On the EMTrack® Towards Success: Implementing a Patient Tracking System in Chicago

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Background

• Illinois EMS Region XI (Chicago) currently has an electronic system called EMTrack® in place and is intended to be used in a mass casualty incident (MCI) to track patients being triaged from the scene of an incident to a hospital, between hospitals and from hospitals to other healthcare locations. EMTrack® is a proprietary, web-based, patient tracking system developed by Juvare.
• The Chicago Department of Public Health (CDPH), in collaboration with Chicago Fire Department (CFD) EMS, the Regional Hospital Coordinating Center (RHCC) and Chicago’s 28 acute care hospitals, are piloting the use of EMTrack® through a series of drills and exercises to track patients from field through hospital.
• Presently, EMS Region XI serves as the first region within Illinois to pilot the use of EMTrack®.

Methods

CDPH, CFD EMS, the RHCC and Chicago’s 28 acute care hospitals piloted the use of EMTrack® as an electronic patient tracking system through a series of two region-wide drills and one full-scale exercise.

Drill 1:
• EMS and hospitals used barcoded wristbands to track all CFD patient transports during a 24-hour period
• EMS scanned each patient into EMTrack®, assigned an appropriate triage category and indicated the destination hospital
• Upon arrival, Chicago hospitals scanned wristbands to indicate receipt of each patient at their hospital

Drill 2:
• EMS and hospitals utilized SMART Tags® to track all CFD patient transports over a 12-hour period
• EMS and hospitals entered each patient’s unique identifier (SMART Tag®), triage category, name and age into EMTrack®
• Hospitals used system to indicate receipt of patients and to track patients through ED disposition (e.g. discharge home, admission)

Drill 3 (Full-Scale Exercise):
• Select hospitals used EMTrack® to track mock patients during the Chicago Healthcare Coalition’s annual surge test and full-scale exercise
• Evacuating hospitals assigned SMART Tags® to each mock patient, entered basic patient information and indicated the destination hospital
• Select receiving hospitals scanned evacuated mock patients’ SMART Tags® to indicate receipt

Results

Drill #1 (September 2018):
• 89% (24/27*) of Chicago’s acute care hospitals actively participated
• 87% (622/714) of total patient transports were scanned into EMTrack® during the drill
• 57% (359/622) of the total patients that were scanned into EMTrack® were successfully received by hospitals at the end of the drill

Drill #2 (February 2019):
• 100% (27/27*) of Chicago’s acute care hospitals actively participated
• 88% (355/402) of the total patients that were scanned into EMTrack® were successfully received by hospitals at the end of the drill
• 37% (133/355) of the patients that were received by hospitals in the system during drill were given a disposition in EMTrack® at the end of drill

Drill #3 (May 2019):
• 100% (2/2) evacuating hospitals successfully scanned and entered a select number of mock patients into EMTrack® during coalition surge test
• 100% (2/2) select receiving hospitals scanned evacuated mock patients’ SMART Tags® to indicate receipt

*Jesse Brown/VA Medical Center excluded

SMART Tag® image obtained from: www.smartmci.com