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Get the medications right

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Medication management reform: Integrating technology to optimize medication use

How can health IT be used to demonstrate the value of comprehensive medication management (CMM)? Through results. Only when we can show outcomes—economic, clinical and humanistic—can we confidently support a scale-up and expansion of the practice.

Pharmacists and care delivery providers need confidence in CMM to ensure that one has buy-in and uptake as one tries to engage patients, explains Molly J. Ekstrand, BPharm, BCACP, AE-C, principal consultant at North Star Medication Optimization, LLC.

We have two real-world examples of how this can work. One involves patients with end-stage renal disease; the other involves retired teachers and pharmacogenomics.

Risk stratification and CMM

Population Management & Risk Stratification is one of the four foundational pillars of leveraging health IT in comprehensive medication management. The other three are

- clinical decision support;
- patient engagement, care coordination and data exchange; and
- outcomes: economic, clinical and humanistic.

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>
> *Molly J. Ekstrand, BPharm, BCACP, AE-C Principal Consultant, North Star Medication Optimization, LLC*

"Whether you're a health plan, a care delivery network or a value-based ACO collaboration, you need tools to identify which patients are most likely to benefit from the comprehensive medication management intervention," explains Ekstrand.

She should know: She's been involved in medication management and CMM for nearly 20 years.

In 2011, Ekstrand launched the medication management program at Minnesota-based Park Nicollet, which is part of HealthPartners. "In the beginning we were a small team

of pharmacists needing to be scrappy and agile to organize our data and develop tools to support our CMM practice. As our program grew, we were formally allocated health IT resources within our organization to develop the better tools."

As a group of pharmacists trying to partner with the primary care leadership group, they found it helpful to align their measure with the HEDIS[1] measures for chronic disease management. Why? Often, a care-delivery group has pay-for-performance money on the line with local health plans, she explains. "Many of the HEDIS measures related to management of chronic-conditions have lots of medication options."

[1] The Healthcare Effectiveness Data and Information Set (HEDIS) is one of health care's most widely used performance improvement tools.

Start simple

Initially, they took a simple approach, looking for a single clinical marker such as an A1C above nine or blood pressure not at goal.

"Then, as we evolved more and worked within our medical home team at Park Nicollet, we developed more complex strategies combining multiple clinical markers of drug therapy that were not at goal," she explains. "Then, we would work with a care coordinator or a diabetes educator to really figure out how the different strategies, and how everyone in the care delivery health care team, were going to help a patient achieve their goals."

In some cases, individual patients identified for CMM services. Other times, such as with ACO and other population health initiatives, populations are risk-stratified using various data points. For example, all patients in a Medicare ACO with end-stage renal disease (ESRD) are identified for CMM.

Risk-stratification tools were essential to the effort: "CMM is a high touch intervention and pharmacists are *not* inexpensive health care providers, so we really wanted to focus on where we felt the patients might have the best financial return on investment as well," Ekstrand explains.

She went in knowing something else, too: The primary care providers told her team how confusing it can be trying to keep up to date on all

The million-dollar question: Getting Started

If a physician practice wants to implement CMM program, how does it begin? Ekstrand calls this the "million-dollar question."

It doesn't require a heavy initial investment in health IT. In fact, most practices already have the tools; it's just a matter of using them optimally. Leveraging health IT for CMM is a maturation process, she explains. As a practice expands its health IT capabilities over time, it will become more efficient and effective.

To get started, she recommends working with a local college of pharmacy or university with CMM experience. The GTMRx Institute also has an array of evidence-based resources.

"In terms of my experience, I would encourage a physician group to start looking at their quality scores and really looking at those HEDIS numbers." Where is medication use contributing to achievement—or lack of achievement—in their quality scores? Ultimately, she says, quality scores are going to be playing a much larger role in health care.

For diabetes alone there are nearly 10 different medication categories to help a patient achieve their glucose control. "Why not have a pharmacist involved in that?" Internal data at Park Nicollet revealed that in patients with diabetes, medications were 67% of their total cost of care. "In that scenario it really made sense for pharmacists to be involved with endocrinology and with diabetes management specifically." GTMR

the different medication options in front of them.

ESRD: Complex conditions, complex regimens

Park Nicollet has several success stories supporting population health and risk stratification, including the aforementioned ESRD Medicare ACO population. In addition to being on dialysis, patients with ESRD likely have myriad other complex, chronic health conditions—and, therefore, complex medication regimens.

The patients in this group took an average of 12.3 medications each, and often they took multiple doses each day. The team also looked at medication burden—the ways one takes a medication. They identified eight different ways this population administered their medication, with an average medication burden of 3.7 different ways.

The intervention: The CMM process

Going in, they knew having a pharmacist involved on the care team to support the patient could help them feel more confident to manage their health and their medications independently. In this model, pharmacists have full access to the EHR, and they follow the CMM care process. (See Figure 1 below.)

Figure 1

Over the three years, they saw over 75 unique patients with many of the same patients attributed each year. They continued to come back to meet with the pharmacist. "We found out that patients largely enjoyed meeting with the pharmacists for a medication review, and they continued to come back to that medication checkup and be engaged in comprehensive medication management services."

In 2016, the first year of the program, they found an average of three medication therapy problems (MTPs) per patient. That had changed dramatically by 2018. Of the 38 unique patients participating in the CMM program, they averaged 1.5 MTPs per patient. Seventeen had no medication therapy problems. For the rest, only 51% of those problems were resolved at the point of care. That's because there were no collaborative practice agreements with the nephrologists, who are the specialists who care for ESRD patients. Comparing this to a nearly 80% resolution rate with their general patient population, Ekstrand's team was able to make the case for collaborative practice agreements with their nephrologists.

In 2016 alone, Park Nicollet saved $1.2 million in the ESRD patient population with this team-based care model involving pharmacists providing CMM.[2] Savings have continued in subsequent years.

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CMM process uncovers more medication therapy problems

This is not a disease-state medication management intervention; the care provided followed the comprehensive medication management process supporting all the patients' medication needs.

Following the CMM process, Ekstrand's team found medication therapy problems in 18 different disease categories. Even though the patients were identified because they were on dialysis, our focus was not just their dialysis medications, she says. "It was *comprehensive* medication management, so we looked at the patient holistically as well as looking at all of the medications the patient was taking."

[2] LaPointe, J. "Team-Based Care for Kidney Disease Saves Park Nicollet $1.2M," *RevCycle Intelligence,* 2018, January 25. Retrieved September 15, 2020, from https://revcycleintelligence.com/news/team-based-care-for-kidney-disease-saves-park-nicollet-1.2m

"I believe CMM is the way to optimize medication outcomes. This was one strategy to identify a high-cost, high-risk patient population group. However, the care provided followed the comprehensive medication management process supporting all their medication needs."

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"I also want to emphasize the relatively even distribution of the categories of medication therapy problems when following the CMM care process." Thirty percent of MTPs were related to the indication for therapy, 23% were related to effectiveness, 25% related to safety of the medicine, while only 22% were related to convenience or adherence. She points out that they would have missed 78% of the problems had they relied merely on traditional claims data and focused on adherence.

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Lessons learned

Based on her work with both Medicare and private payers, she has a few lessons:

Target your population. Identify areas where CMM can truly be effective in preventing future risk, and risk stratify patients to identify those most likely to benefit from services.

One strategy doesn't fit all scenarios. "What we were finding oftentimes, especially from the health plan perspective, is that we needed to apply the CMS MTM inclusion criteria." But that wasn't necessarily a helpful strategy for quality and costs. Her advice for health plans? "If you have a Medicare Advantage plan, you may have to use the CMS MTM inclusion criteria, but you can probably reach a higher percentage of patients by combining some other criteria in there."

Be more strategic than just looking at numbers. "It's easy to get more strategic than simply the number of meds or diagnosis codes," she says. "You want to look at aligning your strategy with the goals of your partners and your contracts."

Pharmacogenomics + pharmacist counseling= medication optimization

Our second example explores how the CMM process was informed by pharmacogenomics (PGx) for a retiree population.

Teachers' Retirement System of the State of Kentucky (TRS) is a defined benefit pension plan that serves roughly 140,000 active and retired members. There are more than 37,000 Medicare-eligible retirees, over 7,000 of whom are over 80 and 34 who are over 100.

The plan is a fully insured Medicare Advantage plan and a self-funded Medicare Part D drug plan. The 2020 monthly premium, $224, is down from $232 in 2002.

An obvious problem, a personalized solution

Research shows half of all medications don't work for the patient as intended and adverse drug reactions are the fourth leading cause of death, explains Jane Cheshire Gilbert, CPA, director of retiree health care, TRS Kentucky.

TRS decided to do something. "What we did was we created a personalized medicine solution," Gilbert explains.

TRS contracted with a PGx vendor to handle the genetic testing. It also expanded its partnership with the Know Your Rx Coalition, whose pharmacists use the test results to discuss possible medication changes with Medicare-eligible retirees and their doctors. "That three-way partnership allows the retiree, their doctor and their pharmacist to *also* create a three-way partnership," she says.

The PGx vendor handled DNA testing, the medication action plan and some of the member engagement. Know Your Rx Coalition pharmacists were responsible for the medication therapy management. "I can't give enough kudos to the Know Your Rx Coalition for their role in the success of this program because what they did was take the medication action plan and, by phone, communicate that information to our retired teachers who participated and explain that in a way that they could understand," Gilbert says.

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> *Teachers' Retirement System of the State of Kentucky*

How it works

The PGx vendor receives a data aggregation feed to develop a medication action plan and to produce a

report that is sent to the Know Your Rx Coalition pharmacists who provide a copy to both the patient and the patient's prescribing physician.

Next, with the patient's permission, the Coalition pharmacists reach out to the prescribing physician to discuss the DNA results, and if the prescribing physician approves, appropriate changes are made to the prescriptions.

From there, Gilbert says, "that's when the magic happens. The pharmacists with the Know Your Rx Coalition spend hours on the phone discussing with the patients what the results are, should they change a medication, should they remove a medication, should they continue a certain medication."

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They act as both the liaison and a catalyst to the physician and the patient together in the program, she explains.

From the beginning

The program was launched in late 2017, and the original plan was to focus on those at greatest risk. "We had some folks taking an average of 15 prescriptions, so the focus was going to be there, and was there to begin with, but ultimately we ended up inviting all 37,000 to participate in this program."

That made sense. Even before the pharmacogenomics testing, the TRS knew that of those 37,000 retirees:

- 83% were taking a drug that had a drug-to-gene implication.
- 75% had high blood pressure.
- About 50% had pain and inflammation.
- 58% had high cholesterol levels.

What do these have in common? They're all disease states treated with drugs that can have genetic implications.

Not just MTM: MTM on steroids

"I've said that the secret to our success is medication therapy management, but it's more than just medication therapy management. It's more like medication therapy management on steroids." The pharmacists spend hours on the phone with our members and hours on the phone with the prescribing physician.

The results demonstrate that this approach worked.

Of 7,000 retirees participating, 28% received a medication change recommendation due to DNA implications alone. Because of the efforts of the pharmacist, the prescribing physician accepted the recommendation 87% of the time.

Based on 16 months of claims data for comparator groups, TRS saw a 14% reduction in spending for those involved in the PGx program, compared to a 3.2% increase in spending among those not participating.

Other results include a 22% reduction in hospitalizations and a 27% reduction in slip and falls.

"We're pretty excited to see those results," she says.

Patient satisfaction was also high: 70% of program participants said the program was extremely valuable. She shared some of the comments:

- "It's been years since I've seen something come through to make me stop and say, 'Wow! This is a great idea.'"
- "I did the testing and thank goodness I did."

> **"I've had the opportunity to speak nationally in regard to this program, and I chuckle a little bit every time I mention that because it seems a little unbelievable to me to go to Harvard or Boston or Baltimore and spend time explaining to folks that if you're taking medicines that don't work for you, then that's costly to your health and that's also costly to the health plan itself."**
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- "This is wonderful! It's nice to see TRS participating in new and more exciting things!"
- "I have far more energy now."
- "This is what health care should be."

A scalable solution to a complex problem

This model—"blended diagnostic capability," aka pharmacogenomics testing with a service through the pharmacists that you have contracted with and that are working in collaborative practice with a physician—can be replicated nationally, Gilbert says. There's also interest: She's presented her success around the country—including to plan administrators—and has found there's tremendous interest.

When you think about it, it seems almost simple, says Gilbert.

"I've had the opportunity to speak nationally in regard to this program, and I chuckle a little bit every time I mention that because it seems a little unbelievable to me to go to Harvard or Boston or Baltimore and spend time explaining to folks that if you're taking medicines that don't work for you, then that's costly to your health and that's also costly to the health plan itself." GTMR

About the Experts

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MOLLY EKSTRAND is a pharmacist and medication optimization expert. She started North Star Medication Optimization, LLC to create strategic partnerships to transform health care. Formerly, she was the founder and leader of the comprehensive medication management program at Park Nicollet Health Services in Minneapolis, Minnesota. She has demonstrated collaborative success in the value based and alternative health care payment models while emphasizing the importance of effective and safe medication utilization. She has worked with various payers and employer groups to help them understand how to navigate this environment.

Before her eight years in leadership at Park Nicollet, she practiced comprehensive medication management in internal and family medicine clinics for nearly 10 years in the Fairview Health System. She understands how to fully utilize a pharmacist in a team-based health

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About the Experts *(continued)*

patient/employee satisfaction and engagement shifts the outcome paradigm. In addition, she has also held numerous volunteer leadership positions with state and national pharmacy and health related organizations. Overall, Molly Ekstrand is an accomplished group facilitator, project manager and public speaker.

Jane Cheshire Gilbert, CPA
Director, Retiree Health Care
Teachers' Retirement System of the State of Kentucky

JANE CHESHIRE GILBERT is the director of retiree health care for the Teachers' Retirement System of the State of Kentucky (TRS) and has served TRS retirees since April 2002. She manages two retiree health plans covering 48,000 retirees. She also serves as a leader in the areas of health insurance cost containment, project management, risk management and federal health care solutions.

Gilbert served in management and directorship positions for a Louisville, Kentucky law firm and cost containment company, The Rawlings Company, from 1989 through 2002. Prior to that, she worked as an accountant for a national CPA firm.

Gilbert earned a bachelor's degree in accounting from Bellarmine University in Louisville, Kentucky and is a certified public accountant and a certified government benefits administrator. She currently serves on the board of the State and Local Government Benefits Association and is a member of the Public Sector Healthcare Roundtable.

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.*

GTMRx Institute™
Get the medications right

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About the GTMRx Institute
The GTMRx Institute is a catalyst for change that brings critical stakeholders together, bound by the urgent need to get the medications right. We are physicians, pharmacists, caregivers, health IT innovators, drug and diagnostics companies, consumer groups, employers, payers and health systems—aligned to save lives and save money through comprehensive medication management, or CMM. By showcasing evidence and innovation, we motivate practice transformation and push payment and policy reform. Together, we ACT to champion appropriate, effective, safe and precise use of medication and gene therapies. Learn more at gtmr.org.

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