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Needs and priority areas for building capacity for working with linked data in the Australian pharmacoepidemiology workforce

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Introduction

Linked data are increasingly used in pharmacoepidemiology studies to enhance value beyond that which can be achieved from stand-alone pharmaceutical data. The complexity of pharmaceutical data can make any linked data analysis challenging and it is imperative that this is matched by the human capacity to perform this work.

Objectives and Approach

Research is needed to understand the state of the current pharmacoepidemiology workforce and to prioritise its capacity building needs. We aim to profile the Australian pharmacoepidemiology workforce to explore views, needs, priority areas and perspectives relevant to capacity building. Participants are the regular pharmacoepidemiology workforce (Group 1) and senior medicines stakeholders (Group 2). Following a literature review and consultation with a group of key informants, we developed survey and interview instruments for each group. We piloted the instruments in February 2018 and study data collection is planned for March 2018. We will use a mixed-methods approach to analyse the data.

Results

We conducted a review of existing literature and identified workforce views, needs and priorities at four levels: personal, team, organisation and wider community. During the consultative process, the informants highlighted the multidisciplinary nature of the pharmacoepidemiology workforce including many with non-health related backgrounds. They also raised concerns about attracting applicants with suitable skills and experience, job satisfaction, career progression and workforce retention. We developed instruments to (i) further explore these issues, (ii) ascertain their experience with linked health data, (iii) determine their training needs, and, (iv) learn about their future intentions. We will present findings on issues pertinent to the Australian pharmacoepidemiology landscape and suggest priorities for building workforce capacity.

Conclusion/Implications

This study will provide empirical evidence to support and prioritise capacity building in the Australian pharmacoepidemiology workforce to improve their ability to work with linked data. The instruments that we developed and findings may be relevant to pharmacoepidemiology workforce in other countries and other emerging fields that use linked data.

