Embedding Pharmacists Into the Practice

Collaborate with pharmacists to improve patient outcomes

CME CREDITS: 0.5

How will this module help me to maximize the role of the pharmacist in my practice?

1. Details six STEPS to collaborate with a pharmacist or pharmacy technician and evaluate impact
2. Answers commonly asked questions around integrating pharmacists into your practice
3. Provides tools and resources to guide you through the process
4. Outlines case studies describing different approaches to collaboration

Hae Mi Choe, PharmD, University of Michigan College of Pharmacy, University of Michigan Medical Group, University of Michigan Health System

Connie Jean Standiford, MD, University of Michigan Health System, University of Michigan Medical School

Marie T. Brown, MD, FACP, Associate Professor, Rush University, American Medical Association
Increasing administrative responsibilities—due to regulatory pressures and evolving payment and care delivery models—reduce the amount of time physicians spend delivering direct patient care. Pharmacists and pharmacy technicians can be valuable contributors to patient care, especially when part of a team-based care model. This module explains how to determine your pharmacy needs and identify the right type of support for your practice.

**Embedded pharmacists: Maximizing team-based care**

**Release Date:** May 2017  
**End Date:** May 2020

**Objectives**

At the end of this activity, participants will be able to:

1. At the end of this activity, learners will be able to summarize ways a practice might consider collaborating with a pharmacist or pharmacy technician.
2. At the end of this activity, learners will be able to demonstrate how to integrate a pharmacist or pharmacy technician into a practice.
3. At the end of this activity, learners will be able to outline different approaches to collaborating with pharmacists or pharmacy technicians.

**Target Audience**

This activity is designed to meet the educational needs of practicing physicians, other clinicians and practice managers who may also be interested in this activity.

**Statement of Competency**

This activity is designed to address the following ABMS/ACGME competencies: practice-based learning and improvement, interpersonal and communications skills, professionalism, systems-based practice and also address interdisciplinary teamwork and quality improvement.

**Accreditation Statement**

The American Medical Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

**Credit Designation Statement**

The American Medical Association designates this enduring material for a maximum of 0.5 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Claiming Your CME Credit**

To claim AMA PRA Category 1 Credit™, you must 1) view the module content in its entirety, 2) successfully complete the quiz answering 4 out of 5 questions correctly and 3) complete the evaluation.

**Planning Committee**

Alejandro Aparicio, MD, CME Program Committee Advisor, AMA  
Marie T. Brown, MD, FACP, PS2 Senior Physician Advisor, AMA  
Bernadette Lim, Program Administrator, AMA  
Lisa Lipinski, Manager, Physician Education Resources, AMA  
Stacy Lloyd, MPH, Senior Practice Development Specialist, AMA  
Christine A. Sinsky, MD, FACP, Vice President, Professional Satisfaction, AMA

**Author(s)**

Hae Mi Choe, PharmD, Associate Dean of Pharmacy Innovations & Partnerships and Clinical Associate Professor of Pharmacy, University of Michigan College of Pharmacy and Director of Pharmacy Innovations & Partnerships, University of Michigan Medical Group, University of Michigan Health System  
Connie Jean Standiford, MD, University of Michigan Health System and Professor of Internal Medicine, University of Michigan Medical School  
Marie T. Brown, MD, FACP, Associate Professor, Rush University, Senior Advisor Professional Satisfaction and Practice Sustainability, American Medical Association

**Faculty**

Audrey Fan, MD, Assistant Professor, University of Michigan  
Angela Hardy, PharmD, Pharmacy Director, Family Physicians Group  
Tami Remington, PharmD, Clinical Professor and Clinical Pharmacist, University of Michigan College of Pharmacy and Health System

**About the Professional Satisfaction, Practice Sustainability Group**

The AMA Professional Satisfaction and Practice Sustainability group has been tasked with developing and promoting innovative strategies that create sustainable practices. Leveraging findings from the 2013 AMA/RAND Health study, “Factors affecting physician professional satisfaction and their implications for patient care, health systems and health policy,” and other research sources, the group developed a series of practice transformation strategies. Each has the potential to reduce or eliminate inefficiency in broader office-based physician practices and improve health outcomes, increase operational productivity and reduce health care costs.

**Disclosure Statement**

The content of this activity does not relate to any product of a commercial interest as defined by the ACCME; therefore, neither the planners nor the faculty have relevant financial relationships to disclose.

**Media Types**

This activity is available to learners through Internet and Print.

**Hardware/software Requirements**

Adobe Flash 9.0.115 or above  
Audio speakers or headphones  
Screen resolution of 800X600 or higher  
MS Internet Explorer 8.0 or higher, Firefox, Opera, Safari, etc.  
Adobe Reader 5.0 or higher

The project described was supported by Funding Opportunity Number CMS-1L1-15-002 from the U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services. The contents provided are solely the responsibility of the authors and do not necessarily represent the official views of HRSA or any of its agencies.

**References**


Pharmacists and pharmacy technicians can be valuable contributors to patient care, especially when part of a team-based care model. They can work with practices in a variety of roles, ranging from embedding a clinical pharmacist within your practice to building a collaborative relationship with your community retail pharmacist. Pharmacy technicians can also be an asset to a practice. However, the educational training of a pharmacist and a pharmacy technician varies greatly, and it is important to understand the roles and duties that each can perform as dictated by state law to determine which one would be the best fit for your practice.

While the focus of this module is to outline how embedding a pharmacist within your practice can improve the quality of care you provide for your patients, we will also touch on working with community pharmacists and pharmacy technicians, as these may be a better fit for some practices depending on practice needs. As we discuss how to embed a pharmacist within your practice throughout this module, we are referring to a clinical pharmacist unless otherwise indicated. This module contains a downloadable tool that will help you determine your pharmacy needs and identify the right type of support for your practice.

“Our clinical pharmacist is invaluable. From providing monthly talks on medications available for various conditions, to identifying patients that should/should not be receiving particular medications, what she does is greatly appreciated.”

Cornelius James, MD

Q&A

How can a pharmacist help me in my practice?

Pharmacists may optimize drug therapy according to agreed upon protocols by escalating therapy, deescalating therapy, substituting medications with safer and/or less costly alternatives, managing drug interactions, improving patient and team education and medication adherence, all in accordance with state laws for pharmacists. Pharmacists may also perform medication reconciliation for the most challenging patients with multiple comorbidities.
What is the difference between a clinical pharmacist and a retail or community pharmacist?

Clinical pharmacists optimize medication therapy and promote overall wellness and disease prevention. Within an ambulatory care clinic environment, clinical pharmacists manage chronic medical conditions, improve medication use and management and address medication adherence. Pharmacists provide medication therapy evaluations and recommendations to patients, physicians and other health care professionals.

A community or retail pharmacist works in retail and chain pharmacies located in drug and grocery stores. They may also own an independent pharmacy. They interact directly with the public but tend to have limited interaction with providers at a practice. Some community pharmacists also perform Medication Therapy Management (MTM), immunization services and patient counseling on various medications.

What does it mean to embed a pharmacist?

Embedding a pharmacist means fully integrating him or her within your care team and giving the same access to the medical record as other members of the team. Pharmacists will work closely with you and may see patients on their own clinic schedule for disease-specific management.

How does a pharmacy technician help me in my practice?

Pharmacy technicians can help streamline medication preauthorization and perform medication histories. While pharmacy technicians’ roles are more limited than those of a pharmacist, they often perform pre-visit medication histories and refill medications by protocol. Pharmacy technicians become a part of the care team much like medical assistants and other ancillary support staff.

Six STEPS to integrate Pharmacists into your team

1. Identify the roles pharmacists or pharmacy technicians can play
2. Decide how your practice can benefit from including a pharmacist
3. Find your pharmacist or pharmacy technician match
4. Prepare and set expectations for your team and patients
5. Determine the resources the pharmacist needs and the impact on the physician’s workflow
6. Measure impact

Identify the roles pharmacists or pharmacy technicians can play

Pharmacists’ roles vary in different practices depending on patient type, care team needs, financial considerations and state law requirements. In some practices, the pharmacist will perform pre-appointment medication reconciliation for the most complex patients, often over the phone a few days before the clinic visit. The pharmacist may also meet with individual patients to provide medication education, address barriers to adherence and answer patient questions.
In other practices, a pharmacist may perform medication reviews for high-cost, high-need and/or complex patients, and suggest to the prescribing physician opportunities to improve effectiveness, simplify the regimen, manage drug-drug interactions, improve medication safety or provide lower cost alternatives. The pharmacist may also be delegated prescriptive authority by the physician to increase or decrease medications according to agreed upon protocols for common conditions managed in the practice, including running anticoagulation clinics. Whichever duties a pharmacist handles within your practice, they must all be performed in conformance with state law requirements. To become familiar with the laws in your state, be sure to reference your state’s Pharmacy Practice Act.

When I have a patient with difficult to control diabetes or hypertension, I refer them to our clinical pharmacist. They are able to see the patient frequently, spend more time with them, and motivate them to change the many lifestyle factors that are crucial to managing chronic conditions. It makes my job much easier, and the patients are also very satisfied.

Yeong Kwok, MD

Q&A

How can pharmacists improve the outcomes of my patient population?

A pharmacist with access to your population data and medical records can look at your entire patient population to determine practice needs. For example, they could analyze your practice’s panel to identify patients who are not reaching A1c goals and then implement a practice-wide effort to improve goal attainment.

How can pharmacists improve the outcomes of individual patients?

Together, physicians and pharmacists can develop protocols to optimize drug therapy to achieve clinical outcomes. The pharmacist can identify medications that are no longer needed (deescalating therapy), which leads to fewer medication interactions and side effects, and can reduce costs and save time. Pharmacists can also perform “brown bag medicine reviews,” which involve patients packing up all of their medications and bringing them to a visit with the pharmacist. The pharmacist then goes through the bag and reviews all the medications to identify older and possibly discontinued medications, duplicate therapies, medications filled by another physician that the practice may not have been aware of. Pharmacists can also focus on improving medication adherence by identifying and resolving barriers for patients.

Can I create collaborative practice agreements for tasks like escalating therapy?

Yes, if your state law allows this. Use clinical care guidelines and evidence-based protocols as the foundation for the delegated protocols.

How can pharmacists help my patients with uncontrolled hypertension?

A pharmacist can teach a patient how to monitor their blood pressure at home and promote medication adherence. If collaborative agreements are allowed by state law, they may be able to adjust therapy to achieve blood pressure goals. The module toolkit contains an example of a delegated protocol for blood pressure treatment.
How can pharmacists help my patients with diabetes?

Physicians may find it helpful to co-manage certain patients with a pharmacist, such as patients with diabetes. For example, pharmacists can provide education, optimize lifestyle choices and titrate medication doses by protocol based on home glucose readings (depending on state law) for patients on insulin. Some practices have found that A1c levels improve in co-managed patients.

How can a pharmacist help educate the care team?

By being on site, the pharmacist can serve as a resource to the entire care team by providing updates regarding new medications, generic availability, guideline updates or other prescribing information. The pharmacist can inform the team about medications that are no longer recommended for geriatric patients or point out medications within a therapeutic class that are now available as generics.

"Our clinical pharmacist is a great help in sorting out how my elderly patients are setting up and taking their medications. They have the time to sort through pill bottles. They can discard expired meds, or meds no longer prescribed. They can advise on medications that may be discontinued or consolidated when there is polypharmacy. They can give me insight into whether a patient may be too impaired to safely manage their own medications."

Christa Williams, MD

Decide how your practice can benefit from including a pharmacist

Your resources and needs will determine whether you hire a pharmacist and embed them in your practice or identify alternative ways to benefit from their skills, such as sharing an embedded pharmacist with another practice.

Q&A

If I cannot embed a pharmacist into my practice, how can I collaborate with community pharmacists that my patients know and trust?

Give your patients copies of their chart or portions of their chart such as medication lists, visit summaries, lists of medical conditions and basic labs, to share with their community pharmacist. If you use OpenNotes, include a request in the note that the patient speak with their pharmacist about various issues and bring a copy of the note with them to the pharmacy.

Our practice has just received access to patients’ medication refill data. How can the practice best utilize this data?

The pharmacist can review the medication refill data while performing medication history or reconciliation with the patient. For example, a patient may initially state they are taking a medication but if the pharmacist sees that the prescription has not been filled for several months, she can address this with the patient in a non-judgmental manner. This process may also uncover barriers to adherence, such as cost, confusion or concerns about the medication’s safety.
Find your pharmacist or pharmacy technician match

It is important to find a pharmacist or pharmacy technician who shares your practice’s vision. This module contains a downloadable tool, Determine your pharmacy needs and identify the right type of support, to help practices identify the best match for their needs.

Q&A

What skills or qualities should I look for in a pharmacist that I want to embed in my practice?

• Experience in ambulatory care through residency/post-graduate training or in a patient-facing setting, such as another clinic
• Training in or have a desire to learn patient care techniques, such as motivational interviewing, medication therapy management and/or complex care management
• Empathy and compassion
• Ability to communicate with ease using plain language with patients and clinical language with the care team

Some of these same skills and qualities, such as listening with empathy and compassion and the ability to communicate with ease and in plain language, are also things you want to look for in a pharmacy technician.

Prepare and set expectations for your team and patients

Designate a physician champion who can explain to the team and other practice leaders the valuable role the pharmacist or pharmacy technician will play to enhance patient care. If you are planning to embed a clinical pharmacist within your practice, explain to the team exactly what this means by clearly defining roles and creating decision trees to lessen confusion and conflict. If you are planning to develop a relationship with a community pharmacist, offer guidance on your approach to sharing medical information and who on the team will be communicating with the community pharmacist about treatment plans.

Q&A

How can I encourage patients to work with the embedded pharmacist?

Create an introductory letter or biography of the embedded pharmacist to share with patients. Display a picture and description of the pharmacist’s services in the practice and/or on your practice’s website. A quick “meet and greet” during a patient’s visit with a physician can be the most influential approach to encourage patients to work with a new team member. Then, schedule the patient for a separate visit with the pharmacist if needed.

How do I determine the embedded pharmacist’s schedule?

There is no standard schedule for an embedded pharmacist. A practice of 10 physicians may have a need for a pharmacist onsite for one day a week. Another practice of only two physicians might also identify a need to have a pharmacist in the office two days a week.
How do I decide where to begin to use the pharmacist’s skills?

You may wish to develop a list of patients who could benefit from pharmacy services such as those with polypharmacy needs, uncontrolled diabetes or hypertension or those requiring anticoagulation management. Work with your electronic health records team to create a list of all complex patients for the pharmacist to risk stratify.

How much visibility does a newly embedded pharmacist need?

Initially, you will want to have the pharmacist physically in your office. This will help them develop relationships with patients, staff and other physicians. Start with fewer hours and build up. Consider scheduling pharmacist clinics for a half-day each week. As use increases, you can adjust the amount of time the pharmacist spends in the practice.

Can a pharmacist do virtual visits?

In-person interactions are useful initially to develop relationships with patients, the physicians and the care team. Once the pharmacist has established trust, they may be able to practice virtually as well, if allowed under applicable law. Virtual visits can be vital for reaching homebound patients. In some practices, embedded pharmacists often conduct a significant percentage of their visits over the phone to minimize travel to the clinic for patients.

What is the appropriate number of daily patient visits for an embedded pharmacist?

The number of patients per day will vary depending on the complexity of patients and type of services. However, once embedded pharmacists are up and running, it is reasonable to expect them to provide care to 10 to 16 patients per day either by phone or with in-person visits.

Michigan Medicine Patient Centered Medical Home (PCMH) pharmacists average 13 patients per day, with 45 percent of these visits occurring in the clinic and 55 percent in the form of phone consults. Phone consults are only done with established patients.

What type of agreements do I need to have in place with the pharmacist?

If you embed a clinical pharmacist, he or she may work as an independent contractor or an employee. The type of relationship the clinical pharmacist has with your practice will be outlined in the formal agreement between the two parties. These agreements need to comply with all federal and state laws and be drafted by competent legal counsel. If your practice is part of a larger organization, it is best to coordinate through the overarching administration.

5 Determine the resources the pharmacist needs and the impact on the physician’s workflow

How should I reorganize clinic and/or office space for the pharmacist’s needs?

You don’t have to overhaul your space when you embed a pharmacist. All they need is a private space with a desk, a phone and an exam room. The pharmacist can take advantage of any open exam room that gives privacy. They will need access to a computer in the exam room as well as common equipment such
as blood pressure monitors. The pharmacist or pharmacy technician should be co-located with other team members and attend the daily huddle.

**How are an embedded pharmacist’s services reimbursed by private payers?**

Review agreements with payers carefully to determine your options. Commercial health plans that focus on medication adherence and medication reconciliation during transitions of care may provide opportunities to reimburse care management services. Legal and coding specialists should be consulted as well.

**Does billing for services as “incident to” capture pharmacist services?**

The Centers for Medicare & Medicaid Services (CMS) defines “incident to” services as those services that are furnished incident to physician professional services in the physician’s office (whether located in a separate office suite or within an institution) or in a patient’s home. This gives non-physician practitioners, such as pharmacists, a potential mechanism for billing for their services that relate to the physician’s care plan.

CMS guidance indicates that pharmacists can bill Medicare for services as “incident to” physician services if certain requirements are met. Services must be within the pharmacist’s scope of practice as dictated by the state’s Pharmacy Practice Act, among other requirements. Check with your local CMS carrier for guidance.

Not all commercial health plans will reimburse for “incident to” services, so be sure to check your contracts before attempting to bill.

**What is a Medication Therapy Management (MTM) program?**

MTM programs focus on efficacy, safety and cost by improving medication use, reducing the risk of adverse events, preventing drug interactions, improving medication adherence and finding cost-effective treatment regimens. MTM is a covered benefit for all Medicare Part D beneficiaries who meet defined eligibility criteria. A pharmacist’s services under MTM include annual comprehensive medication review and quarterly targeted medication review.

**Are all MTM programs the same?**

No, there is no one checklist for delivering MTM. Check with CMS, the commercial health plans you contract with and local retail or community pharmacies to confirm if they offer MTM and what services their MTM programs cover. MTM can take place in a face-to-face visit or over the phone. There is no time restriction for delivering portions of this program. Payment depends on the contracted rate for the activity.

**Does a physician need to sign or review the pharmacist’s notes and medication changes? Does that change if we are sharing notes with patients?**

Scope of practice for pharmacists varies by state law and your organization’s policies. It is discouraged to establish a precedent where the pharmacist sends the physician all of their notes as this could increase the physician’s workload needlessly. Work together for several months and identify the types of notes that should be flagged for a physician’s signature or as an FYI. For instance, one practice asked the pharmacist to include one to two lines at the top of a significant note that summarizes the major changes for the physician. This summary captures changes in a patient’s condition or the addition of a new medication. Follow this same advice if you are sharing notes with patients by participating in a program such as OpenNotes.
What’s the most efficient way to involve the pharmacist in managing incoming requests and messages to the practice?

Decide what types of messages should flow directly into the pharmacist’s inbox or in-basket. These could include specific medication questions or problems and general guidance on treatment options. Next, assign the pharmacist to a specific clinician’s team pool. The team can redirect those notes that require the pharmacist’s attention. Refill requests should go to the team pool in-basket first. The medical assistant assigned to the team pool can then queue up that prescription for the pharmacist to review and approve per the collaborative practice agreement, if applicable under state law. This diverts the refill request from the physician’s in-basket to increase efficiency and productivity for the entire team. If your practice has a licensed practical nurse or registered nurse, they may also perform medication refills based on protocol instead of the pharmacist.

Does the physician always need to refer patients to the pharmacist?

Nuances of payment often determine who must refer patients to the pharmacist. For example, if you are billing Medicare for the pharmacist’s service as “incident to” a physician’s service, a physician will have to make the referral.

Measure impact

There are various ways you can measure the impact of embedding a pharmacist or pharmacy technician within your practice. Some suggestions on what to measure include:

- **Clinical outcomes**, such as improved blood pressure control or decreases in A1c levels for individual patients as well as the population as a whole
- **Impact on process metrics for a selected population**, for example, improvement in nephropathy screening for patients with diabetes
- **Monitoring/documenting medication changes** such as adding, discontinuing and adjusting doses of medications
- **Improvement in medication adherence** measured by self-reporting or pharmacy claims data
- **Decrease in medical and pharmacy costs**

Q&A

How do we know if patients are reacting positively to the pharmacist?

You can measure patient feedback and experience the same way you evaluate other patient satisfaction indicators: through a survey, informal conversations or direct discussions with your patient. Some practices add a question or two on their patient satisfaction surveys about the pharmacist’s services. Practices with embedded pharmacists have discovered that being able to schedule phone visits and provide frequent follow-up, as well as the pharmacist’s accessibility, are great patient satisfiers.
Our on-site pharmacist is an integral part of our efforts to better coordinate and provide continuity of care. The input provided is particularly helpful in the management of our complex patients with multiple chronic conditions.

Mark Fendrick, MD

Conclusion

Integrating pharmacy services into your practice’s offerings can have numerous benefits for patients and providers alike. Providers will have the added support they need to improve adherence, medication reviews and patient understanding. Whether you achieve this by working with a pharmacy technician or a pharmacist, your practice should be able to deliver more effective, higher quality team-based care. Remember that few interventions in history have improved the health of the world population as much as immunizations!

STEPS in practice

How’s it working in Milwaukee, WI?

Physicians, advanced practice providers and internal medicine residents in the busy Froedtert & Medical College of Wisconsin Internal Medicine Clinic (Froedtert clinic) handle hundreds of refill requests daily. To streamline this process, the clinic implemented standardized rooming protocols to help medical assistants capture accurate medication lists in the EHR during office visits. They also initiated a refill protocol to allow staff to refill medications on the medication list for patients who had been seen in the clinic within the last 12 months. The team tracked the time from refill request to completion against a goal of two business days. Despite these efforts, refill turn-around time ranged from seven to 10 days.

The team studied this performance gap and learned that:
1) When refill requests were not met within two business days, second and third requests for the same medication quickly doubled and tripled the number of incoming requests
2) Medical assistants who were entering paper requests into the EHR and performing at-visit medication reconciliation sometimes did not have the sophisticated medication knowledge to enter medications with complete and accurate directions in the EHR
3) Even when explicitly asked to bring their medication lists with them to their first visit, many new patients did not come to clinic with a complete and accurate list.

The Froedtert clinic’s pharmacy partners in the hospital saw an opportunity to showcase the pharmacy services located onsite. Together they explored the potential for pharmacy technicians to assist with medication refills in the clinical practice. Initially, the pharmacy provided financial support and was willing to fund two positions for the clinic: one position to manage refills and one position to call new patients to prep the chart for medications, allergies and immunizations before the visit. The second position allowed for coverage for refills when the first position was out of office, so that the practice didn’t fall behind on medication reconciliation and refills. Both technicians could access refill data, which improved the accuracy of medication reconciliation. Neither technician required training beyond basic EHR and clinic orientation.

Even though the pharmacy technicians were onsite for a full day when the clinic was open and were co-located with the nurses, they were not initially incorporated into the care team. During the clinic day, they managed an inbasket dedicated to refills. The team learned that having the pharmacy technician doing calls before new visits allowed them to explain their clinic processes, including the process for refills, and decreased the no-show rate for new visits. Both pharmacy technicians enjoyed their work, liking the ability to be more connected with patients and providers. Within one month, the practice was able to meet their two-day refill turn-around time goal, which is a significant driver of patient satisfaction in the practice. Additionally, the nurses’ work could be appropriately shifted to their skills: before the addition of the pharmacy technicians, 35 percent of the nurse encounters were for refills; this dropped to 10 percent after the pharmacy technicians joined the clinic. Physician involvement in refill encounters dropped from 16 percent to 14 percent after hiring the pharmacy technicians. Overall, the number of monthly refill encounters decreased by 6 percent.

Providers appreciated the pharmacy technicians, noting smaller numbers of inbox messages about refills and having the ability to forward “nuisance medication questions” to someone who could answer them more quickly. Providers found that the pharmacy technicians were the best team members to confirm adherence, determine fill dates and rectify medication questions with pharmacies. In other settings, it could make sense for pharmacy technicians to handle pre-authorizations, but the practice already had an insurance verifier who works with the pharmacy on these tasks.

Over time, the Froedtert clinic found that they could meet their refill goals with only one pharmacy technician on staff. While making this change saved money on the second technician’s salary, it did so at the expense of meeting priority goals, such as improving no-show rates, and providing coverage for the pharmacy technician when she took paid time off. Other primary care clinics in the hospital network see value in offering pharmacy services and are starting to emulate the pharmacy technician model in their clinics.

How’s it working in Northville, MI?

At University of Michigan Northville Health Center, working with a pharmacist who is onsite and fully integrated into the care team brings tangible benefits to providers and patients. Even before Northville was designated a patient-centered medical home, the providers saw value in developing a well-rounded team to serve their elderly population with complex medical needs. An embedded pharmacist has practiced alongside physicians for the last seven years and his role has grown with the practice, which has added three new physicians over that period.

One of the first conditions the pharmacist tackled was diabetes. By evaluating the practice’s quality and patient data, he was able to identify those patients who had poorly controlled diabetes. The pharmacist then approached each patient’s physician to determine how he could help. “Initially, there was a little hesitancy on the part of the physicians. We had been managing these patients, so it became a question of, ‘What can you help me with and what do I feel comfortable with?’” said Audrey Fan, MD, medical director at Northville. “We discovered that for a patient who was poorly controlled, an interim visit with the pharmacist meant that their diabetes was under better control when I saw the patient at their routine follow-up than they would have been otherwise. This allowed me to spend more time on the patient’s other concerns.”
Face-to-face interactions between physicians and the pharmacist were essential for this arrangement to function, both at the outset and to ensure sustainability of the programs the pharmacist developed. These interactions helped both sides appreciate the nuances of care being provided and simplified charting, since everyone had access to the same platform. Trust was established that translated into genuinely warm handoffs of patients from the physician to the pharmacist.

At Northville, the ideal arrangement has been to have the pharmacist build a patient panel. The primary referrers to the pharmacist are physicians, but physician assistants and the dietician can also refer patients with the physician’s approval. Eventually, as part of a system-wide initiative to address gaps in care, the group built in an automatic referral system for specific patients. For example, if the medical assistant noted an elevated blood pressure when checking vital signs, the patient was automatically referred, with physician approval, to the pharmacist for a recheck and further evaluation.

The pharmacist is introduced to patients in several ways. First, the practice created a short printed biography that included the pharmacist’s picture and described what services he offered. This bio is available in the exam rooms to hand out at the end of visits. Second, physicians and team members verbally explain to patients how the pharmacist can help them. Lastly, providers sometimes introduce the patient and pharmacist through a warm handoff. The physicians emphasize to the patient that they provide care as a team and that the pharmacist can help physicians deliver on their promise of high-quality care. In a small practice, this is easy to do and is often the most effective way to help patients become comfortable with the pharmacist as a new team member.

At Northville, it took some time for the pharmacist to ramp up his projects and patient panel. The schedule evolved from one half-day in the clinic seeing five to six patients to three full days in the clinic following up with eight to 10 patients each half-day. In addition, some of the initial face-to-face time was converted to telephone visits for follow-up, especially for patients with diabetes, because it was very easy to gather measurements over the phone to evaluate the response to treatment. During downtimes, the pharmacist helps the practice comprehensively assess quality. He pulls patient lists and reviews charts to assess measures for diabetes and chronic kidney disease to see if patients are on track. With delegated protocols, he is able to update medications and improve metrics.

Today, the pharmacist’s role has expanded to include medication reconciliation and evaluation for elderly patients. Using a combination of familiarity with Beers Criteria for Potentially Inappropriate Medication Use in Older Adults, knowledge of drug-drug interactions, ability to readily identify less costly alternatives to medications that help patients bridge gaps in their prescription coverage and delegated protocols, the pharmacist is able to assist with medication management, including the ability to discontinue, adjust or add medications as needed with physician input and approval.

Physicians and patients at Northville are very satisfied with the pharmacist and pharmacy services offered. Physicians have been able to shift patients so that their schedule can accommodate more complex cases that require their expertise. Patients report that they like working with the pharmacist so much that they don’t want to stop seeing him when they reach their treatment goals. Patients are huge fans of the pharmacist and appreciate being able to see how Northville prides itself on delivering care as a team.

How’s it working in Michigan?

Started in 1999 by Hae Mi Choe, PharmD, at a single primary care practice, the University of Michigan Medical Group’s embedded pharmacist program has since expanded to include 14 sites and 11 pharmacists and is now both robust and successful.

“Pharmacists have extensive knowledge and training in disease management and education, but physicians weren’t fully aware of these skills. I knew I could be a valuable contributor to the team, but I needed to find a way to incorporate myself into the practice and demonstrate that value,” says Dr. Choe. At the time, diabetes prevalence was increasing in Michigan, but the complexity of treatment regimens and the condition itself prevented management programs from keeping pace. She saw an opportunity to work with providers in her clinic to create and implement a diabetes management program.
Dr. Choe developed a program that focuses on therapeutic management and lifestyle education services for patients with diabetes. She viewed the program as a way to enhance and supplement the care that patients were already receiving from their physicians. Initially, she took the initiative in establishing relationships with the physicians and introducing herself to patients. Her gregarious personality and enthusiasm opened the door for her to demonstrate her competence and capabilities. The physicians soon started referring their patients to her. It took a year to build up a patient panel that she co-manages with the physicians.

Warm handoffs and a quick three-sentence introduction were instrumental to her success. “All the physician needed to say was: ‘I have an excellent pharmacist who works with me in the clinic. She can really help you with your high blood sugar levels and medications. Schedule an appointment with her on your way out,’” said Dr. Choe. “That 30-second introduction from the physician went a long way toward making patients feel comfortable with me.”

She started out seeing three to four patients per half-day at the time of the program launch. Her patient panel grew to an average of eight patients per half-day within the first year after launch. Eventually, she was seeing approximately 18 patients a day, but Dr. Choe acknowledges that this is likely not going be the norm for most clinics. Over time, Dr. Choe’s responsibilities expanded to include training medical assistants and nurses to help them prepare refill requests and answer patient questions. Training topics included a review of common drug names and classes and overviews of recently-approved medications, their indications, mechanisms of action and common side effects. These trainings were very well-received and became part of the value proposition as the program expanded to other sites.

Dr. Choe also took on the task of evaluating the practice’s quality performance to identify opportunities to improve care. She gathered and shared data on baseline practices (e.g., proportion of patients with glycemic or blood pressure control), and explained to her physician colleagues why it was important to address them. This fed into larger quality improvement (QI) efforts that prompted Dr. Choe to start a weekly QI huddle. The huddles include a physician, a medical assistant, a clerical staff member, a nurse and a clinic manager. In these 15-minute huddles, held every Thursday, the group has been able to pinpoint problematic workflows and formulate new ones to improve process and quality. Together, they have developed and implemented an asthma action plan, a controlled substance tracking program and an emergency room follow-up process.

Becoming an integrated team member was not without its challenges. Creating awareness about what pharmacists can and should do was the first hurdle to clear. Dr. Choe overcame this barrier by setting appropriate expectations, educating her colleagues and reinforcing the incremental improvements that they were witnessing.

“Hae Mi was very proactive from the start. She took the time to learn how we practiced day to day, and ran her ideas past us to see if they could be implemented. She focused on determining on how things would work in the real world, rather than just in the abstract. She made sure that the interventions actually made a difference, and when they didn’t, she modified them, or started over.”

David A. Cooke, MD, FACP, Michigan Medicine East Ann Arbor Health Center and Burlington Back and Pain Center

References

Get implementation support

The AMA is committed to helping you implement the solutions presented in this module. If you would like to learn about available resources for implementing the strategies presented in this module, please call us at (800) 987-1106 or click here to send a message to StepsForward@ama-assn.org

The project described was supported by Funding Opportunity Number CMS-1L1-15-002 from the U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services. The contents provided are solely the responsibility of the authors and do not necessarily represent the official views of HHS or any of its agencies.

References


