

Eye Care and Vision Research Workgroup

2026 Titan Award Winner

OHDSI Community Call
November 3, 2026

We’re a group of ophthalmologists, optometrists, informaticists, and vision researchers focused on standardization.

OHDSI
EYE CARE AND VISION RESEARCH



History of Eye Care and Vision Research Workgroup

Founded in 2022 by Kerry Ashby and Sally Baxter. Michelle was added soon after with Cindy joining the leadership team in 2025. The workgroup has grown to over 300 members!



Kerry Ashby

Co-founder

2022



Sally Baxter

Co-founder

2022



Michelle Hribar

2022



Cindy Cai

2024

OHDSI
EYE CARE AND VISION RESEARCH

Workgroup structure

Cindy Cai MD, MS



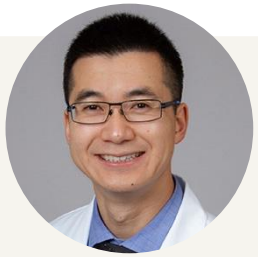
Retina

Network studies on retinal disease and drug exposures

Uveitis

Semaglutide–uveitis study; HSV uveitis phenotype

Brian Toy MD



Sophia Wang MD



Glaucoma

Computable glaucoma phenotype and NEI definition effort

ETL / Visual Acuity

Best recorded VA convention; eye exam ETL rules



Cindy Cai MD, MS & Nitin Parikh

Michelle Hribar PhD & Gayathri Srinivasan OD, MS

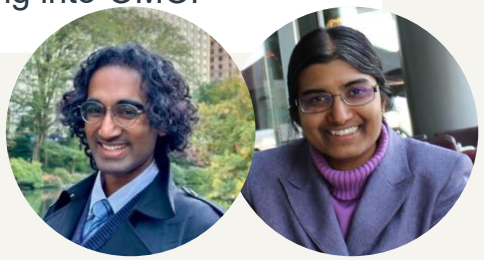


Pediatrics

Visual acuity validation and refraction / strabismus mapping

Imaging

EyeLex, federated learning, thyroid eye disease project, integrate ophthalmic imaging into OMOP



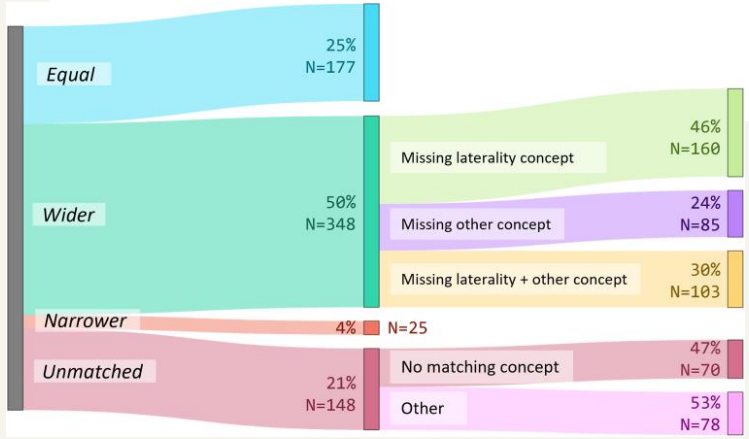
Vishwanath Prathikanti MS & Kaveri Thakoor PhD

OHDSI
EYE CARE AND VISION RESEARCH

Past achievements

Mapping EHR eye exam elements to OMOP

Mapped eye exam data to concepts so they can be included in the OMOP CDM. We found many gaps.



Adding missing concepts to SNOMED and LOINC

Filled vocabulary gaps so eye care findings and measurements can be represented.

Completed network studies

- **SOS Challenge** Comparative risk of kidney failure across three anti-VEGF injections
- **Semaglutide & NAION** Risk of developing NAION while on semaglutide
- **Semaglutide & NVAMD, Semaglutide & Diabetic Retinopathy**

OHDSI
EYE CARE AND VISION RESEARCH

Current network studies

Study	Subgroup	Status
Diabetic Retinopathy Screening	Retina	Manuscript under revision
Glaucoma Prescreening Prediction	Glaucoma	Developing model now; encountering incomplete systemic data for ophthalmology patients
How Often: Ophthalmology	Cross-group	Study package under development
Pediatric Vision Screening	Pediatrics	Stalled; subgroup work continues

PRIMED-AI Grant Submissions

- Model to Clinic
  - Multimodal glaucoma prediction model with 10 sites participating
- Playbook
  - Framework for non-radiology imaging integration
  - Validated in Dentistry

Current Efforts

- **ETL**
  - Release and evaluate the Best Recorded Visual Acuity conventions with data quality checks
  - Expand the ETL subgroup to map the full eye exam
  - Work with new partners (Retinal Consultants of America, National France effort)
- **Common Data Model**
  - Submit missing concepts to LOINC & SNOMED CT
  - Integrate ophthalmic imaging into the OMOP common data model
    - Expand RadLex concepts (EyeLex)
  - Work with other specialties on best ways to include detailed clinical data
- **Dissemination**
  - Complete a standards paper to submit to TVST (due December)
- **Identify new network studies**

Next meeting

DATE

Wednesday, November 11, 2026

TIME

7:00 pm ET / 4:00 pm PT

WHERE

Microsoft Teams