

CASE STUDY

Your Vision, Our Craftsmanship: A Perfect Fit

First Products Dials in on Tele-Health Solutions for Rural School Health, Serving One Student at a Time



Recent statistics show that about **46 million Americans**, almost 14 percent of the U.S. population, live in rural areas. Many of these areas are challenged communities face disparities, with little to no access to equitable healthcare resources. These disparities include: limited to no healthcare providers, inability to travel to receive proper care, necessary income to afford health insurance and related medical costs. HRI's are addressing this disparity by creating outreach and care services that will deliver health direct to these underserved populations. They also are very effective at addressing health inequalities to help build healthier schools and communities.

Telemedicine is one means to breach the disparities. When face-to-face doctor or clinical care support is not available, telehealth solutions become a valuable lifeline for clinical health care and patient and professional health-related education. A **2022 survey** by the digital healthcare advocacy group RockHealth uncovered 73% of rural communities accessed health resources via telemedicine. Telehealth, as defined by the Health Resources and Services Administration (HRSA.gov), brings patients and medical care together long-distance via "electronic information and telecommunication technologies." Telehealth services require consistent use of digital devices, which means that telehealth medical workstations must be optimized to use such equipment productively while supporting the comfort and health of users and care providers throughout telehealth interactions.

A First Products' client, a HRI/Health Science Center within a major university, developed a K-12 initiative to serve health challenged areas within their state via a program, funded by grants from the state. . The client had a vision to supply a mobile Tele-Health solution to 750 different locations across their state. They envisioned a solution with the right design and functionality to suit the type of care they expected to be delivering, which current setups did not provide. Current setups, basically a desk with a tablet and various

diagnostic equipment, was not only becoming a challenge to manage, but was difficult to secure in the small, multipurpose desk environments. It was also a one-size fit all solution that did not support the varied height ranges of the students and adults accessing the equipment. The client's vision had to address their concerns for **mobility, data security, privacy, and delivery.**

Their Telehealth Challenge

First Products, a veteran in bringing clients' visions to fruition, was honored to play a small role in this important initiative of health equity and pursued a thorough assessment of HRI/Health Science Center's specific needs.

"At First Products, we take pride in our ability to truly listen to our clients' visions. In this case, understanding the unique challenges faced by rural schools was pivotal to crafting a solution that could meet their specific needs and improve access to care. We ensure that every solution we deliver aligns with their goals and drives meaningful outcomes."

— Paul Smith, CEO of First Products

Mobility

A mobile medical cart was the natural choice as it met the established prerequisites:

- Compact to function in very tight spaces, sometimes the size of a closet, but with enough utility to accommodate necessary devices and diagnostic tools needed during the tele-visit.
- Shared by resources across a school, like counselors, school nurses, students, and other adults as needed.
- Mobile to move across the school and grounds

requiring robust castors to handle floor surfaces varying from carpet to sidewalks.

Design

Paramount to the client was a solution that had a calming and inviting aesthetic that didn't interfere with the patient and caregiver connection. The cart needed to be an invisible partner in the telehealth visit. This necessitated a solution that could secure expensive technology without becoming encumbered by it. Other functionality and design considerations were also explored. Essentially, the client wanted:

- Simple 'sit to stand' adjustment range accommodating a broad range of users, from students (pre-k to high school) to adults, providing a comfortable visit.
- Specific diagnostic technology tools and equipment incorporated and stored in the cart in a well-managed, easily accessible manner for when needed.
- Security options to protect technology devices from accidental removal, theft, or damage.
- A future-proofed option that would be scalable to address inevitable technology upgrades over time.

Delivery

Perhaps as critical as the design and mobility, the client had a tight and very specific timeline to roll out 750 mobile telehealth solutions to over 750 locations (across 1000 plus miles). The deployment needed to be completed in four months, with white glove delivery. It also had to meet requirements for shipping to diverse locations and unpacking, within client IT timelines. Sustainability was also a concern; all packing materials had to be removed at delivery and recycled appropriately.

Our Telehealth Solution

The First Product solution was customized to meet the specific vision they had for healthier telemedicine in the rural schools they served. The height adjustable non-powered mobile cart mounted a tablet, which could be locked in place for security purposes, included a speaker/microphone accessory to enhance audio, a vanity light to help ensure a well-lit interaction between users and caregivers, and accommodated standard diagnostic tools that needed to be managed in a secure but accessible manner. The mobile solution arrived fully assembled, ready for client IT teams to integrate all technology at the individual sites.

"Our Perfect Fit Process is designed to translate client visions into reality. This telehealth solution exemplifies how thoughtful design and engineering can transform healthcare delivery in underserved areas, creating a better experience for patients and providers alike. The tailored telehealth carts we provided are a testament to our commitment to innovative, client-focused solutions. Each feature was

carefully selected to ensure it met the highest standards of usability, security, and future-proof scalability."

— **Paul Smith**, CEO of First Products

Creating a First Products Perfect Fit Design completely met the client's needs, checking all their boxes for their top concerns and user requirements. The solution helped keep their technology safe from damage, their diagnostic tools easily managed, and offered easy and seamless transportation between offices, campuses and facility floors.

Successful Deployment

Within four months, First Products met the client's four-month goal, with a precise, white glove delivery of the fleet of carts. A specific geographic location was chosen each week within the rollout. High levels of coordination and excellent communication were established; weekly Zoom calls were conducted with the customer team, the freight team, First Products team, and HUB partner in the area. This allowed for the tightest control over the freight partner and any logistical issues were resolved quickly. Thirty-minute delivery timeframes were needed so that the client's IT team member was present to accept the delivery. Once unpacked, cart inspected, and all packaging removed, the cart was handed off to the client's IT team member for integration work and readying the carts for the appropriate counselors, nurses and/or staff.

The project was a success and has become a benchmark of how technology can be incorporated into a more comfortable, life-giving interaction between user and caregiving staff. In addition to a comfortable experience that adapts the technology to the user, the client offered much needed care to these underserved schools, bringing better health outcomes, and peace of mind.

"Deploying 750 telehealth carts across a vast geographic region in just four months was a true team effort. It's a perfect example of what's possible when collaboration, precision, and a shared purpose come together. From manufacturing to white-glove delivery, we ensured every detail was managed so our client could focus on bringing much-needed care to their communities."

— **Kim Marone**, VP of Business Development

First Products helps clients overcome challenges using technology devices in demanding environments by creating 'perfect fit' mobile carts, device mounts, and other tailored solutions. We specialize in crafting mobile carts that fit your unique needs and the technology that fits your world. If you would like to explore our Perfect Fit Process for your tele-health initiative, please contact us to see how we can bring your telehealth vision to life.

**View more solutions
in our OEM Gallery here**

