



## Real-world evidence: What is it and why does it matter to pharmacists?

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#### Dear Editor

Real-world evidence (RWE) is the term used to describe data that is collected from real-world sources outside of randomized controlled trials (RCTs). These sources can include electronic health records, claims data, patient registries, and observational studies. The use of RWE has grown in popularity in recent years to fill gaps in our understanding of the effectiveness and safety of healthcare interventions.<sup>1</sup> While RWE does not replace well-designed RCTs, it plays an increasingly important role in clinical decision-making and health care policy because it provides additional data that may not be captured in an RCT, such as off-label uses, real-world prescribing patterns, rare or idiosyncratic adverse events, and cost-effectiveness.<sup>2</sup> This is apparent in underrepresented populations in clinical trials, including older adults, minorities, and individuals with multiple comorbidities. RWE can be particularly useful in evaluating the real-world performance of medications, as it allows researchers to assess the effectiveness and safety of these interventions in a broader range of patients and settings.<sup>3</sup>

The importance of RWE to pharmacists cannot be overstated. Pharmacists are on the front line of patient care and are often the first point of contact for individuals seeking information about their medications, particularly in developing countries. They are well positioned to collect and contribute RWE that can inform the development and evaluation of treatments, as well as identify potential safety concerns. RWE can help pharmacists better understand the factors that influence medication use and adherence in the real world. For example, RWE can be used to identify barriers to medication adherence, such as cost or access issues, and to develop strategies to address these barriers (1). There are, however, challenges to the use of RWE in pharmacy practice. Pharmacists' involvement in generating this evidence, and the lack of robust methods to ensure the quality and validity of RWE are some of the key challenges.<sup>3</sup>

Given the increasing relevance of RWE in healthcare, it is essential that pharmacists are familiar with the principles and methods of RWE. They should be able to synthesize data to inform their practice. Therefore, pharmacists should be trained in using electronic health records and other sources of RWE. They should be trained in the statistical analysis of these data. The pharmacy curriculum should be revised to incorporate modules on RWE. This will enable them to collect and

analyze RWE to enhance their practice. Furthermore, pharmacists should collaborate with other healthcare professionals, such as physicians and nurses, to develop and implement RWE studies. This will allow for the collection of more comprehensive and reliable data and will ensure that the perspectives of multiple stakeholders are considered. Finally, policymakers should consider formulating financial policies to support pharmacists engaged in RWE research. This could include funding for research projects, as well as incentives for pharmacists to participate in RWE studies and share their findings with the broader scientific community. Implementing these recommendations will boost pharmacists' involvement in the generation of RWE and ensure that this valuable resource is used to its full potential.

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