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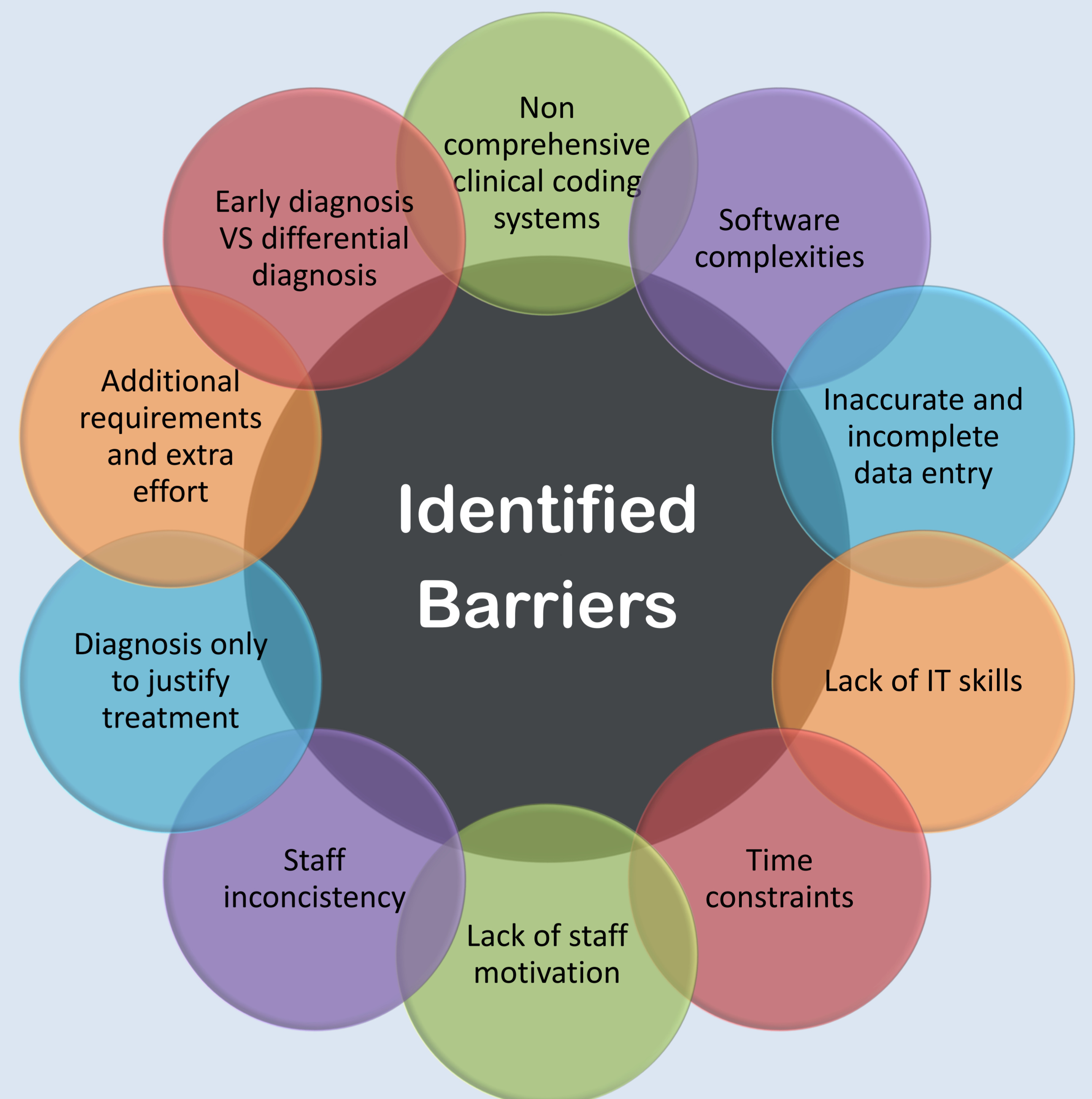
INTRODUCTION

Rising rates of chronic diseases together with an ageing population pose a serious public health challenge for policy makers and health planners in Australia.¹ National policies and state-wide approaches to preventive health strategies have been developed^{2&3} but priority-setting for improved population health necessitates data on disease prevalence at the level of local statistical areas. A need for new and modern methods of surveillance is evident.⁴ A major study conducted in the Illawarra-Shoalhaven region of the state of NSW in Australia has demonstrated the feasibility of extracting data from clinical software used in general practice to generate population health surveillance systems targeted at chronic diseases.⁵ However the issues around data quality, accuracy and the barriers in maintaining completeness and precision of clinical databases have not been investigated widely in peer reviewed literature. This systematic review attempts to explore these barriers and concerns.

METHODS

A systematic literature review using five databases was conducted. Articles were restricted to English language papers published post 1998 that investigated factors influencing the quality and accuracy of primary care clinical data. The initial search identified 121 potentially relevant articles. From these, 33 were excluded as they were either duplicates and/or did not have full text available and/or were not original research articles (e.g. reviews, comments, and letters to editors). A further 64 articles were excluded as not meeting inclusion criteria after screening the abstracts/summaries. 24 full-text articles were retrieved for analysis after which 12 were excluded as to not meeting the inclusion criteria. A total of 12 articles were included in the systematic review.

RESULTS

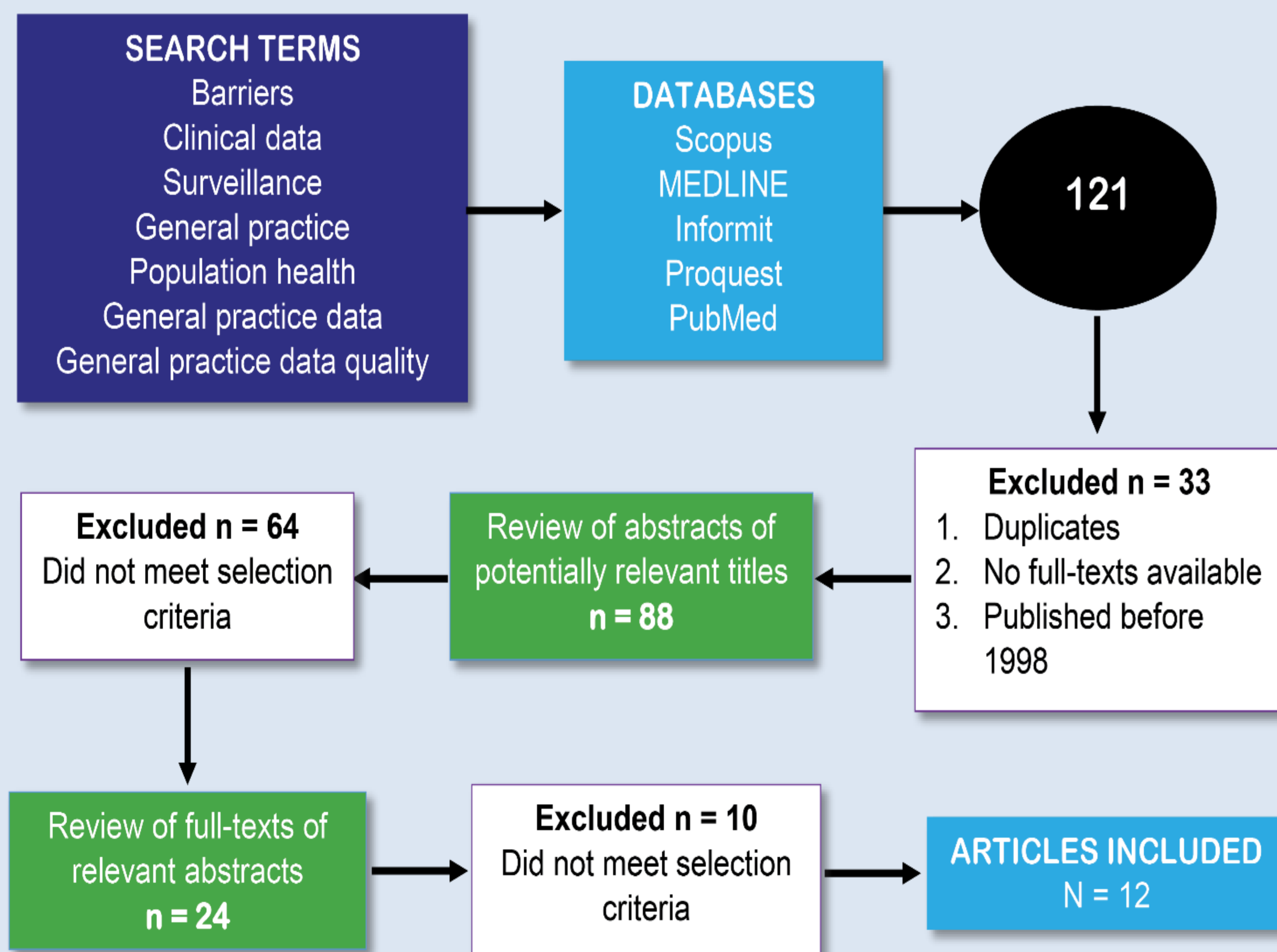


DISCUSSION

Barriers are perceived and experienced differently by each practice. Under Medicare Australia's Practice Incentives Program (PIP), practices receive monetary incentives for a number of different activities including correct clinical coding.^{6&7} Their importance is viewed variably by different practices. Lack of computer skills is also a very predominant barrier amongst other barriers identified in the literature. One potential method to overcoming barriers is to make practice staff aware that their data is contributing to population-level surveillance.⁸ Other authors recommend harnessing the enthusiasm of a practice champion to keep a clean database.^{9&10}

CONCLUSION

Findings from this systematic review will inform further research into the identification of more specific, staff-perceived issues and concerns associated with existing systems and procedures in place for clinical data cleansing, as well as investigating the viability and efficacy of proposed solutions and actions. To be a valid source of data for population surveillance of chronic diseases, improvements in quality and accuracy of data entered into clinical systems are essential.



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