Pharma Application

Project Purpose:

- Compliance with the federal and state mandated process of pharmacists optimizing drug therapy and to prevent, detect, and resolve drug related problems.
- Federal and state laws require pharmacies to create and maintain patient profiles consisting of current medications, drug allergies or drug reactions, health conditions, age, gender, and any additional information pertinent to the patient's pharmaceutical care
- Requires the pharmacist to personally review the patient's profile for potential: drug-drug interactions, drug-disease state contraindications or precautions, drug allergies or hypersensitivity reactions, clinical abuse or misuse (including over- and under-utilization and early refills), incorrect duration of drug therapy, incorrect dose/regimen (including special patient populations, e.g. pediatric, geriatric), and therapeutic duplication.
- The pharmacist must resolve any potential problems prior to dispensing the prescription.
- Perform Profile Updates in Web, Compass & Mail Order
- Enhance the patient profile forms to include more complete clinical profile or medical profile information, increase the information captured.
- includes paper forms, member portal online forms and the systems profile forms.
- Streamline the entry and capture of the medical profile information provide for automation of submission from member portals and automation of the paper forms to scan and read the new or updated information
- Introduce system enhancements to direct the additions and changes to clinical information to be routed for online comparison, review and verification as identified in the business rules
- Modify the Drug Interaction programs to seek the updated medical profile information and perform DUR against the additional profile data with each new fill – retail and mail order
- Perform system enhancements to increase the amount of information presented and accepted for patient entry and transmit the update information for auditing and compliance reporting.

Technical Details

- Purpose / Intent

For both the projects, ESI has identified the need to provide mechanisms for external systems to update HDS files. The HDS Roadmap has identified the concept of a 'Gateway' as the mechanism to provide the means to update the HDS files.

- Short Description

The Gateway will be implemented as a web service. It will accept input from the external systems and determine the work that needs to be done. The work modules will be separate Java classes. The work classes will communicate to HDS using MQ queues.

- Logic Flow
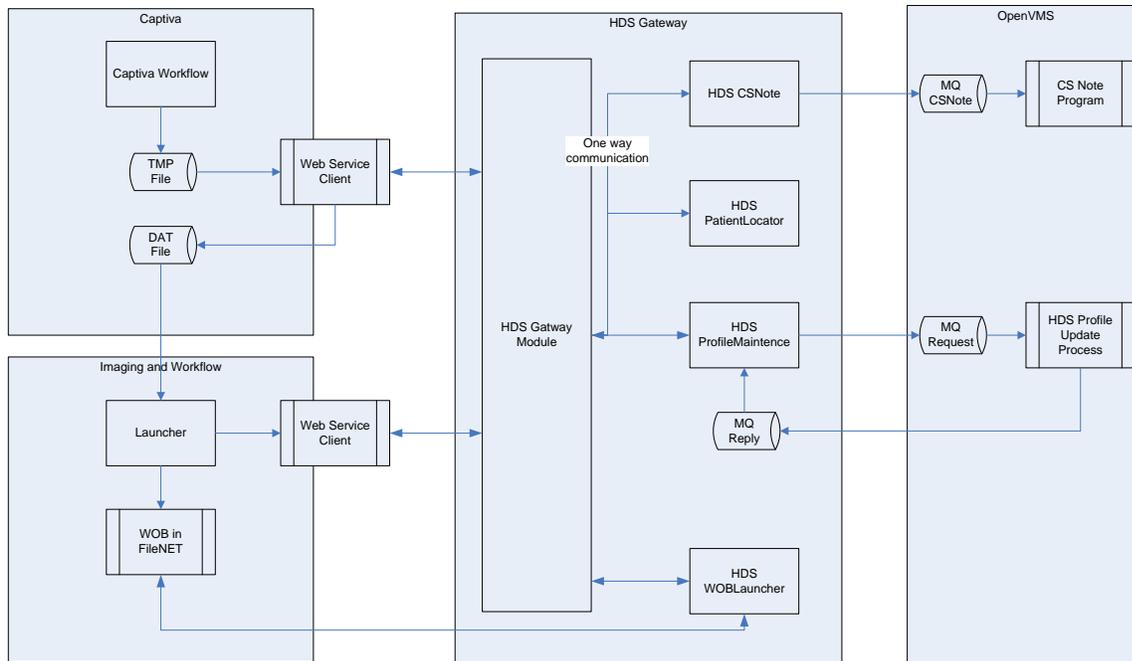
The following paragraphs describe the diagram above.

The Captiva process will process batches as it does today, generating the appropriate data into a temporary file that has the same format as a .DAT file used by the ESILauncher.

A Web Services Client application will poll for the temporary files and format a transaction over a SOAP and HTTP protocol.

The HDS Gateway Module will receive the SOAP transaction and determine what it needs to do with the transaction. The HDS Gateway Module will perform the following functions:

- Determine the patient by using the HDS PatientLocator method
- Determine if it needs to create a customer service note. If it does, it will invoke the HDS CSNote method
- Determine if it needs to perform a profile update. If it does, it will invoke the HDS ProfileMaintenance method

Once the HDS Gateway Module has executed all of the appropriate methods, it will return the results back to the web services client.

Technologies Used:

Java/J2EE, JSP, Servlets, XML, JDBC, Web Services, EJB, Filenet IS 4.x, Filenet P8 4.0, eProcess 5.2, Filenet IDM WebServices, Filenet IDM Viewer, Spring, MQ Series, WAS 6.0, RAD 7.0, Oracle 10g, SOA Test, CVS, ANT, SQL Developer, HTML, Java Script , J2C, JUnit, log4j, Test Director, Unix, VAX.