

Field Notes



Michigan Medicine and Meijer Pharmacy Program

Problem

One in three adults in Michigan has high blood pressure (hypertension) which increases the risk of adverse health events, including heart attacks, strokes, chronic heart failure, and kidney disease.²

Although pharmacists trained in medication management are able to effectively address uncontrolled hypertension, they are often underused in caring for and treating patients with hypertension.

Program

Michigan Medicine addresses hypertension by utilizing pharmacists in 14 primary care clinics and two Meijer* community pharmacies. The pharmacists, using the Pharmacists' Patient Care Process (PPCP), work with patients to help them develop strategies to address their hypertension. Partnering with Meijer expands the reach of the program to patients that prefer to receive care in a community pharmacy setting.

For more information:

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Overview

Michigan Medicine (formerly the University of Michigan Health System) is one of the largest health care systems in Michigan. It provides preventive and acute health care services for a diverse population in southeastern Michigan through hospitals, patient centered medical home (PCMH) primary care clinics, and specialty care centers.

Michigan Medicine helps patients with hypertension control their blood pressure by embedding ambulatory care pharmacists in patient care teams in 14 primary care clinics. Pharmacists provide disease management services for patients with hypertension using the Pharmacists' Patient Care Process (PPCP),¹ a five-step patient-centered approach to help patients optimize their health and medication outcomes. Collaborative Practice Agreements (CPAs) between the pharmacists and physicians enable pharmacists to initiate, modify, and discontinue medication therapies using defined protocols.

To reduce access barriers and expand the reach of the program, Michigan Medicine partners with Meijer, a regional American supercenter chain store and retail pharmacy. Meijer pharmacists serve patients in two community pharmacy locations that may be easier for some patients to access than health care clinics. They provide disease management services to Michigan Medicine patients with hypertension under a modified CPA. This collaboration is made possible by shared access to patients' electronic medical records (EMRs) between physicians, clinic pharmacists, and Meijer pharmacists.

Identifying and enrolling eligible patients from primary care clinics is the first step in the process. Pharmacists then follow the core components of the PPCP to collect, assess, plan, implement, and follow-up. Documenting care and communicating with the team underlies the entire process.

Core Component	Description
Identify and Enroll Eligible Patients	Primary care clinic patients are identified for pharmacist services through alerts built into the EMR. When an elevated blood pressure is recorded in the EMR, an alert prompts for a second reading. If the second reading is elevated, the clinician is provided an order to sign if they want the patient to follow-up with a pharmacist. Patients can meet with a pharmacist at the primary care clinic or at one of two local Meijer pharmacies, depending on their preference and convenience.
Collect	Before and during 30-minute, in-person meetings, the pharmacist collects information on the patient's medication adherence and side effects, blood pressure goals, and health priorities. The pharmacist reviews the patient's EMR for current diagnoses, medication allergies, medical history, current medications, medication history, current symptoms, lifestyle factors, and risk factors for cardiovascular disease.
Assess	The pharmacist assesses the patient's drug therapy to determine if there is the need to change, add, or discontinue any medications.
Plan	The pharmacist develops an individualized patient care plan using data collected and their assessment. Plans may include medication modifications, behavior change recommendations, and referrals to other providers.

*Meijer Inc. is an American supercenter chain with a range of departments including grocery, retail pharmacy, health, electronics, toys, sporting goods, home improvement, auto, clothing and jewelry.

Field Notes

Intended Participants

The intended participants of the program are patients of Michigan Medicine's primary care clinics who have hypertension or chronic diseases requiring medication management.

Michigan Medicine aims to have pharmacists serve all patients with hypertension. Across the 14 primary care clinics, approximately 1,332 patients with hypertension were served in 2017 by clinic pharmacists and approximately 514 additional patients were served by Meijer pharmacists.

Goals and Expected Outcomes

The primary goal of the Michigan Medicine/Meijer Pharmacy program is to achieve optimal hypertension control and management for patients using team-based care. Following the use of blood pressure alerts in the EMR and focused efforts on improving blood pressure control, hypertension control rates at Michigan Medicine increased from 72% in January 2016 to 77% in June 2018.

Expected outcomes for patients participating in the program include improved blood pressure control, improved access to pharmacists and other health care providers, and decreased cardiovascular disease. Michigan Medicine also hopes to strengthen relationships between primary care providers and pharmacists, improve efficient use of resources, and improve the quality ratings for the health care system.

Progress Toward Implementation

The ambulatory pharmacy program began in 1999 in one primary care clinic, funded by the University of Michigan College of Pharmacy. Since 2009, it was expanded to 11 clinical pharmacists and two postgraduate year 2 pharmacy residents embedded in all 14 primary care clinics. At the time, clinics received a subsidy (50% of the pharmacists' salary) from various sources; the subsidy has decreased over time. By 2017, the clinics began covering the full cost of the pharmacists.

The partnership with Meijer pharmacies began in 2016 in two community pharmacies in locations closest to the patient population in need of the service. The two Meijer locations are served by five pharmacists providing a total of 16 hours of patient care per week across the two locations. These pharmacists are funded by Michigan Medicine. Efforts are currently underway to expand to a third Meijer pharmacy location.

The program has made technological improvements over time. In February 2017, blood pressure alerts were built into the EMR system. In September 2017, an interactive voice response system was launched to provide automatic reminder phone calls to patients to measure blood pressure and upload readings into their EMRs.

Enabling Pharmacy Care

Michigan Medicine implemented a number of strategies to support the work of pharmacists in patient care. Blood pressure alerts ensure that all eligible patients are referred to a pharmacist. A CPA allows pharmacists to initiate, modify, and discontinue medication therapies and adjust medication doses. Onboarding protocols for both clinic pharmacists and Meijer pharmacists include practice guidelines, shadowing experiences, and training on the EMR system. Leadership support provides administrative oversight, including hiring and training the pharmacists, overseeing quality control, and serving as champions of the program. Additionally, the collaboration with Meijer, made possible by a modified CPA and shared access to patients' EMRs, has improved patients' access to pharmacy care.

Implement	The pharmacist provides the patient with tools and resources to plan menus, learn about nutrition, and track diet and activity level. The pharmacist instructs the patient on proper home blood pressure monitoring, including tools to upload readings into their EMRs. The pharmacist assists the patient with brainstorming strategies to improve their medication adherence. The pharmacist also works with the patient to identify and resolve financial barriers to medical care or medication use. A clinic pharmacist initiates, modifies, and discontinues medication therapies, as needed. A Meijer pharmacist "pends an order" recommending a medication modification or lab monitoring to the patient's primary care provider for approval within 24 hours.
Follow-up	The pharmacist schedules follow-up appointments with the patient approximately every 2 to 3 weeks until the patient has at least two appointments at their therapeutic goal. During the appointments, the pharmacist takes the patient's blood pressure and updates the EMR with any changes in the patient's medication adherence, side effects, or health priorities.
Document and Communicate	The pharmacist documents in the patient's EMR information collected, patient care plans developed, medication modifications made, and labs ordered. Communication between pharmacists and other care team members occurs largely through the EMR, but can take place during both formal and informal meetings between the pharmacist and the physician.

¹ Joint Commission of Pharmacy Practitioners. Pharmacists' Patient Care Process. 2014: 1-6. Available at: <https://www.pharmacist.com/sites/default/files/files/PatientCareProcess.pdf>.

² America's Health Rankings. Explore High Blood Pressure in Michigan—2017 Annual Report. Website: <https://www.americashealthrankings.org/explore/annual/measure/Hypertension/state/MI>.

