Case Management ADVISOR™

Covering Case Management Across The Entire Care Continuum

June 2013: Vol. 24, No. 6
Pages 61-72

IN THIS ISSUE

Financial disclosure:
Editor **Mary Booth Thomas**, Executive Editor **Russ Underwood**, Senior Vice President/Group Publisher **Don Johnston** and Nurse Planner **Margaret Leonard** report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

AHC Media

Healthcare industry takes action to combat soaring diabetes costs

Providers, payers tackle pre-diabetes as well

Faced with a growing population with diabetes and soaring costs for managing the disease, payers and providers are focusing on preventing and managing the disease that costs the American economy an estimated $245 billion a year — a 41% increase over the $174 billion estimated cost in 2007, according to a report by the American Diabetes Association.

The costs included direct medical costs of $176 billion, including hospitalizations, emergency department visits, office visits, and medications, and indirect medical costs of $69 billion including absenteeism, reduced productivity, unemployment caused by diabetes-related disabilities, and lost productivity due to early mortality.

The organization's report, issued in March, also found that medical expenses for people with diabetes are 2.3 times higher than for those without the disease.

"As the number of people with diabetes grows, so does the economic burden it places on this country. The cost of diabetes is rising at a rate

CMA Reader Survey Now Online

This year, we're going digital with our annual *Case Management Advisor* reader survey — and giving away a free publication to subscribers who take it. To participate, go to the Web address at the bottom of this message and enter your responses. When you're done, you'll receive a PDF of our new 57-page publication, *2012 Healthcare Salary Survey & Career Guide*.

Thanks in advance for sharing your thoughts about *CMA* and how we might better meet your needs as a subscriber.

Here's the Web address for the survey:
https://www.surveymonkey.com/s/CMAsurvey2013

higher than overall medical costs," said **Robert Ratner**, MD, chief scientific and medical director of the American Diabetes Association in a news release issued by the organization. He added that more than one in 10 healthcare dollars is being spent directly on diabetes and its complications and more than one in five dollars is going to the care of people diagnosed with diabetes.

According to the Centers for Disease Control and Prevention (CDC), nearly 26 million children and adults have diabetes, and an additional 79 million have pre-diabetes, putting them at risk for developing the disease. People with pre-diabetes have blood glucose levels that are higher than normal but not high enough to be diagnosed as type 2 diabetes. They are five to 15 times more likely to develop type 2 diabetes than people with normal blood glucose levels.

"Diabetes is definitely a disease that can cause a vast number of health problems and complications, and it is growing in prevalence in our country," says **Ellen Rudy**, PhD, director of strategic research and epidemiology for Molina Healthcare, a Medicare and Medicaid managed care plan with headquarters in Long Beach, CA.

"It's a looming problem. The Centers for Disease Control and Prevention estimates that by 2050, one in three Americans will have diabetes if we don't do something about it," she adds.

Rudy points out that people with diabetes have two to four times greater risks of developing heart disease and stroke. Other complications include blindness, kidney disease, and amputations of the feet and legs.

"Once people get diabetes, it can't be cured. It can be managed, but managing the disease is very difficult," she says.

Molina is offering the CDC's National Diabetes Prevention Program to at-risk individuals in New Mexico and Florida. The program is a lifestyle intervention that includes 16 weekly group sessions with a health coach and monthly sessions for an additional six months. For details on the program, see related article on page 64.

Diabetes is potentially preventable, and complications from the disease also are potentially preventable, says **Karen Bray**, RN, CDE, PhD, vice president, clinical care services for Optima Health, a Virginia Beach, VA, health plan. "If we focus on changing people's lifestyle choices, we can make a difference and change the outcomes," she says.

The old diabetes disease management model

EXECUTIVE SUMMARY

As the cost of managing diabetes increases and lifestyles have put more Americans at risk for the disease, payers and providers are working to help diabetics manage their conditions and help people at risk avoid developing it.

- Costs have increased by 41% in the past five years.
- The CDC estimates that by 2050, one in three people will have the disease.
- Diabetes can't be cured, but people who have pre-diabetes can prevent or delay the onset of the disease.

Case Management Advisor™ (ISSN# 1053-5500), is published monthly by AHC Media, a division of Thompson Media Group LLC, 3525 Piedmont Road N.E., Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Website: www.ahcmedia.com. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

POSTMASTER: Send address changes to Case Management Advisor™, P.O. Box 105109, Atlanta, GA 30348.

SUBSCRIBER INFORMATION

Customer Service: (800) 688-2421 or fax (800) 284-3291, (customerservice@ahcmedia.com). Hours of operation: 8:30 a.m.- 6 p.m. Monday-Thursday; 8:30 a.m.-4:30 p.m. Friday.

Subscription rates: U.S.A., one year (12 issues), $399. Add $17.95 for shipping & handling. Outside U.S.A., add $30 per year, total prepaid in U.S. funds. For approximately 15 CE nursing contact hours, $449. Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kreutzer at 404-262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue date. Back issues, when available, are $67 each. (GST registration number R128870672.)

AHC Media is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been approved for 15 nursing contact hours using a 60-minute contact hour. Provider approved by the California Board of Registered Nursing, Provider # 14749, for 15 Contact Hours.

This activity has been approved by the Commission for Case Manager Certification for 18 clock hours.

This activity is valid 24 months from the date of publication.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

EDITORIAL QUESTIONS

Questions or comments? Call Mary Booth Thomas at (770) 939-8738.

Editor: **Mary Booth Thomas**, (770) 939-8738, (marybootht@aol.com).
Associate Managing Editor: **Jill Drachenberg** (404) 262-5508.
Executive Editor: **Russ Underwood** (404) 262-5521, (russ.underwood@ahcmedia.com).
Production Editor: **Kristen Ramsey.**
Senior Vice President/Group Publisher: **Donald R. Johnston**

provided disease management only to patients who had already developed the disease, but now the focus also includes people who are at risk for developing diabetes.

"We've grown away from the model of people who have already met utilization or cost goals because they already have the problem. Now we also are trying to identify people who might develop diabetes," Bray says. *(For details on the wide range of diabetes prevention and management programs offered by Optima Health, see related article, below).* ■

Plan offers wide range of diabetes programs

Targets people at risk for the disease

Since Optima Health began its Mission Health wellness and disease management program five years ago at a large employer group, 84% of the 450 participants with diabetes have taken their medication as ordered, compared with just 55% when the program began.

"We've also been able to demonstrate a return on investment when we compare the medical cost trend with the actual costs, taking into account the fact that the participants are aging every year," says **Karen Bray**, RN, CDE, PhD, vice president, clinical care services for the health insurer based in Virginia Beach, VA.

Participants in the diabetes management program can receive incentives of up to $460 in their healthcare saving accounts if they meet the program requirements, which include seeing their physician regularly, taking their medication correctly, having all evidence-based tests such as a hemoglobin A1c, foot exams and eye exams, and talking to their nurse health coach at least quarterly.

In addition to the diabetes management program, the health plan offers education and support for people at risk of developing the disease. "We've grown away from a model focusing solely on people who have met utilization or cost thresholds because they already have a problem. Instead of focusing on the disease of diabetes, our disease management and case management programs focus on total population health, and diabetes is just one of the triggers," Bray says.

Optima's programs for employer groups are part of a wide range of programs the health insurer has developed on diabetes prevention and management. At one point, Optima placed diabetes case managers in some physician practices, but while the program was effective, there were limitations, Bray says. "Not all physician offices have space for a diabetes case manager, and there are not enough diabetes educators to go around," she says.

Now the health plan has trained all of its case managers and disease managers on managing diabetes so they will know how to work with members with diabetes and what they can do to collaborate with physician practices to help their patients manage the disease. "As a health plan, we make it possible for physicians to develop innovative ways to manage diabetes in their patients," she says.

The health plan has worked with physicians to educate its nurses and other staff on diabetes principals of care so they understand what to tell patients. In addition, the health plan reimburses physicians for group visits that focus on diabetes. "We've found that one of the best strategies for teaching people how to manage diabetes is to get them together with other people who have the same diabetes and collaborate on what to do," she says.

The health plan has developed broad-based initiatives throughout the continuum of care and works with providers in the hospital as well as the community to educate them about diabetes best practices.

"A lot of people think of diabetes as a disease that is treated by specialists. There is a huge diabetic population and everybody can't get

EXECUTIVE SUMMARY

Optima Health offers a broad array of diabetes management and prevention programs, including Mission Health, which increased medication compliance in diabetics in one large employer group.

- Participants in Mission Health receive incentives if they meet program requirements.
- The health plan also has trained all of its disease managers and case managers on diabetes management and prevention and educated physicians and their office staff on managing the disease.
- Nurse case managers work with members with diabetes to educate them on the disease, help them set goals for improving their health, and follow up with them regularly.

access to an endocrinologist. The majority of people with diabetes get care from their primary care provider," she says.

Optima Health regularly mines its data to identify members who could benefit from its health coaching program. In addition, physicians and the patients themselves often call about the program, she says.

A nurse case manager calls people referred to the program and conducts a complete assessment to identify not only diabetes and comorbidities, but to get a picture of the person's general health and living situation. "We often find that people are not taking care of themselves because they are overwhelmed by other things in their life, like a child who is having trouble in school or a family member with a serious illness," she says.

The nurse works with the patient to identify problems to work on and develop a care plan. "We build the plan around what the patient is willing to do, rather than what we think they need. We want people to be successful, but they are the ones who have to make it happen," Bray says.

The nurse and the patient collaborate on setting goals that are achievable. "We encourage people to take small steps rather than trying to do everything at once, which just sets them up for failure," she says. For instance, instead of going to the gym every day, the nurse case manager will suggest that they start by going one day a week. "Each time they achieve something, it creates rapport with the coach," she says.

Once the plan is in place, the case manager follows up at time intervals agreed upon by the patient. "We call as often as necessary, but it is driven by the individuals. We work on creating a relationship. We don't want the calls to seem like a burden. Otherwise, they won't answer the phone," she says. During the calls, the case manager looks at barriers to achieving the goals and work with the patients to overcome them. For instance, if the weather is bad, the case manager suggests walking in the mall.

If the case managers find problems that need the attention of a physician, they contact the patient's primary care provider. If patients can't afford their medication, they look for resources in the community or from the drug manufacturer or discuss the possibility of lower-cost, higher-quality alternative medications with the provider. ■

Health plan tackles pre-diabetes

Emphasis is on prevention rather than management

Instead of waiting until members develop diabetes to intervene, Molina Healthcare is offering members with pre-diabetes a chance to participate in the Centers for Disease Control and Prevention (CDC) National Diabetes Prevention Program, a prevention program that encourages moderate weight loss, exercise, and lifestyle changes.

The Long Beach, CA-based health plan is partnering with America's Health Insurance Plans and extension services and state Diabetes Prevention and Control programs to implement the Centers for Disease Control and Prevention's (CDC) National Diabetes Prevention Program to at-risk individuals in New Mexico and Florida.

"The program is evidence based, and results from a clinical trial were good. It's a lifestyle intervention program, rather than a disease management or weight loss program. The goal is to make lifestyle changes that are sustainable. Results from most regular weight loss programs often are not sustainable," says **Ellen Rudy**, PhD, director of strategic research and epidemiology for Molina Healthcare.

Once people develop diabetes, it can't be cured and managing it is difficult, but people with pre-diabetes can prevent or delay developing diabetes, Rudy point out.

The program has three components: moderate weight loss of 5% to 7%, an increase in physical activity to 150 minutes a week, and learning to manage the social and environmental cues that

EXECUTIVE SUMMARY

Molina Healthcare is rolling out a prevention program in two states to help members with pre-diabetes make lifestyle changes to help avoid the onset of the disease.

- The program, developed by the Centers for Disease Control and Prevention (CDC) includes 16 weekly group sessions with a lifestyle coach, followed by six monthly sessions.
- Goals for participants include exercising 150 minutes a week and moderate weight loss.
- The coaches educate the participants on healthy dietary habits and nutrition and help them start with reachable goals and build up.

encourage unhealthy eating.

Program participants attend one-hour sessions each week for 16 weeks and six monthly sessions for six additional months. The sessions are led by trained lifestyle coaches and attended by 10 to 15 participants.

"The group sessions make this program different from typical weight loss programs. Participants provide social support for each other and collaborate on problems with adhering to the plan," Rudy says.

Participants learn to track their calorie and fat-gram intake using a food log and to understand what foods they should eat and what they should avoid. They learn about the psychology of eating and how to choose healthier options in a restaurant. The coaches help them choose ways to increase their physical activity and to set small goals that they can reach easily.

"The coaches encourage people to take baby steps so it's not overwhelming. If someone has been mostly sedentary, exercising for 150 minutes a week will be overwhelming. They might start with 30 minutes and build up," she says.

Molina Healthcare primarily serves the Medicaid population. The program is open to all Molina members who are diagnosed with pre-diabetes and is focusing on the Medicaid population because of their high risk for developing diabetes and their challenges in managing it, she says. The program is free to participants who are reimbursed for transportation. "We recognize the challenges this population faces in developing healthy behaviors. The classes are structured so the participants look forward to attending. In addition, we are trying to address the barriers, and offer small incentives for participating, such as a raffle on Week 4," she says.

The coaches go through a CDC-approved lifestyle coach training program to become certified as a lifestyle coach. "There are no educational requirements. The program can be presented by lay people in the community, but they do need the ability to engage a group and encourage people to help each other," she says.

Molina is working with its network of providers in New Mexico and Florida to inform them of the program and encourage them to refer patients with pre-diabetes. Criteria include a body mass index of 24 or greater — 22 or greater for Asian-Americans — and blood sugar levels that are higher than normal but not high enough for a diagnosis of diabetes.

"We've found that provider referral is the most powerful way to encourage patients to attend this program because of the trust patients build with healthcare providers through the years. Participants in focus groups have told us that they are more likely to participate in a program if their provider recommends it," she says.

The program has been enthusiastically received when Molina representatives have discussed it with clinics that serve an indigent and at-risk population, she says. "One provider told me he could fill our classes in a week because there is such a need for the program," she says.

In the first year of the program, Molina is offering classes at one location in Albuquerque and one in Los Cruces, NM, and one each in Broward County and West Palm Beach in Florida. In the second year of the program, the classes will be offered at two locations in each county.

Molina Healthcare is partnering with the New Mexico State University College of Agricultural, Consumer, and Environmental Sciences Cooperative Extension Services and the University of Florida Institute of Food and Agricultural Sciences Cooperative Extension Services as well the Diabetes Prevention and Control Program administered by Department of Public Health in each state.

"We are developing relationships with the state extension services and departments of public health to leverage our resources. We all have the same goal, which is to reduce diabetes in the underserved population. It's a win-win situation for everyone," she says. ■

Diabetes management takes creativity

Proactive approach fills gaps in care

Helping a challenging patient population that includes migrant workers and the homeless requires a team-based and creative approach to helping patients keep their diabetes under control, says **Katherine Brieger**, RD, executive director of the Planetree Training Institute for Hudson River Healthcare, a network of 22 federally qualified health centers in neighborhoods around the Hudson Valley and Long Island, NY.

"As a federally qualified health center, part of our mission is to provide comprehensive care to the most vulnerable. Many of those in our diabetes program have multiple barriers to care, including

EXECUTIVE SUMMARY

At Hudson River Healthcare, a network of 22 federally qualified health centers, a patient-centered team works with patients, many of whom are migrant workers or homeless, to help them manage their diabetes.

- Members with diabetes that is poorly controlled and those who have gaps in care are identified from data in the electronic medical record and receive an outreach call arranging for them to come in for a provider visit.
- Care managers and the patient care coordinators have one-on-one meetings with the patients, teach them about the disease, help them set goals, and overcome the barriers to adherence.
- The health centers arrange to have providers such as podiatrists and ophthalmologists on site on specific days to provide recommended care for patients. They hold community education days with a free program on diabetes, open to the public.

---

psycho-social issues. Some have unstable housing and it's often difficult to reach them. We try a variety of ways to engage them in managing their care," Brieger adds

Initiatives include one-on-one sessions with care managers, group visits where patients receive specialty care such as eye exams and foot exams, and community education days.

Hudson River Healthcare became part of the Health Disparities Collaborative program, sponsored by the U. S. Department of Health and Human Resources Health Resources and Services Administration. The organization's Bureau of Primary Care worked with the Institute for Healthcare Improvement using the Wagner Chronic Care model to develop a system that works for its population.

Hudson River Healthcare's patient-centered diabetes management team includes physicians, nurses, dieticians, social workers, dentists, and diabetes educators. The organization also employs patient care partners, members of the community who are not clinicians but are trained in motivational interviewing and who work with the patients one on one to help them make lifestyle changes.

The program targets high-risk people with diabetes who are identified by their clinical values, or by providers. "Many of those in the program have psycho-social issues that don't show up on their clinical report but their providers are aware of them," says **Carol Gold**, ANP, CDE, diabetes program manager.

When the program began, the team identified people with poorly controlled diabetes through a diabetes registry until the network began using an electronic medical record in 2007.

When clinicians open a patient's electronic medical record, they are prompted if there are gaps in care and can alert the team members. "But we don't wait until patients come in to make sure they have the recommended tests and procedures. We run regular reports and ask the nursing team to call people and schedule them to come in for a visit," Gold says.

The clinicians also can use the electronic record to send triggers to themselves to follow up with the patients to make sure they are doing well.

The care managers and the patient care coordinators have one-on-one meetings with the patients to help them set goals and learn to manage their conditions. They see the patients as frequently as necessary to help them understand their disease and treatment plan and to overcome the obstacles to adherence and follow up by telephone in between visits.

"We listen to what the patients are saying and meet them where they are. Sometimes they just want to stop smoking or improve their exercise, rather than dealing with all of their health issues at once," Gold says.

In the past, clinicians told patients what they needed to do and, when patients didn't follow instructions, listed them as noncompliant, Gold says. "Now, we try to find out what the patient is thinking and understand their goals. Ultimately, it's all in their hands," she adds.

Sometimes health isn't the primary issue that patients are facing. "That's why it is so important to develop a close relationship with patients so they will learn to trust us. Then we can find out what social needs are interfering with adherence to their treatment plan and take steps to help them get what they need," she says.

For instance, many of the patients have multiple comorbidities and do not take their medications regularly because they can't afford to fill the prescriptions. Some don't get regular exercise because they live in a neighborhood where it's not safe to walk.

"It's important to look at the whole person because there are a lot of reasons why they don't follow their treatment plan. We have to be creative in coming up with ways to help patients reach their health goals in the context of their lives," Gold says. In addition, the health system network has

created a patient portal that allows patients to access their healthcare information when they are in another area. The portal is particularly useful for mobile patients who do not have stable homes, Brieger adds.

The health centers all are staffed by medical providers and dentists, but many do not have specialty providers that diabetics need to see, such as podiatrists and ophthalmologists, Brieger says. To ensure that their patients get the recommended tests and procedures, the health centers organize group visit days when podiatrists and ophthalmologists come to the site and perform the foot checks and eye exams and other interventions that the patients need.

"The staff reviews the charts in the electronic medical record to determine gaps in care and schedules all the diabetics who need the exams for an appointment that day," Brieger says.

In addition, the staff organize community education days, a free program open to the public with sessions provided by dieticians, certified diabetes educations, and other clinicians.

"We try to make the educational sessions fun by offering door prizes and inexpensive gifts. People love them," Gold says.

For instance, participants in a session on foot care received a pair of socks, purchased at a dollar store. Another time, participants received measuring cups to help them determine the size of portions they should eat. ■

Coaches work with diabetics, at-risk members

Nurses follow patients across the continuum

In addition to providing health coaching and care coordination for members who already have developed diabetes, Independence Blue Cross, with headquarters in Philadelphia, provides coaching for members at high risk for developing the disease.

The health plan recently combined its disease management and complex case management programs and trained nurses in both programs to become primary health coaches and work with patients across the continuum of care, says **Diana Lehman**, RN, BSN, director of care management for the health plan.

In the past, if members were receiving disease management for a condition and developed comorbidities or were hospitalized, in many cases a complex case manager would coordinate care until they were stable, then transfer care back to the disease manager.

"Now one nurse follows individuals whatever their needs. Members build a trusting relationship with their nurses, which improves communication and ultimately results in better patient care," she says.

Each month, the health plan analyzes claims data and information from the members' health risk assessments, then stratifies members based on their risk factors. Members at moderate risk receive an automated telephone call informing them of risk factors and recommended tests, and also receive a packet of information in the mail. Members with low risk for developing the disease or whose diabetes is better controlled receive a mailing containing information about preventing diabetes.

Members stratified as high risk receive a telephone call from an RN health coach who engages them in the coaching program. This includes members with risk factors for cardiometabolic syndrome, which can lead to diabetes and heart disease as well as those who have the disease but are not managing it well. Risk factors for cardiometabolic syndrome include obesity, elevated cholesterol and triglycerides, hypertension, and elevated fasting glucose levels. Members who have been diagnosed for diabetes are identified for coaching if they have gaps in care, if they make frequent emergency department visits, if their blood sugar levels are not under control, or if they are not filling their prescriptions.

EXECUTIVE SUMMARY

Independence Blue Cross, based in Philadelphia, has combined its disease management and complex case management programs and has trained nurses to be primary health coaches who follow patients, including those with pre-diabetes, across the continuum of care.

- Patients are identified for the diabetes and pre-diabetes program by a combination of claims and a health risk assessment filled out by members.
- Members with high risk of complications for diabetes or high risks for developing the disease receive telephonic case management from nurse health coaches trained in motivational interviewing.
- The coaches educate members on the disease, help them identify what they want to change and support them as they try to reach their goals.

"When they call members, the nurse health coaches can access both the claims data and the members' health risk assessment via a 360-degree view of member activity and tailor the conversation around the members' needs," Lehman says. For instance, they may discuss tests the member has missed or ask why the member hasn't filled prescriptions for medication.

The nurses ask a series of questions and use all the information to work with the member and develop a care plan. The nurse identifies issues and barriers to care and finds out what the member wants to tackle first. "If someone is a smoker and says he doesn't want to quit, that's not something to work on. By identifying what is important to the members, the nurses build trust, which enables them to work on other issues in the future," she says.

The health coaches have received extensive training on coaching and motivational interviewing and how to help members change their behavior.

"Nurses have a tendency to want to fix people and tell them what to do. Instead, our coaches listen to where they are and use the skills they have learned to help members come to their own conclusions about making behavioral changes," Lehman says.

Members typically have a plan of care from their doctor but they need help understanding it and knowing how to follow it, Lehman points out. "For instance, they may be told to eat a healthy diet but they lack the knowledge to determine what they should and shouldn't eat. The nurses help them understand what they should do. If the physician recommends exercise, the nurse helps the member set goals and build their exercise plan," she says.

The nurses determine members' knowledge deficits and educate them on the missing parts. With diabetics, they teach them the importance of checking their blood sugar throughout the day and complying with their medication regimen. They help members identify community resources, such as diabetes classes at local hospitals.

The nurses follow up with the members and go over their plan of care at intervals determined by the individuals' needs. They contact the members' physicians if appropriate or have the health plan's medical director contact them. If they have questions about medication, they can talk with a health plan pharmacist. "We have integrated all the components of care to maximize benefits to the members," she says. ■

Split-flow approach speeds patients to ED

Involve frontline stakeholders from the start

For the past few years, the ED at St. Mary Medical Center in Langhorne, PA, has seen double-digit increases in patient volume. The surging demand has been difficult, to say the least. And by early 2012, administrators realized it was time for a change in course.

"What we needed to figure out was how we were going to see 70,000 patients a year in an ED that was built to see 52,000," explains **Charles Kunkle**, MSN, CEN, CCRN, BC-NA, the director of emergency, pediatric, and trauma services at St. Mary. "Truly, we were 18,000 patients above capacity, so we were really challenged."

After reviewing several different throughput models, the administrative team found what they were looking for in the split-flow approach, an evidence-based practice that relies heavily on queuing theory or line management principles to minimize wait times and expedite patients toward the type of care they need.

"It's not really about fixing the logistics of your institution. It's more about looking at the processes and how you can reduce wait times at each stage as the patients move along," says Kunkle. "How you implement split flow is specific to who you are and what challenges you face."

In the case of St. Mary's ED, the biggest challenge was limited space, coupled with surging demand. The percentage of patients being seen by a licensed practitioner within 15 minutes was hovering in the 60%-70% range, and this was impacting patient satisfaction.

"We did our research, went and visited some places [that had implemented the split-flow model], and then sat down with our operations improvement team and considered what we needed to do to make the model work for us," Kunkle says. "Then we created our own version of split flow, and that was the whole idea."

The results are impressive. In less than a year, the new model has enabled ED personnel to reduce door-to-physician times from an average of 47 minutes to 23.5 minutes, and overall length-of-stay in the ED for discharged patients has been

slashed by 21 minutes. "Now, 99% of the time, people who walk in the door are seen by a nurse within 15 minutes," says Kunkle. And there is good reason to expect continued improvement in the coming months.

Get back to basics

By the time St. Mary began implementing the new model in April of 2012, there were already plans in the works for a major $22 million expansion of the ED — a development that would clearly alleviate St. Mary's space problems, but the ED's administrative team moved ahead with the new model anyway, hoping to become adept at a vastly changed workflow before moving into expanded quarters. "We were able to develop the new ED based on the feedback and experiences we had with the split-flow model we put in place," says Kunkle.

Under the new approach, the traditional triage process that used to take about 15 minutes was reduced to just a handful of questions that could be completed in three minutes. Kunkle acknowledges that the nursing staff at first balked at the notion that they could determine what kind of care patients needed without taking all their vital signs and going through the traditional routine, but he says it was a matter getting back to the basics.

Kunkle points out that you can tell a lot from a patient's radial pulse and skin temperature, and if you are talking to people, you can see how they are breathing and observe their skin color. "We really had to get those triage nurses back to the art of nursing," he says.

A more challenging aspect of this initial step was getting the nurses to carry out a mini registration process. "We did some specific training [on this aspect], and made sure we keyed in on the importance of identifying the patient appropriately," explains **Beverly Vanselous**, RN, CEN, a clinical lead in the ED at St. Mary.

It took some time for the nurses to become comfortable with carrying out the basic elements of registration, but the approach is working smoothly now. "Initially, I wasn't thinking real positively about having the nurses involved in registration, but the way it is laid out in our computer system, it really seems to work quite well, and we have had fewer issues that I thought we would," adds Vanselous.

During the initial assessment, the nurse determines whether a patient should be sent to prompt care, pediatric care, acute care, or an expedited treatment area (ETA). The prompt care area is for minor injuries or conditions; patients with conditions or illnesses that are severe enough that they are likely to be admitted will go to the acute care area; and patients who require additional blood work, imaging, or other tests will proceed to the ETA. These patients tend to be those classified under the Emergency Service Index as level 3, says Kunkle.

"The level 3 patients are the ones that really take the longest because they don't fit into any of those other categories," he says. "They could be sick or not, and they are often the patients who fall by the wayside."

Under St. Mary's split-flow model, patients spend no more than 30 minutes in the ETA. Kunkle likens the way this part of the ED operates to the way a pit crew works in a NASCAR road race. "When a patient is put in a room, he will have a nurse, a physician, a tech, and sometimes a physician assistant who will all come into that room at once," he says. "The physician asks the questions, and the nurses and the techs are listening so they don't have to repeat the same questions."

Scrutinize handoffs

One goal of the split-flow approach is to improve efficiency by enabling more tasks to be done at the same time, rather than in a linear manner, says Kunkle. What happens is the physician assesses the patient and orders whatever testing or procedures need to be completed, and then he or she moves on to the next patient, where the same process is repeated, he explains.

"The ETA is an area that is more labor-resource intensive because we only have 30 minutes from the time a patient arrives to get them assessed, get the initial set of vital signs recorded, and get tests and procedures ordered," says Kunkle. Then the patients are moved out of the ETA to make room for incoming patients, he says.

One thing for ED managers to keep in mind if they are considering the split-flow model: You will be moving patients a lot, says Kunkle. And he acknowledges that this aspect of the model did raise some concerns among administrators initially. "In traditional EDs, you find a seat and you stay there. You own it," he says. "We thought this would be a major issue for us, and that the patients would be upset."

With patient satisfaction gradually rising, such concerns have eased. "In the old days, patients

would sit and wait for us to see them and nothing would be happening," says Kunkle. "Now, because we are turning people over quickly [in the ETA] and moving them out, the patients may still be waiting, but they are waiting for their tests to come back, as opposed to waiting there idly with nothing being done."

However, the continued movement of patients from one area to another requires more handoffs than is typically the case. "One nurse isn't staying with a patient from the start to finish anymore, so you have to be careful because you don't have as much continuity," says Vanselous. "Communication is of the utmost importance because the patient is going to start with one nurse and finish with another, and any time you are doing a handoff, there is a chance for a communication breakdown, so we really work on that very hard to make sure information is shared from one nurse to another."

While handoffs require extra care, the approach enables charge nurses to spend more time on clinical intervention. "Before we implemented the new model, most of our time was taken up watching the waiting room and determining where patients would be placed," says Vanselous.

Now a pilot nurse takes charge of driving the flow of patients. "It frees us up a little bit to support the nursing staff at the bedside," says Vanselous. Further, split flow enables the ED to truly triage patients, she says.

"Before, it was more like we were doing data collection, and wherever there was a bed, we would put a patient," she says. "Now, the sickest patients will go over to the emergent side, and other patients we send through our expedited treatment area, and it is a little bit like a staging area."

With a variety of different pathways, the wait time to be seen is shorter. "It breaks that traffic jam," says Vanselous. "We are not just placing patients in a bed. We can get them seen and move them out to a holding area or waiting area, and it just gives us more flexibility."

Prepare for higher volume

Implementing the split-flow approach in a space-challenged ED hasn't been easy, but staff now have access to more room, as construction has been completed on the first phase of the new ED, which includes an 18-bed emergent area for the sickest patients. Phase two, which will encompass a brand new ETA and some additional waiting space, will also soon be opened. Phase three and phase four should be completed by September.

The new ED is being built to accommodate the split-flow model, so administrators are eager to have access to the new layout, but Kunkle emphasizes that it won't resolve all of the stress on the ED. There are still backlogs of patients being held in the ED while awaiting admission, so that will be the next issue to address on a hospital-wide basis, he says.

Kunkle's advice to other EDs that are struggling with the same issues is to involve as many stakeholders in the improvement process as possible. "We had everybody involved [in the operations improvement]," he explains. "We broke the process down into steps and figured out how we could make it better according to the principles of split flow."

Frontline staff representatives from nursing, pharmacy, radiology, and all of the other departments that work with the ED had a hand in structuring the process in a way they thought would work best. "The immediate engagement of staff helped to alleviate their anxiety because, oftentimes, when you come at people with major change that feels like it is being pushed from the top, it won't work," says Kunkle. "I was not a big believer in the operations improvement process, but I think it was invaluable time spent. Pulling each and every stakeholder into the room and getting their feedback, and then using their feedback, really did help us to implement this plan."

SOURCES

• **Charles Kunkle**, MSN, CEN, CCRN, BC-NA, Director, Emergency, Pediatric and Trauma Services at St. Mary Medical Center, Langhorne, PA.

• **Beverly Vanselous**, RN, CEN, Clinical Lead, Emergency Department, St. Mary Medical Center, Langhorne, PA. Phone: 215-710-2100. ■

Can nurses reduce readmissions?

If their work environment is good

How can you make sure that your nurses make a difference to the outcomes of your patients? According to a study in the January issue of *Medical Care*[1], all it takes is a good patient/nurse ratio and good leadership.

Matthew McHugh, PhD, JD, MPH, RN, and his colleagues looked at the outcomes of heart failure patients in three states and the staffing ratios, educational level of the nurses, and the work environment, and found that improving staffing levels and the work environment make the most difference in preventing 30-day readmissions among that patient base.

Work environment was evaluated based on a National Quality Forum-endorsed Practice Environment Scale of the Revised Nursing Work Index, which includes elements such as physician-nurse relations, nursing leadership support, and participation in hospital affairs.

"There is a lot of focus on readmissions now, since hospitals are on the hook for them," McHugh says. "And more than the financial impact, they aren't a good outcome, particularly not for older adults. Finding ways to keep them out of the hospital is an important goal." Since patients are in the hospital for 24-hour access to nursing care, it figures that nurses matter to outcomes. But beyond throwing more nurses at the problem, what can they do?

It turns out there is more than staffing to the solution — although nurse-to-patient ratios are also important, he says. There are several elements that make for a good work environment: resource adequacy — or having enough stuff to do your job; nursing participation in hospital affairs — meaning a flatter, less hierarchical structure; support from nurse leadership and the ability of nurse managers; having policies and practices in place that support decision-making at the bedside; and the educational level of the nurses, with more BSN nurses being better.

McHugh says if you put hospitals into three buckets — those that do poorly, those that are average, and those that do well on those elements of a good work environment — you can control for a variety of other factors such as severity of illness, size of hospital, and still be able to predict which hospitals will have the worse readmission rates.

He suggests that hospitals take great care to look at the quarterly practice environment scale survey results on a unit-by-unit level. There are 31 items on the survey, and if you aren't doing well on some of them, it's a good place to start — not just because it will make your hospital a better place to work, but because patient outcomes improve along with morale.

It's good to add more nurses, too, he says, noting that it is "hard to find an example of really good staffing and really bad outcomes. But staffing levels are conditional on work environment. At lower levels, if you add people, but don't improve work environment issues, you won't overcome that work environment's downward pull."

REFERENCE

1. McHugh MD. Hospital nursing and 30-day readmissions among Medicare patients with heart failure, acute myocardial infarction, and pneumonia. *MedCare*. 2013 Jan;51(1):52-9. doi: 10.1097/MLR.0b013e3182763284.

RESOURCE

For more information on this topic, contact Matthew D. McHugh PhD, JD, MPH, RN, FAAN, Assistant Professor of Nursing, Robert Wood Johnson Foundation Nurse Faculty Scholar, Center for Health Outcomes & Policy Research, University of Pennsylvania School of Nursing, Philadelphia, PA. Telephone: (215) 746-0205. ■

COMING IN FUTURE MONTHS

- Combining physical and behavioral health management
- Care management designed specifically for the elderly
- How to build rapport with your clients
- Initiatives your peers are using to reduce readmissions

CNE QUESTIONS

1. According to Ellen Rudy, PhD, director of strategic research and epidemiology for Molina Healthcare, the Centers for Disease Control and Prevention estimates that by 2050, one in three Americans will have diabetes.
   A. True
   B. False

2. Optima Health's Mission Health program for diabetics offers incentives for participants who meet what goals?
   A. Seeing their doctor regularly and taking their medication as prescribed.
   B. Having all of the evidence-based tests recommended for people with diabetes.
   C. Talking to their nurse health coach at least once a quarter.
   D. All of the above.

3. One of the goals of the Centers for Disease Control and Prevention's (CDC) National Diabetes Prevention Program involves exercise. How much exercise is recommended each week?
   A. One hour.
   B. 90 minutes
   C. 150 minutes
   D. Two hours.

4. How does Hudson River Healthcare ensure that patients with diabetes who are treated at their federally qualified health centers get the recommended tests and procedures such as eye examinations and foot checks?
   A. They make appointments for patients with specialists and provide transportation.
   B. The health centers all have podiatrists and ophthalmologists on staff.
   C. Health coaches call the members with regular reminders until they have the tests.
   D. The health centers organize group visit days when podiatrists and ophthalmologist come to the site and perform the foot checks and eye exams.

CNE OBJECTIVES

After reading this issue, continuing education 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.

CNE INSTRUCTIONS

Nurses participate in this continuing education program and earn credit for this activity by following these instructions.
1. Read and study the activity, using the provided references for further research.
2. Log on to www.cmecity.com to take a post-test; tests can be taken after each issue or collectively at the end of the semester. First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice or renewal notice.
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the last test of the semester, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly. ■