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Collaborations With Community and Health Systems Help Homeless Patients Gain Housing, Healthcare Services

Project reduces ED visits, hospital stays

Communities nationwide cope with homeless populations and their multiple behavioral, mental, and physical health issues. Hospitals and outpatient providers often see these patients when they are at their worst medically, but until recently, they have not been involved in helping homeless people find housing.

That is changing, starting in cities like Chicago, where homeless patients return to hospitals and EDs so frequently that nurses know some of them by name.

"A risk factor for being homeless is the number of times a person comes into the emergency room," says **Stephen Brown**, MSW, LCSW, director of preventive emergency medicine at University of Illinois Hospital and Health Sciences System.

> INITIATIVES TO END THE PROBLEM OF HOMELESSNESS HAVE BEGUN WITH GOVERNMENTAL AND NONPROFIT AGENCIES IN COLLABORATION WITH HEALTHCARE PROVIDERS.

"We had one person who came in 140 times in a year," he says. The visits stopped only after the patient was struck and killed in a vehicle-pedestrian accident, he adds.

One of the reasons so many homeless people end up in EDs is because there are not enough community services to help them with

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AUTHOR: Melinda Young
EDITOR: Jill Drachenberg
EDITOR: Jesse Saffron
EDITORIAL GROUP MANAGER: Terrey L. Hatcher
ACCREDITATIONS MANAGER: Amy M. Johnson, MSN, RN, CPN

medical, behavioral health, and mental health needs. "The failure of other systems means the cost is shifted into healthcare," Brown explains.

A novel solution is for health systems to use some of their own resources to find homes for their homeless patients. It is part of the national Housing First model, in which healthcare providers and community organizations focus first on finding people homes, followed by helping them with their medical and other issues. *(See story on Housing First in the February 2018 issue of* Case Management Advisor.*)*

The University of Illinois Hospital and Health Sciences System, along with other health systems, local nonprofit organizations, and governmental agencies, developed the Better Health Through Housing program that helps homeless individuals find permanent housing as they stabilize their health. So far, the outcomes are positive with reductions in ED visits, hospitalizations, and costs.

ED visits dropped 57% and hospitalizations declined 67% among people in the housing program. The program also saw a 21% reduction in healthcare utilization costs related to the University of Illinois Hospital — but not including other hospitals, Brown says.

"On the survey, many individuals reported going to between two and five different emergency rooms, but we were only able to capture our healthcare costs," he explains. "It's very difficult to get claims data in the state."

In other communities, initiatives to end the problem of homelessness have begun with governmental and nonprofit agencies in collaboration with healthcare providers.

For example, Bergen County in New Jersey is the first community in the nation to have ended chronic homelessness, according to the U.S. Department of Housing and Urban Development. *(More information can be found at: http://bit.ly/2JMbSpt.)*

"We've been very successful because of a number of reasons," says **Julia Orlando**, CRC, EdM, MA, director of the Bergen County Housing, Health, and Human Services Center in Hackensack, NJ.

The housing center is a collaborative effort by governmental agencies, faith-based organizations, and nonprofits. They follow a Housing First model, with a focus on healthcare and everything else from legal help to free meals that

EXECUTIVE SUMMARY

The healthcare system is uniquely positioned to see how the social safety net can fail people who are homeless and who often suffer from substance use disorders and severe mental illness.

- Homeless people end up in emergency rooms when they fail to find community help for their chronic illnesses.
- Housing First is a national model that focuses on finding housing for homeless individuals and helping them obtain healthcare and other services.
- Bergen County, New Jersey, is the first place in the United States to end homelessness, and the University of Illinois Hospital and Health Sciences System is one of the first hospitals to find housing for homeless patients.

a homeless person might need, she says.

"We're a one-stop location where people can get meals, shelter, access to healthcare, and — most importantly — access to housing," Orlando explains. "All the different agencies that intersect with this work have one place in which they can do it together."

The 25,000-square-foot facility employs onsite nurses and legal aid services. For the past two years, the center has helped Bergen County sustain functional zero in chronic homelessness — defined as when the number of homeless patients does not outpace the monthly housing placement rate — including for veterans, Orlando says.

The center found permanent housing for about 1,300 people. There is a 90-day emergency shelter, and center staff work quickly to come up with a permanent housing plan for each person in the shelter.

"Everything we do is focused on getting people back into housing," Orlando says.

"Our relationship with local hospitals and providers has evolved over the years," she adds. "There's a high need for substance use treatment, and mental healthcare also is a big need among this population."

Chronically homeless people often have neglected their medical needs for years, ignoring symptoms of diabetes and other chronic illnesses. When they are very sick, they visit the ED and improve enough to return to the streets.

"They use the ER quite frequently, and one of our goals was to stop the overuse of ERs," Orlando says. "By having nurses onsite and making sure everyone coming in has had an evaluation, the nurses are then able to connect people to primary care so they can rely less on emergency services."

As an ED social worker 14 years ago, Brown was struck by how many patients with severe mental illness and homelessness came through the doors. "There was no systemic approach to handling these cases, and many of these individuals were what we now deem superutilizers of emergency medicine."

A recent study of homeless adults who repeatedly visited the ED found that they reported comorbid psychiatric, substance use, and medical conditions, as well as high levels of pain. The study also found that a social work case management intervention helped this population become more stable and resulted in their using ED alternatives.[1]

Brown was an early believer in the concept of identifying structural issues that prevent people from getting necessary medical help and fixing these through case management strategies.

"In emergency medicine, there is a lot of burnout because staff is overwhelmed with the number of patients coming in all the time," Brown notes. "And one definition of burnout is feeling powerless to change things that would impact patients' lives."

It took another decade before Brown was able to turn his idea of tackling homelessness to improve homeless patients' health into a funded plan, based on the Housing First model.

The University of Illinois Hospital and Health Sciences System partnered with the Center for Housing and Health in Chicago to start a pilot program targeting the chronically homeless population. *(See story on how homeless agency/ healthcare provider collaborations work, page 52.)*

The program started in November 2015 and has placed more than 55 individuals in supportive housing, Brown says.

"We've been tracking their outcomes, too," he adds.

About 47% of people who are placed in homes have stayed there, a percentage that seems low but could be related to the population's high rate of multiple conditions, including mental illness, which impacted nearly three out of four people in the program's first cohort.[2]

"Two of the individuals qualified to be institutionalized," Brown says. "We tried to move one person into permanent housing, but she was too acutely mentally ill, untreated, and now she's in a state mental hospital."

The program has continued since its initial grant, using $300,000 in hospital funding.

"We have had three cohorts, each based on the fiscal year in which funding came through," Brown says. "In our first cohort, 26 individuals were placed in housing, and the mortality rate was 30% — very high, very disturbing."

This cohort's comorbidities included the following:

- 77% with substance use disorder;
- 77% with hypertension;
- 57% with asthma/COPD;
- 42% with cancer;
- 23% with diabetes;
- 23% with heart failure;
- 19% with metastatic cancer;
- 19% with HIV.[2]

"It was stunning the amount of comorbidities we saw in the first cohort," Brown says. "We're just now coming to terms with the severity of mental illness in individuals in our program."

These very sick, homeless patients need housing alignment and support, he says.

From the population health perspective, the housing focus makes sound economic sense, he notes.

"One emergency room visit is more expensive than putting someone up in a luxury hotel," Brown says. ■

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Organizational Plans to Help Homeless Patients Become Healthier

First steps are to identify and assess

Communities across the country are working to reduce or end chronic homelessness. They are focusing on ways the government, nonprofits, and healthcare providers can work together on solutions that benefit all.

For example, Bergen County in New Jersey ended chronic homelessness in 2017, a decade after beginning a comprehensive Housing First project. In Chicago, a large urban health system has successfully reduced homeless patients' ED visits by focusing on helping them find permanent housing. Following Hurricane Katrina, New Orleans reduced homelessness by 90%. *(More information is available at: https://wbur.fm/2HJPueu.)*

Also, Kaiser Permanente pledged $200 million in May 2018 to support affordable housing for homeless people. *(Find out more on the initiative at: https://k-p.li/2U94hB6.)*

The following are some of the strategies employed in Chicago and Bergen County:

• Identify chronically homeless patients. The University of Illinois Hospital and Health Sciences System in Chicago began its program to find housing for homeless patients with nurses' help, says **Stephen Brown**, MSW, LCSW, director of preventive emergency medicine, department of emergency medicine at the University of Illinois Hospital and Health Sciences System. *(See story about how housing centers can lead collaborative effort, page 54.)*

"Our charge nurses know every homeless individual," he says. "We came up with an initial list of 48 individuals."

Now, the program uses data-mining and other methods to identify ED and hospitalized patients who are chronically homeless.

"Last year, we had 1,240 individuals who are currently homeless in our system," Brown says.

Using the hospital's electronic medical record, the program added a column that notes how many times a patient has visited the ED in the previous four months. This is considered a risk factor for homelessness, he adds.

"I developed a list of the most frequent utilizers, and we looked at their charts," Brown explains. "We might see that their address is a crisis shelter, and we look in the clinical notes to see whether they are homeless, undomiciled, or living on the streets."

Then the list is circulated to social workers, ED doctors, residents, nurses, and psychiatrists.

• Create a panel to assess patients for intake. With a long list of homeless patients, the program needed to focus on those who were chronically homeless.

"They were too challenging, so we needed to do a group decision," Brown says. "We developed a chronically homeless referral panel, whose job is to assess patients for the housing program."

EXECUTIVE SUMMARY

Programs that include healthcare organizations collaborating with homeless shelters and agencies need organizational plans.

- A first step is to identify the population that will be targeted for services.
- Next, create a process, committee, or panel to make decisions about how the housing resources can best be used.
- Third, work with communities to provide preventive care and primary care services and to meet homeless clients' other healthcare needs.

The panel invited staff to present cases they believed needed the program, and there would be three to five cases assessed at each monthly meeting, he says.

To qualify for the program, the patient must be chronically homeless. They defined this as someone who had been homeless continuously for at least one year or someone who experienced four episodes of homelessness within the previous three years.

The panel's meetings would last one hour to 1.5 hours and involve back-and-forth questioning.

"We had some challenging conversations," Brown says. "One homeless person lived in a storage locker, paying $100 a month for the unheated space with no sanitation."

But when that case was compared with homeless people who were experiencing frostbite from living on the streets, it was decided that the latter individuals were suffering more health-wise and better met the definition for chronic homelessness, he explains.

In another case, a woman was about to start breast cancer treatment, but she didn't qualify as chronically homeless because she had only been homeless for eight months.

"So we didn't put her in the program," Brown says. "Eventually, we got her in a medical respite program where people go to convalesce."

"We never excluded people from the program," Brown adds. "We helped a sex offender, and it took us three-to-four months, and we never found anything in the city, so we had to broaden our search to the suburbs."

The man had to be interviewed by a local police department, but he eventually found permanent housing.

These kinds of decisions are terribly difficult, he notes.

• Involve outreach workers, primary care, preventive care, and community providers. The project to end homelessness in Bergen County has benefited tremendously from an integration of services, says **Julia Orlando**, CRC, EdM, MA, director of the Bergen County Housing, Health, and Human Services Center in Hackensack, NJ.

"OUR OBJECTIVE IS TO REDUCE HARM. WE'RE NOT ONLY SERVING THE HOMELESS POPULATION, BUT ALSO REPRODUCTIVE-AGE MEN AND WOMEN AND HIGH-RISK POPULATIONS."

Homeless patients with medical and/or behavioral health issues are increasingly receiving healthcare when they need it. Also, there are more conversations between homeless organizations and health providers about discharge planning, Orlando says.

Before the integrated approach, homeless patients would receive hospital treatment for a medical condition — but not the psychiatric care they also needed. Since the focus on ending homelessness, these individuals are receiving all needed healthcare services, including detox and substance use treatment in one of the local hospitals, she explains.

"If they don't have medical insurance, they can apply for charity care," Orlando says. "One of us will call the hospital and say that 'So-and-so is coming over, here's the profile, here's what's going on with them.'"

This ensures healthcare providers know everything they need to know about each patient.

"Soon, we will have integrated medical records and will share information [electronically]," Orlando says. "When that happens, it will be a game-changer."

The homeless shelter opened a health clinic in September 2018 to provide preventive care and reproductive health counseling, says **Noemi Dominguez**, RN, MSN, director of public health nursing at Bergen County Department of Health Services.

With state funding for the Access for Reproductive Care and HIV (ARCH) program, the health clinic is located in a homeless shelter to provide care for people waiting there for permanent housing, she says. *(Find out more about ARCH at: https://bit.ly/2TZXLNh.)*

"Our objective is to reduce harm," Dominguez says. "We're not only serving the homeless population, but also reproductive-age men and women, and high-risk populations like addicts and sex workers."

The clinic's location within shelters is comfortable for its target clients, she notes.

"We collaborate with other agencies to provide STD screening and nutritional counseling," Dominguez says. "We do sexual and reproductive health counseling, pregnancy testing, vaccinations, wound assessment, HIV care, [and] pregnancy care, and we reach out to IV drug users to reduce self-harm."

The clinic has four exam rooms, two nurses, an outreach worker, and a phlebotomist. They see residents of the shelter, as well as walk-ins, she says.

"In January 2019, we had 188 visits, and we average 100 visits with the wellness nurse per month," Dominguez says. "Sometimes, we can change the behaviors."

The clinic connects clients with primary care services, behavioral health services, and insurance, as needed.

"Our goal is to empower people to have a home and to manage their illnesses," Dominguez explains. "Right now, we're in the process of developing an outreach program to find sex workers and IV drug users that are very hard to reach because their behavior is taboo and they're hidden."

At the University of Illinois Hospital and Health Sciences System, social workers help patients schedule an appointment for when they leave the hospital, and they contact housing case managers to ensure patients are taken to the appointments.

Alignment with community providers includes working with mental health programs, as the homeless population has high rates of mental and behavioral health problems. *(See story on treating mental health issues of homeless patients, page 55.)*

Housing case managers reach out to primary care providers, making it easier to navigate patients into more appropriate levels of healthcare.

"These housing case managers would help set up medical appointments and get them to their appointments," Brown says.

"These folks are already very ill and rely on services with multiple specialists. You see a high rate of comorbidities of this population," he explains. "We try to get people into primary care, but most of the engagement we have is getting them into seeing their specialist." ■

Collaboration to Help Homeless Patients Works When a Quarterback Leads the Team

Local housing center leads, coordinates

A program to improve the health and lives of homeless populations in Chicago follows a quarterback-style team approach.

The Center for Housing and Health (CHH) serves as the quarterback for the Better Health Through Housing program, established in 2014. The collaborative includes an alliance of 28 supportive housing agencies across Chicago and Cook County and has a contract with the University of Illinois Hospital and Health Sciences System. *(For more on the Center for Housing Health, visit: http://bit.ly/2uwbBwj.)*

In New Jersey, the collaborative centers around the Bergen County Housing, Health, and Human Services Center in Hackensack. The lead players provide infrastructure and outreach.

For the University of Illinois Hospital homeless program, collaboration with the local housing center was crucial, says **Stephen Brown**, MSW, LCSW, director of preventive emergency medicine at the University of Illinois Hospital and Health Sciences System.

The hospital also established memorandums of understanding with more than 25 supportive housing agencies and three single-room occupancy (SRO) hotels, Brown says.

"With those relationships, it gave us access to over 4,000 scattered site units — one-bedroom apartments throughout the city," he says. "At any given time, there would be 125 to 150 vacant units."

It was highly variable. As the program's strategies to reduce homelessness became successful, there were fewer vacancies; people stayed in housing longer, so some homeless clients had to wait 60 days to get a unit.

"We got them off the street and put them in SROs," Brown says. "Once we voted on helping an individual, there was paperwork and intake we needed to do, and then we engaged with an outreach worker."

Once homeless patients — usually already discharged from the ED or hospital — were selected for housing assistance, workers had to find them.

The referral panel learned that most of the homeless individuals lived within a four-to-six-block range. This section had restaurants that might give them food and provided convenient locations for panhandling, he says.

"So the outreach worker would go out and find them," he adds.

If that didn't work, they knew the person would sooner or later return to the hospital because they were frequent visitors, Brown says.

Outreach workers take the homeless clients to SROs, usually within a couple of days of finding them and telling them about the program.

"Once they were stabilized there and we got to know them a little better, then the outreach worker would introduce them to a permanent housing case manager, who would start a housing search for them," Brown says. "They'd show them apartments."

Some homeless individuals would share preferences for where they wanted to live. Once they approved a housing choice, they moved in and the program would pay the monthly rental fee on their behalf.

"We do troubleshooting and talk over the difficult cases and challenges case managers are having," Brown says. "A social worker brings in a list of appointments for each patient and gives them to each of the case managers."

The homeless patients helped by the hospital's program are particularly vulnerable healthwise — and this has led to a high mortality rate and more turnover, he notes.

"There was one woman in permanent housing for 30 days, and then she passed away," Brown says.

In one particularly sad case, a woman re-established in housing and reunited with her daughter and grandchild had maintained housing stability for a year. But then she was admitted into hospice care because of cancer. "To me, that was just tragic," Brown says.

The program is evolving into a collective impact model, Brown says.

"We've done things to help our patients, and there is a greater possibility if all the hospitals are doing similar work," he adds. "Four additional hospitals have replicated our program."

Together, the hospitals can help more homeless people than any one of them can do separately. They can provide their own funding and individually apply for grants and subsidies to help pay for affordable housing.

"If we ask every hospital to just provide housing for 10 chronically homeless individuals, then that would have collective impact," Brown explains. "We could reduce the number of chronically homeless individuals by about 25%."

In addition to the four hospitals already involved in the project, additional hospitals and even some payers might also help out, he says.

"There is a direct benefit for insurers to pay for housing," he says. "Payers are finding that homeless people cost them money because of emergency department and inpatient visits."

Many of the homeless people in Illinois have some form of insurance, including coverage due to Medicaid expansion, he adds. ■

Many Homeless Individuals Need Mental Health, Substance Use Treatment

Severe mental illness tied to homelessness

An estimated one in four or five homeless people in the United States suffers from severe mental illness, according to the National Coalition for the Homeless in Washington, DC.

This is about four times the rate of severe mental illness among the nation's general adult population. Mayors commonly mention mental illness as one of the largest causes of homelessness. *(For more information, visit: http://bit.ly/2U0uXZZ.)*

Mental illness is especially common among homeless Chicagoans, according to data collected by the University of Illinois Hospital and Health Sciences System.

The health system found that 73% of homeless individuals seen in the hospital and ED are mentally ill and that 38% suffer from severe mental illness.[1]

"There is a high rate of untreated mental illness on the street," says **Stephen Brown**, MSW, LCSW, director of preventive emergency medicine at the University of Illinois Hospital and Health Sciences System.

Half of the patients who visit the hospital's ED most frequently are chronically homeless, Brown says.

"What we're beginning to discover is there are sheltered and unsheltered homeless people living on the streets, and many of them are unsheltered because of their severe mental illness," he explains. "Crisis shelters don't have the capacity to handle individuals like that."

New research shows that homeless people with substance use disorders are hospitalized and visit EDs significantly less often when they are provided supportive housing.[2]

The Better Health Through Housing program, implemented by the university and community partners, helps homeless patients find mental and behavioral health treatment, housing, and medical care. Soon, the program will pair

housing with psychiatric services, Brown says.

"We'll ask individuals if they want to get into treatment, and half might voluntarily comply," he explains.

Mental and behavioral health problems often overlap with substance use disorders. In those cases, the hospital's housing program can help patients addicted to alcohol or opioids obtain long-acting injectable drugs to help them stabilize, Brown says.

For example, Sublocade — approved by the FDA in November 2017 — is a monthly buprenorphine injection for medication-assisted treatment of moderate or severe opioid use disorder. Patients who already have been on a stable dose of buprenorphine treatment for seven days are eligible for the injection. *(For more information, visit: http://bit.ly/2uyHTqG.)*

It is challenging to find enough residential substance use treatment programs, and this is where medication-assisted therapy can help, Brown notes.

For many homeless patients addicted to opioids, the goal is to prevent them from becoming dopesick several times a day. "That's why they are panhandling all day and why they live on the street — to prevent withdrawal," he explains.

"The cycle of withdrawal happens within six to eight hours, and there's no way they can go into a crisis center without their drugs," Brown adds. "So medication-assisted therapy prevents them from getting dopesick."

It's also an alternative to methadone treatment, which is a challenging treatment option for people who lack housing and financial resources, he says.

"We now have drop-in hours [for medication-assisted treatment] at our own clinics, and we've had some success in getting homeless people into medication therapy," Brown says. "One man was off opioids for the first time in 10 years."

Or, the patients might need and desire psychiatric treatment. But if they lack sustainable housing, they often stop taking their medication, he adds.

The program's goal is to end this obstacle to better overall health.

"A psychiatric case manager meets with them three to five times a week," Brown says. "In terms of alignment, we need to have housing as part of our treatment plan so anyone with severe, untreated mental illness can be helped. We can stabilize their mental condition with medication and keep them stable."

As the Chicago health system's homeless program has evolved, it has become more involved in the population's social determinants of health and solutions to these issues.

"When I started the program, I was given a finite task to create a program. As I started doing that, I immediately recognized that this was going to grow and we had to look outward," Brown explains.

For example, the sheriff's department is creating an opioid hotspot response to a location where most overdoses occur. "They offer opioid users treatment and bring them to the emergency department, where we give them medication and then navigate them into the treatment they need," Brown says.

One aspiration is to hire peer recovery support specialists who will connect opioid users into primary care clinics, he adds.

"We are constantly tweaking this program," Brown says. ■

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Health System Uses Predictive Analytics to Reduce Readmissions

Advocate Aurora Health, a large health system with dual headquarters in Downers Grove, IL, and Milwaukee, is reporting success with a program that uses predictive analytics to identify outpatients with an increased risk of unnecessary hospitalization. Those patients are then provided special intervention to prevent admissions.

The health system uses a predictive modeling platform that integrates 30 to 40 sources of data, explains **Tina Esposito**, vice president of information and technology innovation at Advocate Aurora Health.

The program was developed in 2012 as part of the health system's move to value-based care, Esposito says. Advocate Aurora Health has an accountable care organization with more than 1 million participants, so there is a strong incentive to prevent unnecessary hospitalizations.

"As we thought about how we could be successful for our patients in the new model of care, we realized there was a bit of a gap in understanding how they moved through our health system. In a fee-for-service world, you're very focused on today and the visit at hand," Esposito says.

"So our data had been very siloed in that way, with hospital data in one silo and home healthcare data in another, and we wanted to look at this in a much more holistic way," she continues. "A primary first step was just getting our data organized in a way that would allow us to understand how care was being delivered in our system to the patient overall, rather than just episodes of care."

That required bringing on more experts in data analytics. Once the health system had a better grasp on its data, it began looking for ways to apply it to patient care. Population healthcare managers approached hospital leadership with the idea that they could be more successful if they could better leverage the data for patients at risk of certain utilizations.

"A PRIMARY FIRST STEP WAS JUST GETTING OUR DATA ORGANIZED IN A WAY THAT WOULD ALLOW US TO UNDERSTAND HOW CARE WAS BEING DELIVERED IN OUR SYSTEM TO THE PATIENT OVERALL."

Advocate Aurora Health leaders realized that they needed to use data that allow an intervention in time to make a difference in preventing hospitalization, not long after the opportunity was gone.

"We understand now that once you identify a high-cost patient, that patient doesn't necessarily stay high-cost, but a big realization was that the care managers were very dependent on claims data, and that is very latent data," Esposito says. "If you have latent data, by the time you see that something has occurred to the patient and try to dispatch a care manager or any other intervention, that patient likely has already regressed to some baseline level of spending. So you've now leveraged a resource that in all likelihood isn't needed any longer but could have been effective months prior."

The health system first used the model on heart failure patients at high risk for unnecessary utilization.

The program is designed to be prescriptive in its approach, Esposito explains, focusing on a disease-specific action plan that can prevent unnecessary hospitalization. A key goal is reducing subjectivity in the care management process.

The pilot program determined that patients who are actively engaged with another care team in the health system, such as those addressing transplants or active cancer, are not a good fit for this approach.

The model includes educating patients about their conditions, symptoms to watch for and how to respond, and frequent contact from care managers by phone and in person.

"Part of the intervention is to get the patient ready to no longer need these regular phone calls. We think it is important to have these patients graduate to a level of self-management because you will never have enough care managers to continue this attention indefinitely," Esposito says.

The average length of time in the program was 70 days.

With 350 patients involved in the pilot, Advocate Aurora Health achieved a 23% reduction

in hospitalization, ER use, and observational stays. Half of them achieved all the milestones in the model's prescriptive workflow.

Esposito says the following were some of the key lessons from the pilot study:

• A predictive model alone does nothing to keep patients out of the hospital. Directed intervention with a disease-specific action plan is required to get results.

• Knowing a patient is at risk of an event doesn't necessarily mean one can do anything to prevent it.

• Connecting with patients early and often is essential.

• Focus on chronic disease self-management first.

• Provide care managers with clear objectives and milestones to ensure consistency across the team. Hiring care managers focused on key attributes such as a commitment to improving patients' health, refined phone etiquette, and a personality that was engaging and authentic.

The health system plans to expand the approach to other conditions, such as COPD. Esposito says the program is an example of how data analytics can affect the bottom line, but only if used strategically.

"There is no ROI in analytics unless someone does something with the information you're providing them," Esposito says. "The partnership with operations and clinicians has to be very, very tight to ultimately realize any value. Whatever analytic endeavor you're after, you have to make sure it's aligned to a very tangible business goal, rather than being just an academic exercise." ■

Optima Health Applies SDOH With Nutrition Programs, Mobile Healthcare

Social determinants of health (SDOH) continue to influence quality improvement efforts across the healthcare system, with a Virginia health plan and health system using the data to improve nutrition and even provide mobile vans to take services into the community.

SDOH data can be obtained through vendors and also through the health system's own experience with patients, explains **Thomas Lundquist**, MD, MMM, FAAP, FACPE, senior vice president and chief medical officer with Optima Health, a health plan in Virginia Beach that is part of the Sentara health system.

"Both the health plan and the health system are increasingly capturing social determinants of health, and one of the things I look at is whether we should buy that data broken down by ZIP code or whether we should capture that information directly as our health system and health plan professionals interact directly with patients and families," he says.

"The answer is that it should be a hybrid eventually because if we enter a new market, we can purchase access to a database that will show us what to expect on a ZIP-code level and maybe even by street. And once we're in there a while, we develop our own data as we interact with them and determine what needs and limitations they have."

One initiative that used SDOH within the Sentara health system is providing mothers with easy access to federally funded support programs, Lundquist notes. The traditional enrollment process for the federal supplemental nutrition program for Women, Infants, and Children (WIC) requires mailing the request for assistance, but in an effort to eliminate any potential travel barriers and also to expedite the request for assistance, a Sentara hospital employee facilitates the sign-up process at the new mother's bedside.

"We find ourselves increasingly prescriptive when it comes to traditional social services outreach, encouraging members to enroll in WIC and to allow us to facilitate assistance with their utilities and housing," Lundquist says. "We can only do that when we have that social determinants of health data. That requires us to have a care management system and an electronic record that captures that data and allows us to dive more deeply into details such as whether you live in a one-story or two-story home, whether you have carpet on your stairs."

In addition, through a partnership with local food banks, Optima Health executed a program that provides new mothers with healthy meals following discharge from the hospital. It currently serves approximately 50 mothers per month with two meals a day for 90 days postpartum.

Optima Health also has worked closely with Sentara to proactively involve and engage community members, Lundquist says. Optima Family Care and Optima Health Community Care, both Medicaid programs for those with low income and disabilities in Virginia, implemented a statewide initiative

called the Health Education and Awareness Program to encourage healthy living and lifestyles among youth.

Lundquist notes that lack of access to transportation also has been determined to be a barrier in receiving healthcare.

Optima Health partnered with organizations such as The Health Wagon in rural Appalachia, which provides mobile health vehicles for medically underserved communities in Virginia to deliver essential, free health services, such as mammograms and flu shots.

It has been an effective means of providing compassionate, quality care to rural communities with limited access to services, Lundquist says.

"The biggest challenges are prioritization, how to reach the services people need, and deciding what should be under our purview to pay for versus just connecting people to community resources and hoping for the best," Lundquist says. "We're evolving our systems to better capture the social determinants of health data … so that the nurse working with the patient can connect the dots in the moment and put things in motion more efficiently." ■

CMS Changes Nursing Home Compare, May Drop Star Ratings

CMS recently announced significant changes to Nursing Home Compare and the Five-Star Quality Rating System. The agency also says that it is considering abandoning the star ratings for hospitals completely.

The Nursing Home Compare website and Five-Star Quality Rating System are aimed at helping consumers, families, and caregivers compare nursing homes. CMS says the recent changes are meant to make the tools more accurate.

"Our updates to Nursing Home Compare reflect more transparent and meaningful information about the quality of care that each nursing home is giving its residents," CMS Administrator **Seema Verma** said in announcing the changes.

"Our goal is to drive quality improvements across the industry and empower consumers to make decisions, with more confidence, for their loved ones," Verma said.

Nursing Home Compare gives each nursing home a rating between 1 and 5 stars, with one overall 5-star rating for each nursing home, and a separate rating for health inspections, staffing levels, and quality measures.

The recent changes include revisions to the inspection process, new staffing information, and new quality measures.

CMS is lifting the freeze on the health inspection ratings instituted in February 2018, which it implemented to avoid some facilities being surveyed under the old process and others under the new process implemented then.

CMS also is setting higher thresholds and evidence-based standards for nursing homes' staffing levels.

Under current standards, facilities that report seven or more days in a quarter with no registered nurse on site are automatically assigned a one-star staffing rating. The trigger for an automatic downgrade to one star will be reduced from seven days with no RN on site to four days.

CMS also is implementing changes intended to improve how it identifies differences in quality among nursing homes, raise expectations for quality, and incentivize continuous quality improvement.

CMS also recently updated the ratings for hospitals on Hospital Compare, the first time in almost 15 months. Consistent with previous years, most hospitals received two to four stars and few received the lowest rating of one star or the highest rating of five stars. *(Hospital Compare is online at: https://bit.ly/1MimgOq.)*

However, CMS indicated that it is considering scrapping the basis of the whole star ratings system.

It opened a public comment page soliciting feedback on potential changes to the ratings program, including eliminating the latent variable model altogether. *(The public comment page is online at: https://go.cms.gov/2C5kEIY. The comment period ended on March 29, 2019.)*

In what it called a "long-term" approach with changes that wouldn't be made before 2020, CMS said it is considering "replacing LVM (the latent variable model) with an explicit approach (such as an average of measure scores) to group score calculation." ■

COMING IN FUTURE MONTHS

- Study finds dramatic drop in hospitalizations with home-based serious illness care program
- Health equity teams seek to reduce higher disease rates among ethnic minorities

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CE QUESTIONS

1. **Through the University of Illinois Hospital and Health System's Better Health Through Housing program, ED visits and hospitalizations by the targeted homeless population declined by which percentages?**

   a. ED visits dropped 57%; hospitalizations declined 67%
   b. ED visits fell by 21%; hospitalizations dropped 25%
   c. ED visits and hospitalizations each declined by one-fifth
   d. Hospitalizations dropped by 75%, and ED visits fell 8%

2. **According to the U.S. Department of Housing and Urban Development, the first county to end homelessness was which of the following?**

   a. Cook County in Illinois
   b. Dade County in Florida
   c. Bergen County in New Jersey
   d. Lucas County in Ohio

3. **What proportion of homeless people in the United States suffer from severe mental illness, according to the National Coalition for the Homeless?**

   a. One in two
   b. One in three
   c. One in four or five
   d. One in 10

4. **In November 2017, the FDA approved Sublocade as what type of treatment for opioid addiction?**

   a. Quarterly oral opioid therapy
   b. Once-monthly buprenorphine injection for medication-assisted therapy
   c. A drug to effectively prevent opioid use among addicts
   d. A medication to eliminate opioid withdrawal symptoms

CE OBJECTIVES

After completing this activity, participants will be able to:

1. Identify clinical, legal, legislative, regulatory, financial, and social issues relevant to case management.
2. Explain how the clinical, legal, legislative, regulatory, financial, and social issues relevant to case management affect case managers and clients.
3. Describe practical ways to solve problems that case managers encounter in their daily case management activities.