

# The Ohio State University General Internal Medicine Clinics COLUMBUS, OH

**Authors:** Kelli Barnes, PharmD, BCACP and Stuart Beatty, PharmD, BCACP, FAPhA  
**Contact:** *Kelli.Barnes2@osumc.edu*

Practice Site Details	
DETAIL	SITE INFORMATION
Practice setting type	Health-system general internal medicine clinics
Value-based model type	Network of 6 PCMHs within an ACO
Number of pharmacists	6.5 FTE
Number of clinics/patients covered by pharmacists	6 clinics with more than 75,000 patient lives
Funding model of pharmacists (salaried, contracted, leased, other)	Salaried employees of the practices (5.3 FTE) Shared-faculty pharmacists (1.2 FTE)
Delivery mode for patient visits	Face-to-face, telephone, secure patient portal, and video visits
Average duration of pharmacist visit	5-60 minutes
Collaborative practice agreement in place	Yes; CPAs for diabetes, hypertension and smoking cessation currently. Have ability to order/change medications, order labs, place referrals, etc.
Billing codes used	<ul style="list-style-type: none"> <li>■ Incident-to (99211) for comprehensive medication reviews or disease management visits</li> <li>■ Transitional Care Management codes (99495, 99496) billed by provider, and includes pharmacist and other healthcare professional involvement</li> <li>■ MTM codes (99605-607) for several private insurers</li> <li>■ OutcomesMTM claims</li> </ul>

## Background

The Ohio State University General Internal Medicine Clinics (OSUGIM) are a network of six National Committee for Quality Assurance tier-3 patient-centered medical homes (PCMH) affiliated with a large academic medical center and a part of a CMS shared savings program accountable care organization (ACO). A total of 59 attending physicians, more than 100 medical residents, nine pharmacists (comprising 6.5 FTE), two pharmacy residents, 20 nurse practitioners, 27 nurses, nine social workers, and medical assistants collaborate to provide care for more than 75,000 patients.

The pharmacist practice model was created in 2006, when one shared-faculty member started providing patient care services and education to medical residents two half days per week in one clinic. Over time, the clinics started to embed additional shared-faculty members leading to the implementation of innovative practice models for chronic disease state management, population health management, and transitional care management. Due to the demonstrated value of the embedded pharmacists, the PCMH network began hiring pharmacists fully in 2015.

As reimbursement shifted toward value-based payment models, a group of practice leaders, which included clinic administration, clinic lead physicians, and the network's lead pharmacist, started to examine which healthcare providers and personnel were necessary to build efficient, successful primary care teams. When thinking about allocation of resources, the group commonly referred to a publication by Patel, et al which summarized successful PCMH administrators' recommendations for PCMH staffing infrastructure.<sup>1</sup> This led OSUGIM to invest in a care delivery model with one pharmacist per five clinical full time equivalents of primary care physicians.

## The Model: How it Works

Currently, OSUGIM pharmacists provide a variety of primary care services for complex

patients. Pharmacists provide a hybrid of scheduled and on-demand patient care. Additionally, each pharmacist provides population health management using patient registries and EMR-reporting capabilities. Each clinic has a pharmacist schedule template that is used to schedule patients to see a pharmacist for an office visit. In between scheduled patient visits, OSUGIM pharmacists also see patients on demand, at the request of another provider during that provider's office visit, and contact patients via telephone or secure patient portal to provide additional care. Within this model, medical assistants are used to support scheduling and rooming patients. There are plans to hire a pharmacy technician for support.

OSUGIM pharmacists are providing chronic disease state management, transitional care management, population health management, and polypharmacy care with a focus on deprescribing. Patients needing pharmacist-provided care are identified through referral from another provider, pharmacist-initiated contact, and EMR-generated reports/data analytics. Regarding pharmacist-initiated contact, pharmacists screen the daily clinic schedule to identify patients who could benefit from pharmacist management based on their hemoglobin A1C, blood pressure, estimated glomerular filtration rate, and medication lists.

### **Chronic Disease Management**

OSUGIM pharmacists provide chronic disease management through use of collaborative practice agreements (CPAs) in accordance with state laws and institutional regulations. These CPAs allow OSUGIM pharmacists to initiate, titrate and discontinue medications and order and interpret lab tests for medication monitoring. Currently at OSUGIM, diabetes, hypertension, and smoking cessation CPAs are utilized. Patients are referred for management by a pharmacist through use of warm hand-offs by another provider in clinic and through use of EMR-generated reports used to identify patients with poorly controlled disease states.

Care is provided through a combination of office visits, telephone contact and secure patient portal messaging. Outcomes are tracked for individual patients and contribute to quality metric tracking for value-based contracts.

### **Transitional Care Management**

OSUGIM pharmacists started providing transitional care management (TCM) in January of 2013 when the Centers for Medicare and Medicaid Services (CMS) released the TCM-specific billing codes. These current procedural terminology (CPT) codes require a patient be contacted by a licensed clinical staff member within 2 business days of discharge from an acute care setting and to have a face-to-face visit with a physician within 7 to 14 days. After the face-to-face visit, the physician can bill the TCM codes, which reimburse at a higher rate than a typical level 4 or 5 physician office visit.<sup>2</sup>

Initially, TCM occurred as a result of the patient's primary care provider (PCP) requesting a pharmacist contact the patient for TCM because the PCP felt the patient was at high risk for readmission. As the OSUGIM pharmacy team grew and payment shifted to a value-based model, OSUGIM clinics refined the TCM workflow to reach a larger number of patients during this high-risk period. To do this, EMR-generated reports were created to identify all patients discharged from an OSU medical center or emergency department (ED). An EMR-generated readmission risk score was included on the reports and used to risk-stratify patients for pharmacist or nurse outreach. Currently, pharmacists contact patients at highest risk for readmission and nurse care coordinators reach out to patients at moderate risk for readmission.

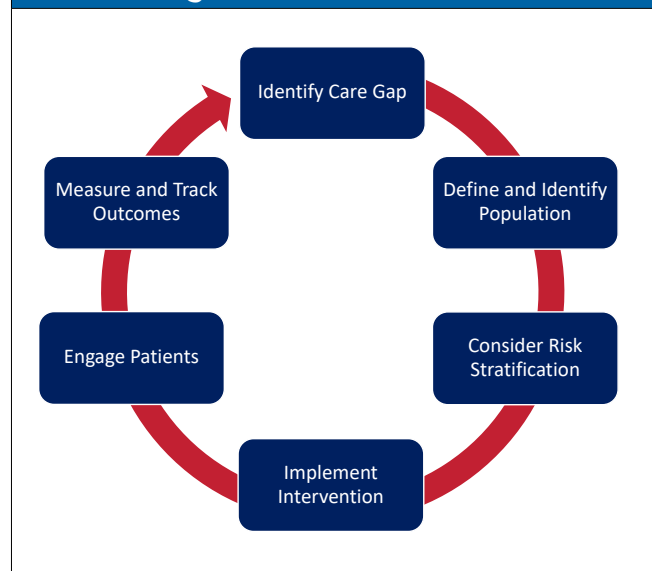
OSUGIM pharmacists and nurses complete 700 to 800 TCM outreaches per month on average, with ~25% completed by a pharmacist and 75% completed by a nurse care coordinator. TCM call times vary, commonly taking 5 to 20 minutes per call. Initial analysis of TCM

outreach effectiveness compared the rate of hospital readmission and ED visits within 30 days in patients contacted by a pharmacist for TCM compared to patients that did not receive TCM. This analysis showed 20% fewer readmissions and 53% fewer ED visits within 30 days of initial admission for the highest risk patient group. This data is used to support the necessity of a high performing pharmacy team.

### **Population Health Management**

OSUGIM pharmacists started providing population health management in 2010 by using systematic, targeted interventions to improve outcomes associated with chronic disease management, preventive health, and high-risk medications.<sup>3-6</sup> To provide population health management, OSUGIM pharmacists follow the workflow shown in Figure 1.

**Figure 1. OSUGIM Pharmacist Population Health Management Workflow**



Care gaps are identified by providers or pharmacists during routine patient care or through use of data analytics identifying areas where disease state or healthcare utilization outcomes could be improved. The patient population is then defined, typically by a specific demographic, disease state or

high-risk medication. Patients in the population are identified through use of EMR reporting capabilities. A data analytics staff is shared between the entire division of General Internal Medicine, who provides support for identifying these patient populations.

Once patients are identified, risk stratification may be completed to identify the portion of the population that would benefit most from an intervention and ensure that the intervention can be completed with available resources. Once the patients are identified and risk stratification is considered, proactive, targeted, evidence-based interventions are implemented to improve outcomes. Interventions are most successful when pharmacists engage patients in informed decision-making regarding changes to medication therapy or recommended medical care. Finally, outcomes are measured and tracked within the EMR and the process is analyzed for quality improvement.

### ***Polypharmacy and De-prescribing***

OSUGIM pharmacists play a key role in polypharmacy management through comprehensive medication reviews. Medication reviews occur through scheduled pharmacist visits, scheduled team-based visits with a provider and pharmacist, and also on demand during other provider visits. Comprehensive medication reviews can be requested by another provider or initiated by the pharmacist reviewing clinic patient schedules and identifying patients who could benefit from the service. Pharmacists also use medication therapy management platforms to provide and bill comprehensive medication reviews.

### **Sustainability and Outcomes**

Since inception, OSUGIM pharmacists have worked to financially justify the pharmacist-provided care in a fee for service system through use of incident-to and OutcomesMTM billing. Additionally, pharmacists supplement

low levels of fee for service reimbursement by showing time savings and improved accessibility for other providers and improving clinical outcomes and medication safety. In January of 2013, CMS released the TCM billing codes described above and OSUGIM pharmacists sought the opportunity to take responsibility for TCM to further justify the pharmacist-provided care. Because these TCM codes result in higher payment than a typical level 4 or 5 physician office visit, the supplemental amount, meant to support the TCM happening between hospital discharge and hospital follow-up visit, can be attributed to the work of the pharmacist completing that work.

Currently, each of the OSUGIM clinics is enrolled in the CMS alternative payment model, Comprehensive Primary Care Plus (CPC+), Ohio Medicaid's Comprehensive Primary Care (CPC) program, the CMS Million Hearts Initiative, and several other shared-cost savings payment models with private payers.<sup>7-9</sup> OSUGIM pharmacists provide care that contributes to achievement of quality metrics resulting in performance-based incentive payments and care management fees. Impact on quality metrics is tracked so the value of the pharmacist can be assessed and communicated. To do this, OSUGIM pharmacists have transitioned to documenting in EMR documentation formats that contribute to tracking quality metrics and can be integrated into reports for quick analysis of outreach volume.

OSUGIM pharmacists work to track improvement in mean A1C, percentage of patients with A1C >9% and percentage of patients with BP <140/90. Additionally, pharmacists track the percentage of TCM outreaches completed per patients discharged from an OSU facility and track the improvement in ASCVD risk scores for high risk primary prevention cardiovascular patients enrolled in the Million Hearts Cardiovascular Disease Risk Reduction Model.

## Innovations/Future Plans

Future plans focus on expanding chronic disease management through collaborative practice. We are working to identify models of care that allow pharmacists to function as the chronic disease care provider and increase access to our physician providers for higher acuity care while also achieving better health outcomes for our patients. We are also exploring the creation of collaborative practice agreements for management of depression and anxiety.

## Key Lessons Learned

- Pharmacist accessibility and visibility in the clinic is imperative. Shared working spaces facilitate collaboration.
- Working closely with other members of the healthcare team results in mutual trust.
- Use of clear, concise, and timely communication with the healthcare team maximizes the efficiency and impact of patient care that can be provided by a pharmacist.
- Understanding and sharing in the practice's care goals helps to establish and expand pharmacy practice in a PCMH or ACO. By working toward shared goals, the pharmacist becomes an indispensable part of the healthcare team.
- Creating a sustainable practice model allows for expansion of the pharmacy team and pharmacist scope of practice.
- Flexibility and adaptability are crucial for optimizing opportunities for pharmacist-provided care in an ever-changing healthcare environment.

## References

1. Patel MS, Arron MJ, Sinsky TA, et al. Estimating the staffing infrastructure for a patient-centered medical home. *Am J Manag Care*. 2013;19:509-16.
2. Centers for Medicare and Medicaid Services. MLN Fact Sheet: Transitional care management services. January 2019. Available at: <https://www.cms.gov/outreach-and-education/medicare-learning-network-mln/mlnproducts/downloads/transitional-care-management-services-fact-sheet-icn908628.pdf>. Accessed June 7, 2019.
3. Otsuka SH, Tayal NH, Porter K, et al. Improving herpes zoster vaccination rates through use of a clinical pharmacist and a personal health record. *Am J Med*. 2013;126:832 e 1-6.
4. Barnes KD, Tayal NH, Lehman AM, Beatty SJ. Pharmacist-driven renal medication dosing intervention in primary care patient-centered medical home. *Pharmacotherapy*. 2014;34:1330-5.
5. Matthews DE, Beatty SJ, Grever GM, et al. Comparison of 2 population health management approaches to increase vitamin B12 monitoring in patients taking metformin. *Ann Pharmacother*. 2016;50:840-6.
6. Coffey CP, Barnette DJ, Wenzke JT, et al. Implementing a systematic approach to deprescribing proton pump inhibitor therapy in older adults. *Sr Care Pharm*. 2019;34:47-55.
7. Centers for Medicare and Medicaid Services. Comprehensive Primary Care Plus. Available at: <https://innovation.cms.gov/initiatives/comprehensive-primary-care-plus/>. Accessed June 7, 2019.
8. Ohio Department of Medicaid. Comprehensive Primary Care Program. Available at: <https://www.medicaid.ohio.gov/Provider/PaymentInnovation/CPC>. Accessed June 7, 2019.
9. Centers for Medicare and Medicaid. Million Hearts Cardiovascular Disease Risk Reduction Model. <https://innovation.cms.gov/initiatives/Million-Hearts-CVDRRM/>. Accessed June 7, 2019.