For Emergency Medicine Chair, Preparation Is Everything

By Tyler Smith

For Richard Zane, much of the story of how we respond to disasters is determined well before they occur. He’s spent a good part of his career writing the scripts to help hospitals, health care systems and other emergency responders prepare for natural disasters and other events that strain the fabric of communities and the physical capacity of health care institutions.

He brings that expertise to the University of Colorado School of Medicine, where he was recently named the inaugural chair of the Department of Emergency Medicine. The appointment follows 14 years at Brigham and Women’s Hospital and Partners Healthcare in Boston.

For Emergency Medicine Chair Richard Zane arrives at UCH having served 14 years at perennial top-10 academic medical center Brigham and Women’s Hospital in Boston.

Most recently vice chair of Brigham and Women’s emergency medicine department, Zane was also medical director for emergency preparedness and biodefense for the non-profit Partners system, which consists of seven acute-care hospitals and a rehabilitation hospital, a large primary care provider network, three nursing homes, a home health care agency and visiting nurses.

Getting ready. His focus in that job was on integrating resources and communication so the system could respond effectively when disaster strikes. The preparation was put to the test in May 2010 when a catastrophic water main collapse left much of Boston without potable water. Three Partners hospitals provided medical support and assistance to other disaster-response teams, and Zane took to the airwaves to inform residents of their health risks and how to keep themselves safe from water-borne infection.

Zane’s academic work also explores practical ways communities and health care providers can prepare for disasters. He co-authored a Hospital Emergency Response Checklist, published by the World Health Organization; prepared tools on behalf of the Agency for Healthcare Research and Quality for assessing and triaging home health patients during emergencies; authored a study of how previously shuttered hospitals could be evaluated and used to expand surge capacity during a disaster; and penned another about evacuating and repopulating hospitals.

The work didn’t simply sit on a shelf. Responders deployed the tools and methods Zane helped develop during some of the worst disasters in modern times, including Hurricane Katrina and earthquakes in Haiti and Japan, he says.

But these and other “pre-mitigation” efforts, as Zane calls them, are not always easy sells for communities and facilities absorbed with day-to-day concerns.

“The biggest issue is that interest in disaster preparedness is directly proportional to the time since the last event,” Zane says. The challenge, he notes, is for leaders to maintain attention to preparation during “lulls” — uneventful times — and dedicate resources adequate to respond to the disaster yet to come.

Without that planning, he adds, communities struck by disasters are like companies overwhelmed by unexpected product demand and left empty-handed. “Thinking about disasters ahead of time makes it easier to rebalance the scale,” he says.

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Non-disaster emergencies. Disasters aside, University of Colorado Hospital frequently faces its own mini patient surges. The hospital is nearly always at or near capacity, and the Emergency Department routinely boards many patients waiting for beds in the inpatient units.

Effectively managing that demand also will require a long-range approach, Zane believes — and adding space alone, as the hospital is now doing by building a new ED, is not the only answer.

“If we don’t redesign the way we deliver emergency care, a larger ED won’t solve our capacity problems,” he maintains.

Most hospitals in the United States have an emergency-care delivery model that hasn’t changed in half a century or more, Zane says, leaving many EDs struggling to handle increasing patient volume, acuity and complexity. That mandates that EDs and hospitals as a whole critically review the processes by which care is delivered, he asserts.

The isle of wait. Emergency departments in general, he notes, are spaces dotted with “islands of serial waiting,” marked by delays in admission, triage, testing, transport, discharge and so on. Figuring out how to shrink those islands safely, even by just a few minutes each, while implementing multiple processes that occur simultaneously, could produce enormous change and efficiency improvements, he says.

“If we take off three minutes here, seven minutes there, another nine minutes somewhere else and multiple that by 70,000 patients, suddenly we’ve saved a remarkable amount of time,” he points out.

It takes effort to reap even incremental gains, Zane says.

“We need to challenge every single process, be patient centered and data driven,” he says. The idea is to “make informed decisions which streamline processing, decrease the variability in the way we move patients and cogently and efficiently utilize our resources.”

The Anschutz Medical Campus is the right environment to effect these fundamental changes, Zane believes.

“My decision to come here was based on what I saw as an unwavering commitment to science, innovation and excellence at UCH and the School of Medicine. I believe we are on the precipice of becoming a preeminent, top-10 academic medical center.”

Zane has seen what it takes to crack the top 10. Brigham and Women’s Hospital has earned a place on US News and World Report’s “Honor Roll of Best Hospitals” the past 19 years. It was ranked eighth in 2011.

“Having worked in a place that has been among the top 10, it feels like there is no stopping us here,” he says. “We have an opportunity to redefine how care is delivered.”