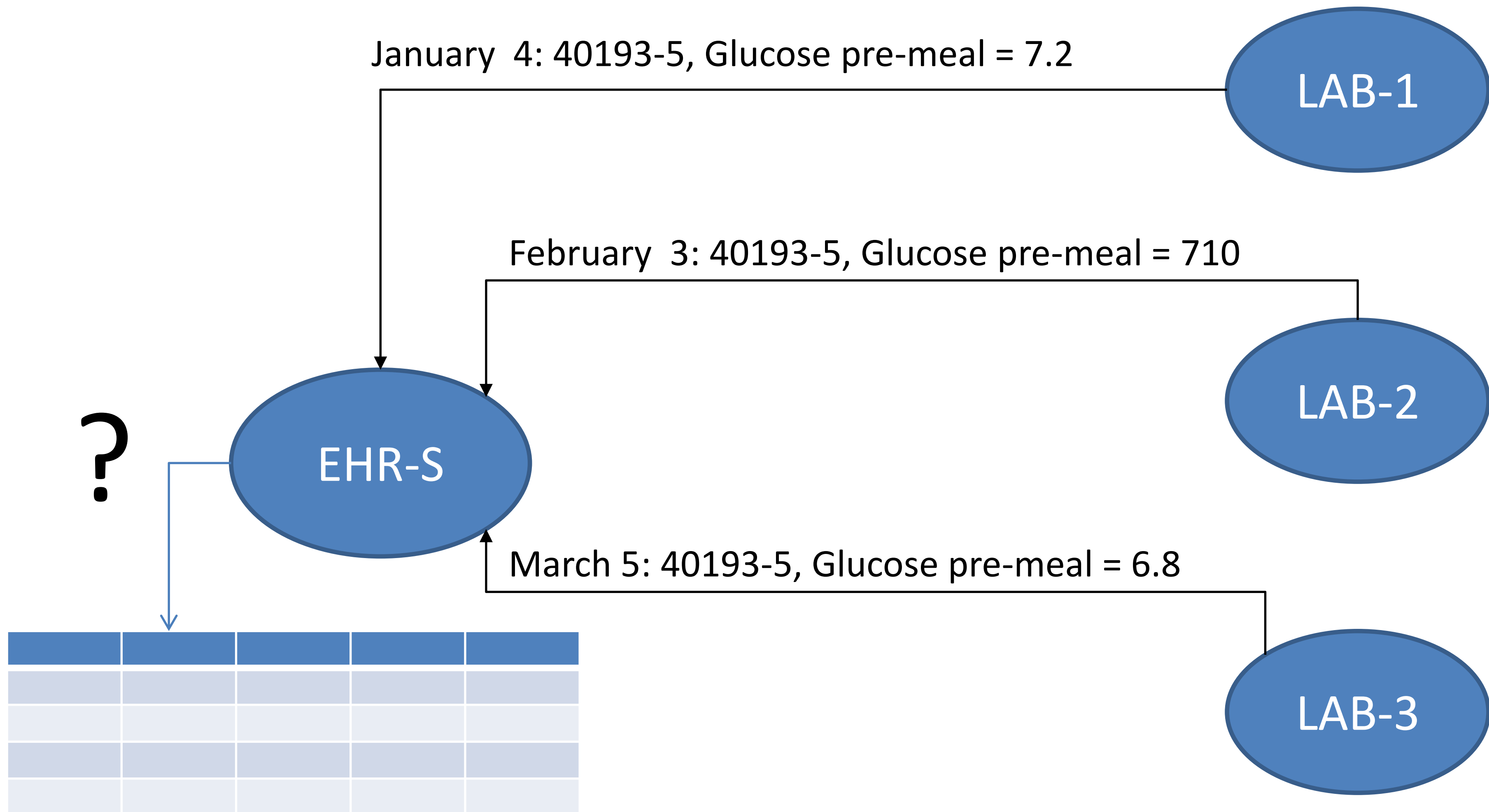
Comparable results for the same patient?



An identical LOINC code is not sufficient to ensure that results can be compared or aggregated into the patient medical record.

To decide if result values (OBX-5) can be compared or aggregated the receiving system has to check:

- Same LOINC code (40193-5 = glucose pre-meal on serum/plasma,) in OBX-3
- Same UCUM unit (e.g.; mmol/L) in OBX-6 (you may use different units with the same LOINC code)
- Close reference ranges in OBX-7 (different reagent, different instrument may imply different range of normality)
- Same observation method if provided in OBX-17
- Same type of specimen (SPM-4 = BLDV, venous blood)

The receiving system SHALL compare two data structures, rather than two values associated with the same LOINC code.

The same is true with <observation> in CDA lab reports

Semantic interoperability is not a magic wand

Same caution applies for any terminology (SNOMED CT, ...) (see Filip's presentation)

Coded vocabularies are a necessary condition for efficient interoperability between systems. But not sufficient: The whole data structure must be interpreted.