Requirement Analysis

Project: OpenEMR

Task: CCR xml import

The requirements include: The ability to import CCR CCD into OpenEMR

Process flow attached

Components in OpenEMR side:

- A new screen to upload the CCR xml.

- The xml is parsed and each value is determined .

- While uploading:

  • functions to check for if patient already exists

  • criteria: same SSN or a combination with same DOB, First Name and Last Name.

  • If there is no match found it inserts as a new patient.

  • Otherwise it will show a comparison of existing and new data of the patient, where the user can select which value should be retained/updated to the EMR.

- The screen will show all the data provided in the CCR document.

- Options for demographics will be to retain/update all information except SSN, DOB, First Name and Last Name(or whatever the critera defined above to check for unique patient).

- All other information, other than demographics, the options will be update/insert/ignore.

- All facilities, labs, etc. in the CCR document will be added to the address book.

Coding:

- Screen to upload

- Function to parse the xml

- Function to insert it into audit tables

- Function to check duplicate record

- Function to perform the action according to user selection

- Function to insert address book entry

There are two concerns that need to be addressed:

- The address book entries will be populated with the records imported from each CCR, we have to identify it in some way and exclude from our listing.

- The lab results in the current system is shown as orders and its result. However from the CCR we won't get enough information for creating the order. Further if we insert such an order as a new one we have to exclude it from the list of tests available in the EMR.Basically the problem is that the values we import from the CCR will be shown in the dropdown lists in the EMR, so we have to exclude and identify them in a way that they can be identified as items imported from CCR document.

Time Estimate:

      Upload screen - 4

      Parsing and getting information- 16

      Insert to audit tables - 8

      Duplicate checking - 8

      Approval screen - 20

      Insert/update - 16

      Insert to address book - 8

      Total = 80