Can Tech Speed Up Emergency Room Care?

A New York hospital system tests a new way to use telemedicine, where E.R. doctors examine patients without being in the same room.

ILLUSTRATION: ROBERT NEUBECKER

By SUMATHI REDDY

Updated March 27, 2017 3:56 p.m. ET
The emergency-room doctor needed to take a closer look at the stitches above Gilbert Winter’s eye.

“Let me just zoom in a little closer,” said Peter Greenwald, an emergency-medicine physician at NewYork-Presbyterian/Weill Cornell Medicine in Manhattan. “I just need you to hold your head as still as possible.”

Dr. Greenwald was talking through a computer screen. Mr. Winter—a 75-year-old construction-company consultant who had suffered a number of injuries from a fall the previous week—was sitting in a small, private room in the hospital’s emergency department, elsewhere in the complex.

The next frontier in digital health may be one of the most unlikely: the emergency room. The Emergency Department Express Care program at NewYork-Presbyterian/Weill Cornell Medicine is among the first telemedicine programs of its kind in the emergency department of an academic hospital. The goal: to reduce waiting times and get patients with non-urgent cases in and out of the emergency room efficiently without compromising care.

‘What’s the number-one complaint of patients in the emergency room?’ says Rahul Sharma, the emergency physician-in-chief at Weill Cornell. “Wait time.”

For patients who have opted to use the Express Care program—only offered to patients with minor injuries or complaints—the total amount of time spent in the ER has dropped to 35 to 40 minutes, from an average of 2 to 2.5 hours, he says.

All patients go through the standard, in-person emergency room triage—where a nurse practitioner or physician assistant screens them. Those who are deemed to have injuries or symptoms that aren't life-threatening are given the option of Express Care. This reduces congestion in the emergency room.

Meanwhile, doctors can now treat patients from more than one hospital from their desk, and pivot to their administrative tasks more quickly in between visits.
Lengthy waits and crowded emergency rooms have some hospitals looking at giving patients with minor complaints or symptoms the option of seeing a physician virtually through a computer screen. PHOTO: GETTY IMAGES/ISTOCKPHOTO

Telemedicine has become an increasingly popular tool for serving patients in remote settings or tech-savvy, in-a-rush patients who would rather use an app for a quick diagnosis than make the trip to the doctor’s office. American Telemedicine, a trade group, says 20 million people in the U.S. received medical care remotely last year. It expects the numbers to grow by 15% this year. NewYork-Presbyterian/Weill Cornell started in July with four-hour shifts. It expanded to a second location downtown a month later and now is available 16 hours a day. Between the two locations the hospital has conducted more than 1,700 virtual visits. It will begin a pilot program in the pediatric Emergency Department in April.
Though patients are connected to an ER physician through videoconferencing, often a nurse practitioner or physician assistant is on hand to assist or conduct procedures, such as removing stitches or ordering X-rays. The doctor will order prescriptions and print out discharge papers that are spit out from a printer in the patient’s room.

About 30% of the patients have routine procedures like suture removals and wound checks. Other common complaints seen include rashes, eye pain, contusions and upper respiratory infections.

The Express Care visits are billed as a standard emergency department visit because the patients have a full triage and medical screening exam, Dr. Sharma says. They have been covered by most insurance companies.

Critics of telemedicine have raised questions about quality of care being sacrificed for convenience, as well as the impersonal nature of a virtual care.

But emergency medicine experts say such issues aren’t relevant in the emergency room because patients have the on-the-ground resources of a hospital. Nurse practitioners and physician assistants conduct screenings and assist with care.

And in the hectic environment of an emergency department where distractions are common, some patients actually find being in a private room with the undivided attention of a doctor more intimate, Dr. Sharma says.

Dr. Sharma has gotten inquiries from more than a dozen hospitals and health-care systems curious about the program.

Ali Raja, vice chairman of the department of emergency medicine at Massachusetts General Hospital, visited Weill Cornell’s Express Care earlier in March.

“Ten years from now, tele-emergency medicine will be the standard around the country,” Dr. Raja says. “We’ll still have emergency departments for those patients who are critically ill, but I think we’re all headed in this direction.”
John Deledda, chairman of emergency medicine for the Henry Ford Health System in Detroit, spoke with Dr. Sharma a couple of weeks ago. “It’s a very novel approach and, frankly, not too complex,” he said. “Because of that, I think it’s very applicable for most academic, urban medical centers that are handling a lot of subacute and minor types of complaints that are traditionally handled outside of the emergency department by primary-care doctors.”

Dr. Greenwald is one of the 20 physicians assigned one to two eight-hour Express Care shifts a week. He says definition on the Avizia telemedicine cart they use “is better than the naked eye.” The monitor on his end is about five times the size of the one in the patient’s room.

Dr. Greenwald says that for some patients, talking a doctor on a video call is less threatening than talking in person.

For Mr. Winter, the emergency-room visit consisted of a physician assistant removing the stitches near his eyebrow after consulting with Dr. Greenwald. Dr. Greenwald then remotely checked on an injury on Mr. Winter’s knee and helped get a patient navigator to follow-up on scheduling a visit with a specialist to look at his fractured fingers.

A speedy visit was a must. He was due at another appointment.

“This has been an interesting experience,” Mr. Winter said. “A part of the future for sure. It’s part of the evolution of becoming more efficient, I guess.”

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