

Patient health outcomes for evaluation of pharmacist-led primary care: a scoping review

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- Pharmacists have the training and medication expertise required to deliver primary care.
- Their scope of practice (the range of services they're authorized to provide) has recently expanded to include primary care delivery.
- More people are now turning to pharmacists for their primary care needs.
- Increased government funding and healthcare system pressures have also supported this shift.

This project used a **scoping review** to identify what kind of patient health outcomes are used to assess the quality, effectiveness and safety of pharmacist-led primary care.

What is a patient health outcome?



The final result or change in a person's health status, physical function, or quality of life after receiving pharmacist-led primary care.



Reviewed studies published from **1997 to 2025**.



Searched four major databases, including Google.



Two independent reviewers screened each article.



Focused on the quality, effectiveness, and safety of pharmacist-led care services.

299 Articles about evaluations of pharmacist-led primary care

39.1% United States **26.7%** Europe **11.0%** Oceania **9.4%** Canada **13.8%** Asia, Middle East, South America, Africa

Most studies included patients with cardiovascular disease or diabetes.



Most interventions focused on education or counselling and chronic disease management.



What kinds of outcomes were reported?

Most Common



Least Common

- Clinical measurements or assessments**, e.g., blood pressure.
- Resource utilization**: e.g., emergency department or hospital visit.
- Adherence to medication**: e.g., continuing/stopping medication.
- Lab test**: e.g., cholesterol, triglycerides.
- Medication regimen assessment**: e.g., prescribing medication.
- Patient satisfaction**: e.g., with counselling, services.
- Identified/resolved drug therapy problems**: e.g., incorrect dosage.
- Adherence to guidelines**: e.g., following treatment guidelines.
- Receipt of immunization**: e.g., vaccinations administered.
- Adverse drug reactions**: e.g, from prescribing errors, complications.

73% of studies reported positive outcomes

24% reported neutral (no change) outcomes

3% reported negative outcomes

Most evaluations of pharmacist-led primary care have not focused on recent scope of practice changes, like prescribing, vaccination and testing.

Outcome measures related to patient experience and health outcomes that matter to patients were missing.

Evaluations of pharmacist-led primary care should focus on full scope of practice and outcomes that matter to patients.