

# Meeting the Needs of Older People with Vision Loss in Tennessee

- Pris Rogers, Ph.D.

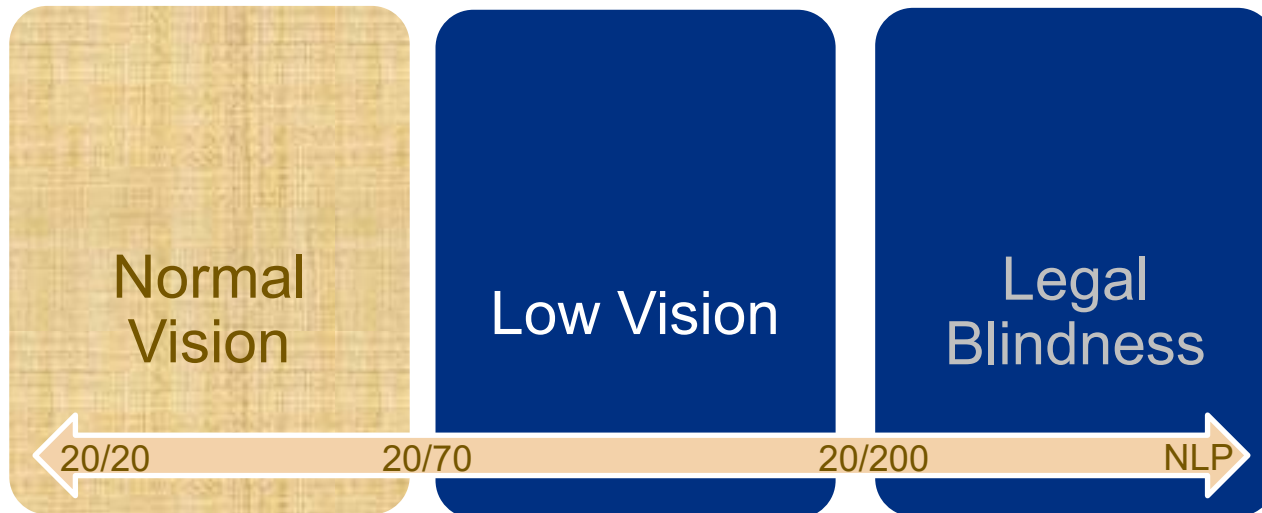
Special Advisor on Aging & Vision Loss

American Foundation for the Blind

# Objectives

- Discuss prevalence of vision loss among older people in TN and US and the implications for service delivery.
- Describe strategies to effectively include older people with vision loss in aging services programs
- Review discuss age-related eye conditions and their functional implications.
- Discuss how and where to refer individuals to find/obtain vision rehabilitation services in TN.

# Vision Spectrum

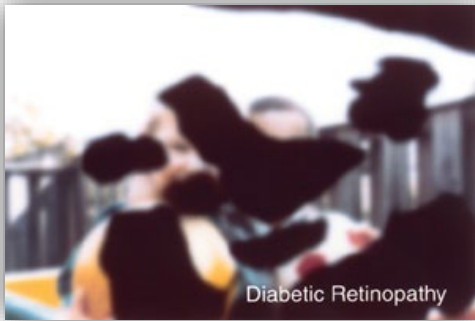


# Major Causes of Low Vision or Blindness

- Macular degeneration, which affects central vision
  - Glaucoma, which affects peripheral vision
  - Diabetic Retinopathy which causes overall blurring
  - Untreated cataracts, which cause blurring, glare issues
  - Dementia
-

# Visual Field Impairments

**Scattered Blind Spots**



**Central Blind Spot**

**Peripheral Field Loss**



National Eye Institute, National Institutes  
of Health (NEI/NIH)



**Macular Degeneration** causes central vision and color perception loss, distorted/fuzzy vision, or difficulty with reading or facial recognition.



# INEQUITY

People with lower-incomes are less likely to get treatment for AMD





**Cataracts** creates a blurry hazy view with multiple levels of images. Other symptoms: glare sensitivity, color perception loss.



## **INEQUITY**

**People with untreated cataracts are more likely to be older (>85), homebound, and have cognitive impairment**

# Diabetic Retinopathy causes patches of vision loss (floaters), cloudy vision, glare sensitivity

Age  
Friendly

A MAP TO  
LIVABLE  
EAST TN





# Glaucoma causes side vision loss, tunnel vision, blurred central vision, and seeing colored rings on lights

Age  
Friendly

A MAP TO  
LIVABLE  
EAST TN



# The Dementia Brain and Vision

- Changes to vision are substantial with dementia
  - There are three levels of vision changes
  
  - Watch video about these changes:  
<https://youtu.be/iaUsRa5kNyw>
  -
-

# Scuba Vision



# Binocular Vision



# Monocular Vision

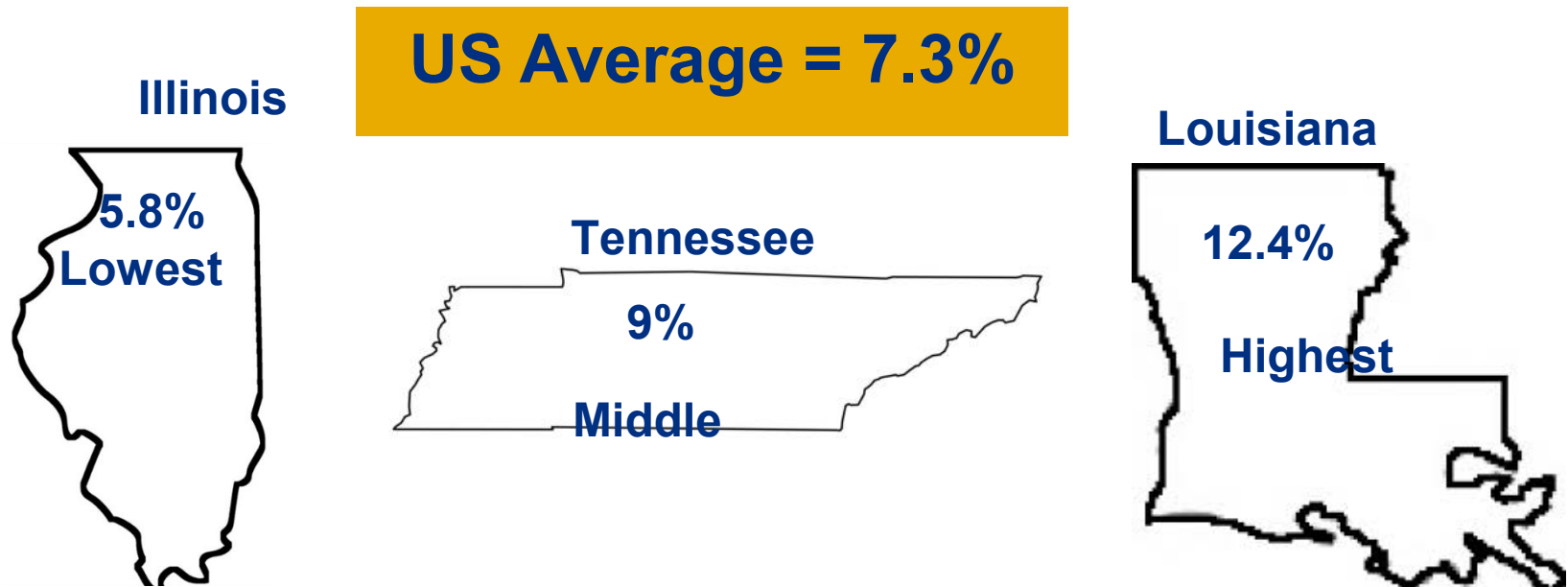


# Aging and Vision Loss National Coalition BIG DATA Project

- State specific data from the Behavioral Risk Factor Surveillance Survey and American Community Survey from 2019
- Vision question: Are you blind or do you have serious difficulty seeing, even when wearing glasses?

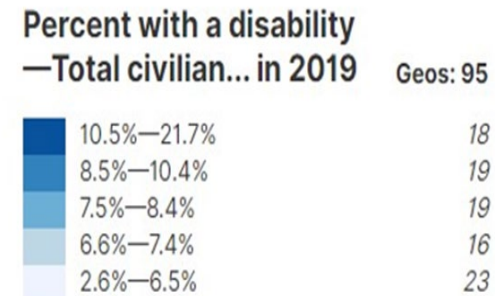
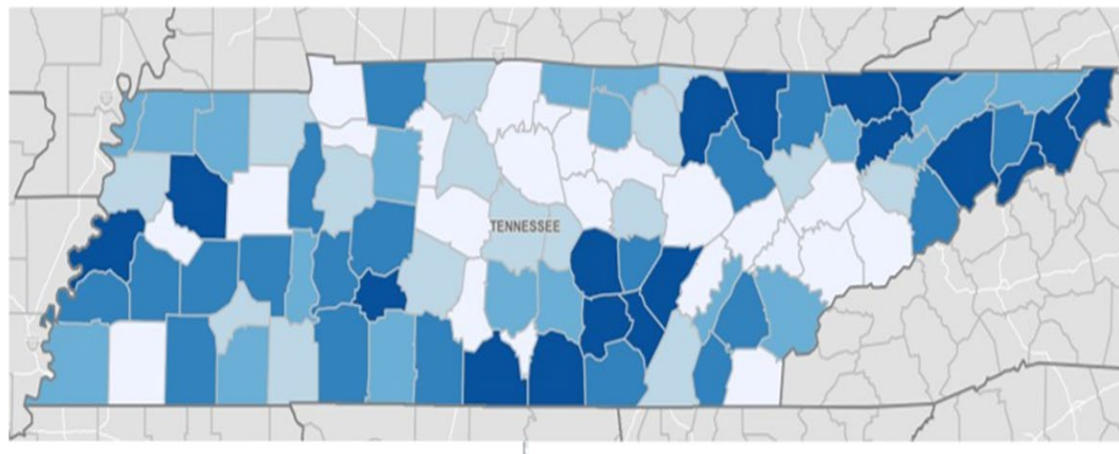
# The Big Data Project

Findings: Prevalence of VI Age 65+, Selected States



# The Big Data Project

Findings: Tennessee County Distribution, VI Age 65+





# The Big Data Project

Findings: TN vs. U.S. VI Age 65+ Demographics

		TN	U.S.
<b>SEX</b>	Male	8.5%	7.5%
	Female	9.4%	7.0%
<b>AGE</b>	65-74 years	7.5%	6.3%
	75-79 years	8.2%	7.4%
	80+ years	14.5%	9.8%
<b>RACE/ ETHNICITY</b>	White, non-Hispanic	9.0%	6.1%
	Black, non-Hispanic	8.1%	10.5%
	Hispanic	---	13.9%

# The Big Data Project

Findings: Income among Age 65+ with and without Vision Impairment, TN (BRFSS)

Income	Blind / VI	Not Blind / VI
<\$10,000	9.2%	2.7%
\$10,000 to \$15,000	17.2%	8.4%
\$15,000 to \$20,000	15.7%	10.8%

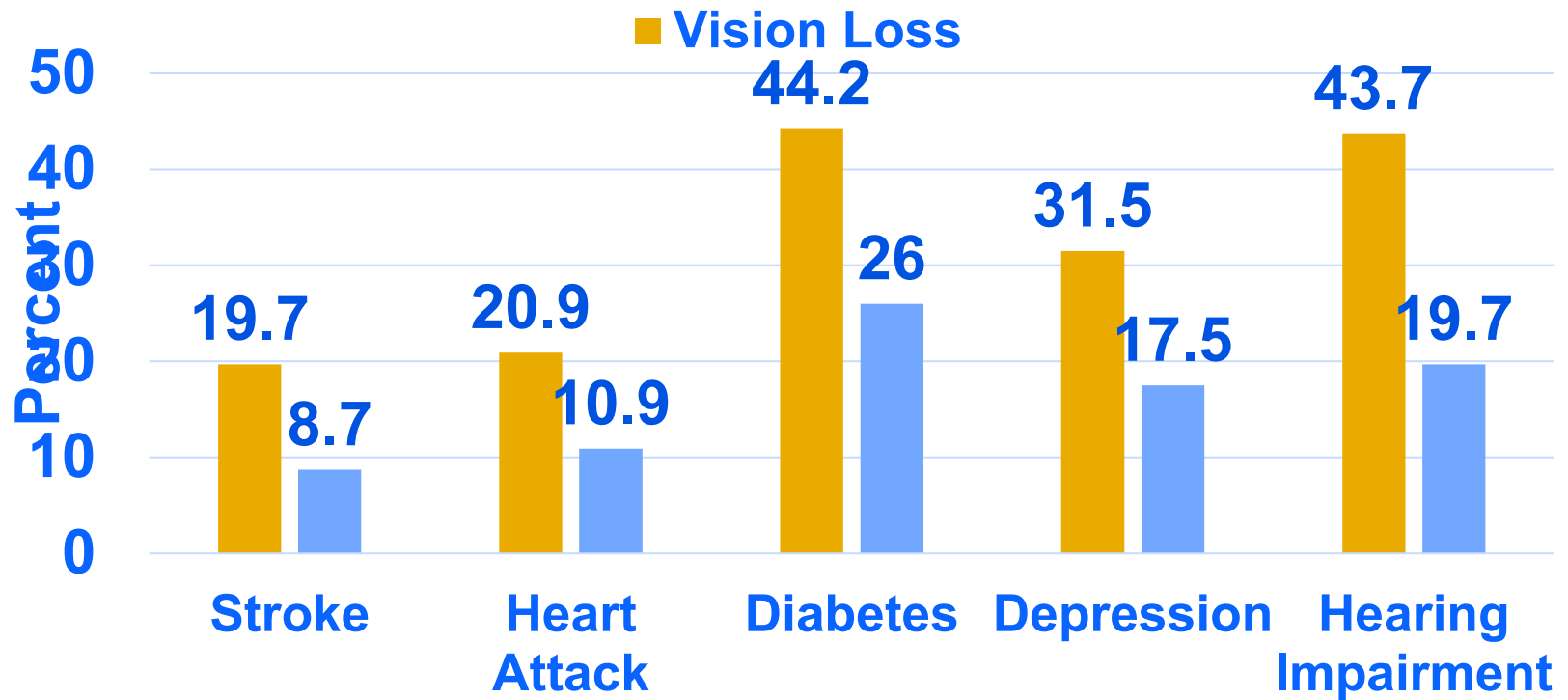
# The Big Data Project

Findings: Education among Age 65+ with and without Vision Impairment, TN

Education	Blind/VI	Not Blind/VI
Less than High School	37.2%	16.2%
High School	34.3%	35.1%
Some College	15.6%	25.4%
College Graduate	12.9%	23.5%

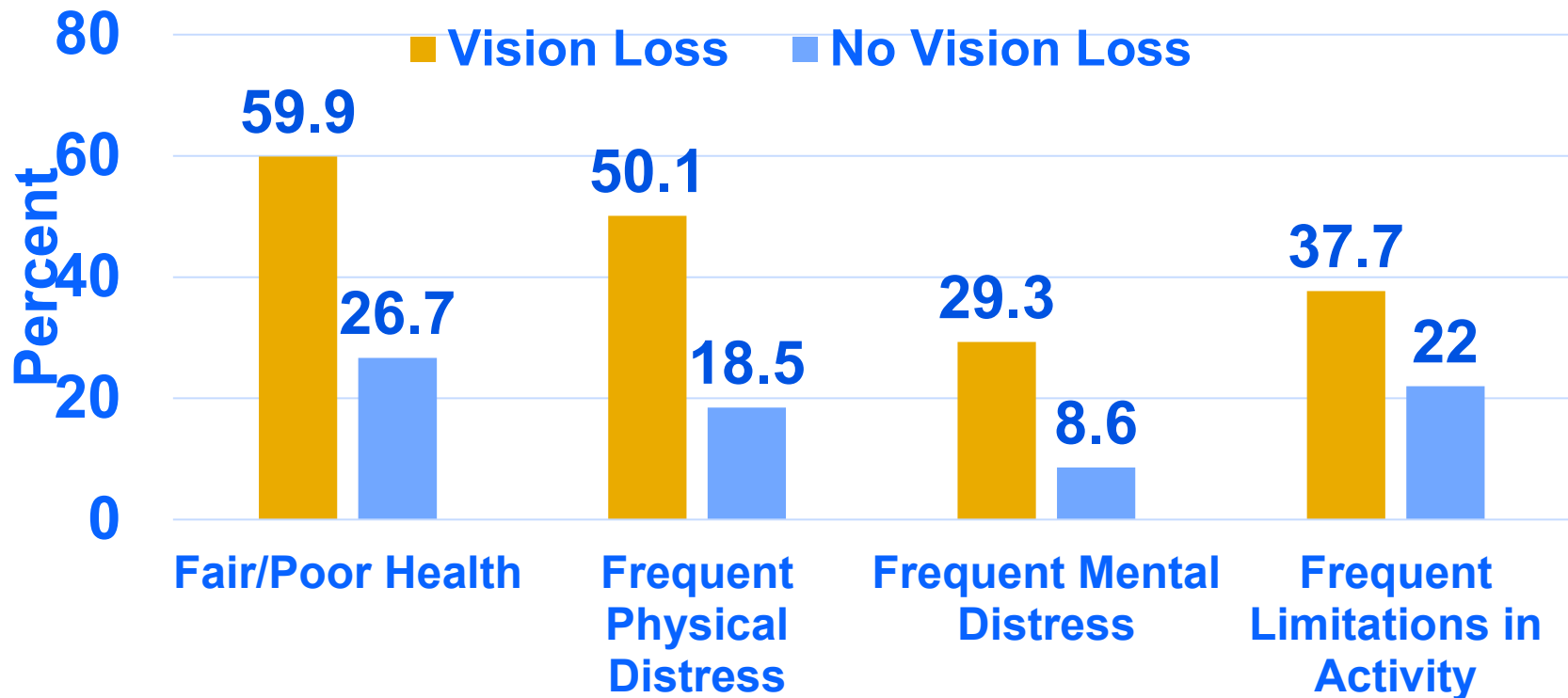
# The Big Data Project:

Prevalence of Chronic Conditions among Age 65+ with and without Vision Impairment, TN (BRFSS)



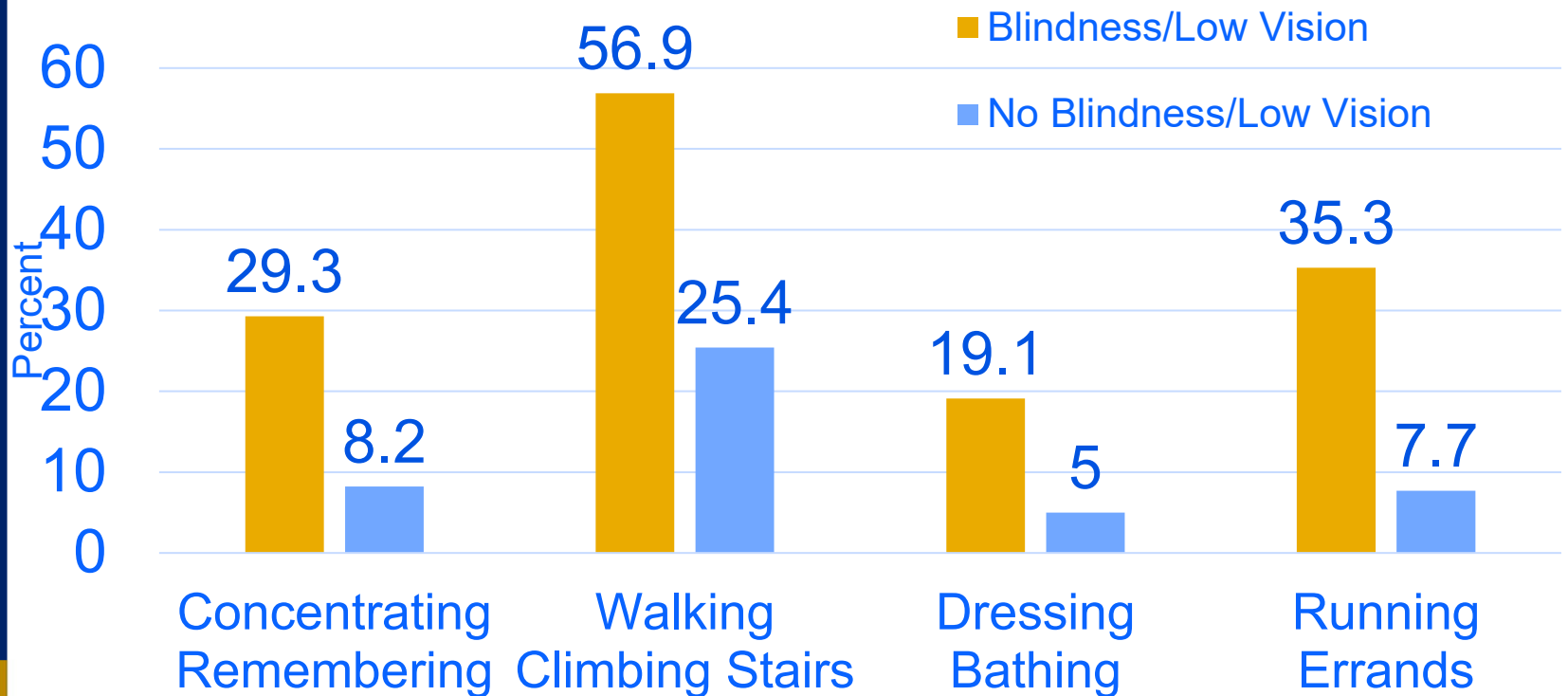
# The Big Data Project

Findings: Health-Related Quality of Life among Age 65+ with and without Vision Impairment, TN (BRFSS)



# The Big Data Project

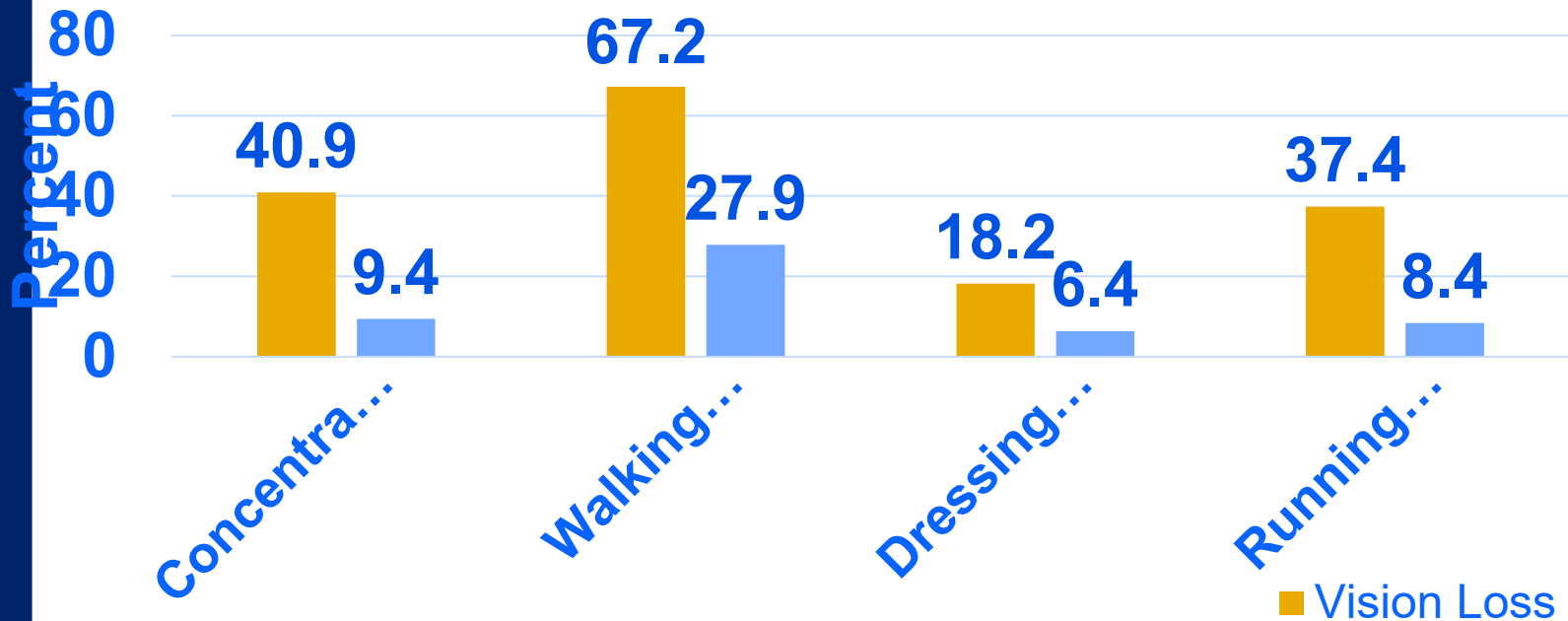
Findings: Prevalence of VI Age 65+, Disability U.S.



Source: 2019 Behavioral Risk Factor Surveillance System, Centers for Disease Control, Atlanta, GA

# The Big Data Project

Findings: Disability Measures among Age 65+ with and without Vision Impairment, TN (BRFSS)



# Economic Burden of Care



**Medical** – inpatient, ambulatory, prescriptions, glasses, DME



**Long-Term Care** – nursing home cost



**Productivity Losses** – loss of household productivity, informal care, loss of wages,



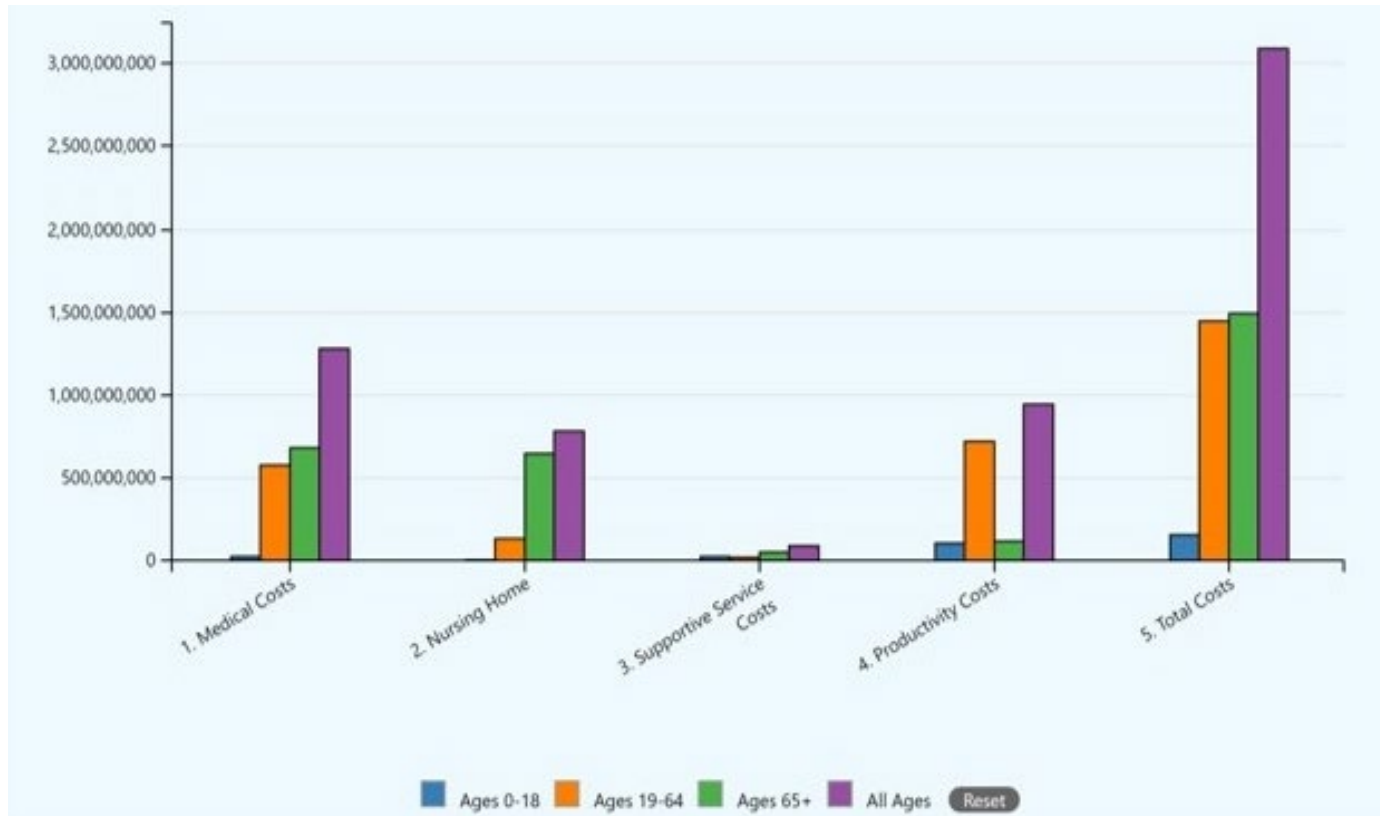
**Supportive Services Cost** – includes Vision Rehab and related services



**Detailed Results** - Tennessee | Vision State Economic Burden Toolkit | CDC

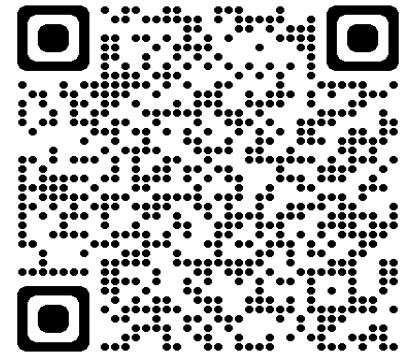


# Tennessee Economic Burden



# More about Big Data

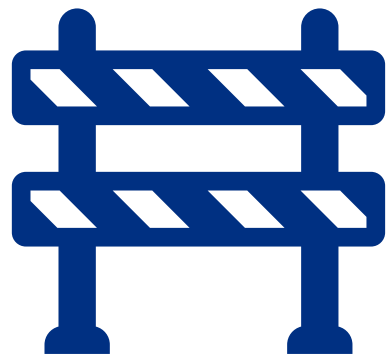
- To find out more about the Big Data project and other projects in which the Aging and Vision Loss Coalition is involved: [visionservealliance/avInc](http://visionservealliance/avInc)



# Retrospective Cohort Study by Muhammad Elahi ETSU Quillen College of Medicine / College of Public Health

- **166 Participants**
- Survey in **4 NE TN counties:**
  - Greene
  - Hawkins
  - Sullivan
  - Washington
- Conducted in **community and senior centers** among **individuals 50+**

# Significant Obstacles to Eye Exams



**45.8%**

**1+ obstacles**

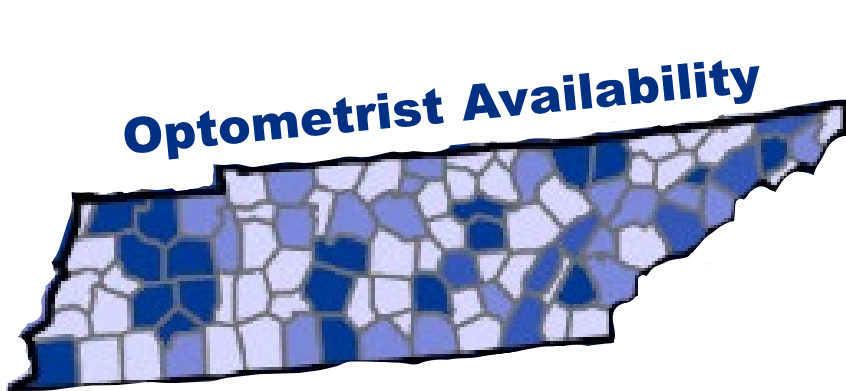
- 1 19.3%** Cost
- 2 14.5%** Limited/No Insurance
- 3 13.2%** Transportation/Distance
- 4 6.6%** Lack Awareness of Eye Care Professional



# Call to Action

# One in four

U.S. counties have no ophthalmologist or optometrist



Source: Gibson, DOI: [10.1016/j.ypped.2015.01.008](https://doi.org/10.1016/j.ypped.2015.01.008)

## **What do Service Providers Need to Know?**

- Older people with vision loss are often misunderstood
  - Are often left out and not included
  - They may not have had an eye exam nor does their primary care physician check vision or refer for eye care.
-

# Older People with Vision Loss are often left out

- Left out socially because unable to see faces
- Left out because sometimes others don't want to have to make adaptations
- Unable to get to activities because of transportation limitations
- Aren't aware of opportunities because unable to access print information about them

# What Can Help

- Access to eye care
  - Access to vision rehabilitation services
  - Access to transportation
  - Access to information
  - Promoting and encouraging environment of inclusion (attention to both environmental and social factors)
-





# Independent Living Program Services for the Blind and Visually Impaired

# **Independent Living Program Services for the Blind and Visually Impaired**

- **The Independent Living Program is a part of Services for the Blind and Visually Impaired within the Division of Rehabilitation Services.**
- **The program provides services to eligible individuals of all ages who are blind or who have a severe visual impairment.**
- **Services help Tennesseans continue to live as independently as possible in their homes and communities.**

# **Independent Living Program Services for the Blind and Visually Impaired**

- **There are no fees required for the program. Services are provided through State and Federal Funding.**
- **Someone may be eligible for program services if they are having difficulty seeing the newspaper or reading their mail, setting their microwave or signing their name.**
- **Referrals are accepted from all sources including doctors, individuals, home health providers, and other state or local agencies.**

# **Independent Living Program**

## **Services for the Blind and Visually Impaired**

- **Rehabilitation Instructors and Rehabilitation Assistants are located throughout the State.**
- **Rehabilitation Instructors meet with individual who are referred and conduct assessments to help define daily living goals related to vision loss. Medical information is obtained to determine the severity of vision loss and eligibility for program services.**
- **Once eligibility has been established, the Independent Living Program staff can provide direct services to individuals on a one-on-one basis.**

# Independent Living Program, Services for the Blind and Visually Impaired

Services are customized to meet each individual's needs and may include:

- **Functional Low Vision Evaluations:** Exploration of magnifiers, filters and lighting
- **Instruction in Communication Skills:** Learning to write signatures and notes, accessing and using auditory books, and tracking dates and appointments
- **Daily Living Skills:** Practicing kitchen safety, dining skills, organizing and identify foods, telling time, setting and using kitchen appliances, performing personal hygiene and matching clothing

# Independent Living Program Services for the Blind and Visually Impaired

- **Instruction in Leisure Activities:** Playing cards, performing craft projects, and viewing tv
- **Orientation and Mobility Services:** Traveling safely and independently indoors and outdoors
- **Information and Referral:** Coordinating services with other agencies
- **Guidance and Counseling:** Assistance with coping and adjusting to vision loss

# Independent Living Program

## Services for the Blind and Visually Impaired

- **Rehabilitation Instructors and Assistants provide training to help adjust to in-home environments and life with vision loss.**
- **Training to introduce adaptive techniques and equipment to compensate for vision loss will occur at least once a month for several months .**
- **Services will continue until the individual can independently use the new skills and adjust to life with limited vision. An individual can be referred to the program again if their vision becomes worse or if additional needs are identified.**

# **Independent Living Program Services for the Blind and Visually Impaired**

## **Getting Started:**

Referrals are accepted from all sources including doctors, individuals, home health providers, and other state or local agencies.

## **Call:**

**833-772-TDHS (8347)**

**To reach the One DHS Contact Center**





# Coming Soon at the Tennessee Public Health Training Center

☰ Vision Health Training Course\_Draft

## Module 1: Knowledge

### Submodule 1

Vision Loss Basics

### Submodule 2

Data on Top 5  
Eye Conditions  
in the U.S.

### Submodule 3

Vision Health:  
A Leading Cause  
Of Disability

### Submodule 4

Current State Of  
Blind and Vision  
Impairment  
Research And  
Practice

# APH Resources

The APH Information & Referral  
Hotline

1-800-232-5463 (U.S and Canada)  
staffed M-F 8:00-8:00 PM EST

Email: [connectcenter@aph.org](mailto:connectcenter@aph.org)

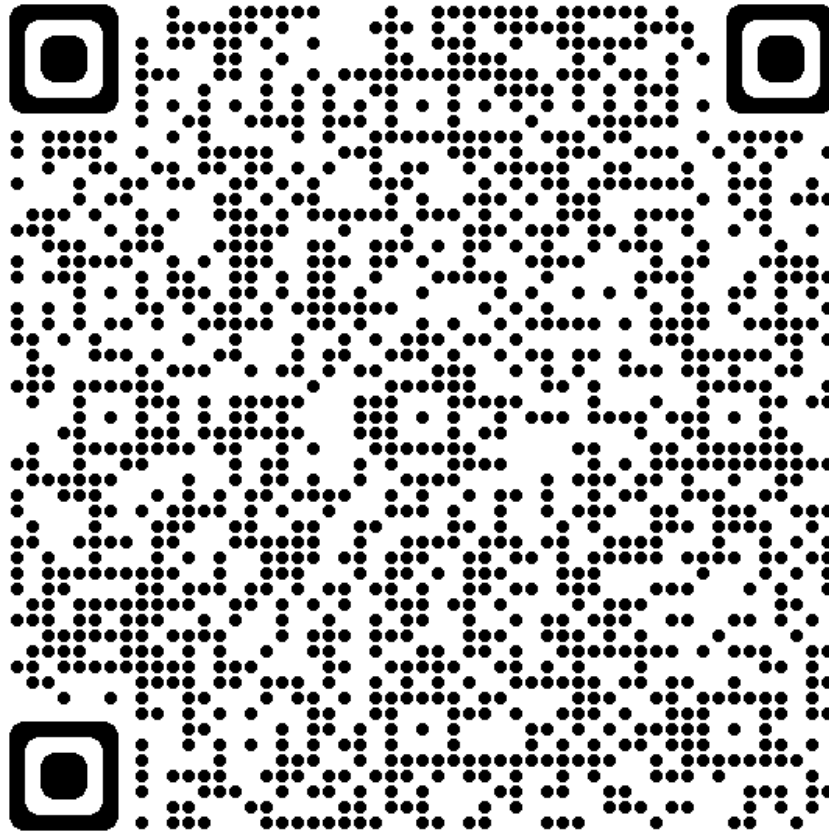
Also contains AFB Directory of  
Services and

VisionAware Professional Resources—  
with tips and helpful articles

# Other Professional Resources

- [ADA National Network](#)--provides information, guidance and training on how the ADA applies to older people with disabilities including vision loss.
- [Aging and Vision Loss National Coalition Aging Service Provider Toolkit](#)
- [Resources | OIB-TAC](#) & [Continuing Education | OIB-TAC](#)
- [Timetobebold.org](http://Timetobebold.org) to find resources
- [WellConnected](#)--A virtual community that offers phone and online activities that build community through group conversations, games, and education.
- [Guide Techniques for people who are blind or visually impaired - YouTube](#)

# QR Code for Professional Information & Resources on APH ConnectCenter



# Contact Information

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