The Challenge

Children’s Mercy Kansas City (Children’s Mercy) is an exemplary pediatric health system, with the highest-level designations in neonatal and pediatric intensive care, trauma and emergency services, fetal health and transport services. Children’s Mercy supports the children of Kansas and Missouri, with the next children’s hospitals being 583 miles to the west and 244 miles to the east. Historically, this geographical distance has made it difficult for patients and families to access pediatric specialty care.

The Solution

To address this barrier to care, Children’s Mercy was an early investor in the technology needed to start offering telehealth. This ensured early adopters would have good experiences, leading to additional sub-specialists to incorporate virtual care into their practice and ultimately reach more patients across the region.

Telehealth-enabled clinics were initially established in two locations in Kansas and two in Missouri, with plans for more. The facilities are identical to traditional healthcare clinics, with the addition of Teladoc Health’s real-time, two-way interactive virtual care technology that supports the use of digital ancillary exam devices. Nurse telefacilitators trained in multiple specialty assessments support the patients in person, as well as the providers in Kansas City, to ensure standards of care are met for these complex appointments.
The Results

Since establishing the telemedicine department in 2012, the number of subspecialty encounters via telehealth has steadily grown. Prior to COVID, about 2% of all ambulatory sub-specialty care was facilitated through virtual care visits.\(^1\)

Having a mature, centralized telemedicine department allowed Children’s Mercy to rapidly switch to home virtual care appointments during the spring of 2020. Within three weeks, the organization had all its subspecialty practices and allied health services (51 separate service lines) ready to care for patients and families remotely, as well as schedule, document and bill these encounters. At the height of the lockdown, Children’s Mercy converted 65% of its ambulatory appointments to home virtual care visits.\(^1\)

Demand for telehealth continues, in part because it helps reduce the financial burden of travelling considerable distances for care. Parents and children miss significantly less time from work and school when seen in a telehealth clinic.

Today, Children’s Mercy offers telehealth across dozens of clinical specialties and sub-specialties, a 70% increase from just four years ago.\(^1\)

Children’s Mercy also coordinates outside hospital imaging and diagnostic services with the team supporting synchronous telehealth services. Since the program began in 2014, the organization has completed more than 48,000 remote diagnostic imagining interpretations (including radiology, EEG, EKG, and ECHO) for partner hospitals.\(^1\) In recent years, synchronous services have also been made available for access sites in neonatal stabilization (8 locations), child abuse and neglect (2 locations) and neurology (6 locations).

Program highlight: KidCare Anywhere

In 2017, Children’s Mercy Kansas City began developing a direct-to-a-patient virtual care service called KidCare Anywhere (KCA), powered by Teladoc Health’s Solo platform. The intent was to allow direct access from home to Children’s Mercy pediatric provider within minutes via smartphone, tablet or computer.

By 2021, KCA grew to be a leading telehealth platform, used by over 2,000 Children’s Mercy’s care providers and enabling 37,000 virtual care visits in 2021 alone.\(^1\)

At final count, 51 specialty services were trained to use KCA as their solution for telemedicine visits. Meanwhile, integration with Cerner eased scheduling, automated patient notifications, and ensured immediate and secure access to patient information.

Integrated interpretive services addressed language barriers, enabling patients access to interpreters in 67 languages.\(^1\)
Next steps

The overwhelming satisfaction with telehealth has allowed providers to thoughtfully solve other challenges in healthcare with a virtual presence. For example, the Teladoc Health app allows a tablet computer to connect patients physically at a Children’s Mercy location with additional care providers at other Children’s Mercy locations—especially valuable for conditions requiring multiple specialists. Patients who need to be seen in person and who are followed by multiple services can visit any Children’s Mercy location and receive all the care they need in fewer trips per year.

Other plans to extend telehealth at Children’s Mercy include:
- Expansion of remote patient monitoring
- Additional use cases with Mobile Telemedicine and Disaster Recovery Unit
- Tele-ophthalmology for detection of retinopathy of prematurity
- e-Consults
- Telepathology
- Telesurgical mentoring/collaboration
- International provider-to-provider consultations

Reduced: Time to appointment, wait times, travel time, outmigration and transfers

Lower total cost of care and readmission penalties

Improved: Resuscitation, chronic care management, care coordination, speed to diagnosis and treatment

Reduced: Birth injuries, hospital length of stay, emergency department length of stay and readmission rate

Lower provider burnout

Higher patient and provider satisfaction

Higher provider recruitment and retention

Higher provider capacity and productivity

1Based on client-provided data