

# Safety Enhanced Design Brief

## Problem List

Problem Lists are a comprehensive record of a patient's health issues and ensure continuity of care between providers.

User challenges with problem lists include keeping problems updated (i.e. adding new, revising current, or removing old) and linking problems with ICD codes for billing and documentation purposes.

Providers use the problem list for three main tasks:

- Understanding the patient's health problems
- Keeping the list up to date and accurate
- Creating links between related documentation (e.g. orders to visit notes or billing).

### 1 Simplify viewing of problem lists

- **Set active problems as the default view**  
but provide easy access to past problems in a list or a timeline format
- **Provide filter and sorting functionality**  
Ex: by specialty, date, bodily system, chronic vs. acute, alphabetical, etc.
- **Provide functionality for customization of sorting**  
Ex: for cardiologists cardiac problems should be first, and orthopedic problems below
- **Provide ability to add uncommon problems via ICD library search and allow the functionality for both keyword and specific code searches**  
Ex: a family practice physician needs to add a problem for a rarely treated hand, foot & mouth disease that doesn't exist on her 'favorites' list

### 2 Simplify tasks for efficient problem list management

- **Allow users to access the patient's chart from the problem list**
- **Allow users to add, update and remove problems throughout their workflow; support different cognitive models (e.g. SOAP note vs. comprehensive listing)**  
Ex: adding a problem during ordering, without losing their place in ordering workflow
- **Consider specialty-specific lists of commonly encountered problems**  
Ex: cardiology, orthopedic, etc.
- **Categorize problems as new, improved, unchanged or deteriorated**
- **Allow providers the ability to add their own comments to problems**
- **Facilitate documentation by:**
  - Automatically populating visit notes with the problem list
  - Suggesting related ICD or billing codes to speed data entry
  - Linking problems to commonly prescribed medications and orders  
Ex: Upper Respiratory Tract Infection linked to Amoxicillin and CBC orders
- Provide links to recommended protocols (e.g. preventative care)

The screenshot displays a medical software interface. At the top, there are three main sections: 'Symptoms', 'Problems', and 'Lab Results'. The 'Symptoms' section lists Angina, Shortness of breath, Palpitations, Dizziness, Headache, and Fatigue. The 'Problems' section lists Congestive Heart Failure, Heart Disease, Coronary Artery Disease, and Hypertension. The 'Lab Results' section shows LDL = 162, HDL = 40, Chol = 280, Trigs = 300, and VLDL = 38, each with a corresponding color-coded bar indicating the result's status relative to a range. Below these sections is a timeline from 13 Jan to 14 Jan, with markers for Flu (13 Jan), Hypertension (13 Jun), and Myocardial Infarction (13 Nov). The bottom section is titled 'Problem List Management' and contains a 'Define Problem' dialog box. This dialog box has a 'Type of Problem' dropdown set to 'Diagnosis of', a 'Custom List' dropdown set to 'Cardiac', and an 'ICD Library...' button. The 'Description' field contains 'coronary artery' and a dropdown menu with options: 'Chronic total occlusion of coronary artery', 'Coronary atherosclerosis due to lipid rich...', and 'Coronary atherosclerosis due to calcified...'. The 'Onset Date' is set to '03/01/2009' and the 'End Date' is empty. The 'Assessment' section has radio buttons for 'New Problem' (selected), 'Improved', 'Unchanged', and 'Deteriorated'. The 'Code' field shows 'ICD-125.82'. There are 'Cancel' and 'Submit' buttons at the bottom right of the dialog box.