A Study of Archetype Development Processes

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What is an archetype?

The archetype is a formal definition of semantic relationships between concepts. These relationships are defined as a set of constraints within an underlying reference model based on clinical knowledge.
Comparison between main classes of ISO13606 and OpenEHR RM
Apgar Score Archetype

(source: OpenEHR.org)
Archetype Lifecycle

- Draft archetype
- Team Review archetype
- Published archetype
- Obsolete archetype
Apgar Score Archetype

- Description
- Protocol
- Data
- Events

Original Author
Details (en) modified
Use modified
Details (en) Purpose modified
Details (en) Misuse deleted
Details (en) Keywords modified
Details (en-us) Language deleted
Details Other Contributors added
Other Details References modified

Record the Apgar index or assessment score as a simple, recognizable method to reflect the state of the newborn infant immediately after birth. The root time of the event series is always born.

Only partially completing the score and adding less than five values to give the total Apgar newborn, index, score. With infarct, neonatal, assessment.

References modified


Policies

Local Database

Clinical Knowledge

Local Database

Hospital Universitario Virgen del Rocío
Methodology

Analysis the development from January 2008 to January of 2010
- Why are there so few published archetypes?
- How the organisational settings impact on the archetype development process?
Selection Criteria

**First selection criterion based on the archetype status**
Team reviewed and Published most representative archetypes

**Second selection criterion for key archetypes**
Archetypes have been selected from the *Poll - Top 10 archetypes for use in an Emergency* with more than 5% of votes where analysed

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**Draft**
- Medication
- Diagnosis
- Vital Signs
- Alert
- Laboratory test
- Procedure instruction
- Patient Admission
- Diagnostic report

**Team Review**
- Pulse Oximetry
- TNM - Lung Cancer
- postal Address
- Adverse Reaction
- Clinical Synopsis
- Problem
- MF - Prostate Cancer
- MF - Melanoma of skin

**Published**
- Apgar Score
- Blood pressure
- Body mass index
- Body Temperature
- Body Weight
- Height/Length
- Respiration
Only 2 archetype editors in charge of a large number of archetypes. The small number of archetype editors helps to satisfy the OpenEHR governance. Likewise it also results in a small number of rejected archetypes (less than 3%).
The number of review teams is also limited with a large number of orphan archetypes.

<table>
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<tr>
<th>Team</th>
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Long periods without modifications for most of the draft archetypes analysed.

Published archetypes have the highest number of modifications than team review and draft archetypes. Also, the average number of days between modifications is smaller than the others.
This study highlights the importance of organisational setting within ADP.

Since the study was performed the number of user has increased but there number of published archetypes is still the same

- Need more archetype editors,
- Greater commitment from the community:
  - Donations from other repositories
  - Meaningful participation in archetype development
Thank you for your kind attention