Corporate Social Responsibility

Children's Hospital Expands Effectiveness of Pediatric Care

Lucile Packard Children's Hospital and Cisco HealthPresence model "care-at-a-distance" for patients in underserved communities.

Executive Summary

Customer: Lucile Packard Children's Hospital at Stanford

Region: Northern California

Industry: Healthcare

Business Challenge

- Expand the reach and effectiveness of its pediatric specialty care
- Improve access to care for rural and underserved patients
- Reduce costs associated with "no shows" and physician travel

Network Solution

- Create immersive, face-to-face communication experiences
- Provide easy access to specialists at the point of care
- Improve both the timeliness and quality of care delivered

Results

- The opportunity for pediatric patients in underserved communities to access specialty medical expertise that was previously unavailable to them locally
- A successful telehealth pilot program that resulted in a 60 percent decrease in wait times to see a pediatric urologist
- Better productivity for health care providers and improved cost efficiencies for the hospital

Business Challenge

Internationally recognized for excellence in pediatric healthcare, Lucile Packard Children's Hospital at Stanford (Packard Children's) is a non-profit academic medical center dedicated to providing innovative, team-oriented care to children in need. The Palo Alto-based hospital opened in 1991 and became a leader in delivering outstanding family-centered care and developing effective new treatments for childhood illness and injury.

Packard Children's efforts to ensure children get the care they need have extended into the rural and underserved parts of California, where specialty pediatric healthcare services are typically scarce. While about 10 percent of children in California were classified with special care needs in 2008, these kids and their families often have difficulty accessing the resources and expertise they need for optimal treatment.

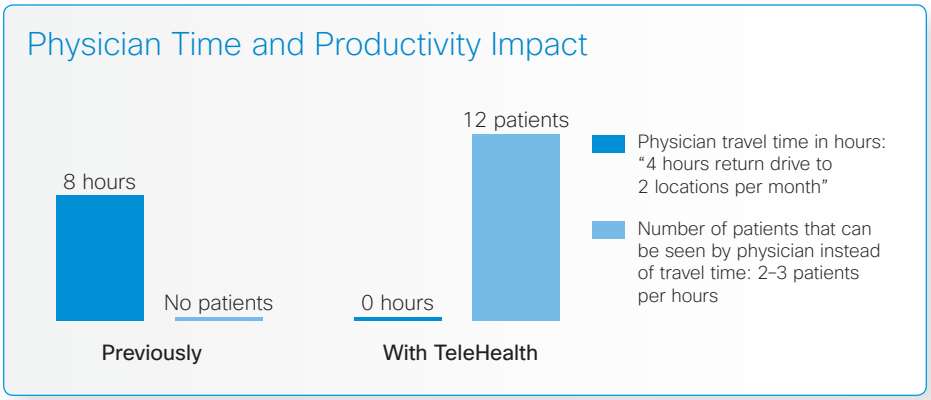
In fact, the number of pediatric hospital beds in the state shrank by 19 percent between 1997 and 2007, according to the Children's Specialty Care Coalition, and shortages of physicians in several pediatric sub-specialties remain acute. Because of this scarcity, children may wait months for non-urgent specialist appointments.

Packard Children's pediatric urologist William Kennedy, M.D., witnessed firsthand the dilemma faced by children and families who live in communities without pediatric sub-specialists. From his outreach work with patients at the Pediatric Group of Monterey, 80 miles to the south of Palo Alto, Dr. Kennedy knew that children sometimes had to wait months to get an appointment with him.

you + networks = impact

This document was updated in May 2013. EDCS-1256002

"It was frustrating because once a month I spent four hours or more driving to Monterey and back, and during those hours I probably could have seen 12 to 16 patients. Making better use of those lost hours would really help me cut my backlog of patients," Dr. Kennedy says.



With HealthPresence, physicians spend less time on the road and more time seeing patients.

"Missed days at work and school are very emotionally stressful and financially challenging for my patients and their families, who are already dealing with health issues," Dr. Kennedy says. "Kids and their parents would be frazzled from the traffic and strain of the two-hour car ride from Monterey, making them poor recipients of the important medical information we needed to discuss."

To overcome these challenges, Packard Children's started taking a closer look at telehealth technologies, including Cisco HealthPresence. Then in early 2012 the idea of using telehealth in Dr. Kennedy's practice became even more attractive. That's when changes in California broadened the scope of how telehealth could be used in pediatrics and expanded insurance coverage for many types of telehealth appointments.

Solution

In January 2013 Packard Children's began using Cisco HealthPresence to connect Dr. Kennedy with his Monterey patients. HealthPresence allowed Dr. Kennedy to consult with patients virtually, eliminating the long wait times and travel, as well as the financial and logistical burden of taking time off school and work for his young patients and their families.

> "With the option of a telehealth appointment close to home, everyone is so much more relaxed because families are not expending so much time and energy in travel."
>
> —William Kennedy, M.D., pediatric urologist, Lucile Packard Children's Hospital

"HealthPresence allows for faster and more convenient treatment for my patients and it's amazing how much they like it," says Dr. Kennedy. "Kids warm up to me more quickly when I pop up on screen than in person. They're less intimidated by a doctor on TV. Parents are amazed at the quality of the audio and video. It's so realistic that within minutes they forget they're interacting via telehealth and relax, too."

Designed with healthcare providers like Dr. Kennedy in mind, Cisco HealthPresence uses communication, collaboration, and video technologies to help enable high-quality, face-to-face clinical interactions between pediatric specialists and patients. Using the network as the platform and intelligent routing, HealthPresence can be connected to medical devices such as stethoscopes and handheld cameras, and users can exchange information in real-time, in a highly secure environment.

Using Cisco HealthPresence to bridge the distance between Packard Children's and the Pediatric Group of Monterey was just a first step. If the pilot in Monterey proved successful, Packard Children's wanted to expand telehealth to other pediatric sub-specialties in Monterey, and also to pediatric patients at California Pacific Medical Center/Sutter Health in San Francisco. (The telehealth program was introduced in

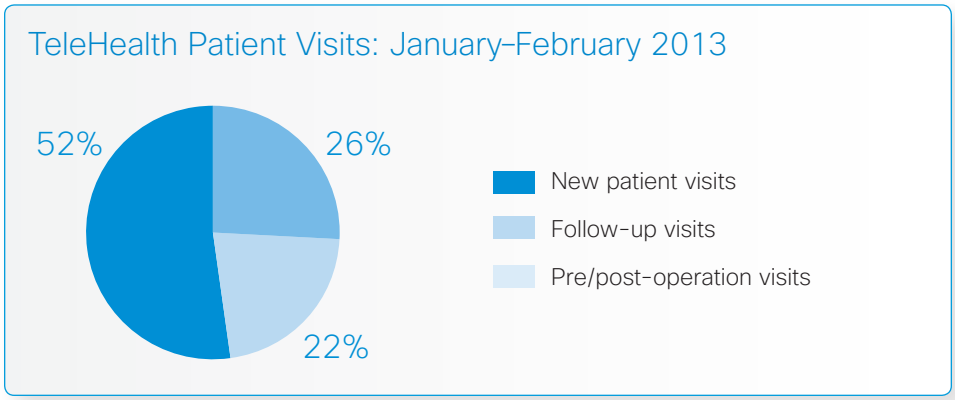
© 2013 Cisco and/or its affiliates. | © 2013 Cisco Systems, Inc. All rights reserved. EDCS-1256002

February 2013 at CPMC/Sutter Health in San Francisco.) Many of the remote pediatric services from Packard Children's that are expected to be available—including cardiology, dermatology, hematology, renal, and pain management—have not been previously offered at Monterey or at CPMC/Sutter Heath. "Telehealth is an enormous win for those communities, and will have a hugely positive impact on patients and their families," says Dr. Kennedy.

The Cisco HealthPresence solution is part of a larger effort at Cisco called the Connected Healthy Kids Program. The goals of the program are to improve access to specialized pediatric care through collaborative technologies and to increase access to care for rural and underserved patients. Learn more in this video: www.youtube.com/watch?v=2I7mp6FCUIE.

Results

Two months after Packard Children's introduced Cisco HealthPresence to help pediatric urology patients in Monterey, the results are positive. Dr. Kennedy has been conducting remote consultations from his home base in Palo Alto, beginning in May 2012. In addition, other Packard Children's pediatric sub-specialists were beginning to conduct sessions with patients in Monterey and at CPMC/Sutter Health in San Francisco.



Dr. Kennedy says he now spends less time on the road and more time with his patients, and feels confident that telehealth is helping improve patient satisfaction and outcomes. "The bottom line is that telehealth allows us to provide high-quality, collaborative care that is accessible to our patients in their own communities. What we've achieved since the telehealth sessions began is wonderful," he says.

- **Benefits for patients and families: More convenience, better care.** Since HealthPresence was introduced in Monterey, wait times to see Dr. Kennedy have dropped 60 percent. Fewer families are making the 80-mile trek to Palo Alto and patients are getting faster treatment and better continuity of care, with providers sharing key documents, like electronic medical records radiographic images, over the telehealth platform. The remote solution also expands the spectrum of medical experts who are available to assist with diagnosis and treatment.
- **Benefits for communities: Quality healthcare close to home.** The introduction of telehealth by Packard Children's has strengthened the community health infrastructures in Monterey and San Francisco. Access to pediatric specialty care that was previously unavailable in these communities will lay the foundation for healthier communities.
- **Benefits for physicians and hospitals: Increased productivity, improved efficiencies.** Besides reducing travel time so that physicians can see more patients, telehealth is expected to decrease the likelihood of patients missing routine post-operative appointments due to issues like car trouble or work inflexibility. Telehealth may also help the hospital recruit a wider circle of patients for research studies since families would only need to travel to a local clinic instead of a distant hospital.

"Kids warm up to me more quickly when I pop up on screen than in person. They're less intimidated by a doctor on TV."

—William Kennedy, M.D., pediatric urologist, Lucile Packard Children's Hospital

This document was updated in May 2013. EDCS-1256002

"Telehealth could be used to help broaden our population of research participants to better reflect the cultural diversity of our society as a whole," Kennedy notes.

Telehealth could also help to ease space constraints at the medical center's main campus. Currently, the hospital's ambulatory clinics are almost always filled to capacity, so the exam rooms freed up through the telehealth program are helping out. Additional cost savings will come from the greater use of less expensive clinic exam rooms in moderately priced Monterey.

Next Steps

Packard Children's is rapidly expanding its telehealth program, embracing new pediatric specialties and reaching out to include more clinics in rural and underserved areas in northern California and Nevada. Down the road, the hospital is looking at connecting to clinics across the U.S. and even internationally.

"We believe Packard Children's telehealth program will serve as a health care model for other programs," Dr. Kennedy says, estimating that currently as much as 80 percent of his work with patients can be conducted remotely and an even higher percentage in five to ten years. "Our experience with Cisco HealthPresence so far indicates that patients and families have adapted smoothly to the 'care-at-a-distance' model and more healthcare providers and institutions are getting on board. "

For More Information

To find out more about the Cisco HealthPresence, go to: http://www.cisco.com/web/strategy/healthcare/cisco_healthpresence_solution.html. To find out more about Cisco Corporate Social Responsibility Connected Healthy Kids program, go to: http://csr.cisco.com/pages/healthcare.

Cisco Corporate Social Responsibility

We believe that businesses have a responsibility to operate in ways that respect and ultimately benefit people, communities, and the planet we live on; we call this Corporate Social Responsibility (CSR). Our core CSR philosophy is that impact multiplies whenever human and technology networks combine to solve a problem.

This is why we approach CSR the same way we approach business—by applying our technology, employee expertise, and partnerships. We are focused on four primary goals: improving the well-being of people and communities around the world, reducing our environmental impact and helping our customers do the same, conducting our business ethically, and creating a workplace where our employees thrive.

© 2013 Cisco and/or its affiliates. | © 2013 Cisco Systems, Inc. All rights reserved.

This document was updated in May 2013. EDCS-1256002