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SAVING LIVES AND MONEY

Technology helps get doctors to the scene after-hours

By CATHY DYSON THE FREE LANCE-STAR Feb 17, 2018



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It's the middle of the night, and the elderly patient—let's call her Mrs. Smith—has shortness of breath and a low-grade fever.

If Mrs. Smith's condition had changed during the day, the nurse would have called the medical official who serves skilled nursing facilities, once known primarily as nursing homes.

But it's another matter when a patient gets sick after hours or on weekends and holidays, when doctors and nurse practitioners are trying to enjoy their time off like everyone else.

Falls Run Nursing and Rehabilitation in Stafford County has a way to get a white coat to the scene during these after-hours episodes. It's the first in the region to use TripleCare, a virtual health care system that brings a doctor to the bedside through the technology of a two-way camera and television screen.

Here's how it works:

When a nurse notices that Mrs. Smith has taken a turn for the worse, he or she calls TripleCare and wheels the telemedicine cart into the room. Mrs. Smith doesn't have to get out of bed. She won't be placed on a stretcher or in a wheelchair and transported elsewhere—a special plus in frigid or rainy weather.

As the nurse gets the cart in place, the doctor reviews Mrs. Smith's records electronically. The camera and 21-inch television screen sit atop the cart, so Mrs. Smith can see the doctor, and the doctor can see her.

The doctor begins the exam, asking Mrs. Smith if she's had shortness of breath before and when she started to feel worse. When the nurse picks up the stethoscope to listen to Mrs. Smith's chest, the doctor can hear the lub-DUB of her heart or if there's a crackling sound in her lungs from fluid in her airways.

The doctor can zoom in with the camera for a closer look at Mrs. Smith's eyes or to gauge her reaction when the nurse puts pressure on parts of her body.

"The nurse really becomes the instrument for the physicians, they become the hands," said Michael Demagall, vice president with Saber Healthcare Group, which manages the Falls Run facility. "The doctor's watching those facial images, it's no different than if the doctor was holding your wrist and saying, 'Does this hurt?' "

PREVENTING A SLIDE

Falls Run launched the telemedicine feature in December and has used the service—which isn't billed to the patient—16 times since then. In most of the situations, the patient had the same issues as the imaginary Mrs. Smith, Demagall said.

"It's a patient-changing condition, it's not going to resolve on its own, it's going to need some kind of intervention," he said.

TripleCare has been offering its telemedicine service since 2011, and currently operates in 15 states, said Dr. Mary Jo Gorman, interim CEO at the company based in New York City. Almost 16,000 patients have been through the virtual exam, and about 80 percent of the time, the situation was resolved without the patient leaving the facility.

Of that number, "about half would have gone to the emergency room without our intervention," Gorman added.

Time is of the essence in these kinds of cases, she said.

"When you're a frail elderly person, waiting a couple days just gets you worse and worse and worse, and often you do end up in a hospital," Gorman said. "So by having this early intervention, early change of condition, [there's the] opportunity to get the patient before they start the slide in the wrong direction."

FINANCIAL BENEFITS

There's also the financial impact.

In a recent study, TripleCare looked at 91 cases in which patients didn't have to be hospitalized, which resulted in an estimated \$1.6 million in savings. Here's how that breaks down:

- \$1.36 million saved by not readmitting patients to the hospital, which costs \$15,000 per admission.
- \$109,200 saved by avoiding ambulance rides, estimated at \$1,200 each.
- \$75,840 saved by avoiding 16 days of skilled care billed to Medicare or Medicaid.

In 2011, the Hospital Readmission Reduction Program, under the Affordable Care Act, started imposing penalties every time Medicare recipients returned to hospitals within 30 days of being discharged. The notion was, patients could get the necessary treatments at facilities, or at home, instead of them automatically being transported to the hospital, where everything is more expensive.

Readmissions cost the nation \$41 billion in 2011, according to a 2014 Agency for Healthcare Research and Quality report. Of that amount, Medicare paid \$26 billion—and the report concluded that \$17 billion of it was due to hospitalizations that could have been avoided.

Three years after the penalties started, Medicare spent \$9 billion less on rehospitalizations, according to the report.

Skilled nursing facilities currently aren't penalized for re-admissions, but Medicare is scheduled to change that next year. More of these centers are using telemedicine to fill in the gaps when medical officials aren't available, "thus avoiding getting dinged by Medicare in the process," according to a story on VSee, an online telemedicine platform.

A TECHNOLOGY BOOM

More than half of all hospitals use this technology in some fashion, according to the American Telemedicine Association.

Rural facilities, such as Riverside Tappahannock Hospital in Warsaw, often use telemedicine to get input from specialists who aren't on staff.

Likewise, skilled nursing facilities can turn to telemedicine for patients who may need psychological evaluation but aren't able to get to a provider in their area.

The Children's Hospital of Richmond at VCU offers information about adolescent bariatric surgery and genetics through telemedicine at its Fredericksburg Multispeciality Center in Spotsylvania County.

Mary Washington Hospital has a robot called Oscar that's used with stroke patients. With a nurse and Oscar at the patient's bedside, neurologists can assess the patient's situation before they're able to get to the hospital. That quick evaluation can avoid delays in administering clot-busting drugs that save critical brain cells.

"During a stroke, time is brain—2,000 brain cells may die every minute," states the hospital website about Oscar.

Novant Health U.Va. Health System Culpeper Medical Center has a similar service, called "telestroke," that it has used for more than five years through its partnership with the University of Virginia Health System.

When a patient enters the emergency room with stroke symptoms, the Culpeper facility does an assessment and CAT scan. If stroke signs are present, the ER doctor connects through the telestroke system to a neurologist at U.Va. so a thorough exam can be conducted and care administered.

And parents can pick up their phones in the middle of the night and have a video chat with a doctor when the baby's got an unusual rash—as seen in a current TV commercial.

Telemedicine is expected to boom in the years to come. Worldwide revenue for telehealth devices and services could reach \$4.5 billion this year, up from \$440.6 million in 2013, according to the London company, IHS Markit Ltd.

Likewise, it predicts the number of patients using telehealth services will rise to 7 million this year, up from less than 350,000 five years ago.

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