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Plain English Publication Summary

Publication: Incidence, origins and avoidable harm of missed opportunities in diagnosis: longitudinal patient record review in 21 English general practices

Publication details (Vancouver format)

Cheraghi-Sohi S, Holland F, Singh H, Danczak A, Esmail A, Morris RL, Small N, Williams R, de Wet C, Campbell S, Reeves D. Incidence, origins and avoidable harm of missed opportunities in diagnosis: longitudinal patient record review in 21 English general practices 2021 BMJ Quality & Safety DOI: 10.1136/BMJQS-2020-012594

What are the most important findings/conclusions in this paper? Why are they important?

We found that the level of diagnostic errors - which we called missed diagnostic opportunities (MDOs) in this study - are low, with only 4.3% of consultations containing one. But the high numbers of primary care consultations nationally each year (340 million) suggests that several million patients are potentially at risk of avoidable harm from MDOs. Also, in around half the errors we found, the errors were thought to be of moderate to severe harm to the patient.

Errors were often due to multiple issues, e.g. issues in the consultation, patients not following medical requests properly, and how diagnostic tests were done. Errors can also happen in secondary care, and can be identified in the GP record.

What did you do?

We recruited and trained GPs to review patient records from surgeries that were chosen to represent a wide range of General Practices in terms of size and poverty level. We randomly selected 100 records from each of the 21 practices and the reviewers looked for evidence of errors. Any errors were discussed and reviewers tried to find out how these errors occurred and whether the patients came to any harm as a result.

Why did you conduct this research?

There were no studies of diagnostic errors in UK general practice. So we wanted to improve understanding of this topic, especially as diagnostic safety is a priority area of research for the World Health Organisation.

What was known before your paper was published?

Very little was known about the scale of diagnostic errors in general practice. Only a handful of studies had been done in other countries with very different health systems.

What is next? What is the potential impact of the work in this paper? What will change as a result of this paper (or the study it describes)?

Our work shows that diagnostic errors happen most often within the consultation and usually have multiple causes. We need to understand how we can prevent avoidable harm that happens as a result of these errors. Errors in knowledge, or errors because information has been mis-interpreted, are what is known as 'cognitive errors' on the part of the GP making their diagnosis. These are difficult to resolve, but research in this area is taking place.

It could be beneficial to look at using the electronic health record to identify diagnostic errors before they happen, or before something is missed, e.g. a test result being ordered and not being done. We are hoping to do more work looking at the use of technology to reduce diagnostic errors.

Does this paper link in to a particular study / project? If so, please summarise the study and explain how this paper has improved understanding, or will move the study forward.

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