Psychiatrist Michael Farnsworth built a telemedicine network that connects mental health practitioners with patients in 10 Minnesota counties.

In a room off his garage, psychiatrist Michael Farnsworth, MD, sits at a desk, surrounded by computers. One allows him to see and talk to patients as far away as Mankato and Albert Lea. Another he uses to access patients’ electronic health records and prescribe medications. A third is for looking up information—if a patient wants to know about a new drug, for example. An iPad is for messages and emails.

He likens this setup to “the command center at NASA.”

Farnsworth uses the equipment to provide psychiatric care to adults with serious and persistent mental illnesses in 10 counties in southern Minnesota—a geographic area the size of Connecticut. He spends four days a month in the Blue Earth County mental health center in Mankato, then conducts between 60 and 80 remote visits a week from his home office in Nisswa.

Through this telepsychiatry network, which he launched through Blue Earth County in 2003, Farnsworth has brought needed care to a part of the state where mental health services, especially for Medical Assistance patients, are limited. (The state-owned psychiatric hospital in St. Peter closed in 2006.)

He spoke with Minnesota Medicine editor Kim Kiser about how he set up the network—called the South Central Community Based Initiative (SCCBI) Psychiatric Services Hub—and how it’s changed mental health care in that part of the state.

You were medical director for the St. Peter Regional Treatment Center’s psychiatric hospital and the Minnesota Security Hospital before you were hired by Blue Earth County in 2003. What challenges was southern Minnesota facing then in terms of mental health care?

We had a huge logistical issue, which was how to provide mental health services to patients who were as far as two hours away. Ten counties relied on us to provide mental health services. We had satellite offices, but they were inadequately served. To get to Fairmont and back to Mankato, where we were based, for an appointment, a practitioner would spend half a day in the car. We also had a 50 percent no-show rate in Mankato because patients couldn’t get to their appointments. As a result, we had a lot of patients in crisis because they weren’t being seen or their medications lapsed, and we couldn’t respond to their crisis. That was the chaotic setting I entered into in 2003.

What happened when a patient was in crisis?

They often ended up in the ER or were civilly committed, which is why we had the big state hospital in St. Peter. We had over 200 psychiatric beds when I was medical director. Most were full because there wasn’t adequate care in the community.
Did you know much about telemedicine at the time? Had you seen these systems operate?

When I was medical director at St. Peter, we developed the sex offender program in Moose Lake and St. Peter. I needed to set up a system where I could go to Moose Lake but still be in St. Peter. There had been some early attempts to create an interactive television (ITV) network within the state system, but they were very primitive. Reception was poor, the images were grainy—it was like watching video of the first moon landing. But videoconferencing had improved and we were able to use it to see patients in Moose Lake.

Was the county receptive to trying this?

There was concern at first. Everyone was concerned patients wouldn’t want to sit in front of a monitor with a camera on them and not have a practitioner physically present. But that turned out not to be the case. Patients valued the convenience of being able to see someone easily rather than having to travel a long distance for a 20-minute appointment for medication management or a half-hour visit.

Then there was the issue of cost. The initial equipment was expensive—$50,000 per setup. But the state promised that as they reduced services at big-box institutions like the St. Peter Regional Treatment Center, they would transfer equivalent staff and funding into the community.

Grants and some funding from the SCCBI allowed us to purchase equipment. The cost has since come down dramatically.

How does the system work?

The patient, depending on where they live, goes to the closest dedicated site—it could be the county’s social service department, a group home, the jail, a hospital, the crisis center in Mankato. They are greeted by a nurse who takes their vitals and completes any necessary screenings such as the PHQ-9 for depression or AIMS (abnormal involuntary movement scale) for patients taking antipsychotic medications. They sit in front of a secure, HIPAA-compliant high-definition ITV console. It’s no different than if they were coming into the clinic in Mankato and seeing me in person. They see the nurse, complete their paperwork, have their vitals taken, do the visit, get their prescriptions and get their next appointment set up.

Do you ever see patients in person?

Standard practice for our clinic is to do initial evaluations in person whenever possible. Also, every person who is seen electronically has to be seen in person at least once a year. And I see in person those individuals who object to ITV or have a hearing or cognitive impairment that makes ITV problematic. In some parts of the country, patients may never see the doctor in person. But I don’t think that’s good practice. I still like the personal touch. I like being able to see the person across the desk from me. I like being able to shake their hand.

How has the technology evolved?

Initially, we had to drag a big monitor into our offices and plug it in and turn it on. They would do the same thing at the distant site. It was cumbersome and inconvenient. By 2008, we launched a much better system. We have a dedicated ITV system built into the wall of my office and our nurse practitioners’ offices in Mankato. It’s a TV set and a camera. We have the same equipment at 30 to 35 remote sites.

To what extent has the program grown?

When I started, it was me and a part-time nurse practitioner. We now have four nurse practitioners, all based in Mankato.

What sort of impact has the network made in terms of patient care?

We see about 1,400 patients who are seriously and persistently mentally ill. Using ITV has increased our overall show rate from 50 percent in 2003 to 85 percent today. ITV visits have a 93 percent show rate. And when you look at patient satisfaction with ITV, they love it.

I can respond to emergencies by getting the patient to one of our sites or I can see the person right in their group home. We’ve had less reliance on inpatient hospitalization because we have a faster response time both for crisis and ongoing care. And because we can communicate more effectively with caregivers and case managers, we can work more quickly with patients whose conditions are deteriorating and perhaps avoid a crisis.

What are your plans for the future?

We’re looking to expand and are recruiting a psychiatrist and a nurse practitioner. We’re also going beyond the scope of just seeing “county” patients. We’re also seeing patients with private insurance. As more of those patients come in, the better reimbursement (from private insurers) will enable us to enhance our services, perhaps expanding into child and adolescent services, which we don’t provide now. But we will always be the safety net for the community. That will always be our mission. MM