

Editorial: estimating the costs of care in irritable bowel syndrome - a necessary step to enhance value-based care for a high prevalence, low-cost condition

Running Title:

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Word Count: 487

References: 10

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: [10.1111/apt.16956](https://doi.org/10.1111/apt.16956)

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Irritable bowel syndrome (IBS) is one of the most common gastrointestinal disorders worldwide, with a global prevalence of over 10%.¹ Although the per-person costs for individuals diagnosed with IBS are lower than for those with other chronic conditions, rigorous quantification of current, disease-specific spending estimates are warranted to adequately allocate resources and to identify research priorities for which appropriate funding levels can be determined.

Goodoory *et al* recently provided a contemporary estimate of the direct healthcare expenditures for IBS in the UK.² Although IBS costs have been reported previously, these estimates are largely outdated, completed outside of the UK, and/or rely on commercial insurance claims databases.³⁻⁵ In this study, the authors recruited individuals registered with ContactME-IBS, a national UK registry of 4280 members with self-reported IBS. Members who met Rome III and IV criteria were administered questionnaires on demographics, gastrointestinal/psychological symptoms, quality of life, and healthcare utilization. The mean per person annual direct cost for IBS care for those meeting Rome III and IV criteria was between £474.16 and £ 556.65, respectively, resulting in an estimated total annual cost between £1.27 and £2.07 billion. The largest cost drivers were appointments with healthcare professionals (40.3%), investigations (28.3%), unplanned emergency service visits (18.3%), and medication (13.1%). Importantly, this is a significant deviation from the cost drivers for other high expenditure, low prevalence gastrointestinal conditions, such as inflammatory bowel disease and hepatitis C, where medications and unplanned emergency service utilization make up the majority of costs.^{6,7}

Whereas IBS is a heterogenous condition with different clinical phenotypes and variable patient response to therapies, this study highlights the need to refocus efforts on making a prompt diagnosis according to established Rome criteria, thereby limiting unnecessary expensive exclusionary investigations, and on optimizing appointments to ensure that clinically-indicated care is provided at each visit. Given that IBS patients interact frequently with the healthcare system, development of evidence-based pathways tailored to an individual's healthcare needs are warranted, with particular attention paid to high healthcare utilizers.^{8,9}

The rapid dissemination of virtual care platforms due to the COVID-19 pandemic and the availability of digital therapeutics have created novel approaches to provide more convenient, effective, and efficient care to IBS patients. It is becoming increasingly clear that IBS requires an integrative, multidisciplinary care team consisting of physicians, dietitians, behavioural therapists, social workers and, in some instances, health coaches and complementary alternative medicine providers.¹⁰ Previously, team-based interventions were often inaccessible beyond specialized academic centres, and a lack of access linked to overutilization of unnecessary diagnostic testing, use of expensive and often ineffective medications, and preventable emergency service utilization. As virtual care and digital therapeutics allow for a 'hybrid' approach to multidisciplinary care delivery using in-person visits and home-based care, there is potential to expand access, enhance equity, and improve patient centred-outcomes, while increasing spending efficiency. Future evaluations should rigorously examine the clinical

and economic impact of these promising innovations that may transform the care of individuals with IBS.

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