



UW Emergency Medical Services Informatics Initiative

Background

The University of Wisconsin provides medical direction for your emergency medical services (EMS) agency. As described in that contract and accompanying BAA, the Department of Emergency Medicine provides physicians who support your agency, including overseeing your quality management program.

Objective

To improve the scope and effectiveness of our activities with your agency, we have developed an informatics-driven approach that would create an EMS database that facilitates quality management and research that advances the practice of EMS medicine, in alignment with our institutional mission.

Current State

Presently, EMS data is stored by your agency's electronic health record vendor. There is limited ability to perform secure data transactions (per HIPAA regulations) and advanced analytics that are increasingly necessary to a modern EMS agency. Additionally, the current system has minimal connectivity to hospital outcomes, which are critical for effective quality management programs.

Proposal

The University of Wisconsin School of Medicine and Public Health (SMPH) will create a secure storage resource for EMS data that meets HIPAA Security Rule requirements. Using the same encrypted method that you currently use to send data to state registries and billing companies, data will also be sent to SMPH. EMS and hospital data will be analyzed and presented through dashboards and other visualizations that are designed for medical directors and EMS service directors. Research use of the data, limited to deidentified and limited data sets, will be strictly controlled and subject to the process described in the accompanying Data Use Agreement. Direct access to the database will be limited to SMPH informatics faculty and Clinical Research Data Services.

Costs

There will be no cost to EMS agencies to participate in this initiative. Some electronic health record vendors charge a fee for exporting records. We will pursue mechanisms to fund this expense so that participation remains cost-neutral to the EMS agency.

Risk Assessment

Since we are using the same mechanism that your agency is already using to transmit data to state registries and billing companies, we anticipate minimal additional risk to data in-transit. Once the data arrives at the database, SMPH is responsible for safeguarding the data. By using this secure database for analyses rather than the current method of downloading files from the electronic health record vendor, we believe that overall risk of data compromise will be reduced. Your agency and your community will realize direct benefit by participating, as the scope and effectiveness of your quality management program will be improved.

For any questions related to this project, please contact:

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