

# OHDSI Eye Care and Vision Research Workgroup

7/11/2024

Theme: Network Studies

Agenda:

[https://github.com/OHDSI/EyeCareVisionWG/blob/main/meetings/07\\_11\\_2024/README.md](https://github.com/OHDSI/EyeCareVisionWG/blob/main/meetings/07_11_2024/README.md)



# Agenda

- Announcements
- Updates
- Collaboration: eye related flowsheet concepts
- Network studies
- Goals
- Engagement opportunities
- Next meeting

# Announcements

- OHDSI Global Symposium Oct. 22 – 24, 2024
  - Hyatt Regency New Brunswick, NJ
  - Registration for conference & hotel block are open
  - <https://www.ohdsi.org/ohdsi2024/>



## 2024 OHDSI Global Symposium

Oct. 22-24 • New Brunswick, N.J. • Hyatt Regency Hotel

# Updates

- Retina
- Glaucoma
- Uveitis
- Pediatrics
- Imaging
- ETL

# Eye related EHR flowsheet concepts

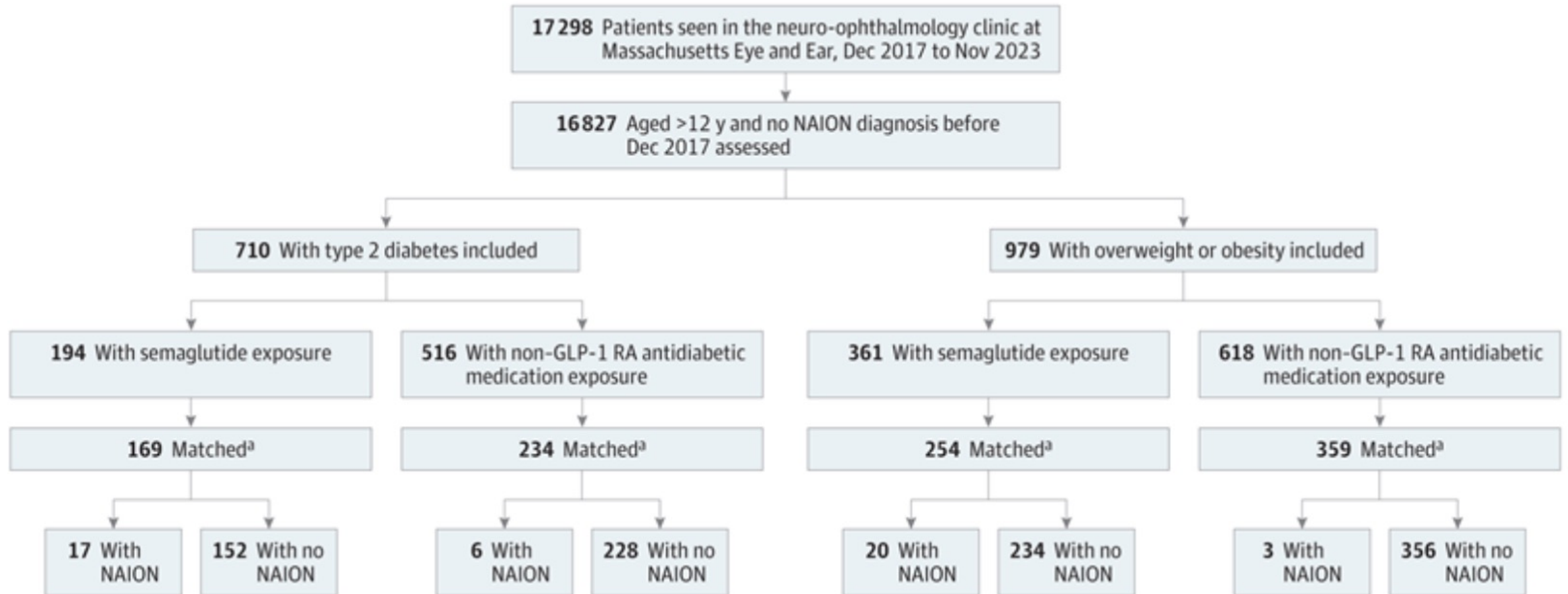
- Andrew Williams from Tufts

# Network Studies: NAION & Semaglutide

- JAMA Ophthalmology article:  
<https://jamanetwork.com/journals/jamaophthalmology/fullarticle/2820255>
  - Study of 17k neuro-ophthalmology patients at Mass Eye and Ear
  - 2 analysis: diabetic patients and obesity patients
  - Cohort matching, found increased incidence of NAION in both analyses
    - Cumulative incidence for T2DM: 8.9% in semaglutide cohort vs. 1.8%
    - Cumulative incidence for obesity: 6.7% in semaglutide cohort vs. 0.8%
- Risk of selection bias—network study would provide clearer answer about incidence of NAION in semaglutide users



# Cohorts



# Phenotypes

- T2DM
  - LEGEND-T2DM phenotype(s)
- Semaglutide exposure
  - New users of GLP-1 receptor antagonists nested in obesity in phenotype library
- Non- GLP1 RA antidiabetic medication exposure
  - Need phenotype?
- Obesity
  - Existing in phenotype library
- NAION
  - No existing phenotype
  - ICD-10 H47.01 Ischemic Optic Neuropathy
  - In JAMA Ophthalmology paper, manual review of each occurrence of H47.01 revealed 40% were not NAION



# Opportunities for Involvement

- Phenotype development
- Network study development
- Data partner to run network study
- Coordinate efforts

# Next Steps

- Group(s) to perform tasks
- Regular meetings
- Coordination with broader OHDSI community
- Set goals and timeline

# Network Study: IOP

- Ideas
  - Incidence of steroid induced ocular hypertension
  - Others?
- Interest in developing? Serving as data partner?
- Timeline?

# Workgroup Goals

- At least one more network study
- Grant submission (Fall/Winter)
- Add VA to OMOP datamarts (distance corrected, best recorded)
- Add missing imaging/VF concepts to standardized terminologies
- Others?

# Opportunities for Involvement

- Visual Acuity testing: visualacuity toolkit
- Visual Acuity consensus building
  - Plan Delphi process
  - Participate as an expert
- ETL testing
  - Distance, corrected VA
  - Best recorded VA
- Grant planning
- Network study
  - NAION risk for semaglutide users
  - One that uses IOP
- Eye related flowsheet concept mapping
- Google form for signing up: <https://forms.gle/YF6o9EUicKQqZXad9>



# Next Meeting

- August 1, 3:00 pm PT/6:00 pm ET
- Moved up one week