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In April 2018, the two largest health systems in Illinois and Wisconsin—Advocate Health Care and Aurora Health Care—came together to form Advocate Aurora Health. While the process of merging into one organization is complex, our vision is clear and simple: We help people live well.

At the heart of helping people live well is understanding what living well means to the individual. This requires us to really know our patients beyond just the information that is in their electronic medical record. Advocate Aurora Health is on a path to become a consumer-first health system—one that truly understands the individual needs of the three million people who trust us to deliver an exceptional health care experience, every time.

Going all in to become a consumer-first health system requires nothing short of transformation.

Population health management is a key driver in our transformation. Both legacy organizations have proven track records of delivering top tier clinical outcomes while controlling the total cost of care for those who use and pay for health care. To accelerate this work, we’re boldly bringing our system onto a single integrated electronic medical record platform, with the goal of patients receiving one record regardless of where they seek care across our 400-mile footprint.

As a significant employer and health care provider we see the imperative to be consumer-focused growing by the day, as health care costs continue to rise—reaching $3.3 trillion in 2018. This means greater out-of-pocket costs for employers and consumers alike. Yet, as medical costs have risen approximately 6 percent nationally per year, Advocate Aurora Health has been able to control this increase at 1 to 2 percent per year for patients in our value-based plans. Over time, these savings translate to lower premiums and out-of-pocket costs for employers and consumers.

In this report, you’ll read stories of the role population health plays in transformation—both in changing the way we are delivering care today to create better outcomes and value for employers and in transforming the consumer experience beyond medical care by addressing the myriad barriers and inequities that keep people from seeking their own best health.

Together, we can help more people live well.
LEADING THE TRANSFORMATION TO BETTER VALUE

- **400** miles
- **28** hospitals
- **500** sites of care
- **63** Walgreens clinics
- **54** partnered Skilled Nursing Facilities
- **2.7 million** unique patients annually
- **8,000** physicians
- **70,000** team members
- **22,000** nurses
- **4,000** in post acute division
- **1,800** advanced practice clinicians
- **2,350** employers in an Advocate-only insurance plan
- **80,000 members**
- **8,475** members in the Advocate-only Medicare Advantage plan
- **1,000+** Wisconsin employers in an Aurora-only or narrow network insurance plan
- **110,000 members**

- **3** Medicare Shared Savings Program Accountable Care Organizations (ACOs) over 200,000 lives
- **Over 25** value-based contracts
- **2nd** in quality among top national health systems
- **100%** Illinois primary care physician practices (those eligible) certified as Patient-Centered Medical Homes
- **30% less** readmissions through effective post-discharge follow up

Numbers reflect 2018 performance
Over 100 patient safety huddles happening every day across our sites of care

More than 285,000 online appointments

Nearly 4,000 virtual and e-visits

722,000 patients engaged in their care via the MyAdvocateAurora portal

14 day average LOS at in-network Skilled Nursing Facilities

26 days nationally

Wisconsin
300,000 value-based lives
* Prevalence of chronic disease
- Asthma: 22,600
- Congestive Heart Failure: 12,600
- COPD: 16,800
- Coronary Artery Disease: 31,700
- Diabetes: 43,800

Illinois
1 million value-based lives
* Prevalence of chronic disease
- Asthma: 60,200
- Congestive Heart Failure: 32,300
- COPD: 52,000
- Coronary Artery Disease: 81,900
- Diabetes: 89,100

$2.5 million in pharmacy savings for Illinois patients in value-based contracts

$160 million in taxpayer savings through Medicare Shared Savings Program

$2 billion in community benefit services

1,400 research studies and clinical trials

1.3 MILLION LIVES IN VALUE-BASED CONTRACTS
At the most basic level, population health management is making the most efficient use of our health care resources to improve the health of a population.

At Advocate Aurora Health, we define our population as those patients for whom we are sharing a large portion of the medical costs with the payers. These are patients in value-based insurance contracts—which is about 1.3 million lives across Illinois and Wisconsin, nearly half of all patients we serve. That number will only grow as more patients move into value-based plans.

This is important because those who are paying for health care today—consumers, businesses, organizations, the government—are seeking greater value for the financial investments they’re making. This requires Advocate Aurora Health to get better every day at using the health care dollar to invest in the programs and care that truly support the achievement of better health.

The Quadruple Aim is the accepted compass to optimize performance in population health. To be successful, we must:

- Enhance the patient experience
- Improve quality health outcomes
- Reduce the total cost of care
- Enhance the physician and clinician experience

Transforming Care Through the Quadruple Aim

Where we’ve been; where we are headed

Historically, third-party payers, such as insurance companies and the government, reimbursed health care providers for the procedures performed or services rendered, rather than for the health outcomes they achieved. Today, as we continue to read headlines about rising health care costs and insurance premiums, we accelerate the shift from “fee-for-service” (doing more to earn more) toward “fee-for-value” models that are based on rewarding physicians and hospitals for achieving better outcomes and lowering the total cost of care.

For example, the Centers for Medicare & Medicaid Services (CMS) is changing the way Medicare pays both physicians and hospitals by rewarding providers for delivering services of higher quality and lower cost to deliver value and savings for taxpayers. Advocate has a long history of participating in and leading the nation in government programs as one of the first Accountable Care Organizations (ACOs).

Both Advocate and Aurora have Medicare ACOs that participate in the Medicare Shared Savings Program (MSSP). As one of the country’s largest ACOs, with more than 120,000 Medicare lives, Advocate has participated in the MSSP since 2012. We have made significant strides in improving quality and reducing costs, saving taxpayers $160 million since entering the program. Aurora has two ACOs—one established in 2017 and one in 2018—with nearly 82,000 Medicare lives combined. Both are performing well in quality and costs compared to benchmarks.

Advocate also participates in a new Medicare advanced alternative payment model program called Bundled Payments for Care Improvement-Advanced. In this model, physician, hospital, and other care provider services are coordinated to encourage efficient, high quality care over a 90 day episode of care. With the same goals in mind, Aurora participates in the Comprehensive Care for Joint Replacement bundled payment program. Advocate Aurora Health is building these competencies to enable bundled payment offerings to payers and employers.

Many private insurers are now following Medicare’s lead. Both Advocate and Aurora have innovative partnerships with commercial insurance partners to create contracts that reward the delivery of high quality health outcomes and lowering the total cost of care by sharing in the savings.
Access, quality and cost

Advocate Aurora Health is controlling costs for payers, employers and individuals through a variety of ways, including:

- **Improved access to primary and low acuity care** to ensure patients get the right care at the right time by the right provider at the right cost
- **Better management** of patients with chronic conditions, making use of interdisciplinary care teams and evidence-based approaches and technologies to engage patients in better condition control
- **A robust integrated care management program** that partner across care settings, enabling clinician communication and coordination between inpatient, post acute and community care settings
- **Strategies to address social determinants of health**, removing socio-economic and behavioral non-medical barriers to health
- **Increasing the use of technology** for both clinicians and consumers to access and manage care

Read more about these efforts in the following pages of this report.

Helping people live well

In the past, patients primarily sought medical care when they were sick, injured or had an immediate medical problem. While we must always provide safe, high quality care for these situations, we are also laser focused on prevention and disease management across the health care continuum to help people achieve their personal health goals at every stage of life. This person-centered approach to health is reflected in our mission of “helping people live well”—with the definition of “well” personally defined for each individual we serve.

Establishing and improving upon more person-centered measures of success is important in achieving this mission. For example, our health system has started tracking the “Days at Home,” in which days spent not in a hospital or other facility (such as skilled nursing) are measured as a true north marker of success. We know we have helped people live well—back at home, at work and with family and friends—as this metric has significantly improved over the past year.

Data-driven, technology-enabled care

Having access to comprehensive patient data is critical for a successful population health program in order to close gaps in care and prevent costly care episodes before they occur. In Illinois, we use HealtheRegistries™ to provide our physicians with robust, actionable information they can use to manage patients in real time—24/7, 365 days a year. Our dedicated field operations team visits with offices regularly to review data and highlight opportunities and programs to support the best health outcomes. As a result, physicians are able to conduct patient outreach early and often to ensure patients complete their annual wellness visits and other important screenings, adhere to their medications, and manage their chronic disease symptoms to avoid a costly emergency room or hospital visit. Across both states, predictive modeling is used to identify high risk patients—allowing us to intervene at the right time and drive down future high costs.

Today, health care consumers increasingly want to be active partners with their providers and drive their own care. Technology such as mobile applications and wearable devices for tracking and managing your own health data, patient portals with capabilities like virtual visits and easy prescription refills, and convenient online scheduling for doctor’s appointments, immediate care, mammograms, and heart scans are enhancing consumer access and affordability.

Advocate Aurora Health’s implementation of the Epic single integrated platform will accelerate our population health efforts, giving physicians access to real-time, actionable data not only for every health care encounter they have within our health system, but beyond to provide the most comprehensive, efficient care. In addition, one platform allows patients to have one health record and one bill, which allows them to better manage their own health and health care finances.

Read on to learn how Advocate Aurora Health is advancing population health to transform the health care industry.
Access to transportation
Food security
Medical/dental care
Housing stability
Counseling
HELPING PEOPLE LIVE WELL

Tackling Social Determinants of Health

There are many factors that impact a person’s health beyond what is diagnosed in a medical setting or written on a prescription pad. Coined 'Social Determinants of Health (SDoH),' factors ranging from job security and education to having access to healthy food and transportation play a critical role in overall health outcomes and total cost of care.

In fact, research shows that patients having SDoH barriers disproportionately have:

- Higher utilization and unnecessary emergency room visits
- Avoidable hospital admissions and readmissions
- Lack of engagement with their primary care medical home

“Medical care accounts for only about 10 to 20 percent of the modifiable contributors to healthy outcomes of a population, with the other 80 to 90 percent being the SDoH,” says Alvia Siddiqi, MD, Vice President, Population Health in Illinois. “Providing whole-person care is fundamental to managing population health. We have implemented innovative solutions to address these important social needs.”

That’s why Advocate Aurora Health is now “prescribing” the non-medical resources needed to address potential barriers to care—through a mobile-enabled messaging and referral platform called NowPow.

How NowPow works

Clinical team members, including care managers and community health workers, ask screening questions about having adequate food, housing or transportation—thus creating a more complete picture of a patient’s needs. Based on the patient’s social data, NowPow software queries its extensive database of more than 11,000 community resources. It links patients to services in their local neighborhood, including job training, housing assistance, help with transportation, meal sites, food banks, or government resources. A curated list of available resources and social services is then emailed, texted or printed for the patient.

NowPow can help to close the feedback loop with community service providers, keeping the care team informed when patients actually access the resources to which they were referred. NowPow’s two-way electronic messaging capability helps nudge patients into action, decreasing “no show” rates.

“NowPow is an excellent example of how tapping into technology and using non-traditional approaches can accelerate our population health impact,” adds Dr. Siddiqi. “When the tool is fully implemented in 2019, we expect to see reductions in emergency room visits, avoidable readmissions, and total cost of care, while improving the overall health across populations.”

Since the 2018 launch of NowPow in south Chicagoland, covering areas serviced by Advocate Christ Medical Center, Advocate Trinity Hospital and Advocate South Suburban Hospital, nearly 400 patients in a five month period screened positive for a SDoH barrier and were referred to community service providers.
Meeting Patients Where They Are

At home, the coffee shop around the corner or a local homeless shelter, meeting with patients on their own turf breaks down barriers between the health care system and the communities we serve. This customized, patient-centered approach helps us engage with some of our highest-risk patients leading to greater impact on emergency room use and hospitalization.

Many Advocate Aurora Health programs recognize the importance of meeting patients where they are to provide comprehensive health care through education, coordination of appropriate health care services and connection to available community resources.

However, one community-based program in the greater Milwaukee area has taken this concept to new heights. Advanced practice registered nurses and advanced practice social workers are embedded right in the community, providing care management services for high-risk, hard-to-engage patients. As a team, these case managers literally meet their patients wherever they are.

“I had a patient who wasn’t comfortable meeting at her home, so instead we had a series of interactions at the Perkins down the street.” says Paula Ulch, MSN, RN. “I was able to make sure she had something to eat and could also offer tips on healthy eating.”

The patients seen through this program are most often Medicaid recipients or those without health insurance who have high-intensity needs. They typically struggle with chronic illness, behavioral health issues and are at high risk for hospitalization or emergency room utilization. The care management team serves as an important connection to basic health care services and community social services, helping improve the health of a group of people that could easily fall through the cracks.

Caring for and engaging these high-risk patients at a site convenient for them is working. Results from 2017 for this program showed a 24 percent reduction in emergency room visits, a 32 percent reduction in inpatient admissions and a 38 percent drop in readmissions. These notable accomplishments translated to approximately $2.1 million in avoidable cost savings. 

A Physician’s Perspective

“Having access to real-time, actionable data about my patients helps me easily identify gaps in care so my team can reach out to schedule wellness visits, mammograms, colon cancer screenings and other preventative care. This proactive focus on “well care” helps to prevent avoidable “sick care” in the future.”

– Kushleen Dhillon, MD, Internal Medicine
Sometimes Food is the Best Medicine

Access to fresh, affordable food is a key ingredient in the recipe to address social determinants of health—and in keeping the community healthy. Yet, over 15 million households in the U.S. face some level of food insecurity\(^1\). This statistic hits close to home for patients living in south Chicagoland—near Advocate Trinity Hospital. Food insecurity affects between 30 percent and 51 percent of the population, depending on zip-code location. These rates far exceed the Chicago average of 8.5 percent.

In August 2018, Advocate launched an innovative pilot program—Healthy Living Food Farmacy—at Advocate Trinity Hospital to make a positive impact on patients facing socio-economic barriers to better health.

Patients are invited to attend the bi-weekly events for a free dose of healthy food—making their selections from tables of assorted fresh produce and low-sodium, shelf-stable proteins. Items are displayed in a grocery store environment in the hospital cafeteria and include fresh kale, cauliflower, broccoli, tomatoes, beans, tuna and more.

The program aims to impact the health of the community. A 2017 study found that low food security among working age adults is associated with an increased risk of 10 of the most common, costly and preventable chronic conditions\(^2\). In Trinity’s Chicago neighborhood, many residents suffer from these conditions, including 31 percent with obesity, 52 percent with hypertension and 24 percent with diabetes\(^3\).

During visits, patients are coached on the importance of eating healthy, low-carb meals and snacks.

“There’s no limit to the positive impact a program like this can have on the health of patients and families,” says Tony Hampton, MD, a family medicine physician. “It shows how Advocate Aurora Health is helping people live well, far beyond the clinical care we give patients. Healthy Living Food Farmacy is a life-changing way to address diet-related health concerns—without prescribing more medications—just healthy food.”

The Food Farmacy is supported by a partnership with the Greater Chicago Food Depository, Advocate Trinity Hospital’s leadership, volunteers and the Advocate Performance Advisory Office. 

For source of citations, visit advocateaurora.org/valuestory
7 Emergency room visits in the past 6 months
5 Medications
3 Chronic conditions
2 Abnormal lab results

=34%
Risk of hospitalization
Harnessing Analytics to Head Off Hospitalizations

Imagine being able to predict the likelihood of a patient being admitted to the hospital within the next 90 days—a period in which patients with chronic conditions often land at the hospital’s door, driving up health care costs and detracting from quality of life.

Advocate Aurora Health has harnessed the power of technology and predictive analytics to do just that, by developing a model that estimates a patient’s “risk score” for a future hospitalization.

This proprietary tool, called the “Acute Utilization Prediction Score,” identifies Congestive Heart Failure (CHF) patients having a high likelihood of being admitted to the hospital. The model includes over 60 variables across multiple categories like prior utilization, diagnoses, medications, and lab results to correctly identify these patients. CHF patients showing an increased risk of 20 percent or more are quickly referred for Episodic Care Management.

“When a patient’s score is high enough for a referral, the Episodic Care Management team reaches out proactively and begins working with the patient to get their condition under better control,” says Carrie Nelson, MD, System Vice President of Population Health. “We don’t wait for someone to end up in the hospital or emergency room before taking action. Our goal is to work with people with heart failure and empower them to better care for themselves and manage their disease at home. We provide patient education, close surveillance and regular phone conversations to monitor their situation. Patients learn which symptoms to watch for and when to contact their physician, both for the current episode and for the future.”

The care management team skillfully engages and teaches patients to make sure they understand their care plan. Team members employ the “teach back” method to verify understanding. They ask patients to state, in their own words, what they need to know or do, when CHF symptoms arise.

CHF patients are followed closely, providing the care managers multiple opportunities to assess and address any barriers to care, so patients can self-manage at home after that.

Early results of this patient-centered approach have been favorable—a 23 percent reduction in CHF-related admissions. The program maintains a very high engagement rate at more than 78 percent.

“Identifying high-risk CHF patients and reducing future hospitalizations is a win-win for all,” says Lisa Roome, RN, BSN, Executive Director, Ambulatory Care Management and Medical Operations. “We attribute this success to the increased effectiveness of our team’s interventions and using the new predictive tool. We are now expanding the program to reach more patients with more disease states.”

We don’t wait for someone to end up in the hospital or emergency room before taking action.
Follow-Up Care Just a Click Away

Actively engaging patients in their care remains a key driver in improving outcomes and lowering costs. Surgical patients can now use their smartphone to stay on track—and ask for help—before and after a procedure, all at the click of a button.

GetWell Loop is a mobile app that offers easy, two-way communication, both to and from the surgeon’s office. Advocate Aurora Health surgeons in Illinois use the tool to connect with their patients before surgery, during their inpatient stay and after discharge. During the first 90 days following discharge, when readmissions are most likely to occur, patients receive automated “check-in” text messages to see how they are recovering.

Since launching a GetWell Loop pilot in 2016 across orthopedic surgery settings in Illinois, this innovative tool has engaged patients to partner with their surgeon to achieve better outcomes.

The tool now covers all surgical specialties and is used to connect with patients as part of the Medicare Bundled Payment Program—ensuring care is coordinated following an inpatient hospital visit. To date, nearly 2,000 patients have been invited to use GetWell Loop, with 73 percent of these patients activating and routinely using their account. Of these patients:

- Over 83 percent report they were able to avoid unnecessary follow-up office visits
- 93 percent report they are “extremely likely to recommend” their providers

GetWell Loop’s automated daily engagement feature encourages patients to become active stakeholders in their own health. It empowers them to reach out for information or advice they feel they need, when they need it. Remote guidance and monitoring keep surgical patients on track toward a successful recovery.

Addressing the Opioid Crisis

Following surgery, many patients head home with prescriptions for opioid painkillers. The American Society of Anesthesiologists recommends using prescription painkillers sparingly after surgery. To avoid the potential for opioid addiction, surgical patients need to be properly educated about the risks and benefits of opioids—before their surgery takes place. GetWell Loop is helping in this effort, as health care organizations can customize the content of this digital app to meet their own patients’ needs. With this in mind, Advocate Aurora Health created several short videos on the topic of opioids that surgical patients are encouraged to view on GetWell Loop.

These short videos include easy-to-follow instructions explaining the proper use of drugs after surgery and how to dispose of any unused opioids. These videos are now available to all Advocate Aurora Health surgical patients—in both Illinois and Wisconsin.

Keeping Patients on Track for a Rapid Recovery

Ritesh Shah, MD, Orthopedic Surgeon, adopts new advances that allow many joint replacement patients to walk out of the hospital 90 minutes after surgery and resume their active lives in days or weeks. Such rapid recoveries are made possible because of new advances in surgery, anesthesia, physical therapy and importantly—proper patient preparation and education.

Closely following these “rapid recovery” patients once they leave the hospital is crucial to the healing process and the success of joint replacement surgery. Dr. Shah believes the GetWell Loop has made keeping tabs on surgical patients more efficient.

“It is a very helpful tool to engage patients after they leave the hospital setting,” he says. “I can check on how they are doing at home, address any concerns they may have in a timely manner and follow their outcomes as the treating physician.”

Ritesh Shah, MD
Right Care, Right Time with the Help of a Bot

From the sniffles to a severe burn, arming patients with information on where to go for appropriate care is critical in ensuring the right care is delivered at the right time and the right place – helping to avoid costly and unnecessary emergency room visits. By leveraging the latest in digital innovation, we can do just that.

Meet Symptom Checker — a chatbot powered by artificial intelligence (AI) and backed by a library of the same trusted clinical protocols used in nurse triage call centers. When someone feels ill and is deciding when and where to seek care, Symptom Checker acts as a digital concierge to help make the call.

Advocate Aurora Health’s digital division teamed up with developers from Microsoft’s Healthcare NExT initiative to develop this interactive online tool that engages users in a digital conversation while visiting the organization’s website. Symptom Checker provides users with possible symptom causes and suggested care options.

Symptom Checker has been programmed with an extensive set of decision trees with more than 470 distinct reasons for a potential visit or encounter and approximately 2,700 different conditions, diseases, and injuries.

The system uses AI to understand natural language and the user’s intent. If the user types something like “My eight-year-old son has a fever,” the bot asks appropriate follow-up questions about the patient’s symptoms. Symptom Checker then offers possible causes and suggests an appropriate treatment venue. This could be urgent care, seeing a primary care provider, or simply staying home to rest. If the user decides to seek medical care, he or she can click through to reserve a place in line at an Advocate Aurora Health immediate care location.

Symptom Checker isn’t meant as a substitute for a physician. Rather, it’s aimed at helping patients make informed decisions about their care. It’s one many digital tools Advocate Aurora Health is employing to transform the consumer experience.
Bringing Value to the Workplace

It’s a simple fact: healthy employees not only incur fewer health care costs, they are more productive at work and spend more days in the office.

Wisconsin employers, both large and small, partner with Advocate Aurora Health to help their employees live well—and to do so at a lower cost. Over 300 employers currently access a wide range of population health solutions, including care management, employer clinics with primary and preventive care services offered directly in the workplace, wellness services, occupational health services and more.

The formula for success? Using data analytics to provide personalized health care to employees in the workplace – as done through Advocate Aurora Health care management programs. Risk profiles are used to identify areas where intervention, coaching, disease management and clinical integration can help slow the growth of health care costs and improve health.

“By analyzing clinical and claims data and using predictive modeling we can identify risk factors and gaps in care much earlier,” says Sara Russell Rodriguez, MSN, MPH, RN, Vice President, Integrated Care Management. “By identifying high-risk employees and those struggling with chronic disease, steps can be taken to help them stay healthy. This is a more proactive approach to care.”

The trend of providing cost-effective, value-based services revolves around:

- Improving efficiency and accessibility of health care services
- Identifying high-risk employees who need extra attention and using ongoing interventions for those with chronic disease
- Fully engaging employees in their own health through patient education

“When we compare the populations we serve to other commercial populations, we know we deliver better cost and quality outcomes,” adds Russell Rodriguez. “By encouraging members to see a primary care provider for non-urgent health needs, incurred costs are not only lower, care and outcomes actually improve. Having a primary care relationship ensures that preventive care is being done and chronic conditions are well managed.”

In a commercial population that uses these population health services, the per-member per-month cost trend beat the benchmark by 18 percent. This was accomplished with 12.5 percent fewer inpatient days, 18 percent fewer emergency room visits and 18 percent more primary care visits compared to benchmark.

Coordinated care teams, including onsite nurses, nurse navigators, nurse care coordinators and other team members strive to engage employees in their own health care. An onsite nurse gets to know the employees and may learn if there are any social barriers.

“Employees appreciate when they receive extra attention and know their employer is concerned about their well-being,” says Russell Rodriguez. “When engagement is done one-on-one, it’s more effective. This is a more compassionate and realistic approach to help an employee population stay well and it’s being reflected in the bottom line.”

When we compare the populations we serve to other commercial populations, we know we deliver better cost and quality outcomes.
Thinking Differently about Chronic Disease

Six in 10 adults in the US have a chronic disease—and the financial impact is staggering. Managing care for these patients is a leading driver of the nation’s $3.3 trillion in annual health care costs.

Finding ways to control these costs is paramount to bending the health care cost curve. Developing innovative solutions to provide better care for these patients is equally as important.

Here are just a few of the programs developed across Advocate Aurora Health to address the needs of patients with chronic disease or complex medical needs.

AdvocateCare® Center

The AdvocateCare® Center is aptly named. It offers a caring environment designed to help Medicare patients get the most out of life. The center offers "one-stop shopping" convenience, by having an integrated care team onsite. This includes a clinical pharmacist, an exercise physiologist, a chaplain and a social worker, all of whom complement the doctors and nurses. Patients are scheduled for extended, coordinated appointments, typically lasting an hour or more, so they can see multiple providers in a single visit. The site has served more than 700 patients and reduced the overall total cost of care. A recent sampling of the population found a $510 per-member per-month cost reduction achieved through a coordinated care approach to patient care. Emergency room visits were reduced by 35 percent and hospital admissions have been reduced by 38 percent.

Physicians at Home

To break down barriers to basic primary care services, the Physicians at Home program essentially delivers a medical office direct to a patient’s doorstep. The program serves Advocate Medical Group’s homebound Medicare Advantage patients. A physician or advanced practice registered nurse visits the patient quarterly to provide a primary care "office call"—right at home. Nurses visit monthly to address a patient’s ongoing health and social issues and functional aspects of care. With that comes resources such as x-rays, lab draws, EKGs or other diagnostic testing.

This outreach approach pays big dividends to both patients and payers as it has been shown to reduce hospitalizations and emergency room visits for this high-risk population, while improving health outcomes and patient satisfaction. Patients enrolled in the program have seen a 57 percent decrease in admissions and 22 percent decrease in readmissions from their pre-participation experience. In addition, the program has decreased the total cost of care for this population by 58 percent.

The grateful daughter of a 96-year-old patient summed up how Physicians at Home offers her peace of mind. "My mother can’t walk and is in a wheelchair. If they didn’t come to us, my mother wouldn’t have any health care. The nurses and doctors are so compassionate and caring, they are like loving members of our own family.”

Mobile Integrated Health

The first program of its kind approved in Illinois, Advocate Sherman Hospital’s Mobile Integrated Health (MIH) program deploys paramedics into the community to support patients who can use a helping hand in managing their conditions. These paramedics are specially trained in evaluation, treatment and patient education, and carefully follow patients at home for approximately one month after a hospital stay. This home-based approach provides a valuable "insider's view" of what is happening with patients and their environment. Paramedics assess whether or not patients are following their plan of care, or if they need additional community resources or re-education about their condition.

And it’s working. Last year, 196 patients were enrolled in this free service, with 538 patient home visits completed. Only eight patients were readmitted to the hospital within 30 days. Cost avoidance in 2018 alone topped $2.7 million, with a 57 percent reduction in hospital admissions and a 29 percent decrease in emergency room visits.
Post-Acute Care across 400 miles

Developing an extensive post acute network (PAN) is essential to ensure care is coordinated across the continuum—a foundational element of population health. At Advocate Aurora Health, this includes a PAN Skilled Nursing Facility (SNF) Care Program.

Created in Illinois in 2010, this innovative program embeds physicians and advanced practice registered nurses (APRNs) at network-affiliated SNFs to provide coordinated care. This allows us to actively reduce hospital readmissions, reduce SNF length of stay and better manage our patient population.

The physician-APRN team provides clinical care on site and see patients as frequently as needed versus just once monthly as may be the case under usual care models. The team formulates an individualized plan of care for each patient that is updated as the patient condition warrants. They work collaboratively with the patient, family and SNF to develop a discharge plan that enables the patient to transition safely to the next level of care. The APRNs are also responsible for relaying medical information back to the referring primary care physician and scheduling a follow-up appointment after discharge.

This model program, highly recognized by the Centers for Medicare and Medicaid (CMS), was one of the first programs to demonstrate the success of Advocate Aurora Health’s Illinois/Wisconsin integration.

In Illinois, the program is yielding impressive results through enhanced coordination of care—encouraging optimal patient outcomes—while lowering costs. Its successes include 30 percent reductions in both readmissions and length of stay. The program’s positive effect on outcomes has also been revealed by tracking quality measures. For example, a measure determining how many Medicare patients have been assessed for fall risk, then given fall prevention recommendations, shows that PAN SNFs outperform non-PAN SNFs by more than 34 percent.

Building upon the success in Illinois and the transitional care management practices in Wisconsin, the program was expanded across state lines in summer 2018. It began with 10 SNFs in the Milwaukee and Sheboygan areas, followed by three SNFs in the Kenosha market in December 2018 with a goal of program implementation in all Wisconsin markets by 2020.

“This program exemplifies our commitment to providing high quality care to our patients in the post acute setting while using resources efficiently and effectively,” says Sheila Thiel, MD, Medical Director of the SNF Program in Wisconsin.

Early results from August to December 2018 show the program is making positive strides. SNF length of stay has been reduced by nearly 11 days, from 27.9 to 17.38.

The program expansion is key to coordinating care for patients in the Medicare Shared Savings Program and Medicare Bundled Payment Program.

A Physician's Perspective

Digital technology helps me to engage patients in their own care. With the MyAdvocateAurora patient portal, my patients can use e-advice to message with me and my team for simple issues, saving them time. Or, if the issue is more complex I can direct them to seek the right level of care. Putting my patients’ own health data in their hands makes it easier for them to stick to their care plan.

– Sheri Silva Rocco, MD, Pediatrics
Bending the Cost Curve

Health care costs continue to rise, reaching $3.3 trillion in 2018, with greater out-of-pocket costs for employers and consumers. Yet, as medical costs have risen approximately 6 percent nationally per year, Advocate Aurora Health has been able to control this increase at 1 to 2 percent per year for patients in our value-based plans. This has been achieved through a focus on key drivers that impact total cost of care, such as avoidable emergency room visits, unnecessary hospitalizations and tests and better care coordination. Over time, these savings translate to lower premiums and out-of-pocket costs for employers and consumers.

Illinois and Wisconsin Value-Based
Year-Over-Year Medical Cost Trend Versus National Average

NOTES:
Illinois includes Capitation and Shared Savings Contracts
Wisconsin includes Shared Savings Contracts
2018 Quality Data

When Advocate and Aurora combined, each organization brought a laser focus on key metrics that drive population health performance.

The tables that follow highlight each legacy organization’s 2018 performance when compared to external benchmarks, reflecting the unique, historical approach each organization has taken to build, track and report on quality performance measures. The data is not comparable across states, as each organization has historically defined the underlying populations differently and used different external and internal benchmarks to track performance. These results demonstrate top decile and top quartile performance for 10 primary population health measures that both legacy organizations tracked in 2018 based on either National Committee for Quality Assurance (NCQA) benchmarks for Illinois or Wisconsin Collaborative for Healthcare Quality (WCHQ) benchmarks for Wisconsin.

In 2019, we began tracking comparable quality data across Illinois and Wisconsin and are continuing to build out the combined program.

**Illinois Performance Results: NCQA Benchmark Comparison**

Since the launch of the Clinical Integration Program in Illinois in 2004, quality measures have been built based on NCQA definitions. The data below represents all attributed patients included in payment contracts through Advocate Physician Partners, including full risk, shared savings and clinically integrated fee-for-service contracts.

**Wisconsin Performance Results: WCHQ Benchmark Comparison**

Since 2006, quality measures in Wisconsin have been built based on WCHQ definitions. The data below represents all patients regardless of insurance coverage—who have had a physician visit.

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>ILLINOIS Performance</th>
<th>Benchmark</th>
<th>WISCONSIN Performance</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1c Control for Diabetic Patients ¹</td>
<td>67%</td>
<td></td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td>Statin Use for Diabetic Patients</td>
<td>85%</td>
<td></td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Monitoring Kidney Function for Diabetic Patients ¹</td>
<td>95%</td>
<td></td>
<td>97%</td>
<td></td>
</tr>
<tr>
<td>Controlling High Blood Pressure</td>
<td>82%</td>
<td></td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>Adult Pneumonia Vaccination</td>
<td>77%</td>
<td></td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>Breast Cancer Screening</td>
<td>84%</td>
<td></td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Colorectal Screening ²</td>
<td>77%</td>
<td></td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Cervical Cancer Screening</td>
<td>85%</td>
<td></td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>Childhood Immunizations</td>
<td>86%</td>
<td></td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Well Child Visits ³</td>
<td>92%</td>
<td></td>
<td>77%</td>
<td></td>
</tr>
</tbody>
</table>

¹ Benchmark met in IL only reflects patients under age 65; benchmark met in WI reflects all eligible adults per measure specifications.
² Benchmark met in IL reflects top decile for patients under age 65, and top quartile for patients age 65 and older; benchmark met in WI reflects ages 50-75.
³ For Well Child Visits, IL tracked that 4 visits were completed by age 15 months and WI tracked that 6 visits were completed.

**PERFORMANCE MEASURES KEY**

- ![Achieved top decile performance](image)
- ![Achieved top quartile performance](image)
- Blank cell: Did not meet benchmarks

For source of citations, visit advocateaurora.org/valuestory
Seven hospitals received a five-star quality rating from the *Centers for Medicare and Medicaid Services*

Named a 2018 *Chicago Tribune* Top Workplace

Named to *College of Healthcare Information Management Executives* HealthCare’s Most Wired list

Advocate Aurora Health’s CEOs Jim Skogsbergh and Nick Turkal, MD named on *Modern Healthcare’s* 100 Most Influential People in Healthcare list

Nine hospitals with American Nurses’ Credentialing Center’s *Magnet Recognition* Program® status

Received System For Change Award from Practice Greenhealth

Six hospitals received *American College of Surgeons NSQIP™* Meritorious recognition

24 hospitals honored by the American Heart Association/American Stroke Association’s *Get With The Guidelines* Stroke Gold Plus Quality Achievement and Target Stroke Elite Plus, Elite Honor & Honor Roll Recognition

Six hospitals recognized in *Newsweek’s* inaugural list of the world’s best hospitals
A Physician's Perspective

Health care is changing so rapidly; it’s challenging for physicians to keep up with all the rules and regulations and compete with disruptors while continuing to give 100 percent to our patients. Advocate Aurora Health provides the infrastructure I need to help me navigate the changes, which gives me more time to focus on my patients and my practice.

– Michael Kupkowski, MD, Family Medicine
We help people live well.