

Telemedicine Program Provides Epilepsy Services in Rural Michigan

The Michigan Pediatric Epilepsy Telemedicine Program aims to improve access to quality epilepsy care for children and youth in rural and medically underserved areas by utilizing telemedicine to connect them to epilepsy specialists in Michigan's major children's hospitals.

Michigan has 83 counties, with 57 considered rural/medically underserved. There are large areas of the state where children and families have limited access to pediatric specialty care, including neurology. The state Pediatric Epilepsy Telemedicine Initiative is a three-year, federally funded grant awarded by the Maternal Child Health Bureau, HRSA, and administered to the Michigan Department of Health and Human Services (MDHHS), Division of Children's Special Health Care Services (CSHCS). The grant allows CSHCS to use telemedicine to provide access to quality epilepsy care for children and youth with epilepsy in rural and medically underserved areas. The program uses telemedicine technology to connect the rural primary care clinics with pediatric neurologists from CS Mott Children's Hospital and the Pediatric Neurology Clinic of the University of Michigan Health System.

Steps Taken:

- In 2006-2007, the Michigan Medicaid telemedicine policy was added to the Michigan Medicaid Provider Manual. In 2010, MDHHS received the three-year HRSA grant to increase awareness and access to care for children and youth with epilepsy.
- MDHHS developed six telemedicine sites at pediatric medical homes in rural areas, many of which were federally qualified health centers (FQHCs). Using Michigan's Medicaid database, CSHCS staff and Project Director Linda Fletcher identified eligible counties with populations of children with epilepsy, beginning with Upper Peninsula sites and then the Lower Peninsula.
- During the first three years of the grant cycle, the child/youth had to be enrolled in Michigan Medicaid or the CSHCS program to be eligible to participate in the telemedicine program. Each site was responsible for identifying eligible children/youth with epilepsy in its clinic and offering the patient an opportunity to participate in the telemedicine program.
- Each site was a designated medical home, which provided the framework for the project, with an emphasis on care coordination between the child/youth with epilepsy, the family, the primary care provider, and the specialty care provider. Grant funding was used to purchase the telemedicine equipment for each site, and each site received a stipend of \$5,000 to support implementation. Consultants from the University of Michigan provided technical support for the site development. Each site was required to have its own IT support to assist with connectivity to the University of Michigan IT/telemedicine consultant.
- During the telemedicine visits, the primary care doctor, the patient, and their family are in an exam room equipped with a video monitor and camera at their local clinic site, while the specialist connects from the children's hospital. Visits proceed exactly as they would if the patient was in-person, except they are in live-time with the telemedicine equipment (HD screen, camera, and software).
- Michigan's telemedicine policy allows both the primary care physician and the specialist to bill Medicaid and/or CSHCS for their visit (each billing at their own rate) on the same day at the same time. This rate is the same as it would be if the visit were occurring in a traditional clinic setting. During the first grant cycle (prior to 2013), the Michigan Medicaid policy prohibited telemedicine sites from being within 50 miles of a specialty medical center. The distance

requirement was eliminated in 2013, which has allowed the program to expand to urban areas of Michigan that also qualify as medically underserved.

- In 2013, MDHHS was awarded a second HRSA grant to continue the same telemedicine model, and identify more FQHCs to enroll in the project (2013-2016). The goal was to add three additional sites per year over three years. It is currently in the second year of this grant cycle.
- The second grant award included a component to use telemedicine to facilitate the child/youth with epilepsy's transition between the pediatric neurologist and the adult neurologist. Using telemedicine technology, the first visit in the transition will be led by the pediatric neurologist and will include the patient's primary care physician and the pediatric neurologist. The adult neurologist leads the second visit, with the pediatric provider present to facilitate the transition. After the initial two visits, the pediatric specialty provider will bow out and the patient will transition to the adult provider. All providers can bill for the visits that they facilitate together.
- Staff are working to identify eligible youth with epilepsy for transition services through telemedicine. The program anticipates that this number will be small based on the current demographics. The program is utilizing the transition framework provided by the [Got Transition](#) program.

Results:


- Providers are only using telemedicine for children and youth with epilepsy at this point, but there is potential for future expansion. According to preliminary surveys, patient satisfaction has been 100 percent, and provider satisfaction has been around 97 percent.
- Although a rigorous evaluation has not yet been completed, the following anecdotal results have been reported:
 - *Improved Care Coordination:* The medical home concept allows sites to support care coordination in a way that has positively impacted the families and providers. Because everyone is on camera at the same time, the patient receives coordinated the care, and the patient, family, primary care provider, and the specialists all participate in real time in the development of the care plan. The care coordination component also serves to assess needs for school-based supports, behavioral supports, and another additional community supports.
 - *Medication Reconciliation:* The use of telemedicine clinic visits provides an ideal opportunity for medication reconciliation for the patient, family, and providers.
 - *Physician/Provider Education:* The subspecialists and primary care physicians/providers are able to discuss current epilepsy treatments. The primary care providers have reported increased level of skills related to care of children/youth with epilepsy and epilepsy assessment.

Key Components Needed for an Effective Telemedicine Program:

- ✓ **Excellent IT support** – Information Technology Support is key to any telemedicine project.
- ✓ **Committed clinicians on both ends** – Clinicians willing to invest time in the effort is a critical component of a successful program.
- ✓ **Dedicated staff support for data collection** - Data must be collected at each step of the telemedicine process.
- ✓ **Centralized or Integrated Telemedicine Scheduling system**
- ✓ **Physician champion**
- ✓ **Time** – It takes several years for the program to become well established.

Lessons Learned:

- The most significant barrier to expanding the telemedicine program is commercial reimbursement. As of June 2014, 20 states have laws that govern private insurer reimbursement policies, but Michigan does not.¹ The State of Michigan has a [public act on telemedicine](#), that supports the use of telemedicine, but it does not mandate commercial insurance reimbursement for telemedicine.
- Sustainability is key. It takes several years to get a telemedicine program well established. Michigan had a three-year grant that helped with start-up of the program, but it is also important to set up a business model in the beginning that you know will be sustainable beyond the grant cycle. Part of sustainability is also building in a network of support for billing, reimbursement, scheduling, IT support, etc.
- Make it easy for providers to incorporate telemedicine visits into their routine. Ideally, a doctor can do an in-person and telemedicine visit in the same office location on any given day.
- Telemedicine is not a large initial investment, but it does require intensive initial support in set-up and coordination.
- For telemedicine to be successful, there needs to be commitment across the state to improve access to care.
- Think creatively about reimbursement.
- Most traditional clinic appointments can be accommodated through telemedicine technology.



“TELEMEDICINE MEANS THE USE OF AN ELECTRONIC MEDIA TO LINK PATIENTS WITH HEALTH CARE PROFESSIONALS IN DIFFERENT LOCATIONS. TO BE CONSIDERED TELEMEDICINE, THE HEALTH CARE PROFESSIONAL MUST BE ABLE TO EXAMINE THE PATIENT VIA A REAL-TIME, INTERACTIVE AUDIO OR VIDEO, OR BOTH, TELECOMMUNICATIONS SYSTEM, AND THE PATIENT MUST BE ABLE TO INTERACT WITH THE OFF-SITE HEALTH CARE PROFESSIONAL AT THE TIME THE SERVICES ARE PROVIDED.”
MI Compiled Law Svcs. Sec. 500.3476.

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ⁱ Center for Connected Health Policy. "Telehealth Policy." Available at: <http://cchpca.org/telehealth-policy>. Accessed 8-27-15.