



**OHDSI**  
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

オデッセイ  
ジャパン

# Toward Vocabulary Standardization in Japan

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## Two Step Approach

(STEP 1)  
Mapping  
from Hospital EMR house codes  
to the Japan standards



(STEP 2)  
Mapping  
from the Japan standards  
to the OMOP Concepts



## STEP 1

# Hospital EMR house codes to JP standards

- Individual hospital based development is needed because each hospital has its own codes.
- Various efforts are being made about this in Japan, not only by OHDSI. For example, HL7 FHIR. Harmonize with other activities.
- OHDSI Japan is promoting methods that are easy to implement in most of hospitals. That is to use clamis codes. All hospitals have support for claims codes. (Despite that, it is not immediately implementable in many hospitals. That is one of strange thing about Japanese medical IT.)



## STEP 2

# From the Japan standards to the OMOP Concepts

- One mapping table works for whole Japan.
- Not required outside of OMOP/OHDSI.
- We focus on STEP2.



# Toward Vocabulary Standardization in Japan

- STEP2 detail: Conditions

Approach:

Standard Japanese disease names/codes have ICD10.  
So mapping to concept ID via ICD10 can be done by machine.

Status:

Done at first glance, but rough areas are noticeable because it is ICD10 granularity.

→ When actual research runs, refine needed part by hand.



# Toward Vocabulary Standardization in Japan

- STEP2 detail: Drugs

Approach:

Ehime University has done essential part of mapping.  
(map to RxNorm)

Status:

Waiting for presentation/paper as an academic research.

→Then apply it to the OHDSI Vocab.



# Toward Vocabulary Standardization in Japan

## ● STEP2 detail: Measurements

Approach: Take a method that does not require Japanese standards.

- For the limited number of exam items selected, choose standard concepts from Lab Test class, and pick up the corresponding house codes.
- Japanese standard codes are treated as the common house codes. Hospitals having Japanese standard codes do not need to pick up by themselves.
- Unification of units should be included in the mapping process.

Status: Limited items and their standard concept IDs have been selected (draft version). Picking up corresponding Japanese standard codes has done. Still untouched: units issue.