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EXPERIENCE

# Pharmacist home visits: A 1-year experience from a community pharmacy

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ABSTRACT

*Objective:* To provide experience on the methods and costs for delivering a large-scale community pharmacist home visit service.
*Setting:* Independent urban community pharmacy, Buffalo, NY.
*Practice description:* Mobile Pharmacy Solutions provides traditional community pharmacy walk-in service and a suite of clinically oriented services, including outbound adherence calls linked to home delivery, payment planning, medication refill synchronization, adherence packaging, and pharmacist home visits. Pharmacist daily staffing included three dispensing pharmacists, one residency-trained pharmacist, and two postgraduate year 1 community pharmacy residents.
*Practice innovation:* A large-scale community pharmacy home visit service delivered over a 1-year period.
*Evaluation:* Pharmacist time and cost to administer the home visit service as well as home visit request sources and description of patient demographics.
*Results:* A total of 172 visits were conducted (137 initial, 35 follow-up). Patients who received a home visit averaged 9.8 ± 5.2 medications and 3.0 ± 1.6 chronic disease states. On average, a home visit required 2.0 ± 0.8 hours, which included travel time. The percentages of visits completed by pharmacists and residents were 60% and 40%, respectively. The amounts of time to complete a visit were similar. Average home visit cost including pharmacist time and travel was $119 ($147 for a pharmacist, $77 for a resident).
*Conclusion:* In this community pharmacy–based home visit service, costs are an important factor, with each pharmacist visit requiring 2 hours to complete. This experience provides a blueprint and real-world perspective for community pharmacies endeavoring to implement a home visit service and sets a foundation for future prospective trials to evaluate the impact of the service on important indicators of health and cost.


## Background

The changing landscape of health care has created a focus among health care providers and payers to concurrently better the quality of care, enhance the experience of care, and reduce costs.[1] Pharmacists are well positioned to thrive in this changing health care environment as clinical services such as medication therapy management (MTM), collaborative drug therapy management protocols, and vaccinations have been expanded over the past decade.[2-5] Similarly, pharmacists have been widely adopted as key members of the health care team and integrated into evolving models of health care delivery, such as patient-centered medical homes[6,7] and accountable care organizations.[8,9]

Despite these advances in clinical services and an acceptance of pharmacists as members of the health care team, a critical limitation is that the clinical service role of the pharmacist is largely limited to a small fraction of pharmacists working in select clinical settings. This is problematic because

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**Key Points**

**Background:**

- Pharmacist-led home visits are currently not standard practice in the community pharmacy setting.
- Currently there are no financial models available in the medical literature to pharmacy, health plan, or physician leadership to understand sustaining the pharmacist home visit service.
- Expansion of the community pharmacist role to include home visits would serve to better align the profession with medicine in attaining the tenets of the triple aim (better care, better care experience, reduced costs) and potentially position a new revenue stream.

**Findings:**

- Pharmacist home visits can be implemented in the community pharmacy setting, but the service is time consuming, totaling 2 hours to complete a visit at approximately $150 when delivered by a pharmacist.
- Most patients requested for a pharmacist home visit were older than age 65 and had three chronic disease states and 10 medications.
- This experience provides the foundation for other community pharmacies endeavoring to provide home visits and for future prospective trials evaluating the impact of community pharmacy–based home visits on the tenets of the triple aim.

more than 50% of the profession provides care in community settings,[10] which in many cases are structurally and financially limited to providing traditional services. These services include but are not limited to educating patients about disease state management, dispensing and counseling about prescriptions, answering questions about drug therapy, providing immunizations, and assisting in the selection of over-the-counter (OTC) medications.[11]

The Asheville Project demonstrations in diabetes, dyslipidemia, hypertension, and asthma,[12-14] along with the Diabetes Ten City Challenge,[15] are accepted foundations for the role of the community pharmacist in improving care and mitigating the rise in health care costs. In recent years, there has been progress in reimbursable services in the community setting, including companies and programs like OutcomesMTM, statewide billing models in North Carolina,[16] and CareSource-managed Medicaid billing in Ohio.[17] These pockets of success are important steps forward for the profession and need to be supported by continued innovation and demonstration projects that show feasibility and ultimately, the cost benefit of community pharmacy–based services.

The ideal scenario for a community pharmacy developing clinical services is to design a structure that has a high impact on improving disease conditions, reduces hospital visits, and is reimbursable on a standalone basis. The pharmacist home visit has potential to achieve all three of these objectives. Pharmacist home visits have been shown to improve medication use while reducing both emergency department and hospital visits.[18,19] To date, published experiences of pharmacists providing home visits have been conducted only through university-based grants and do not provide context for the rigors of real-world implementation or costs to deliver the service. Herein, we describe the first large-scale experience of community pharmacists conducting home visits.

## Objective

The primary objective of this study was to provide experience on the methods and costs for delivering a large-scale community pharmacist home visit service. Secondary objectives included descriptive overviews of the sources identifying the need for home visits and the characteristics of patients receiving home visits. Providing this experience establishes a logistic and financial blueprint for community pharmacists considering adoption of the home visit service and foundation for future prospective clinical trials to evaluate impact of home visits on medication adherence, clinical outcomes, health care service utilization, and cost.

## Practice setting and innovation

This experience is a retrospective review of pharmacist home visits conducted by an independent community pharmacy in Buffalo, NY (Mobile Pharmacy Solutions [MPS]), over a 1-year period from 2012 to 2013. MPS is located in an urban setting and provides traditional walk-in services, but it has also integrated a suite of clinically oriented services, including inbound telephone call triage to a clinical pharmacist–managed hub, outbound adherence telephone calls linked to home delivery scheduling, payment planning, medication refill synchronization, customized adherence packaging, and pharmacist home visits. Prescription volume is approximately 3,000 prescriptions per week (~500 per operating day), and daily pharmacist staffing includes three dispensing pharmacists, one residency-trained pharmacist, and two postgraduate year 1 (PGY1) community pharmacy residents. The residency program is accredited by the American Society of Health-System Pharmacists and the American Pharmacists Association and is administered by the State University of New York (SUNY) at Buffalo School of Pharmacy and Pharmaceutical Sciences. The service focus of this experience is the home visit as provided by the pharmacist or PGY1 resident. The study was approved by the SUNY at Buffalo Institutional Review Board.

## Practice description

### *Patient identification for pharmacist home visits*

Patients who would benefit from a home visit were identified in a variety of ways. Patients were considered for a home visit at the request of the patient or caregiver, medical or telemonitoring providers, home nursing agencies, community-based organizations, health plans, or pharmacy staff members who identified the potential for a medication-related issue or knowledge deficit that may affect appropriate use of the therapeutic regimen. Patients were also identified through traditional MTM platforms (Mirixa, OutcomesMTM) and the Pharmacy Compliance Packaging program (Pop-Pak). The home visit pharmacist would speak with