**CS 6440 Student Project Proposal**

|  |  |
| --- | --- |
| **Project Title:** FHIR Interface to Controlled Substance Database | |
| **Mentor 1 Name:** Jeff Duncan | **Mentor 1 Email:** [jduncan@utah.gov](mailto:jduncan@utah.gov) |
| **Mentor 2 Name:** Paula Braun | **Mentor 2 Email:** pax1@cdc.gov |
| **Project Background:** Drug poisoning deaths are now the leading cause of injury related deaths nationwide. Office of the Medical Examiner (OME) pathologists and investigators need access to relevant clinical information during the completion of a medicolegal death investigation.  One potential resource is the Controlled Substance Database (CSD).   The CSD is a repository of prescriptions for controlled substances designed.   OME pathologists currently must log in to a separate system to access the CSD. The Utah Department of Health currently has a view into the CSD for epidemiologic analysis. A FHIR interface between UMED (the OME’s case management system) and CSD could be used to enable pathologists and investigators to access a deceased person’s controlled substance history from within the UMED application.  UMED would send personal identifiers such as name, date of birth, sex, and CSD would return prescription history information. | |
| **Project Objective(s):** Develop a FHIR interface to the Controlled Substance Database and to UMED (the medical examiner’s case management system) to enable providers to access a deceased person’s controlled substance history from within UMED. | |
| **Description of the Solution:**   1. Develop a FHIR interface to the Controlled Substance Database 2. Develop a FHIR interface to the UMED (the medical examiner’s case management system) 3. Develop a mechanism, using FHIR, for providers to access a deceased person’s controlled substance history from within UMED | |
| **Desired Student Skills/Background:**   * Experience with RESTful interfaces, backend development, and webservers * Interest in FHIR enabling existing systems. * Interest in innovative solutions to combat prescription drug overdoses | |
| **Data Requirements and Potential Sources:** Public or synthetic data can be used for these purposes | |
| **Other Comments:**  The State of Utah is a very advanced public health partner. This project provides an excellent opportunity for students interested in developing novel solutions to help combat the current prescription drug overdose epidemic. | |