

Not started - Bowel Cancer Screening in the UK

Bowel cancer is the 4th commonest cancer in the UK and will affect around 1-in-15 men and 1-in-18 women. It's also the second commonest cause of cancer death. Sadly, the UK is lagging behind other countries when it comes to improving survival rates from this common condition. In fact, the UK ranks at the bottom for bowel cancer survival compared to other similarly economically-developed countries such as Australia, Canada, the USA, France and The Netherlands. For example, in Australia, over 70% of people diagnosed with bowel cancer survive for at least 5 years. In the USA, it's 65%. In the UK, only 60% survive for 5 years or more. [Data from <https://www.nuffieldtrust.org.uk/resource/cancer-survival-rates> and <https://gut.bmj.com/content/70/1/114>]

The question is, why is bowel cancer survival so poor in the UK compared to other countries? There are likely many reasons but I think we have to look closely at screening. Broadly, there are two ways you can be diagnosed with bowel cancer. You might develop symptoms, such as a change in bowel habit, stomach pain, weight loss or blood in your stool. Alternatively, you might have no symptoms but be diagnosed with bowel cancer by screening. It won't surprise you to learn that, compared to being diagnosed because you have symptoms, you're much more likely to have early stage bowel cancer and roughly 3 times more likely to survive if you're diagnosed through screening.

In England, you'll generally be invited for bowel cancer screening from age 54. Compare this to the United States where you're invited from 45 or Japan where you're invited from 40. This is a problem because, although most people diagnosed with bowel cancer are over 50 years old, the rates of new bowel cancer diagnoses are actually going up fastest in the *under* 50s [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7994182/>]. What's more, the US, Japan and many other countries screen people for bowel cancer every year. In the UK we only screen every other year.

But perhaps the biggest difference comes down to the actual screening test itself. Most countries use a combination of a test to look for blood in the stool (called a quantitative faecal immunochemical - or qFIT - test) followed by colonoscopy if someone has a "positive" qFIT test. But a country has to decide what amount of blood in the stool it will call "positive". This is arbitrary, but in most countries a qFIT result of 20µg of blood per gram of stool or above is considered "positive". In contrast, 80µg/g is considered positive in Scotland and in England and Wales it's 120µg/g.

Using a lower cut-off means that more people are considered "positive" and will go on to have a colonoscopy where bowel cancer can actually be diagnosed. So, for a threshold of 20µg/g which is used by the United States, approximately 8% of people tested with FIT are invited for a colonoscopy, whereas for the UK, which uses 120µg/g as the cut-off, only 2% are invited [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8366184/>]. Is it any wonder that in the UK only 10% of bowel cancers are picked up by screening whereas in the USA it's 45%?

[<https://www.nboca.org.uk/content/uploads/2020/01/NBOCA-2019-FINAL-Draft.pdf>]

and

<https://www.norc.org/content/dam/norc-org/pdfs/State-Specific%20PCDSs%20chart%201213.pdf>]. In fact, researchers estimate that using a threshold of 120µg/g misses over half the bowel cancers present at the time of screening [<https://journals.sagepub.com/doi/10.1177/0969141320980501>].

So why do we use such a high qFIT threshold in the UK? Why do we screen less often and why do we start at a later age? In a word, money. All of these decisions limit the number of screening colonoscopies we do because we simply do not have the resources to do any more. I think this may come as a surprise to many people who assume that the NHS will follow the data and do what's best to prevent them dying from bowel cancer. In fact, they're getting suboptimal care because that's all we can afford. If this was at least made common knowledge then people could make a choice and consider paying to have extra screening done privately. But it's not common knowledge. People trust the NHS to "do what's best". Unfortunately, in the case of bowel cancer screening, the UK is a long long way off "best" whichever way you care to look at it.