



# Colonoscopy in the post-COVID-19 era

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Simon M Everett <sup>1</sup>, Nicholas Ewin Burr <sup>1,2</sup>

Colorectal cancer (CRC) is the third most common malignancy in men and women in England and the second most common cause of cancer-related death. The English bowel cancer screening programme (BCSP) was introduced for those aged 60–69 years in 2006, with rollout complete for 74-year-olds in 2014 and a predicted reduction in CRC mortality of 16% based on the first 2 million tests offered.<sup>1</sup> The number of BCSP colonoscopies has increased by nearly a third from 2017 to 2019, and this trend is set to continue. The replacement of the guaiac-based faecal occult blood test by faecal immunochemical test, which requires one rather than three tests, results in around a 7% increase in uptake. Furthermore, the age range for the BCSP is set to increase over the next 4 years to include those aged 50–60 years. The question therefore arises as to how this increased demand will be met.

In *Frontline Gastroenterology*, Ravindran *et al* report the results of an important and timely survey of the career intentions of English endoscopists to aid planning of the BCSP workforce.<sup>2</sup> In this survey, screening consultants have a median 1 programmed activity dedicated for screening colonoscopy each week, which accounts for 40% of their endoscopy job plan. The survey highlights that retention of screening endoscopists is a looming issue. Screening consultants are older than their non-screening counterparts, and 38% anticipate giving up colonoscopy in the next 2–5 years, the principal reasons being retirement and pension issues. However, others also cited burnout, tiredness and pressure of work. Considering these factors, the authors predict a shortfall of 154 screening colonoscopists and 31053 colonoscopies by 2025 at the current work rate. Some of this shortfall could be met within the existing workforce; two-thirds of trainees, one-half of nurses and one-third of non-screening consultants stated that they would consider ‘upskilling’ in this area. The current screening workforce also indicated that they would be willing to increase this part of their job plan by

70% at the expense of outpatient clinics and general internal medicine (GIM) and surgical ward work and on-call. Any such reductions would of course be met with hesitancy by service planners in Trusts and Colleges.

This is an important survey, although the results need to be considered in context. The survey was sent out in February–April 2020, which spanned the onset of the COVID-19 outbreak. Only 38% of consultant screening colonoscopists responded; the denominator for other groups surveyed is not known. It is open to speculation as to what results would have been attained at another time or from a more complete response. Nonetheless, the findings are striking, say much about how colonoscopy has changed since the inception of BCSP in 2006 and raise the broader issues of how colonoscopy should be trained and delivered.

The situation, of course, is set in a starker reality following the ongoing COVID-19 pandemic, which has at least temporarily decimated diagnostic colonoscopy services in England. This has led to a sustained reduction in the number of people being diagnosed and treated with CRC, with an estimated 3500 fewer cases diagnosed in 2020 compared with 2019. Regardless, as the nation moves with hope towards a postpandemic future, we need to contemplate how best to train and deliver endoscopy services in the wake of such impact. Gastroenterology trainees are expected to achieve sign-off for independent practice in colonoscopy by the end of higher specialty training, yet in the latest British Society of Gastroenterology trainee survey, only 51% of trainees completed colonoscopy training within the 5 years. The problem is even greater for colorectal surgical trainees, with only 19% achieving 300 colonoscopies before the completion of training. The situation will only worsen; the COVID-19 pandemic has had a devastating effect on endoscopy training, with a 96% reduction in training opportunities and high levels of stress, anxiety and burnout among trainees, and impending changes will

reduce dedicated specialist training from 5 years to 4 years.

On this backdrop, one must appreciate the additional rigour required to become a BCSP colonoscopist. An applicant must have a procedure count of >1000, 150 in the preceding year; an adenoma detection rate of >20%; an unadjusted completion rate of >90; be assessed for four polypectomies; pass an online knowledge assessment; and be assessed performing two colonoscopies. This has been considered the zenith of colonoscopy training, yet the survey by Ravindran *et al* suggests this may not be so universally the perspective now: whereas screening consultant colonoscopists in this survey were performing a median of 2.5 lists (of all types) per week, many therapeutic endoscopy specialists, with expertise, for example, in endoscopic submucosal dissection or biliary endoscopy, will perform several lists on a weekly basis.

Perhaps predictably, the rigorous approach to accreditation for BCSP has led to what is now demonstrably a two-tier service. In a recent National Health Service study, colonoscopies performed as part of the BCSP had the lowest worldwide rate of post-colonoscopy colorectal cancer (PCCRC) of 3.6%, compared with 8% PCCRC outside of the screening programme and 9.3% when performed in the Independent Sector.<sup>3</sup> These differences of course arise from multiple factors, but include the quality of the colonoscopy procedure. Are we willing to accept these poorer outcomes for our symptomatic or surveillance patients, or do we demand that all procedures are performed to a similar standard?

Ravindran *et al* make some practical suggestions as to how the predicted service delivery gap may be addressed. They address possible new technologies that may improve refinement of patients undergoing screening. These could potentially be applied to many patients in the symptomatic or surveillance groups too, making the pretest probability of a colonoscopy requiring therapeutic intervention far higher. Some post-COVID-19 data from Europe suggest that since the

resumption of services, colonoscopy is more likely to detect CRC probably as a result of improved case selection, suggesting serendipity is at work in this area already.<sup>4</sup> Consequently, there is an argument that most, if not all, colonoscopists should be trained to the highest levels in diagnostics and in all but the most demanding of therapeutics.

In the expectation that our patients would prefer all diagnostics to be performed to the same standard of the BCSP, should we consider selecting out trainees for colonoscopy early in the programme and offering training to fewer individuals but to a more intense and higher standard so that all those who are accredited for independent colonoscopy meet the exacting levels required for BCSP? This would mean fewer colonoscopists doing more lists and more procedures, with a mix of diagnostics and therapeutics. Naturally, training highly skilled specialists presents a dichotomy with the need for generalists and fulfilling GIM rotas, and would also mean others not training in colonoscopy at all. However, given the established 11.6% post-upper gastrointestinal (GI) endoscopy cancer rates, perhaps focusing attention on higher levels of upper GI diagnostics would not be such a bad thing either.<sup>5</sup> In a recent Commentary on colon capsule in this journal, it was whispered that

colonoscopy may become a superspecialist option rather than a core curriculum subject. The post-COVID-19 landscape makes whispering this to be no longer an option. It may be aspirational to suggest advanced training in all forms of diagnostic endoscopy, but if ever there was a time to aspire, it is probably now.

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#### ORCID iDs

Simon M Everett <http://orcid.org/0000-0002-4251-5323>  
 Nicholas Ewin Burr <http://orcid.org/0000-0003-1988-2982>

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