

Backlog of a half-million endoscopies and rising during the pandemic, report finds

March 22 2021



U.S. Navy Cmdr. Thomas Nelson and Lt. Robert Roadfuss discuss proper procedures while performing a laparoscopic cholecystectomy surgery. Credit: U.S. Navy on [Wikimedia Commons](#) CC BY 2.0

A backlog of nearly half a million endoscopy procedures, essential for diagnosing gastrointestinal cancers and diseases, has built up during the

COVID-19 pandemic, finds a new analysis of NHS England data led by UCL researchers.

The study, published in *The Lancet Gastroenterology and Hepatology*, shows the number of endoscopies being performed in April 2020, the month following the first lockdown, fell by over 90%.

By January 2021 researchers estimated the backlog was 476,000, and this figure could potentially rise to more than 870,000, should there be a further full or partial lockdown and/or a slow return to normality.

Clinicians are now calling on the U.K. government and NHS to implement a concerted mitigation plan, in order to prioritize patients in urgent need of an endoscopy and help reduce the health impact and consequences.

Explaining the study, lead author Dr. Alex Ho (UCL Division of Surgery and Interventional Science) said: "The COVID-19 pandemic has had a significant impact on NHS diagnostic services. This has included endoscopic services which are crucial in the diagnosis of [gastrointestinal cancers](#) and diseases, such as bowel, stomach and oesophageal [cancer](#). In this study, we sought to quantify the national backlog of endoscopic procedures in England and assess how interventions may affect this backlog."

For the study, researchers analyzed the number of endoscopies (colonoscopies, flexible sigmoidoscopies and gastroscopies) performed across England, using NHS England's Monthly Diagnostic Waiting Times and Activity dataset.

To estimate the potential backlog they compared the number of endoscopies performed by month, from January 1, 2018, through to Oct 31, 2020, from 125 NHS trusts in England.

In April 2020, the month following lockdown, 10,476 endoscopy procedures were performed, representing 9.5% (or a 90.5% drop) of those done in April, 2019 when 110 584 procedures were done. Endoscopy procedures recovered to 105,716 in October, 2020—84.5% of the 125,072 done in October 2019.

As part of a modeling analysis, researchers concluded that even if endoscopy procedures reached 100% of pre-pandemic monthly totals from November 2020, the backlog in January 2021 would be 476,000.

Modeling against further interruption (i.e full or partial lockdown), researchers found a further two-month interruption would add an extra 15.4% or 73,000 to the backlog total, a four-month interruption would add an extra 43.8% or 208,000, and a six-month interruption ([worst case scenario](#)) would add an extra 82.5% to the potential backlog—equating to 393,000 additional procedures (so a potential backlog of 870,000). However, researchers say, the vaccine rollout and lessons learnt from the first wave mean the higher figure will likely be reduced.

Assuming no further interruption (recovery phase), researchers modeled the backlog from January 2021 to January 2023, using the average number of procedures carried out in 'normal times' researchers estimated the backlog recovery at 90% of capacity through to 130%. If 90% of procedures took place the backlog by January 2023 would be 811,000. At 100% the backlog would be 476,000. To clear the backlog by January 2023, procedures would need to be conducted at 130%.

In a separate scenario researchers asked what would happen if the NHS used the FIT (fecal immunochemical test) to triage/prioritize people for colonoscopies. They found that even with nationwide FIT implementation it would reduce colonoscopy volumes to around 75% of usual levels, with the colonoscopy backlog not cleared until early 2022 at the earliest.

Corresponding author, Professor Laurence Lovat (UCL Division of Surgery and Interventional Science) said: "Our study highlights the scale the COVID-19 pandemic has had on endoscopic services on the NHS in England. Even with mitigation measures, such as FIT triaging, it could take much longer than a year to eliminate the pandemic-related backlog. Urgent action is required by key stakeholders, including individual NHS trusts, Clinical Commissioning Groups, British Society of Gastroenterology, and NHS England, to tackle the backlog and prevent delays to patient management."

Co-author Professor Mark Lawler, Professor of Digital Health, Queen's University Belfast and Scientific Director DATA-CAN, the U.K.'s Health Data Research Hub for Cancer said:

"These data provide yet more evidence of the disastrous impact of COVID on cancer services and ultimately cancer patients. The precipitous drop in endoscopic services nationally (to less than 10% of pre COVID levels) is extremely worrying.

"We need to address the enormous backlog that has accumulated as a matter of urgency, otherwise we risk significant increases in deaths from colorectal and oesophageal cancer over the next five years."

The number of extra deaths or serious illness caused by delays in endoscopy procedures and diagnosis, was not covered in this study. However several modeling studies have been published in this area.

Professor Lawler added: "In previous work, we have shown that a six month delay could lead to nearly 3,000 excess deaths in people with cancers of the gastrointestinal tract."

The UCL-led study was carried out in collaboration with researchers at Queen's University Belfast and Newcastle University.

Funded sources included, the Wellcome/EPSRC Centre for Interventional and Surgical Sciences (WEISS) at UCL, National Institute for Health Research University College London Hospitals Biomedical Research Centre, and DATA-CAN, Health Data Research U.K..

Gastrointestinal cancers and diseases includes bowel (colorectal), stomach (gastric) and oesophageal (gullet) cancer. Bowel cancer is the 2nd biggest cancer killer in the U.K., oesophageal is the 7th and stomach is the 15th(CRUK data).

In March 2020, in response to COVID-19, the British Society of Gastroenterology issued guidance, recommending a six-week pause in endoscopic activity—so all but emergency and absolutely essential endoscopy should stop, including bowel cancer screening, allowing time to refine triage systems. In late April 2020 the BSG issued early guidance in the restarting of endoscopy services, acknowledging the additional challenges in delivering endoscopy services in the era of COVID-19.

More information: Kai Man Alexander Ho et al. Predicting endoscopic activity recovery in England after COVID-19: a national analysis, *The Lancet Gastroenterology & Hepatology* (2021). [DOI: 10.1016/S2468-1253\(21\)00058-3](https://doi.org/10.1016/S2468-1253(21)00058-3)

Provided by University College London

Citation: Backlog of a half-million endoscopies and rising during the pandemic, report finds (2021, March 22) retrieved 24 April 2024 from <https://medicalxpress.com/news/2021-03-backlog-half-million-endoscopies-pandemic.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.