



Eye Care and Vision Research Workgroup

- **Workgroup purpose:** The purpose of the Eye Care and Vision Research Workgroup is to advance the development and implementation of data standards in ophthalmology, optometry, and the vision sciences, and to support studies using observational ophthalmic data for generating insights to improve health and vision outcomes.
- **Workgroup past accomplishments:**
 - Published a gap analysis of two large, well-known EHR systems for eye care (Epic and Cerner).
 - In addition to standing monthly meetings, organized in-person meetings at major conferences.
 - Organized additional subgroups: retina, glaucoma, pediatrics, uveitis, imaging and ETLs.
 - Collaborated with Verana Health for OMOP transformation of the AAO IRIS Registry.
 - Partnered with the NIH Bridge2AI AI-READI project to map ophthalmic data elements; pilot public release in spring 2024.
 - Submitted retinal condition codes to SNOMED International.
 - Submitted glaucoma examination codes to SNOMED International.
 - Submitted uveitis phenotypes to HowOften.
 - Supported SOS Challenge project examining the risk of kidney injury associated with anti-VEGF.
 - Engaged with LOINC to develop framework for representing visual acuity data.
 - Started working on ETLs of ophthalmic data at several participating sites.



Eye Care and Vision Research Workgroup OKRs

Objective 1: Continue advancing data standards development around specific use cases

Key Result 1: Build upon prior success with developing tonometry-related concepts with the glaucoma subgroup and advance representation of additional concepts relevant for glaucoma research, including gonioscopy-related concepts and visual field concepts. Timeline – end of Q2 2024.

Key Result 2: Submit diabetic retinopathy phenotype-related concepts from the retina subgroup to SNOMED for subsequent incorporation into the CDM. Timeline – end of Q1 2024.

Key Result 3: Contribute to public release of pilot data from the AI-READI Bridge2AI project, which includes ophthalmic data element mapped to standard OMOP concepts. Timeline – end of Q2 2024.

Objective 2: Map common ophthalmic data elements at multiple institutions

Key Result 1: Submit visual acuity codes to LOINC using panel approach. Timeline – end of Q1 2024.

Key Result 2: Trial ETL processes at 3 institutions for visual acuity data. Timeline – end of Q4 2024.

Key Result 3: Trial ETL processes at 3 institutions for IOP data. Timeline – end of Q2 2024.

Objective 3: Develop long-term sustainability to workgroup efforts.

Key Result 1: Organize grant-writing committee to plan proposals. Timeline – end of Q2 2024.

Key Result 2: Submit grant for funding data network. Timeline – end of Q4 2024.