OHDSI Japan
established in Nov 2019!

1st Meeting
June 20th ,2019

2nd Meeting
Sep 5th - 6th ,2019

Mini-meet #1
Oct 29, 2019

3rd Meeting
Nov 19th ,2019

Mini-meet #2
Dec 17, 2019

<u>Main attendee affiliations:</u>
University hospitals, Pharmaceutical companies,
IT vendors, Data vendors

OHDSI Japan's Working Group

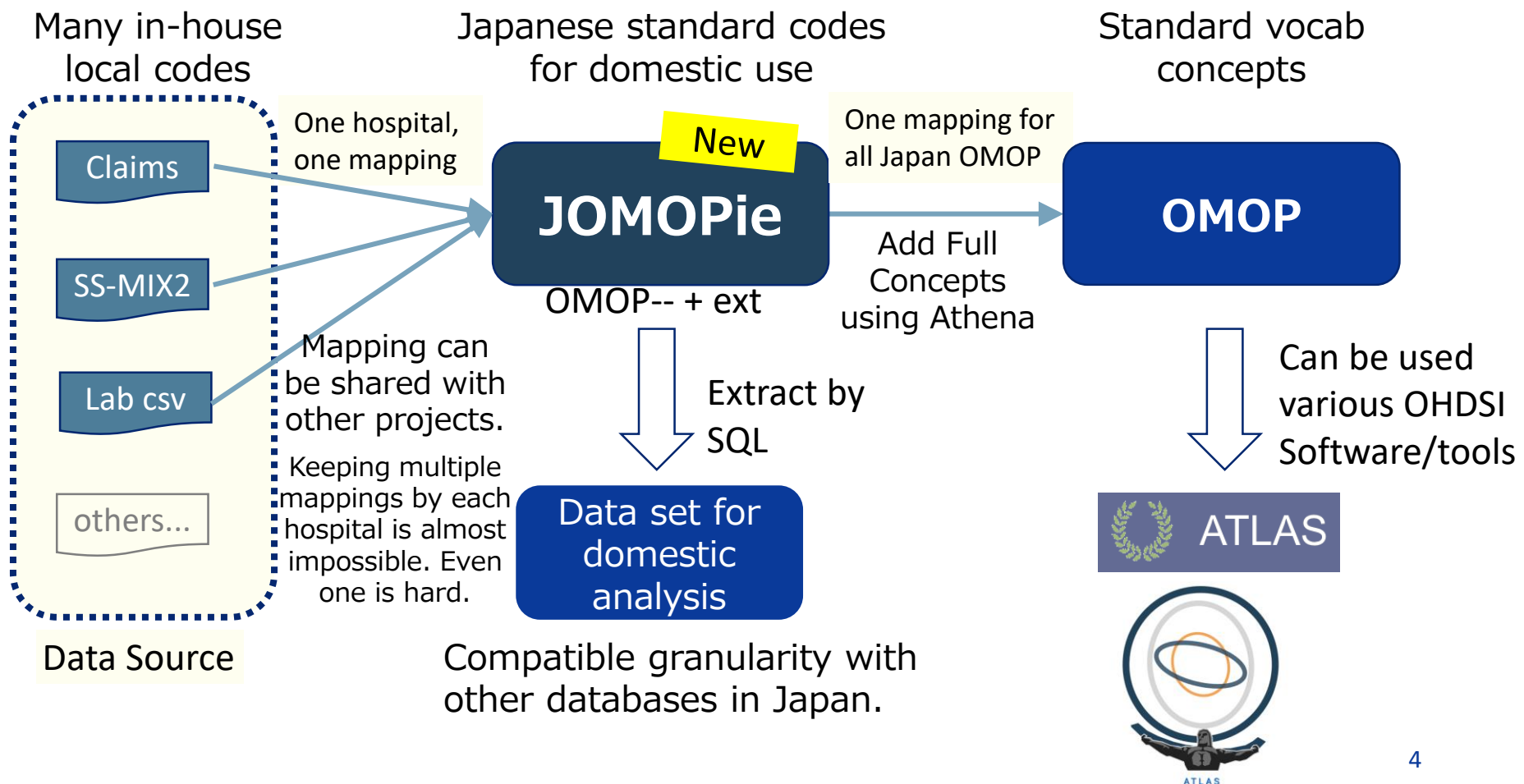| WG #1 | OHDSI Study Group | Learn RWD and OMOP-CDM / OHDSI including reading circle of OHDSI Book. |
WG #2	Vocabulary strategy	Consider how to tackle the vocabulary mapping from source data in Japan.
WG #3	Building CDM	Efforts to build OMOP CDM by real world data holders in Japan.
WG #4	OHDSI Book Translation	Translation activities for the publication of the Japanese version of OHDSI Book.

coming

JOMOPie -> gradual vocab approach

Multi-stage OMOPize method with useful intermediate stage data.

Many in-house local codes

Japanese standard codes for domestic use

Standard vocab concepts

One hospital, one mapping

Claims

SS-MIX2

Lab csv

others...

Data Source

New

JOMOPie

OMOP-- + ext

One mapping for all Japan OMOP

OMOP

Add Full Concepts using Athena

Mapping can be shared with other projects.

Keeping multiple mappings by each hospital is almost impossible. Even one is hard.

Extract by SQL

Data set for domestic analysis

Compatible granularity with other databases in Japan.

Can be used various OHDSI Software/tools

ATLAS

JOMOPie – features

1. Field expansion in clinical data tables for multiple Japanese standard codes, which is not for global use but is for domestic use where compatibility with other Japanese databases is important. Vocab tables are intact.

    ※ *_source_value fields are for original local codes/names.

2. *_concept_id fields whose corresponding extended fields have values can be left as empty (or zero) for domestic use.

    ※ Therefore, SNOMED issues can be set aside. Japan is not SNOMED member.

    ->Data holders in Japan are easy to participate

3. Empty *_concept_id fields can be filled anytime when/where possible. Mapping from representative Japanese standards to OHDSI standards will be in Athena so that everyone can use it.

    ※ In fact, mapping except to SNOMED can be done from the beginning.

    ->Coexist with global OMOP

4. Limitation: Standard tools such as Atlas cannot be used without filling required *_concept_id fields.
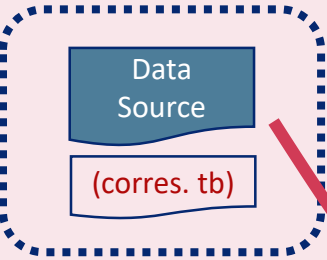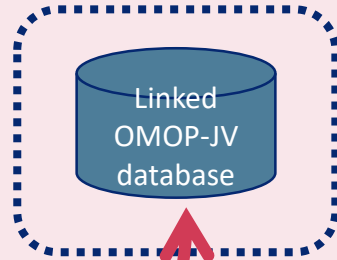
A free ETL tool in Japan

Prof Hiramatsu has developed a tool that can easily perform ETL using Oracle VirtualBox virtual machine.
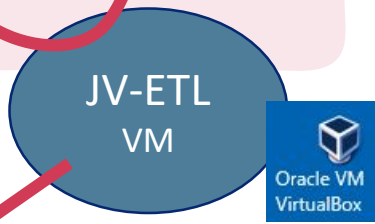
VirtualBox Shared Folder

INfiles

Data Source

(corres. tb)

dbfiles

Linked OMOP-JV database

LOGfiles

logs

Mid files

OUTfiles

Corres. tb

JV-ETL VM

Oracle VM VirtualBox

ETL Operation

`http://localhost:8500/`

browser

連結OMOP-JVへ取り込み（検査CSV）

| レセプト取込 | 検査CSV取込 | IDチ |

レセプト匿名化　検査CSV匿名化　SS-MIX2取込

INFO

取込処理中...

Phase1: （16.71%）

MENU

1. 取込前検査CSV一覧確認
   INfiles/LabCSV 内にある検査CSVファイルの一覧を確認します。

2. 連結OMOP-JVへ取込処理(検査CSV)
   取込処理を実行します。すごく時間がかかります。
   既存の連結OMOP-JV(検査CSV)があるとき一旦全削除されます。

3. 取込結果の確認
   連結OMOP-JV(検査CSV)内の人数やレコード数を表示します。

• 再実行の準備
   取込処理をリセットし、INfiles/LabCSV の検査CSVファイルを入れ、取込処理を行うことができます。

連結OMOP-JV 0.91 by T.Hiramatsu, 2018.

格納データ件数（レセプト）

取り込んだレセプト年月と種類

年月	種類
2018-05	医科

※通常は国保と社保で2個づつある.

OMOP-JVテーブル件数

テーブル名	総件数
person	576
visit_occurrence	622
condition_occurrence	2,314
drug_exposure	3,236
procedure_occurrence	5,685
measurement	0
concept	1,112

person (人数)

年齢層	総数	男性	女性
0-9	283	135	148
10-19	45	25	20
20-29	13	5	8
30-39	51	20	31
40-49	68	32	36
50-59	52	23	29
60-69	48	26	22
70-79	9	3	6
80-89	6	0	6
90-99	1	0	1
100-11	0	0	0
1899以前	0	0	0
2020以降	0	0	0
生年不明	0	0	0
合計	576	269	307

※ JV is the previous version of JOMOPie. We are going to reconstruct the tool.

An Example of usage in Japan
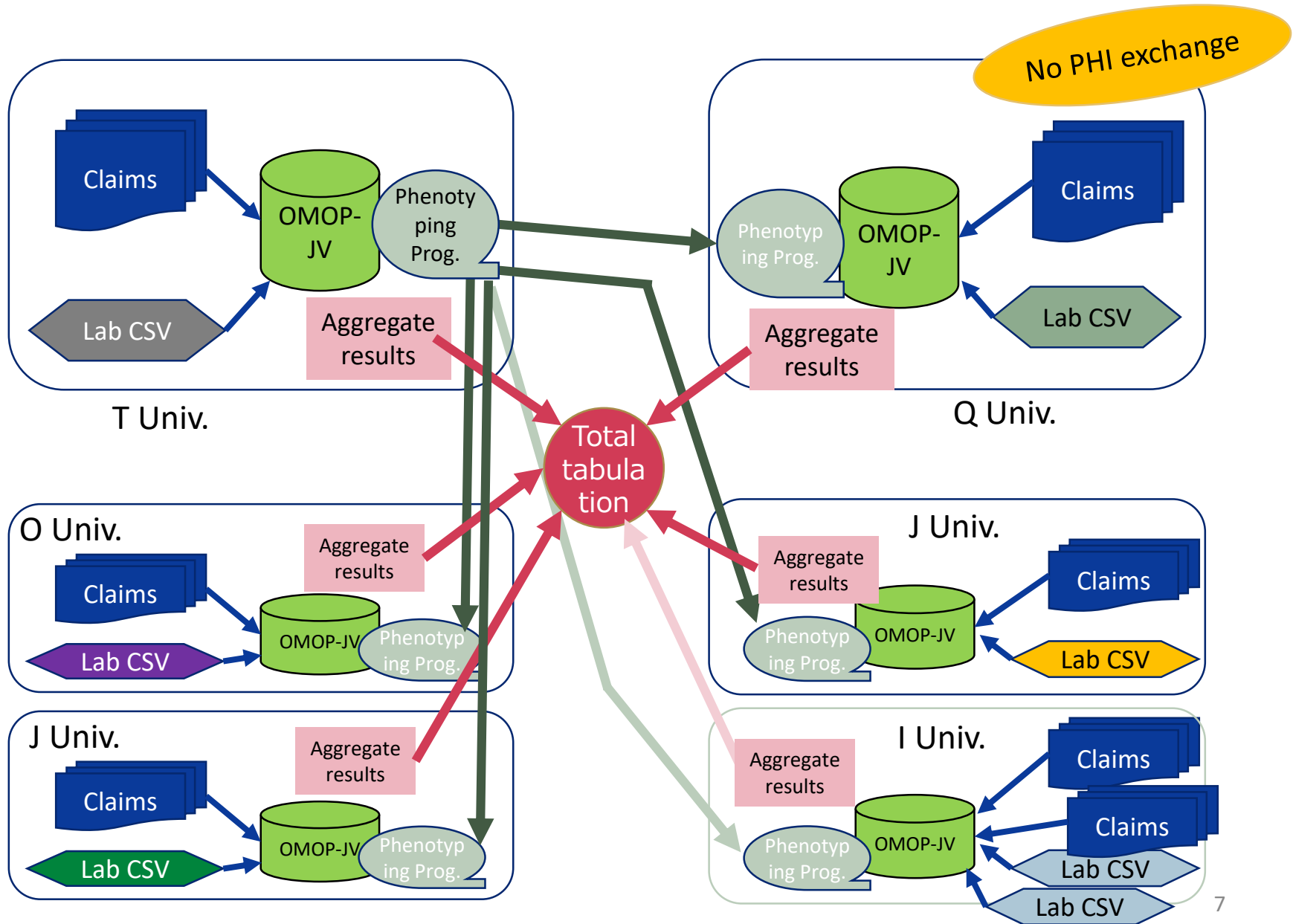
Going forward

As OHDSI JAPAN, we would like to realize the spread of OMOP in Japan by promoting activities such as…

 ➢ Translating books
 ➢ Conducting various seminars
 ➢ Promoting implementation with Real data holders

…etc

We really look forward to make new evidence with global healthcare data together with you!