BOLD ACTIONS

• Implement a coordinated health care infrastructure in Houston with public health overlay leveraging technology.
• Identify opportunities to reduce healthcare costs.

DESCRIPTION OF THE WORK TO DATE

In December 2014, the Houston Fire Department launched a program called ETHAN (Emergency Telehealth and Navigation) that provided a coordinated care model for non-emergency 9-1-1 callers to be redirected to a community-based primary medical clinic. This program was launched in response to a high volume of 9-1-1 calls – over 1,000 daily to be exact of which more than half are estimated to be non-emergency transports costing the city millions of dollars. In order to accomplish this goal, ETHAN’s Team worked closely with partners that provided real time clinic appointment and patient medical record access, video teleconferencing capabilities, taxi dispatch and transportation coordination, and long-term care team follow-up.

In less than six minutes, an ETHAN emergency physician, fire department medic and the resident are able to connect through the video interface and discuss the reason for the 9-1-1 call as well as schedule a follow-up appointment for the patient and provide any transportation assistance. To date, more than 9,000 Houston Fire Department members and 20 board certified emergency physicians have been trained and are utilizing this platform. CHMI enhanced this effort by mobilizing a national partner, Verizon, to provide in-kind IT and resource support as well as provided hands-on support for stakeholder engagement, strategic planning and generated visibility through national summits, online media, and blogs.

DESCRIPTION OF THE WORK YET TO DO

The current ETHAN structure helps redirect residents to primary care but in the future the effort hopes to expand into the arena of mental and behavioral health. Furthermore, while ETHAN has been fully adopted by the Houston Fire Department, there is a strong interest to expand into the surrounding independent first responders within the region given the transient lifestyle pattern of residents.

IMPACT TO DATE

The Houston Fire Department has provided the EMS industry with a disruptive technology: implementation of a teleconferencing solution in the pre-hospital setting which allows direct patient-to-physician communication. As a result of ETHAN, within two years, over 10,000 Houston 911 EMS patients were triaged by Emergency Medical Physicians for alternate prehospital transportation and destination within the Emergency Telehealth and Navigation (ETHAN) mobile integrated healthcare (MIH) program.; more than 85 percent of patients were transported via non-traditional (non-ambulance) methods; and 18 percent of all ETHAN patients were dispositioned to non-emergency department destinations.

FUTURE IMPACT OF THE WORK

In the future, it is expected that more residents interfacing with 9-1-1 for nonemergency purposes will have a touch point with ETHAN. This is expected in part to the continuous education and exposure ETHAN staff are providing to the community and partners and also due to increase in staffing resources. Furthermore, it is also expected that the number of nonemergency related 9-1-1 calls will decrease, followed by a decrease in non-emergency transports and an increase in the number of patients establishing medical homes with primary care providers within their respective neighborhoods.

PARTNERS

Verizon Wireless
Panasonic
CISCO
Houston Health Department
Houston Fire Department
Greater Houston HealthConnect
Community-based Clinics
Local taxi and ambulatory service companies