Digital technology can power personalized, preventive health care

Imagine that you are sitting in a movie theater. As you recline in your seat and the lights dim, the beginning of a feature film flashes onto the screen in front of you. But after watching for only a minute, you are abruptly asked to leave. Halfway through the film, you are allowed to return for another minute of viewing, and then once more at the end.

Now, reconstruct the story. Who were the main characters? How did they relate to one another? And why did the movie end the way it did?

Piecing together an entire movie like this would be challenging, if not impossible. Yet in health care, that is how we typically interact with patients. When patients come in for a visit, we see a small snapshot of their health story, often when they are already sick, and we care for them in that moment.

On either side of the episode, we miss out on a wealth of information — knowledge that could help us understand how to personalize care for patients and intervene before disease.

It’s easy to see how the new Stanford Hospital will look now that the exterior is complete; the interiors are built out; and the furniture, equipment and art are being installed. Less visible but equally important is how the new hospital will feel to patients when it opens this fall.

Multiple teams throughout the hospital have helped create a digitally driven patient experience that matches the majestic façade of the new structure, said Alpa Vyas, vice president of patient experience for Stanford Health Care. “The service and the culture we create inside must complement and enhance the physical environment.”

From the moment patients and family members come through the doors of the new Stanford Hospital, a compassionate team of caregivers and staff will shepherd them through their health care journey. Digital tools developed specifically for the new space will also assist them: Teams at Stanford are designing a patient experience that will take advantage of smartphone technology to guide them through their inpatient visit.

Digital companion

Stanford’s MyHealth app will act as the digital companion for patients at the new Stanford Hospital, said Aditya Bhasin, vice president of software for Stanford Health Care. Patients can check in using MyHealth and speed up the admitting process before their scheduled surgery or inpatient stay. The app will also remind them about appointments and provide step-by-step directions to locations within the building. For example, the app can guide patients from the parking garage to the laboratory to the infusion treatment area and back again.

“Navigating a large medical campus can be confusing,” said Vyas, noting that it’s especially difficult for patients who are already consumed by anxiety or worry about their health or the health of a loved one. The way-finding capability within MyHealth is one way of quelling that stress and improving the experience, she said.

More than 500,000 people are using MyHealth for their outpatient care at Stanford Health Care; the software team is now enhancing
Physicians connect with young patients remotely

These days it’s hard to find someone who doesn’t use digital health technology. Most of us go online to make appointments, access our medical records, look at test results and exchange notes with our doctor’s office. Many of us take advantage of remote virtual appointments and use devices to track health data that can give providers a broader picture of our well-being.

Digital health technology is also helping Stanford Children’s Health offer patients and their families better access to Stanford Medicine pediatric experts. This year, Stanford Children’s plans to more than double the number of its telehealth appointments — from 1,100 visits in 2018 to 2,500 visits in 2019.

Currently, telehealth virtual visits are offered to patients for follow-up appointments. Some of those are clinic-to-clinic visits, in which a nurse practitioner at a primary care office connects with a physician at a specialty clinic.

During a clinic-to-clinic visit, a nurse practitioner at the remote clinic examines the child while a high-resolution camera and microphone — both on a secure communication network — let the physician at the specialty clinic see and hear exactly what the nurse practitioner does.

Vandna Mittal, director of digital health services at Stanford Children’s Health, said these clinic-to-clinic telehealth visits are used for an array of appointments, from diagnosing eye problems in premature infants to performing video electroencephalograms for neurology. Because the Stanford Children’s Health network spans from Santa Rosa to Salinas, these virtual visits help families fit appointments into their schedules.

“Through virtual visits, we are not only saving families time traveling to appointments and taking their kids out of school and work, we are also maximizing our providers’ ability to see more patients, fill in last-minute cancellations and accommodate urgent requests,” said Mittal.

Patients also benefit from clinic-to-home visits. Through the Stanford Children’s Health MyChart patient portal, patients and families can connect with their physicians remotely using their own devices, such as phones and tablets. Mittal said such virtual visits are popular among teen behavioral-health patients who go away to college but want to maintain a close relationship with their mental health provider at Stanford. Additionally, providers within the developmental-behavioral clinic are using these visits to observe patients in their natural play environments, at home or even on the playground, which provides a more realistic evaluation of the child’s condition.

In addition, Stanford Children’s Health offers clinic-to-school visits, in which physicians can connect remotely with a patient in a school nurse’s office. For instance, a physician caring for a child with Type 1 diabetes can communicate directly with the school nurse and the patient’s parent through a telehealth visit at the nurse’s office, minimizing the need for the parents and the child to travel to the doctor’s office and enabling the doctor and the school nurse to interact. According to Mittal, this approach is working well for patients with diabetes who may live far from the hospital but require ongoing support and blood glucose monitoring.

Telehealth is also being used within Packard Children’s Hospital. From inpatient units, on-call doctors are evaluating patients in the emergency department via telehealth before they are admitted; in some cases, specialists are able to advise ED care teams on the most appropriate transfer methods for patients. This approach cuts down on provider walking time and limits the time families spend waiting for care consultations.

“Although virtual telehealth visits are not a blanket solution for everyone or every visit, they are instrumental in helping patients and families who require more care or live away from their specialists, without sacrificing that vital connection,” said Mittal. “Thanks to advances in medicine and science, we are able to care for more children with chronic or serious conditions than ever before, and digital health allows more flexibility and greater access to the best care available.”

In November, Stanford Children’s Health launched a new service in conjunction with Stanford Health Care that offers digital second opinion consultations from Stanford physicians. Through the program, called Grand Rounds, patients don’t have to visit the hospitals or clinics for this service. Rather, people can create an account through the Stanford Children’s website and pay a $700 fee; Stanford will collect all of their medical records for them (if the records are in the United States). An expert from Stanford will then review the medical information and send a written second opinion, usually within two weeks.

Mittal noted that Stanford Children’s Health’s multipronged digital health approach — including telehealth, remote care monitoring and patient portal access — will continue to empower families and patients to manage their health care and enable providers to make better-informed care decisions.
When describing the inspiration for her life’s work, Carla Pugh, MD, PhD, recalled her time as a medical student and surgical resident. “Before I could operate on a tumor, I needed to know how densely it was attached. A CT scan couldn’t tell me — the only way I’d know was through my hands,” said Pugh. “I realized I wouldn’t truly learn how to diagnose just by watching my instructors, and I wanted to find a better way.”

Today, Pugh is an international expert in the science of touch. She has created sensor technologies to quantify clinicians’ hands-on skills and has combined those tools with educational concepts; together, they help medical students and residents learn how to more effectively use touch when treating their patients.

After completing her surgical residency at Howard University, Pugh enrolled as a doctoral student in the Stanford Graduate School of Education, where she began to explore optimal training methods in the medical environment and to develop the sophisticated sensor, video and motion-tracking technologies that would be key to capturing haptic — or touch-sensing — information.

“It really all started at Stanford 17 years ago,” said Pugh, who received a PhD in education in 2001 and now holds three patents on the use of sensor and data-acquisition technology to measure and characterize hands-on clinical skills.

Since returning in December 2017 — to take a dual role at Stanford Medicine as professor of general surgery and director of the Technology Enabled Clinical Improvement Center — Pugh has created collaborations across campus and beyond that are bringing the new field of touch technology and training to the next level.

On the technology side, for example, the Pugh lab has partnered with Technion Israel Institute of Technology to develop a fabric force-sensor bra that captures clinical data during a breast examination. Pugh is also exploring the creation of new touch-sensing tools with Stanford faculty members Allison Okamura, PhD, professor of mechanical engineering, an expert in haptics as well as virtual environments and simulators; and Zhenan Bao, PhD, professor of chemical engineering and of materials science engineering, who builds stretchable flexible sensors.

Pugh is working with colleagues in the Graduate School of Education, including the school’s dean, Daniel Schwartz, PhD, and lecturer Karin Forssell, PhD, on the training half of the equation.

“In terms of the best approach to training students to use haptic data,” she explained, “we need to know: How much of this should be learned while using your hands in context, or on a computer? Does this learning objective require a haptic display, or virtual reality? How much data can you collect during the process of care, right in front of the patient, and get real-time feedback that goes directly to a database?”

Pugh and her colleagues plan to engage industrial and systems engineers, social scientists, and other experts in answering these critical questions about using the growing quantity of haptic data in training.

“Nationwide, trainees are telling us they want this information,” said Pugh. “There’s a lot more work to be done — but the audience is ready.”

COMMUNITY MATTERS FROM PAGE 1

has a chance to strike. Advances in digital technology are allowing us to fill in those blanks. And these types of advances are happening right here at Stanford Medicine.

Stanford Medicine’s strategic priority is to be digitally driven. That includes embracing new technologies that allow us to continuously monitor patient health and engage people in programs designed to predict and prevent disease.

In 2017, Stanford Medicine took an important step toward this goal by partnering with Apple to launch the largest-ever digital health study of its kind: using Apple Watch to screen for irregular heart rhythms in wearers. In less than a year, we enrolled more than 400,000 participants in the study, a sample size larger than the population of New Orleans, and continuously monitored their heartbeats. Our goal is to learn if Apple Watch can detect atrial fibrillation, a heart condition that causes 130,000 deaths and 750,000 hospitalizations in the United States each year, yet often goes undiagnosed.

This kind of research, including its scale, is unprecedented. And we hope it will help us understand how digital health technologies can one day improve human health at a population level. That future may be arriving sooner than many of us imagined.

As a tool to aid in the prevention and treatment of disease, artificial intelligence also has tremendous potential. Whether it takes the form of a deep-learning algorithm that can predict patient outcomes during and after a hospital stay, or of AI-assisted imaging software that can diagnose 14 conditions, Stanford Medicine is accelerating a new era of health care that will be defined by technology augmentation.

However, even as we embrace the promise of these new capabilities, one thing won’t change: the importance of the patient-doctor bond, including the vital role of human compassion in healing. Stanford Medicine’s vision for the future is one that combines high-tech with high-touch to offer our patients a truly personal care experience. That, after all, is what matters most.

As we consider our own future at Stanford Medicine, we are excited to have Paul King joining our institution as the new president and CEO of Stanford Children’s Health and Lucile Packard Children’s Hospital Stanford. Paul is a visionary leader who will guide our continued growth and preeminence in pediatric and obstetric care. We are thrilled to have him on our team. We also thank Dennis Lund, MD, for his exceptional leadership and his many important contributions while serving as interim president and CEO of Stanford Children’s Health.
‘Stanford has saved my life … twice’

Heart recipient doing well after second transplant

Yolanda Ishaq’s “miracle baby” is 25 years old, and Ishaq herself is a grandmother. She continues to thrive after receiving a second heart transplant and a kidney transplant at Stanford Hospital in 2015.

“Stanford has saved my life not once, but twice,” said Ishaq, who lives in Oakland. “They’ve also given my daughter life. It was unheard of to have a baby after a heart transplant.”

Ishaq’s story began about two decades after the late Norman Shumway, MD, PhD, a cardiothoracic surgeon at Stanford, performed the first successful adult human heart transplant in the United States in 1968. In the 50 years since that historic operation, heart transplantation continues to be one of the few treatment options available for end-stage heart disease.

“Heart transplantation opened up a potential life-saving treatment for people who were dying of heart disease,” said Sharon Hunt, MD, PhD, a professor emerita of medicine who was a Stanford medical student when Shumway performed his first transplant. She later became Ishaq’s transplant cardiologist.

Life was ‘literally hell’

For Ishaq, a nagging cold was the first sign that something was wrong. After multiple trips to the doctor, she was diagnosed with an enlarged heart. It could no longer pump blood effectively to her body. She went from working full time and enjoying life to barely being able to walk from one room to another without getting out of breath.

“Life before my first heart transplant was literally hell,” she said. “I couldn’t function as a person on a day-to-day basis with the heart that I had.” When medical therapy failed to improve her condition, Ishaq’s doctor referred her to Stanford. At her first appointment, she knew she was in the right place.

Her Stanford cardiology team continued to monitor her enlarged heart and placed her on the transplant list when it was clear that the right side had completely failed and the left side was on its way. “I believed they would make me better,” she said. “I love my entire transplant team. Without them, I would not be here.”

She underwent a heart transplant in 1991, and when she became pregnant a year later, she asked Hunt, “Can I keep it?” At the time, the Stanford transplant team discouraged heart recipients from conceiving a child because of the risk of complications to the organ, such as rejection, infection and graft dysfunction, a life-threatening complication that affects the heart’s ability to circulate blood effectively. But Ishaq was willing to do whatever it took to have a baby, and Hunt was ready to help.

“That’s how I had my daughter, Monique,” Ishaq said. “She is the first baby born to a heart transplant recipient at Stanford. The delivery room was packed with 28 people, all of whom wanted to witness the historic birth.”

Ishaq was fine for 24 years with her new heart, and Hunt continued to care for her. But she had a setback in mid-2015 when her heart and kidneys began to fail. Her blood pressure periodically plummeted, causing fainting spells. The first time it occurred was in the middle of the night. Ishaq woke up on the floor, her dog persistently nudging and licking her. His bark alerted her daughter that something was wrong, and Ishaq was rushed to Stanford Hospital. “He is my furry savior,” Ishaq said of her dog.

Ishaq at ‘heart’ of innovation

Ishaq experienced three more of these episodes and three more trips to the hospital. In July of that year, her Stanford cardiologist adjusted her pacemaker to stabilize her condition until a second donor heart became available.

Ishaq received a second heart transplant on Nov. 9, 2015. Because her body was also showing signs of kidney failure, her Stanford transplant team decided to simultaneously conduct a kidney transplant.

Today, approximately 50 patients undergo heart transplantation at Stanford each year, and the program has performed more than 1,200 heart transplants over five decades. Stanford remains the oldest continuously operating heart transplant center in the world, and its physicians are responsible for many of the innovations that continue to improve long-term survival.

Antirejection advances

Research conducted by Shumway and his team led to the use of the antirejection drug cyclosporine and to an innovative biopsy technique that allows doctors to spot rejection in a transplanted organ earlier, so they can administer antirejection measures to save the heart.

Stanford doctors also performed the first successful simultaneous transplant of the heart and lungs, and the first successful implantation of a left ventricular assist device, which is a mechanical pump that helps weakened hearts circulate blood. Additional Stanford contributions to the field include the creation of the classification system used to determine rejection and the development of a noninvasive way to detect rejection earlier.

“Stanford really is the birthplace of heart transplantation,” said Kiran Khush, MD, associate professor of medicine at the Stanford School of Medicine and a transplant cardiologist who works with physicians, nurses, physical therapists, social workers, dietitians and pharmacists to care for patients before, during and after heart transplantation at Stanford Hospital.

For Ishaq’s daughter, Monique Crawford, Stanford is simply home. “It’s where my son, Jonah, was born. It’s where I was born,” she said. “And it’s where my mom got both of her new lives. Stanford is definitely a special place for us.”

PHOTO: STEVE FISCH
When Lizneidy Serratos’ mother took her to the hospital at 1 a.m. Aug. 4, she thought wildfire smoke near the family’s Reno home was the reason the 12-year-old was struggling to breathe. But after a series of tests, doctors said Lizneidy’s heart was failing.

“Her heart function was at only 10 percent,” said Lizneidy’s mom, Maricela Alvarado-Lazarit. “It was a shock.”

On Aug. 12, Lizneidy underwent surgery at Lucile Packard Children’s Hospital Stanford, becoming the youngest and smallest person in the country — and one of the smallest in the world — to receive a specific type of heart pump which kept her alive until she received a heart transplant in early December. She was saved by the heroic behind-the-scenes work of her doctors and nurses, who petitioned the Food and Drug Administration for permission to use a medical device that had not yet been approved for children. They got a compassionate-use exemption in about 24 hours.

Too sick to walk
“When Lizneidy came to us, she was very, very sick,” said Katsuhide Maeda, MD, associate professor of cardiothoracic surgery at the Stanford School of Medicine. Lizneidy had dilated cardiomyopathy, a leading cause of heart transplants in children. “She was vomiting and nauseated, and could not eat at all,” said Maeda, who performed the surgery to implant her ventricular assist device. And she couldn’t walk because her heart was so weak.”

In late July and early August, as wildfire smoke drifted into Reno, Lizneidy’s family noticed she was breathing less easily. Then, just after midnight on Aug. 4, Alvarado-Lazarit found Lizneidy sleeping in a strange position.

“I was criss-cross applesauce, with my head down at my feet,” Lizneidy said. (Though Alvarado-Lazarit didn’t know it, people with heart failure can often breathe better if they sleep sitting up.) Alarmed, she woke her daughter and took her to the nearest emergency room. Doctors transferred Lizneidy to the pediatric intensive care unit at another Reno hospital, Renown Children’s Hospital, which has a pediatric specialty care partnership with Stanford Children’s Health. Lizneidy was then transferred by an emergency medical flight to Packard Children’s.

Lizneidy received medications that stabilized her for a few days. But her heart was not recovering. As in most cases of dilated cardiomyopathy, the physicians did not know why her heart was failing.

“It appeared she was getting worse and was going to need a ventricular assist device,” said Christopher Almond, MD, associate professor of pediatric cardiology at the School of Medicine. A VAD is a surgically implanted pump that helps a patient’s failing heart move blood through the body.

Almond told the family that Lizneidy would probably need a heart transplant, and that she would receive surgery to implant a pump that could keep her alive until a donor heart became available.

The best pump
The Packard Children’s cardiology team wanted to give Lizneidy a pump called the HeartMate 3, which is small enough to implant in the chest. Patients with the pump must wear an external battery pack, but can leave the hospital, walk freely and perform many normal activities. In rare cases, heart pumps allow children’s hearts to regain enough function to avoid a transplant.

However, the HeartMate 3 had one drawback in Lizneidy’s case. To implant it, Maeda needed to create a hole in the girl’s left ventricle, the largest pumping chamber in her heart, and suture a washerlike device called a sewing ring onto the heart to anchor the pump. But the sew-

See Heart on page 6
ing ring that had been approved by the FDA was too big for Lizneidy. There was a smaller ring, but it was approved only in Europe.

“The problem with the larger sewing ring is that Dr. Maeda would have had to sew across one of her most important coronary arteries,” Almond said. Closing the artery would have permanently severed the blood supply to part of Lizneidy’s heart muscle, cutting off the possibility of avoiding a transplant.

“Because she had a chance of recovery, we didn’t want to sacrifice the main artery supplying blood to her heart,” Almond said.

So on Aug. 9, Almond asked the FDA for a compassionate-use exemption. He wrote a letter to the FDA and the device manufacturer, Abbott, requesting permission to use the smaller, unapproved sewing ring; contacted Stanford’s ethics team to get its permission for the unusual surgery; and arranged for another cardiologist to provide an independent second opinion to the FDA. On Aug. 10, as hours ticked by and paperwork stacked up, people in several locations across the country — including FDA staff — stayed late at work to help.

“The process for getting compassionate-use approval is a bit complex,” Almond said, noting it can take days or weeks. But everyone recognized the urgency of Lizneidy’s case. “The hospital, the FDA and the company did a phenomenal job supporting this medical request on such short notice.”

“Everybody was so good, keeping us informed of what was going on and what to expect,” Alvarado-Lazarit said.

By 9 p.m. Pacific time on Aug. 10, the approval was complete. In one more bit of serendipity, Almond learned that the small sewing rings — which were commercially available only in Europe — are manufactured 30 miles from Packard Children’s, in Pleasanton, California.

The sewing ring arrived at the hospital the following morning. That evening, Lizneidy was relaxed and cheerful, attending Stanford while she recovers from the transplant. She was admitted in the fall.

“Having her just talking and laughing and asking for things was great,” Alvarado-Lazarit said. “When she started being able to get up, it felt like, ‘She’s going back to normal.’”

Since the surgery, the smaller sewing ring has received FDA approval for commercial use, enabling more patients to benefit from the device.

Lizneidy’s medical team — which also included pediatric cardiologist David Rosenthal, MD, professor of pediatrics at the School of Medicine, and nurse practitioner Jenna Murray — monitored her for three months before deciding in early November that a transplant was her best long-term option. Maeda and cardiothoracic surgeon Teimour Nasirov, MD, performed her heart transplant on Dec. 4. Lizneidy and her family are now staying at the Ronald McDonald House near Stanford while she recovers from the transplant.

Throughout the fall, living with the VAD, Lizneidy was relaxed and cheerful, attending seventh grade at the hospital school and accepting her challenges with a dose of tween humor. The battery pack for her heart pump was always at her side, housed in a tote bag she wore over her shoulder.

“It’s like an annoying best friend, always there,” Lizneidy said in September. “But I’m OK with it.”

The new Stanford Hospital is preparing to open its doors later this year. While the construction crew paints the walls and adds finishing touches, the moving crew is installing large medical equipment and furniture, as well as the last of the 300 pieces of artwork. In the spring the 368 patient rooms and 3 acres of surgical space will be stocked with smaller equipment and supplies, and in the summer hospital staff will undergo training. The community will be invited to visit and tour the hospital before the first patient is admitted in the fall.
New president and CEO for Stanford Children's Health

Paul King has been selected as the new president and CEO of Lucile Packard Children's Hospital Stanford and Stanford Children's Health.

King began his new duties on Jan. 28. He succeeds Dennis Lund, MD, who served as interim president and CEO of Stanford Children's Health since last March.

"With more than 35 years in health care, including 22 years in executive roles leading pediatric health care enterprises, Paul brings a wealth of experiences and leadership expertise to Stanford Children's Health," said Jeff Chambers, chair of the board of Stanford Children's Health.

King previously served as executive director of the University of Michigan health system's C.S. Mott Children's Hospital and Von Voigtlander Women's Hospital, where his management efforts helped the organization achieve the highest patient satisfaction and employee engagement levels in the entire University of Michigan health system. Prior to that, he served as president and CEO of the Pediatric Management Group, a 550-physician academic pediatric subspecialty group practice affiliated with Children's Hospital Los Angeles.

"As we plan for the continued growth of Stanford Children’s Health and expansion of innovation across the entire continuum of care, Paul's distinguished record of accomplishment and dedication to the critically important role of pediatric and obstetric care will undoubtedly help us achieve our vision of precision health at Stanford Medicine," said Lloyd Minor, MD, dean of the Stanford School of Medicine.

"I am thrilled to be joining Stanford Children's Health at a time of flourishing innovation in pediatric health care," King said. "The possibilities that are within reach for the world-class Stanford Medicine academic medical institutions are truly limitless. I look forward to working with the board and executive leadership, the physicians and staff, as well as with partners at the School of Medicine and Stanford Health Care, to continue to advance pediatric care and research and raise the bar for patient experience and outcomes not just for our patients, but for children and expectant mothers everywhere."

King earned a bachelor’s degree in business administration and economics from the University of Nebraska, and a master’s degree in health care administration from the University of Iowa. He serves on several boards, including those of the Children’s Hospital Association and the American Hospital Association Maternal & Child Health Council.

Stanford has implemented a secure messaging platform that allows care teams to communicate about a patient’s personal health information in a protected environment, said Troy Foster, senior manager for network infrastructure. "It provides seamless communication between all members of a treatment team via phone call or text," he said. It also eliminates a lot of searching for team members when a question arises. The system runs on iPhones and is being used by more than 3,500 physicians and 2,000 nursing and ancillary staff. On an average day, 30,000 text messages and 6,000 calls are transmitted through the messaging platform.

"It’s a faster way for care teams to collaborate on patient care," said Ann-Marie Yap, executive director of technology. "It really increases our efficiency."

"From a patient experience perspective, we are looking at how technology can help automate processes so team members have more time to focus on patient care," said Vyas. Care teams and staff are currently testing and refining many of these new capabilities in the existing hospital before they are implemented in the new Stanford Hospital. "We want to get people comfortable with using all the new technology before we move into the new space so they can be ready to care for our patients."
A new channel for fun at Packard Children's

Hospital show helps kids connect

The countdown begins: three, two, one. "Hey guys, it’s Mat and Brianna, and we are live in Sophie’s Place studio right now."

Brianna Chambers and Mat Vido, studio coordinators in the Sophie’s Place Broadcast Studio in Lucile Packard Children’s Hospital Stanford, are streaming through the hospital’s closed-circuit television channel, Get Well TV. Their show, Radio Talk Show (despite the name, patients can watch as well as listen), was the studio’s first live broadcast after months of preparation and planning. It launched in October.

The bubbly duo sound much like the personalities on radio stations and podcasts. They chat about how they spent their weekends, how much they love *The Incredibles*, national cupcake day, the perfect pizza toppings and other important topics — like the difference between French dips and Fun Dip. The half-hour show is punctuated with music and calls from patients, listening or watching from their room, who answer questions posed by the hosts, such as whether it’s appropriate to start playing holiday music before Thanksgiving.

For patients like 10-year-old Morgan Passalacqua, the studio can be a fun distraction. “The shows and programs really lifted her spirits,” said her mother, Stacey Passalacqua. “She was going through some tough procedures, her diagnosis and remove her princess tiara to show the audience her bald head,” said Vido. "Other children watched the bravery of the girl, then took the courageous step to participate on air after previously feeling too self-conscious.”

In addition to the live talk show, the studio offers daily live and recorded shows including game shows and “kids’ choice” programs, where youngsters can help select the video footage they will see that day based on the week’s shows. Patients can also come into the studio to participate on air or call in from their hospital room to interact with the studio team and other patients.

The hospital’s child-life studio team is committed to finding ways to connect with all patients, ranging from toddlers to teens, and their siblings in ways that are meaningful for each. “We strive to provide opportunities for all ages here in the studio,” said Vido. “We have game shows based on *Sesame Street* or Disney trivia that speak to our youngest patients, and we create opportunities that are just for teens, like our radio talk show segments where patients call in to share their thoughts or ideas on a given subject. Teens have also joined as co-hosts for some of our TV segments.”

The team notes that even though it’s a “mass media” platform, the experiences can be quite personal and fulfilling for patients. They recall one boy who came to the studio daily before it had officially opened to film his own projects. He had been in the hospital for many months, and the studio was a place where he thrived. He gained new skills like hosting, editing and interviewing. He inspired the team with new ideas for ways to use the space.

“It is incredibly rewarding to see patients engaged in something, whether it be crafts, singing or just listening to music, and it actually helps them express what they are going through,” said Chambers. “It’s pretty powerful.”

The funding for Sophie’s Place was donated by NFL Hall of Fame quarterback Steve Young and his wife, Barb, through their Forever Young Foundation.

To support the studio, please contact Lauren Ploch at lauren.ploch@lpfch.org or 650-736-8280.