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HL7 EHR-System Problem-Oriented Health Record (POHR) Functional Profile, Release 1

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Terminology	Owner/Contact
Current Procedures Terminology (CPT) code set	American Medical Association https://www.ama-assn.org/practice-management/cpt-licensing
SNOMED CT	SNOMED International http://www.snomed.org/snomed-ct/get-snomed-ct or info@ihtsdo.org
Logical Observation Identifiers Names & Codes (LOINC)	Regenstrief Institute
International Classification of Diseases (ICD) codes	World Health Organization (WHO)
NUCC Health Care Provider Taxonomy code set	American Medical Association. Please see www.nucc.org. AMA licensing contact: 312-464-5022 (AMA IP services)

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Functional Profile Components

The Function List includes the following components:

Function ID # (Normative)	This is the unique identifier of a function in the Function List (e.g. CP.1.1) and should be used to uniquely identify the function when referencing functions. The Function ID also serves to identify the section within which the function exists (CP = Care Provision Section) and the hierarchy or relationship between functions (CP.1.1 is a sibling to CP.1.2, parent of CP.1.1.1 and child of CP.1). In many cases the parent is fully expressed by the children.
Function Type (Reference)	Indication of the line item as being a header (H) or function (F) or conformance criteria.
Header/Function Name (Normative)	This is the name of the Function and whilst expected to be unique within the Function List; it is not recommended to be used to identify the function without being accompanied by the Function ID. Example: Manage Medication List
Function Statement (Normative)	This is a brief statement of the purpose of this function. Whist not restricted to the use of structured language that is used in the Conformance Criteria (see below); the Statement should clearly identify the purpose and scope of the function. Example: Create and maintain patient-specific medication lists.
Description (Reference)	This is a more detailed description of the function, including examples if needed. Example: Medication lists are managed over time, whether over the course of a visit or stay, or the lifetime of a patient. All pertinent dates, including medication start, modification, and end dates are stored. The entire medication history for any medication, including alternative supplements and herbal medications, is viewable. Medication lists are not limited to medication orders recorded by providers, but may include, for example, pharmacy dispense/supply records, patient-reported medications and additional information such as age specific dosage.
Conformance Criteria (Normative)	Each function in the Function List includes one or more Conformance Criteria. A Conformance Criteria, which exists as normative language in this standard, defines the requirements for conforming to the function. The language used to express a conformance criterion is highly structured with standardized components with set meanings. The structured language used to define conformance clauses in the Function List are defined in the Glossary (Chapter 4).
Reference (Reference)	Reference to the Functional Model or Functional Profile the current Functional Profile was developed against.
Change Indicator	The change indicator shows the change from previous versions. This will be valued as follows: C - Changed D - Deleted N - New NC - No Change DEP - Deprecated
Priority	The priority for the implementation of the item. This will be valued as follows: EN - Essential Now EF - Essential Future O - Optional

1. Care Provision Section

Section Overview

The Care Provision Section contains those functions and supporting Conformance Criteria that are required to provide direct care to a specific patient and enable hands-on delivery of healthcare. The functions are general and are not limited to a specific care setting and may be applied as part of an Electronic Health Record supporting healthcare offices, clinics, hospitals and specialty care centers. The functions in this section are organized in general flow of an encounter; however, it is recognized that encounter flow varies considerably in different care settings and scopes of practice. All functions within the Care Provision Section have an identifier starting with “CP”.

Section/Id#: Type:	Header/Function Name Conformance Criteria	Reference	Chg Ind	Priority
CP.1 Header	Manage Clinical History	CP.1	NC	EN
	Statement: Manage the patient's clinical history lists used to present summary or detailed information on patient health history. **Description:** Patient Clinical History lists are used to present succinct "snapshots" of critical health information including patient history; allergy, intolerance and adverse reactions; medications; problems; strengths; immunizations; medical equipment/devices; and patient and family preferences.			
CP.1.4 Function	Manage Problem List	CP.1.4	NC	EN
	Statement: Create and maintain patient-specific problem lists. **Description:** A problem list may include, but is not limited to chronic conditions, diagnoses, or symptoms, injury/poisoning (both intentional and unintentional), adverse effects of medical care (e.g., drugs, surgical), functional limitations, visit or stay-specific conditions, diagnoses, or symptoms. Problem lists are managed over time, whether over the course of a visit or stay or the life of a patient, allowing documentation of historical information and tracking the changing character of problem(s) and their priority. The source (e.g., the provider, the system id, or the patient) of the updates should be documented. All pertinent dates are stored, including date noted or diagnosed, dates of any changes in problem specification or prioritization, and date of resolution. This might include time stamps, where useful and appropriate. The entire problem history for any problem in the list is viewable.			
1. The system SHALL provide the ability to manage, as discrete data, all active problems associated with a patient.		CP.1.4	NC	EN
2. The system SHALL capture, maintain and render a history of all problems associated with a patient.		CP.1.4	NC	EN
3. The system SHALL provide the ability to manage the status of each problem (e.g., active, inactive, resolved).		CP.1.4	NC	EN
4. The system SHALL provide the ability to manage relevant dates including the onset date and date(s) of problem status change (e.g., inactivation or resolution date).		CP.1.4	NC	EN
5. The system SHALL provide the ability to manage information about the chronicity duration (e.g., chronic, acute/self-limiting) of a problem.		CP.1.4	NC	EN
6. The system SHOULD provide the ability to manage information regarding the information source (i.e. informant) of the problem.		CP.1.4	NC	EN
7. The system SHALL conform to function RI.1.1.17 (Deprecate/Retract Record Entries) to enable the inactivation or deprecation of a problem.		CP.1.4	NC	EN
8. The system MAY provide the ability to update an inactive problem in order to re-activate it.		CP.1.4	NC	EN
9. The system SHOULD provide the ability to render the list in a user-defined sort order.		CP.1.4	NC	EN
10. The system SHALL provide the ability to render only active problems.		CP.1.4	NC	EN
11. The system SHOULD provide the ability to link one or more problem(s) in the Problem list to encounters.		CP.1.4	NC	EN
12. The system MAY provide the ability to link one or more problem(s) in the Problem List to medications.		CP.1.4	NC	EN
13. The system MAY provide the ability to link one or more problem(s) in the Problem list to orders.		CP.1.4	NC	EN
14. The system MAY provide the ability to link one or more problem(s) in the Problem list to medical equipment.		CP.1.4	NC	EN
15. The system MAY provide the ability to link one or more problem(s) in the Problem list to prosthetic/ orthotic devices.		CP.1.4	NC	EN
16. The system MAY provide the ability to link one or more problem(s) in the Problem list to notes.		CP.1.4	NC	EN
17. The system SHALL provide the ability to link orders, medical equipment, prosthetic/orthotic devices, and medications to one or more codified problems.		CP.1.4	NC	EN
18. The system SHALL provide the ability to capture free text problems and render them in a manner that distinguishes them from coded problem entries.		CP.1.4	NC	EN
19. The system SHALL tag and render an indicator that interaction checking will not occur against free text problems.		CP.1.4	NC	EN
20. The system SHALL provide the ability to capture a problem into the problem list using standardized coding schemas (e.g., ICD or SNOMED).		CP.1.4	NC	EN

Section/Id#: Type:	Header/Function Name Conformance Criteria	Reference	Chg Ind	Priority
21.	The system SHALL provide the ability to manage free text comments associated with the problem.	CP.1.4	NC	EN
22.	The system MAY provide the ability to manage the severity of a problem using a standards based classification scheme.	CP.1.4	NC	EN
23.	The system SHOULD provide the ability to link actions taken and outcomes with a problem.	CP.1.4	NC	EN
24.	The system MAY provide the ability to manage problems for known genetically based illnesses (e.g., single allele carrier status of a genetic trait or disease) according to scope of practice, organizational policy, and/or jurisdictional law.	CP.1.4	NC	EN
25.	The system MAY provide the ability to manage a known single allele carrier status of a genetic trait or disease according to scope of practice, organizational policy, and/or jurisdictional law, and subject to patient's preferences and consent.	CP.1.4	NC	EN
26.	The system SHOULD provide the ability to manage the linking of problems on the problem list, i.e., creating hierarchies or nestings within the problem list.	CP.1.4	NC	EN
100.	The system SHALL provide the ability to capture, maintain and render problem list entries for SNOMED terms with hierarchy tags (~domains), e.g., disorders, findings, procedures and situations. A hierachy tag is a parenthetical notation at the end of a fully specified name indicating the relevant domain. (More detail is found in the SNOMED CT Glossary at https://confluence.ihtsdotools.org)		N	EN
101.	The system SHALL provide the ability to enter problems directly into the problem list.		N	EN
102.	The system SHALL provide the ability to enter selected billing diagnoses into the problem list.		N	EN
103.	The system SHALL provide the ability to import problems from a separate EHR/HIT system using interoperability functions.		N	EN
104.	The system SHALL provide the ability to determine which user roles (e.g., physician, nurse, pharmacist, medical assistant) are allowed to enter problems on the problem list.		N	EN
105.	The system SHALL provide the ability to determine which user roles (e.g., physician, nurse, pharmacist, medical assistant) are allowed to edit problems on the problem list, including conversion to inactive status, merging of problems (e.g., merging symptoms into a unifying problem), removal of duplicates, and deletion of problems (e.g., designation as entered in error).		N	EN
106.	The system SHOULD provide the ability to enter problems using the current billing diagnosis terminology endorsed by national standards (e.g., ICD-10 in the US, as of 2021).		N	EN
107.	The system SHOULD provide the ability to enter problems using chosen terminologies. (e.g., IMO, Health Language).		N	EN
108.	The system SHALL provide the ability to determine which terminology is used to display problems.		N	EN
109.	The system SHALL display a warning for any new problem list entry that is an exact duplicate of an existing problem.		N	EN
110.	The system SHALL allow entry of a duplicate problem, if justified by inclusion of supporting qualifiers.		N	EN
111.	The system SHOULD display a warning for new problem list entry that has a substantially similar meaning to that of an existing problem.		N	EN
112.	The system SHALL provide the ability to manage problem status as active or inactive.		N	EN
113.	The system SHALL capture new problems as active on entry.		N	EN
114.	The system SHALL capture, maintain, render and exchange the source of the problem when entered.		N	EN
115.	The system SHALL capture the source (author) automatically on entry.		N	EN
116.	The system SHALL capture, maintain, render and exchange the date and time of the last edit of the problem.		N	EN
117.	The system SHALL capture the date/time automatically on entry.		N	EN
118.	The system SHALL provide the ability to capture, maintain and render the problem set relevant to the current inpaitent hospitalization.		N	EN
119.	The system SHOULD provide the ability to capture, maintain and render the evidence for asserting a problem/condition.		N	EN
120.	The system MAY provide ability to capture, maintain and render the goals associated with a the problem.		N	EN
121.	The system MAY provide ability to capture, maintain and render the degree of disabiity caused by the problem.		N	EN
122.	The system SHALL provide the ability to determine and capture priorities for each problem as specified by an individual user.		N	EN
123.	The system SHALL provide the ability to display problems in the priority sort order specified by an individual user.		N	EN
124.	The system SHALL provide the ability to display problems that are substantially similar, allowing them to be merged as appropriate.		N	EN
125.	The system SHALL provide the ability to display problems that have been merged, allowing them to be unmerged as appropriate.		N	EN
126.	The system SHALL provide the ability to determine and capture a threshold at which certain acute problems should be considered for removal from the probem list.		N	EN

Section/Id#: Type:	Header/Function Name Conformance Criteria	Reference	Chg Ind	Priority
127.	The system SHALL provide the ability to display the acute problems that exceed the given threshold for longevity on the list and provide tools for inactivation of those problems.		N	EN
128.	The system SHALL provide the ability to determine and capture a threshold at which encounter/ billing diagnoses will be designated a recurrent acute or chronic problem.		N	EN
129.	The system SHALL provide the ability to display acute encounter/billing diagnoses that have occurred multiple times and meet a threshold for consideration to be designated as a recurrent acute or chronic problem.		N	EN
130.	The system SHALL provide the ability to link problems, including the abiliy to designate one problem as the root problem and link other problems as manifestations of that root problem.		N	EN
131.	The system SHALL provide the ability to unlink previously linked problems.		N	EN
132.	The system SHALL provided specific CDS tools for reconcilation of problems at hospital discharge.		N	EN
133.	The system SHALL provide the ability to display the problem list sorted by organ system, by problem priority or by date of last problem edit.		N	EN
134.	IF a prefered sort order has not been selected, THEN the system SHALL display the problem list by organ system.		N	EN
135.	The system SHALL provide the ability to determine and capture the association of human organ system(s) with specific speciality(ies).		N	EN
136.	IF the individual user has a specific specialty(ies), THEN the system SHALL provide the ability to display problems sorted and prioritized by the organ system(s) associated with the specialty(ies).		N	EN
137.	The system SHALL provide the ability to display only active problems or all problems (active and inactive) as selected by the individual user. The system default is active problems only.		N	EN
138.	The system SHALL provide the ability to display problems deemed relevant to the current inpatient hospitalization.		N	EN
139.	The system SHALL provide the ability to manage a unified problem list concurrent across multiple care settings (e.g., inpatient and outpatient).		N	EN