September 18, 2011

Responding Before a Call Is Needed

By KIRK JOHNSON

EAGLE, Colo. — Emergency medicine carries a deep aura of romance in America, with its first-responder traditions of adrenaline, acuity and bravery. But here in this rural mountain area of the West, and in a handful of other places around the nation, a new vision is gaining ground — that emergency workers should not wait around for crises to happen, but rather go out and prevent them.

People like Kevin Creek are blazing the path.

Mr. Creek, after years of roadside rescue and urban mayhem, is Colorado's first "community paramedic." In this rapidly aging area, he is also leading an eight-week course at the senior center — part fitness and flexibility training, part psychology — about maintaining balance and avoiding falls.

"All right, now let's try and touch both toes," Mr. Creek, a 40-year-old with a shaved head and earrings who is a weight lifter in his off hours, said as he led the class on a recent morning here in Eagle, about two hours west of Denver.

His message to the participants — ranging in age from their 70s to their 90s, and including a few who have broken hips in the past — was that a little work could go a long way toward keeping them out of the hospital and in their homes.

"And no slippers," Mr. Creek said. "Shoes are better — laced up and tied."

The original threads of community paramedicine trace back to places like Nova Scotia, which began experimenting with the idea around 2000 when a doctor who had served two remote islands off the Canadian coast retired; paramedics were recruited to fill the gap.

Around the mid-2000s, San Francisco, and later San Diego and Washington, D.C., among others, began sending paramedics into homeless populations, aiming to reduce 911 calls.

The new push, fueled by a cash-crunched public sector and looming changes to Medicaid under the federal health care overhaul, combines all those pieces, aiming for the first time to

standardize training and create operating systems that can function from farm country to big-city downtowns. The federal Health Resources and Services Administration, which works on health care access issues, is expected next year to release the first-ever system for measuring the performance of community paramedics, which could further accelerate the trend.

“What we have had is a patchwork of different cities trying different things, and different paramedics reinventing the wheel each time,” said Niels Tangherlini, a paramedic captain at the San Francisco Fire Department who helped create that city’s project with the homeless. “In this next evolution, E.M.S. is starting to become what it must be in the future — proactive rather than just reactive,” he said.

In Texas, the emergency medical system that serves a 15-city area centered in Fort Worth, called MedStar, found that 21 people, calling 911 as often as twice a week or more, were accounting for more than 1 percent of the total call volume. So starting in July 2009, paramedics went out to see if behaviors could be changed, through counseling or treatment.

More than 1,000 calls a year — at average cost of $1,200, and mostly nonreimbursable since those heavier users tended to be uninsured — were cut from the system, according to MedStar.

About 30 million to 40 million 911 calls are placed each year across the nation, according to federal figures.

“We have taught the population to call 911,” said Dr. Jeff Beeson, the medical director at MedStar. “We ran TV shows about it, and news stories — truly we created this problem.”

One driving force for rethinking medical intervention in homes and communities is that starting next year under the health care overhaul, Medicare will no longer reimburse health care providers if a patient is readmitted to a hospital within 30 days of his or her discharge with a preventable repeat of the previous diagnosis. That will create sharp new incentives, medical experts say, for follow-up home care.

For Mr. Creek, in working with older patients who might be on a dozen or more prescriptions, prevention often comes down to human contact and interaction. On a recent home visit to Howard Risk, 83, a former professional photographer, Mr. Creek organized Mr. Risk’s complicated daily pillbox, arranged by time of day and medication, checked his blood-sugar level and blood pressure, and promised to swing by the pharmacy to pick up a new order.

“This guy is keeping me alive,” Mr. Risk said, sitting on the couch in his apartment in Eagle, the walls lined with his photos and mementos.

But for all of what might seem like straightforward logic — that preventive care is better than emergency care — a single knotty problem remains. Under federal rules, emergency medical providers get reimbursed only if they transport a person. What that means is that cutting down on 911 calls, even in the name of better care, can have a built-in conflict of interest for emergency responders themselves.

“All these programs are run by people who believe in them — but they don’t get paid for it,” said Dr. Greg Mears, an associate professor in the Department of Emergency Medicine at the University of North Carolina at Chapel Hill. “We haven’t solved that yet.”

The homeless outreach program at the San Francisco Fire Department, for example, reduced emergency call volume by about 75 percent in just 18 months among homeless users of the system, said Mr. Tangherlini, the paramedic captain there, and saved an estimated $12 million. But it was put on hiatus in 2009 anyway as budgets were cut and managers worried about diverting resources from front-line emergency needs.

Here in Colorado, a $1.5 million investment for the pilot project — mostly in labor, including a traditional paramedic to replace Mr. Creek on the emergency squad and a first-ever director of family medicine — is expected to produce about $10 million in medical cost savings over five years in an area of about 15,000 people, said Christopher A. Montera, the chief of the Western Eagle County Ambulance District.

Exact measurements, however, might be tough. “How do you know that you actually did prevent the hospitalization?” said Anne Robinson, a public health nurse consultant to the district. “Often you don’t.”

For Mr. Creek, though, it is all new, and he said he did not miss his days of crisis on the run. “I did the stabbings and shootings,” he said. “Now I’m learning to look in kids’ ears.”