination of their bowel.

**Stage** - staging is a way of describing the size of a cancer and how far it has grown. Staging is important because it helps decide which treatments are required.

**Stent** - a flexible, hollow tube designed to keep a section of the bowel open when it has become blocked.

**Stoma** - a surgical opening in the abdomen through which the bowel is brought out onto the surface of the skin. Colostomy and ileostomy are types of stoma.

Further information:



[www.nboca.org.uk](http://www.nboca.org.uk)



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We would like to thank the NBOCA Patient Panel which consists of patient and carer representatives as well as bowel cancer charity representatives for their invaluable contribution to the formation of this report. Details of the NBOCA Patient Panel can be found here: <https://www.nboca.org.uk/about/our-team/>