

Overview

In Minnesota, 80 percent of pediatric specialists reside in the Minneapolis-Saint Paul metro area, making it difficult for patients in outlying regions to receive needed treatment. As the technological, legislative, and reimbursement landscapes became more favorable to telemedicine, leaders at Children's Minnesota looked for opportunities to improve access to care through virtual connections.

To that end, what started just three years ago as video consultations between specialists at Children's Minnesota and physicians in farther removed areas has grown into a full-blown telemedicine program. "We started with ED-to-ED connections to provide pediatric consultation on the fly, 24 hours a day, seven days a week, to small community and rural hospitals that don't have pediatric emergency specialists," says Charles Blackwell, MD, telehealth medical director for Children's Minnesota.

Within a short time, Children's Minnesota expanded its reach beyond emergency care to provide primary and specialty services through real-time, interactive audio and visual tools.

According to Blackwell, the goal of Children's Minnesota's telemedicine program is to connect providers to providers, as well as offer direct, in-home patient care. For example, one of the organization's first specialties to use telemedicine was the Center for the Treatment of Eating Disorders. Most of the pediatric patients in the program require two to three office visits per week. Even for

families close to providers, such a commitment can prove difficult. But for those in outlying areas, it can be an impossible schedule to maintain. Through the telemedicine program, however, participants in the eating disorders program are able to receive counseling and medication management in their homes via video technology.

Similarly, the Pain and Palliative Care Clinic provides care via telemedicine. Many pediatric

patients with chronic disorders depend on medical technology such as ventilators and specialty wheel chairs. Transporting these patients to the clinic or emergency department can be quite difficult, which makes in-home virtual visits an attractive and convenient option.

"We also have a pilot program for our social work team that allows social workers to connect with our emergency department and conduct behavioral crisis evaluations," says Blackwell. "Social workers who are on call but at home in the middle of the night are able to

quickly connect through our secure audiovisual platform to talk directly with families needing support."

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Charles Blackwell, MD, telehealth medical director, Children's Minnesota

Impact

To date, Children's Minnesota's telemedicine program has documented more than 300 visits across all service lines. Although this is not enough data to draw significant conclusions, the results so far have been promising.

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of the patients in their home communities and avoid a transfer right at that moment,” says Blackwell.

For now, the telemedicine team at Children’s Minnesota can draw on ample anecdotal evidence to propel the program forward until they have collected enough data. One example involves the use of the ED telemedicine consultation service to provide a second opinion for a young child who presented to his local pediatrician with a rash. The onsite physician was confident that the rash was innocuous but wanted confirmation from a Children’s Minnesota ED physician. The consulting physician examined the rash via video and determined that it was not a typical rash. Ultimately, the child was diagnosed with Kawasaki disease, changing the entire course of treatment.

“Even though we may only have a request for virtual consultations in the ED once a month, the impact can be life-changing,” says Blackwell.

Lessons Learned

Although Children’s Minnesota’s physicians are embracing the telemedicine program, initially the hospital faced a few challenges gaining their buy-in. Some specialty physicians were skeptical about how traditional inpatient services would be operationalized in a virtual setting. They expressed concern about how virtual visits would be carved into their schedules, how the visits would actually be implemented, and what type of reimbursement mechanisms were in place.

To successfully address physician concerns, the telemedicine team at Children’s Minnesota emphasizes that beyond the technology, a great deal of coordination and effort takes place behind the scenes to keep the program running smoothly.

“We learned early on that no department can be left out of the process of implementation,” says Blackwell. The hospital has a core team representing nearly every department at Children’s—from patient scheduling to billing, legal to risk, credentialing to licensure, and information management to technology support—that helps with the implementation of a service line, anticipating future difficulties. The telemedicine team also took time to carefully set the expectations about both the advantages and the

constraints—such as licensure issues across state lines—of telemedicine.

Blackwell emphasizes the importance of clinical and hospital leaders understanding that there are also many nontraditional players in the space of virtual care. Taking time to grasp the depth and scope of technological opportunities will help health care organizations understand where they fit in.

Future Goals


Children’s Minnesota currently has 11 service lines that use telemedicine to some extent, with a goal of continuing to expand to other specialties such as mother-fetal and neonatal programming. The hospital also plans to expand the social work ED pilot for consultations from two days per week to seven days. Another goal is to examine how the hospital interacts with school systems so that care may be offered in the settings children are in most frequently.

“Telemedicine is not a replacement for what we do,” says Blackwell. “It is an additional tool for helping us have the biggest impact in the most effective way on the patients we serve.”

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