



## Build, manage and sustain: *Lessons from CMM practices at different levels of maturity*

**H**ow do you eat an elephant? One bite at a time. That's not just an old joke: It's one of the themes of a recent discussion facilitated by M. Shawn McFarland, PharmD, FCCP, BCACP, manager, National Clinical Pharmacy Practice Program and the Clinical Practice Integration and Model Advancement, Clinical Pharmacy Practice Office, Pharmacy Benefits Management Services at the Veterans Health Administration.

Representatives from mature, moderately established and new CMM practices shared their insights. Several themes emerged, including that a CMM program doesn't have to jump immediately from concept to full maturity but needs a plan to move in that direction. This includes the need to measure results from day one, make itself visible to

clinicians and organizational leadership and provide consistent CMM services across all practice areas.

### Seasoned practice: CMM before CMM

Amanda Brummel, PharmD, BCACP explained how MHealth Fairview was doing CMM before CMM existed.

The integrated health system based in the Twin Cities has clinics across Minnesota, including 12 hospitals and around 3,300 providers. "We have a comprehensive pharmacy services model. I liken it to ice cream: We have pretty much every flavor of ice cream that you can have within pharmacy services, except for maybe nuclear pharmacy," she explained.

CMM practice sites are located across the MHealth Fairview system

and affiliated clinics. Each CMM clinic site has their own patient care schedule. Both in person and tele-medicine visits are available. Typical visits are 30 – 60 minutes in length.

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*Amanda Brummel, PharmD, BCACP*

## Program snapshot

The CMM program launched in 1997, in partnership with the University of Minnesota College of Pharmacy. Currently it consists of

- 49 pharmacists at 53 locations
- 39 primary care clinics, 14 specialty clinics
- 4 PGY-1 residents (primary care)
- 14,000+ patients with 32,000+ encounters in 2021
- About 75% of the systems contracts include financial risk
- Referral sources: patient's physician (about 50%), EHR/registry alerts & health plan referrals
- Evenly split between in-person and virtual visits (both telephonic and video).

In large part, Brummel and her colleagues had to figure it out as they went along: "When we first started out in practice, pharmacists weren't even recognized to be billing for services directly with payers. There was no MTM, no CPT codes. We didn't even have NPI numbers for pharmacists at the time."

This changed in 2006: Minnesota Medicaid allowed pharmacists to be reimbursed for medication

management services. That same year, Medicare part D began. "We were able to start to contract and be credentialed with our payers for services.. That really helped." From there, the practice continued to contract directly with health plans and employers and our system continued to move in its journey toward taking on more financial risk.

"It's important to look at our outcomes and to look at the value that we're providing." This needs to be top of mind from day one, and it needs to include all four elements of the Quadruple Aim: Enhance patient experience, improve population health outcomes, reduce total costs and improve the work life of providers/care teams.

Figure 1 (see next page) illustrates some of the MHealth Fairview outcomes; patient and provider experience both fall in the humanistic category.

## Intermediate: Focusing on the most at-risk

Richard Bone, MD, Senior Medical Director for Population Health, Advocate Medical Group, talked about CMM at Advocate Aurora Health (AAH), an integrated system with over 500 sites of care in Illinois and Wisconsin. It has more than 1.3 million value-based lives and, he reported, was the top performing ACO in the nation, with \$110 million in savings in 2020.

The progressive Clinical Pharmacy Practice includes 36 residency-

trained PharmDs delivering ambulatory clinical pharmacy services. Embedded PharmDs reside in legacy clinics with the largest volume of risk contracts. They are strategically placed to support high risk, highly complex patients with co-morbid conditions and social determinants of health.

Bone focused on one AAH CMM program: the South Chicagoland CMM, launched in 2009.

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*Amanda Brummel, PharmD, BCACP*

## The practice snapshot:

- Interdisciplinary team that includes seven contracted faculty PharmDs, eight employed PharmDs and one PGY2
- Primarily face-to-face with some telephonic follow-up; 60-minute initial visit, 30-minute follow-ups
- 8,152 patient encounters in 2021
- Mostly risk-based arrangements, including full-risk capitation

Admissions to the CMM program come from several sources, including predictive modeling (EHR risk scores). Care managers and physicians can make referrals. Patients who come in with diabetes or congestive heart failure (CHF) are referred to the program.

## Diabetes and CHF outcomes, Sept. 2020 to Aug. 2021

- 2,493 patients
- 1.8% reduction in A1C
- 80% patients with blood pressure below 140/90
- 6,400+ medication adjustments
  - 85% patients taking statin and 78% patients taking ACE/ARB
  - 22 in-office treatments for hypo/hyperglycemia
- Nearly 60% of the patients with ejection fraction above 40

He then went on to offer advice for starting a program:

1. **Physician support:** That starts with finding a physician champion. The next step is to educate physicians—not just about what CMM is, but how it improves clinical outcomes. “That’s what’s really important to providers and provider organizations.”
2. **Scheduling and workflow:** Once physicians are onboard, coordinate with their schedules so that when the patient finishes seeing the physician, they can see the pharmacist in the same visit. “You need to have a consistent workflow across all the offices. We are in multiple offices, and you want to make sure the same thing is happening in each,” he said. “That includes standard documentation, standard metrics and consistent use of the EHR.”

3. **Skilled team members:** “You need to get the right person at the right site.” It helps to have a residency program. “They rotate through, and it gives us a chance to really pick the people we’re interested in. Skill is essential, but they need to share your philosophy.”

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*Richard Bone, MD*

Clinical	Economic	Humanistic
<ul style="list-style-type: none"> <li>■ The percentage of <b>diabetes patients optimally managed</b> was significantly higher for MTM patients compared to the year earlier (21.49% vs.45.45%, P &lt; 0.01).</li> <li>■ Patients who received a comprehensive medication visit from our pharmacist had a <b>33% lower rate</b> of 30-day readmissions than patients who did not.</li> <li>■ MTM services resulted in <b>improvement of medication adherence</b> with statins, ACEI/ARBs, and B-Blockers</li> </ul>	<ul style="list-style-type: none"> <li>■ An average <b>12-to-1 return</b> on investment in terms of reduced overall healthcare costs.</li> <li>■ An employer analysis showed that for <b>each \$1 of CMM billed costs an average of \$8.98 savings</b> of total health care costs occurred.</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>95%</b> of patients rate their pharmacist as a 9 or 10- top box.</li> <li>■ <b>69% of patients strongly agree</b> that their pharmacist helped them to be more confident in managing their medications.</li> <li>■ <b>88% of providers strongly agree</b> that they would recommend CMM to their patients.</li> <li>■ <b>87% of providers strongly agree</b> that they feel confident in the recommendations given.</li> </ul>

Figure 1

Focusing on health equity is a really big issue with us.”

4. **Collaborative practice:** CMM is a collaborative, interdisciplinary process that includes a defined

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*Amanda Brummel, PharmD, BCACP*

scope of practice for the PharmDs. Partners can include physicians, nurses, PAs, NPs, case managers, palliative care and others as needed.

5. **Managing growth:** CMM/ pharmacy leadership needs to be integrated within the larger health system. It’s essential to keep track of volume and capacity and adjust staffing accordingly. “And then, obviously, you want to leverage technology for innovation and efficiency.”

### New practice: Keeping it comprehensive

Sara Maki, PharmD, BCACP, clinical pharmacy specialist at North Memorial Blaine Clinic, established the CMM practice in 2020.

### The practice snapshot:

- Serves 10 family medicine providers and three pediatric providers at her site, plus 10 providers at two other primary care clinics
- Four PharmDs practicing CMM, service available to patients at all 14 primary clinic in the health system
- More than 75% of referrals from primary care providers at these three clinics; other referral sources: bariatric surgeons (about 10%), insurance referrals (about 10%), other health care team members (about 5%)
- One hour a day spent on administrative tasks
- Meets with five to seven patients daily:
  - Evenly divided between new and follow-up visits
  - About 60% of the visits are in person, 40% are virtual
  - Average number of meds per patient: 13
  - Average number of medication therapy problems per month: 100+

## Put your practice on the registry

We created the GTMRx National Registry of CMM Practices® on Dec. 31, 2021 to showcase where CMM is occurring and provide better resources for emerging and existing CMM practices.

As of October 2022, we have:

- **166** Total respondents
- **2,123** Total CMM sites (underestimate)
- **65** Total health care systems
- **98** Total individual sites



Is your practice included? If so, thank you. If not, please visit [gtmr.org/the-national-registry-of-comprehensive-medication-management-practices-by-the-gtmrx-institute/](https://gtmr.org/the-national-registry-of-comprehensive-medication-management-practices-by-the-gtmrx-institute/) to add your organization to the registry.

She provides comprehensive medication management but mostly serves people with diabetes. “That’s kind of where I’ve landed in my role here, partly by design, partly by accident.” That’s because she

specializes in continuous glucose monitoring and serves on North Memorial's A1C quality improvement work group.

"We identified 187 patients who were part of this pilot group who needed follow-up for diabetes due to uncontrolled A1C. About half (87) saw their primary and completed a referral to either the pharmacist, the diabetes educator or the endocrinologist. "And I am very happy to report that the best outcomes were in the pharmacy group: 63% of the patients who saw a pharmacist had an improvement in their A1C in about six months."

She struggles with being "the diabetes pharmacist." But she practices CMM. Patients may be referred for diabetes management, but they're on an average of 13 meds, which opens the door to a comprehensive review. Diabetes is just a starting point. "We then expand along the way into this comprehensive model."

## Fidelity and comprehensiveness

"One thing I learned very early on was, 'Yes you have to be comprehensive, but you don't have to get to everything in one visit,'" Maki said. "We always want to be looking at all of the disease states and all of the meds, but we have to prioritize. It's really been helpful for me to say, 'okay, we can take a chunk of this and then next time we'll get to the other chunk.' And then at the third visit, we put it all together."

Once providers understand that you are doing comprehensive medication management, they start asking for help, and the CMM practice begins to grow organically, she reported.

Brummel offered a similar insight. It's a misperception that, if someone is referred to you for diabetes care, you aren't practicing comprehensively. "You're focusing in on their diabetes that day (and any other urgent items), but you're bringing the patient back for follow-up—and that is another key piece of our practice model. We are following up with the patient." Because it's not a one-time encounter, it's ok to focus on a condition or two, especially that first visit.

"Being comprehensive means you're looking at everything, but you're taking care of the patient's need at the time that they're there." That's why that follow-up is so important. Again, everything doesn't all have to happen in one visit. "Also, sometimes it's not good for the patient if you're trying to get it all done in one visit, because there's only so many things that they can take in and comprehend."

At the same time, fidelity is essential. "Fidelity of practice—making sure we're providing consistency across all practices—was really important to us from a network standpoint." A physician may say "Well, I just want you to look at their medications for diabetes." That's a hard *no* for Brummel. "As I look at my patient care practice, I need to

look at the patient holistically. It's not fair to the clinical pharmacist. No one would tell the provider, 'I don't want you to look at something else that's going on—only look at this,' right?"

To keep the fidelity of a comprehensive practice, you must be firm with your practice model, she said.

## Collaborative practice agreements: Make them centralized

Maki launched her practice without collaborative practice agreements (CPA) in place. "We started with nothing, but here we are, and it has only been two years. So, I hope you don't see the lack of a collaborative practice agreement as a barrier," Maki said.

Other pharmacists had individual CPAs with providers. "We found that was not effective; we were not giving the same care to the patients across our system." She pushed hard for change, winning support from the medical director. Now the CPA covers all four pharmacists and all the primary care providers across the health system.

Brummel, too, started with individual CPAs. But that soon changed based on provider feedback. The centralized CPAs are based on medication class, and the medical director signs off on them. Having centralized agreements across the system helps ensure fidelity. "It allows us to provide the same level of care in any of our primary care sites"

McFarland and Bone noted that their organizations, too, used centralized CPAs.

## One piece of advice

McFarland asked each participant to offer one piece of advice to those starting new CMM programs.

**MAKI: Visibility matters.** “I was lucky to move into a system that was ready for a pharmacist, Maki said. There was some exposure to pharmacy in the past, but I’m the first person who’s ever been here. It took a lot of walking around and saying, this is what I do, and this is what I can help you with, and going to those other clinics, meeting those providers and letting them know what I can help with.”

Visibility requires one-on-one conversations as well as larger system-wide efforts, which can spread the word about what CMM is and how it can help. “I’d say just be fearless about connecting to those

“One of the things that’s hardest to prove is how did you *not* spend money? How did you save an admission? How did you save an ER visit? So, I think my advice would be one, try to maintain as much data as you can, to prove that the program is working.”

*Richard Bone, MD*

within the organization and let them know what you do. Having that visibility has been really helpful to build my practice providing a consistent source of referrals.”

**BONE: Demonstrate results:** “One of the things that’s hardest to prove is how did you *not* spend money? How did you save an admission? How did you save an ER visit?” Bone said. “So, I think my advice would be one, try to maintain as much data as you can, to prove that the program is working.”

You need to be aggressive in doing that to prove your worth. You get the program going, you get some good results, and then you brag about that to the others who were a little bit recalcitrant in the beginning. I will tell you now, when we have an open position or we’re talking about expanding, I have people calling. They’re fighting over those resources because they realize how valuable they are.”

But clinical results aren’t enough. “I think we all have to answer at some point to the finance department. As much as clinically we know we’re doing absolutely the right thing, it’s again, hard to prove that you didn’t spend the money on admission.” What he tries to do is look at costs, admissions, etc. 12 months before, and then how are things 12 months after. It doesn’t have to be a formal study. It just needs to provide a ballpark assessment, he said.

**BRUMMEL: Know thyself, and measure early and often.** “I think the most important thing that we

can do in starting a practice, is to know what our purpose in that practice is and to know what our practice model is.” It can be challenging when providers are asking for help with everything medication related, including prior authorization.

It’s important to keep focus. “What I provide is comprehensive medication management. This is what I do. This is the practice model that I follow. This is what I do when I see a patient...and I can replicate it over and over in other sites. Having that fidelity within your practice, I think, is the most important thing that we can do.”

She added a second insight: Measurement must be a consideration from day one. “What am I going to do to show that value? And how am I going to measure it? Because it really is hard to go in the reverse and then try to find and pick things out of the chart and do stuff afterwards, because you weren’t thinking about what you wanted to measure.”

## The good fight

McFarland wrapped up the discussion. “Our dream would be at some point that a pharmacist seeing a patient for CMM in Nashville is receiving the same or equal care as the patient that’s in Minnesota or California. We are not there yet, but I think that this discussion gave everyone an opportunity to see that regardless of where you are on the stage of implementation of CMM, it can happen. You just have to keep on fighting the good fight.” [GTMRx](#)

## About the Experts



***Dr. Sara Maki, Clinical Pharmacy Specialist,  
Comprehensive Medication Management,  
North Memorial Health***

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**Dr. Sara Maki** works with individuals to learn their stories, hear their perspectives, and create a personalized medication plan to help them achieve their unique goals. She strongly believes in team-based care and enjoys working in the primary care setting where she can build long-lasting relationships with both customers and colleagues.

Dr. Maki enjoys gardening, cooking, traveling, and spending time with family. She is not a native of Minnesota, but is happy to participate in all its beautiful outdoor offerings between the months of May and October.



***M. Shawn McFarland, Pharm.D., FCCP, BCACP***

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**Dr. McFarland** is the manager for the National Clinical Pharmacy Practice Program and the clinical practice integration and model advancement for the Clinical Pharmacy Practice Office of the Pharmacy Benefits Management Services at Veterans Health Administration in Washington D.C. In the past, Dr. McFarland was responsible for the direction of clinical pharmacy services within the Tennessee

Valley Health Care System. This includes supervision of 50+ clinical pharmacy specialists at the two main facilities and 13 outlying community-based outpatient clinics. In addition, he oversees the coordination of the second-year ambulatory care residency program and guidance of all student operations from the Tennessee Valley's six affiliate colleges of pharmacy. He was previously an associate professor at the University of Tennessee and a clinical pharmacist in the local VA and the Murfreesboro Medical Clinic and Surgical Center. He obtained his BS in Pre-Pharmacy Studies from the Middle Tennessee State University, and his Pharm.D. from the University of Tennessee in the year 2000.



***Richard Bone, MD***

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**Richard Bone** is the senior medical director for population health at Advocate Medical Group (AMG). He is also a board-certified internist and gastroenterologist who operates out of Advocate Christ Hospital, Advocate Trinity Hospital, Advocate South Suburban Hospital and the Tinley Woods Surgical Center. Prior to his current role, he served as vice president of medical management in the South Region for AMG, and has held numerous other administrative roles throughout his career.

Dr. Bone completed his residency in internal medicine in June 1987 at West Suburban Hospital and Medical Center (WSHMC), where he also served as chief resident. He was a fellow in digestive disease at Rush-Presbyterian-St. Luke's Medical Center from July 1987 through June 1990.

## About the Experts *continued*

Dr. Bone served as chair of Advancing High Performance Health's (AMGA) CMO Leadership Council and is an advisor to AMGA's Collaborative for Performance Excellence (CPX).



### ***Amanda Brummel, PharmD, BCACP***

**Amanda Brummel** serves as the vice president of clinical ambulatory pharmacy services. Dr. Brummel has been employed by Fairview Pharmacy Services since 1999 when she graduated from the University of Minnesota. While at MHealth Fairview, she has built and practiced comprehensive medication management (CMM) as a part of MHealth Fairview's

Medication Therapy Management (MTM) Program in multiple clinic locations. Dr. Brummel has responsibility for the MTM Program, the anticoagulation program, the outcomes department and the clinical development and integration of ambulatory pharmacy services in the MHealth Fairview Network including transitions of care and quality measurement. She works closely with the MHealth Fairview Network in their population health approach and new payer product development.

Dr. Brummel is also an adjunct professor at the University of Minnesota. She has published multiple articles on MTM and pharmacy's role in the care team. She has chaired and served on multiple committees and is a current member of the Minnesota Pharmacists Association, the American Society of Health-System Pharmacists (ASHP), the American College of Clinical Pharmacy (ACCP) and Pharmacy Quality Alliance (PQA).

Our **VISION** is to enhance life by ensuring appropriate and personalized use of medication and gene therapies.

Our **MISSION** is to bring critical stakeholders together, bound by the urgent need to optimize outcomes and reduce costs by *getting the medications right*.



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