# Title

Develop an open source integration engine to send HL7 V2.x messages to FHIR server

# Description

Health Level Seven (HL7) is a set of international standards for transfer of clinical and administrative data between software applications used by various healthcare providers. Hospitals and other healthcare provider organizations typically have many different computer systems used for everything from billing records to patient tracking. All these systems should communicate with each other when they receive new information, or when they wish to retrieve information. HL7 ADT is a messaging standard for communicate Admission, Discharge and Transfer messages

Fast Healthcare Interoperability Resources (FHIR) is a standard describing data formats and elements and an application programming interface for exchanging electronic health records. One of its goals is to facilitate interoperation between legacy health care systems, to make it easy to provide health care information to health care providers and individuals.

The goal in this project is to develop an open source integration engine that will take legacy HL7 V2.x messages and send to a cloud based FHIR server. The team needs to

* investigate the suite of API technology that is available and decide on what API technology to implement. Provide a pro and con evaluation on why the chosen API technology is selected.
* use an open source development environment to develop an integration engine that can receive HL7 V2.x ADT A01, A03 and A08 messages, and convert the messages into FHIR data format and elements to be sent to a FHIR server.
* investigate available cloud based FHIR servers that are available. Provide a cost analysis among evaluated FHIR servers. Decide on which one to integrate with and send the converted HL7 V2.x ADT messages to the FHIR server.
* develop a GUI or use what is available from the FHIR server to display data from the PID and PV1 segments of the ADT messages.