Vision and Eye Health Surveillance System Overview and update

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NORC at the University of Chicago

Background of the VEHSS project

- Consensus statements on need for surveillance
  - CDC Surveillance Expert Panel (2012)
  - National Academies of Science, Engineering & Medicine (2016)
- CDC/NORC cooperative agreements
  - 2015-2019
    - "Establish a Vision and Eye Health Surveillance System for the Nation"
  - 2019-2022
    - "Research to Enhance Vision and Eye Health Surveillance"

Major Goals of VEHSS

- Create a single platform to summarize prevalence information from multiple new and important data sources

- Create a framework to identify and organize vision and eye health indicators

- Review and validate vision and eye health indicators

- Generate new prevalence estimates for vision loss and major eye diseases that can identify trends and disparities by demographic group, risk factors, and geographic area

THE VISION AND EYE HEALTH
SURVEILLANCE SYSTEM

A national data system for vision and eye health

- Expert panel

- VEHSS partner group:

1. Identify and summarize data sources

- Reviewed potential data sources
  - 16 National Surveys
  - 6 Administrative claims databases
  - 2 Electronic health records registries
  - 100 Published population based studies

Analyze Summary Prevalence Estimates

Survey Data

American Community Survey (ACS)

Behavioral Risk Factors Surveillance System (BRFSS)

National Health Interview Survey (NHIS)

National Health and Nutrition Examination Survey (NHANES)

National Survey of Children's Health (NSCH).

Claims

Medicare 100% Fee-For-Service RIF

VSP Global managed vision plan insurance

Medicaid MAX

MarketScan private commercial insurance

EHR/Registry

IRIS Registry

2. Define indicators

- Created an indicator categorization schema to organize over 240 specific indicators across 3 topic areas:
    1. Eye health conditions
        - Diagnosis code categories, self-reported diagnoses
    2. Visual function
        - Measured visual acuity, self-assessed vision and functional limitations
    3. Service utilization
   - Eye exams, medical treatments, low vision services, vision correction

3. Analyze VEHSS Data Sources

- Calculated prevalence of indicators from a single source
  - Uniform methodologies across data sources
  - Cross stratification by
    - demographic group (age group, race/ethnicity, sex/gender)
    - Location (national, state, county)
    - Risk factor (diabetes, hypertension, diagnosed eye disease)
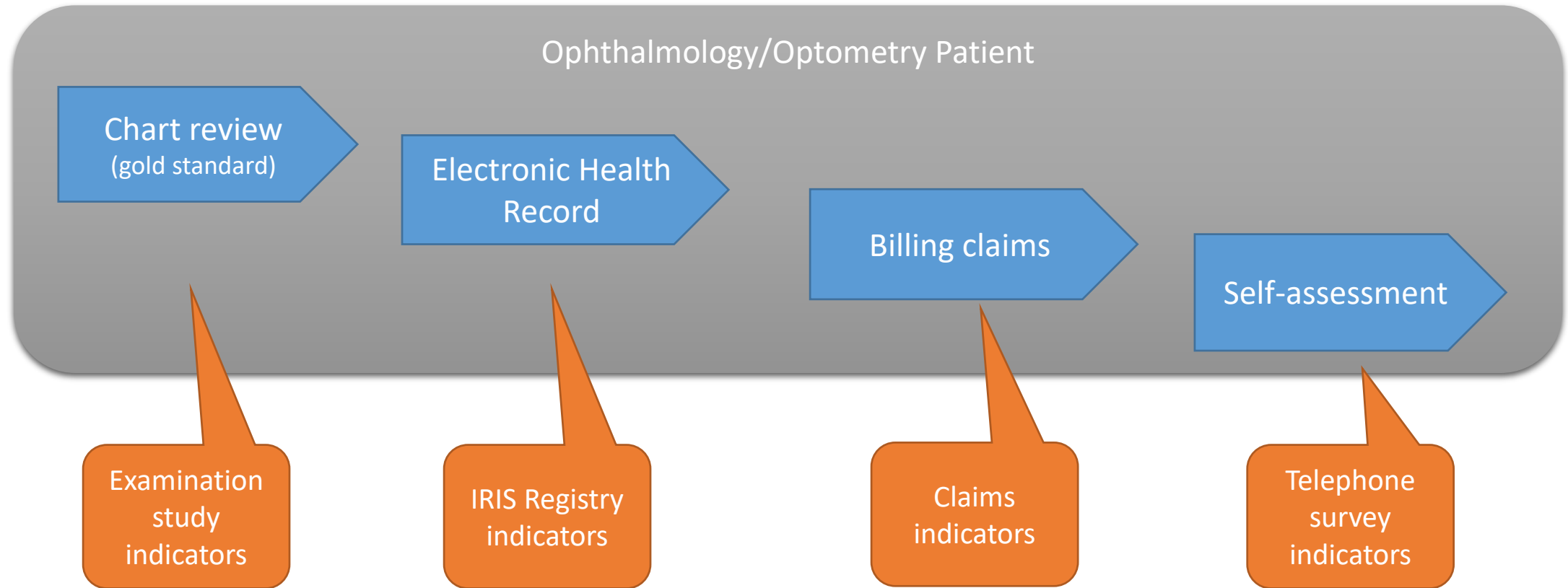- Summary estimates available on VEHSS website

Many data sources give you many answers:
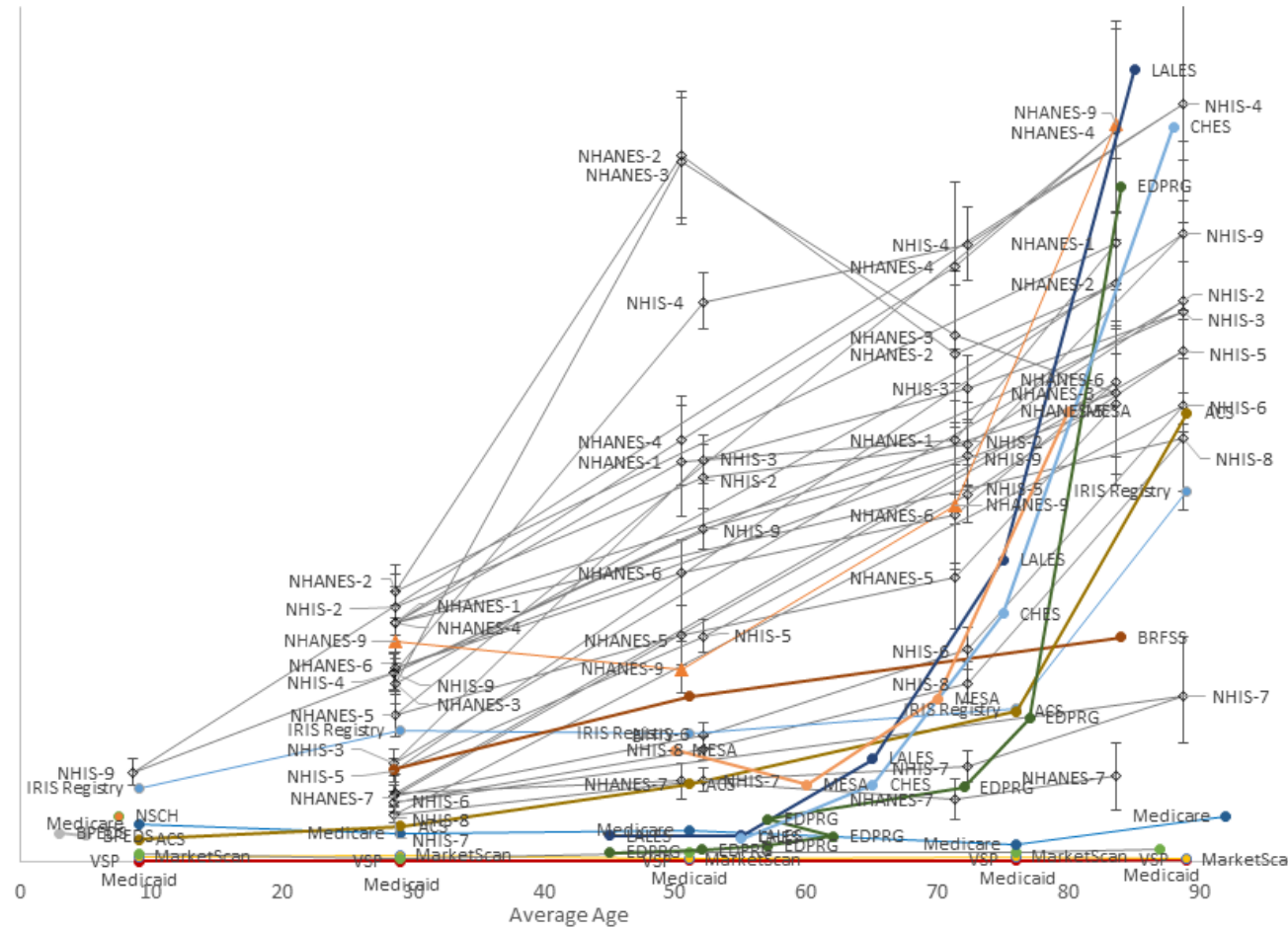
4. Indicator Validation

- Assess concordance between different VEHSS indicators measured at different points of information flow in one patient population
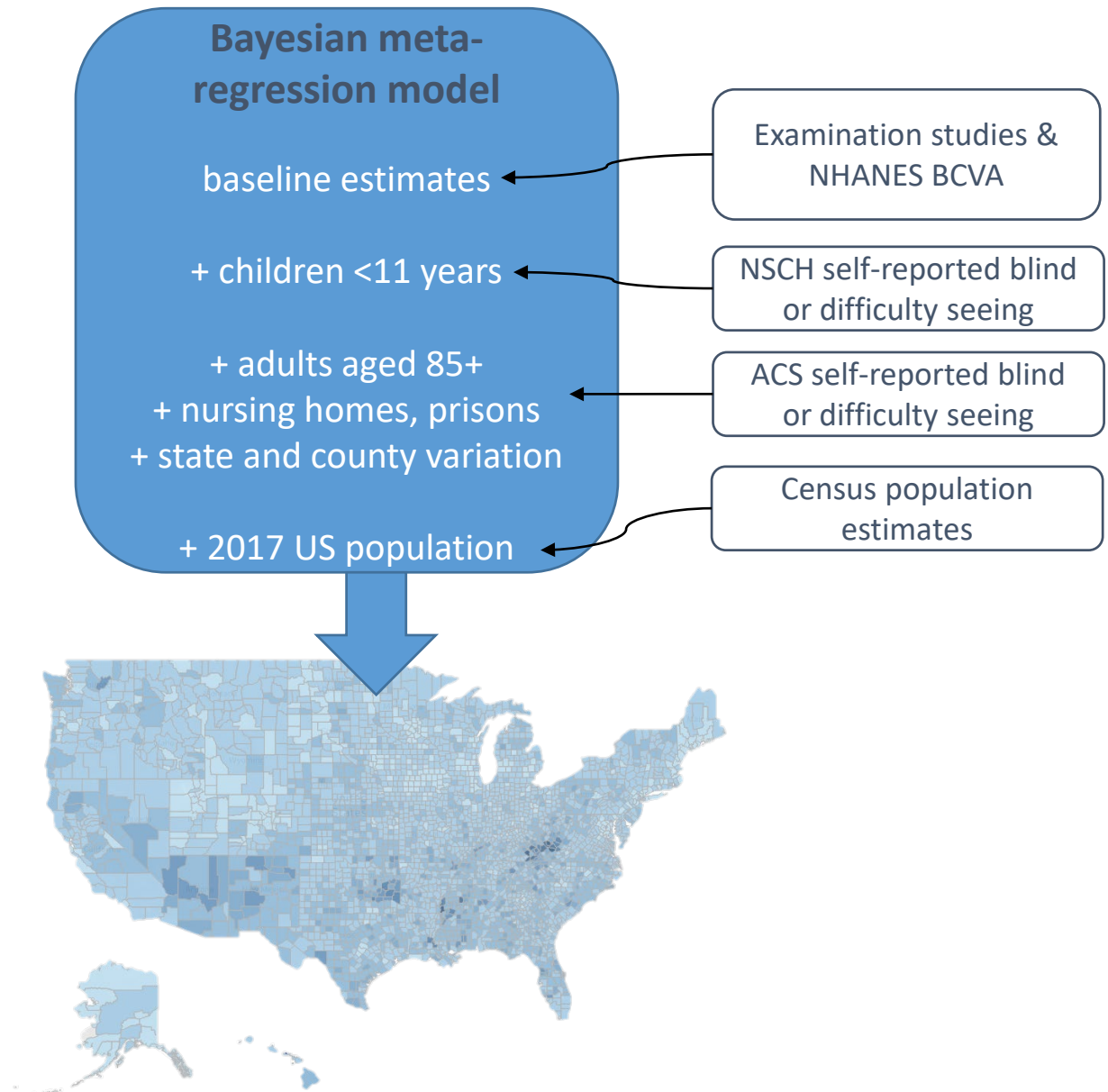

Ophthalmology/Optometry Patient

Chart review (gold standard)

Electronic Health Record

Billing claims

Self-assessment

Examination study indicators

IRIS Registry indicators

Claims indicators

Telephone survey indicators

5. Composite Estimates

- Integrating information from different indicators and data sources to produce more comprehensive estimates

- Visual Acuity Loss released in May 2021

- AMD, diabetic retinopathy and glaucoma in-progress

Composite Estimates model for prevalence of uncorrectable visual acuity loss

- Self-reported blind or difficulty seeing is a biased but highly correlated predictor of BCVA

- Variation in self-reported vision indicators used to predict prevalence of BCVA in unmeasured populations

*BCVA = best corrected visual acuity in better-seeing eye

Bayesian meta-regression model

baseline estimates ← Examination studies & NHANES BCVA

+ children <11 years ← NSCH self-reported blind or difficulty seeing

+ adults aged 85+
+ nursing homes, prisons
+ state and county variation ← ACS self-reported blind or difficulty seeing

+ 2017 US population ← Census population estimates

The Vision And Eye Health Surveillance System

A national data system for vision and eye health

VEHSS Website

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Search

Advanced Search

Vision and Eye Health Surveillance System (VEHSS)

Vision Health Initiative

VISION & EYE HEALTH SURVEILLANCE SYSTEM

Now Available:
Composite Estimates of the Prevalence of Vision Loss and Blindness
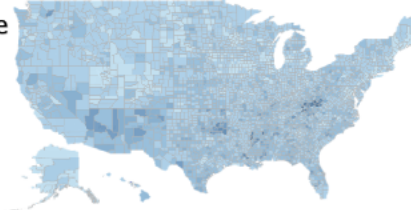
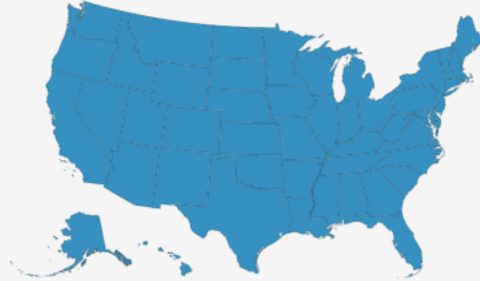VEHSS integrates multiple data sources into composite estimates of the prevalence of vision loss and blindness.

Click for more information and to explore the estimates.

Explore VEHSS Data for One Location

Territories GU MH MP PR VI

Select an Item
Alabama   Go

National Data

Composite Estimates

VEHSS Integrated Prevalence Estimates

Data Sources

Review of Examination-Based Studies
A review of published examination studies on vision loss and major eye disorders

National and State Surveys
Nationally representative survey indicators for vision and eye health

Electronic Health Records Registries
Vision, eye health, and healthcare services data extracted from medical records

Administrative Claims Databases
Medical services and treated eye health conditions

Explore VEHSS Data for All Locations

Type
Composite Estimates

Claims Database

Topic

Category

Indicator

GO

About VEHSS

Project Overview

Reports and Papers

Data Indicators (Case Definitions)

Help

Use the Data Portal

Need to work with the Vision & Eye Health data directly?

Go to the Vision & Eye Health Data Portal to create your own filtered dataset, customize visualizations, download data, and more.

Vision & Eye Health Data Portal

Callout annotations:

Quick access to the Composite Estimates

Location Explorer: shows all data available for a state or national location

Data Documentation

Data Explorer: shows all data available for any location

Indicator Documentation and Help pages

Access the data portal for back-end data access, PUFs and APIs

Data Documentation Pages

- Data overview
- Analytic methods
- Indicators analyzed
- Limitations
- VEHSS Data access
- VEHSS Data Portal PUF access
- PDF reports

VEHSS - The Vision & Eye Health Surveillance System

Indicator Documentation Pages

Overview

Datasets represented

Variables included

Disorders of Optic Nerve and Visual Pathways +

Disorders of Refraction and Accommodation +

Glaucoma

VEHSS includes indicators for Glaucoma from examination-based data including NHANES and published studies, self-reported diagnosis history from NHANES, treated cases from claims databases, and diagnosed cases from IRIS Registry.

Examination-based
Examination-based glaucoma indicates the respondent had graded probably or definite glaucoma in either eye based on retinal imaging.

Examination Surveys

Dataset	Description	Variable name(s)	Years available	Years analyzed	Response options
NHANES	Percentage of people with glaucoma, based on examination	OPASCST2 – Exam status; OPXDGLAU – Glaucoma, right eye; OPXSGLAU – Glaucoma, left eye	2005, 2008	2005, 2008	2 – Probable 3 – Definite

Published Examination Studies

Study	Years	Location	Citation
Eye Diseases Prevalence Research Group (EDPRG)	1985-2000	Multi-national	Friedman DS, Wolfs RC, O'Colmain BE, et al. Prevalence of open-angle glaucoma among adults in the United States. *Arch Ophthalmol.* 2004;122(4):532–538.
Los Angeles Latino Eye Study (LALES)	2000-2003	California	Kim E, Varma R. Glaucoma in Latinos/Hispanics. *Curr Opin Ophthalmol.* 2010;21(2):100–105.
Salisbury Eye Evaluation Glaucoma Study	2001-2003	Maryland	Friedman DS, Jampel HD, Munoz B, West SK. The Prevalence of Open-Angle Glaucoma Among Blacks and Whites 73 years and Older: The Salisbury Eye Evaluation Glaucoma Study. *Arch Ophthalmol.* 2006;124(11):1625–1630.

Click **+** to open indicator details

VEHSS - The Vision & Eye Health Surveillance System

1. Selector Box: Complete all 6 dropdowns and click GO

2. Compare Box: Compare 1-2 stratification factors and click Compare

3. Filter Box: Filter data to selected groups and click Apply Filters

4. Results Panel

1. Location — Georgia
2. Type — Claims
3. Claims Database — Medicare Claims — Data Source Information
4. Topic — Service Utilization
5. Category — Eye Exams — Category Definition
6. Indicator — Annual examination rate — GO

Explore VEHSS Data for Georgia

○ View one year
○ View all available years

Compare variable 1
Race/Ethnicity

Compare variable 2
Gender

Compare

Apply Filters   Reset

Year
2017

Subgroup
By any provider type

Age Group
All Ages

Gender
Compare All

Race/Ethnicity
Compare All

Risk Factor
Diabetes

Risk factor response
Yes

Proportion of patients who had an eye exam in selected year
By any provider type
Georgia | 2017 | Medicare (Fee for Service)
Crude Prevalence
Diabetes-Yes
Compare By: Race/Ethnicity & Gender

Gender
■ All genders
■ Male
■ Female
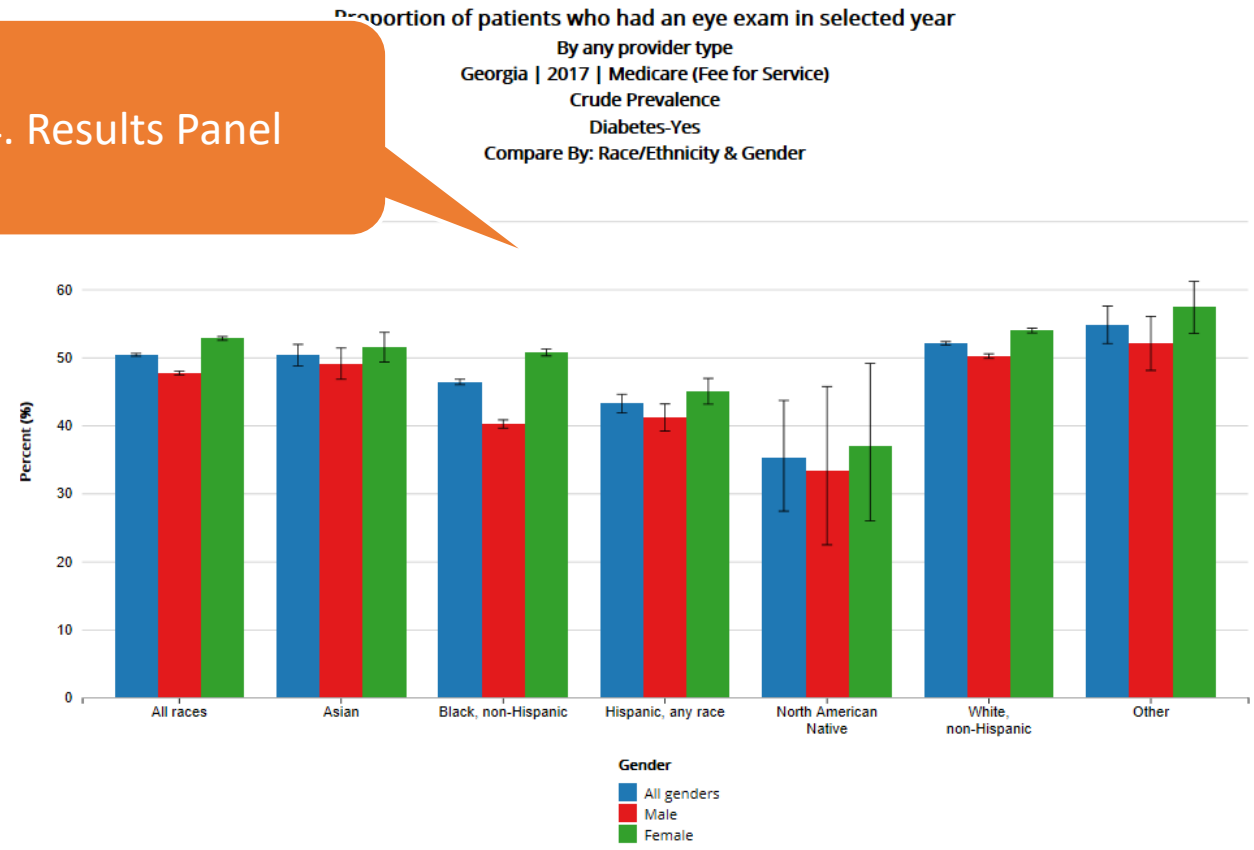
	All genders	Male	Female
All races			
Percent (%)	50.37	47.71	52.78

VEHSS — The Vision & Eye Health Surveillance System

1. Selector Box

Click Data Source Information to open documentation page for selected data source

Selecting All available locations defaults to state level map

Selecting National or any state defaults to chart+table with compare box

Click Category Definition to open documentation page for selected indicator category

VEHSS - THE VISION & EYE HEALTH SURVEILLANCE SYSTEM

2. Compare Box:

Not available in map views

Select all years of data for trend line analyses

3. Filter Box:

Filters get reset when Compare changes

Explore VEHSS Data for Georgia

○ View one year
● View all available years

Compare variable 1
Years

Compare variable 2
Diabetes

Compare

Apply Filters   Reset

Year
Compare All

Response
Yes

Age Group
All Ages

Gender
All genders

Race/Ethnicity
All races

Risk Factor
Compare All Diabetes

Data Type
Crude Prevalence

Apply Filters   Reset

Percentage of people who are blind or have serious difficulty seeing even when wearing glasses
Response: Yes
Georgia | All Available Years | BRFSS
Crude Prevalence
Compare By: Diabetes

Diabetes
— Yes
— No
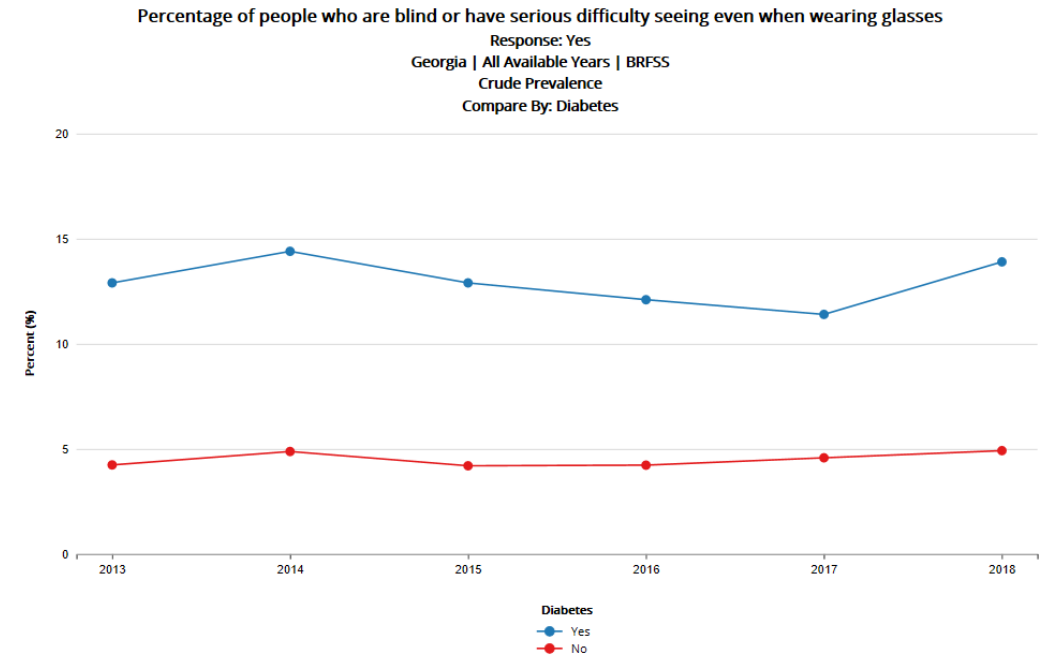
	Yes	No
2018		
Percent (%)	13.90	4.92
95% CI	11.70 - 16.50	4.35 - 5.56
n	136,000	333,000
2017		
Percent (%)	11.40	4.58
95% CI	8.71 - 14.80	3.94 - 5.33
n	99,000	310,000
2016		
Percent (%)	12.10	4.23
95% CI	9.53 - 15.10	3.52 - 5.07
n	111,000	283,000
2015		
Percent (%)	12.90	4.20

VEHSS - The Vision & Eye Health Surveillance System

4.Results Panel

Map   Chart   Table

Proportion of patients who had an eye exam in selected year
By any provider type
All available locations | 2017 | Medicare (Fee for Service)
Crude Prevalence
65-84 years | Female | Hispanic, any race | Diabetes-Yes

Switch view from Map, Chart or Table (if available)

National: 53.21%
95% CI (53.02 - 53.40)
N = 263,400

Zoom or reset map

Percent (%)

	46.76 - 50.47
	50.48 - 54.26
	54.27 - 57.36
	57.37 - 73.68
	Data suppressed
	Data unavailable

Quantile
Legend settings
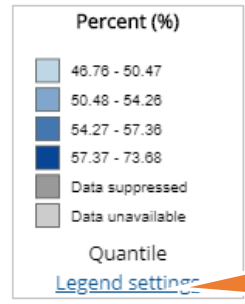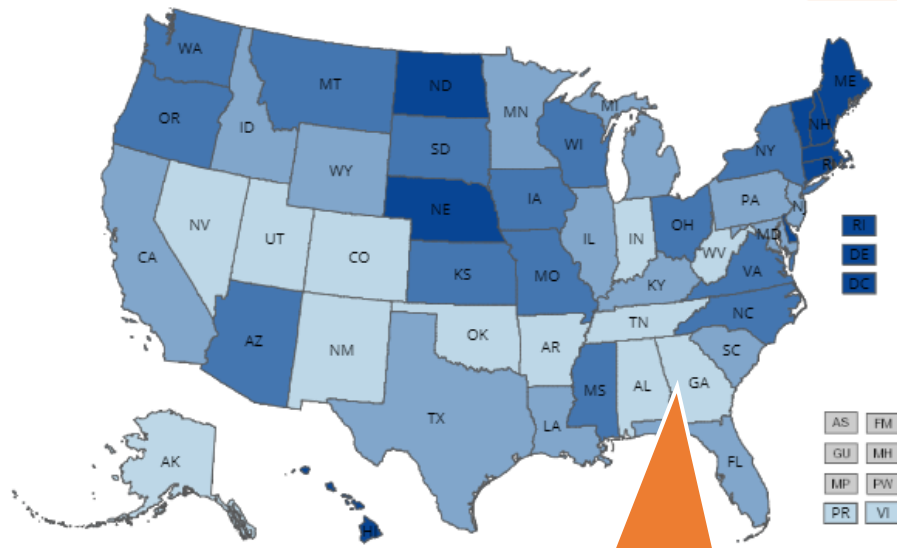
Click Legend Settings to change gradient scales

Click a state to zoom, or explore all data for location

Data Source: Medicare Claims

Save as PDF   Export CSV

Export formatted PDF report, or CSV table

New for 2021:

- Composite estimates of the prevalence of visual acuity loss

- County-level mapping:
    - ACS
    - Medicare claims
    - Composite estimates of vision loss
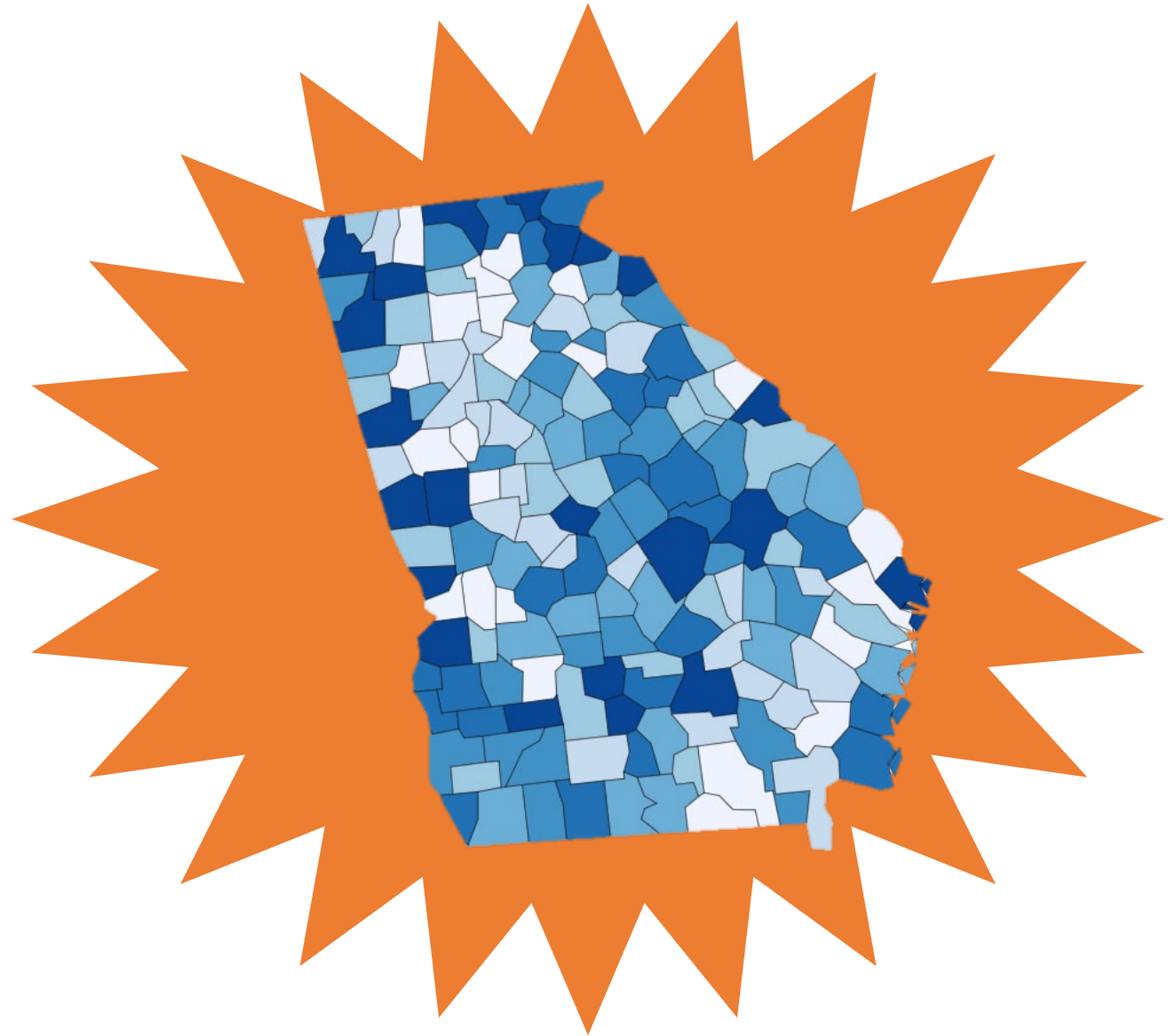
1. Location
North Carolina

2. Type
Composite Estimates

3. Composite Estimates
Prevalence Estimates
Data Source Information

☑ View as county map

4. Topic
Visual Function

5. Category
Measured Visual Acuity
Category Definition

6. Indicator
Prevalence of Vision Loss, by major age groups

GO   Clear

County map option is shown if user selects a state and a data source that has county-level results

Explore VEHSS Data for North Carolina

Help

Apply Filters   Reset

Map   Chart   Table

Year
2017

Subgroup
Any vision loss

Age Group
All Ages

Gender
All genders

Race/Ethnicity
All races

Risk Factor
All persons

Risk factor response
Total

Data Type
Prevalence Estimates

Apply Filters   Reset

Prevalence of Vision Loss, by major age groups
Any vision loss
North Carolina | 2017 | Prevalence Estimatess
Prevalence Estimates
North Carolina: 2.25%
95% CI (1.89 - 2.58)
N = 10,273,419

State totals in header
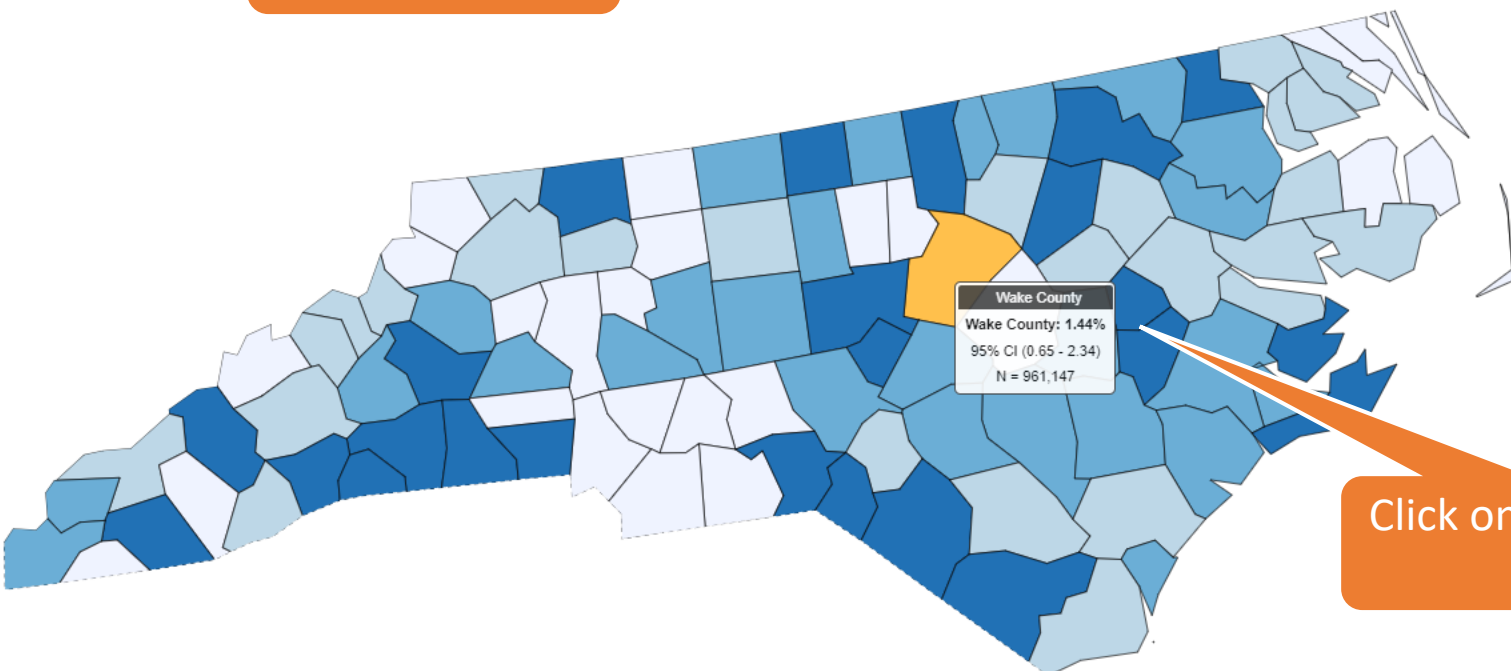
Map view selected

Search county

Percent (%)
☐ 01.89 - 03.11
☐ 03.12 - 03.62
☐ 03.63 - 04.08
☐ 04.09 - 05.66
Quantile
Legend Settings

Wake County
Wake County: 1.44%
95% CI (0.65 - 2.34)
N = 961,147

Click on a county for detail

Vision and Eye Health Surveillance System (VEHSS)

1. Location
North Carolina

2. Type
Composite Estimates

3. Composite Estimates
Prevalence Estimates
☑ View as county map
Data Source Information

4. Topic
Visual Function

5. Category
Measured Visual Acuity
Category Definition

6. Indicator
Prevalence of Vision Loss, by major age groups
GO Clear

Explore VEHSS Data for North Carolina

Share Link | Data Portal | Help

Map | Chart | Table

View one year

Compare variable 1
Race/Ethnicity

Compare

Apply Filters | Reset

Year
2017

Subgroup
Any vision loss

Age Group
65-84 years

Gender
Female

Race/Ethnicity
Compare All

Risk Factor
All persons

Risk factor response
Total

Data Type
Prevalence Estimates

Chart view selected

Compare box available in Chart and Table views

Prevalence of Vision Loss, by major age groups
Any vision loss
North Carolina | 2017 | Prevalence Estimatess
Prevalence Estimates
65-84 years | Female
Compare By: Race/Ethnicity
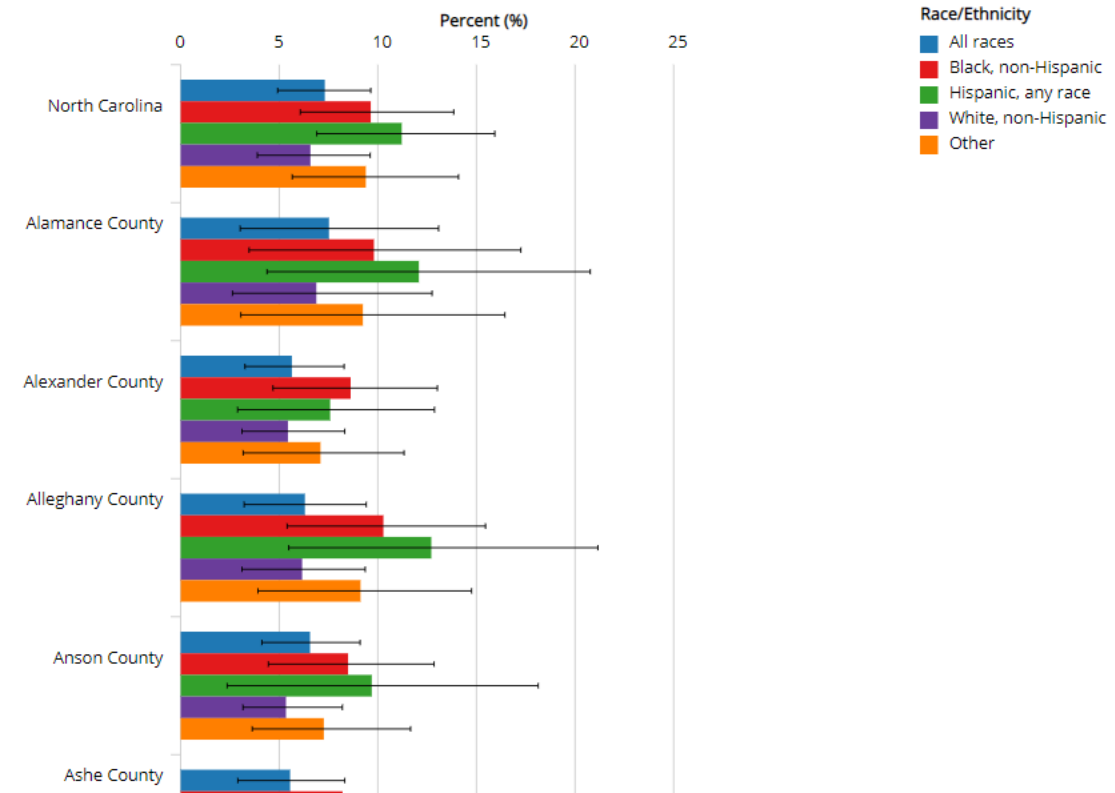
Percent (%)
0   5   10   15   20   25

Race/Ethnicity
- All races
- Black, non-Hispanic
- Hispanic, any race
- White, non-Hispanic
- Other

North Carolina

Alamance County

Alexander County

Alleghany County

Anson County

Ashe County

Focus on Eye Health Summit: Our Changing Vision

Prevent Blindness
Focus on Eye Health National Summit

Vision and Eye Health Surveillance System Applications

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Demonstrating Differences Across Different Data Sources

- Public Health and Environmental Vision
  - Research clearly demonstrates significant vision health disparities

Disparities in Adult Vision Health in the United States

APRIL ZAMBELLI-WEINER, JOHN E. CREWS, AND DAVID S. FRIEDMAN

Zambelli-Weiner A, Crews JE, Friedman DS. Disparities in adult vision health in the United States. Am J Ophthalmol. 2012 Dec;154(6 Suppl):S23-30.e1. Epub 2012 May 24. PMID: 22633355.

Prevent Blindness
Focus on Eye Health
National Summit

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Public Health and Environmental Vision - VISSCI 7620
  - To make some of these disparities less abstract and to get students to use available epidemiology data, I give them multiple assignments over the course of the semester, using the VEHSS
  - As a teaching tool, I use the VEHSS to
    - Demonstrate vision impairment prevalence rates based on different demographic characteristics
    - Demonstrate geographic disparities in the prevalence of vision impairment using interactive mapping
    - Provide opportunities to work with data from different vision health surveillance sources and understand how those data are collected
    - Demonstrate the strengths and limitations of different types of epidemiology data
    - Learn to use data to advocate for vision health as a public health priority

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Data sources available in the VEHSS
  - Survey Data
    - American Community Survey, Behavioral Risk Factor Surveillance System, National Health Interview Survey, National Health and Nutrition Examination Survey, National Survey of Children's Health
  - Electronic Health Records Registry Data
    - IRIS Registry
  - Claims Databases
    - Commercial Medical Insurance, Managed Vision Care, Medicaid MAX, Medicare Claims
  - Composite Estimates (new)
- Each may have different topics with different data that are collected through different collection methods and may be collected at different times

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - Find the Electronic Health Records and Registries section of the Vision and Eye Health Surveillance Section of the CDC's Vision Health Initiative.
    - https://www.cdc.gov/visionhealth/vehss/data/ehr-registries/index.html

  - Using information on this page, what EHR registries are currently included in the CDC VHI's VEHSS and what EHR registries might be included in the future?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - Find the Electronic Health Records and Registries section of the Vision and Eye Health Surveillance Section of the CDC's Vision Health Initiative.
    - https://www.cdc.gov/visionhealth/vehss/data/ehr-registries/index.html

  - Using information on this page, what EHR registries are currently included in the CDC VHI's VEHSS and what EHR registries might be included in the future?
    - Of the sources identified in our review, the IRIS® Registry is the only data source currently included in the VEHSS, although data from MORE may be included in the future.

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - The background for the surveillance data is thoroughly explained for those interested in more detail.

Review of Administrative and Registry Data on Eye Health
Vision & Eye Health Surveillance System

DATE	PRESENTED TO:	PRESENTED BY:
MARCH 26 2018	Jinan Saaddine, Division of Diabetes Translation, Centers for Disease Control and Prevention	John Wittenborn, Emily Phillips, David Rein, NORC at the University of Chicago

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - Click on the IRIS Registry link at the top of the table to access IRIS registry specific information.

	IRIS® Registry	MORE
Nationally Representative	No	No
Demographics		
Age/Sex/Race	Yes	Yes
Geographic Representation		
State Representation	Partial	Partial
County Representation	Partial	Partial

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

IRIS® Registry

IRIS® Registry at a Glance

	IRIS Registry
Data Type	Health registry compiled from participating ophthalmology practices' electronic medical records systems
Sample	Convenience sample consisting of patients visiting IRIS-participating ophthalmology practices, representing approximately 95% of US ophthalmology practices

Explore Summary Data

IRIS® Registry

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - What year(s) are data available in the VEHSS for the IRIS Registry (described as Years Analyzed)?

  - As of 2018, what percentage of ophthalmologists participated in the IRIS Registry?

  - As of 2019, how many patients were contained in the IRIS Registry?

  - At the bottom of the page is a list of limitation on population surveillance using the IRIS Registry. List one potential limitation listed.

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - What year(s) are data available in the VEHSS for the IRIS Registry (described as Years Analyzed)?
    - 2016, 2017, 2018
  - As of 2018, what percentage of ophthalmologists participated in the IRIS Registry?
    - In 2018, the IRIS® Registry collected data from more than 90% of ophthalmologists nationally
  - As of 2019, how many patients were contained in the IRIS Registry?
    - More than 50 million patients (230 million encounters)
  - At the bottom of the page is a list of limitation on population surveillance using the IRIS Registry. List one potential limitation listed.
    - Rates from data are not representative of the overall population

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - At the top of the IRIS Registry page, click on the Explore Summary Data Link above the map of the United States. This will direct you to an interactive mapping tool that will allow you to visualize the geographic distribution of ocular disease in the United States from IRIS Registry data.

IRIS® Registry

IRIS® Registry at a Glance

	IRIS Registry
Data Type	Health registry compiled from participating ophthalmology practices' electronic medical records systems
Sample	Convenience sample consisting of patients visiting IRIS-participating ophthalmology practices, representing approximately 95% of US ophthalmology practices

Explore Summary Data

IRIS® Registry

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

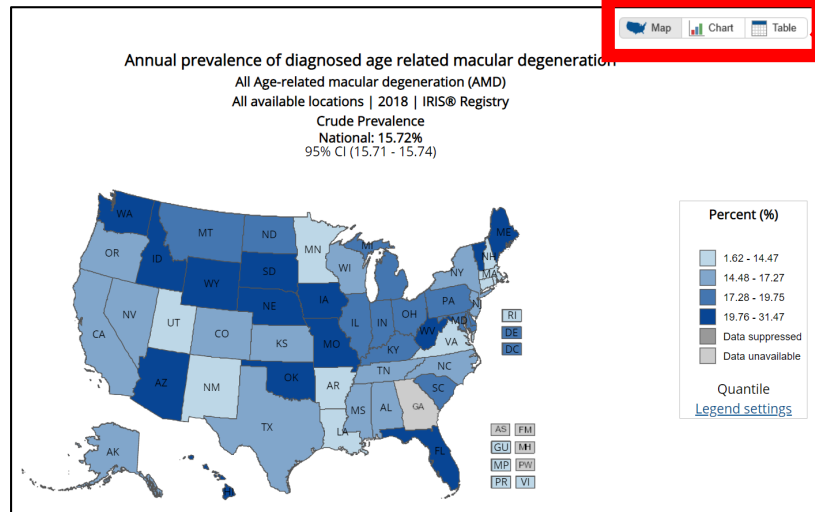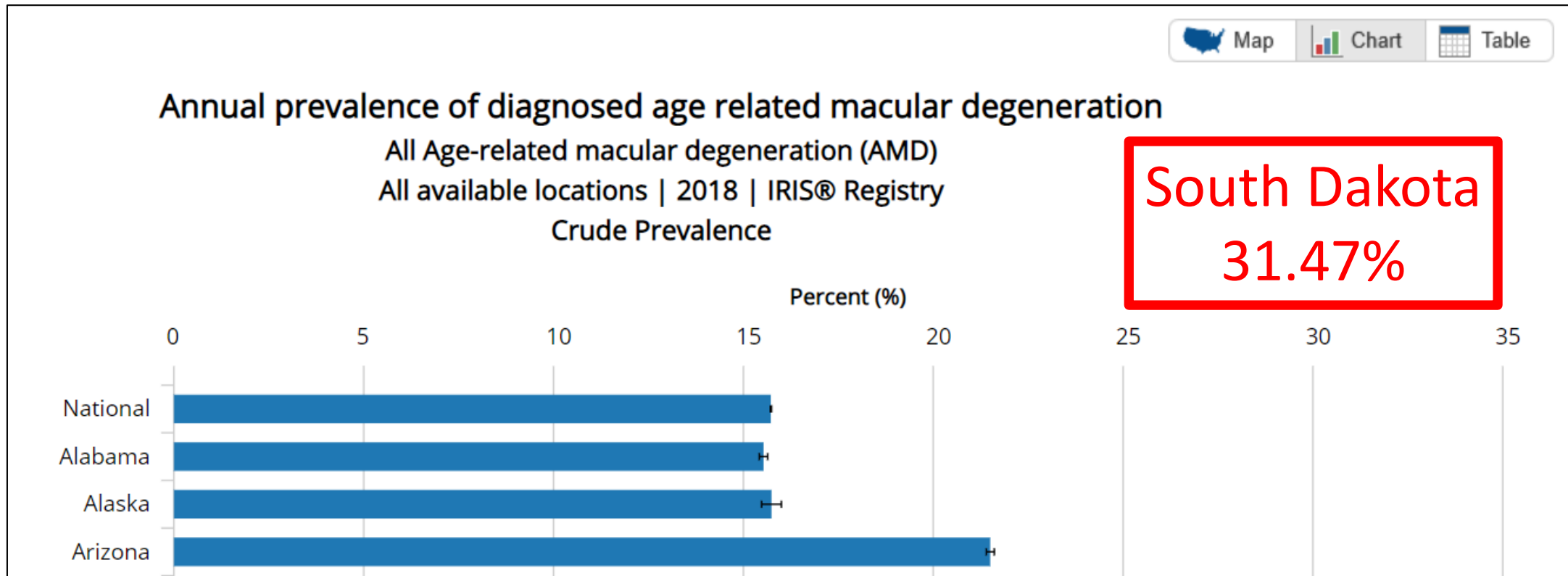- Electronic Health Records and Population Health Surveillance
  - From the drop down menus at the top of the page, make sure
    - All Available Locations is selected under the Locations dropdown menu
    - EHR Registry is selected under the Type dropdown menu
    - IRIS Registry is selected under the EHR Registry dropdown menu
    - Eye Health Conditions is selected under the Topic dropdown menu
    - Age Related Macular Degeneration is selected under the Category dropdown menu
    - Annual Prevalence of Diagnosed is selected under the Indicator dropdown menu
    - Click the GO button
    - With these selections, what is the national prevalence rate of age-related macular degeneration based on IRIS Registry data?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

• Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - A state map of the United States is the default display for the IRIS Registry on the VEHSS. You can also visualize the data in a chart or a table. Click on the Chart button to display a bar graph of state-specific AMD prevalence rates. Which state has the highest prevalence of vision impairment from AMD?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - You can also perform a more in-depth analysis that provides some insight into health disparities in ocular disease.
    - Under the Gender dropdown menu, select Male.

    - Click on the Apply Filters button.

    - What is the prevalence rate for AMD in males nationally?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Apply Filters   Reset

Year
2018

Subgroup
All Age-related macular

Age Group
All Ages

Gender
Male

Race/Ethnicity
All races

Annual prevalence of diagnosed age related macular degeneration
All Age-related macular degeneration (AMD)
All available locations | 2018 | IRIS® Registry
Crude Prevalence
Male

National: 15.32%

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - Research has shown gender disparities in vision impairment. Are data from the IRIS registry consistent with those findings?
    - Change the selection from the Gender dropdown menu to Female.

    - Click on the Apply Filters button.

    - What is the prevalence rate for AMD in females nationally?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Apply Filters   Reset

Year
2018

Subgroup
All Age-related macular

Age Group
All Ages

Gender
Female

Race/Ethnicity
All races

Annual prevalence of diagnosed age related macular degeneration
All Age-related macular degeneration (AMD)
All available locations | 2018 | IRIS® Registry
Crude Prevalence
Female

National: 16.02%

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - We have seen evidence that there are racial/ethnic disparities with respect to ocular disease. Does this hold true in the VEHSS IRIS Registry?

    - In the Category dropdown menu, change Age-related Macular Degeneration to Diabetic Eye Disease.

    - Click on the GO button.

    - What is the overall national prevalence of diabetic eye disease?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

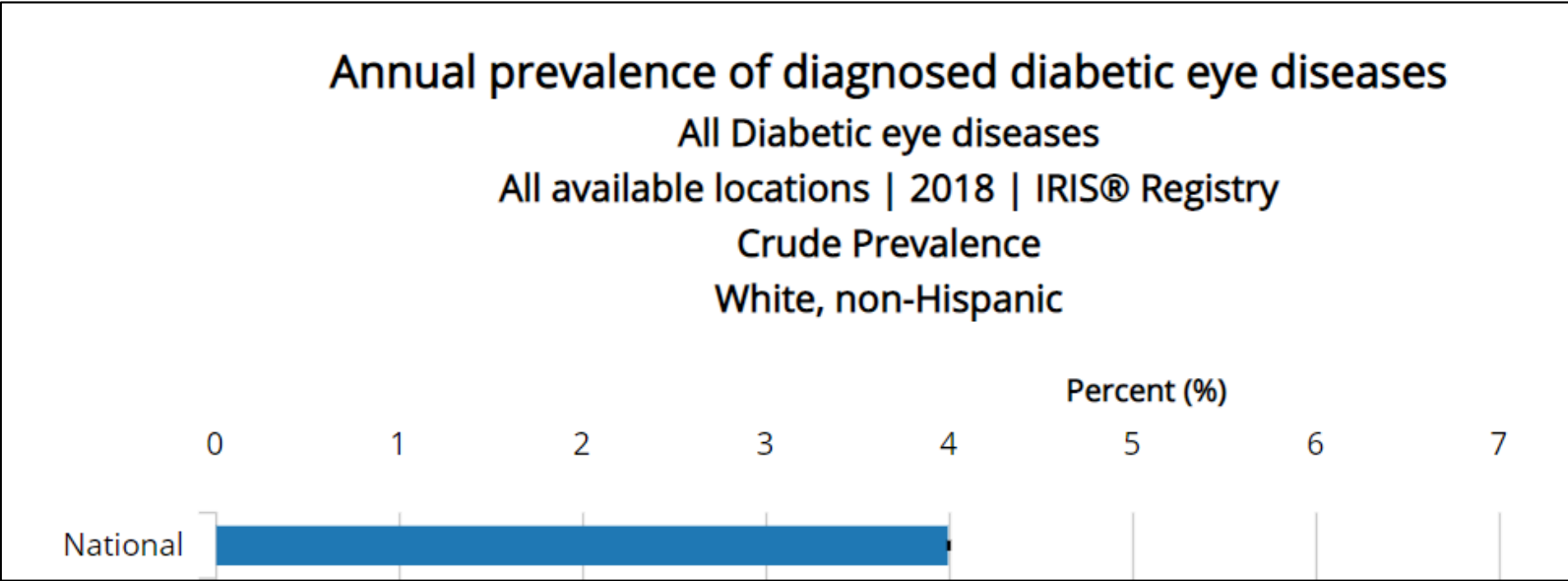- Electronic Health Records and Population Health Surveillance

Annual prevalence of diagnosed diabetic eye diseases
All Diabetic eye diseases
All available locations | 2018 | IRIS® Registry
Crude Prevalence

National
4.76%

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - We have seen evidence that there are racial/ethnic disparities with respect to ocular disease. Does this hold true in the VEHSS IRIS Registry?
    - Under Race/Ethnicity, select White, non-Hispanic.

    - Click the Apply Filters button.

    - What is the crude prevalence of diagnosed diabetic eye disease in the IRIS Registry for the White, non-Hispanic population in the United States?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

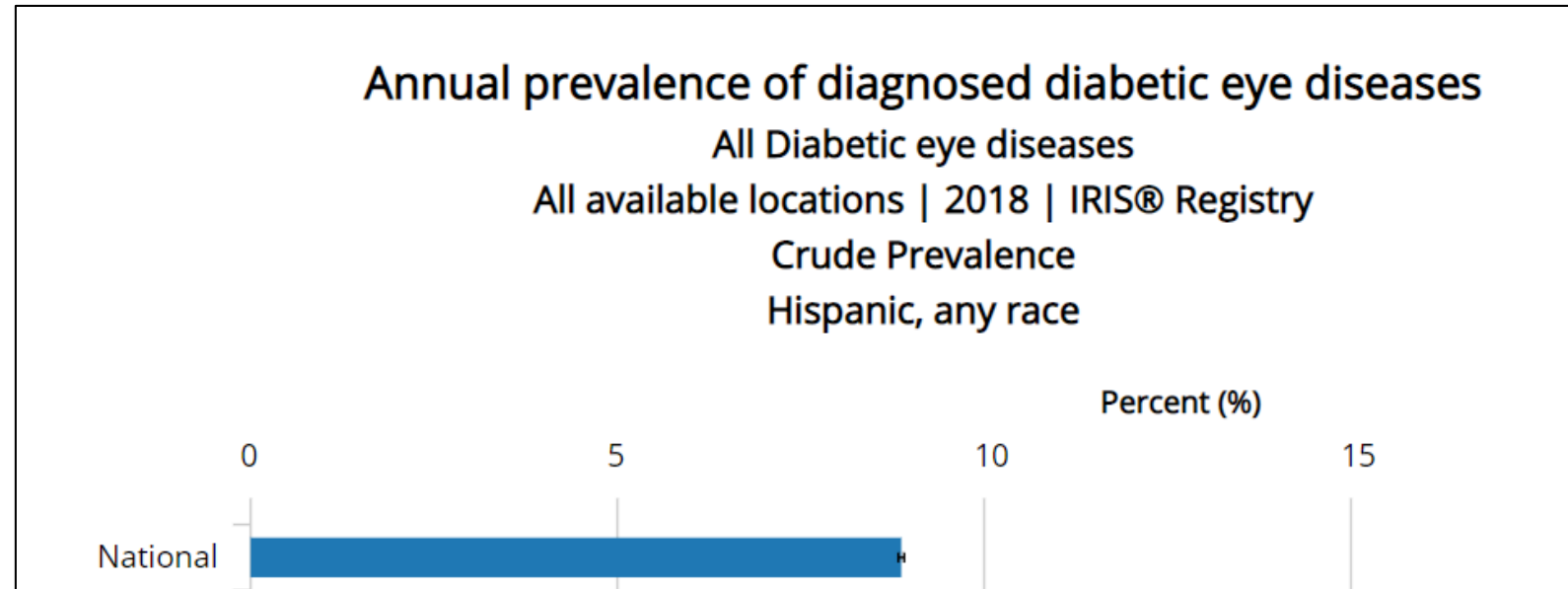- Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance
  - We have seen evidence that there are racial/ethnic disparities with respect to ocular disease. Does this hold true in the VEHSS IRIS Registry?
    - Under Race/Ethnicity, select Hispanic, any race.

    - Click the Apply Filters button.

    - What is the crude prevalence of diagnosed diabetic eye disease in the IRIS Registry for the Hispanic, any race category?

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Electronic Health Records and Population Health Surveillance

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Seeking Conceptual Clarity
  - Not all prevalence estimates will be the same from all of the data sources.

The Variability of Vision Loss Assessment in Federally Sponsored Surveys: Seeking Conceptual Clarity and Comparability

JOHN E. CREWS, DONALD J. LOLLAR, ALEX R. KEMPER, LISA M. LEE, CYNTHIA OWSLEY, XINZHI ZHANG, AMANDA F. ELLIOTT, CHIU-FANG CHOU, AND JINAN B. SAADDINE

Crews JE, Lollar DJ, Kemper AR, Lee LM, Owsley C, Zhang X, Elliott AF, Chou CF, Saaddine JB. The variability of vision loss assessment in federally sponsored surveys: seeking conceptual clarity and comparability. Am J Ophthalmol. 2012 Dec;154 (6 Suppl):S31-44.e1.

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Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Seeking Conceptual Clarity
  - Not all prevalence estimates will be the same from all of the data sources.

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Seeking Conceptual Clarity

Crude Prevalence
National: 0.14%
95% CI (0.14 - 0.14)

Demonstrating Vision Health Disparities Using the Vision and Eye Health Surveillance System

- Using the VEHSS, we have been able to
  - Demonstrate vision impairment prevalence rates based on different demographic characteristics
  - Demonstrate geographic disparities in the prevalence of vision impairment using interactive mapping
  - Provide opportunities to work with data from different vision health surveillance sources and understand how those data are collected
  - Demonstrate the strengths and limitations of different types of epidemiology data

- Now, I hope everyone will use data from the VEHSS to advocate for vision health as a public health priority.

Thank you.

Questions?

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