

Clinical role of pharmacists in primary health care: Evidence, challenges, and perspectives in the Chilean context

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Elena Vega,¹ Jorge Cienfuegos²¹Departamento de Farmacia, Facultad de Farmacia, Universidad de Concepción, Chile²Universidad Academia del Humanismo Cristiano, Chile**Correspondence:** Elena María Vega, Departamento de Farmacia, Facultad de Farmacia, Universidad de Concepción, Barrio Universitario S/N, Concepción, Chile**Received:** April 28, 2026 | **Published:** April 30, 2026

Introduction

Primary health care (PHC) refers to the delivery of integrated and accessible health services by healthcare professionals. The integration of clinical pharmacists in PHC has been widely documented in international scientific literature as an effective strategy to optimize medication use and improve health outcomes.¹ Since the late twentieth century, multiple studies have shown that the active participation of pharmacists within multidisciplinary teams contributes not only to healthcare efficiency but also to the quality of care. In this context, the demographic and epidemiological transitions observed in countries such as Chile further reinforce the need to consolidate this role within the first level of care.

Situation analysis

During the 1990s, pioneering studies laid the foundation for the clinical role of pharmacists in PHC. A controlled study conducted by J. Jameson showed that incorporating clinical pharmacists into primary care teams was associated with less expensive medication regimens without compromising quality of care.² Similarly, J. E. Hanlon showed that pharmaceutical care provided to older adults with polypharmacy reduced inappropriate prescribing and potentially decreased adverse drug events, without adversely affecting health-related quality of life.³

Over the past two decades, the evidence base has strengthened considerably. Systematic reviews and randomized controlled trials have shown that pharmacist-led interventions in PHC significantly improve chronic disease management, including reductions in glycated hemoglobin (HbA1c), blood pressure, body weight and therapeutic inertia.⁴⁻⁶ Additionally, a review suggests that pharmacist-led interventions which include direct pharmacist-physician communication at transition of care, may be effective in reducing readmissions to hospitals within 30 days and improved medication adherence, particularly within coordinated care models.^{7,8}

In several healthcare systems, such as those in the United Kingdom and Canada, pharmacists have been granted prescribing authority, reflecting institutional recognition of their clinical impact and on medicines access by increasing medicine use.⁹

In Chile, the incorporation of pharmacists into PHC has yielded results consistent with international findings. Local studies have shown improvements in clinical outcomes and medication adherence among patients with cardiovascular diseases receiving pharmacotherapeutic follow-up.¹⁰ Likewise, interventions targeting patients with atrial fibrillation treated with acenocoumarol have shown enhanced therapeutic control, alongside increased adherence and patient satisfaction¹¹

From a pharmacoeconomic perspective, pharmacist-led medication reviews for cardiovascular disease prevention in PHC found these

interventions to be cost-effective from the public healthcare sector perspective. When additional costs such as medication-related hospitalizations and emergency visits were included, a trend toward overall cost savings was observed. Notably, cost-effectiveness was more pronounced in high-risk patients and those experiencing polypharmacy.¹²

Operationally, pharmaceutical activities in PHC are monitored through standardized monthly statistical records (REM in Spanish), which serve as essential tools for health system management.¹³ These reports compile data on service provision, productivity, and the range of services delivered in healthcare facilities, including pharmaceutical services.

Key activities include pharmaceutical care, pharmacotherapeutic follow-up, medication review, medication reconciliation, pharmacovigilance, and health education.¹⁴ These records enable the evaluation of program implementation and provide insight into the pharmacist's contribution to National Health Objectives.

The Pharmacy Fund (FOFAR in Spanish) represents a key public policy initiative aimed at strengthening access to medications within Chilean PHC. Implemented in 2014 by the Ministry of Health, this program ensures the free and timely provision of medications for chronic conditions such as hypertension, diabetes, and dyslipidemia.¹⁵

By 2024, the program had reached approximately 2,371,394 beneficiaries, corresponding to 90% of the target population.¹⁶ In addition to funding medications, FOFAR allocates resources for the hiring of pharmacists, recognizing their critical role in ensuring appropriate medication management.¹⁷

However, the program also imposes a significant administrative burden, including stock management, compliance with performance indicators, and reporting requirements. This workload may limit the time available for clinical activities, shifting the pharmacist's role from direct patient care toward logistical responsibilities.

Chile has undergone a significant demographic transition characterized by population aging, driven by declining fertility rates and increased life expectancy. According to national statistics, the proportion of older adults has risen substantially, while the population under 15 years of age has decreased.¹⁸

Concurrently, the epidemiological profile has shifted from infectious diseases to noncommunicable diseases, particularly cardiovascular conditions and malignancies.¹⁹ This transition has led to increased prevalence of multimorbidity and polypharmacy, highlighting the growing need for specialized pharmacological management.

Despite these advances, the evaluation of the clinical impact of pharmaceutical interventions in Chilean PHC remains limited. While robust indicators exist regarding medication availability, it is less clear whether these improvements translate into better chronic disease control or enhanced medication adherence.

This gap underscores the need to incorporate more sensitive clinical indicators, such as biomarker control, preventable hospitalization rates, and patient-reported outcomes. Strengthening health information systems is also essential to capture the full value of pharmacist-led interventions.

A critical issue in consolidating the clinical role of pharmacists is the relationship between increasing professional demands and working conditions. In many cases, pharmacists in PHC face precarious employment contracts, high workloads, and limited professional recognition, which may lead to burnout and constrain innovation in clinical practice.²⁰

Expanding the clinical role without adequate structural support risks creating excessive workload pressures that could negatively affect both quality of care and professional well-being. Therefore, it is essential to develop models that balance administrative and clinical responsibilities while ensuring appropriate working conditions.²¹

In this context, the FOFAR program presents a strategic opportunity to evolve into a platform that actively promotes pharmaceutical care. This would require redesigning performance indicators, reducing administrative burdens, and strengthening the clinical dimension of the pharmacist's role.

Moreover, greater involvement of pharmacists in policy design and evaluation is crucial to ensure that their professional experiences and needs are adequately addressed. In underserved populations, where disease burden is often higher, pharmacists can play a pivotal role in health education, medication-related problem detection, and adherence promotion.

Conclusion

The available evidence consistently supports the value of clinical pharmacists in PHC as key agents in optimizing pharmacotherapy and improving health outcomes. In Chile, while significant progress has been made, important challenges remain, particularly regarding impact evaluation, administrative workload, and working conditions.

Strengthening the pharmacist's role requires an integrated approach that combines scientific evidence, coherent public policies, and adequate labor conditions. In a context marked by population aging and a high burden of chronic diseases, consolidating this role is not only desirable but essential for the sustainability of the healthcare system and therefore with the Sustainable Development Goals.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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