OHDSI CDM Survey Sub-Working Group

2026 Objectives & Key Results

Advancing Standards for Survey Data in the OMOP Common Data Model

| 1 Standards & Modeling | 2 Vocabulary | 3 Tools & Resources |

Why This Work Matters

Mission: The OHDSI CDM Survey Sub-Working Group develops standardized frameworks, vocabulary, and tools to enable consistent, interoperable representation of survey and assessment instrument data in the OMOP CDM — reducing duplication of effort and accelerating patient-reported and standardized assessment data in observational health research.

THE CHALLENGE

Inconsistent Mapping

Community groups independently solve the same mapping challenges, producing incompatible representations of identical instruments across sites.

Vocabulary Gaps

Standard OMOP vocabularies (LOINC, SNOMED CT) are incomplete for social, behavioral, and survey-specific content — forcing proliferating custom concepts.

No Shared Tooling

Survey-to-OMOP ETL scripts, mapping tables, and tools are project-specific and not shared, preventing the community from building on each other's work.

In 2026, the subgroup addresses all three through interconnected objectives: standards, vocabulary, and tools.

1 — Establish Best Practices and Standards for Survey Data Modeling in OMOP CDM

Formalize data representation standards to reduce ambiguity in how survey information should be represented in the OMOP CDM.

KR 1.1 — Classification Framework Document

Publish a comprehensive guide formalizing the classification and terminology for Standardized Assessment Instruments (SAIs), clearly distinguishing Psychometrically Validated Instruments (PVIs) from Standardized Data Collection Instruments (SDCIs).

KR 1.2 — Data Representation Guidelines

Develop decision-tree guidance for mapping as Facts, Q/A Pairs, or Triplets — covering instrument components, nesting structures, repeated measures, and a dedicated subsection on PVIs (scores treated analogously to lab results).

KR 1.3 — Metadata Standards Specification

Define standardized conventions for essential metadata: provenance (self-report vs. informant-reported), administration type and mode (paper, electronic, interview), and evaluation interval (baseline, follow-up, repeat administration timing).

2 Accelerate Standardization of High-Impact Survey Vocabulary Content

Address vocabulary gaps that force community groups to create custom concepts, with focus on social/behavioral data and validated instruments.

KR 2.1 **Priority Vocabulary Additions**

Complete standardized vocabulary for ≥3 high-impact content areas (Social & Behavioral Data, validated instruments such as MoCA terms and priority PROMs), spanning both SDCIs and PVIs. Organize by content area — not individual survey — to maximize cross-study reuse.

KR 2.2 **Custom Concept Promotion Process**

Establish and document a formal workflow for reviewing and promoting successfully mapped custom concepts from community implementations into the official OMOP vocabulary, including governance criteria and submission templates.

KR 2.3 **SDO Collaboration Deliverables**

Submit ≥2 formal content requests to LOINC and/or SNOMED CT; organize by content area and prioritize by community use. Invite groups to present instruments so appropriate SDO scope can be determined collaboratively before submission.

3

Build and Disseminate Reusable Community Resources and Implementation Tools

Move the community from project-specific mapping silos toward shared, accessible resources that accelerate adoption and prevent duplication of effort.

KR 3.1 — Instrument Mapping Best Practices Guide

Publish a comprehensive guide addressing complex implementation challenges: handling negation (mapping negative responses), managing copyright and proprietary instrument restrictions, and recommended approaches for common instrument patterns.

KR 3.2 — Centralized Resource Repository

Establish and populate a dedicated OHDSI GitHub repository for sharing ETL scripts, mapping tables, and documented methodologies from community implementations — with initial content from ≥5 contributing organizations.

KR 3.3 — Tool Assessment and Development

Evaluate existing survey mapping tools (Epiharmony, LLM-assisted approaches), publish findings, and prototype or enhance ≥1 tool for survey-to-OMOP mapping and downstream federated analysis. Integrate with existing OHDSI repositories where possible.

Get Involved

The CDM Survey Sub-Working Group welcomes anyone working with survey, assessment, or patient-reported outcome data in OMOP.

Join Our Meetings

Bi-weekly Tuesdays, 10:00 AM ET

Recordings and notes always posted to the wiki

Access Resources

github.com/OHDSI/CdmSurveySubWg/wiki

Meeting notes, use cases, working documents

Contribute a Use Case

forums.ohdsi.org — search "CDM Survey"

Share instruments you have mapped or plan to map

Your use cases and expertise directly shape the standards this group produces.