

Team 3 Assignment: Open EMR Certification Gap Analysis

Enable a user to electronically and dynamically select, sort, access, and create patient lists by:

1) date

You can select by a range of visit dates. There is no option to sort by any other dates (like DOB). But within that range, the visit dates are unsorted. Functionality should be added to allow for the sorting of dates from newest to oldest and from oldest to newest. Also, functionality should be added so that reports could be generated based on, for example, patients seen in the last 6 months. In other words, not based on dates but a time range.

The report function has problems handling dates. It will accept 01/01/2012, but it switches it to 2012-01-01. If you try to enter 01.01.2012 it changes your entry to try to force it into the data format that it prefers, but doesn't complain or give an error. OpenEMR should accept the date the way the user enters it rather than try to force a particular date format on the user. This is a usability feature, however, and not important for certifying for Meaningful Use.

The export to CSV works very well initially, but after you click the 'Export to CSV' button once, from then on, the button become repurposed to export CSV files instead of display to the screen.

The screenshot shows the OpenEMR web application. On the left is a vertical sidebar menu with icons for Check Lab Results, Patient/Client, Fees, Procedures, Administration, Reports, Clients, List, Clinical, Referrals, Immunization Registry, Clinic, Visits, Financial, Procedures, Insurance, Blank Forms, Services, and Miscellaneous. The 'Clients' icon is highlighted. The main content area has a title 'Report - Patient List'. A search bar at the top includes fields for 'Provider: All', 'Visits From: 2013-01-15', and 'To: 2013-01-17', with 'Submit', 'Export to CSV', and 'Print' buttons. Below is a table with columns: Last Visit, Patient, ID, Street, City, State, Zip, Home Phone, and Work Phone. The table lists several patients with their details. Below the table is a section titled 'Message and Reminder Center' with a 'Reminders' sub-section and a 'Messages (See All)' section. The 'Messages' section includes buttons for 'Show All', 'Show Active', and 'Show Inactive', and a search/filter table with columns: From, Patient, Type, Date, and Status. Buttons for 'Add New' and 'Delete' are also present. The bottom of the screen shows the Windows taskbar with the 'start' button, the OpenEMR application icon, and system icons like network and battery status.

2) time

Currently, OpenEMR does not have the ability to record the time a visit occurred, so no sorting or patient lists can occur based on time.

And based on each one and at least one combination of the following data:

1) Problems

In OpenEMR you can search by a diagnosis code, but not a range of codes. This is not actually a specification for MU stage 2, but it would be very useful since ICD9 codes are so granular and specific that only a range of ICD9 codes would likely return an inclusive patient list.{DC}

2) Medications

I added Lipitor for a patient and tried to create a report for all patients with Lipitor. I was not able to generate a list of any patient's. This might be due to the fact that Lipitor was entered as free text, not structured data. Possibly, if the RxNorm list was added into HITNY OpenEMR, a list of patients by medication could be created.

3) Medication allergies

Creating lists of medication allergies works the same way as diagnoses.

4) Demographics

Strangely, this report is very different in look, feel and operation from the previous report. Also, it should be included under its own tab instead of being located under "Clients" and then "Clinical". The (very useful) "Export to CSV" button is gone. The "Submit" button puts out a report in which it is necessary to click an arrow to see each patient's information. In other words, the report makes it impossible to scan the page to find the important information. All the selection options work well. The date selection is the same as the Report - Patient List. Also, somehow, you can't leave the dates blank. If you delete them, they default to 01/01/2013 and 11/12/2013 on the display even though they are ignored in the search criteria. The question is; how can you tell if dates in the "from" and "to" boxes will count towards the search? This report has several "sort" options, none of which work. The list of names stays stubbornly unsorted no matter what you do. Another problem is that the report doesn't necessarily show the information being searched for. So for instance, if you were able to search by a range of ages, you would not be able to see from the report which patients had which age.{DC}

5) Laboratory tests and values/results

The ability to add lab tests, values and results for a patient must be created before any patient lists can be generated.

6) Ambulatory setting only. Patient communication preferences.

Patient preferred language can be added, but not searched for. Also, email/phone, etc. preferences are not being captured.

7) (Ambulatory Setting Only) One combination of two of the above categories

I was able to sort on age range and sex but I a lot of work has to be done on usability before it will be feasible to sort effectively on any two of the above items.