

# Listening to the Underserved:

## Rural Community Health Center Vision Care Needs Assessment



**FERRIS STATE UNIVERSITY**  
[www.ferris.edu/mco](http://www.ferris.edu/mco)  
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# Overview

- **Rural Health and Michigan**
- **Community-Campus Collaborations**
- **Vision Care Survey**
- **Next Steps...**

# How do we define Rural?



Courtesy of The Carsey Institute "Demographic Trends in Rural and Small Town America" by Kenneth Johnson  
[http://www.carseyinstitute.unh.edu/documents/Demographics\\_complete\\_file.pdf](http://www.carseyinstitute.unh.edu/documents/Demographics_complete_file.pdf)

# How do we define *Rural*?

- Numerous valid existing definitions for “Rural”
- NRHA recommends definitions be specific to program purpose and referred to as a programmatic *designations* vs definition
- Rural populations in US represent
  - 55% of those aged 65 and older
  - 57% of those with poorer health status
  - 56% of those below poverty level
  - 25% of US population cared for by 10% of US physicians

Data Source: NRHA <http://www.nrharural.org/about/sub/different.html> and Rural Healthy People 2010—“Healthy People 2010: A Companion Document for Rural Areas,” <http://www.srph.tamushsc.edu/rhp2010/>

# How do we define *Rural*?

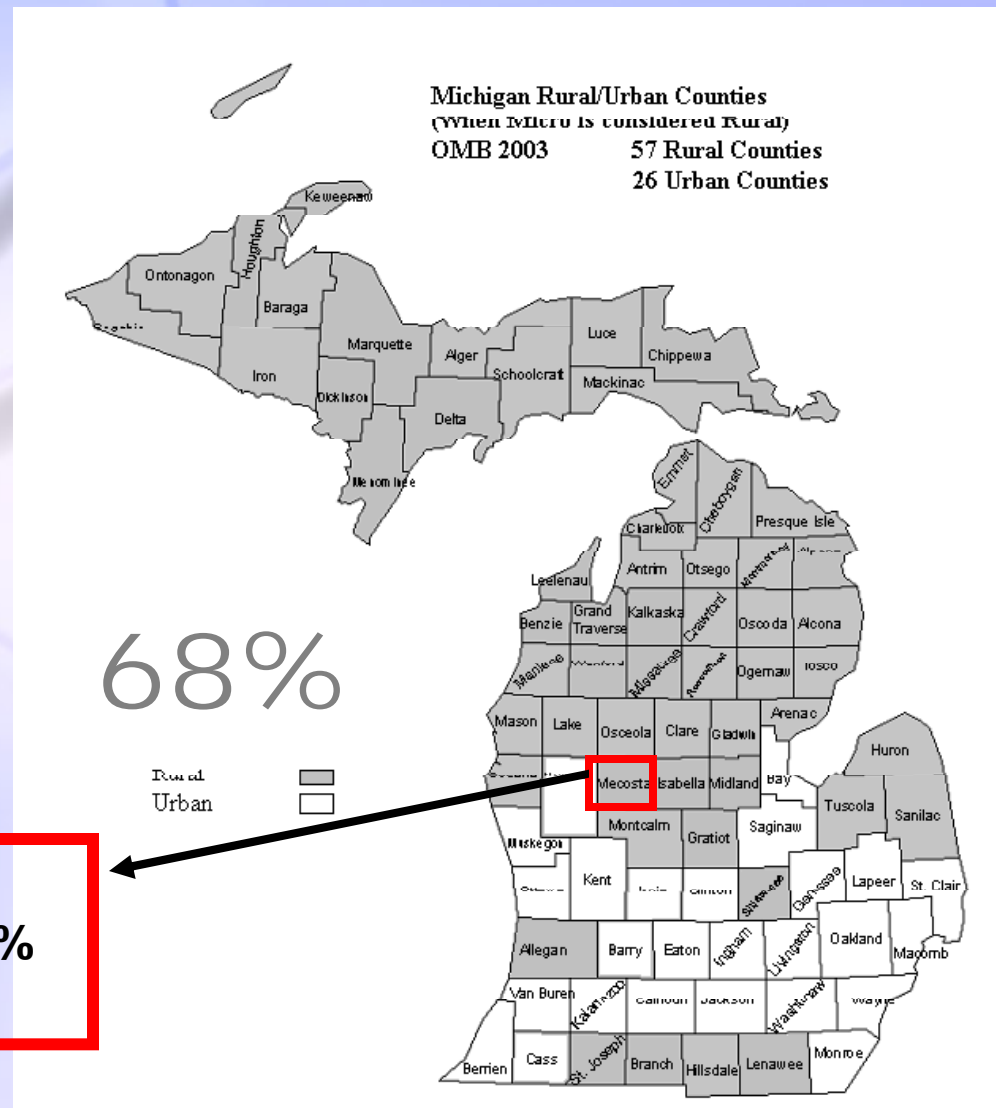
- Rural populations increasingly face challenges as they tend to be older, sicker, poorer, and more likely to live in medically underserved areas.



[http://www.przyborski.com/glenns\\_photos/old\\_farmer.jpg](http://www.przyborski.com/glenns_photos/old_farmer.jpg)

Data Source: NRHA <http://www.nrharural.org/about/sub/different.html> and Rural Healthy People 2010—*"Healthy People 2010: A Companion Document for Rural Areas,"* <http://www.srph.tamushsc.edu/rhp2010/>

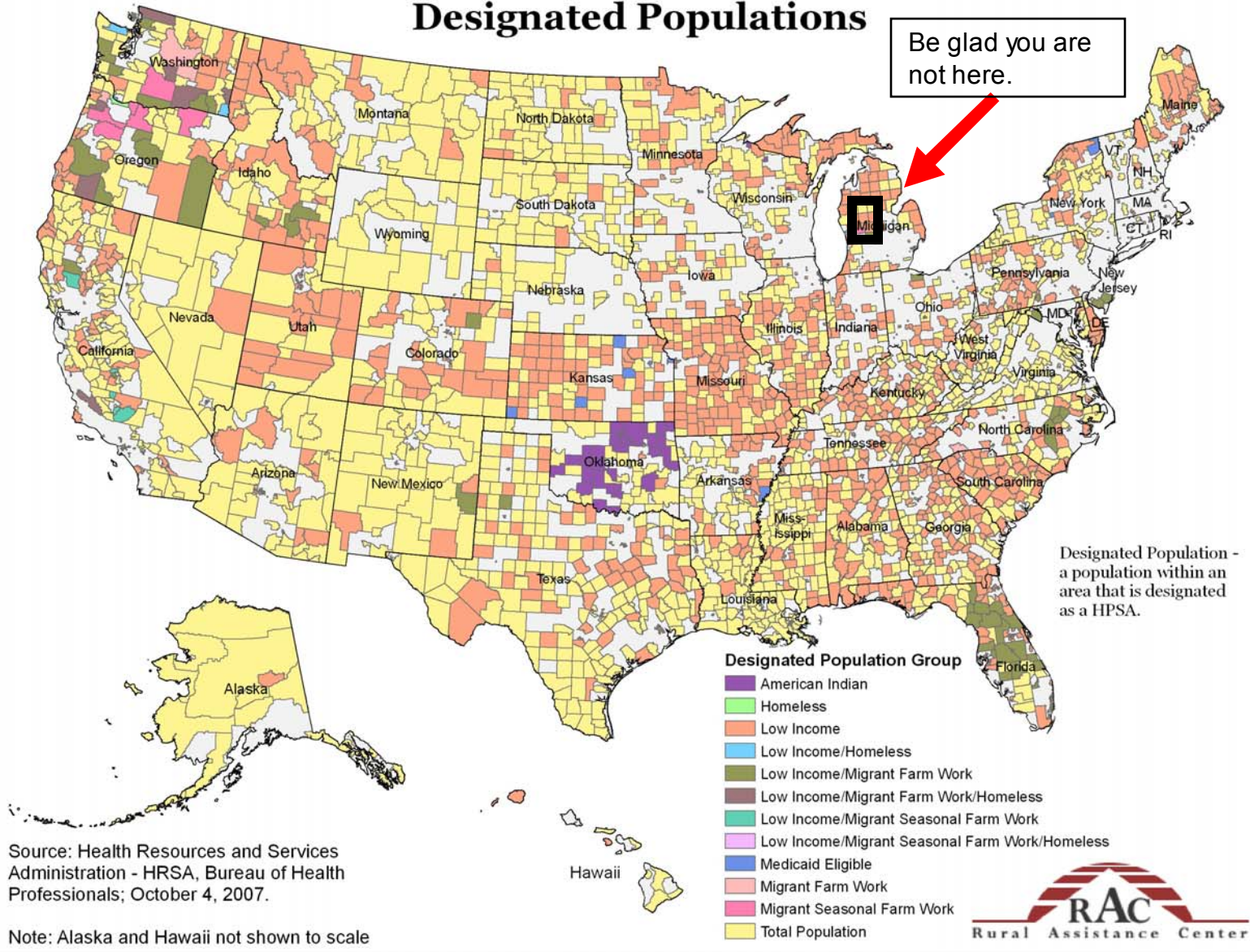
# Rural Michigan...



**38% of persons  
living below 200%  
of poverty**

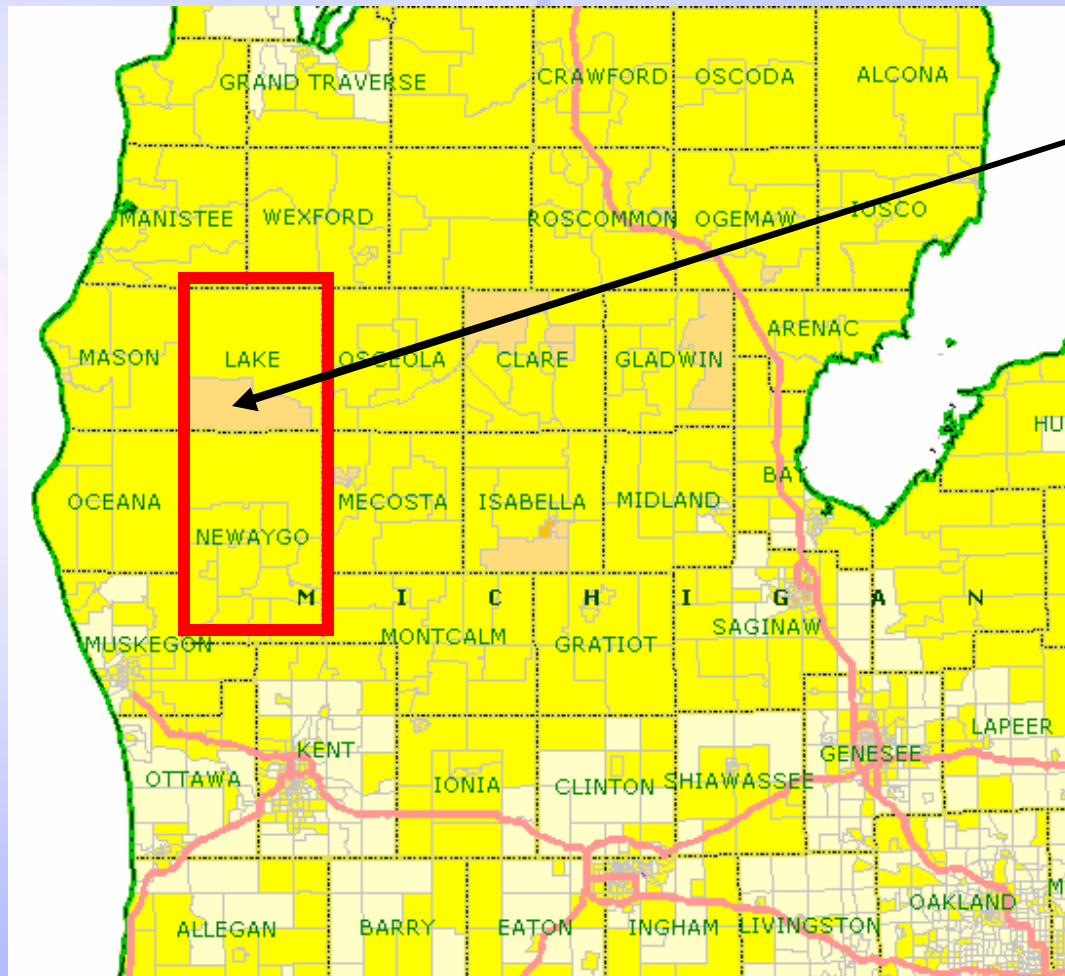
Michigan Center for Rural Health [www.mcrh.msu.edu](http://www.mcrh.msu.edu) and 2000 US Census Data

# Health Professional Shortage Areas (HPSA) - Primary Health Designated Populations

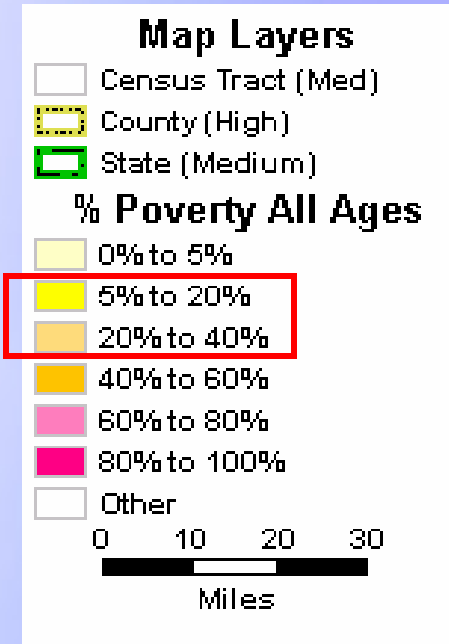




# % Poverty in Michigan

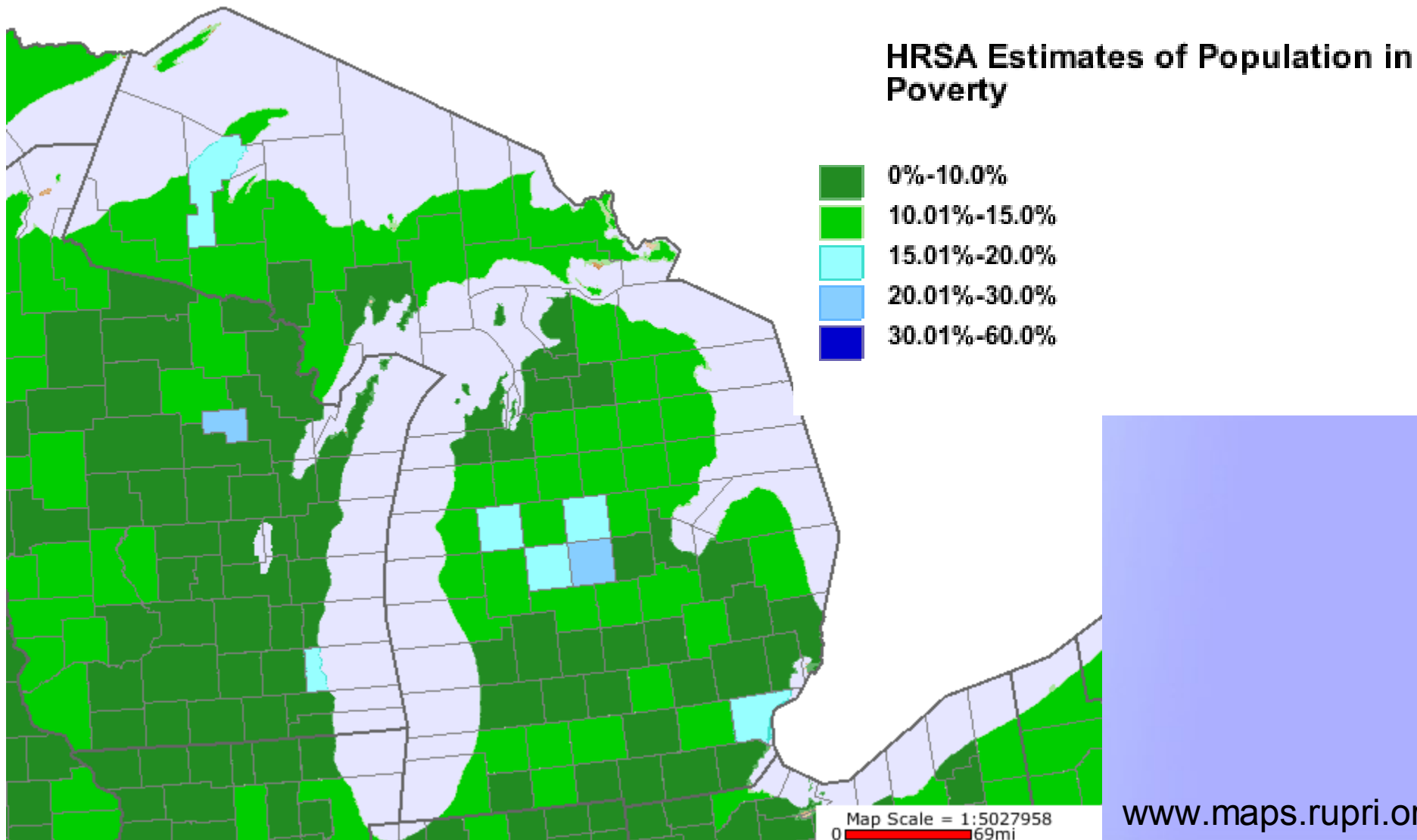


Baldwin's (2005) estimated median household income: **\$15,500**



<http://216.55.182.132/FairData/SocioEconMapper/map.asp?command=scope&map=0>

# Michigan's Poverty Estimates



# Disparities in vision care vision and eye care

- 61 million adults across the nation are estimated to be at high risk for significant vision impairment or blindness (uninsured & poor at highest risk)
- ~50% lack annual dilated exams
- Among the 14 mil visually impaired, over 83% are simply in need of spectacles
- 1 in 12 cannot afford them



**Sources:** Zhang X, *Arch Ophthalmol.* 2007;125:411-418 and Vitale S, Cotch MF, Sperduto RD. Prevalence of visual impairment in the United States. *JAMA.* 2006 May 10;295(18):2158-63.



# Federally Qualified Community Health Centers

- Primary medical home for the nation's underserved, regardless of their ability to pay
- Percentage of CHCs that provide professional eye care services:

**18% US vs. 8% MI**

# Community-Campus Partnership



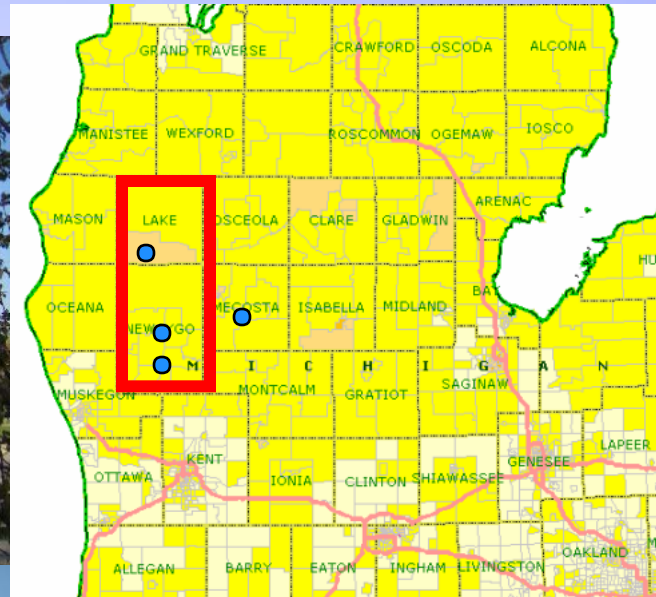
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- Committed to improving access to primary care within community
- No professional eye care services
- Need to increase diabetic eye exams
- Committed to improving access to primary eye care within community
- Desire to expand clinical experience for interns
- Workforce development

# Family Health Care



**Baldwin, MI (Lake County)**



**White Cloud, MI (Newago County)**



**Grant, MI (Newago County)**

# Community-Campus Partnership

- Sharing...
  - mission/values/goals
  - power
  - resources
  - decisions/solutions
  - capacity building
  - monitoring and evaluating
  - benefits





# A.C.C.E.S.

## A Collaborative Community Eyecare Service

A dedicated, patient-centered, fully-integrated, comprehensive vision care service of the community that includes inter-professional care, resources, education, and collaborative referrals.



# Vision Care Survey

- *The **mutual understanding** of local access and utilization issues, and the unique barriers facing rural populations **is requisite to adequately respond to the unmet needs of the community.***
- *Successful planning and implementation of vision and primary eye care services is dependent upon **listening to the underserved within the CHC.***

# Questions...

- Do they seek care?
- How often do they seek eye care?
- Are diabetic patients receiving eye care?
- What are the most significant barriers to care?
  - Cost
  - Transportation
  - Cultural / ethnic difference
  - Language...
- What is the proportion of patients with visual impairment?
- Are patients interested in receiving eye care in-house (i.e. at FHC)?

# Survey Methods

- Over 1500 adult and child patient anonymous surveys
- Non-systematic distribution x 15 days (registered pts)
- 3 separate rural community health centers
- 28 items (adult); 20 items (child)
  - patient demographics
  - vision and medical insurance status
  - perceived visual impairment
  - ocular health, medical health
  - access to care
  - frequency of utilization
  - barriers to care
- Several items were borrowed/adapted BRFSS and NHIS

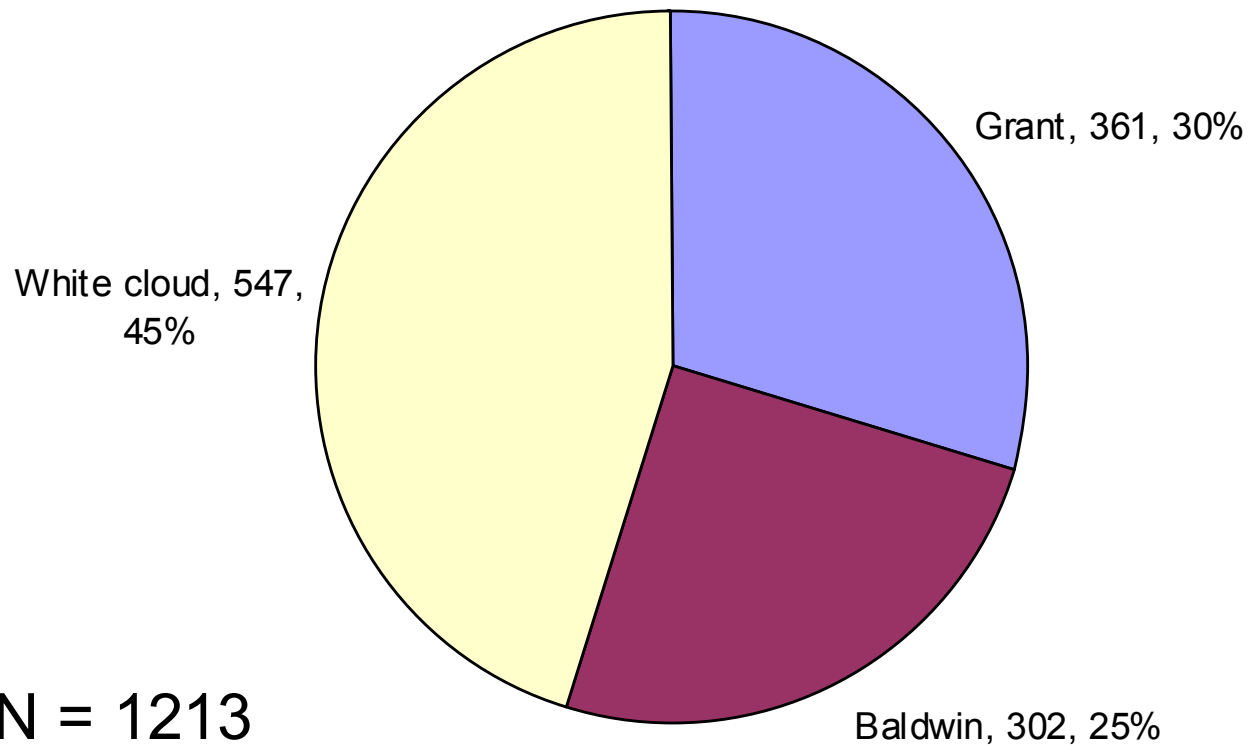


# Survey Methods

- Staff training
  - distribution, tracking, and collection
- Raffle drawing for a \$50.00 gift certificate to the local grocery store

# Results

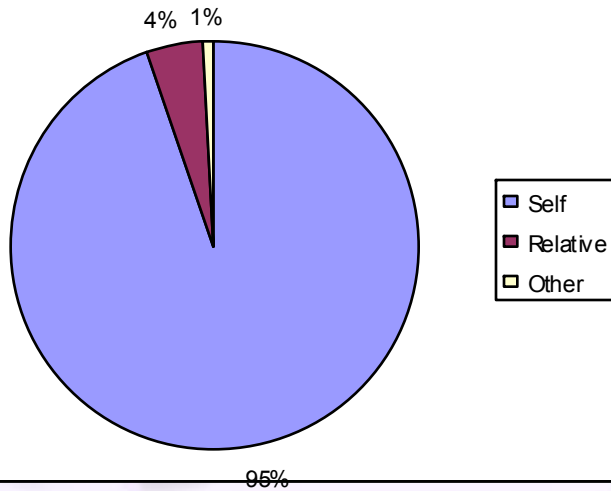
## Adult Survey



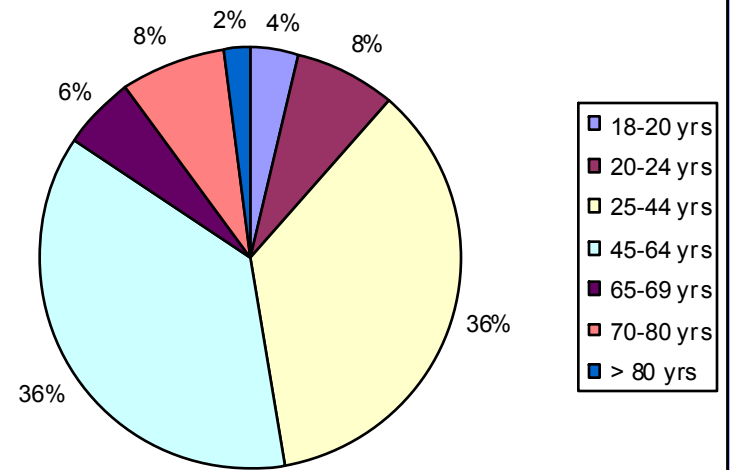
Total N = 1213

# Demographics

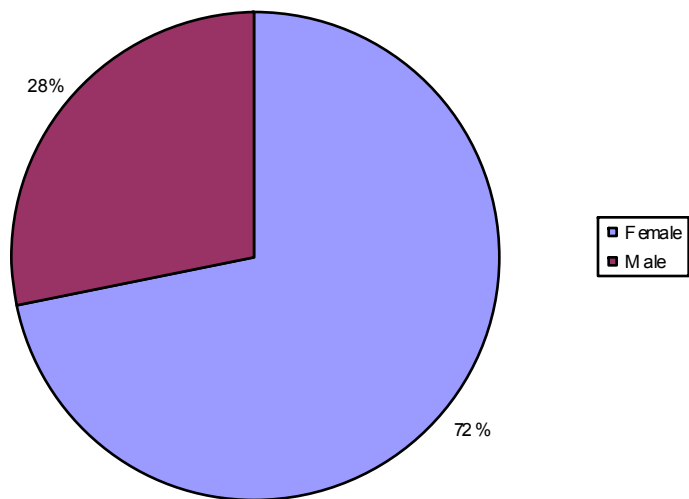
Who filled out the survey?



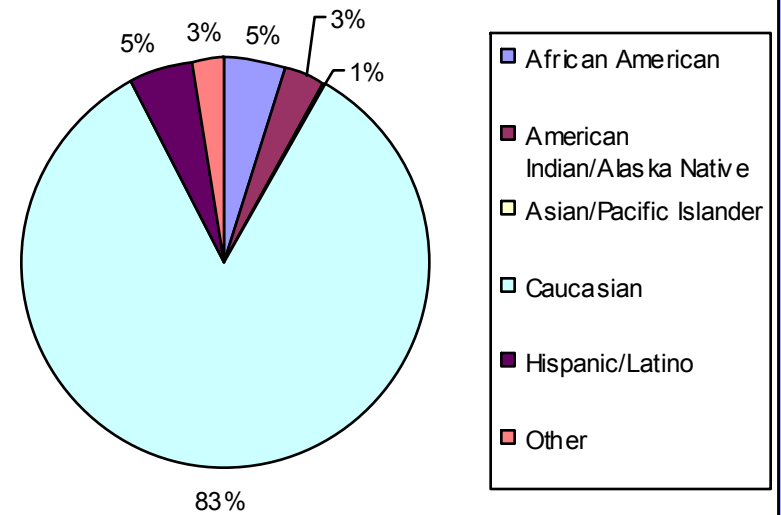
Age



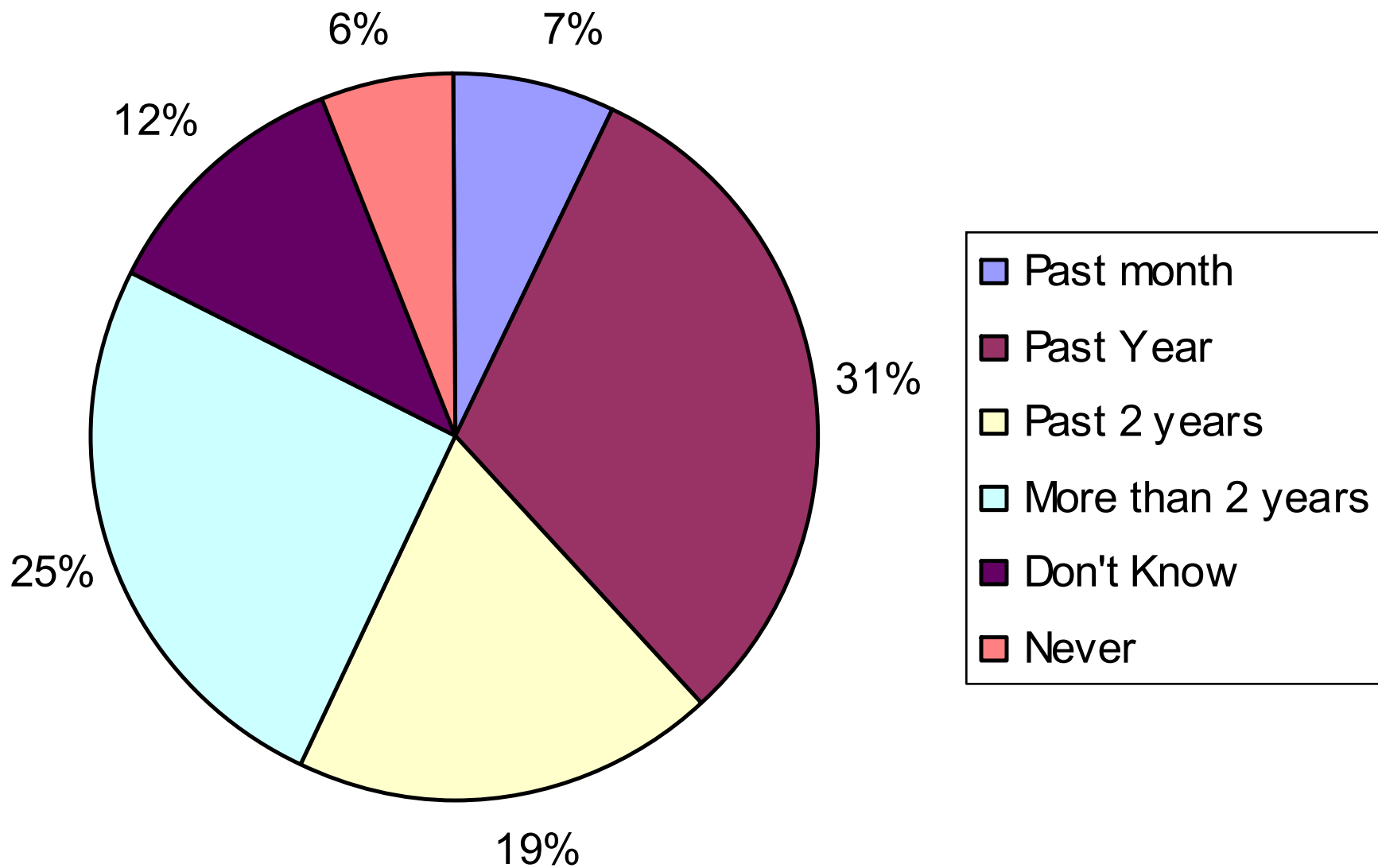
Gender



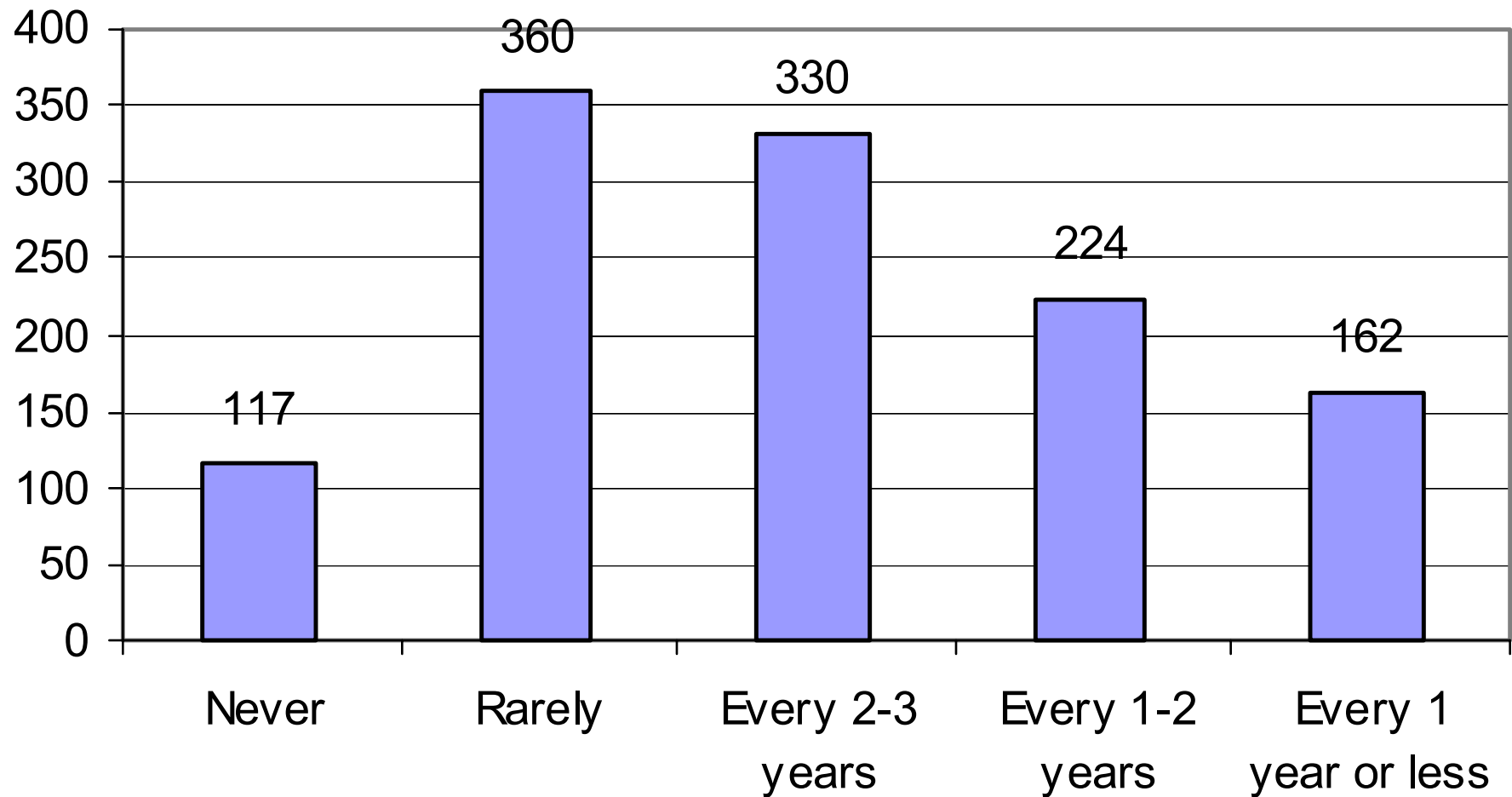
Race/Ethnicity



## When was the last time you visited ANY eye doctor (optometrist or ophthalmologist)?

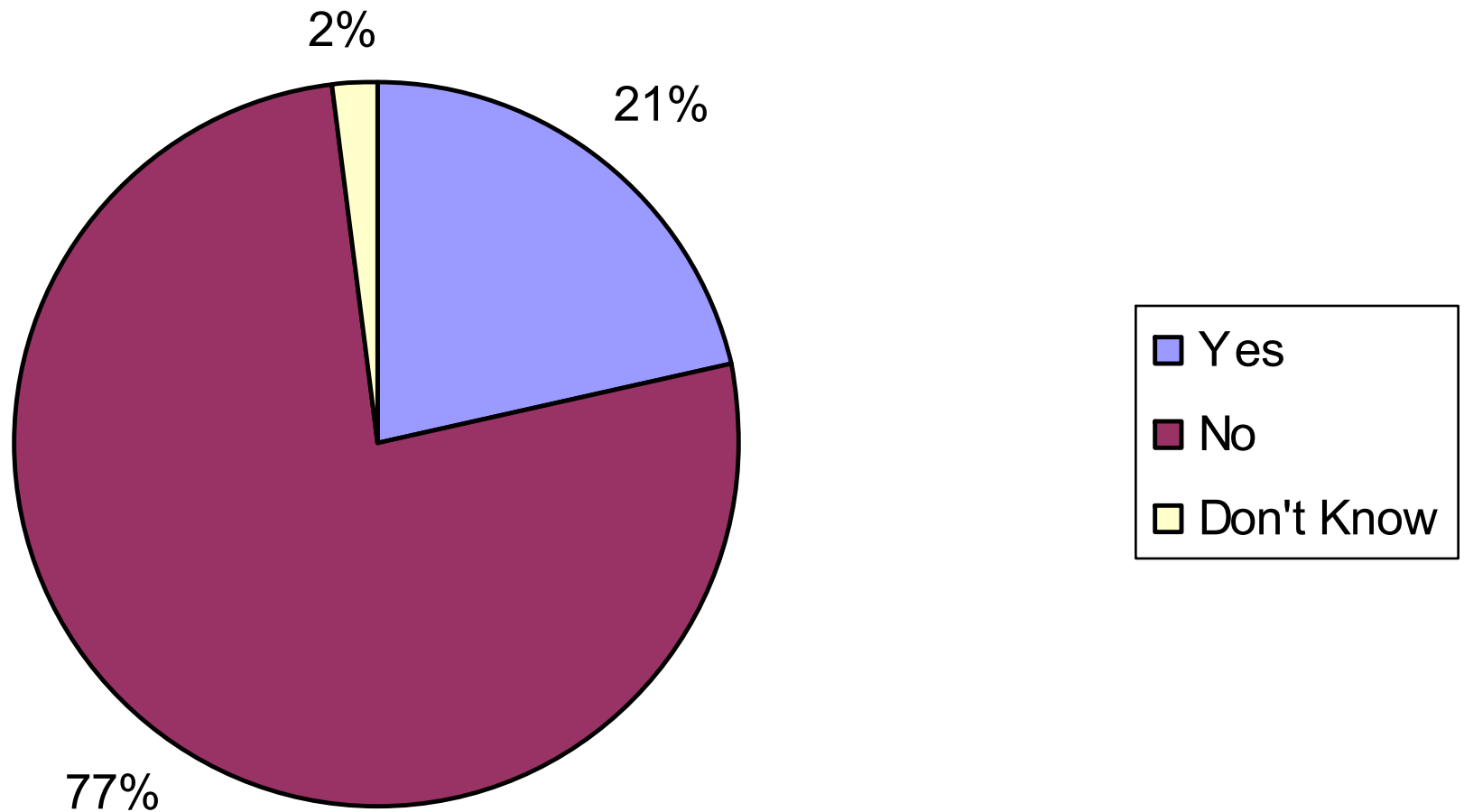


## How often do you receive care from ANY eye doctor (optometrist or ophthalmologist)?

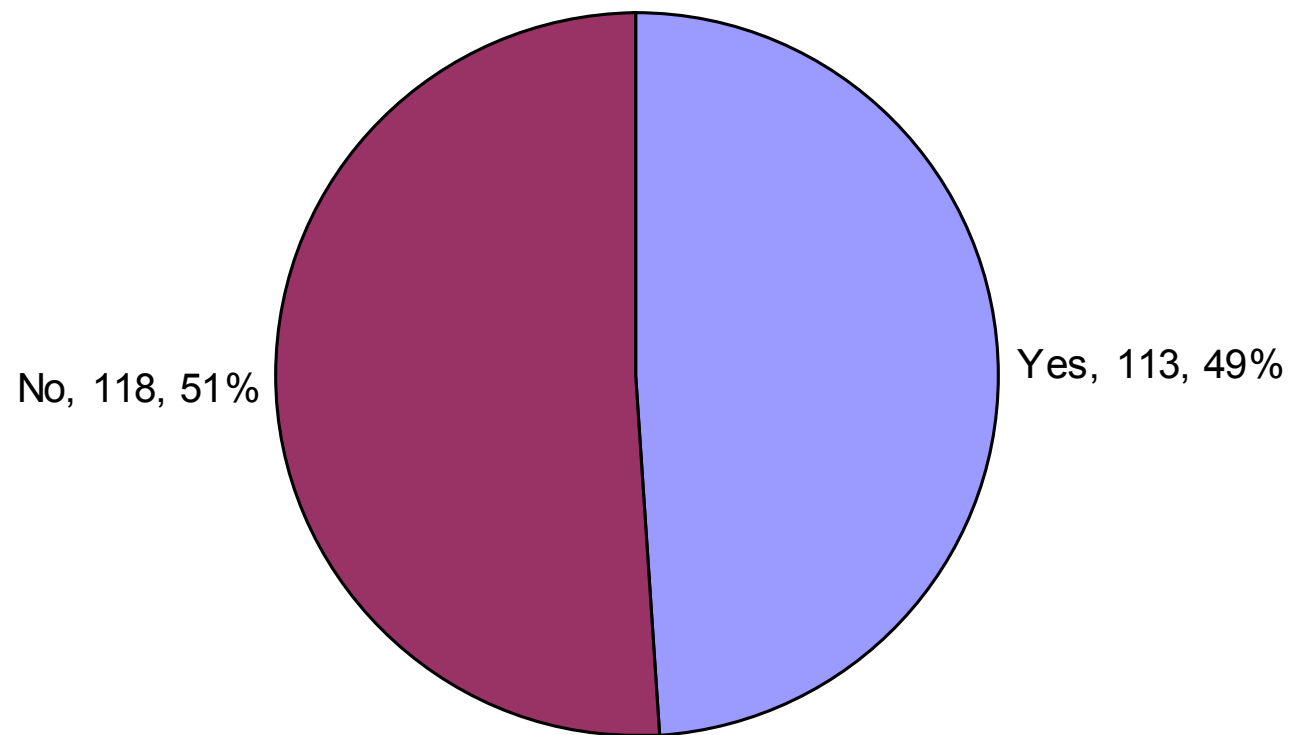




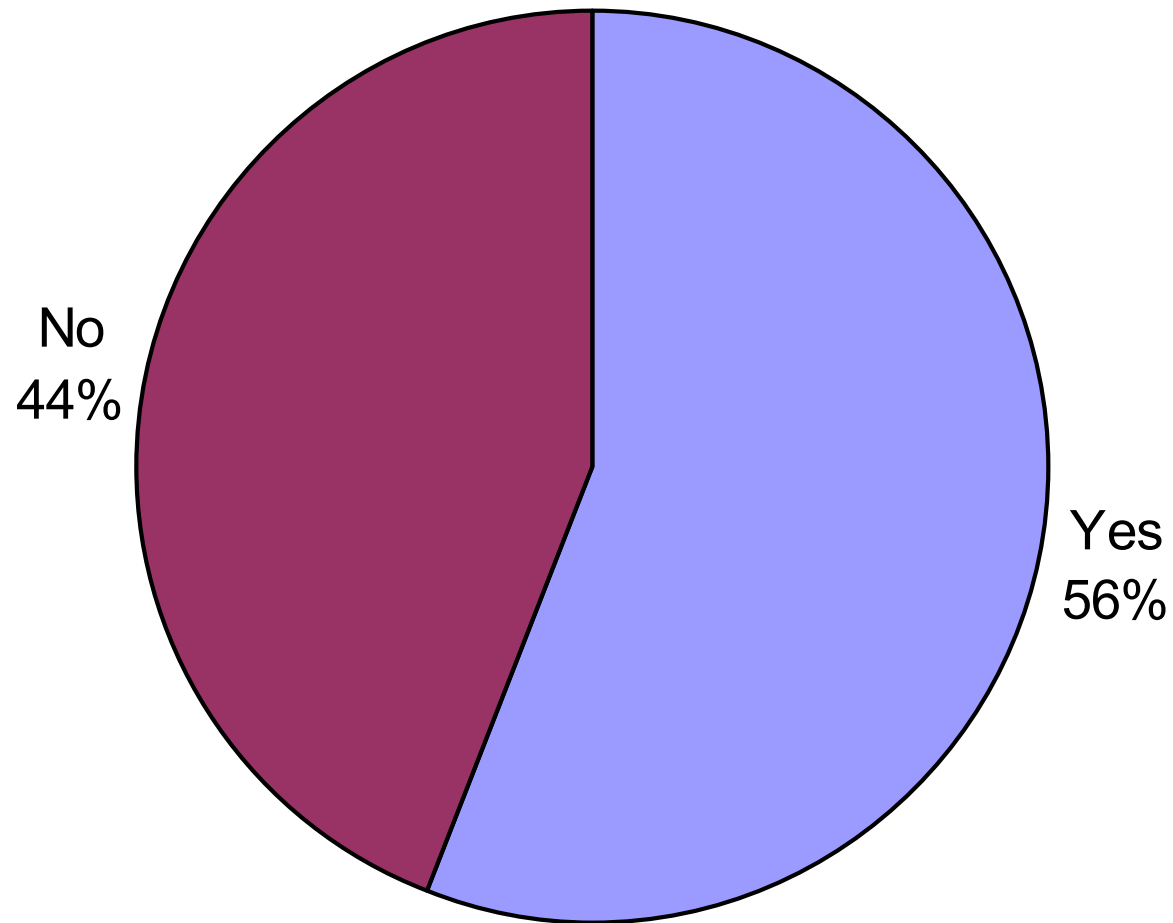
**Has your primary care provider (i.e., medical doctor, physician's assistant, nurse, etc.) ever referred you to ANY eye doctor (optometrist or ophthalmologist)?**



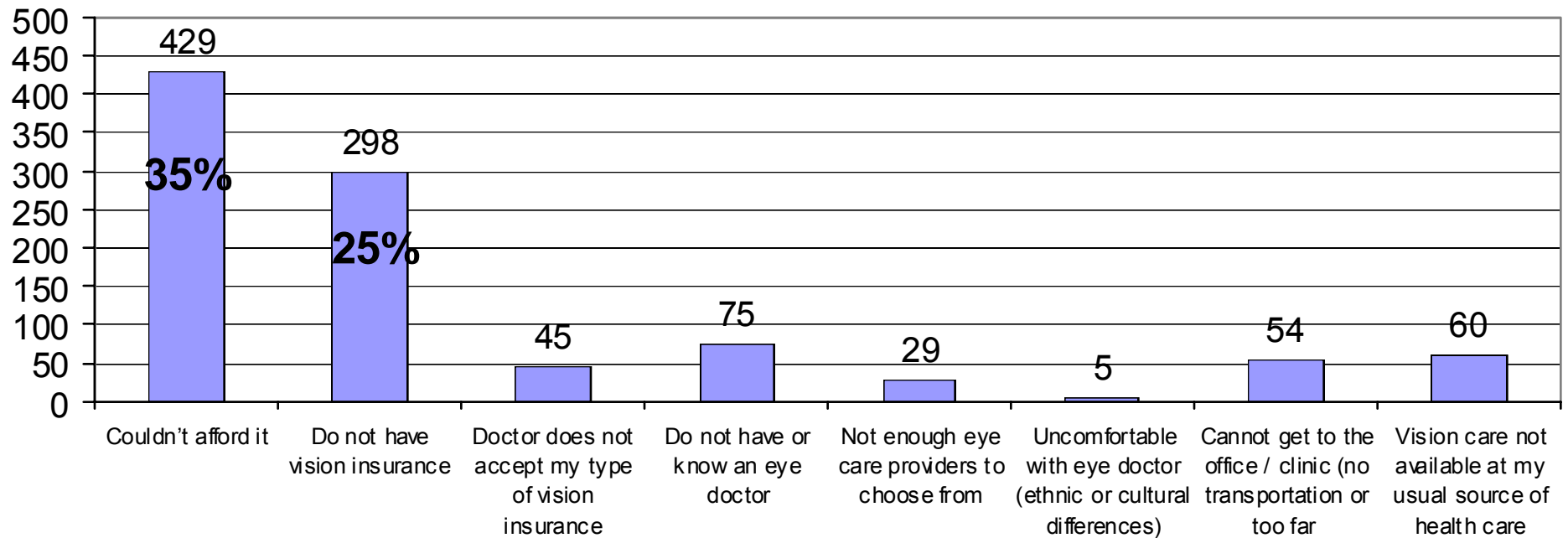
## Diabetic and Referred by PCP



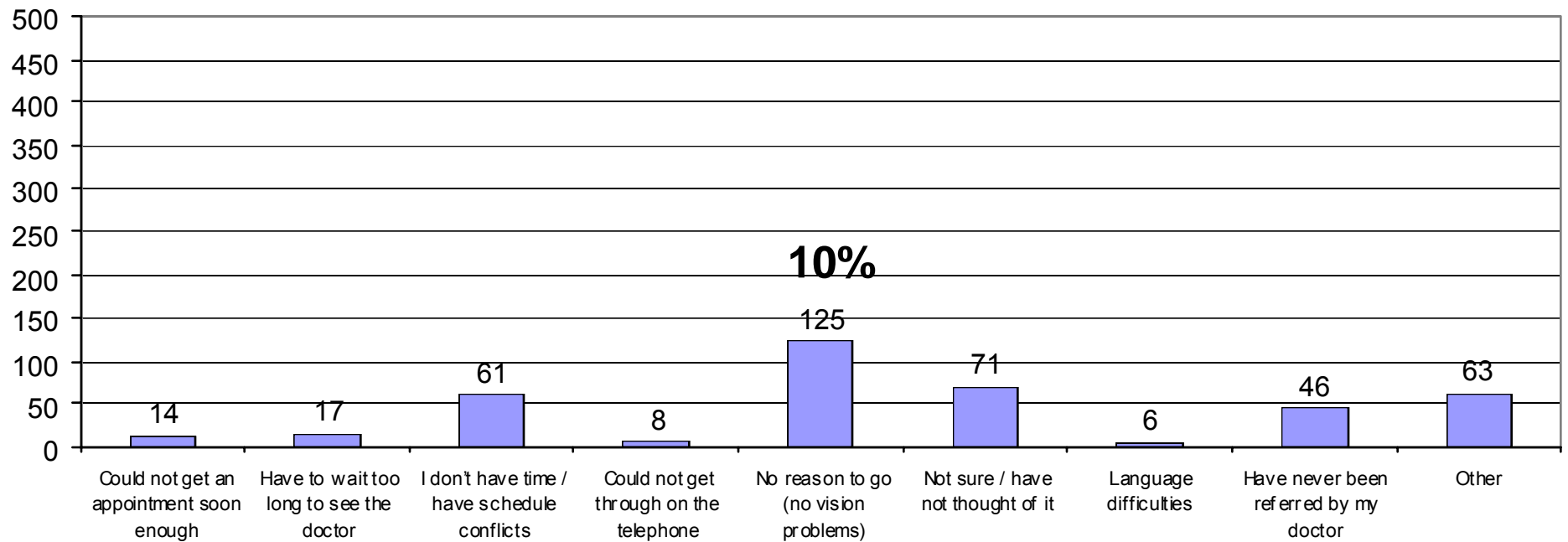
## Diabetic and Did They Have an Eye Exam within the Last Year



## Reasons for not visiting an eye doctor in the last 12 months? Part 1

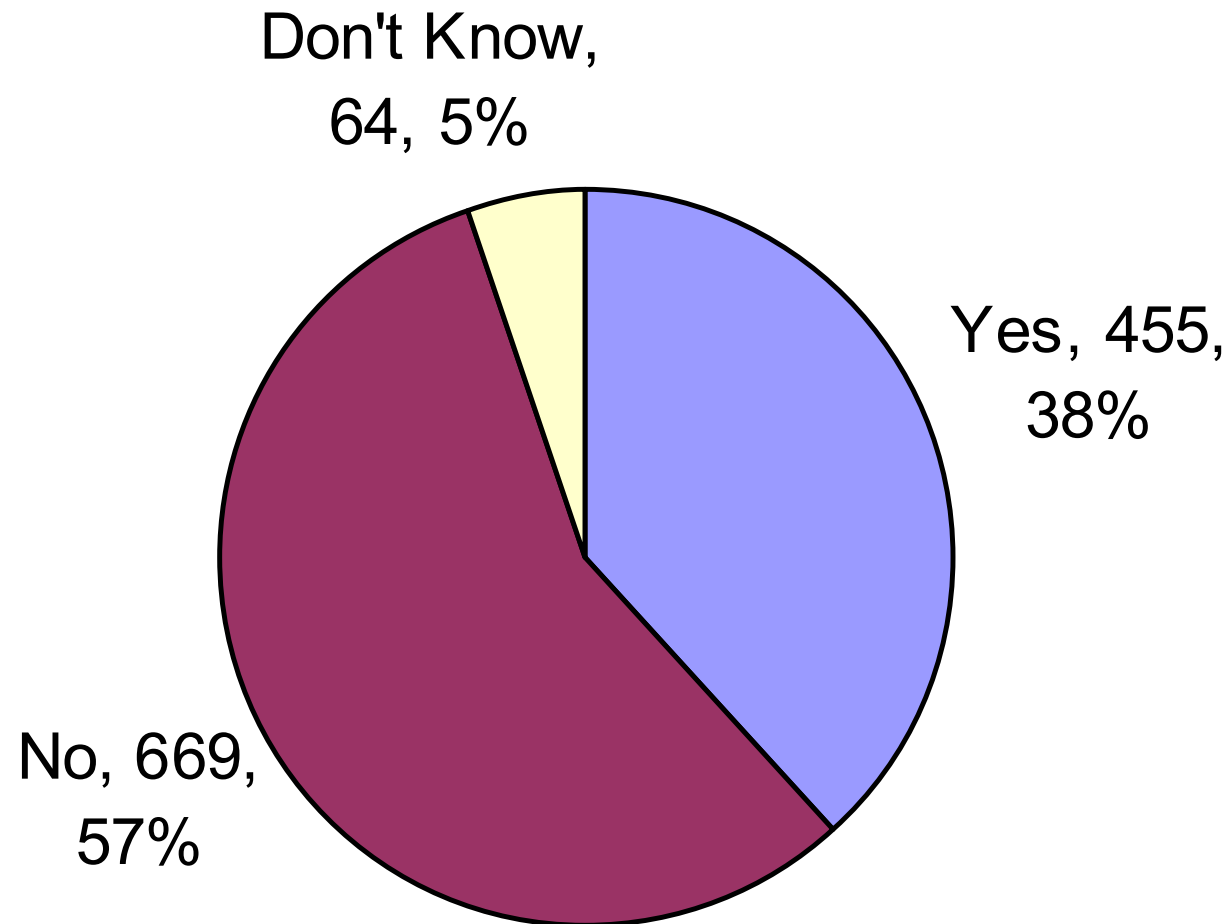


## Reasons for not visiting an eye doctor in the last 12 months? Part 2



# Do you have any trouble seeing, even when wearing glasses or contact lenses?

NHIS Defined Visual Impairment



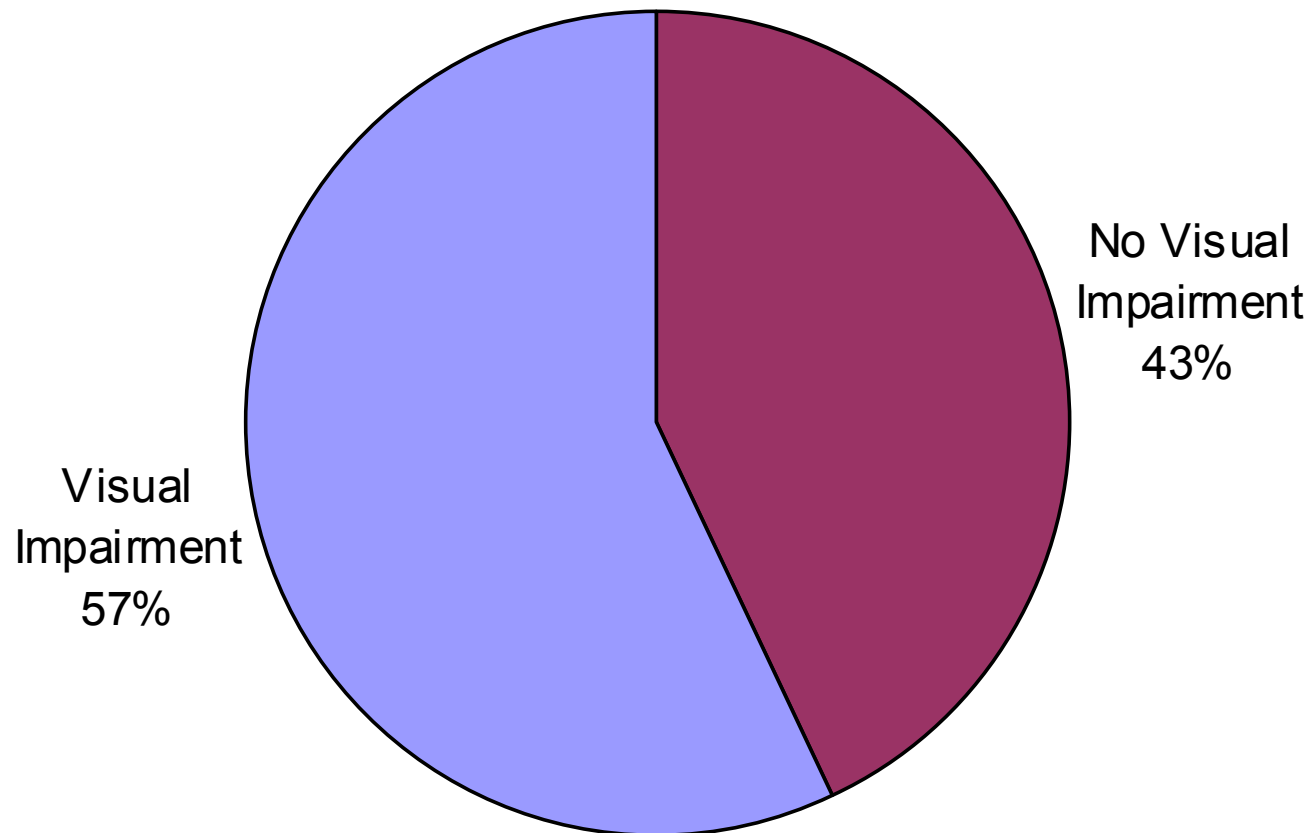
	% Visual Impairment			
	National Health Interview Survey (NHIS)		MCO-FHC Survey 2007	
	Diabetic	Non-Diabetic	Diabetic	Non-Diabetic
<b>Age Groups (yrs)</b>				
<b>50-64 (45-64 MCO)</b>	22.5	9.2	55.0	51.3
<b>&gt;65</b>	24.7	16.1	48.3	35.7
<b>Total</b>	23.7	12.1	52.7	47.1
<b>Gender</b>				
<b>Men</b>	19.2	10.9	42.3	35.7
<b>Women</b>	28.5	13.6	51.7	39.4
<b>Race/Ethnicity</b>				
<b>White/Non-Hispanic</b>	23.0	12.0	49.1	39.7
<b>Other</b>	24.9	14.1	51.5	32.1
<b>Health Insurance</b>				
<b>Yes</b>	22.6	12.1	49.5	37.0
<b>No</b>	33.3	19.5	41.9	43.8

# BRFSS –visual impairment

- **How much difficulty, if any, do you have in recognizing a friend from across the street?**
  - no difficulty
  - little difficulty
  - moderate difficulty
  - extreme difficulty
  - unable to do recognize a friend because of eyesight
- **How much difficulty, if any, do you have seeing the television?**
  - no difficulty
  - little difficulty
  - moderate difficulty
  - extreme difficulty
  - unable to do recognize a friend because of eyesight

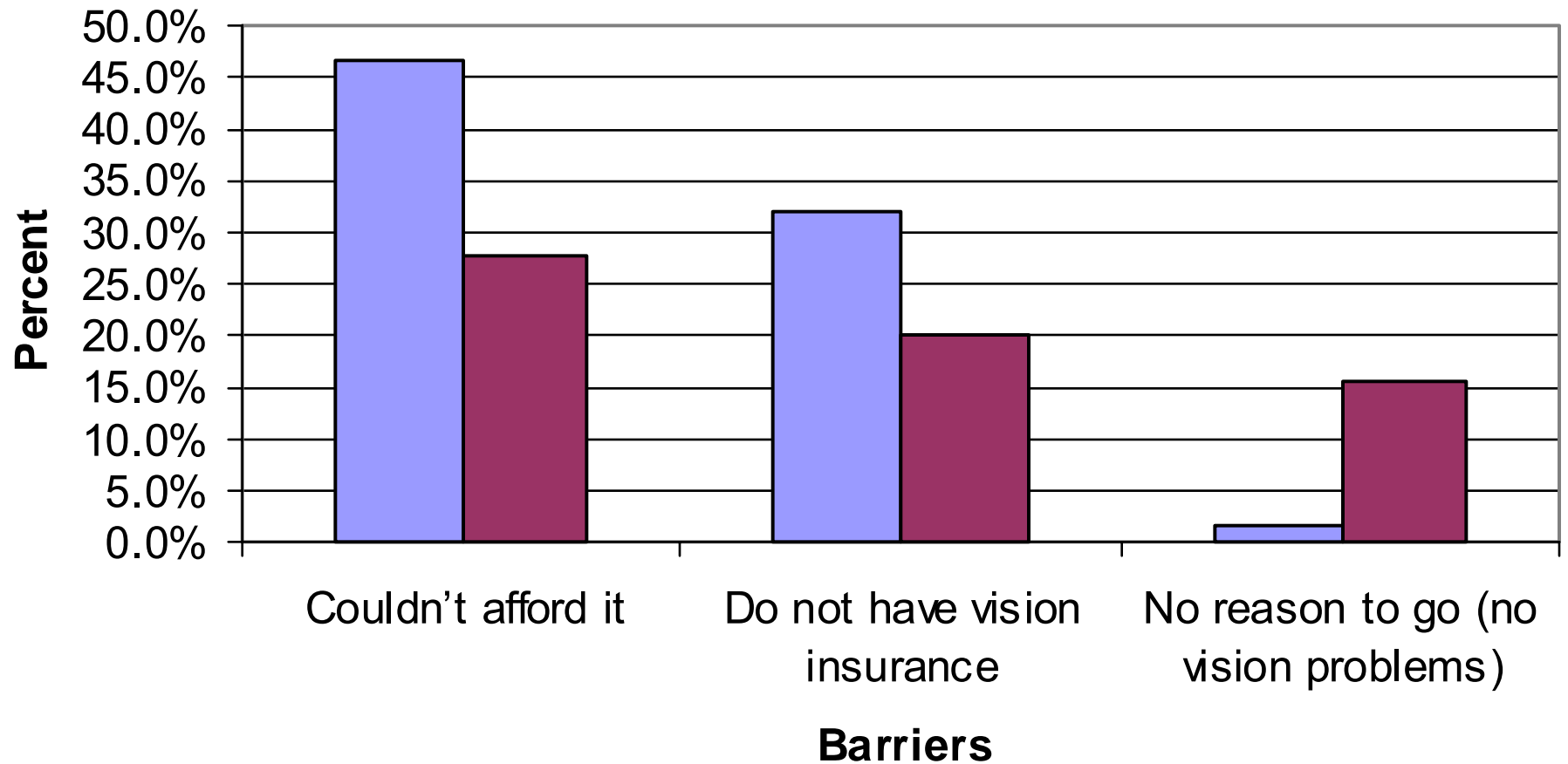


## BRFSS Defined Visual Impairment



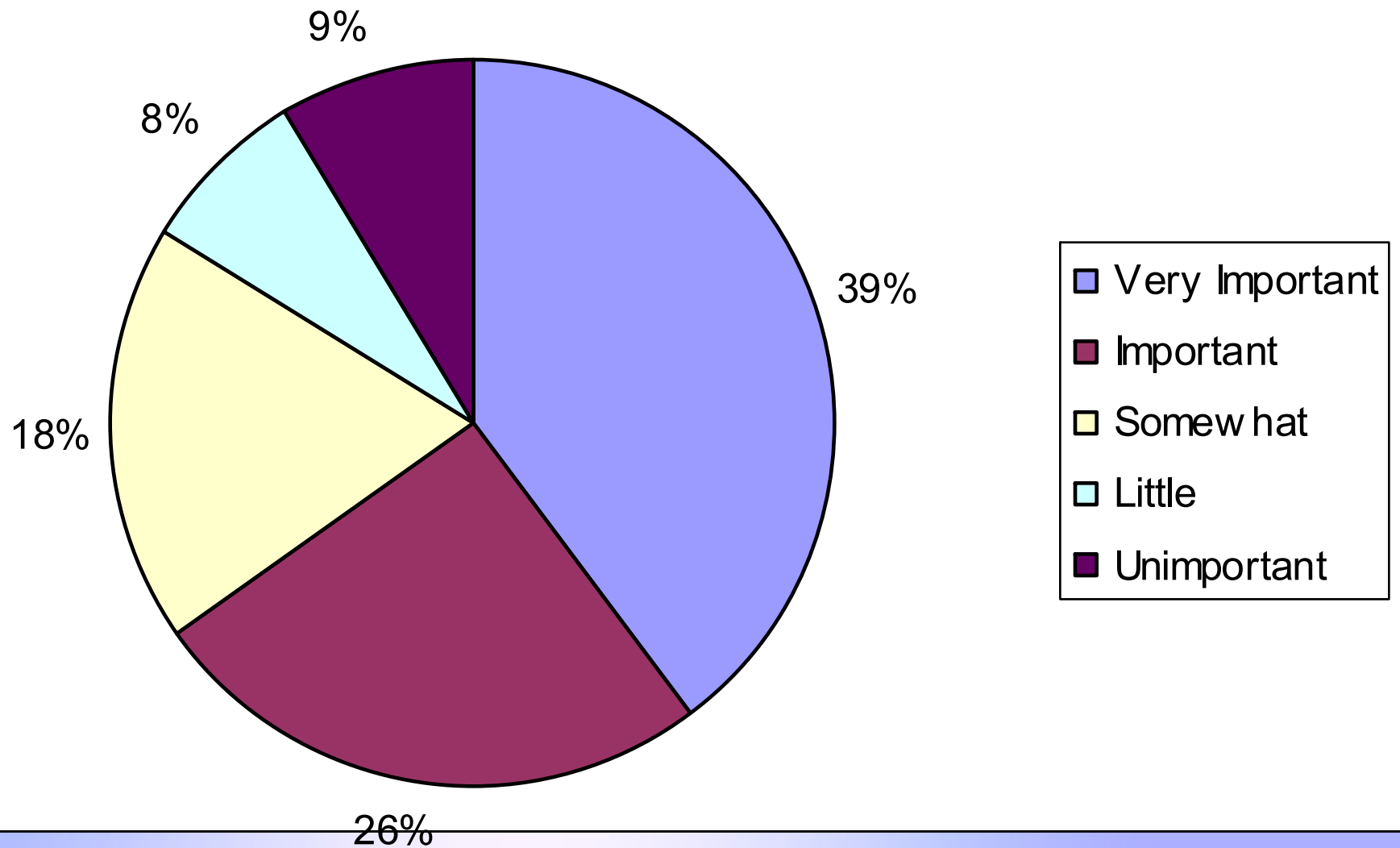
BRFSS (5 states): 14.3% - 20.5% (Iowa, Ohio, Louisiana, Texas, Tennessee)

## Perceived Barriers by Visual Impairment

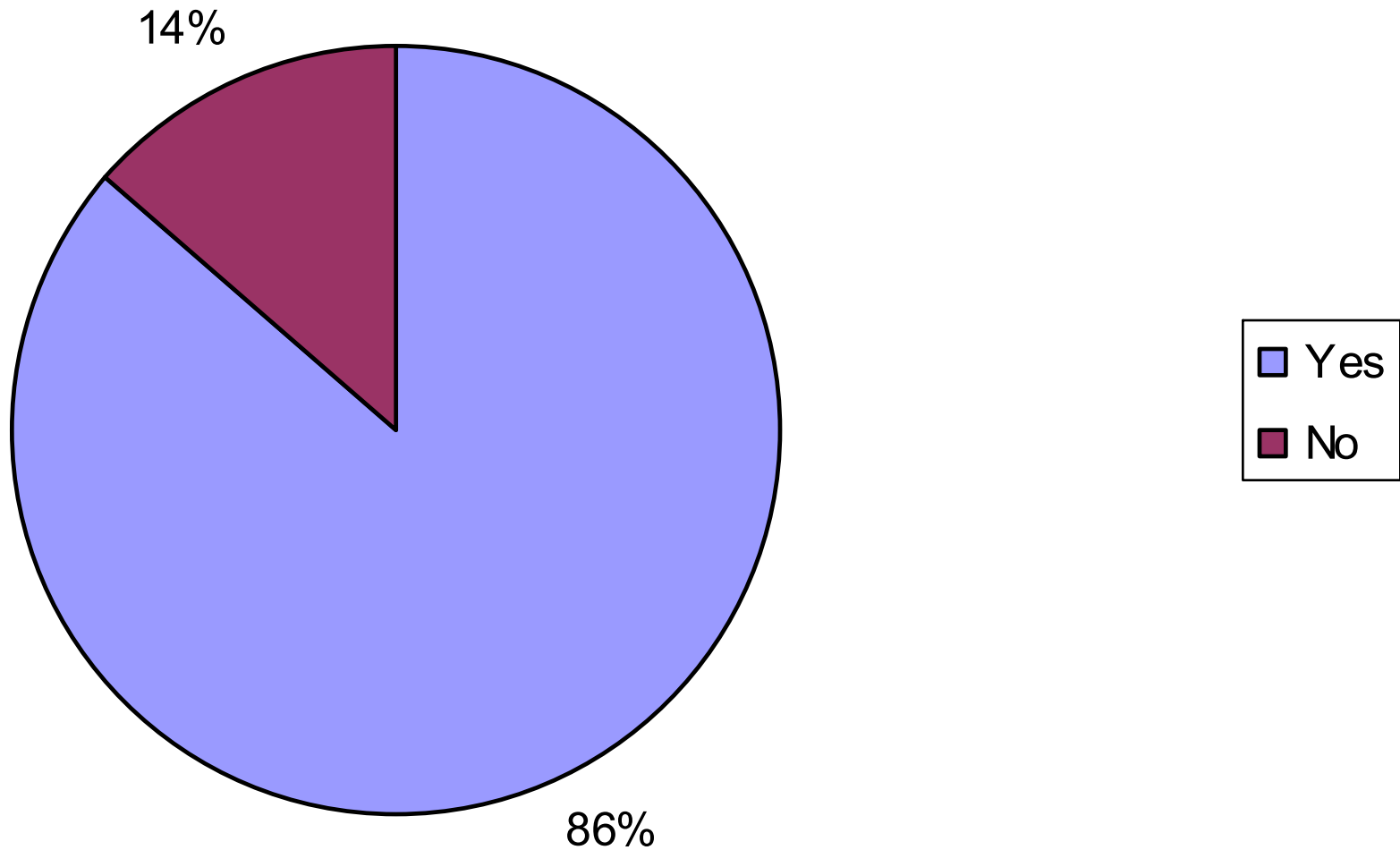


■ Visually Impaired ■ Non-Visually Impaired

## How important would it be for you to receive eye care services at this facility?



**Would it be convenient for you to receive eye care services from an eye doctor at this facility?**



# Conclusions...

- Do they seek care? **~50% seek eye care every 1-2 years**
- How often do they seek eye care? **~68% >2 years**
- Are diabetic patients receiving annual eye exams? **44% no**
- What are the most significant barriers to care?
  - **Cost, lack of insurance, no reason to go**
  - Transportation
  - Cultural / ethnic difference
  - Language...
- What is the proportion of patients with visual impairment? **38%**
- Are patients interested in receiving eye care in-house? **YES**

# Limitations...

- Local survey –cannot generalize
- Self-reported findings
- Selection bias



# Questions?



# Resources

- National Association of Community Health Centers  
[www.nachc.com](http://www.nachc.com)
- Community-Campus Partnerships for Health  
[www.ccph.info](http://www.ccph.info)
- National Rural Health Association  
[www.nrharural.org](http://www.nrharural.org)
- US DHHS -Health Resources and Services Admin  
[www.hrsa.gov](http://www.hrsa.gov)
- Rural Health Policy <http://ruralhealth.hrsa.gov/>
- Rural Healthy People 2010—*"Healthy People 2010: A Companion Document for Rural Areas,"*  
<http://www.srph.tamushsc.edu/rhp2010/>



# Thank You!

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