

Members in Action: Improve Quality & Patient Outcomes

Montefiore Health System – The Bronx, Westchester and the Hudson Valley, N.Y.

App improves outcomes in Collaborative Care Model

The AHA's Members in Action series highlights how hospitals and health systems are implementing new value-based strategies to improve health care affordability. This includes work to redesign the delivery system, manage risk and new payment models, improve quality and outcomes, and implement operational solutions.

Overview

Integrating behavioral health and primary care has been shown to improve patient access and outcomes. The integrated care model has three decades of research behind it and more than 80 randomized control trials that demonstrate its effectiveness and efficiency in care delivery. In 2015, Montefiore Health System in New York City began implementing a program using the Collaborative Care Model (CoCM) to better serve its large population of lowincome and minority patients with significant medical and mental health comorbidity and socioeconomic challenges.

The health system initiated the CoCM with a grant from the Centers for Medicare & Medicaid Services' Innovation Center, which helped Montefiore design, implement and sustain the model to increase the availability and quality of behavioral services and test innovative reimbursement methods. At the same time, Montefiore began looking for ways to leverage digital tools, including a smartphone application that could be used by caregivers and patients. The app has been used to enhance care management capabilities and allow care managers to increase the number of patients with whom they interact.

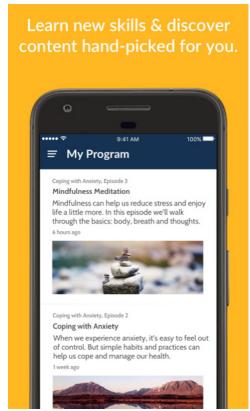
The aim was to improve patient outcomes, and facilitate faster recovery and better communication with providers. The program has helped the health system improve care for both pediatric and

Connect with your care team. 4 = Alvssa lames 4:12 PM Hey Kevin, how are you feeling? Kevin Lee 4:15 PM I've been pretty stressed lately. Alvssa lames 4:35 PM Sorry to hear that. Want to try the breathing exercises we talked about? **Breathing Exercises** CONTINUE Kevin Lee 5:05 PM Thanks! I'll try it out now. Alyssa James 10:33 AM Here's the information for your upcoming appointment. Monday, Dec 12, 9:00 AM Appointment with Alyssa I'M GOING

The application allows the health team to intervene early.

adult patients with mental health conditions, including depression, post-traumatic stress disorder, general anxiety disorder, panic disorder and alcohol use disorder.

Under Montefiore's CoCM clinical initiative, primary care providers (PCPs) who treat patients with mental health and substance-use conditions are supported by a behavioral health care manager and psychiatric consultant. The behavioral health manager provides brief behavioral interventions, supports treatment initiatives delivered by the PCP, and coordinates care with the PCP and psychiatric consultant using a shared



Through the app, behavioral health managers can send patients educational materials and strategies on how to take care of themselves.

registry to review and monitor the progress of patients. A behavioral health specialist (licensed clinical social worker or psychologist) also is part of the team and provides diagnostic confirmation and short-term psychotherapy when appropriate.

In addition to developing a behavioral health registry in the electronic health record (EHR), the Montefiore CoCM also piloted a smartphone application developed by Valera Health, a company that helps providers and health plans optimize their care management programs. Valera Health developed the app to help clinicians remotely monitor patients and to give patients a simple way to provide updates about how they're feeling to care managers.

Through the app, behavioral health managers can send patients educational materials and strategies on how to take care of themselves, as well as individualized reminders to help them stay on track with their health goals. The materials address issues such as medication and overall wellness in areas like depression, anxiety, sleep hygiene, exercise, social activity and more. For example, with a patient suffering from depression, the case manager may send information on what depression is and common symptoms and then discuss strategies and goals that might be useful for patients.

"We give them strategies for setting manageable goals, remind them what goals they agreed to work on, and help them troubleshoot when barriers arise," says Michelle Blackmore, Ph.D., project director for behavioral health integration at Montefiore

Medical Center's Care Management Organization, Yonkers, N.Y. "This helps encourage patients to work on their goals more consistently and helps us to coach them when challenges come up, rather than having them wait until their next visit to 'restart' on the goals."

Since adoption, the app has improved the effectiveness and efficiency of the CoCM by allowing behavioral health care managers to work with higher caseloads while maintaining key elements of the CoCM aimed at improving treatment outcomes.

Impact

The smartphone application pilot project was implemented in five Montefiore-owned primary care clinics in the Bronx and Westchester County. The project was undertaken in two phases, with the first wave implemented at three sites, and later expanding to a total of 1,140 patients between July 2016 and December 2018. The vendor was on-site in the early phase to troubleshoot problems, obtain feedback on the technology from patients and behavioral health care managers, and make needed adjustments.

To improve acceptance, behavioral health care managers gave patients demonstrations and tip sheets on how to use the app. Care managers also were trained on workflow changes and how to optimize the app's features and were offered talking points to discuss the benefits of the application with patients.

Montefiore's Henry Chung, M.D., professor, department of psychiatric and behavioral sciences at Albert Einstein College of Medicine, says the smartphone-enhanced CoCM program enabled care managers, social workers and PCPs to be more successful with helping their patients use the CoCM. This also helped the health care team to better identify and prioritize patients who needed to be seen by a psychiatrist.

"The app makes it easier for patients to reach out and access their care team, and patients report feeling more comfortable asking questions about their health care," Blackmore says. "That allows the health team to intervene early and step up the level of care when needed. Patients also aren't just waiting for those in-person visits because our care managers perform a lot of outreach in between sessions."

Given that patients are able to connect with their care team outside the office, they can share challenges as they occur and ask for help to address any barriers. This fosters more contact, collaboration and cooperation with the care team.

While Montefiore needs to gather more data to more fully analyze the impact its efforts are having on reducing costs and emergency department utilization, Blackmore says quality is improving.

"We're finding that patients get three times as many clinical contacts using the Valera Health app and that there are shorter times to their follow-up contacts and visits once they initiate treatment, which is a mediator for improved clinical outcomes," Blackmore says. "It really helps improve access."

By monitoring patient symptoms and functioning with the scales sent through the app, care managers also are notified more quickly if a patient is not improving or worsening, which allows for intervention in a more timely manner. Passive data collection, such as the patient's step count, also allows care managers to track when a patient is becoming less active, which can be a sign of worsening depression. Care managers are alerted when a patient is inactive for 72 hours and can reach out to check on the patient. All of these features help improve quality, Blackmore says.

Data from the pilot program also has demonstrated high levels of patient satisfaction. Eight-six percent said they found the app easy to use and the same percentage said they would continue using it. Seventy-two percent said they felt more connected to the care team and expressed overall satisfaction with the app and would recommend it. Slightly less than half said the program helped them work on their health care goals, while 42 percent said they learned more about their health by using the app.

Lessons Learned

With this more collaborative approach to delivering care, PCPs can access the behavioral health team's notes in the EHR and vice versa. The model also ensures more regular communication between the PCP and the behavioral health team, whether through email, phone consults or weekly team meetings. This enhanced level of communication helps identify patients who perhaps were difficult to engage, who were not showing improvement and who needed to be prioritized for psychiatrist visits.

"We learned that you can have psychiatrists covering multiple sites by using this model while allowing them to work at the top of their license," Chung notes. "They are providing psychiatric patient chart reviews as well as direct patient treatment for complex patients or those patients who are not responding initially under the collaborative care model." He adds that care managers' time also is maximized as demonstrated by one



care manager who has been so productive and efficient in the way she uses the app, that she can now cover two sites comfortably.

The technology also has helped augment the provider-organization relationship. It serves as an extension of the provider through the care manager who uses the app, Chung explains.

Blackmore adds that patients have adapted well to the app, thanks to its user-friendly interface. For example, care managers are able to send patients materials that look just like a text message, a familiar way of communicating for patients. Educational materials also are written with the language level appropriate to the population — an important lesson for organizations to consider as they evaluate applying the app.

"We're also finding that having access to a smartphone is not as problematic as we had anticipated it would be for our patients who experience a number of socioeconomic challenges," Blackmore says. A lot of the patients are very tech-savvy and use smartphones. It's one of the universal technologies that everyone uses."

For others considering this approach to care, Blackmore offers these points to consider:

- Get provider buy-in to the program early, because you need provider buy-in in order to get patients to buy-in.
- Develop the enrollment process and what the criteria will be for inclusion in the program.
- Incorporate the technology into the day-to-day patient care workflow and adjust as needed based on health care team and patient feedback.
- Anticipate training needs and develop user-friendly handouts and FAQs for both staff and patients.
- Be aware of the infrastructure and technology support needed. The CoCM requires a patient-registry tracking system to ensure that key elements of the model are captured for data monitoring and to allow providers to effectively organize and track patient progress. This registry typically sits outside EHRs. EHR registry integration can assist in CoCM sustainability and spread throughout various health care settings by eliminating double documentation, and can also ensure more streamlined collaboration and communication across medical and behavioral health teams.

Future Goals

By situating the CoCM in an academic medical center with one of the largest primary care residency training programs nationally, Montefiore has been able to establish a foundation of collaborative care model training for the future primary care workforce. Montefiore is currently building a flexible training curriculum for use in other academic and community settings. Based on the program's successful outcomes, the organization has expanded the model to include additional Montefiore Medical Group practices and key primary care and behavioral health practices in New York's Hudson Valley region.

Montefiore also is expanding use of the smartphone app across its primary care practices to support program sustainability as it relates to the essential non-billable program components (e.g., in-between visit engagement and outreach, symptom and functional monitoring, improved patient health education and self-management). Promising outcomes data also led Montefiore to pilot the app in some of its pediatric and specialty departments, as well as with several of its Hudson Valley behavioral health practice partners.

