Clean Data Can Mean Life or Death in Pre-Hospital Care

Company
Medusa Medical Technologies

Industry
Emergency Medical Services

Challenge
Medusa Medical Technologies—based in Halifax, Nova Scotia, Canada—launched its flagship product, the Siren ePCR™ Suite, in 2001. An electronic patient care reporting (ePCR) software solution, it’s designed to meet the rigorous demands of the pre-hospital emergency services industry.

The system is intended to make it easier for paramedics to deliver quality patient care. Among the information emergency medical technicians (EMTs) need to record: the location of the emergency; the circumstances surrounding the emergency (car accident, heart attack, drowning, etc.); the victim’s age; medical status; etc. All of this data must be accumulated and entered into their system before reaching the hospital.

“The primary focus is to have reliable, fast, and accurate data available to EMTs and hospital personnel,” states Craig Fraser, vice president of product management.

Accurate data ultimately helps speed patient care, but collecting this data is a second priority to patient care. EMTs spend their days and nights in a tension-filled environment where data entry holds very little importance in comparison to human life. Dealing with a heart attack patient, a car accident victim, or a drowned child, takes priority over the correct spelling of a name or address.

“Every minute counts when dealing with a cardiac arrest event. The faster EMTs can provide information, the sooner hospital staff can start analyzing the data and start treatment. It can mean the difference between life and death,” states Fraser.

“Your data helps save lives.”
-Craig Fraser, VP product management, Medusa Medical Technologies

About Medusa
Incorporated in 1998, Medusa develops information technology solutions that improve pre-hospital emergency data capture, increase emergency medical staff effectiveness in patient care encounters, and ultimately lead to better pre-hospital emergency treatment protocols.
**Solution**
Melissa Data’s Data Quality Tools Suite (DQTS)
Canadian Address Object API

**Benefits**
- Verifies data in real-time, at point-of-entry or batch mode
- Resolves data inconsistencies quickly
- Saves time by standardizing data for faster processing
- Updates and corrects area codes/prefixes
- Parses full names and appends gender

**Results**
Medusa Medical Technologies incorporated Melissa Data’s Data Quality Tools Suite to work in conjunction with their ePCR Suite. Medusa’s Siren ePCR feeds data to Melissa Data’s Address Object Interface, where incomplete contact data is cleaned at point of entry. In addition to the DQTS, Medusa uses Melissa Data’s Canadian Address Object to immediately verify and correct Canadian address data.

“Your [Melissa Data] product adds a lot of value,” Fraser approves. “The more efficient the product, the faster the response time, and that’s ultimately what we’re trying to achieve here. Every second counts.”

Medusa’s customers use the information they gather for patient care reporting, as well as for data mining purposes. Agencies collect everything from medical insurance for accurate billing, to pinpointing the most dangerous intersections for car accidents. These agencies have provided this data to local city officials and planners to improve changes to local infrastructure. Additionally, they are able to better plan ambulance deployment for improved response times based on historical data.

According to Fraser, the data collected is extremely important because, "it can affect everything from patient care to a billing error from their insurance company. That’s why the clarity of data is so important," Fraser says.

Quality assurance is also a key goal. “Using the data to improve operational systems so agencies know how well the medics are performing, how long it takes them to respond to a call, improving the data input time—all this is meant to help the patient,” Fraser stresses.

When asked if he felt if Melissa Data’s DQTS was worth the financial investment, Fraser responded adamantly, “Of course. It literally helps save lives.”