



**North Carolina Diabetes Advisory Council**

**Welcome, Diabetes Stakeholders!**



Lisa P. Davis, PhD, MSPH  
Duke Translational Research Institute



Public Health



 **Duke** Translational Medicine Institute

*Transforming* **Medicine**



Cooperative Extension



Ebenezer Missionary Baptist Church



The Conservation Fund/The Sojourner Group



Transforming Medicine



## Project Goals

- Improve population-level diabetes management health outcomes and quality of life for diagnosed and undiagnosed adults with type 2 diabetes.
- Reduce disparities in diabetes management, health outcomes, and quality of life for adults living with type 2 diabetes. These include disparities based on race, age, gender, SES, and insurance status.



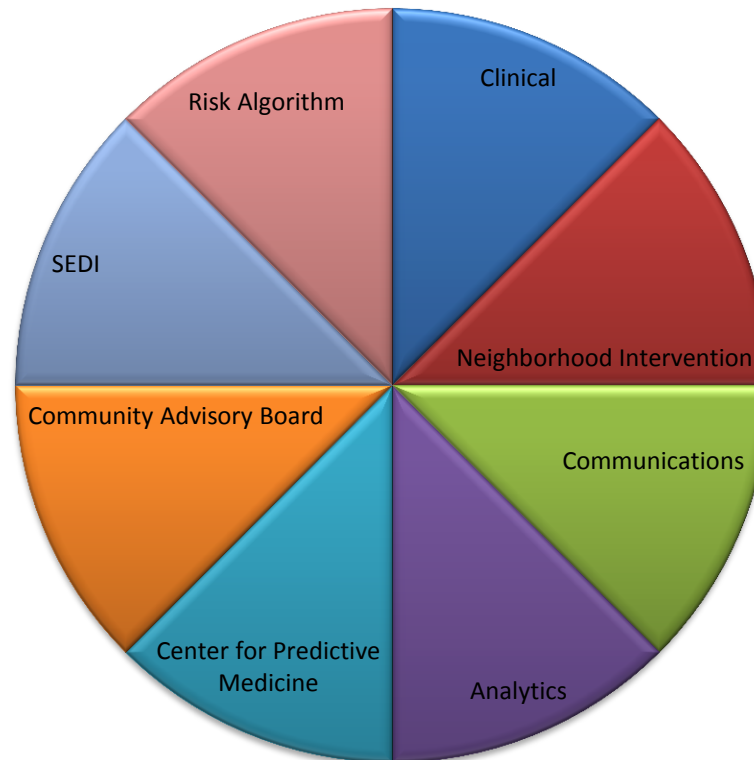
Centers for Medicare & Medicaid  
Services

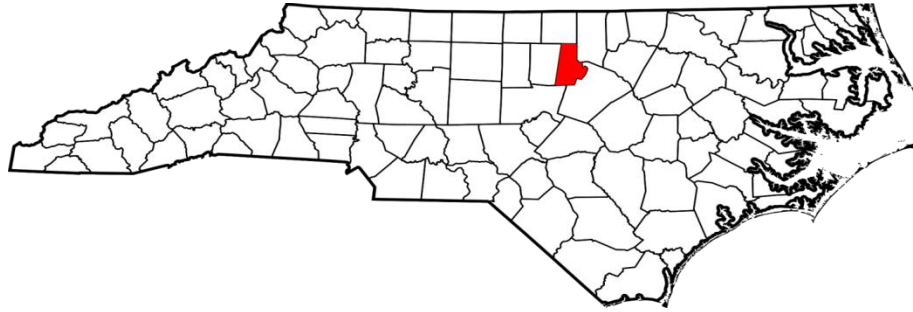


*Transforming* **Medicine**



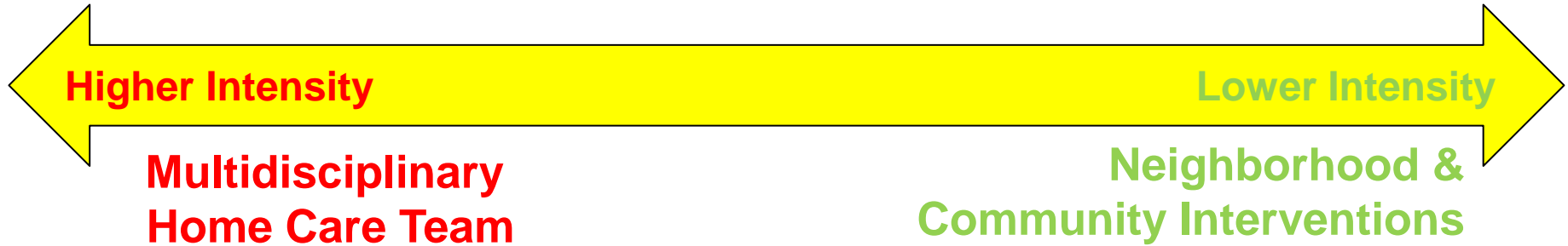
# Key Project Components





# FOCUS ON **CLINICAL** AND **NEIGHBORHOOD** INTERVENTIONS

# Social/Medical Risk Model Drives Intervention



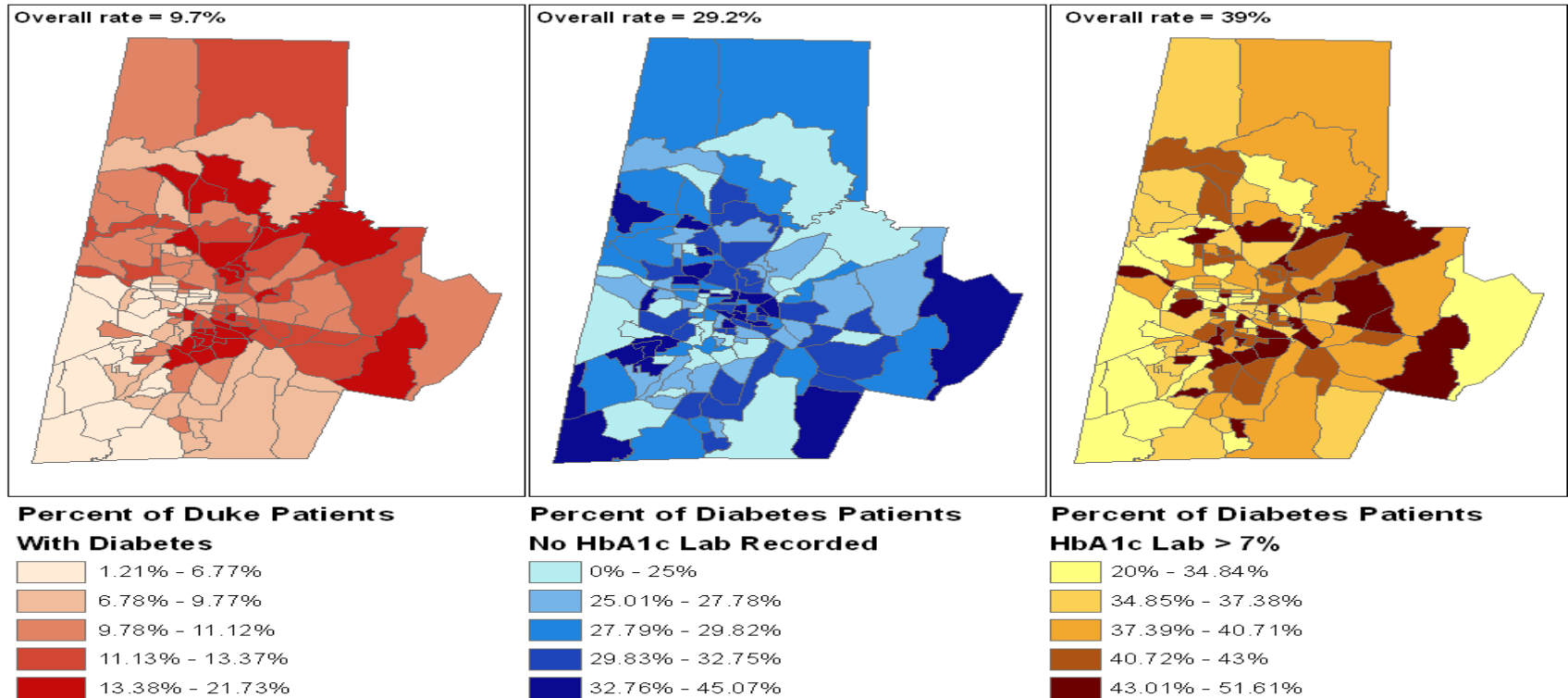
- Different intensities of intervention
  - High-intensity clinical teams versus lower-intensity community-based teams
- Different modes of intervention
  - Patient basis, neighborhood basis, community basis
- Targeted intervention
  - Stratifying patients based on risk, both at patient and neighborhood levels



# GHIS Maps

- Show how health and other outcomes are spatially patterned and drives higher intensity interventions

Duke Diabetes Patients, 2007-2011

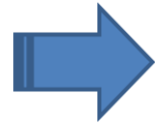




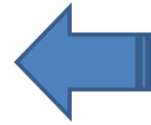


# Flow Chart

EHR data  
(currently Durham  
site only)



Risk  
Algorithm



Provider  
Referrals

≥90%

High risk

65-89%

Moderate risk

≤65%

Low risk

### High-risk Intervention

- 5 sets of home visits by team, occurring every 6 months
- Assistance also provided between visits
- Teams include nurses, social workers, dietitians, community health workers

#### Electronic data capture in eCOS:

- Demographics
- Vital signs/physical exam
- Laboratory results
- ED/Inpatient visits
- Medication adherence
- Patient activation
- Health literacy

### Telephone Module Intervention

- 12 monthly calls by interventionist
- Mailers reinforcing/supplementing information covered during calls

#### Electronic data capture:

- Medication adherence
- Side effects
- Routine exam/test compliance
- Weight/Tobacco/Exercise goals

Community-based events, diabetes self-management classes, quality improvement with current sources of care, media activities, cooking demonstrations, etc.

**Data collected:** Participation and demographics



# HIGH & LOW RISK PATIENT STORIES





## High Risk Patient Story #1

- Provider referred 60 yo AA male with T2DM, Medicaid and Medicare coverage
- History of stroke, cardiomyopathy, elevated A1C, syncope, multiple injuries due to frequent falls from passing out, and bipolar depression
- Patient has several providers (neurology, cardiology, endocrinology, gastroenterology, psychiatry) and takes multiple medications daily



## High Risk Patient Story #1 (continued)

- DDC Clinical Team (NP, CHA, RD, LCSW):
  - Identified food insecurity as a major issue
  - Connected patient to Senior PharmAssist, Meals on Wheels, Congregate meals program, emergency community food resources, DDC Food Pantry, and Section 8 housing support
  - Titrated insulin as needed due to hypoglycemia, set-up a new glucometer, and prescribed statin
  - Noted patient resources (family support, home health aid, phone availability)
  - A1C **decreased** from **13.2** to **7.4** over 12-months



## High Risk Patient Story #2

- Latino male patient from Mexico with uncontrolled type 2 diabetes, no PCP, and frequent ED visits
- CHA intervened and established PCP, obtained case management services, submitted application for hospital financial assistance program, wrote letter to employer noting the need to attend medical appointments, and provided education
- Patient decreased blood sugar levels, ER visits, and health care costs



## High Risk Patient Story #3

- Unemployed 39 AA female with diabetes, severe depression, and dental issues
- Resides in a crime ridden neighborhood and maintains a very disorganized home environment
- Tense daily living situation due to broken marriage, lack of financial resources, and overall feelings of hopelessness
- Social worker linked patient with mental health professionals in the community; helped patient transition to new provider that has improved her overall outlook; and provided social support



## Low Risk Patient Story #1

- Community health integrators offered DSMP classes at the health department and local church; 4 seniors aged 65-70 attended to “learn more about diabetes”
- By the end of the session seniors shared that they had been diagnosed with diabetes by their physician over a year ago but did not want to *claim* the condition
- One participant stated that he learned more through the 6-week workshop than he did over several months at the wellness center



## Low Risk Patient Story #2

- Simple inexpensive kale apple salad food demonstration for 34 residents in a Durham Housing Authority Community Healthy Living Moment presentation motivated residents and increased workshop participation for a CDSMP class





# COMMUNITY EVENTS



## What's the 411: Workshops

- Connect providers to the community and provide free medical expertise
- Address community needs and interest areas
- Provide free resources to the community to support diabetes self-management (shoes, foot mirrors, educational resources, etc.)
- Topics covered to date include medications, foot care, and amputations. Kidney health workshop coming in July



# What's the 411 Workshops





# Diabetes Food Pantry and Support Group

- Offer weekly health education sessions, clinical counseling, and blood pressure checks
- Provide monthly cooking demonstrations
- Give food bag with diabetes friendly foods





# Other Community Events

- Diabetes Alert Day
- Men's Health Initiative Screening Partner
- Take A Loved One to the Doctor
- Diabetes food drive
- Grocery store tours
- Health festivals
- Mini-grants to community organizations
- Support groups



# Communications Activities



- Living Healthy Television Show
  - Airs nightly on DTN at 7p.m. on Time Warner Cable and U-Verse Channel 99
- Website
  - [Durhamdiabetescoalition.org](http://Durhamdiabetescoalition.org)
- FB
- Twitter
- YouTube
- Newsletters
- Press releases
- Media campaigns
- Proclamations





## Results to Date

- Created a Risk Algorithm to I.D. patients with diabetes at highest risk for bad outcome in the next year
- Deployed clinical and neighborhood interventions
- Developed a Diabetes phenotype for secondary EHR data analysis
- Completed 6,358 clinical team contact logs with high risk patients and advanced the CHW profile in Durham County
- Strengthened provider communications and built capacity within targeted communities
- Started a diabetes food pantry and support group
- Decreased # of inpatient admissions, ED visits, and % poorly controlled A1C values among high risk patients



# Living Healthy Television Show

- <https://www.youtube.com/watch?v=Fcb7ZeMMP-U>





**Cornell P. Wright, MPA**

Executive Director

NC Office of Minority Health and Health Disparities

# Office of Minority Health and Health Disparities: History

The original impetus for creating an Office of Minority Health (OMH) came from a 1987 report prepared by the State Center for Health Statistics that highlighted the **disproportionate morbidity and mortality experienced by minority populations.**



# Office of Minority Health and Health Disparities: History

In response to this report, the 1992 North Carolina General Assembly established the **Office of Minority Health**, and the **Minority Health Advisory Council** (MHAC) in public law H.B. 1340, part 24, sections 165 and 166.

Under the leadership of the Secretary of the Department of Health and Human Services in 2001 the office name was changed to **Office of Minority Health and Health Disparities** (OMHHD).

# Office of Minority Health and Health Disparities: Mission

To promote and advocate for the elimination of health disparities among all **racial/ethnic minorities** and other **underserved populations** in North Carolina.



# Office of Minority Health and Health Disparities: Vision

All North Carolinians will enjoy good health regardless of **race** and **ethnicity, disability** or **socioeconomic status**.

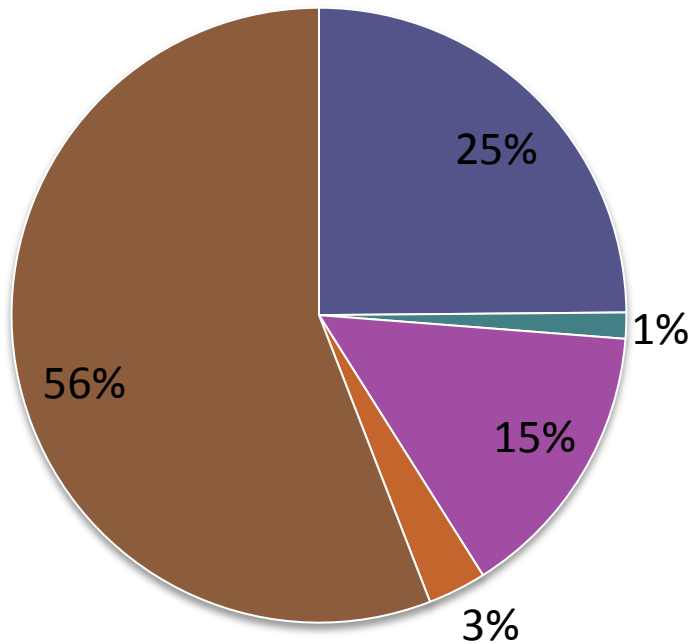


# North Carolina's Population

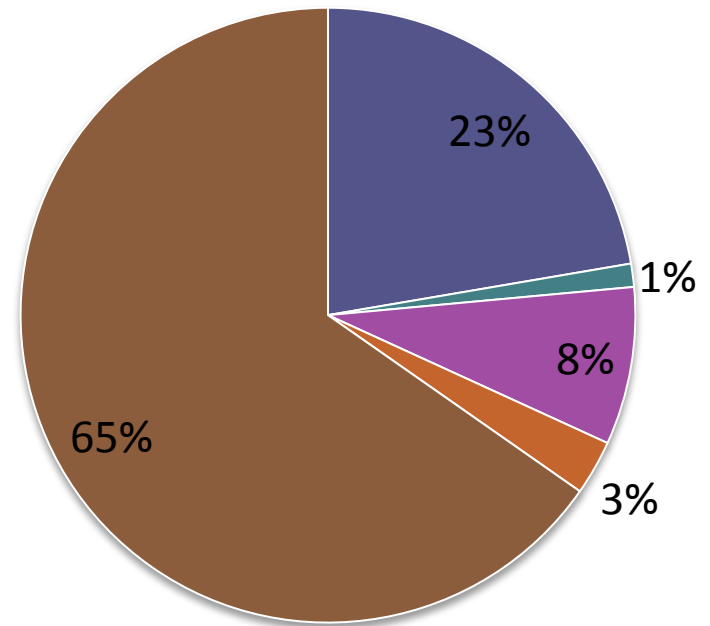


# North Carolina Population By Age and Race/Ethnicity

## Under 18



## 18-64



■ African American, Non-Hispanic

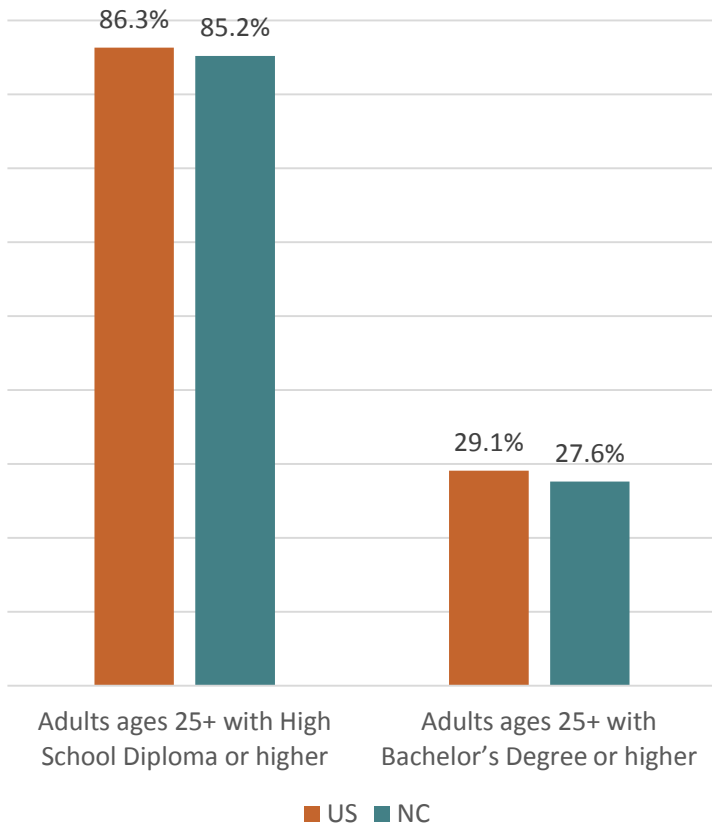
■ American Indian, Non-Hispanic

■ Hispanic/Latino

■ White, Non-Hispanic

■ Other Races, Non-Hispanic

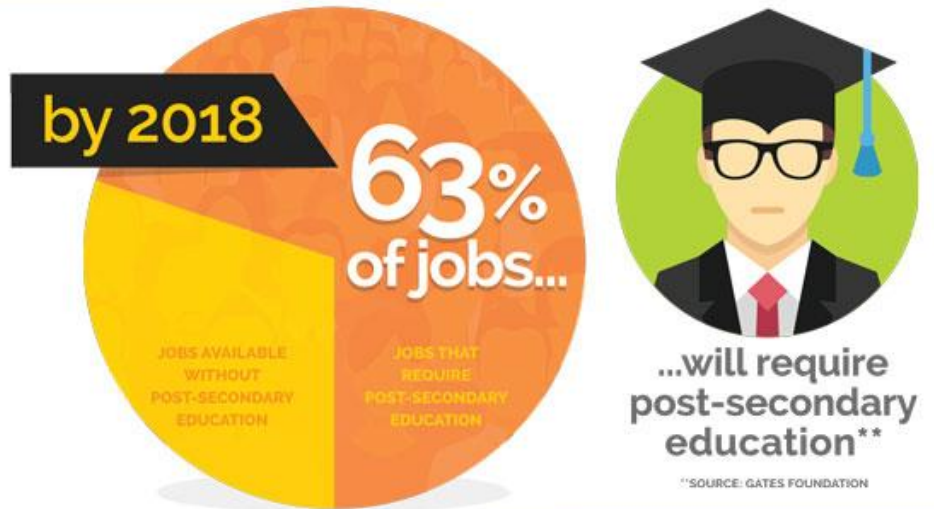
# North Carolina Population By Education Level



**HIGHER EDUCATION is an ECONOMIC DRIVER**

28% of North Carolina residents 25 and up have a Bachelor's degree or higher\*

\*SOURCE: UNC STRATEGIC DIRECTIONS, 2013-18



**Will North Carolina be Ready?**  SIGN UP TO RECEIVE THE LATEST NEWS ON NC HIGHER ED [www.HigherEdWorksFoundation.org](http://www.HigherEdWorksFoundation.org)



# North Carolina Population

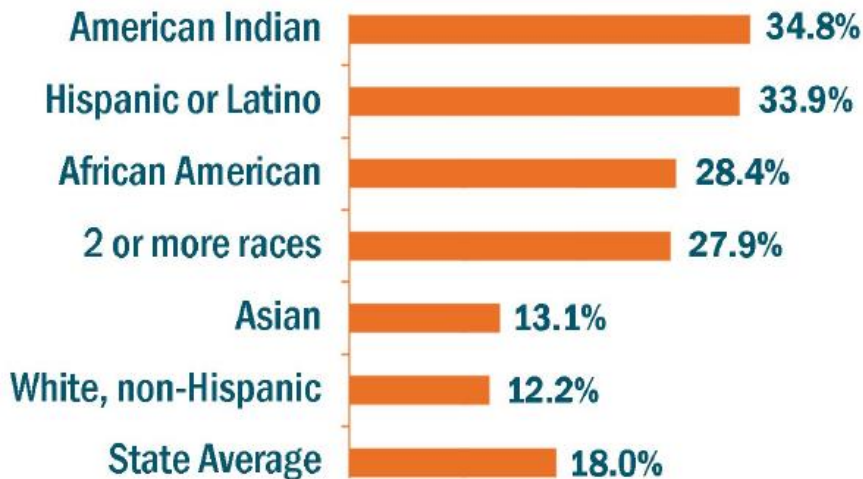
## State Poverty Rate



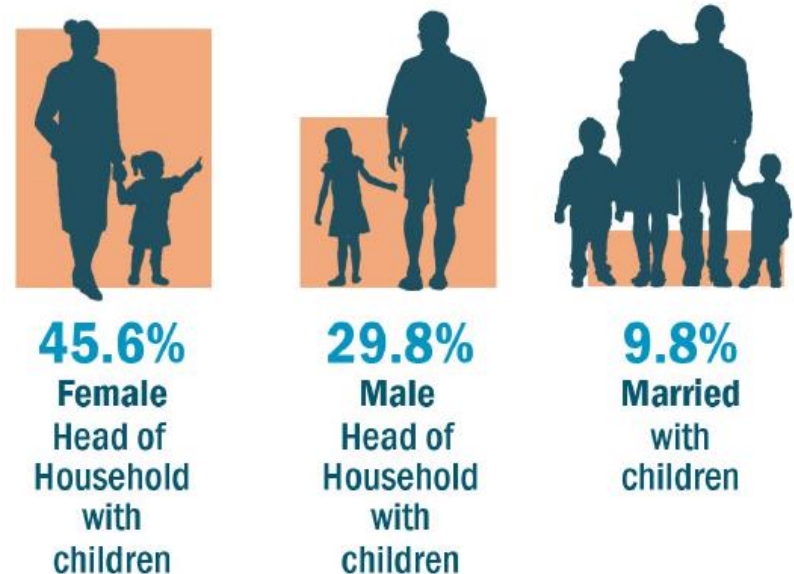
**1 in 5**

North Carolinians live in poverty  
(\$23,492 per year for a family of four)

### Poverty by Race, All Ages

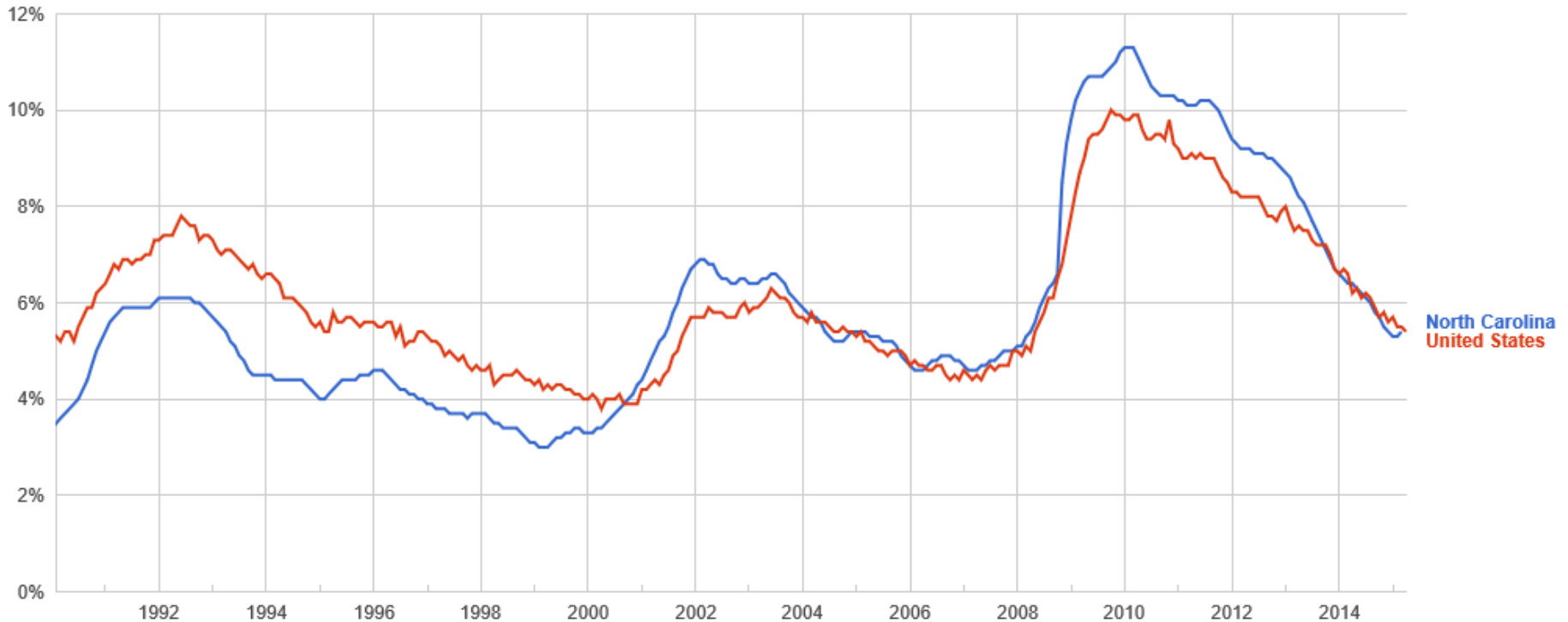


### Poverty by Family Type



# North Carolina Population State Unemployment Rate

Trends in Rate of Unemployment in the US and NC, 1990-2015



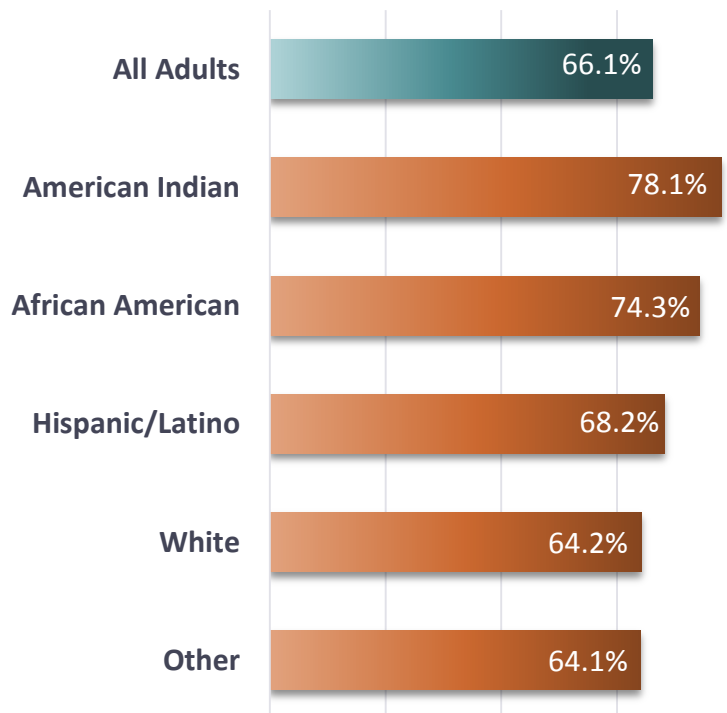
North Carolina Unemployment (2015): **5.5%**

# The State of Obesity & Diabetes

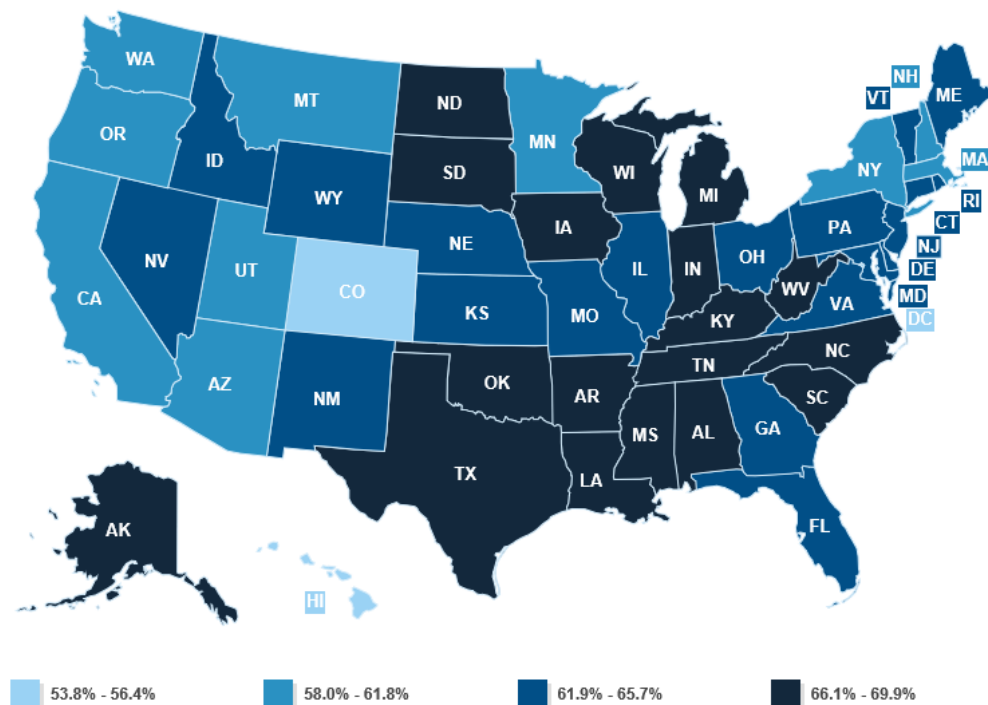


# North Carolina Population Overweight & Obesity Rates for Adults

Overweight/Obesity in North Carolina,  
by Race/Ethnicity

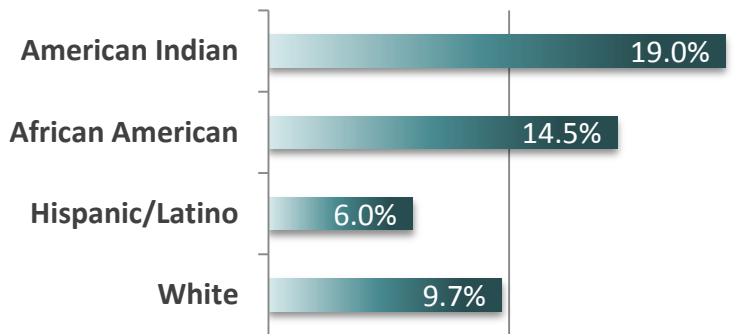


Overweight/Obesity in North Carolina,  
compared to other states

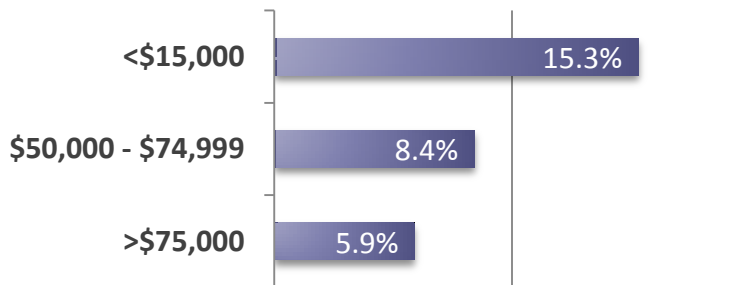


# North Carolina Population Diabetes Rates for Adults

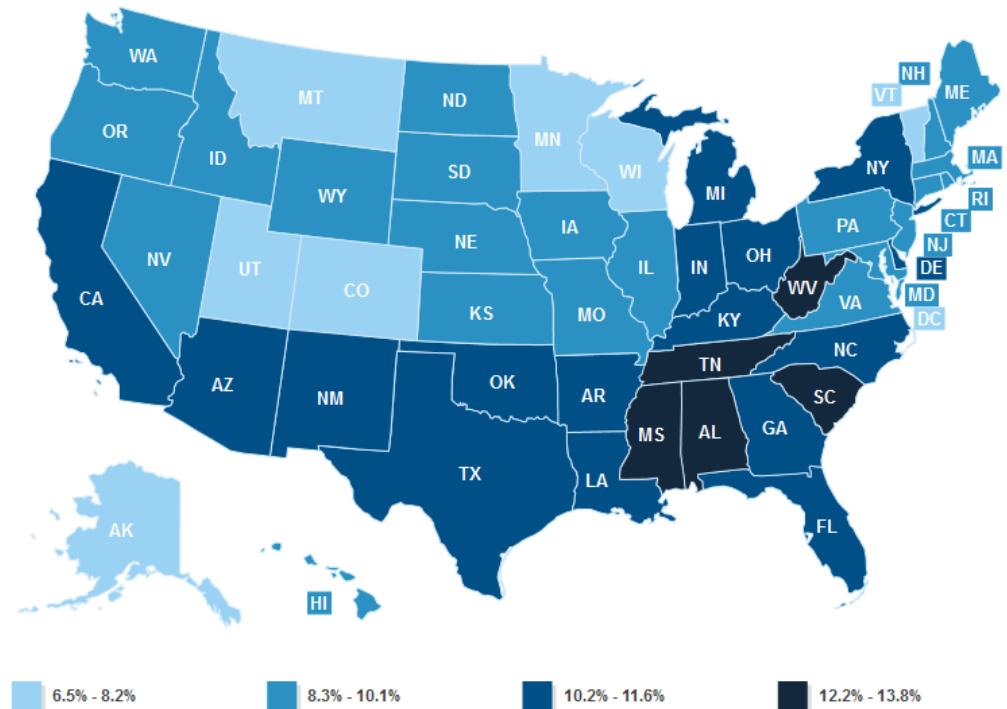
Diabetes Prevalence in North Carolina,  
by Race/Ethnicity



Diabetes Prevalence in North Carolina,  
by Income



Rates of Diabetes Diagnoses in North Carolina,  
compared to other states



# Resources & Innovative Approaches Diabetes Management

**DEAP**  
DIABETES EDUCATION  
ACCREDITATION PROGRAM

**AADE** American Association  
of Diabetes Educators

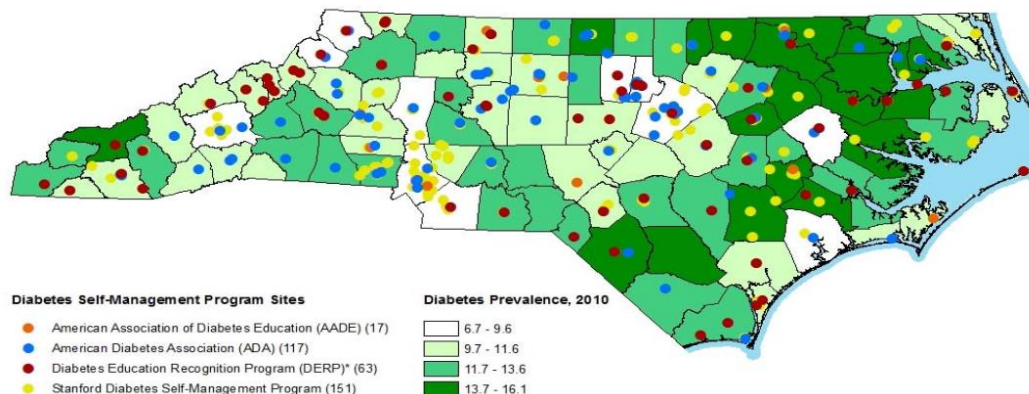
The American Association of Diabetes Educators (AADE) strives to offer diabetes educators in all settings (including, but not limited to: physician offices, medical clinics, pharmacies, hospital outpatients, public health departments, and community centers) with a way to ensure that they are offering their patients comprehensive, effective diabetes self-management education and to achieve accreditation for their efforts.

**Education**  
Recognition Program  
American Diabetes Association.

To promote quality education for people with diabetes, the American Diabetes Association (ADA) endorses the National Standards for Diabetes Self-Management Education and Support. Diabetes Self-Management Education programs seeking ADA Recognition must be providing "out-patient" services, be billing Medicare for services, and must have fully implemented the National Standards for Diabetes Self-Management Education and Support.



Stanford's Diabetes Self-Management Program is for people with type 2 diabetes. Each workshop lasts for 2½ hours once a week for six weeks, and takes place in community settings such as churches, community centers, libraries and hospitals. Workshops are facilitated from a highly detailed manual by two trained Leaders, one or both of whom are peer leaders with diabetes themselves.

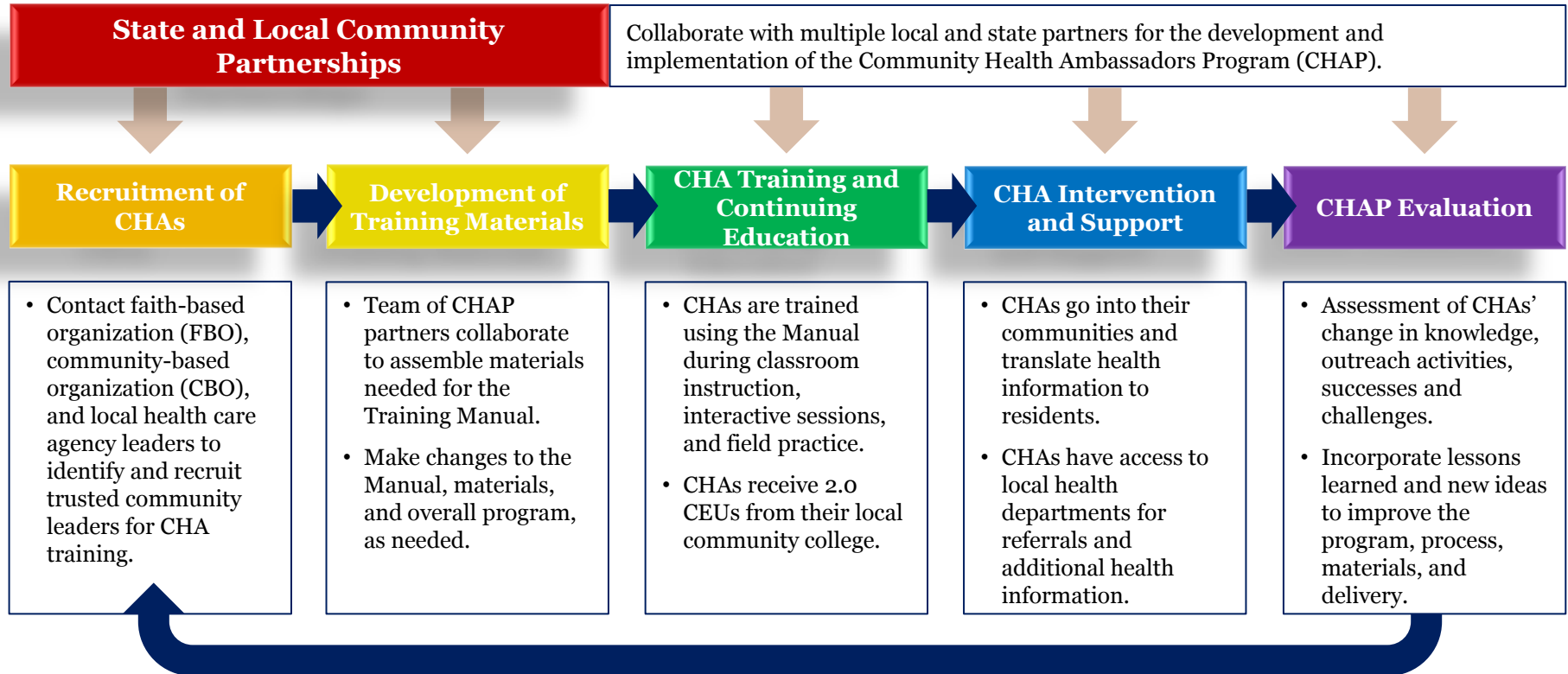




# Community Health Ambassadors Program (CHAP)

## Conceptual Framework

A statewide training and education project designed to engage leaders from diverse populations and communities to help eliminate health disparities in North Carolina.



# Community Focused Eliminating Health Disparities Initiative (CFEHDI)

- Focuses on the use of preventive measures to support healthy lifestyles for African Americans, Hispanics/Latinos, and American Indians
- Close the gap in health disparities between minority populations and the white population.
- Recipients work collaboratively to ensure implementation of an evidence-based medical home model
- Eight health focus areas: Heart Disease, Stroke, Diabetes, Obesity, Asthma, HIV/AIDS/STDs, Cancer and Infant Mortality.



# Community Focused Eliminating Health Disparities Initiative (CFEHDI)

## Diabetes-Focused Grantees



BUNCOMBE COUNTY  
HEALTH & HUMAN  
SERVICES



WAYNE COUNTY  
THE GOOD LIFE. GROWN HERE.



Cornell P. Wright, MPA  
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NC Office of Minority Health and Health Disparities

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Phone: 919-707-5034

Website: [www.ncminorityhealth.org](http://www.ncminorityhealth.org)





## North Carolina Diabetes Advisory Council

# DAC Bylaws Update

### Membership Privileges

a) Members who have been appointed to the North Carolina Diabetes Advisory Council shall have the right to:

1. Vote as outlined below in (b)
2. Attend all meetings
3. Work on assigned committees and subcommittees
4. Provide input into the decision-making process
5. Recommend members for appointment

b) Voting Privileges

The North Carolina Diabetes Advisory Council encourages attendance and input at each regular and special meetings from all interested parties. For the purposes of voting, the following rules shall pertain: In the event of a voting member's absence, a designee is urged to attend, but shall not be vested with voting privileges.

### Conflict of Interest

A conflict of interest exists when members of the council participate in a way that directly affects the personal or financial interests of the council members. In order to avoid conflict of interest problems, council members who have a personal or financial interest in an action must abstain from participating in the entire process which would include both discussion and voting. The council members who have or think they may have a conflict of interest should declare that there is or may be a conflict of interest and request a determination from the council. Where a conflict of interest is determined to exist, council members should abstain from voting and should be recorded as abstaining when votes are taken. Members shall exercise good faith in all transactions touching upon their duties with the Council. In their dealing with and on behalf of the Council, they are each held to a rule of honest and fair dealings between themselves.



North Carolina Diabetes Advisory Council

# DAC Bylaws Update

## Term of Membership

The initial term of membership for the Council shall include two and three-year tenures.

If a member resigns and a new member is appointed to complete the term they will serve the remainder of that term and are eligible for re-appointment ~~to two additional terms~~.

## Termination of Membership

- a) Any member may resign by giving written notice to the presiding Chair and the Council to be effective upon receipt or any later date specified in the notice.
- b) Upon completion of the tenure of office, Council members may be re-appointed by the Chair for an additional term, or may retire.
- c) Removal and Resignation
  1. When a Council member is absent from more than two council meetings in a one-year period, without due cause or prior notification, the Council Chair may send a letter to that member to determine his/her commitment to the council membership. The Council Chair may also remove the member from the Council if there continues to be a lack of participation.
  2. Any member's DAC appointment may be rescinded if DAC member does not abide by the COI policy or it is determined a flagrant COI exists

# DIABETES DISCUSSION GROUPS

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Jenni Albright, MPH, RD

Rachel Pohlman, MPH, RD, LDN

# Purpose

1. Why don't more people participate in Diabetes Self-Management Education (DSME)?
2. What can we do to improve DSME participation?

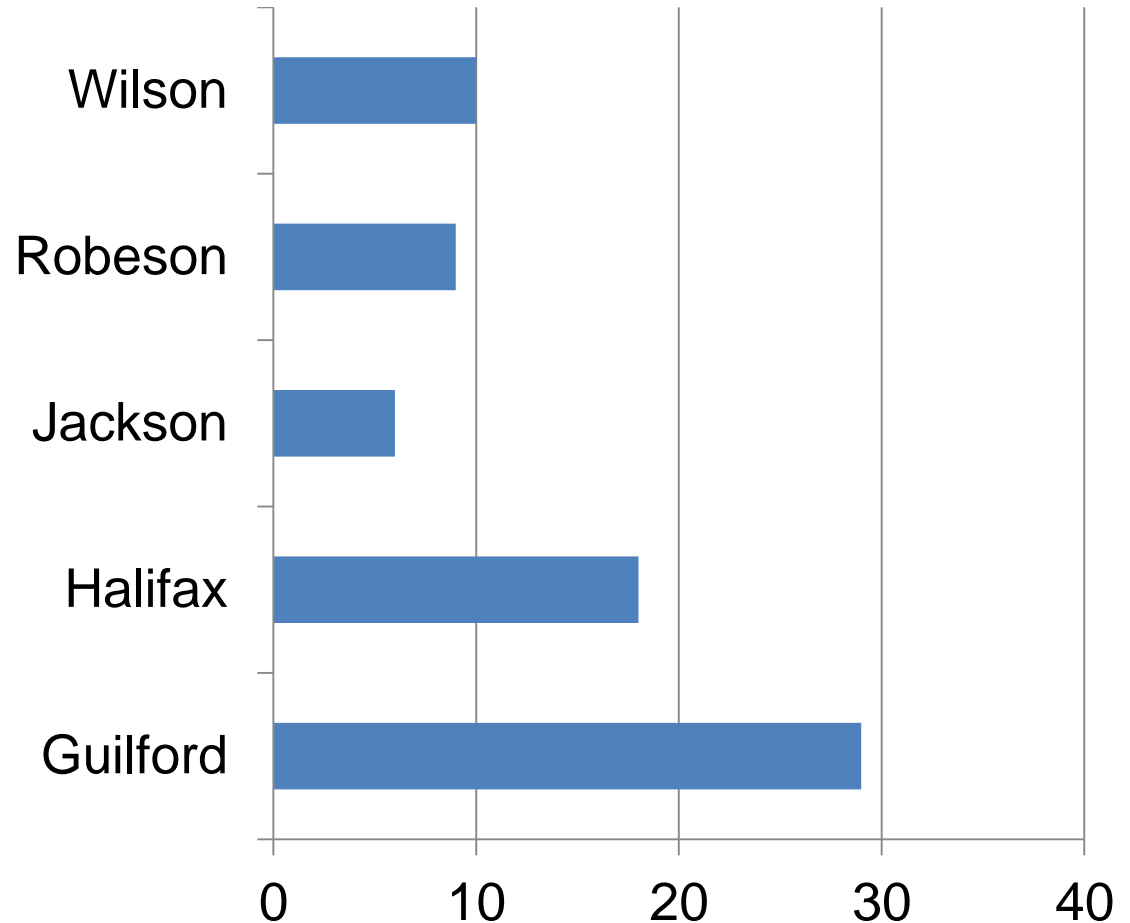
# Total Participants

72

72 total participants from five counties

# Participants in Five Counties

- Wilson (10)
- Robeson (9)
- Jackson (6)
- Halifax (18)
- Guilford (29)





# DEMOGRAPHICS

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# Mostly Female

86%

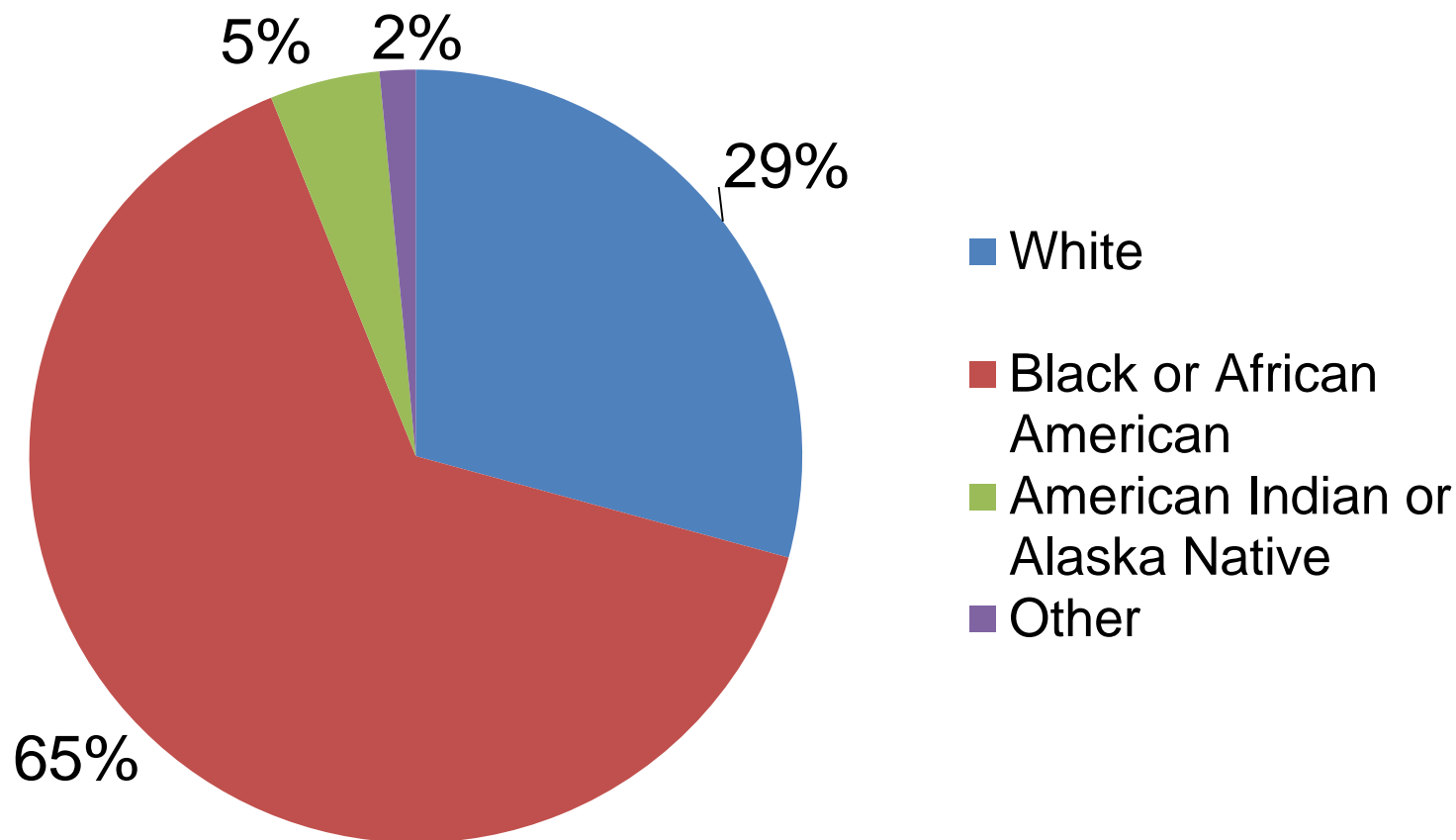
86% of the participants were female.

# Average Age

54

The average age among participants was 54.

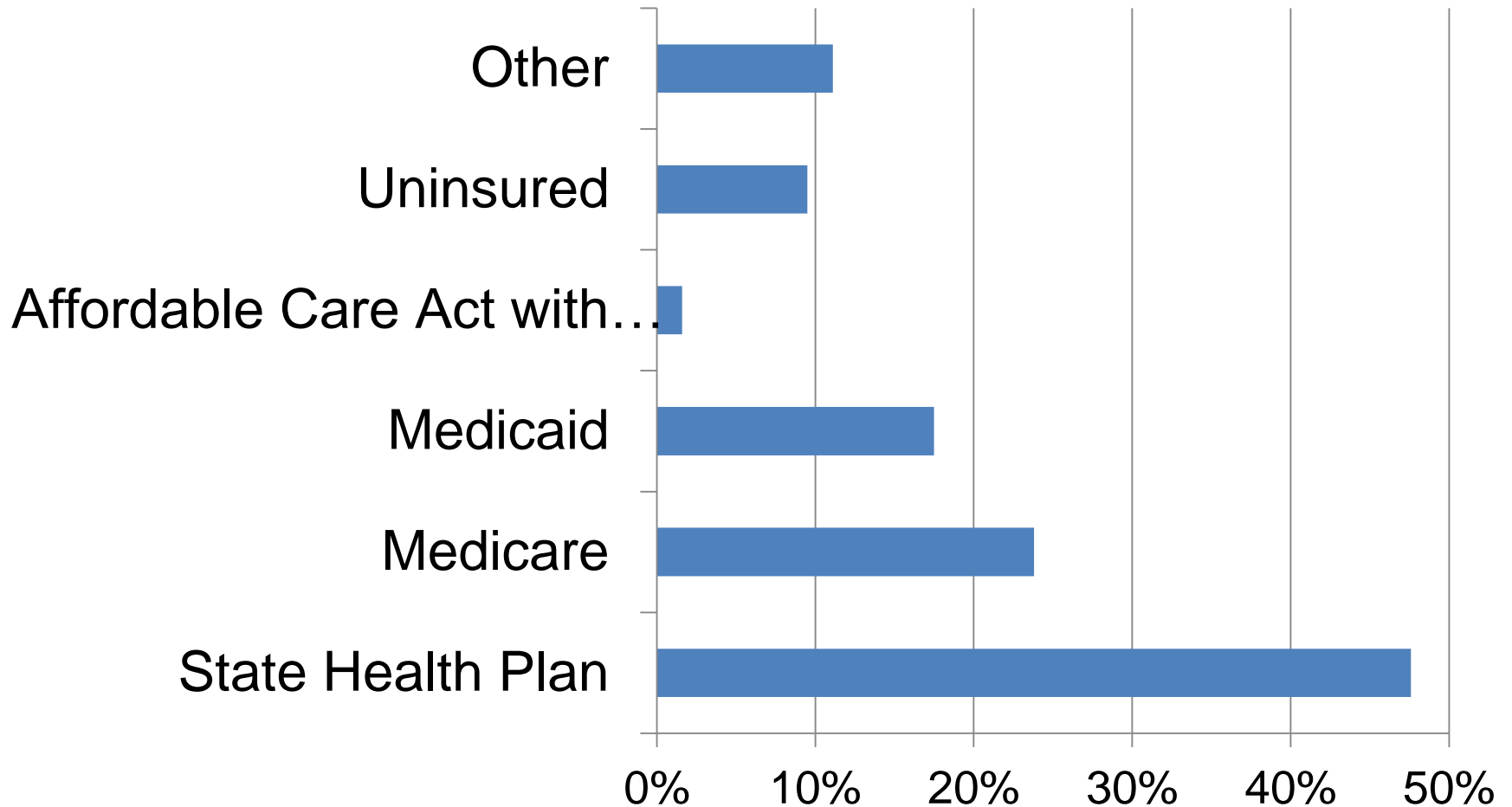
# Race and Ethnicity



## Note

No participants were of Hispanic, Latino/a, or Spanish origin.

# Type of Health Insurance



# PROCESS

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# Recruiting Criteria and Methods

- Type 2 Diabetes
- Specific health insurance
- Recruiting methods
- Groups conducted in English

# FINDINGS

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# Common Themes

- Denial is common when first diagnosed.
- Diabetes classes are valuable for people who have recently been diagnosed.
- One-on-one diabetes education was appealing to participants at a variety of stages.
- Hands-on learning opportunities were appealing to participants at a variety of stages.

# Observations

- Need for a support network
- Financial cost of the disease
- Thankful to be heard
- Differences in resources in different counties

# Lessons Learned

- Challenge to recruit
- Local contacts are key to recruiting
- Having two facilitators beneficial to process

# QUESTIONS?

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THANK YOU

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