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Performance of a diagnostic algorithm for functional gastrointestinal disorders

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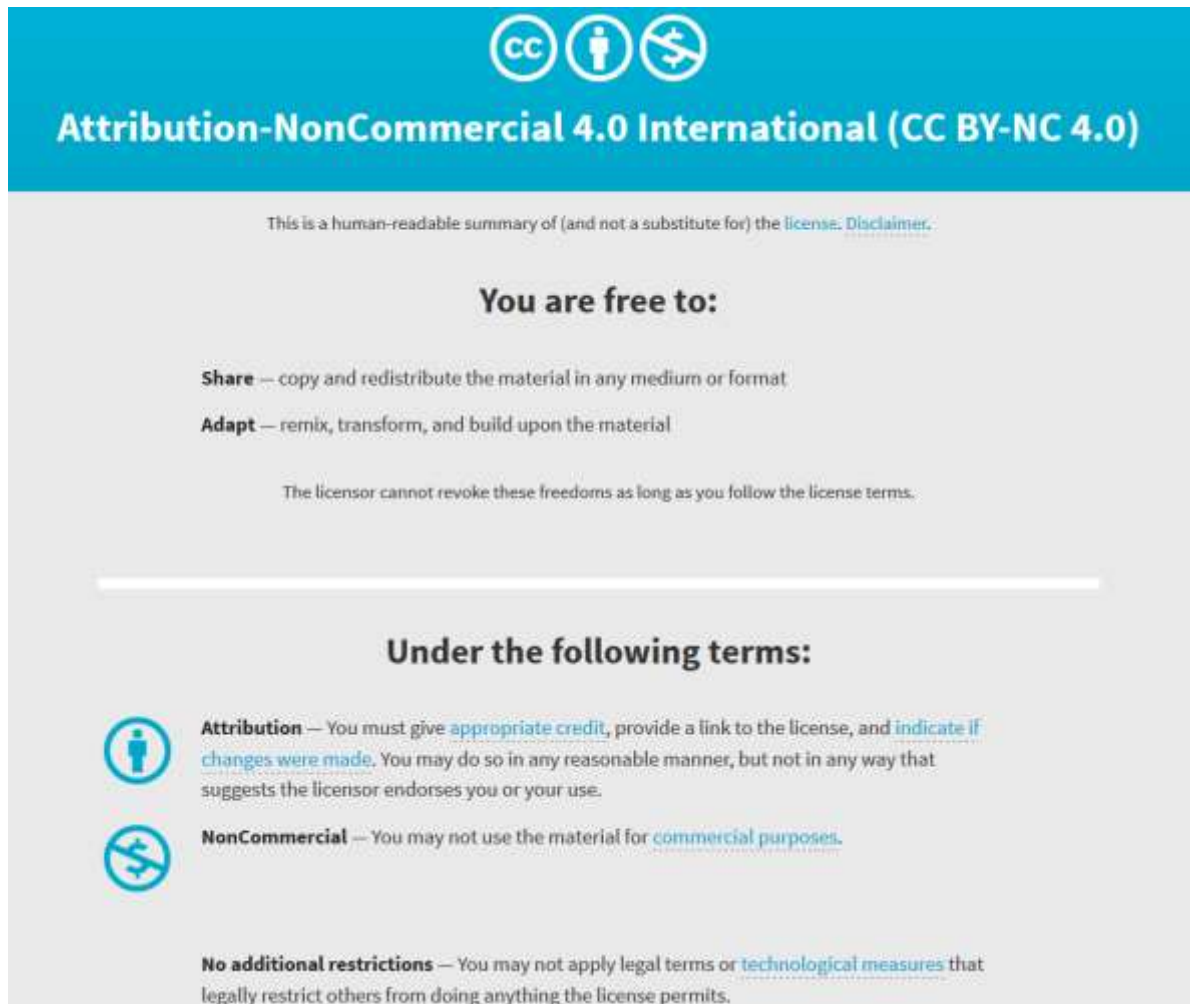
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“Performance of a diagnostic algorithm for functional gastrointestinal disorders”

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Functional gastrointestinal disorders (FGIDs) such as irritable bowel syndrome and functional dyspepsia are poorly managed in many healthcare settings. Delays in diagnosis and the unnecessary use of invasive investigations are common. Although symptom based diagnostic criteria and effective evidence-based treatments are available, most clinicians outside FGID specialist centres do not use these criteria in practice and are not confident in diagnosing without specialist input. In fact, gastroenterology referrals for suspected FGID can represent up to half of ambulatory gastroenterology consultations, and often exceed the capacity of publicly funded tertiary referral centres. This results in not only extremely long waiting lists but also poor patient outcomes and high use of healthcare resources due to delayed diagnosis and the lack of effective management.

The aim of our study was to determine whether an alternative model of care could be used to facilitate a safe and timely diagnosis, and provide effective management without direct specialist input. Participants from the routine waitlist of a tertiary referral centre were randomised to a waitlist control group, or algorithm group (1:2). 315 patients were invited with 109 completing intake (control n=20, algorithm n=89). Participants in the algorithm group were screened with a questionnaire and routine tests (without consultation). Almost two in five (39%) had clinical alarms requiring gastroenterologist review, which resulted in prompt detection of organic disease in almost a third. Organic disease diagnosed included inflammatory bowel disease, neoplasm, pancreatic insufficiency, reflux oesophagitis, iron deficiency (cause unknown). Half of those screened had no clinical alarms and received a letter clearly stating and explaining the FGID diagnosis. Information about FGIDs and evidence-based management options such as the low FODMAP diet, and psychological therapies as well as resources and how to access these services was also provided to both the patient and referring doctor.

All but one participant read the diagnostic letter, and found it to be useful as it provided a diagnosis, reassurance and management options. Interestingly only a quarter discussed the letter with their physician, yet most (80%) engaged in some form of management by 6 weeks. Dietary management options were used almost twice as often as psychological therapies, and do-it-yourself options were preferred. Symptomatic improvement was reported in 61% of respondents at 6 weeks, and 86% at one-year. The approach was at least moderately acceptable to 68% of participants and 100% of referring doctors. The preference for self-management options identifies an important opportunity to safely address a clear clinical need. Similarly, the poorer uptake of psychological therapies such as gut-directed hypnotherapy – which have been shown to be very effective in reducing global symptom burden-highlights the need for better communication regarding the brain-gut-axis and the ability to harness this to achieve symptomatic improvement.

Our study has shown that a simple screening algorithm can be used to improve the detection of organic disease and provide timely, accurate diagnosis of and evidence based management options for FGIDs without gastroenterologist consultation. This pathway has been shown to be safe, and

importantly, safer than current triaging of referrals. The process was feasible to implement and acceptable to both patients and doctors. These pilot data are encouraging and justify a further larger scale evaluation within primary care.