Since 1992, the Georgetown University Hospital/MedStar Health KIDS Mobile Medical Clinic has provided a medical home to children who have trouble accessing good, quality health services in Washington D.C.’s most underserved and at-risk communities. Using a fully equipped 40-foot mobile clinic, MedStar makes weekly stops at five public housing communities, two public high schools, and the D.C. Village emergency family shelter. Health-care services include well-patient checkups, immunizations, ophthalmology exams, sick visits, chronic illness management, a 24/7 on-call pediatrician, and referrals to specialists—all at no cost to the patients. The clinic also provides children with a variety of adolescent services and coordinated care for mental health and social services.

**Objective.**

MedStar is doing what many thought would be impossible—providing state-of-the-art medical care from a mobile health-care clinic in several at-risk neighborhoods in the Washington D.C. area. It helps that MedStar’s 40-foot mobile clinic is more than just a one-room medical closet on wheels, boasting two examination rooms, a mobile laboratory, a patient waiting area, a small consultation and registration area, and a nurses’ room. In this seemingly tiny space, patients can walk in, register, get their vital signs checked, and then make their way into an examination room where doctors and health-care providers have the freedom to work as if they were in a traditional health-care clinic with all the amenities of a normal doctor’s office.

But with multiple sites to visit, a limited budget, and a large number of patients to serve every week, MedStar knew it needed to maximize the amount of service and support it provided its patients while streamlining its processes for this important program to work. And while offering so many valuable health services at one place was an exciting and important venture, it made for an overwhelming barrage of information—confidential patient records, inoculation histories, and other data that needed to be expertly managed, securely maintained, and accessible at a moment’s notice. And since MedStar is an entirely mobile operation, all of this had to be available on a secure, reliable, and wireless remote network, no matter where the mobile clinic happened to be visiting.

Working with a number of charitable partners and services providers, as well as raising money every year through extensive fundraising, MedStar knew it had to be careful about every dollar it spent—and at the same time tighten up its communications and information management to be more productive and maximize the number of patients it was able to serve. MedStar also needed better efficiency, organization, clarity, and speed—so patients could spend less time processing their cases in the waiting area, and more time getting the help they needed with health-care providers.

**Objectives:**

- Allow health-care providers to wirelessly access patient medical records and other important online medical resources quickly and securely from remote locations, eliminating the need for the manual transfer of patient records from site to site.
- Streamline record retrieval and management, improving efficiency, organization, clarity, and speed.
MedStar was also dealing with an inefficient process when it came to accessing and sending patient records. Because records were being transferred by hand and carried to and from work sites, the process was sluggish and prone to errors, filled with latency and delay.

“Over the first 12 years of our operation, we had to either bring the chart out with us to these sites or we would have to call our billing receptionist in the hospital and have them fax over the most recent visit slip,” says Dr. Matthew Levy, Medical Director of Community Pediatrics and the KIDS Mobile Medical Clinic at Georgetown University Hospital/MedStar Health. “Sometimes our fax line worked and sometimes it didn’t. We had to read things over the phone. It was really a nightmare.”

Patient records are all maintained at a central location at the Georgetown University Hospital for security reasons, so the process of accessing and using this information anytime from remote locations presented MedStar with significant challenges as it focused on its goal of delivering quality, continuous care to patients, while remaining compliant to governmental regulations.

Levy knew that in order to better reach underserved families and provide them with better services, an electronic health record was crucial. By using a secure wireless system, Levy also knew MedStar could better tap into its hospital’s systems and sync with scheduling and billing. In order for this process to work, however, MedStar needed to communicate with its Centricity® system, which serves as MedStar’s electronic health record, charting, and recordkeeping solution, and is housed offsite in Maryland.

Solution.

MedStar had its mobile health-care vehicle outfitted with Mobile Broadband wireless service from Verizon Wireless, giving health-care providers and staff the wireless high-speed Internet connectivity they needed to upload and download electronic medical records, sync existing knowledge bases, and access other online databases and services.

Since MedStar already relied on Verizon Wireless technology for mobile phone and PDA connectivity, Levy quickly learned that the wireless service provider was actually pilot-testing the broadband connection in D.C. and other nearby areas. Levy approached Verizon Wireless, explained MedStar’s situation, and got the answers he needed.

“After learning what Verizon [Wireless] could do for us, we put the broadband cards in our computers, and they found us a partner who installed an antenna at each work site on the roof, ensuring our connectivity,” Levy says. “Now the system allows us to send information to each other in a team approach and we use it as a communication tool, as well as a recording tool.”

Results:

- MedStar’s Mobile Broadband service increased overall clinic productivity, allowing health-care providers to take care of more patients in less time, with greater accuracy and confidence.
- Health-care providers now have access to all patient records, histories, and hospital information remotely and securely, no matter where they are.
Levy explains that as a specific component to MedStar’s internal system, health-care providers now get real-time information by sending a flagged message to colleagues about a patient’s record with specific details about his or her health situation. If a referral needs to be made to a specialist, or a series of tests ordered, it can be done instantly and include all necessary documentation. Levy adds that using the Mobile Broadband technology with his Palm® Treo™ device gives him added freedom to take full advantage of the network to access email and manage his schedule.

“Now I can make a referral for a patient to orthopedics, for example,” says Levy. “It’s almost like an instant message, but you don’t have to be online to do it. It just sends it into that person’s mailbox or right to their desktop.”

Results.

The wireless Internet capability provided by Verizon Wireless Mobile Broadband service provides MedStar’s health-care professionals with fast, secure, remote access to a patient’s entire medical record and the ability to view and update records in real time. MedStar can also access other online resources, like the D.C. Immunization Registry, which is part of the Vaccine for Children Program, to see if a child has received the required immunizations needed to enter or stay in school or day-care centers. Because most of MedStar’s patients have Medicaid or are Medicaid-eligible—or uninsured—they’re eligible for those immunizations. Levy says that having this type of information significantly cuts down patient wait times and helps his teams treat more patients.

“We are one of the first in the area to connect a patient’s electronic record to a public immunization registry,” Levy says. “The immunization registry in the District is a database of all of the immunizations of everybody in the city. With Verizon [Wireless], our Centricity system now is not only wireless, but it’s almost paperless. We simply created a link, and now MedStar instantly pushes the immunization information that we enter into our system into their system directly. So we don’t need to send them any kind of information at all.”

Another thing MedStar can do now is run reports more efficiently, giving health-care professionals a clear, timely view of how many patients they have and their exact medical history. Levy says this ability to know everything about a patient at a glance and do instantaneous cross-checks helps them to know they are providing patients with a better quality brand of health care.

“Verizon [Wireless] has helped us to become much better at communicating with each other,” Levy says. “We've been able to focus on the practice of medicine, as opposed to the logistics. Now we can appreciate the whole patient record right up front and be able to address all the issues, because they're better organized and we can easily access them. It allows us to be more thorough.”

• MedStar now can connect a patient’s electronic record to the Washington D.C. public immunization registry, allowing them to better track inoculations and better serve their patients in less time.

• MedStar runs reports more efficiently, giving health-care professionals an organized and clear view of a patient’s experience and history during a visit.

“In any business, personal connectivity helps improve technological connectivity. Just like we need to have a good relationship with our patients, so do we need that same great relationship with our technology provider. Verizon [Wireless] has stood behind their product and helped us to maximize our abilities to do our jobs better.”

DR. MATTHEW LEVY
MEDICAL DIRECTOR OF COMMUNITY PEDIATRICS AND THE KIDS MOBILE MEDICAL CLINIC AT GEORGETOWN UNIVERSITY HOSPITAL/ MEDSTAR HEALTH
Levy adds that he feels confident knowing that given the complexity of MedStar’s connectivity needs and the constant care he must give his network, he trusts that Verizon Wireless will be there when he needs help. He compares his relationship with Verizon Wireless to the doctor/patient relationship he personally nurtures every day.

“In any business, personal connectivity helps improve technological connectivity,” Levy adds. “Just like we need to have a good relationship with our patients, so do we need that same great relationship with our technology provider. Verizon [Wireless] has stood behind their product and helped us to maximize our abilities to do our jobs better.”