

Clinical pharmacists



Role at a glance: Clinical pharmacist

The clinical pharmacist predominantly supports care for high-risk patients in the primary care setting by optimizing patient medication regimens, facilitating medication adherence, and providing chronic disease education.

Credentials:	Doctor of Pharmacy plus one to two-year residency with specialist board certification
Target population:	High-risk patients with polypharmacy (those who take eight or more medications) or who are multimorbid
Staffing ratio:	0.25-0.5 FTE per primary care provider
Median salary:	\$124,170 (\$87,420 – \$159,410) ¹
Evidence-based ROI:	Average of 3:1 to 5:1 ²
State scope of practice considerations:	Scope of practice is determined by state legislatures, which results in significant state-to-state variation. Common areas of variance include rules regarding reimbursement for pharmacist-rendered services and allowances around prescribing medications and ordering medical labs and tests.

Key roles and responsibilities

The pharmacist's primary role is to provide medication therapy management (MTM), which means they determine and evaluate patients' medication treatment plans on an ongoing basis. However, pharmacists can also play a role in preventive care, transitional care support, and panel management. Some organizations designate pharmacists as care team leaders for high-risk patients with complex medication regimens.

Beyond MTM, additional tasks pharmacists perform include: chronic disease education and management; medication refill; patient assessments; transitions of care; immunizations; care team education; quality improvement projects; annual wellness visits; and connecting patients to medication-related financial assistance.

Three components of medication therapy management (MTM)

1

Medication history

Review medication lists and update by interviewing patients and verifying with secondary source (e.g., SureScripts, retail pharmacy)

2

Medication reconciliation

Identify potential drug interactions and opportunities to simplify or adjust regimens, switch to lower-cost options, and address adherence barriers

3

Patient education

Help patients understand how to self-manage conditions, focusing on when, how, and why to take medications

1) Includes pharmacists that work outside of health care settings, such as retail pharmacies.
 2) One study from 2008 found an ROI of 12:1 (Isetts BJ, et al.).

Source: Bureau of Labor Statistics Occupational Outlook Handbook, "Pharmacists," 2017; Isetts BJ, et al., "Clinical and economic outcomes of medication therapy management services," *J Am Pharm Assoc*, 48, (2008): 203-211; Cipolle R, et al., "Pharmaceutical care practice," *The clinician's guide*, McGraw-Hill, 2004; Population Health Advisor interviews and analysis.

Deployment models

Organizations either embed pharmacists in primary care clinics or use virtual platforms to provide pharmacist consultations and direct patient care.¹ Based on need across clinics, embedded pharmacists can be dedicated to a single clinic or shared among multiple sites of care depending on resource availability and clinic needs.

<i>Model</i>	 <i>Embedded</i>	 <i>Virtual</i>
Benefits	<ul style="list-style-type: none"> Increases physician referrals Increases physician satisfaction Improves patient engagement Improves care team cohesion 	<ul style="list-style-type: none"> Scales easily Increases capacity Doesn't require clinic space²
Drawbacks	<ul style="list-style-type: none"> Expensive to scale Requires clinic space 	Some payers require a face-to-face meeting before reimbursing for virtual pharmacy services
Considerations	<ul style="list-style-type: none"> High-risk patients should ideally receive face-to-face coaching, but virtual support alone can be effective for rising-risk patients For a geographically-dispersed network, a rotating model can burden staff that have to travel far distances 	<ul style="list-style-type: none"> Providers need to assess and negotiate reimbursement opportunities with payers Clinics across the network must have access to the necessary virtual platforms to support care provision Existing care teams should receive continuous training and performance updates on leveraging pharmacists to optimize referrals

Funding and financing

Providers often turn to grant funding to develop their integrated pharmacy programs. Over time, pharmacists can become self-sustaining by billing for services. Some state Medicaid programs offer direct pharmacist reimbursement, while Medicare and some private payers reimburse for services provided by pharmacists on an “incident-to”³ basis. Codes pharmacists can provide care for include:

- Medication Therapy Management services⁴ (99605-99607)
- Evaluation and Management codes (99211-level CPT codes)
- Fee-for-value codes such as
 - TCM⁵ (99495, 99496)
 - CCM⁶ (99487, 99489, 99490)
 - AWV⁷ (G0438, G0439), and
 - DSMT⁸ (G0108, G0109)

1) While pharmacists can also be community-based (e.g. located in retail pharmacies), it is a less common approach for organizations looking to add pharmacist support into primary care.

2) State regulations may require patients to receive care in a clinic setting, so even if the pharmacist doesn't require clinic space, a patient receiving pharmacy support may.

3) Refers to services provided in an outpatient setting by a licensed non-physician practitioner (e.g. clinical pharmacist) under the supervision of a physician and billed for by that supervising physician.

4) There is no universal agreement on how to reimburse for MTM, rather commercial plans (including Medicare Advantage plans) often develop their own criteria.

5) Transitional Care Management.

6) Chronic Care Management.

7) Annual Wellness Visit.

8) Diabetes Self-Management Training.

Key performance indicators

To develop a holistic understanding of ROI, providers should link the pharmacist role to downstream cost savings in the long-term and use process and quality measures to assess short-term effectiveness.



Medication-related metrics

- Patient adherence to medication regimen
- Number of adjustments regimen (e.g. dose, interval, duration, drug)
- Rate of deprescribing or switching from brand to generic drug
- Change in amount of physician time spent on medication-related issues
- Number of adverse drug events avoided
- PMPM pharmacy spend



Health management metrics

- HbA1c testing, HbA1c < 8.0% in patients with diabetes
- Controlled blood pressure among patients with hypertension
- Completion of preventive care measures (e.g. immunizations, diabetes screenings)
- Appropriate medication utilization (e.g., beta blockers for patients with heart failure)



Outcomes metrics

- Overall PMPM spend
- Avoidable acute care utilization
- Patient and physician satisfaction
- PCP capacity
- Quality bonuses achieved/penalties avoided

Return on investment

According to numerous research studies and organizational case studies, pharmacists in primary care are associated with improved cost, utilization, quality, access, and satisfaction when deployed appropriately to meet the needs of their target patient populations.

Reduce cost

31.5%

Decrease in per-person total cost of care

Rightsize utilization

11/12

Studies show reduced hospitalization

Improve quality

70%

Of quality metrics improved with fully integrated pharmacists in primary care

Improve access

28%

Of primary care appointments shifted from PCP to pharmacist¹

5.1 /6 Likert scale score

Physicians report that integrated pharmacists enabled them to spend more time on patient care activities

Improve satisfaction

90%

Of patients would recommend MTM to family or friends²

5.5 /6 Likert scale score

Physicians report that integrated pharmacists positively impacted quality of care

1) Veteran's Administration.
2) Hennepin County Medical Center.

Questions to consider when deciding whether to hire a pharmacist

- 1 *Burden of disease.* Many integrated pharmacy programs focus on patients with diabetes, hypertension, asthma, COPD, and/or heart failure. What proportion of your patients have polypharmacy (i.e. take 8+ medications) and/or have been diagnosed with two or more chronic conditions?
- 2 *Quality performance.* Pharmacists can help close quality gaps by optimizing medication-related care and providing preventive care. How are you currently performing on quality measures related to chronic disease management?
- 3 *Practice efficiency.* Medication-related tasks are not top-of-license for a physician and can be performed at a lower cost and with greater accuracy by a pharmacist. How much time do your PCPs currently spend on these types of tasks?

Alternative hires to meet pharmacy demand

Organizations without the means to hire pharmacists across the network may want to consider hiring pharmacy technicians. “Pharm techs” have a significantly smaller scope of practice but still reduce the burden of managing polypharmacy needs in clinics by performing administrative and patient support tasks.

Role	Tasks performed	
	<i>Pharmacist</i>	<i>Pharmacy technicians</i>
Medication therapy management	Perform medication reconciliation and adjust medications as needed	<ul style="list-style-type: none"> • Collect and verify medication history ✗ Perform medication reconciliation ✗ Make alterations to medication list
Clinic support	<ul style="list-style-type: none"> • Implement population health initiatives (e.g. gap closure for chronic disease) • Educate care team on pharmacy issues 	Process prior authorization to promote practice efficiency
Patient support	<ul style="list-style-type: none"> • Provide education on community resources • Answer medication-related questions • Contribute to patient care plan, including accessing the EMR 	<ul style="list-style-type: none"> • Provide education on community resources • Provide medication-related financial assistance

To learn how to integrate pharmacists into primary care, visit [advisory.com](https://www.advisory.com)