

Executive Summary
Prepared for the Community Pharmacy Foundation

**“Market Analysis for Pharmacist Patient Care Services
in Ambulatory Care Patients”**

Principal Investigator:

Suzan Kucukarslan, PhD, MBA

Co-Investigators:

Richard Bagozzi, PhD

Caroline Gaither, PhD

Nancy Lewis, PharmD, MPH

Leslie Shimp, PharmD, MS

College of Pharmacy
University of Michigan
Ann Arbor, MI

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Introduction

This document provides a summary of the activities and findings of the research project titled “Market Analysis for Pharmacist Patient Care Services in Ambulatory Care Patients” completed by the University of Michigan College of Pharmacy. This work was co-funded by the Community Pharmacy Foundation and the Blue Cross Blue Shield of Michigan Foundation. The College appreciates the support provided by the Community Pharmacy Foundation and hopes that findings of this research are helpful in advancing the mission of the Foundation.

This summary provides an overview of the study design, a summary of the findings and a discussion of the implications for the marketing of community-based pharmacist patient care services. While this summary provides a general overview of the work completed, published papers provide details.

The following papers were published from the study findings:

- (1) Kucukarslan SN, Hagan A, Shimp L, Gaither CA, Lewis NJW. Integrating Medication Therapy Management Services in the Primary Care Medical Home: A Review of Intervention Studies. *Am J Health Syst Pharm*. 201;68:335-345.
- (2) Kucukarslan SN, Lewis NJW, Shimp LA, Gaither CA, Lane DC, Baumer AL. Exploring patient experiences with prescription medicines to identify unmet patient needs: Implications for research and practice. *Res Soc Adm Pharm*. 2012;8:321-332.
- (3) Kucukarslan SN, Shimp LA, Lewis NJW, Gaither CA, Kirking DM. Patient desire to be involved in treatment decisions. *J Am Pharm Assoc*, 2012;52:333-341.

The CPF-funded study findings led to the subsequent papers and studies:

- (1) Kucukarslan SN. A review of published studies of patients’ illness perceptions and medication adherence: Lessons learned and future directions. *Res Soc Adm Pharm*.2012;8:371-382. (2012 Research and Social Administrative Sciences Best Paper Award)
- (2) Kucukarslan SN, Plumley D, Chang A, Ajami M, Ueda A. Intending to adhere or to not adhere: Results from an experiment in healthy subjects testing illness perceptions and behavioral intentions in asthma. *Res Soc Adm Pharm Adm*.2014;10:239-245.
- (3) Kucukarslan SN, Lee K, Ruparelia B, Patel T. An Experiment Using Hypothetical Patient Scenarios in Healthy Subjects to Evaluate the Treatment Satisfaction and Medication Adherence Intention Relationship. *Health Expectations (In press)*
- (4) Kucukarslan SN, Ung J, DeGabrielle S, Butala J, Baek VS, Lim S. Patients and Their Desire to be Involved in Treatment Decisions,*J Am Pharm Assoc (In press)*.

Study purpose

The overall purpose of the market analysis was to determine how pharmacists' expertise could best be incorporated into the ambulatory healthcare system to promote optimal medication use for chronic disease management. This project was unique in that it incorporated opinions from multiple participants in the health care system - patients, prescribers, healthcare payors and purchasers, as well as pharmacists - regarding chronic medication use and needed services to improve such use.

Research design

The research methodology used and a summary of the findings is given below.

Evaluation of the evidence

The current health care environment was assessed through a comprehensive review of the published literature focusing on chronic medication use. The assessment found that successful patient interactions included educating patients about drug therapy, identifying potential barriers to medication adherence and supporting patients in their effort to manage their health conditions. To supplement this information interviews were held with College of Pharmacy-based researchers and pharmacy association leaders active in the establishing of patient care programs. These interviews highlighted the challenges in patient recruitment into medication therapy management programs as well as the value of collaborations with multiple stakeholders. Findings of this environmental assessment are in press at this time.

Stakeholders who had a vested interest in improving chronic medication use were brought together through the establishment of two advisory groups. A Strategic Advisory Group composed of representatives from business, health plans, public health, health professions (pharmacy, physicians, physician assistants, nursing) and patient advocates was organized. This group generated lively discussions about the key factors they saw as influencing chronic medication use including patient adherence and disease self-management involvement, medication costs, prescription benefit plan design and implementation, and the use of e-prescribing and electronic medical recording. They provided useful input into the major issues related to medication use that were to be explored and reviewed and provided feedback on focus group results.

A Pharmacists Advisory Group composed of pharmacists from community practice (independent, chain, grocery store, mass merchandiser), ambulatory care and academia provided input into pharmacists' experiences and concerns regarding chronic medication use and feedback on focus group results. They discussed patient response to receiving medications and medication non-adherence, the barriers to patient counseling and prescriber communication, and their strong desire to be part of the health-care team.

Focus Groups

Perspectives about chronic medication experiences were gained through focus groups of patients, pharmacists, prescribers and health plans and payors. These focus groups provided rich insight into the factors needed for successful pharmacist patient care services.

The University of Michigan Institute for Social Research (ISR) conducted 10 focus groups under the direction of the College of Pharmacy. ISR is known internationally for its social research endeavors and its involvement provided an unbiased leader for group discussions. The patient, prescriber and pharmacist focus groups explored the prescription medication process from diagnosis to prescribing to chronic use. The subsequent health plan/insurer focus group responded to issues commonly raised by the other focus groups. The number and composition of focus groups held are listed below

- Three focus groups of adults taking at least one prescription medication
- Three prescriber (physician, nurse practitioners, physician assistants) focus groups
- Three pharmacist focus groups
- One focus group of statewide health plans/health insurers

Focus groups were held in various locations including Metro Detroit (a large Southeastern Michigan urban area), Midland (a mid-sized mid-Michigan community) and Grand Rapids (a large Western Michigan urban city). This allowed us to investigate whether opinions differed by geographic location. Only one focus group was held for health plans and health insurers since most of these organizations provide services on a statewide basis. Synthesis of focus group findings were reviewed by the Strategic Advisory Group and served as the basis for meeting our final research phase.

Statewide patient survey

A statewide survey of Michigan residents who were at least 45 years of age and took at least one chronic medication was done to validate focus group findings. Four hundred and sixty five survey respondents provided information about their perceptions about the usefulness of medication related services they received, their satisfaction with those services, their involvement in treatment decision making and monitoring and their likelihood to use specific medication services. Using Michigan residents as the survey population gathered data most pertinent to our stakeholders.

Results

Three themes were identified that can guide the marketing of pharmacist patient care services. These themes included:

- Patients want to be involved in health care treatment decisions.
- Communication between patients and health professionals and among health professionals must improve. Trusting relationships are the foundation to care.
- Medication costs are a concern of all parties with access limited for both the uninsured and the underinsured

These themes were echoed throughout the messages received from the advisory groups, focus groups and the statewide survey. They serve as a foundation for understanding the environment into which pharmacist services are marketed. In some cases, all stakeholder groups had similar concerns while differences in viewpoints among the groups also occurred. Areas of agreement serve as potential stepping-stones for the developing and marketing of pharmacist patient care services. Areas where opinions vary indicate issues that must be addressed within the marketing and development plan for services. These messages and discussion points are provided in the table below. A detailed analysis of the results and their implications will be forth coming in the set of manuscripts being prepared.

Key Messages from Stakeholders (patients, prescribers, pharmacists, health plans/insurers*)

Message	Viewpoints
Patient-provider trust is essential	<ul style="list-style-type: none"> ▪ Patients' trust in a health professional's advice influences medication adherence. ▪ Health professionals seek to provide care in a manner intended to build trust ▪ Health plans/insurers feel creating trust is a health professional duty
Optimal medication use requires active patient involvement	<ul style="list-style-type: none"> ▪ Patients want treatment that is personalized to their health beliefs and life situations ▪ Health professionals and health plans/insurers view patient involvement as essential but feel that patients often do not take actions needed for optimal health ▪ Limited resources (i.e., time, funding) are available to provide desired level of personalized care
Acceptance of the diagnosis affects medication use	<ul style="list-style-type: none"> ▪ Uncertainty or denial about diagnosis negatively impacts adherence. ▪ Medication need may only be accepted after a health crisis (e.g., hospitalization) ▪ Health professionals recognize the reluctance to begin chronic medications ▪ Prescription abandonment may signal diagnosis denial or desire for treatment options
Consumers search for medication information to gain self-control in decision making	<ul style="list-style-type: none"> ▪ Consumers seek and compare information from multiple sources (e.g., family members, multiple physicians and pharmacists, the Internet) ▪ Patients generally view medication information received as useful ▪ All view the myriad of conflicting information sources to be of concern. ▪ There is uniform concern about the use of Internet-based information for decision-making
Communication between physicians and pharmacists is not optimal	<ul style="list-style-type: none"> ▪ Personal relationships between prescribers and pharmacists encourage collaboration ▪ Prescriber often view prescription-related communications as hassles ▪ Pharmacists are concerned about lack of access to prescribers ▪ Patients are not concerned with pharmacist-prescriber relationships
Electronic medical records (EMR) will improve care, maybe	<ul style="list-style-type: none"> ▪ Health professionals and health plans/insurers feel EMR hold great potential for improving medication safety and prescribing appropriateness ▪ EMR medication information was recognized as incomplete due to lack of claims data for cash prescriptions, incomplete OTC and herbal product data
Medication costs are a concern	<ul style="list-style-type: none"> ▪ Prescription costs limit access to care for both the insured and the underinsured ▪ Health plans/insurers are unaware of the confusion caused by multiple benefit designs ▪ Patients are unaware of cost saving recommendations

Implications for pharmacist patient care services

Marketing is the creation of an environment into which a product or service can be sold. This project identified several areas in which a better foundation for the widespread adoption of pharmacist patient-care services is needed. Our findings suggest that the following are important in the marketing of pharmacist patient care services:

- Pharmacists need to develop personal, trusting relationships with patients as a precursor to service offering. Creating and maintaining such relationships may mean a re-thinking of pharmacist workload, workflow processes and the cultural competency of pharmacists.
- Exploration of patient perceptions about their diagnosis and illness should serve as a foundation for chronic medication use services.
- Meeting patients' expressed desire to communicate with a health professional and the implications of medication risk and benefit information should overcome perceived insufficient usefulness of current such information.
- Incorporating greater patient involvement in treatment decisions as a component of pharmacist patient care services may appeal to a significant subset of patients.
- To improve prescriber-pharmacist relationships, communications must shift from prescription-based problems to patient care discussions.
- A collaborative approach is needed to ensure that e-prescribing and EMR technologies improve medication safety and use.
- Services that focus on medication cost issues are likely to be supported by multiple stakeholder groups.
- Traditional criteria used to recruit patients for pharmacist services (e.g., age, number of medication used, cost of therapy) may not be good indicators of people likely to use medication-related services and, thus, not optimal methods of recruiting potential service users.
- Focusing on newly diagnosed patients prescribed chronic medications may have significant effects on medication adherence, the occurrence of unnecessary medication care use, and, given the high rate of abandoned prescriptions, pharmacy revenue may also improve prescriber-pharmacist relationships since health professionals share a concern about medication non-adherence among this population.

Summary

This project used a multi-phase market analysis approach to explore consumer perceptions about needs related to chronic medication use. The study identified patient beliefs and preferences and professional practice issues that can influence the perceived benefit and effectiveness of patient care services. This work can inform the design of such services as well as identify strategies to more effectively market pharmacist patient care services. We believe that barriers that limit pharmacists' involvement as integral members of the healthcare team can be overcome if pharmacists offer services that truly meet consumer needs.