OPD Module

Motivation

The OPD (Outpatient Department) is the most important part of a hospital (clinic) which serves a dominant number of patients (could be 80-90% of patients visiting the hospital).

The current OpenMRS design and requirement of OPD

The models of encounter and observation can best served the requirement of OPD. However, the current way of adding observation is pretty general. This OPD module is to provide a "customized" user interface for doctors/physicians to enter observations in a more straight forward and friendly way:

- A subset of concepts is provided for particular type of observations: complains, investigation, diagnosis
- Multiple concept selection
- Review and edit OPD encounter

User case

1. Identify a patient by searching
2. Show all the encounters with the let's say OPD encounter type (a new type created for this module). In each encounter, there will be lists of observations which belong to certain groups of concepts.
   
   For example, for complains we need concepts in class ids: 5, 7, 12, 13 (findings, symstom etc). For investigation class id will be 1, and diagnosis, class id is 4.
3. User can select to Edit an encounter or Add new encounter for this patient.
4. In the encounter Add/Edit page, user can select at the same time many concepts, fill/select in values before click Save.

Next step

What are missing now are: 1/a link for doctor to add prescription (e-prescription), could be possible by reuse drug order in openmrs (possibility for integrating with pharmacy which dealing with money and drug stock, inventory)
2/ a link for adding lab/medical service orders. This could be or integrated/separated with billing module where with also the same orders, bill is issued for patient.

Screen shots
### Create observations for this selected patient:

#### mai ngoc nguyen (M, 30)

**Date Created:** Wed Oct 28 15:54:03 ICT 2009  
**Creator:**

#### Complains

- REVIEW OF SYSTEMS, MUSCULOSKELETAL: JOINT PAIN
- REVIEW OF SYSTEMS, GASTROINTESTINAL: DIARRHEA

#### Investigations

<table>
<thead>
<tr>
<th>X-RAY, CHEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEMOGLOBIN: 1000.0</td>
</tr>
<tr>
<td>X-RAY, HAND: ABNORMAL</td>
</tr>
</tbody>
</table>

#### Diagnosis

- SEXUAL ASSAULT: 165
**OPD**

Showing how patient's opd encounters are searched

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Given</th>
<th>Middle</th>
<th>Family Name</th>
<th>Age</th>
<th>Gender</th>
<th>Birthdate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1057-8</td>
<td>mai</td>
<td>ngoc</td>
<td>nguyen</td>
<td>30</td>
<td>M</td>
<td>01/01/1979</td>
</tr>
</tbody>
</table>

**List of encounters for this patient**

- **09-10-2009**
  - 03:00:08.8
  - HEMOGLOBIN:200.0,

- **09-10-2009**
  - 00:40:49.0
  - SEXUAL ASSAULT; HEMOGLOBIN:1000.0, REVIEW OF SYSTEMS,

- **09-04-2008**
  - MUSCULOSKELETAL:JOINT PAIN, X-RAY, HAND:ABNORMAL, REVIEW
  - 04:04:30.0 OF SYSTEMS, GASTROINTESTINAL:DIARRHEA,

Create observations for this selected patient:

nguyen ngoc mai (30, M)