Reviewer's report

Title: Many Missed Opportunities for Earlier Diagnosis Occur in Patients Diagnosed with Colorectal Cancer

Version: 4 Date: 5 November 2008

Reviewer: David Weller

Reviewer's report:

Thanks for asking me to look at this revised manuscript. Overall, I think the paper has improved in response to reviewer feedback, but I still have concerns. Specifically:

I’m happier about definitions of patient-related and system-related delay – although I would still have preferred more detail on the reliability and validity of these measures.

I asked whether there was any kind of standardised data extraction form (a fairly standard requirement in audit-based studies) – this hasn’t been addressed.

I was concerned that there was very little description of the quality and completeness of the various data sources (eg notes, reports). I accept that audit-based studies have to work with what they have (as the authors emphasise), but the reader needs a clear idea of how accurate and complete the authors consider their data sources to be.

I think the authors are saying in their response that all reference in the paper to the evaluation of the association between potential predictive variables and advanced stage has been removed (although this isn’t entirely clear).

Poor grammar and typographical errors:
The manuscript is better, but by no means perfect! Examples:

‘Sixty nine cases were identified in which more than six months of delay prior to the diagnosis of CRC’

‘In 11 cases, a diagnostic procedure or imaging likely missed a missed an existing lesion’

‘providers can easily be overwhelmed…’

‘more study is needed of clinician management abnormal laboratory tests’

I’m not sure the ‘professional editor’ engaged by the authors has been terribly thorough!

I think the authors haven’t understood my comment 7 – it’s possible that the diagnosis of some of the cancers in patients who had screening tests wasn’t actually a result of the test. Small point
International literature. It’s not really up to a reviewer to give examples of papers, but the absence of European literature is striking. Some suggestions:

Korsgaard M, (Denmark) – many papers on CRC diagnostic delay

Mitchell E, Macdonald S, Campbell NC et al.

Ramos M, Esteva M, Cabeza E, Campillo C, Llobera J, Aguiló A.

It’s probably at this point an editorial decision, but I still find the paper quite muddled, poorly written in sections, and lacking methodological precision. Of course audit-based diagnostic research is an imperfect science, and researchers need to work with the data they have available to them. But that is all the more reason for being very precise about data sources, definitions, and limitations to interpretation.

I do think this is important work, and that the paper is publishable - but I’d advocate more work. I am a little disappointed the authors haven’t taken more effort in tightening methods, improving grammar and typos and distilling key messages.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests