Editorials

Improving survival in colorectal cancer:

what role for general practice?

Cancer will affect one in three of our patients at some time in their lives, and will soon be the commonest reason they die. Colorectal cancer is one of the four common cancers that account for almost half of all cases, although in contrast to breast and prostate cancer, less than half of those diagnosed will survive more than 10 years after diagnosis. More importantly, international differences in survival after colorectal cancer mean that in England an excess of 1700 lives are lost each year compared to the best-performing countries in Europe, with no sign of a narrowing in the survival gap. Detailed analyses of comparative European data point to late diagnosis being a significant contributor to these differences.

Many factors influence the length of time between onset of symptoms and the start of cancer treatment, including the way in which patients appraise their symptoms and seek help, the process of clinical assessment in both primary and secondary care and delays in the scheduling of treatment. Public awareness of symptoms and risk factors for colorectal cancer is poor, with one-quarter of adults unable to name any signs or symptoms.[1] Recent media campaigns in England, intended to raise awareness of symptoms of bowel cancer, have increased public understanding of symptoms. This was reflected in a concurrent 50% increase in patients attending their GP with symptoms of rectal bleeding or change in bowel habit, comparable increases in urgent referrals and colonoscopy, but no additional cancer diagnoses.[2]

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WHAT PART CAN GPs PLAY?

A third of patients with colorectal cancer consult their GP three or more times before referral.[3] Clinical decision support tools can help in symptom assessment. For example, use of the Hamilton risk assessment tool (RAT) is associated with increased investigation and referral and more cancers are diagnosed, GPs finding it particularly useful in complex cases.[4] A further National Awareness and Early Diagnosis Initiative in 2013 will pilot the provision of electronic decision support, integrated into GP clinical systems through a *BMJ* Informatica platform, and will test the utility of both the Hamilton RAT and the QCancer® risk calculator for suspected colorectal cancer. Better access for GPs to flexible sigmoidoscopy may also expedite the diagnostic process. Guidance for GPs on its use in the assessment of lower-risk bowel symptoms was published in early 2012 by the Department of Health. Additional money has been made available to clinical commissioning groups to support its provision, together with a requirement in the NHS Operating Framework 2012/2013 that less than 1% of patients should wait more than 6 weeks for a diagnostic test.

Emergency presentation of colorectal cancer is associated with 50% 1-year survival, compared with over 80% for other referral pathways, and 26% of cases present in this way.[5] There has been much public concern that this is unduly high and in some way represents a failing of general practice. However, comparable rates of emergency presentation have been described elsewhere in Europe[6] and North America.[7] Neither do we yet know what proportion of emergency presentations have previously consulted their GP with relevant symptoms. A detailed understanding of the emergency pathway to diagnosis of colorectal cancer is a priority for researchers in this field.

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SCREENING AND GENERAL PRACTICE

In the UK symptom-based diagnosis in primary care works alongside screening of the population; the National Bowel Screening Programme was introduced in 2006. The programme involves biannual faecal occult blood testing and in England has targeted individuals in the 60–69 year old age group, although this is now being extended to the age of 74 years. Screening is centrally organised and all aspects including recruitment, notification of results, and arrangement of follow-up investigations are under the control of the central programme.

Despite this apparent exclusion from the process, bowel screening has an impact, albeit modest, on workload in primary care; no matter how much information is provided with the screening invitation, people still often want information about screening from their GP.[8] Indeed, primary care plays an important role in most centrally organised programmes; there is evidence that simple endorsement from the GP leads to improvements in uptake;[9] this is particularly evident in hard to reach groups.[10] Further, misunderstandings abound in cancer screening, highlighting an important educational role for primary care; addressing, for example, beliefs that negative test results mean bowel symptoms are less of a concern, or that taking a screening test is an appropriate response to a symptom. There is a recognised role for primary care in promoting informed choice in cancer screening;[11] ideally individuals should make their screening decisions based on the best available information.

The UK has been at the forefront of identifying models of primary care engagement in centrally-organised bowel cancer screening. Although this sharing of tasks between programme organisers and primary care is not without difficulties, it is potentially the most sensible solution in achieving screening coverage and informed participants. Outside the UK primary care has other roles in colorectal cancer screening; in the US screening is

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typically office-based, and family doctors have the responsibility of offering the test opportunistically, while in Australia there is a stronger emphasis on 'risk appropriate' screening, requiring an assessment of the added risk associated with a family history of colorectal cancer as a prelude to screening invitations.

The screening programme in England is evolving, and so will the associated role of primary care. For example, once-only flexible sigmoidoscopy screening at the age of 55 is now being introduced. While again this will be centrally organised, it is likely that there will be the same impact on primary care, and the need for close engagement. Already there is some evidence that hard-to-reach groups (such as ethnic subgroups) express a desire for GP involvement in flexible sigmoidoscopy screening.[12]

GPs have a complex task in promoting earlier diagnosis of colorectal cancer in their patients; hopefully, the combination of initiatives such as use of risk assessment tools, better access to investigations such as flexible sigmoidoscopy and closer engagement with national screening programmes will lead to an improvement in survival from this disease. At present the reason for the relatively poor colorectal cancer survival data in countries such as England and Denmark is unclear. However, it is likely that early diagnosis and screening both feature in the solution, and primary care has a central role in these activities, underlining the need for further research and investment to enhance this role.

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REFERENCES

1. Power E, Simon A, Juszczyk D, *et al.* Assessing awareness of colorectal cancer symptoms: measure development and results from a population survey in the UK. *BMC Cancer* 2011; **11:** 366.
2. Taylor M, Radford G. *Evaluation of the bowel cancer awareness pilot in the south west and east of England 31 January to 18 March 2011.* London: Department of Health, 2012.
3. Lyratzopoulos G, Neal RD, Barbiere JM, *et al.* Variation in the number of general practitioner consultations before hospital referral for cancer: findings from a national patient experience survey. *Lancet Oncology* 2012; **13(4):** 353–365.
4. Hamilton W, Green T, Martins T, *et al.* Evaluation of risk assessment tools for suspected cancer in general practice: a cohort study. *Br J Gen Pract* 2013; DOI: 10.3399/bjgp13X660751.
5. Elliss-Brookes L, McPhail S, Ives A, *et al.* Routes to diagnosis for cancer–determining the patient journey using multiple data sets. *Br J Cancer* 2012; **107(8):** 1220–1226.
6. Sjo OH, Larsen S, Lunde OC, Nesbakken A. Short term outcome after emergency and elective surgery for colon cancer. *Colorectal Dis* 2009; **11(7):** 733–739.
7. Rabeneck l, Paszat LF, Rothwell DM, He J. Temporal trends in new diagnoses of colorectal cancer with obstruction, perforation or emergency admission in Ontario: 1993–2001. *Am J Gastroenterol* 2005; **100(3):** 672–676.
8. Jepson R, Weller D, Alexander F, Walker J. Impact of UK Colorectal Cancer Screening Pilot on primary care. *Br J Gen Pract* 2005; **55(510):** 20–25.
9. Hewitson P, Ward AM, Heneghan C, *et al.* Primary care endorsement letter and a patient leaflet to improve participation in colorectal cancer screening: results of a factorial randomised trial. *Br J Cancer* 2011; **105(4):** 475–480.
10. Weller DP, Patnick J, McIntosh HM, Dietrich AJ. Uptake in cancer screening programmes. *Lancet Oncol* 2009; **10(7):** 693–699.
11. Shokar NK, Carlson CA, Weller SC. Informed decision making changes test preferences for colorectal cancer screening in a diverse population. *Ann Fam Med* 2010; **8(2):** 141–150.
12. Austin KL, Power E, Solarin I, *et al.* Perceived barriers to flexible sigmoidoscopy screening for colorectal cancer among UK ethnic minority groups: a qualitative study. *J Med Screen* 2009; **16(4):** 174–179.