American College of Clinical Pharmacy

Policy and Practice Advancement Issue Brief

Integrating Clinical Pharmacy in Advanced Primary Care Services

Purpose

This brief introduces the Primary Care Investment Guide and highlights its recommendation to invest in clinical pharmacists embedded in primary care teams. Developed by the Harvard Medical School Center for Primary Care—with support from the California Health Care Foundation and the Commonwealth Fund—the guide demonstrates why greater and sustained investment in advanced primary care is essential to improving health outcomes. This brief focuses on clinical pharmacy services as an integral component of advanced primary care.

Background

Primary care is central to an effective, efficient, and equitable health system. Improving access to primary care clinicians, including clinical pharmacists, contributes to longer life expectancy, lower mortality, and improved health outcomes. However, inadequate payment for primary care and a shortage in its workforce threaten the survival of primary care, making enhanced payment in current systems and evolving payment models (value-based and hybrid payments) critical to the sustainability of primary care practice. Recommendations for implementing high-quality primary care, including integrated pharmacy services, have previously been described.[1] This guide focuses on recommendations for prioritizing advanced primary care services where these investment opportunities exist.

Pharmacists' Role in APCM-Covered Services

The guide breaks down how advanced primary care services such as behavioral health integration, clinical pharmacy services, care management, population health, and social needs interventions lead to better outcomes for patients. It brings together insights from more than 40 stakeholder interviews, case studies, spending analyses, and literature reviews, providing a better understanding of the primary care functions that deliver the greatest value. It also includes a closer look at 5 states that are leading in the primary care investment space. The Investment Guide details how policymakers, employers, provider organization leadership, practices, and health plans can holistically assess, plan, and prioritize investments, particularly the integration of clinical pharmacy services, in team-based advanced primary care services.

The guide states that the following 6 team-based services improve health outcomes, reduce costs, enhance patient experience, support workforce well-being, and advance equity:

- **Embedded Clinical Pharmacists** to optimize medication management and chronic disease control
- **Behavioral Health Integration**, including the Primary Care Behavioral Health model and the Collaborative Care Model
- **Care Management** for patients with complex medical or social needs
- **Population Health Programs** that use data to close care gaps and proactively manage chronic disease

- **Social Determinants of Health and Disparities Initiatives**, including systematic screening and community health worker support
- **eConsults**, enabling rapid specialist input and reducing avoidable referrals

Pharmacists embedded in primary care teams are instrumental in medication optimization, population health/chronic disease management, and patient education. Implementation models range from full-time pharmacists in clinics, to centralized telepharmacy services and hybrid models where disease-specific clinical pharmacy services (e.g., HIV, anticoagulation, or diabetes) are provided at multiple sites. Yet integrating clinical pharmacy into primary care faces several key challenges: high costs and staffing shortages, particularly in rural areas where full-time embedded pharmacists are not feasible; limited clinician engagement and cultural resistance to delegating care; and difficulties in establishing sustainable funding models. These barriers continue to limit the scale and impact of clinical pharmacy services in primary care.

Prioritizing Investment in Clinical Pharmacy

Of these 6 team-based services, only clinical pharmacy services exhibited strong-level evidence of impact in the literature.

Leaders reported that clinical pharmacists improved diabetes and hypertension control, reduced specialist referrals and ED visits, and increased equity by ensuring access to affordable medications. These pharmacists also reduced physician workload, freeing up clinical time for other priorities. Research reinforces these findings: 12 of 14 studies documented positive financial returns, and 9 of 12 similar studies showed significant reductions in ED use and hospitalizations. The greatest financial gains occurred when clinical pharmacy services were integrated with broader care management and population health initiatives and when the pharmacists were available at the practice level.[2]

The guide summarizes the following cross-cutting themes and best practices related to clinical pharmacy:

- **Embedding pharmacists into primary care teams:** Place clinical pharmacists directly in primary care settings to manage chronic diseases, perform medication reconciliation, and support transitions of care.
- **Using shared or centralized models for efficiency:** Rotate or centrally manage clinical pharmacist coverage across multiple sites, allowing smaller or rural practices to access clinical pharmacy services without full-time staffing.

Table 1. Impact of Advanced Primary Care Services

	Insights from Health Organization Leadership		Evidence of Impact on Cost/Utilization from the Literature (n)
APC Service	**Impacts on Cost/Utilization**	**Other Reported Impacts**	
Behavioral Health Integration	↓ ED visits ↓ readmissions	Improved depression/anxiety management; ↑ PCP confidence; ↓ clinician burden; ↑ access for vulnerable patients	Limited evidence (8)
Clinical Pharmacy Services	↓ ED visits cost savings	Improved diabetes/hypertension control; ↑ adherence; ↓ PCP workload	Strong (33)
Care Management	↓ hospitalizations ↓ re-admissions	Improved chronic disease control; Better follow-up after discharge; ↑ continuity; ↓ provider burden	Moderate (39)
Population Health	↑ revenue from meeting incentives ↓ hospitalizations and readmissions from RPM	Improved screening; improved chronic disease outcomes; ↓ care gaps; ↑ equity ; ↓ burnout; ↑ job satisfaction	Moderate* (11)
Social Determinants of Health	↓ ED visits for social crises	↑ access to supports; ↑ engagement; ↑ family stability; ↑ provider satisfaction	Limited evidence (1)
E-Consults	↓ unnecessary referrals	Faster clinical decision-making; ↑ access; ↑ provider and patient satisfaction; Enhanced PCP capability	Limited, but Strong (8)

Courtesy of Amie Alley Pollack at Harvard Medical School.
*review of diabetes population management only
Abbreviations: APC, advanced primary care; PCP, primary care provider; RPM, remote patient monitoring.

- **Leveraging 340B revenue and grant funding for sustainability:** Use 340B pharmacy revenue and targeted grants to fund clinical pharmacist positions, mobile immunization programs, and infrastructure needs.
- **Reducing clinician burden and improving team efficiency:** Clinical pharmacists handle time-intensive tasks such as medication adjustments and patient education, freeing other clinicians to focus on other care needs.
- **Supporting value-based care and improving ROI:** Deploy clinical pharmacists in programs that enhance adherence, chronic disease control, and preventive services, driving quality metrics and shared savings.
- **Addressing patient-level and socioeconomic barriers:** Clinical pharmacists play a key role in improving equity by working with patients' insurance plans to identify affordable options and addressing challenges such as medication storage and access.
- **Employing flexible and hybrid staffing models:** Combine embedded, rotating, and virtual clinical pharmacy services to balance cost and reach, particularly in rural and resource-limited settings.
- **Facilitating team-based culture and establishing collaborative practice agreements:** Ensure clinician buy-in and development of formal agreements that authorize clinical pharmacists to manage care within the team.

References

1. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Care Services; Committee on Implementing High-Quality Primary Care. *Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care*. Robinson SK, Meisnere M, Phillips RL Jr, et al, eds. National Academies Press (US); 2021. https://doi.org/10.17226/25983

2. Pollack, AA, Ricci DA, Song Z, Sullivan EE, Grumbach K, Cohen DJ, Phillips RS. (December 18, 2025). The Primary Care Investment Guide, Primary Care Collaborative.