eLetter in the British Journal of General Practice

Published on: (5 April 2017)

Concerns on 'clinical features of bowel disease paper in patients

http://bjgp.org/content/early/2017/03/27/bjgp17X690425/tab-e-letters#concerns-on-clinical-features-of-bowel-disease-paper-in-patients

Julia Hippisley-Cox, Professor of Clinical Epidemiology & General Practice, University of Nottingham & ClinRisk Ltd

Other Contributors:

Carol Coupland, Professor of Medical Statistics, University of Nottingham

We have some significant concerns regarding the recent paper Stapely et al published in a recent edition of the BJGP.¹

- They state that "all symptoms, signs and investigations that had previously been reported as associated with CRC/IBD were studied". However, the paper fails to cite four papers, all published in the BJGP, which examine and validate the predictive value of symptoms for predicting colorectal cancer.²⁻⁵ This is a major omission especially since these papers²⁻⁵ were cited in the NICE guidance on suspected cancer.⁶
- There is no clear list of which variables were tested. Did they include weight loss, appetite loss and abdominal distension which are all independently and significantly associated with a 2-3 fold increased risk of colorectal cancer.²⁻⁵ These studies were included in the NICE guideline meta-analysis of weight loss as a predictive symptom for colorectal cancer. Did the authors analyse these variables and what were the results? If there is no association between weight loss and risk of colorectal cancer, then this is an important negative finding and should be highlighted.
- They state their "methodology is well accepted" although, the NICE guideline raised concerns about the use of the case control design (page 106), known to be associated with bias and inflated risk estimates⁶.
- Their results assume the same risk for patients aged 18 as those aged 49 years, although incidence rates increase around 10-fold across this age range(Cancer Research UK).
- They have not validated the tool there is no information on discrimination, calibration or the sensitivity of the tool at the 3% threshold.
- The risk assessment charts only cater for pairs of symptoms. Consider a 49-year old man with a family history of bowel cancer, weight loss, abdominal distension and rectal bleeding? Using the Stapely paper, the PPV for colorectal cancer would be

0.4% so no action would be taken. Using the QCancer tool, www.qcancer.org, developed for use in patients aged 25 to 89 and which is already implemented into the majority of GP IT systems, the risk is 14%, above the threshold for urgent referral.

References

- Stapley SA, Rubin GP, Alsina D, et al. Clinical features of bowel disease in patients aged <50 years in primary care: a large case-control study. Br J Gen Pract 2017 doi: 10.3399/bjgp17X690425
- 2. Hippisley-Cox J, Coupland C. Identifying patients with suspected colorectal cancer in primary care: derivation and validation of an algorithm. *Br J Gen Pract* 2012; **62(594)**:e29-e37.
- Hippisley-Cox J, Coupland C. Symptoms and risk factors to identify women with suspected cancer in primary care: derivation and validation of an algorithm. *Br J Gen Pract* 2013; 63(606):11-21.
- Hippisley-Cox J, Coupland C. Symptoms and risk factors to identify men with suspected cancer in primary care: derivation and validation of an algorithm. *Br J Gen Pract* 2013; 63(606):1-10.
- 5. Collins GS, Altman DG. Identifying patients with undetected colorectal cancer: an independent validation of QCancer (Colorectal). *Br J Cancer* 2012.
- 6. National Institute Clinical Excellence. *Suspected cancer: recognition and referral.* NICE quideline. 1 ed. London: NICE, 2015:378.

Competing Interests: JHC is professor of clinical epidemiology at the University of Nottingham and co-director of QResearch® – a not-for-profit organisation which is a joint partnership between the University of Nottingham and Egton Medical Information Systems (leading commercial supplier of IT for 60% of general practices in the UK). JHC is also a paid director of ClinRisk Ltd which produces open and closed source software to ensure the reliable and updatable implementation of clinical risk equations within clinical computer systems to help improve patient care. CC is Professor of Medical Statistics at the University of Nottingham and a paid consultant statistician for ClinRisk Ltd. JHC and CC are authors of the QCancer papers. This work and any views expressed within it are solely those of the co-authors and not of any affiliated bodies or organisations.