

Health Care Without

Leveraging technology to succeed in a post-COVID world

► Featuring Michael Michetti, Esq.

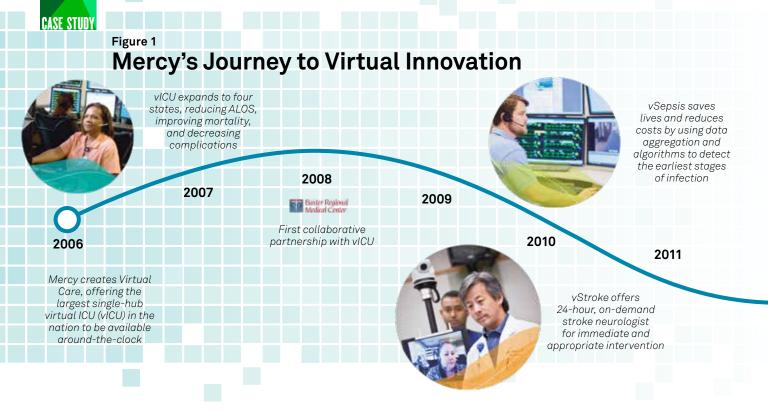
ell before COVID-19, Mercy Health was blazing a trail with their industry-leading virtual care program. At AMGA's 2021 Annual Conference, Michael Michetti, Esq., Mercy Health's senior vice president of System Clinical Operations, shared how that digital blueprint was key to Mercy's response to the pandemic, how it led to further advances in their technology, and what lessons learned over the course of the pandemic mean for Mercy Health and other healthcare systems moving forward.

Background

In 1827, Catherine McAuley, a young woman in Ireland, thought about a different way to treat those who were suffering in her community. She founded a religious order that didn't stay behind walls, but "went out into the community and innovated and tried to find new ways to meet the need that they saw," said Michetti. That movement resulted in

what is now Mercy Health, a system with 40 hospitals, about 900 practices and outpatient facilities, about 4,000 providers with 45,00 coworkers and \$7 billion in revenue. Reaching across the heart of the Midwest, Mercy is concentrated across the states of Missouri and Oklahoma and the top half of Arkansas, with outreach ministries in Texas, Louisiana, and Illinois.

Michetti said McAuley's spirit "imbues a lot of what we do at Mercy—really trying to embrace innovation and trying to get outside the box to think about how we can meet the needs in our communities." Mercy is consistently rated "one of the top five large healthcare systems," including by IBM/Watson four times, and consistently received high marks in quality and patient experience. One reason for that, says Michetti, is a consistent focus on quality and safety. Another reason for Mercy's success is its effort to stay ahead of the curve and embrace innovation in all facets of the organization.



Building the Virtual Care Center

Mercy's 12-year journey in telemedicine began with creating the virtual care center model in the early 2000s, beginning with how it could monitor patients in the hospital. Explained Michetti, "It then starts to move into: How can we do consults? How can we take that 40-hospital system and make it feel like one hospital system without walls?" The program officially began in 2006 with virtual ICU (vICU), which acquired its first regional partner three years later (see Figure 1). This was soon followed by vStroke, vSepsis, vAlert, and vHospitalitist. The new Virtual Care Center, which Michetti described as "the world's first center dedicated entirely to taking care of a patient who's never walked through its doors," was opened in 2014. This Virtual Care Center monitors patients 24/7, 365 days a year, both within Mercy and in other healthcare systems.

"We have specialists in the care center who are doing realtime consults for all our different hospitals," said Michetti. "We do this across specialties and continue to innovate new ways for our Virtual Care Center to work with each of our facilities."

One of the biggest programs is vEngagement, focused on chronically ill patients and based on the idea that "we can take care of you better by monitoring you and having regular touch points with you in your home and putting devices in your home, if need be, to keep you out of the hospital." Launched in 2015, vEngagement "started to pay a lot of dividends for us and for our partners," noted Michetti, "not just

when it comes to chronically ill patients, but it became the backbone of part of our COVID response."

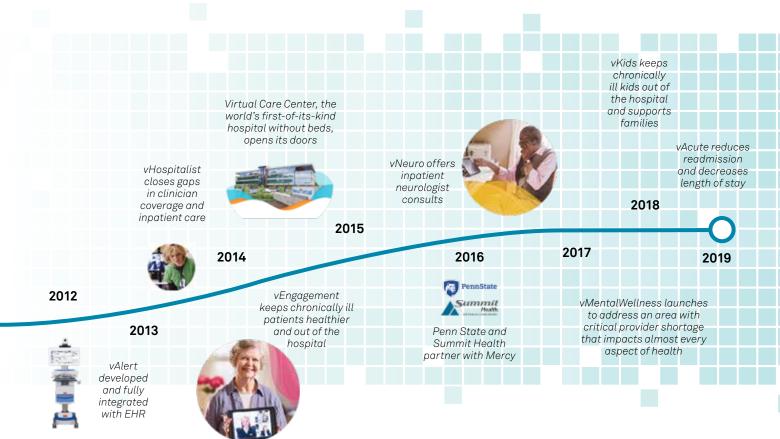
More recent virtual programs were part of Mercy's 2015 five-year plan. Then came 2020, "a year that will none of us will forget," said Michetti. Suddenly, economic disparity, artificial intelligence (AI), automation, workforce changes, and consumer expectations came to the fore. "We realized that our next strategy would have to embrace each of these macro trends."

Using Technology to Respond

The new strategy involved several key adjustments. First, a meaningful push to virtual visits. In 2019, Mercy had done only a handful of video visits. In 2020, they did almost 700,000.

Second, said Michetti, they learned about the importance of being available when and where the patient wants to be seen. "So, we've been talking for years about the idea that patients don't want to be patient; patients don't want to wait. And we knew that. But it was always that you waited for the doctor to see you. And we learned during COVID that wasn't going to work. So, we spent a lot of time thinking about how can I immediately meet a need—whether it's digitally, whether it's online—by standing up care venues that we haven't traditionally used?"

This led to the third adjustment: temporary/flexible care locations. Hearkening back to McAuley's mission, Mercy asked, "How can we get outside of our own our own four walls



to take care of patients?" Next, said Michetti, was a focus on teamwork: "If we were going to be resilient and meet this need, it was going to mean partnering within our teams and across our communities differently."

Finally, Mercy focused on what patients had been telling them. "We've taken 2.4 million consumer voices and distilled it down into what our patients really want." The data showed patients were focused on convenience, transparency, personalization, care coordination, and "really the idea of feeling valued, feeling like they're on a journey with their healthcare system, that they're a valued partner in the exercise," said Michetti. This became the lodestone anchoring Mercy's COVID and post-COVID response.

Digital Screening and Virtual Care

During COVID, Mercy launched digital screening tools that would connect patients not only with a test, but with monitoring programs if they tested positive. Patients were contacted via text several times a day and could respond as to whether their condition was worsening or improving. Depending on the patient's response, the virtual team could deploy video visits or other supportive care models or steer patients to respiratory care centers, other office-based venues, and, if need be, the emergency room. "We could really envelop them in a system of care that could be as simple as their phone and as complicated as a hospital and anything else it needed to be."

This led to the development of Mercy Express Care, at the time of the presentation a pilot program but going to market soon, is an app that "puts primary care in the palm of every patient's hand." Using the app, a patient begins with a request to start a Mercy Express Care visit. The patient completes a dynamic interview process, with the results of that process being routed to a provider. At that point, the provider can either resolve the condition directly, escalate the care to a video visit, escalate the care to an in-person care venue, or even direct a patient to the emergency room.

This ease for patients also provides ease for providers. Virtual providers see the queue of "smart exams," including the chief complaint. They see the real-time dialogue between the patient and the software tool. The tool includes AI that can make treatment recommendations to the provider. The provider can agree or disagree with the AI recommendation, Michetti noted, "but it really helps the provider work their way through it." Also, a record of the process is created so that if the patient is escalated to a video visit and/or an office or emergency room, "all of this is always connected to the care model."

Predictive Technologies Assist Personalization

Another place Mercy began using AI was in vaccine distribution. "We realized really quickly that the model of allocating vaccines like concert tickets, with the first person who can dial their phone the fastest gets the tickets, didn't seem like



the right way to deal with the pandemic," said Michetti. "We needed to be more and more predictive and more and more proactive." Mercy started looking at the available data and used AI to knit together all the information to help identify/predict risk and become more proactive about vaccine outreach "to make sure that we did not just deliver a minimum acceptable process, but really met the needs within our community."

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—Michael Michetti, Esq.

Michetti said that COVID also showed that "things need to happen even sooner than we thought they did." Whether it's getting supplies to providers or care to patients, real-time distribution is key. The same technologies, pop-up clinics, and workflows that were implemented for COVID vaccines can be implemented for flu vaccines or school sports physicals. "We've learned how to get our staff,

equipment, and providers outside of their four walls. They've become very comfortable with that. This was really good muscle memory for our organization that we don't intend to lose as we move forward."

Finally, COVID highlighted the importance of getting patients to the appropriate channel. "If a patient could be managed at home, they should be managed at home. If that patient could be managed in a doctor's office, they should be managed in the doctor's office. If they could be managed in urgent care, in an urgent care." Reserving hospital beds for the sickest patients was "really critical" during the COVID pandemic. Mercy saw key improvements when COVID and non-COVID patients connected with the Virtual Care Center before they went into a facility, including:

- ▶ 16% more visits targeted to conditions that needed to be treated
- ▶ 51% decrease in hospital admissions
- ▶ 50% reduction in emergency room visits
- ▶ 30% reduction in costs

Also, Michetti noted that clinic patients were suddenly "showing up on time because they knew they needed to be there and there was a coordinated way to get them there." And, perhaps most importantly, "our patients loved it: 98% patient satisfaction."

The future is about becoming "care navigators," said Michetti, steering every patient to the "right provider, the right venue, at right time. That becomes the lifeblood of what we're going to have to do to be successful in the care model of the future." It's about being "excellent in the performance that we offer to our communities and that we hold each other accountable to every day." And, finally, he said, it's about transformation: "Just like in 1827, when Catherine McAuley decided to transform her personal ministry into the ministry that we inherit today, we will have to continuously transform. We can't be comfortable with four walls. We have to get comfortable with digital solutions, comfortable with really meeting the need where the need exists."

Being predictive also allows for personalization. Michetti noted that Mercy was able target messages to different populations and help them understand why they should be vaccinated, help them overcome fears, help them understand their options, and guide them to the right care model.

Michetti believes that technology provides "a real opportunity to shift the way we render care," whether it's preventative care, responding to other changes in the healthcare system, or a natural disaster. He noted that a Mercy hospital was hit by a tornado several years ago, requiring Mercy to "partner with that community in a way that we'd never had to partner before," and that predictive and proactive technologies can help the response to such emergencies in the future.

He also noted that the shift to more proactive care will allow Mercy to take more risk on patients. "We know that's the change that's happening in the broader payer landscape. We think that we can use this same kind of information and the connecting of this information with AI to become more facile in how we identify patients who will become sick in the future and then envelop them with supporting care. And it goes to this idea of a patient feeling respected, valued, and personalized in their healthcare journey—not saying to the patient, 'you have to fit into my healthcare system,' but instead saying to the patient, 'our healthcare system will adapt to what you need." So, the same technology used to assist a vaccination campaign will provide the backbone for programs moving forward. "We see this playing a really big role for us as a healthcare ministry as we move into risk and as we partner with our patients more broadly."

Moving Forward

Several other lessons learned from the COVID experience will be utilized as Mercy moves forward. One thing Michetti noted was that social determinants really impacted individuals' COVID journeys. Mercy will be looking at social determinants of health to empower its digital solutions and support networks. He noted, "we're only going to touch 20% of what happens for a patient," so Mercy is "really committed to the idea of personalizing our care model by including social determinants of health."

Michael Michetti, Esq., is senior vice and president, System Clinical Operations, and chief operating officer, Mercy.