Unique program bringing electronic medical record data to ambulances lauded

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The nation's first and only program linking paramedics in the field to patients' pre-existing health information -- enabling emergency workers to make more informed treatment decisions and to transport patients to the most appropriate facility -- has been recognized by the prestigious Computerworld Honors Program.

The Indianapolis Emergency Medical Services Electronic Patient Care Reporting / Indiana Network for Patient Care program, a collaboration of Indianapolis EMS, the INPC, the Regenstrief Institute, the Indiana Health Information Exchange (IHIE), and Medusa Medical Technologies was honored at a Washington, D.C., ceremony earlier this month for providing emergency medical technicians in the field with the ability to securely access a patient's health data, enhancing the quality, safety and efficiency of the care they deliver.

Metropolitan Indianapolis is the most health wired area in the United States. Indianapolis EMS ambulances now carry tablet computers to gain secure access to patient data abstracts compiled from visits to hospital systems, along with laboratory test results and prescription information, throughout central Indiana.

For example, paramedics are able to view a heart attack victim's previous EKG and compare it to an emergency EKG administered in the field. This allows emergency services providers to make decisions based on changes in test results, potentially reducing heart muscle damage and increasing survival rates.

"Electronic medical record technology has been widely recognized for its role in improving quality of care, increasing efficiency of health care delivery, preventing medical errors and enhancing patient safety," said Regenstrief Institute investigator John T. Finnell, M.D., associate professor of emergency medicine at the Indiana University School of Medicine and director of health informatics at the IU School of Informatics, who developed the link between electronic medical records and emergency treatment in the field. "Using Regenstrief research and technology, Indianapolis is the only place in the country that is able to securely push health care data to medics in real time, which can impact the pre-hospital care provided."

Research leading to extension of electronic medical records to the ambulance was supported by grants from the U.S. Departments of Health and Human Services and Homeland Security.

"We took an existing product out of the hospital emergency department, modified the software and extended its use to wherever the Indianapolis EMS responders travel to help those with medical emergencies," Dr. Finnell said. "The Regenstrief Institute provided the technical expertise to allow interface between tablet PCs and an abstract of the patient's medical record. The INPC compiles the data that is transmitted by IHIE. Add in the IU School of Medicine and MESH, which have also contributed, and this project is a true collaboration."

"In a perfect world, every health care practitioner caring for you would have access to your critical [health](#) care information wherever and whenever it's needed," said William Tierney, M.D., president and CEO of the Regenstrief Institute, Chancellor's Professor and associate dean for clinical effectiveness research at the IU School of Medicine, and chief of internal medicine for Wishard Hospital, whose EMS service first installed and used this EMS information system. "Unfortunately, each hospital, medical lab, X-ray facility, pharmacy and doctor's office

uses a different medical record system that cannot be accessed when needed. With hospitals, labs, X-ray facilities and pharmacies securely providing critical patient data to the Indiana Network for Patient Care, EMS technicians, in this case, can more quickly and accurately figure out what your problem is and how best to treat it."

Computerworld Honors is the longest-running global program to honor individuals and organizations that use information technology to promote positive social, economic and educational change.

Provided by Indiana University School of Medicine