



# In the Tribal Communities of California's Pauma Valley, It Takes a Village to Combat Chronic Illness

## Implementing the Chronic Care Model

Good health has eluded many American Indian and Alaska Native communities. Their health statistics are among the poorest of all U.S. racial and ethnic groups. In some native communities, more than half of adults ages 18 and older have diagnosed diabetes, with prevalence rates reaching as high as 60 percent. About one in five people in these communities has two or more chronic health problems.

The reasons for such ill health are many and complicated: displacement, isolation, cultural barriers, poverty, poor sanitation, unhealthy eating habits and lifestyle, among them.

### **Turning the Tide in California's Pauma Valley**

The tribal communities that inhabit the rural Pauma Valley north of San Diego are no strangers to these dismal figures. But the tide may be turning, in large part because of the work of the Indian Health Council.

The council was created in 1970 in response to a shift in federal policy that returned to tribes the responsibility for managing their own health care systems. It was a daunting shift for California's 107 tribal entities, especially those with few members. The nine tribes in North San Diego County formed a consortium, raised funds and opened a health clinic in a tiny wood-frame house, formerly Roberto's Taco Shop.

By 2009, the clinic was splitting the seams of a 55,000 square-foot brick facility across the road from the original building. The growth is a testament both to how far health care has come in this tribal area and how deep is the need.

Corinna Nyquist, R.N., the clinic's director of ambulatory services, came to the Indian Health Council in 2001, after 10 years at San Diego's Scripps Clinic. Not being Native American, she said she was initially surprised at the degree of fatalism among the patients she saw. "It was like: 'My mom had diabetes, my dad had diabetes, my grandmother had it, my great-grandmother had it. They all lost their vision or lost limbs and it's going to happen to me,'" she recalled.

Such beliefs were among many reasons that patients received little preventive care, Nyquist said. "When I first started here, the only time we would see patients was when they were in a crisis. I said, this is not the way to take care of the community, this is not the way to take care of a patient, always doing crisis management."

### **Putting the Patient at the Center**

Nyquist and other clinic staff began looking at ways to engage patients in managing their illnesses. "I think nurses can be used so much more as managers to really look at an individual's and a family's health care," she said. "How can we better manage it, how can we help them better manage it?"

The nurses gained a staunch ally in 2002, when Daniel Calac, M.D., joined the Indian Health Council as medical director. Calac grew up just five miles from the clinic on the Pauma Indian reservation. A Harvard Medical School graduate, board certified in internal medicine and pediatrics, he could have had his pick of East Coast, state-of-the-art, medical institutions. But something—he calls it fate—drew him back home.

Calac brought to the Indian Health Council a deep understanding of the American Indian community and a conviction that the best care centered on the patient, not the medical practitioner. "I have seen what it is like to have a doctor-centered approach to care dictating what happens to patients," Calac said. "From a community standpoint, from a Native American standpoint, it doesn't really jibe with high-quality care."

Aided by funding from the federal Indian Health Services' Special Diabetes Program, the Indian Health Council already had instituted a team approach with diabetes patients. They had also recruited specialists—an ophthalmologist, a podiatrist, a cardiologist—to come to the clinic to deliver services, increasing the likelihood that diabetes patients would follow up on referrals.

"We had done really well with the diabetic population," Nyquist said, "so we said, why can't we just do this across the spectrum. We have this whole team approach with diabetes, why don't we have it for everything?"

### **Targeting a Range of Chronic Illnesses**

The opportunity to realize that dream came in 2007 when the Indian Health Council was one of 14 tribal health centers selected to participate in Innovations in Planned Care, a year-long Breakthrough Series Collaborative aimed at implementing the Chronic Care

Model (what the Indian Health Service calls simply "the Care Model") into how they worked with patients with a range of chronic illnesses.<sup>1</sup>

The team members selected six areas of patient health for which they would screen patients and measure outcomes: alcohol misuse, depression, domestic violence/intimate partner violence, tobacco use, obesity and blood pressure. The teams were cautioned to use measurement to guide improvement, not to judge performance.

The Collaborative process required teams to participate in intensive two-day "learning sessions" at eight- to 12-week intervals (some held in person and others Web-based) and in one-hour Web-based "action period calls" every other week. The regular contact, in person and online, enabled teams to exchange ideas and learn from each other as they measured their progress and implemented changes in their office and patient care routines.

### Creating Microsystems of Change

To get started in making improvements, teams created "little microsystems" to test changes. At the Indian Health Council, the first microsystem centered on Mary Jo Moses, F.N.P., a family nurse practitioner who was enthusiastic about improvement and able to motivate others. Moses focused on patients she had seen several times within the previous 18 months. The 772 identified patients were assigned to her team, which included two medical assistants.

The team started each day in a 30-minute "huddle" to review the charts of patients scheduled for clinic visits. The goal was to identify and plan for needed medical tests or exams, including immunizations, mammograms and physicals.

This chart review proved challenging at first, Nyquist says, because of data entry errors and omissions. The clinic eventually trained all staff in data entry, rather than relying on one person, and the change helped improve the accuracy of the records.

Armed with information, the team was able to address patients' needs proactively. Team members also assured the patients that they would see someone who knew them and understood their health issues.

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<sup>1</sup> The Institute for Healthcare Improvement developed the Breakthrough Series to help health care organizations make "breakthrough" improvements in quality while reducing costs. The driving vision behind the Breakthrough Series is that sound science exists on the basis of which the costs and outcomes of current health care practices can be greatly improved, but much of this science is unused in daily work. The Breakthrough Series helps organizations use the science by creating a structure in which interested organizations can easily learn from each other and from recognized experts in topic areas where they want to make improvements. A Breakthrough Series Collaborative is a short-term (6- to 15-month) learning system that brings together a large number of teams from hospitals or clinics to seek improvement in a focused topic area.

"One of the biggest complaints from patients," Calac says, "was turnover in the clinic. 'Who am I going to see next? Is it someone different?' Now there is not just one practitioner but one group of people responsible for delivering care for that one patient. Patients can expect follow up. They are contacted more frequently and they do not have to explain all over again what happened last time. From the patient standpoint, that has been a big improvement."

That sense of continuity also made a difference in how the medical staff feels about their jobs. "I have a lifeline to my patients—and they to me—through the use of the team," Moses says. "I sleep better at night, and patients know there is a home with a group of people who care and know about their conditions."

### **Making Rapid Cycle Changes**

During the pilot process, the team also undertook a number of "rapid cycle quality improvement" tests. They used a tool they had learned about at the Breakthrough Collaborative called Plan-Do-Study-Act (PDSA—shorthand for testing a change by planning it, trying it, observing the results and acting on what they learn).

One of the improvement projects focused on high blood pressure statistics. The team looked first at office processes. The clinic's blood pressure station was right inside the front door. When patients walked in, staff sat them down, took their blood pressure and then whisked them into an exam room. Staff wondered: What if they took patients into an exam room first and, after getting them settled and taking a bit of history, then took their blood pressure?

"We did that test in 20 minutes," Nyquist says. "With the next five patients that came in we took their blood pressure right away as usual and then five minutes later when they had been in the exam room we took it again. There was such a substantial difference in the readings that we implemented that procedure right away. There was no reason to be doing the blood pressure out in the middle of the hall."

They also explored why patients were not taking their medications as prescribed. "I've always hated the word noncompliance," Nyquist says. "If the patients don't take their medicine, have we looked at why? Has anyone asked whether they can afford \$50 worth of medication? Or whether they are comfortable with giving themselves insulin? Are we just tagging someone as noncompliant because it is easier for us to make that assumption rather than take ownership of what we are actually doing from patient to patient?"

By participating in health fairs and engaging with the elders in the community, clinic staff got more clues about patients' concerns and instituted some small but important changes in office procedures to help patients with their medications. They found out that many patients did not know why they were taking their medications, so the team asked

the doctors to begin writing that down, in plain language: "for diabetes" (not hyperglycemia), "for high blood pressure" (not hypertension), "for high cholesterol" (not hyperlipidemia). The pharmacy was more than willing to include the information on the pill bottles.

"We asked a couple of community members, what do you think of that?" Nyquist said. "They said, 'That's great, now I know why I'm taking that pill.' These are really simple things. We have all gone through a transformation: instead of deciding what a patient needs and prescribing for them, we are involving them in their care."

### **Bolder Changes, Stiff Resistance**

After a year in the pilot, the Indian Health Council was ready to roll out system changes more broadly. With the blessing of Calac and the clinic's leaders, Nyquist and the team redesigned care delivery throughout the medical clinic to reflect the new team approach.

The clinic's five primary care doctors were each assigned to a "pod," a care team that included nurses and medical assistants. Each pod was responsible for the care of some 800 patients. To reinforce the team concept, each pod shared an open office space to encourage communication and collaboration.

In addition, field nurses often joined the morning "huddles," as they were actively engaged with patients in the community and could help with broader needs, such as housing or home health aides.

The new system immediately met resistance from several physicians, mostly younger ones who were new to medical practice. "I was shocked," Nyquist says. "I would have expected it of older physicians stuck in their ways... But they were younger."

Nyquist suspects the resistance stemmed from old notions of hierarchy—"the physician on top, then maybe the nurse, then the medical assistant, then everybody else"—a model that she and Calac have never subscribed to. "We believe in using everybody to the highest point of their ability or their licensure," Nyquist said. "There is so much more that the nurses could be utilized for. Nurses should be obtaining histories, looking at chronic disease processes that haven't been followed up and doing education. Physicians generally are open to that."

The physicians not enamored of the care team concept have not stayed at Indian Health Council. "It was just not a good fit," Nyquist said. "We wanted to improve communication among the team members and to do better case management. Before, it seemed that everyone just felt, 'That's not my job.' Part of the team approach is that it is everybody's job, regardless of what your license is, to look at everything in the community. We are basically the community's public health system."

## Proving the Model With Data

Implementing the Care Model also required collecting patient data consistently. The pilot group of 14 health centers struggled with setting up patient registries and getting office staff to collect accurate data so that they could measure outcomes and improvement. By the second round of the Breakthrough

Collaboratives, there was a manual on how to do the measurements, gleaned from the pilot groups' hard experience.

To make tracking easier, certain measures were bundled together. There's a cancer bundle, for example, that includes cervical, breast and colon screening. "It's an all-or-nothing screening," Nyquist says. "If you are good at screening for one but not for all three you get a lower number."

Tracking the numbers has been informative. The team found that colon screenings were very low—about 20 percent. Because no one had told them to, according to Nyquist, data entry was not recording colonoscopy referrals outside the Indian Health Council. "We did a manual audit and it went from 20 percent to 60 to 65 percent." The clinic immediately retrained everyone and included data entry staff on the care team so they would understand the context and the importance of the data.

Eventually, Indian Health Council staff completed the transfer of patient files to electronic medical records, extracting information manually in order to capture important data, such as: When did the patient get screened for that condition, what other screenings are they due for?

## A Better Pathway to Health

The transformation in care delivery has resulted in consistent improvement in alcohol misuse screening, colorectal cancer screening and childhood immunizations; decreasing office visit cycle time; and improved continuity of care. Physical activity and exercise referrals have increased, and staff has noted that patients are taking control of their own personal health and well-being.

"Our community is very used to us telling them what they need to do," Nyquist says. "Now we see patients taking the driver's seat. We tell them, 'If you need these tests, come in and demand them from us. You are in control and we are here to help you.'"

Calac says he now wants to involve the entire clinic in what he calls "the Big Team." Current plans are to extend the implementation of the Care Model to include the departments of community health, dental and behavioral health. He credits the

*"It's amazing how implementing the Care Model has really blossomed. No one could have foreseen that a small \$30,000 grant could totally transform how we are providing care."*

*Daniel Calac, M.D.  
Medical Director  
Indian Health Council*

Collaboratives with creating the will and process to institute widespread and lasting changes.

"Before the Collaboratives, I thought we were providing at least good care," Calac says. "But we weren't doing some things. One, we were not systematic about how we provided care. Two, we were not documenting what we needed to. By implementing the Care Model and putting some better algorithms and pathways in place, we are able to do a much better job. And we can take credit for it by showing the numbers. People know we are really doing a pretty good job."

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Grant ID # CDM

Program area: Quality/Equality

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