

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Laboratory test ordering and results management systems: a qualitative study of safety risks identified by administrators in general practice
AUTHORS	Bowie, Paul; Halley, Lyn; McKay, John

VERSION 1 - REVIEW

REVIEWER	Parker Magin University of Newcastle
REVIEW RETURNED	31-Oct-2013

GENERAL COMMENTS	<p>This is an under-researched but important topic. The qualitative approach is appropriate. A few issues could be addressed:</p> <ul style="list-style-type: none"> • The 'Strengths and limitations of this study' section on page 3 contains only strengths. The limitation of a convenience sample rather than purposive sampling should be acknowledged here (and in the Limitations section of the text). • On page 15, line 53 it's stated that 'Limitations include the fact that study participants may not reflect the profile and experiences of the administrative workforce, which is a difficult issue to resolve for all qualitative studies'. This suggests seeking a representative sample. Qualitative studies characteristically don't aim for a representative sample. In this study it would have been appropriate to aim for a maximum variation sample, possibly with further key informants, rather than a representative sample (or the convenience sample that was recruited). • Further data should be supplied on this sample – for example, age, years in general practice, and role within the practice (receptionists, health care assistants or phlebotomists). • It's not clear to me what role phlebotomists would have in Laboratory test ordering and results management
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REVIEWER	John Holden Garswood Surgery, UK
REVIEW RETURNED	28-Nov-2013

GENERAL COMMENTS	<p>We have known for decades that general practice administrative staff have a difficult front-line job balancing the needs and demands of patients with those of clinical staff. This study confirms this regarding communicating test results. Staff clearly vary in the degree to which they cope with these demands depending on their own skills, experience and personality; those of the GPs & nurses whom they are serving; and the structure and procedures of the practice.</p>
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	<p>Eight 'recommendations' for change are made. However I could not find evidence that there are clear problems that occur in many, most or all practices that could be attempted to be solved by the suggested changes and there is a real risk that things could be made worse. If I were attempting to make such changes (as a GP myself) this paper does not tell me where to begin.</p> <p>I am genuinely sorry to be negative since much effort has gone into the study.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer No1. (Parker Magin)

“...the limitation of a convenience sample rather than purposive sampling should be acknowledged here (and in the Limitations section of the text)”.

- We have amended the manuscript accordingly (Abstract and Limitations sections).

“On page 15, line 53 it's stated that 'Limitations include the fact that study participants may not reflect the profile and experiences of the administrative workforce, which is a difficult issue to resolve for all qualitative studies'. This suggests seeking a representative sample. Qualitative studies characteristically don't aim for a representative sample. In this study it would have been appropriate to aim for a maximum variation sample, possibly with further key informants, rather than a representative sample (or the convenience sample that was recruited)”

- We agree with the reviewer and have amended the manuscript to make this issue clearer. We were attempting to describe the limitation of our convenience sampling method by stating that a carefully selected purposive sample may have better reflected the characteristics/profiles of practices, administrative job roles, age etc.

“Further data should be supplied on this sample – for example, age, years in general practice, and role within the practice (receptionists, health care assistants or phlebotomists)”.

- We have inserted further details on the practice role of study participants, but unfortunately do not have the further data requested. We have added this as a further study limitation.

“It's not clear to me what role phlebotomists would have in Laboratory test ordering and results management”

- Phlebotomists' job roles will vary depending on the practice they're employed in. All will take bloods and carry out associated administrative checking/data input duties as part of test ordering and checking results back in. We have asterisked job role details in Table 1.

Reviewer No2. (John Holden)

“Eight 'recommendations' for change are made. However I could not find evidence that there are clear problems that occur in many, most or all practices that could be attempted to be solved by the suggested changes and there is a real risk that things could be made worse. If I were attempting to make such changes (as a GP myself) this paper does not tell me where to begin...”

- We agree to a large extent with Dr Holden that we have overplayed our hand in terms of making 'recommendations for change' based on our findings in this study. However, the majority of the issues highlighted in this Box were raised in our study either directly (e.g. language communication problems between GP and receptionists) and some indirectly (e.g. lack of systems thinking) and are supported by the related results handling/patient safety literature. We have amended the Box title and sub-

heading, therefore, to suggest that practices may wish to reflect and act on some or many of these issues if they perceive that system safety could be improved by doing so. This is likely to be a complex social and technical issue in the great majority of practices, there are no quick pragmatic fixes which this paper can offer – many of the issues raised will require a level of cultural change (e.g. involving and empowering all staff in the co-design or re-design of results handling systems), we are suggesting practices may wish to focus on some of these but problem-solving, improvement and implementation is largely a local concern.