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New efforts target appropriate screening of high-risk groups

PCPs need to step up their care of patients with CKD

More than 20 million Americans have chronic kidney disease (CKD), but both patients and providers often fail to recognize the disease until it has advanced, thereby missing opportunities to delay the need for expensive, life-altering care such as dialysis and transplantation.

Part of the problem is that many generalist physicians are unclear of the warning signs that patients may be at risk for CKD, and many tend not to use the most appropriate diagnostic tests to assess kidney function. There is even evidence that for patients who have both CVD and CKD, physicians may be reluctant to prescribe the very treatments that would be effective in treating both conditions.¹

The National Kidney Foundation is addressing the problem with an enhanced screening effort aimed at identifying more cases of CKD at an earlier stage (see the sidebar on p. 14).

Further, given the extreme shortage of nephrologists in the United States, the group also stresses that generalist physicians need to equip themselves with the knowledge to not only recognize CKD, but also to effectively treat the condition, at least in its earlier stages.

Screening is essential

Patients are unlikely to recognize CKD because it is largely asymptomatic in its early stages, and even after the condition has advanced, symptoms such as ankle swelling or fatigue do not necessarily suggest to patients that there is a problem with kidney function.

Consequently, it is even more important that generalist physicians understand that they need to screen for CKD in patients who are at risk for the condition.

This encompasses a relatively large group, including patients over the age of 65 and those with

- any form of CVD
- diabetes
- a family history of CKD
- hypertension

Inside This Month...

- **HIV screening offers good value, but obstacles remain.** That's the message of at least one new study that provides a solid foundation for new guidelines, recommending that HIV screening be integrated into routine care. However, huge obstacles—including lack of funding and legislative barriers—continue to stand in the way of the kind of broad screening practices that policy experts agree are needed. 16
- **The chronic care model establishes a path to improvement—even at the practice level.** It's a highly esteemed model for chronic care management, but even large organizations struggle to implement all of the elements that comprise the chronic care model. However, it can be done at the practice level. See how one Seattle-based clinic used it to produce an array of improvements in diabetes care. 19
- **A unique intervention delivers behavioral health support to patients with less prevalent, but high-cost conditions.** Not nearly as many patients suffer from Crohn's disease or rheumatoid arthritis as diabetes, but Newark, NJ-based Horizon Blue Cross and Blue Shield believes it can nonetheless improve care for these types of patients—and recoup an ROI—by providing them with an intervention that emphasizes psychosocial support. 21

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Chronic kidney disease

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Most experts agree that the most accurate way to screen for CKD is to obtain the estimated glomerular filtration rate (GFR), which is a measure of how effectively the kidneys remove waste and excess fluid from the blood. However, to obtain the GFR, providers need to take the patient's serum creatinine level and enter that number into an equation that also incorporates the patient's age, race, and gender.

The means to carry out this calculation are widely available. In fact, many Web sites, including *www.kidney.org*, offer a tool that allows providers to simply enter the appropriate data for a patient, and the tool automatically carries out the calculation.

However, many physicians do not take this step, preferring to just look at the serum creatinine level—a less accurate measure that can also create confusion, says **Joseph Vassalotti, MD**, chief medical officer of the National Kidney Foundation, and assistant clinical professor in the Division of Nephrology at Mount Sinai School of Medicine in New York City.

"The problem with the serum creatinine test is that it has an inverse, reciprocal relationship to kidney function, and that concept is difficult for patients and even PCPs sometimes to follow," he says. "What is good about the estimated GFR is it gives you a number for how well the kidneys are functioning."

For example, an estimated GFR less than 60 suggests that a patient has developed CKD. It's a simple concept for both providers and patients to grasp, so in an effort to get physicians to use this more precise measure, many experts and educational groups, including the National Institute of Health's Kidney Disease Education Program, encourage laboratories to automatically report the estimated GFR as well as the normal and abnormal ranges that apply to the number whenever a physician orders a serum creatinine level.

An estimated GFR value not only gives the physician important information about a patient's likelihood of progressing to the point where he or she needs dialysis or transplantation, it also provides critical insight on other aspects of care.

"At lower levels of kidney function, you have higher rates of CVD," says Vassalotti.

Additionally, lower levels of kidney function can alter drug metabolism, potentially affecting all of the drug therapies that a patient receives—not just therapies for kidney disease.

Screening program shifts gears to focus more intently on CKD-CVD links

The National Kidney Foundation has screened Americans at risk for chronic kidney disease (CKD) for the past 10 years through its Kidney Early Evaluation Program (KEEP). Data from these screenings suggest there is a large number of undiagnosed people whose lives could be prolonged with appropriate diagnosis and care.

Nearly one-third of all individuals who have undergone KEEP screening have been found to have CKD, but only 2% knew they were at risk prior to attending the screening. Additionally, more than 30% of KEEP participants have diabetes, 69% have elevated blood pressure, and nearly 86% have at least one CVD risk factor.

In light of these findings, the National Kidney Foundation intends to ramp up the KEEP effort with the development of new screening strategies and a broader focus on the links between CKD and CVD. The organization reports that death from CVD is 10–30 times higher in people with advanced CKD than the general population. However, research shows that CVD complications and progression of CKD can both be modified through early intervention.

The foundation has appointed a new, multidisciplinary KEEP steering committee with combined expertise in nephrology and cardiology to underscore the significant links between the two diseases. Further, they hope to leverage the general knowledge of CVD risk among patients to drive awareness of CKD.

Editor's note: More information about KEEP, including a schedule of planned screening events, is available at www.keeponline.org.

Group Publisher: Matt Cann Executive Editor: Christine Hannan Editor: Dorothy Brooks

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CKD multiples CVD risk

A second calculation that is important to both PCPs and nephrologists is the urine albumin-to-creatinine ratio. "Abnormal levels of albumin in the urine or albuminuria represent not only kidney damage, but also probably vascular damage as well," says Vassalotti.

"If endothelial cells—the cells that line the blood vessels—are damaged in the kidneys, then they are often damaged in other parts of the body such as the heart and the blood vessels that feed the heart, putting the patient at increased risk for heart attack, stroke, or HF," he says.

Because of the strong connection that is observed between CKD and CVD, both the National Kidney Foundation and the American Heart Association have published position papers that recommend that patients with CVD undergo the test of kidney function—the estimated GFR—and the test of kidney damage—the urine albumin to creatinine ratio.²

"One of the messages that we are trying to deliver to the PCP is that CVD is the number one killer in Americans, and CKD multiples the CVD risk," says Vassalotti. "The lower level of kidney function that a patient has, the more likely he or she is to die of a CVD event, and the more likely he or she is to be hospitalized."³

PCPs miss signs of CKD

In addition to relying on less accurate measures of kidney function, there is also evidence that some PCPs fail to recognize some signs and symptoms of CKD, and they may also be reluctant to refer patients on to a nephrologist.⁴ In a national study that asked 304 physicians to evaluate the medical files of mock patients that contained strong clues of CKD, 97% of the nephrologists surveyed accurately diagnosed CKD, but only 59% of the family physicians and 78% of the internists surveyed fully recognized the signs and symptoms of CKD.

"In our scenarios, patients were just crossing over into an estimated GFR of 30 over a fairly rapid time period," explains L. Ebony Boulware, MD, the lead author of the study and an assistant professor of medicine at Johns Hopkins University School of Medicine in Baltimore. Boulware adds that this is the point where guidelines issued by the National Kidney Foundation suggest that patients should be referred to a nephrologist.

However, one point that Boulware and her coauthors make in the study is that PCPs are often not aware of the guidelines regarding CKD. "There is very little dissemination of these guidelines to PCPs, and so there is very little consensus among the medical specialists regarding when patients should be referred," she says.

"When we present these data to generalist physicians, they believe the situation is more complex, which is true," she says. "Not every patient necessarily needs to be referred [to a nephrologist] if, in fact, the patient is receiving appropriate care."

To establish more of a consensus regarding referral practices, Boulware would like to see collaborative guidelines developed, including both nephrologists and generalist physicians. She believes this would not only provide more visibility of the recommendations to PCPs, but also take into account their views and experience.

New care models are needed

Along similar lines, both Vassalotti and Boulware agree that care models need to be developed that facilitate the care of patients with CKD by both nephrologists and PCPs.

Such models might include opportunities for PCPs to consult with nephrologists, particularly in the earlier stages of CKD, and then as the disease progresses, to jointly care for the patient.

"There are an estimated 20 million people in the United States with CKD, and it is just not feasible for the several thousand nephrologists to see all of those patients," says Vassalotti.

One of the hurdles to overcome in engaging generalist physicians more in the care of CKD patients is the negative perception that many of them have about the disease, says Vassalotti, noting that there are numerous alternatives for early treatment.

"We need to make it a positive message for PCPs," he says. "If they diagnose CKD, they can produce better outcomes for their patients. That is what we really need to emphasize." ❖

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Research underscores the value of routine HIV screening, but barriers remain

In a major shift in policy, the Centers for Disease Control and Prevention (CDC) now recommends that providers carry out HIV screening as a routine part of medical care among adults and adolescents.

Statistics suggest that as many as 250,000 people—roughly one-quarter of the total number of HIV cases in the United States—are not aware of their HIV-positive status. With no knowledge of the risks involved, these individuals are undoubtedly passing the disease on to sexual partners. Further, they are failing to receive needed care for their disease.

Many HIV care experts applaud the new recommendations, but there is no question that huge obstacles stand in the way of routine HIV screening.

Funding is the biggest issue, but there are also legislative barriers and a clear need for new solutions on how to link HIV-positive patients with the counseling and care that they will need.

Research supports testing

New research published in the December 2006 *Annals of Internal Medicine* bolsters the case for routine testing by exploring some of the thorniest aspects surrounding the issue.¹

“In its [new] guidelines, the CDC mentioned three big sources of uncertainty: how much HIV has to be in the population in order to justify expanded testing, how well the drugs have to work in terms of reducing transmission, and how much society is willing to pay for additional health,” says **David Paltiel, PhD**, the lead author of the research, and a professor in the Department of Epidemiology and Public Health at Yale School of Medicine in New Haven, CT. “We thought if those are the three basic uncertainties, then why don’t we explore what combination of them would result in something that would be a cost-effective use of money.”

To carry out their work, the researchers used a mathematical simulation model that Paltiel and his colleagues have been working with for more than a decade to predict the costs and benefits associated with different HIV care strategies. Called the Cost-Effectiveness of Preventing AIDS Complications Model (CEPAC), the tool simulates the events that occur in the life of an HIV-infected person. These include detection, treatment, medical costs, and transmission to others.

To date, researchers have used CEPAC to look at numerous issues ranging from the cost-effectiveness of

antiretroviral therapy and when to start therapy, to the design of AIDS drug assistance programs.

In fact, researchers have used the CEPAC model to look at the value of HIV screening before, but they felt that new data and circumstances warranted further evaluation. “We previously found that HIV testing would be a cost-effective thing to do, but we changed the analysis here a little bit,” says Paltiel. “In the first place, we used updated cost and efficiency data, and secondly, this analysis focuses on rapid HIV testing, whereas the earlier research looked at conventional HIV testing.”

One other factor that distinguishes the new research from its predecessor is the extent to which researchers weighted the impact of a false-positive HIV test. In the earlier research, the researchers were criticized for not adequately taking this factor into account, so in the new analysis, Paltiel indicates that he and his coauthors went out of their way to account for the psychological and potentially economic and quality-of-life detriment of a false-positive test.

HIV testing offers good value

To look at the relative value of routine, rapid HIV screening, the CEPAC model figured in the additional costs of screening as well as the added years of survival based on earlier detection. It also took into account how much HIV infection shortens a person’s life.

Ultimately, researchers found that HIV testing would deliver better value than many diagnostic tests and procedures that physicians now do routinely, including screening for breast cancer, colorectal cancer, and diabetes (see **Figure 1** on p. 17).

“There are lots of things that we do in this country that are completely noncontroversial and completely routine that deliver quality-adjusted life years for a cost much higher than \$50,000,” says Paltiel. “So, if I can show you that HIV testing delivers quality-adjusted life years for less than \$50,000, I am simply making the case that compared to all these other things that we do as a matter of routine care, this seems to be delivering better bang for the buck.”

Investigators also looked at the impact of screening under a variety of scenarios where the amount that society is willing to pay for a quality-adjusted life year varies from \$25,000–\$100,000; the prevalence of HIV in the population varies; and the impact of drug treatment on transmission rates—an issue that remains unclear—can be manipulated as well (see **Figure 2** on p. 18).

“The less you are willing to pay for quality, then the more stringent you would be about making sure that there is enough HIV in the population, or that drug therapy is effective,” says Paltiel. However, he

points out that even if the prevalence of HIV in the population is as low as 0.1%, and drug therapy has no impact on transmission rates, if society is willing to pay \$75,000 for a quality-adjusted life year, then an expanded HIV testing program makes sense.

Rapid testing offers advantages

The model's findings are based on the assumption that once people are identified as being infected with HIV, they will then be linked to good care. However, there is considerable doubt as to whether the funding and resources are currently available to provide this level of care to the many thousands of people who would be identified through routine HIV screening. Additionally, questions remain as to who is best equipped to carry out the screening tests, and to counsel patients about their results.

Rochelle Walensky, MD, MPH, a coauthor of the research into expanded HIV screening, and an infectious disease specialist at Massachusetts General Hospital in Boston, has been studying the feasibility of

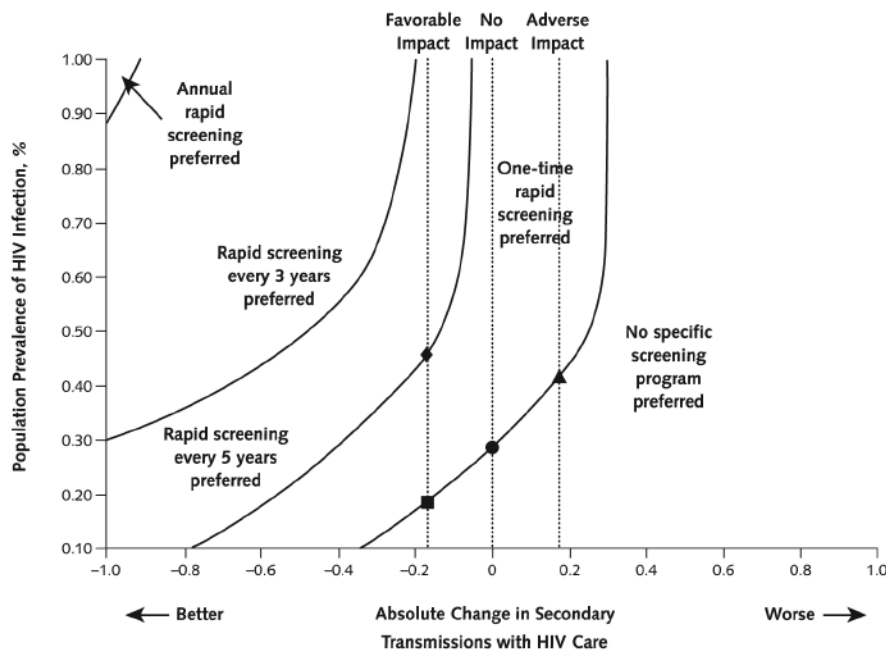
HIV testing for a number of years. For example, in 2005, she published the results of a nine-month pilot demonstration project, showing that routine, voluntary HIV screening in areas identified as having a high prevalence of HIV infection was effective at uncovering undiagnosed cases of HIV—even among people who considered themselves at low risk for contracting the disease.²

Researchers in that study conducted oral—but not rapid—tests at four urgent care centers, so patients needed to come back for a follow-up visit to receive their results. Walensky is now in the process of launching a four-year, randomized trial that will look at different strategies for using the rapid HIV test—a procedure that delivers a result within minutes, but it is a preliminary finding that must be confirmed with further testing.

Nonetheless, Walensky anticipates there will be more patients willing to undergo rapid testing.

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Figure 1. Recommended strategy regions: \$50,000 per quality-adjusted life-year threshold



The figure recommends an HIV screening policy as a function of both the HIV prevalence in the target population (*vertical axis*) and the impact of HIV patient care on secondary transmission, ΔR_0 (*horizontal axis*). ΔR_0 can be interpreted as the lifetime number of secondary HIV infections averted when an HIV-infected person in a susceptible population is identified, counseled, and linked to treatment via HIV screening. Each prevalence value is associated with a specific incidence assumption (see Methods section for details). The figure recommends HIV screening policies, assuming that society is prepared to pay up to \$50 000 per additional quality-adjusted life-year of health for its citizens. The dotted lines represent the 3 transmission impact scenarios described in Table 2: “favorable impact,” “no effect of screening and treatment on transmission impact,” and “adverse impact.” The curves denote the circumstances under which a given HIV screening strategy is preferred. For example, assuming no impact on secondary transmission, a one-time screening is recommended for prevalences greater than 0.28% (*solid circle*). Assuming a favorable transmission impact, the one-time screening threshold falls to 0.20% (*solid square*); with an adverse transmission impact, it increases to 0.40% (*solid triangle*). The threshold population for screening every 5 years (assuming favorable transmission impact) is HIV prevalence of 0.45% and annual incidence of 0.0075% (*solid diamond*).

Source: Paltiel D, Alwensky R, Schackman B, et al. “Expanded HIV Screening in the United States: Effect on Clinical Outcomes, HIV Transmission, and Costs.” *Annals of Internal Medicine* 2006; 145:797-806.

HIV screening

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"Certainly the follow-up will be less of a problem for patients who test negative, but we will have to be vigilant in our follow-up of patients who test positive because these are only preliminary results," she says, noting that the rapid test can produce some false-positive results. "Also, people who test negative must be told that there is a window period, and if they had any exposure within the last three months, the test will not pick that up."

Barriers remain

Even with the rapid HIV tests and streamlined counseling procedures, Walensky says significant problems with routine testing remain. For example, she notes that the laws in several states require written informed consent in a patient's chart before an HIV test can be administered. This is a labor-intensive process for medical personnel, and an obstacle to

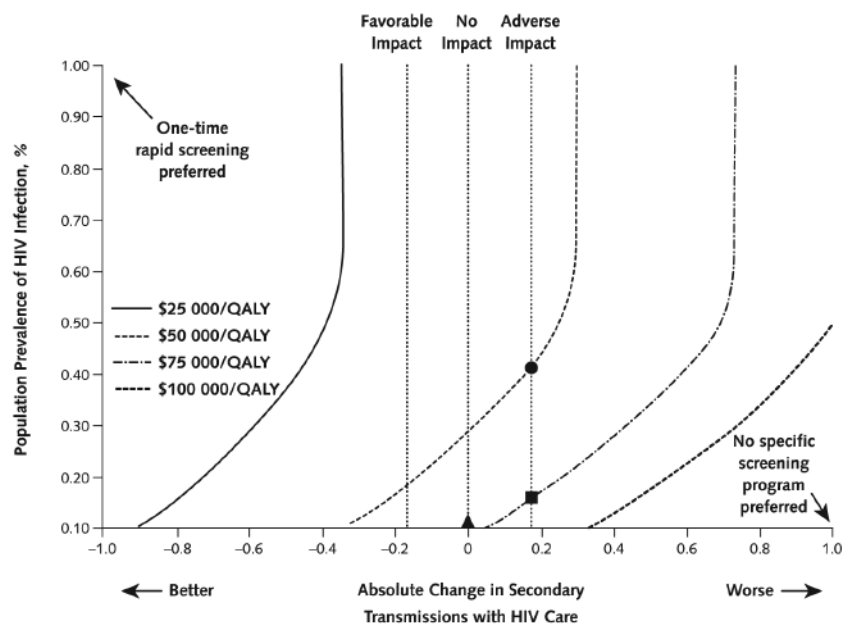
patients who might be reluctant to sign their name.

"I am a firm believer that we need to streamline the process of HIV testing to eliminate written informed consent, but I am also a firm believer that no one should be HIV tested without their knowledge and permission. So I think there has got to be some happy medium where the written informed-consent process is not such a barrier, and yet patients are fully informed," Walensky says.

Further, if the CDC guidelines are to be fully carried out, then routine HIV testing must be offered in primary care settings. The test is relatively easy to administer, but what is not clear is whether PCPs are equipped with the time, resources, and training to provide appropriate counseling.

"There is literature suggesting that PCPs are uncomfortable discussing sexual risk, so it wouldn't surprise me if that is one of the reasons why [routine HIV testing] is not taking place, but other reasons include 20-minute office visits and the pressure to see many patients, addressing all of their acute and prevention

Figure 2. One-time screening vs. no specific screening program: sensitivity to cost-effectiveness threshold



The figure identifies the evolution of the boundary between current practice (that is, no specific screening program) and one-time HIV screening as a function of 3 factors: 1) the prevalence of HIV in the target population (vertical axis); 2) the impact of care on secondary transmission, ΔR_0 (horizontal axis); and 3) the value that society is prepared to pay to purchase an additional quality-adjusted life-year (QALY) of health for its citizens (as measured by the threshold cost-effectiveness ratio). Each prevalence value is associated with a specific incidence assumption (see Methods section for details). The figure reports results for threshold cost-effectiveness ratios ranging from \$25 000 to \$100 000 per QALY. The dotted lines represent the 3 transmission impact scenarios described in Table 2: "favorable impact," "no effect of screening and treatment on transmission," and "adverse impact." The curves represent the borders of regions over which a given HIV screening strategy is preferred. For example, assuming that society is willing to pay up to \$50 000/QALY and an adverse transmission impact, one-time screening is recommended for prevalences above 0.40% (solid circle); if society is willing to pay even more (up to \$75 000/QALY), one-time screening is recommended for prevalences above 0.15% (solid square). Assuming no effect of screening and treatment on transmission and a societal willingness to pay \$75 000 per additional QALY, one-time screening is preferred for prevalences above 0.10% (solid triangle). At a societal willingness to pay of \$100 000/QALY, one-time screening is preferred under almost all plausible scenarios.

Source: Paltiel D, Alwensky R, Schackman B, et al. "Expanded HIV Screening in the United States: Effect on Clinical Outcomes, HIV Transmission, and Costs." *Annals of Internal Medicine* 2006; 145:797-806.

issues simultaneously," says Walensky. "When you bring up HIV testing with a patient, it opens the door to a longer discussion that patients potentially want to have. And providers need to be prepared and equipped to have that discussion."

In fact, Walensky suggests that PCPs may not be the ideal personnel to carry out HIV tests. She points out that social workers and health educators are well-equipped with the training and skills to provide counseling that is especially critical in the event of a positive test result. "There are HIV counselors [who provide HIV testing] in every state in the country, and maybe we should

be thinking outside of the box about having a different mechanism to get this done," she says. ❖

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Effort produces activated patients and clinical improvements

Clinic uses chronic care model to tackle diabetes

Widely viewed as an optimal approach for managing patients with chronic disease, the chronic care model¹ (CCM) incorporates several elements into patient care, including decision support, care coordination, linkage with community resources, and mechanisms to promote and support self-management. It's a tall order to carry out—even for large, integrated healthcare systems—but one group that is successfully tackling the model at the practice level is Seattle-based Polyclinic, a multispecialty group comprised of more than 100 physicians, including 30 focused on primary care.

Beginning with diabetes, the group has implemented CCM-style strategies that have earned it recognition from the National Committee for Quality Assurance (NCQA) and the American Diabetes Association.

And now it is focused on using the same framework to make equally important strides in the care of patients with CVD.

Work begins with a registry

Polyclinic's work with the CCM began in 2001 as part of the Washington State Collaborative on Diabetes Care, a project that, among other things, served as one of the early proving grounds for the model, explains **Claudia Wilson, RN, MSN**, Polyclinic's director of quality. Participating providers in the collaborative, including two physicians from Polyclinic, met regularly to evaluate outcomes and share insight from their respective quality improvement efforts.

But by 2004, Polyclinic moved to greatly expand the effort beyond the pilot stage. "We made a decision corporately and organizationally to bring all of our

PCPs into the model," says Wilson. "It became a cultural imperative, and we had top-down support and direction to do it."

The effort's clinical champions first evaluated how they could retool the way they cared for diabetics, especially patients under the care of internal medicine and family practice providers, explains **Marc Cordova, MD**, Polyclinic's director of DM.

"Prior to being involved with the collaborative, we had no systematic way of knowing who our diabetic patients were, and how well we were taking care of them," he says. "So with this model, we were first able to get an idea of who our diabetic patients are, and then develop a way to evaluate the different parameters that reflect what good quality care is for diabetes."

To accomplish these tasks, administrators took the bold step of creating a new department to develop and maintain a registry of diabetic patients. Without the benefit of an electronic medical record, much of the initial work had to be done manually. However, the Washington State Department of Health eventually made available software designed specifically as a registry tool to the Polyclinic free of charge.

Additionally, Cordova notes that department staff devised a program that enables lab data to be automatically transferred into the registry—a huge, time-saving maneuver.

Extra task proves its value

To keep the registry up-to-date, physicians must complete a form that details the care provided at every encounter with a diabetic patient. "We have dedicated people who are responsible for maintaining the registry, getting the forms to the physicians, and inputting all of the data, such as the dates of things like flu vaccines, eye exams, foot exams, and [other care processes] that we track that are important to the care of diabetes," says Cordova.

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CVD care

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Although the form is an added burden to physicians, it is also designed to draw their attention to any care processes that are overdue or lab values that are out of range. "It is a really a quick way for the doctor to evaluate how well-controlled the patient is," says Cordova. "Anything that is overdue or [out of range] is underlined in red, and things that will soon be due, but are not yet overdue, are underlined in green, so the colors are part of the form."

The same staff members who maintain the registry are also responsible for making sure that these forms are on the very top of a patient's chart whenever that patient is scheduled for an office visit. "What our department tries to do is look through the next day's schedule and in the morning, provide the forms to the physician to be put on the chart on the day of the visit," Cordova explains.

Even in cases where the patient comes in for a visit that has not been scheduled at least a day in advance, the department is able to generate and deliver the summary form to the physician in time for the visit, adds Cordova.

Having an extra form to fill out was a hard sell to physicians—at least initially. "I was a little bit opposed to that because I have this real personal connection with patients. I hate to just put checks on a form; it just seemed robotic to me," says Susan Baumgaertel, MD. "But I think it really has proved its value in [helping us] to be more accurate in providing quality, comprehensive care to our chronic, diabetic patients. So the value outweighs the burden."

Reports provide transparency

In addition to receiving data about individual diabetic patients, physicians also receive a monthly active

summary report that provides them with aggregated information on all of their diabetic patients. "Things that are out of target or overdue are either underlined or in bold numbers so that, again, they can quickly scan which patients are overdue for which tests," says Cordova.

Physicians also receive graphs that show them where their numbers are with regards to key parameters such as BP control and HbA1c control, and these numbers are measured against benchmark comparisons to their colleagues at Polyclinic, and to NCQA numbers, when they are available.

"Organizationally, we have been very forthcoming about sharing PCP outcomes at regular primary care section meetings, so it is very visible to all the physicians where their counterparts are," says Marian Sofferin, MPH, Polyclinic's DM manager. "It provides a little bit of pressure to work harder so that their numbers will improve, and they can be [at the top] as well."

The motive in revealing these numbers is more about providing transparency than competition, emphasizes Wilson. "We have had some physicians who just didn't have a sense of where their numbers were, and once the reports were given to them, they got on the bandwagon by themselves and developed individual interventions at their own level on top of whatever we were doing corporately as a quality team."

Patient-directed care is challenging

The CCM emphasizes the importance of motivating patients to take charge of their own care. To make strides in this regard, Polyclinic hired a certified diabetes educator (CDE) to work with patients one-on-one, establish community forums on an array of diabetes topics, and link physicians and patients with valuable community resources.

Additionally, the CDE put together physician "toolboxes" that contain a list of community resources

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that they can use as a referral source with patients who may need more specialized education or care, exercise programs, weight management programs, or other assistance.

The physicians have also had to learn to be less didactic and think more in terms of providing patient-centric care, adds Wilson. "To try and develop that kind of relationship with patients is time consuming and it has not been the norm for many doctors," she says.

Baumgaertel agrees, noting that even recently trained physicians can feel threatened by the idea that the patient is going to direct his or her own care, but she emphasizes that it is the "wave of the future" for chronic care management, and that it is a good thing. "Trying to weave that into the fabric of how we look at diabetic and CVD patients is so much better," she says. "You have more engaged patients who are so much more willing to work together with you, and you have better outcomes."

Baumgaertel suggests that establishing goals with patients to work toward does not necessarily have to be time-consuming. "If you don't have time [to create a written] action plan, it can be something very simple," she says. "But acknowledging it as an action plan . . . and then coming back to it and following up on it are key because then you get into the habit. And not

just you, but the patient also gets involved with the process, and that is where you really have the value."

Effort produces results

Polyclinic's efforts have produced clinical improvements. Compared to national best practice standards, test scores on a range of key measures such as LDL cholesterol less than 100, BP less than 130/80, and HbA1c scores under 7 put Polyclinic's results in the 90th percentile. And the organization is now pushing forward with a similar approach to CVD care.

Cordova acknowledges that implementing the CCM is an expensive proposition, but he is optimistic that the clinic will ultimately be rewarded. "As a large clinic, we have made the commitment financially to do this because we feel it is the right thing, and we are interested in promoting good quality care," he says. "The physicians feel this is a good investment and we are committed to it. With the pay-for-performance trend, hopefully we will [eventually] be compensated for some of this work." ❖

Reference

"The chronic care model was developed by Improving Chronic Illness Care, a national program of the Robert Wood Johnson Foundation, is directed by Ed Wagner, MD, MPH, FACP.

Early data suggest behavioral health intervention offers dividends

Unique approach offers guidance to patients with low-prevalence/high-cost conditions

The idea that psychological health has a significant impact on physical health has gained traction in recent years, particularly as evidence mounts of the deleterious impact that behavioral disorders such as depression have on the chronically ill. However, for a variety of reasons, traditional health plans continue to struggle with designing care management strategies that adequately take behavioral health into account.

One organization that believes it has come up with an effective approach to the problem is Newark, NJ-based Horizon Blue Cross and Blue Shield (BCBS). The health plan already has in place a suite of 10 in-house DM programs, including one for depression, all of which provide psychosocial support along with traditional DM services to members identified with the most common chronic diseases.

But convinced that there are additional opportu-

nities to improve care and cost-efficiency, the organization has now partnered with Tampa, FL-based Health Integrated to provide a behavioral health intervention to members with less prevalent chronic conditions, including chronic back pain, Crohn's disease, ulcerative colitis, rheumatoid arthritis, Parkinson's disease, migraines, and seizures. Called Synergy, the program aims to improve overall health and quality of life by addressing both medical and behavioral needs.

Members seek support

"There is an important psychosocial aspect to these conditions, which is very in sync with our mentality and how we are running our programs," says Sue Binder, RN, CCM, PAHM, the director of Horizon BCBS' health and wellness programs. Further, Binder notes that although the diseases may not be as common as diabetes or asthma, they are nonetheless high-cost, and members impacted by these conditions have sought additional support.

From Health Integrated's perspective, the targeted diseases make sense because they all play a critical role

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in the overall health status of patients, especially with respect to some of the pain disorders that patients with these diseases frequently experience, says **Sam Toney, MD**, chief medical officer and vice chair for Health Integrated. “Our approach, utilizing the behavioral sciences as the core foundation, and our care coaching strategies lend themselves very nicely to this suite of diseases,” he says.

A diagnosis involving one of the five targeted conditions is just one of the criteria involved with the case selection process. Health Integrated runs sophisticated analyses on administrative data, which enable care managers to identify those individuals most likely to benefit from intervention.

“We reach out to and attempt to enroll that subset of the [targeted] population that we believe we will have the highest impact with, and obviously, the highest level of ROI for,” says Toney. “There are clinical markers and targets, utilization patterns, and trends that we look at, so it is not simply a historical-cost methodology.” Further, while a member does not necessarily have to have a psychiatric diagnostic code in the claims system to be considered for enrollment, that is one additional filtering and stratification layer that is included in the case-identification process.

Care coach focuses on ‘patient-centric’ goals

Engaging identified patients in the program is among the most challenging aspects because many of them have psychosocial and behavioral issues, and they tend to lack the motivation to participate.

Health Integrated tries to get around these barriers by letting patients know ahead of time that they will receive a call from a program representative. The representative then uses motivational communication strategies to describe the program to potential enrollees and obtain their consent to enroll. Roughly 60% of the people Health Integrated reaches by phone enroll in the program, says Toney.

At this point in the process, each enrollee is referred to a care coach—a licensed clinician with a behavioral health background—who will work one-on-one with the individual to address areas of difficulty and establish a roadmap for achieving specific goals. And even before the care coach speaks with a patient, he or she has a number of prepopulated data sets pertaining to the person’s

- diagnostic conditions on both the medical and behavioral side
- medications

- demographic information
- providers
- risk level as stratified by the Health Integrated system

Consequently, Toney explains that the interaction can get off to a relatively quick start, beginning with what he describes as a motivational assessment component—named as such because it is designed to be engaging. “It is a tool not only for gathering information, but also for defining patient-centric goals, and actually beginning the patient-coaching process on the first call,” he says.

The first part of the motivational assessment is primarily concerned with psychosocial challenges. It includes a behavioral health profile, which Toney suggests is particularly important for patients who have not been diagnosed with a psychiatric condition.

“Clinicians are able to ascertain through this profile what general areas of impairment and disability they might see with the individual relative to depression, anxiety, mania, [or other behavioral health disorders],” he says. “Once the first part of the assessment is complete, we then have already established patient-centric goals, we have already begun some interventions, and we have gathered a tremendous amount of data.”

Program includes disease-specific modules

Care coaches turn their attention to the second part of the motivational assessment during the second call to a patient. This section focuses on disease-specific metrics and interventions, and it includes the Patient Health Questionnaire (PHQ-9) for the assessment of quality-of-life and depression. Depending on what conditions the patient has, the care coach and patient work through disease-specific modules that are derived from evidence-based guidelines.

“If the care coach discovers that the patient has reported that his or her treatment plan is not consistent with those evidence-based guidelines, then that will yield a referral to one of our medical directors for review, and a potential intervention with the attending physician,” says Toney. “When we feel we need to intervene with a provider, it is always telephonic and it is also from a specialty-based physician.”

Such communications are never directive, emphasizes Toney, but rather intended to provide attending physicians with information they may not be aware of. In fact, Toney points out that in many cases, the treatment plan is in accordance with evidence-based guidelines, but the patient does not adequately understand it.

“When we reach out to the provider and discuss the issues at hand, the provider clarifies for us [what

the treatment plan indicates], and we are then able to go back and connect those dots with the member and get the communication gap closed," says Toney. "That is a very important care coaching goal."

Personal goals motivate patients

In many cases, the goals patients establish for themselves are very specific or narrow, and only indirectly related to their condition. However, Toney points out that they often provide patients with the focus and motivation to take meaningful steps toward improving their quality of life, and this can lead to larger improvements in health status.

For example, Toney recalls the case of one patient with low back pain who established the goal of being able to take walks every Saturday with his grandchildren. In working with this patient, the care coach discovered that he was not adhering to his physician's treatment regarding pain medication and physical therapy. The care coach helped the patient to realize that by adhering to the treatment recommendations, his pain could be reduced, and he ultimately was able to achieve his goal.

"It has been an interesting time for us in connecting these dots for the patients, and recognizing that the primary goals that they have identified on the front end may not be the goals that most people would recognize as most important, but in reality they are the most important goals because they are what get these patients to move and change behavior," says Toney.

Guidance & encouragement help

Working as a care coach in the Synergy program, **Shelly Watts, LMHC**, says that she spends a lot of her time helping patients learn to solve problems. "Pain is a factor that comes up over and over again, whether it involves rheumatoid arthritis, migraines, or whatever, and I often encounter people who used to be really active, and now they can't be, and they are really grieving the loss of that," she says.

In these instances, Watts helps patients identify activities that they can do. Additionally, she may refer them to a physical therapist or another specialist for consultation, and she often works with patients on coping strategies that can help distract them from their pain. "[We

focus on] anything that can improve their quality of life by either reducing their pain or finding ways to manage it," adds Watts. Another goal that comes up frequently in her work with patients is a desire to lose weight, says

Watts. "If this is not their primary goal, it is their secondary goal, and I am often asked how I can help them do that over the phone," she says. "It is really a matter of assessing their strengths, and really trying to play up to those because a lot of people are really just discouraged, or maybe they don't have a lot of support."

In many cases, Watts notes that just having someone on their side who can make suggestions and provide encouragement helps patients feel better about themselves and make progress.

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—Sam Toney, MD

Staff collect and report data

The Horizon BCBS Synergy program has just begun, but based on work Health Integrated has done with other clients, the average length of stay in the program is 12–18 months. However, Toney emphasizes that patients remain in the program until they have achieved the following key goals:

1. They are adherent with their treatment plan
2. The treatment plan is in accordance with evidence-based guidelines
3. Behavior changes are sustained

Health Integrated built these triggers into its information system so that care coaches receive an automatic prompt to consider discharge when patients have reached the indicated goals.

However, Toney emphasizes that program staff continuously track many additional clinical and financial parameters including

- symptom severity trends
- PHQ-9 scores
- hospital and ER utilization
- overall medical costs
- patient and provider satisfaction

Health Integrated publishes these data points in quarterly or annual reports for clients to review.

Additionally, clients receive monthly activity reports that include enrollment and discharge data.

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Early results show promise

Based on studies looking at earlier implementations of the program, Toney anticipates positive results with Horizon BCBS as well.

"We have managed close to 18,000 patients through this program," he explains, noting that the first iteration, unveiled two years ago, focused exclusively on depression. "We realized early on that with effective management of depression, we see a significant offset on the medical side."

In one early study of the impact of the program on a cohort of 1,100 people, for example, Toney says the program was associated with a 20% decrease in hospital admissions, and an 18.3% decrease in annual, per-member medical costs.

"[These results] are the primary reason why we decided to move this program and evolve it into a more comprehensive, global, med-psyche or medical-behavioral initiative," he says.

One reason for the program's success may be related to the extent to which PCPs have accepted the intervention.

"I would have expected some resistance from the physicians, but they are pleased that there is someone who is going to be working with their patient, and collaboratively with them as well," says Binder.

Toney believes this acceptance is partly because many physicians refer their patients to behavioral health specialists, but the patients are reluctant to follow up on those referrals. "Consequently, we become like extenders to that PCP from a specialty perspective, and it has been very positive and very well received," he says.

Going forward, Toney envisions further refinement of the approach, with the possible inclusion of additional disease states, and there are also initiatives in place to enable Web-based outreach to patients. "We are looking at both the expansion of the clinical scope as well as the technological scope." ❖

Editor's note: For more information about Health Integrated or its Synergy program, visit the organization's Web site at www.healthintegrated.com.

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