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# Pharmacists' Role in Chronic Disease Management from Physicians' Perspective

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#### Abstract

**Objective**: The objective of this research was to gather physicians' perception of pharmacists providing chronic disease management and identify trends in physicians' characteristics that could potentially impact their comfort level collaborating with pharmacists. **Method**: Physicians practicing in the outpatient setting in the state of Washington were invited to participate in a voluntary, anonymous survey. Physicians practicing in a large multidisciplinary outpatient clinic in the Southwest Washington and Seattle areas were included. For Likert scale questions, median values were reported. Physicians' characteristics were also correlated with their willingness to collaborate with pharmacists in the provision of clinical services.

**Results**: Results were analyzed using descriptive statistics to summarize the data collected to determine which pharmacist provided clinical services physicians would like to collaborate on. Physicians were most comfortable with pharmacists reviewing patients' medications followed by pharmacist provision of disease state education and least comfortable with pharmacists initiating therapy. Physicians that have worked with pharmacists in the past were more likely to collaborate with pharmacists compared to physicians that have never worked with a pharmacist. Furthermore, pharmacists' ability to bill patients' medical insurance did not influence physicians' likelihood to collaborate with pharmacists.

**Conclusion**: This information will be used to aid in the determination of future directions for the implementation of additional clinical services within the community pharmacy setting. Additionally, it is anticipated that pharmacists will be able to utilize this information to initiate conversations with physicians in an effort to collaborate on new pharmacist provided clinical services as well as improve patient outcomes by increasing access to healthcare providers, including pharmacists.

**Keywords**: Community pharmacist collaboration, physician shortage, collaborative practice

### Introduction

According to the Association of American Medical Colleges (AAMC), there is a significant physician shortage in the United States. AAMC estimates that by 2025 there will be a shortage of 35,600 primary care physicians (PCPs). It takes roughly ten years to train physicians and the number of medical students choosing primary care is slowly declining<sup>1</sup>. These shortage numbers may be a low estimate given not everyone seeks care when needed or follows up appropriately with their PCPs. This shortage may potentially have a significant impact on patient outcomes by creating a gap in patients attaining timely and quality healthcare. Despite this documented shortage and a lack of clear plan to resolve the shortage, community pharmacists are underutilized in alleviating this healthcare burden. Community pharmacists have a significant opportunity to improve patient outcomes by playing a larger role in providing chronic disease state management<sup>2</sup>. Not only are community pharmacists one of the most accessible healthcare providers, they are cost effective as well<sup>3</sup>. Several large health systems and government entities have historically utilized pharmacists in the management of a variety of disease states. Physician-pharmacist collaboration has the potential to reduce

Corresponding author: Julie Akers, PharmD, BCACP Clinical Assistant Professor, Washington State University WSU College of Pharmacy, 205 E Spokane Falls Blvd Spokane, WA 99202; Email: Julie.akers@wsu.edu gaps in care that are predicted because of the physician shortage. Furthermore, studies have shown that inclusion of a pharmacist on a healthcare team results in significant improvement in patient outcomes<sup>5</sup>. Community pharmacists are in a prime position to provide cost effective, convenient, and quality healthcare, however collaboration with physicians plays a key role in the success of implementing this innovative approach.

### **Objectives**

The objective of this research was to gather physicians' perception of pharmacists providing chronic disease management, identify trends in physicians' characteristics that could potentially impact their comfort level collaborating with pharmacists, and evaluate whether legislation allowing pharmacists to bill commercial medical insurance influences physicians' likelihood to collaborate with pharmacists.

### Methods

A peer-reviewed survey was distributed to physicians in person or via email. Survey questions included Likert scale, multiple choice, and open text, which were analyzed using descriptive analysis.

A list of the top one hundred prescribers was generated by a retail pharmacy chain at thirteen of their locations in Vancouver, Olympia, and Seattle, Washington (WA) areas. The list of prescribers was filtered to only include physician

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prescribers. Ten physicians were randomly selected from each pharmacy location and their office was contacted to participate in this voluntary and anonymous survey. Upon agreement to participate in the study a Qualtrics link was sent via email to the physician's office. Additionally, researchers partnered with an outpatient multi-specialty physician owned clinic in Vancouver, WA. At this location, paper copies of the survey were distributed to all physicians during a monthly all provider meeting. Completion of the survey was anonymous and voluntary. Those completed were collected at the conclusion of the meeting. All physicians practicing in the outpatient setting regardless of their specialty were included in this study. The duration of the study was December 2017 through February 2018. This study was reviewed and considered to be exempt by the Washington State University Institutional Review Board.

#### **Results**

Responses were received from 71 physicians. The majority of physicians in the survey (n=51) were from Vancouver, WA while the remainder (n=20) were based out of Seattle, WA and surrounding areas. Of all the respondents, 14 physicians were from family medicine, 6 physicians were from internal medicine, while the other 51 physicians were specialists. Most physicians agreed or strongly agreed (n=53) that they felt comfortable with pharmacists providing chronic disease management, while 7 were neutral, and 11 disagreed/strongly disagreed. The most desired pharmacist provided clinical services were reviewing patients' medications (n=60), provision of chronic disease state management (n=54), and refill authorizations (n=50), while the least desired clinical service was pharmacist initiation of therapy (n=19) (See Table 1). In addition, data was analyzed to identify physician characteristics of those more likely to collaborate with pharmacists. Of those physicians comfortable or very comfortable with pharmacists providing follow up care for their patients (n=30), 26 had worked with a pharmacists at least once before. Physicians' length of experience practicing medicine may also impact their perception of pharmacists. Physicians that graduated more recently were more likely to feel comfortable and collaborate with pharmacists in comparison to physicians practicing medicine for a longer period of time (See Table 2). Pharmacists' ability to bill medical insurance did not impact physicians' comfort level with pharmacists providing patient care. The majority of physicians were either neutral (n=31) or disagreed/strongly disagreed (n=17) when asked if they were more likely to collaborate with a pharmacist due to the ability to bill a patient's medical insurance.

# Discussion

Most physicians agreed or strongly agreed that they would collaborate with pharmacists to provide chronic disease management. The data also indicated that physicians practicing for a shorter period of time felt more comfortable collaborating with pharmacists. More and more schools have started to incorporate inter-professional training, which allows each

healthcare professional to recognize how other healthcare professionals play a vital part in providing care for the patient. This is further highlighted by the fact that a large majority of physicians would like pharmacists to provide disease state education to the patients. The survey results show the perception of pharmacists is evolving. Furthermore, the results show that familiarity with a pharmacist may also play a key role in physicians' comfort level with pharmacists providing chronic disease state management. As the traditional pharmacy practice of solely dispensing and counseling on medications is dissipating and reimbursement for prescriptions is decreasing, pharmacists are playing a larger role in providing comprehensive healthcare. In order to expand services offered, pharmacists will need to continue to develop relationships and use a collaborative approach to increase patient access to quick, convenient, and quality healthcare. Hurdles do exist that are preventing widespread adoption of pharmacist provided chronic disease management. Two hurdles are the financial viability of pharmacist-provided services and access to technology that allows the pharmacist to document patient encounters that satisfies Centers of Medicare & Medicaid Services (CMS) standards and communicate efficiently with other healthcare providers. The results of this study show pharmacists' ability to bill medical insurance did not impact physicians' willingness or unwillingness to collaborate with pharmacists. It is important to note that all physicians in this study were employed by large organizations. Executives of those organizations or physicians practicing privately, whom are more likely to be financially impacted, may have a different opinion. This could provide another stream of revenue for the organization and they may be more likely to add pharmacists for quality and cost effective care. The current technology, or the lack of, also presents many challenges. The technology barrier that currently exists limits communication between pharmacists and other healthcare providers thus hindering comprehensive care for patients in multiple ways. Pharmacists providing immunizations and other chronic disease management services may lead to fragmented care given there is hardly any shared software that allows for two-way electronic communications between physicians and community pharmacies. Community pharmacies often send faxes to physicians' offices notifying them of services provided, however, faxes are unreliable and the chances of that information being included in the patient chart is low. As several national and state pharmacy associations are looking for a solution to these hurdles, it is imperative that pharmacists and physicians form a symbiotic relationship in order to adapt to challenges posed by this evolving healthcare system.

# Limitations

There were several limitations in this study. The sample size was small and results may not be applicable to the general physician population. Surveys were collected via two different methods. In-person survey collection by a pharmacist researcher may have introduced bias by introducing the topic

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rather than having participants read about the study on their own. All physicians from Vancouver, WA in this study are employed by a single outpatient clinic. The outpatient clinic has an established relationship with a community pharmacy chain and the familiarity may introduce a bias in their responses.

## Conclusion

Overall, physician perception of pharmacists providing chronic disease management was positive. As the role of pharmacists continues to expand, identifying physician partners will be key to the pharmacy profession increasing access to chronic disease management. These partnerships could lead to additional collaborative practice agreements with pharmacists, as well as support for legislation expanding access to pharmacist-provided care. Furthermore, as legislation requiring health plans recognize pharmacists as providers continues to gain momentum at a national level, the pharmacy profession will benefit from established clinical services and inter-professional collaboration to improve patient outcomes and reduce gaps in healthcare.

**Disclosure:** Tara Pfund, PharmD and Amy Jay, PharmD are employees of Fred Meyer, which is the chain pharmacy in which this study was conducted. Arsalan Shah, PharmD, MBA was a PGY-1 Community Pharmacy Resident and employee of Fred Meyer at the time this research was conducted. Any potential conflicts of interest were resolved during the Institutional Review Board (IRB) process.

**Previous Presentations:** Summary findings of this research were presented as a poster presentation at the annual American Pharmacists Association (APhA) conference in Nashville, TN March 2018 and the Northwest Convention in Coeur D'Alene, ID June 2018. It was presented as a podium presentation at the Northwestern States Regional Conference in Portland, OR May 2018.

### **IRB Exempt**

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#### References

- Mann, S. (2016). New AAMC research confirms looming physician shortage. AAMC Report. 2016. Accessed 23 Feb 2018.
- J Am Pharm Assoc (2003). 2018 May 24. pii: S1544-3191(18)30201-2. doi: 10.1016/j.japh.2018.04.027
- Hypertension. 2015 Dec;66(6):1145-51. doi: 10.1161/HYPERTENSIONAHA.115.06023. Epub 2015 Nov 2
- 4. <u>BMC Health Serv Res.</u> 2012 Sep 16;12:320. doi: 10.1186/1472-6963-12-320
- Hypertension. 2015 Dec;66(6):1145-51. doi: 10.1161/HYPERTENSIONAHA.115.06023. Epub 2015 Nov 2

Table 1: Physicians' responses as to which clinical services they would like pharmacists to offer (n=71)

Clinical Services Physicians would like Pharmacists to Perform						
	Review All Medications n (%)	Disease State Education n (%)	Refill Authorization n (%)	Therapy Modification n (%)	Follow-Up Care n (%)	Therapy Initiation n (%)
YES	60 (85)	54 (76)	50 (70)	41 (58)	29 (41)	19 (27)
NO	11 (15)	17 (24)	21 (30)	30 (42)	42 (59)	52 (73)

Table 2: Physicians that feel "Comfortable" or "Very Comfortable" having a pharmacist provide chronic disease management

