Request #1: “General patient observation”

From CDC for v2 Implementation Guide for Immunization messaging

3 terms in question:

- General patient observation
- Effective date of general patient observation
- Expiration date of general patient observation

Background information from submitter

When forecasting immunizations for a given patient, there are observations about the patient…which influence the forecast recommendations for future doses of vaccine). These observations can be a wide variety of things. For example:

- Occupational: veterinarians are recommended to get vaccinated against Rabies
- Behavioral: smokers are recommended to get a pneumococcal vaccine
- Medical: asplenic patients are recommended for a number of vaccines

We are looking for a way to report all of the different types of conditions in the simplest way possible because typically it doesn't matter what "category" (occupational, medical, etc) the observation is. Thus we requested the "general observation" LOINC code.

To complicate things, these "general observations" about the patient can become "indications" or "contraindications" when you're evaluating the patient against a specific target disease. The examples above are all "indications" to vaccine, but something like "allergy to latex" becomes a contraindication to some vaccines. As you might guess, some observations can be an indication to receive one type of vaccine but a contraindication to receive a different type of vaccine (e.g. pregnancy is an indication for pertussis but a contraindication for measles/mumps/rubella).

There are LOINC codes already in existence for Indication for Immunization (59785-6) and Vaccine Contraindication (30946-8) along with "effective" and "expiration" date LOINC codes for each (for a total of 6 existing LOINC codes). So we can use these codes to report the intersection of the observation and the target disease (e.g. being a veterinarian is an indication for rabies) but sometimes we just want to report the fact that the patient is a veterinarian and not link that observation to a specific target disease.

The HL7 version 2 OBX segment which we use to exchange observations/indications/contraindications does contain a field
for "date/time of the observation" which is defined as the "physiologically relevant date-time" but it doesn't really equate (in my mind) to the effective date and there really isn’t anything that I know of for an expiration date.

Regenstrief LOINC Team Observations (ha ha) / Comments

The concept of “General Patient Observation” is too vague to be useful. Although potentially helpful in this context, it also has huge potential to be too broadly used for representing all sorts of information.

We view the intention of that term to be consistent with the meaning of the FHIR Condition Resource:

This resource is used to record detailed information about a condition, problem, diagnosis, or other event, situation, issue, or clinical concept that has risen to a level of concern. The condition could be a point in time diagnosis in context of an encounter, it could be an item on the practitioner's Problem List, or it could be a concern that doesn’t exist on the practitioner's Problem List. Often times, a condition is about a clinician's assessment and assertion of a particular aspect of a patient's state of health. It can be used to record information about a disease/illness identified from application of clinical reasoning over the pathologic and pathophysiologic findings (diagnosis), or identification of health issues/situations that a practitioner considers harmful, potentially harmful and may be investigated and managed (problem), or other health issue/situation that may require ongoing monitoring and/or management (health issue/concern). The condition resource may be used to record a certain health state of a patient which does not normally present a negative outcome, e.g. pregnancy. The condition resource may be used to record a condition following a procedure, such as the condition of Amputee-BKA following an amputation procedure.

The current Condition structures in FHIR have attributes for onset/resolution times, but there isn’t an equivalent in an OBX field. CDA implementation guides for “Health Condition” have done something similar, using an effectiveTime and a statusCode, but it wasn’t clear to us if there was a time associated with a status change to “completed” in CDA.

We agree that using the OBX "physiologically relevant date-time" is a bit of a stretch, particularly if the condition was patient reported. In LOINC, we have several different onset date terms, and one term 11368-8 Illness or injury onset date and time.

Proposal

We recommend that the submitter use existing term 75323-6 Condition for their “General Patient Observation” purpose.

We recommend that the submitter use existing term 85585-8 Date of condition onset for their “Effective date of condition”.

We recommend creating a new term to represent the “Expiration date of condition” purpose but recommend modeling it based on the FHIR Condition Resource, which is labeled Condition Abatement Date/Time with this note:

The date or estimated date that the condition resolved or went into remission. This is called "abatement" because of the many overloaded connotations associated with "remission" or "resolution" - Conditions are never really resolved, but they can abate.

Committee Decision
Request #2: “Report no events” section and observation codes

From CDC to be used across National Healthcare Safety Network (NHSN) tracking modules.

Background information from submitter

The observation “is intended to be used as a generic (reusable) concept / question within the 'Report no events Section' across NHSN modules and will be further specified using module-specific answers (value sets) created in our NHSN Local Code System.”

Each module has specific sections to report details about various events, but if there were no events, then the “Report no events” observation is used in the “Report no events” section.
Regenstrief LOINC Content team concerns/questions:

A more optimal modeling of this data could use the same term to count “0” and the number of events of a particular type. For example

Positive blood culture reportable events: Num: Rpt period: {^patient/facility}: Qn
An alternative where the event type(s) are defined elsewhere could be handled more generically as:

Reportable events:Num:Rpt period:{^patient/facility}:Qn

If a positive assertion of the absence of events is absolutely required, we could consider a term like “Events that did not occur” or “Reportable events with zero occurrences” with timing of “Report period”. The proposed phrase “Report no events” is understood in the NHSN community, but likely will not be understood outside of that community.

RI Team Note to Self

The reason for needing the section term is not clear. It seems like the fact that an event did not occur would make sense within the summary section for that event. Need to follow-up with submitter to see if that would be acceptable.

Committee Decision
Request #3: “Significance of updated pathology report”

From Gunter Haroske, M.D., PhD, Federal Association of German Pathologists, for CDA Pathology Structured Reporting

Background information from submitter:

Submitted term:
Pathreport.ClinicalImpact

Description: Pathology reports may be updated, thus giving additional information or being corrected if errors have been detected. The clinical impact of an updated pathology report has to be described to the content consumer of a pathology report as to give him an alert for his further diagnostic or therapeutical decisions.

Example answers:

significant, not significant, highly significant, moderately significant, most significant, etc.

Clinical Impact entry is contained within the CDA Update Information Organizer (see ArtDecor).

Example xml:

<!-- Update information organizer (updates in Sections "Microscopic Observation" and "Diagnostic Conclusion" -->
<entry>

<organizer classCode="BATTERY" moodCode="EVN">
    <templateId root="1.3.6.1.4.1.19376.1.3.10.4.5"/>
    <id root="1.3.6.1.4.1.19376.1.8.9.1" extension="A7102400008_UpdateInformation"/>
    <statusCode code="completed"/>
    <effectiveTime>
        <low value="2010010511525"/>
    </effectiveTime>
    <reference typeCode="RPLC">
        <externalAct classCode="ACT" moodCode="EVN">
            <id root="1.3.6.1.4.1.19376.1.8.1.2.4" extension="MicroscopicObservation"/>
        </externalAct>
    </reference>
    <reference typeCode="RPLC">
        <externalAct classCode="ACT" moodCode="EVN">
            <id root="1.3.6.1.4.1.19376.1.8.1.2.5" extension="DiagnosticConclusion"/>
        </externalAct>
    </reference>
    <reference typeCode="RPLC">
        <externalAct classCode="ACT" moodCode="EVN">
            <id root="1.3.6.1.4.1.19376.1.8.1.2.6" extension="ProcedureSteps"/>
        </externalAct>
    </reference>

    <!-- Clinical impact of the update -->
    <component typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
            <code code="TBD" codeSystem="2.16.840.1.113883.6.1" displayName="Clinical impact"/>
            <value xsi:type="CD" codeSystem="2.16.840.1.113883.6.96" display="Significant (qualifier value)"/>
        </observation>
    </component>

    </organizer>
</entry>

LOINC Content team concerns/questions:

Should we create a LOINC code for “Clinical Impact” of an updated pathology report?
If so, should the term be specific to pathology?

Proposal
Create a more generic term:

Clinical significance of updated report  Find Pt  ^Patient  Ord

Example answers:

Not significant, Significant, Moderately significant, Highly significant

Alt proposed Component names:
Clinical impact of updated report
Clinical significance of updated pathology report (seems too specific)

Proposed term description:

Information in patient reports, such as pathology reports, may be updated to provide additional information or a correction if errors have been identified. The clinical impact (e.g. significant, not significant) of an updated report may be reported to the receiver to alert for further diagnostic or therapeutic decisions.

Committee Decision