

# Current and Future Demands on the North Carolina Safety Net

Mark Holmes

Presentation to NCIOM Health Reform  
Safety Net Workgroup

15 Sep 2010

# Outline

- Current: What are the areas of high need in North Carolina?
- Future: Characteristics of the North Carolina Uninsured after 2014

# Outline

- Current: What are the areas of high need in North Carolina?
- Future: Characteristics of the North Carolina Uninsured after 2014

# What is “high need”?

- Multi-dimensional
  - Uninsured (underinsured?)
  - Low income (access is a challenge)
  - “Need” for healthcare
    - *Unmet* need?
    - What kinds of healthcare?
- Uni-measurable
  - Proxies
  - Outcomes associated with high need

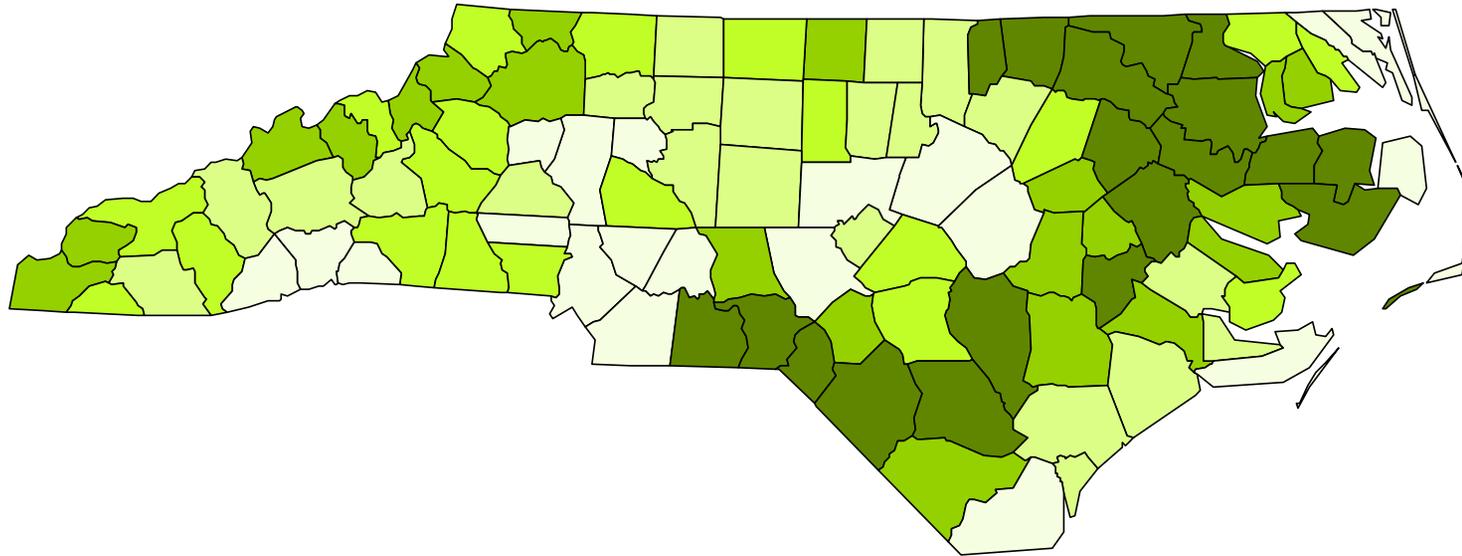
# Possible measures

- Poverty/income
- Uninsured
  - Limited data for “small areas”
  - Can be modeled
    - Function of income/poverty, demographics, use of social welfare programs (e.g. free and reduced lunch)
    - Estimates differ
  - Ignores underinsurance
- Outcomes

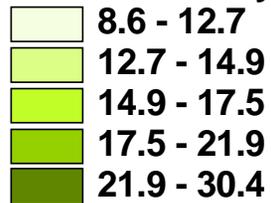
# Geography of high need

- Poverty
- Uninsured
- Ambulatory care sensitive conditions

# Percent in Poverty (2008)

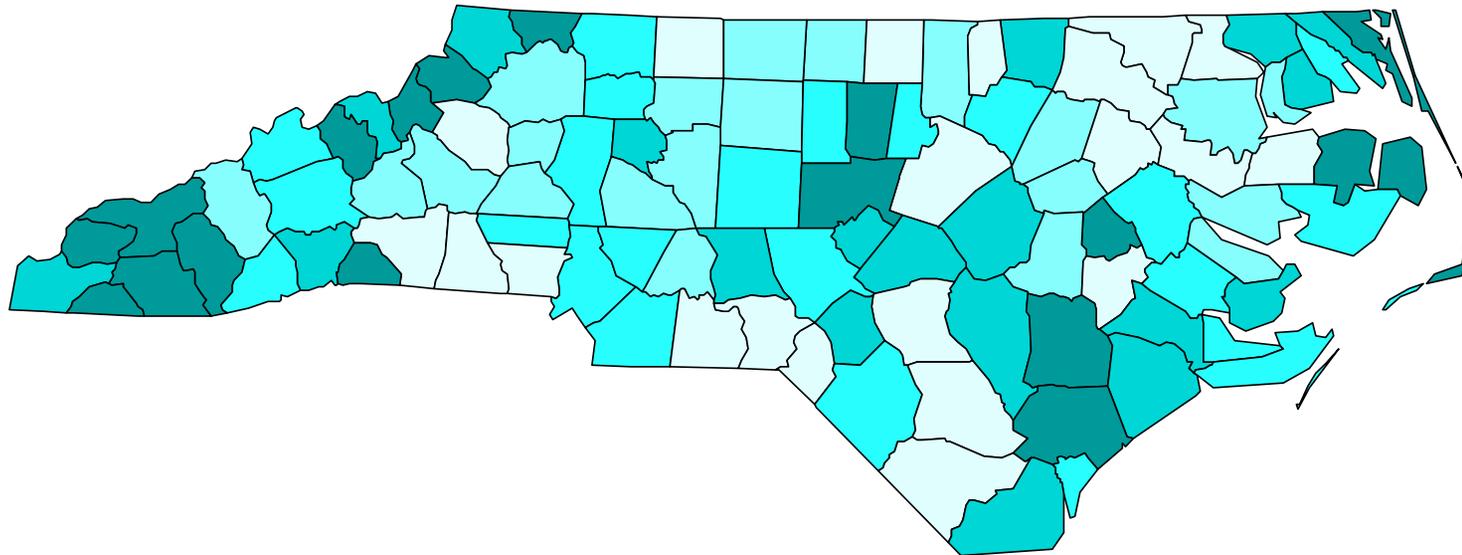


## Percent Poverty (2008)

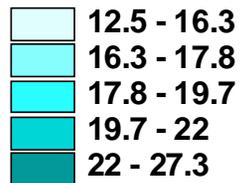


Data Source: Small Area Income and Poverty Estimates (SAIPE), US Census Bureau

# Percent Uninsured (2007)



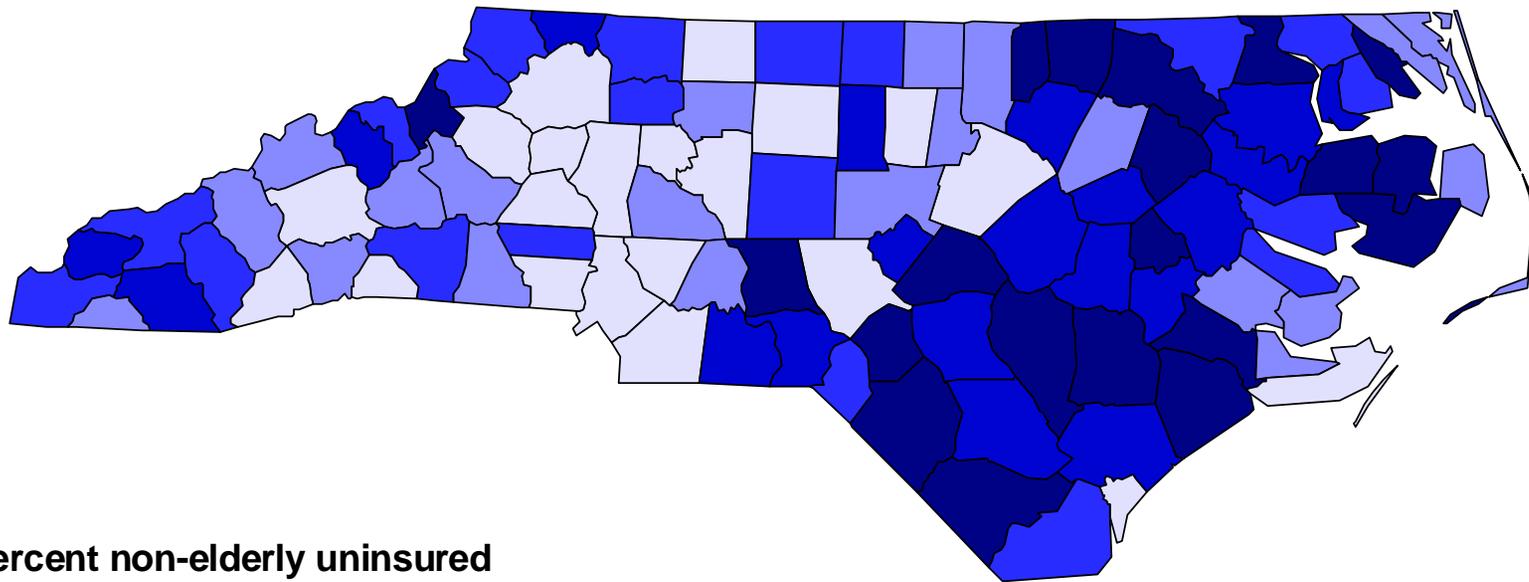
Percent Uninsured (2007)



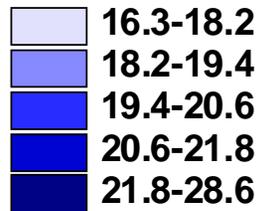
Data Source: Small Area Health Insurance Estimates (SAHIE), US Census Bureau

# Percent of Non-elderly Without Health Insurance

## 2006



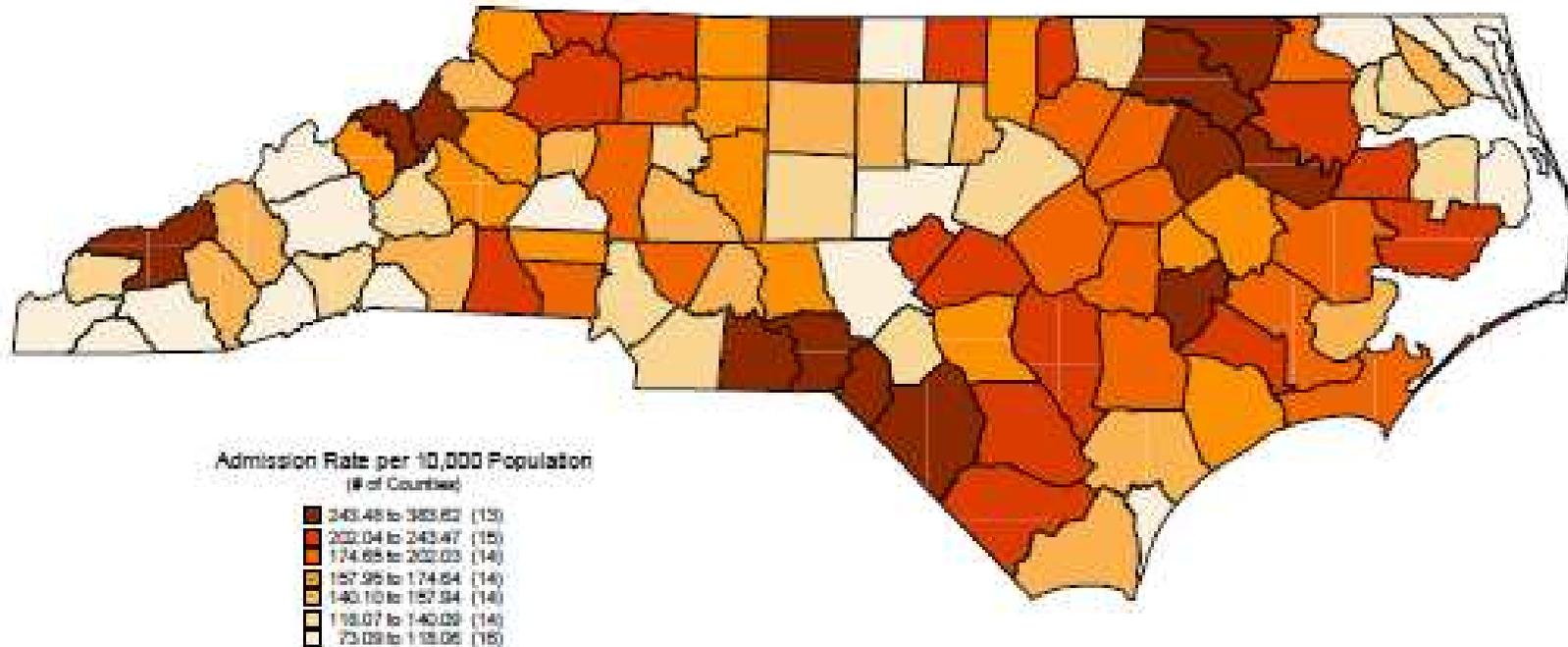
### Percent non-elderly uninsured



Produced by North Carolina Institute of Medicine. <http://www.nciom.org>  
Estimates based on Annual Social and Economic Supplement to the Current Population Survey.

# Ambulatory Care Sensitive Condition Hospital Admissions (2008) All Conditions

by County for All Persons



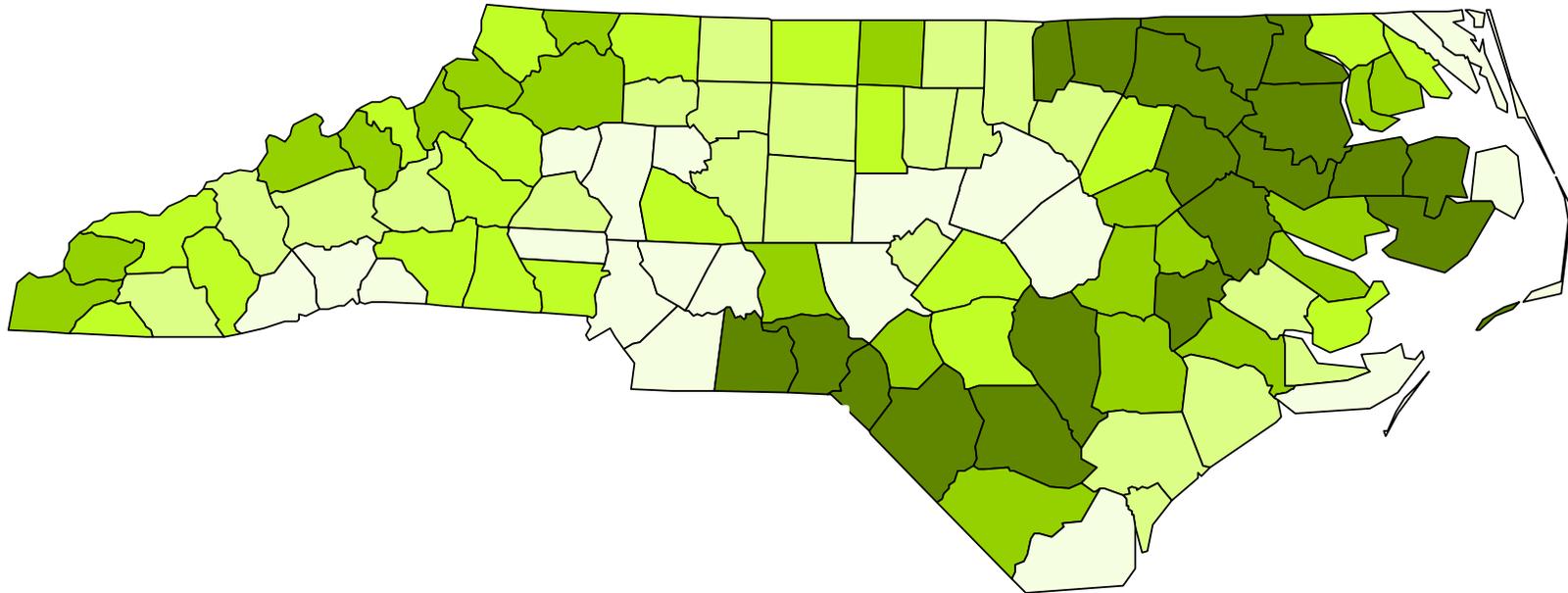
Note: Only admissions to North Carolina hospitals are included.

Source: Thomson Inpatient Discharge Database, October 1, 2007 to September 30, 2008; NC Office of State Budget and Management, 2008.

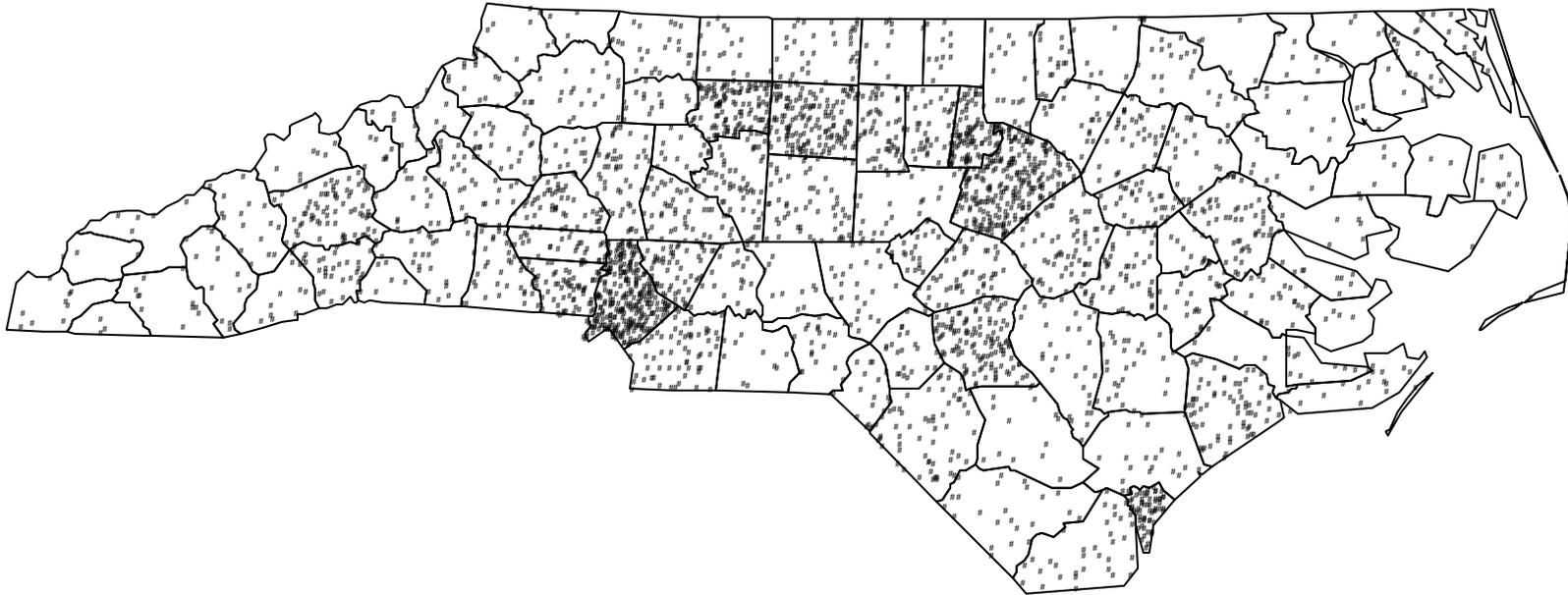
Produced by: North Carolina Rural Health Research and Policy Analysis Center, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

North Carolina Rural Health Research and Policy Analysis Center.  
<http://www.shepscenter.unc.edu/rural/maps.html>

# Percent Poverty



# Number of Uninsured Non-elderly

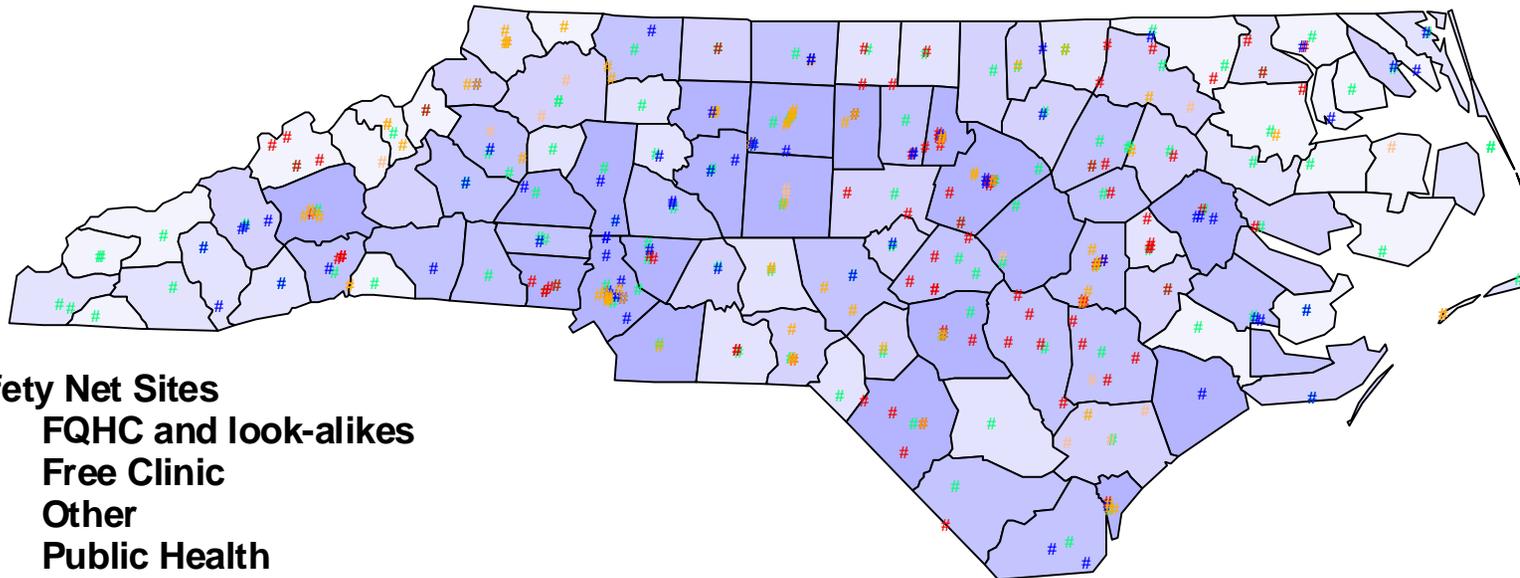


**Number uninsured non-elderly**

• 1 Dot = 500

Produced by North Carolina Institute of Medicine. <http://www.nciom.org>  
Estimates based on Annual Social and Economic Supplement to the Current Population Survey.  
Dots placed at random locations within the county.

# Number of Uninsured Non-elderly and Safety Net Delivery Sites Included in the nchealthcarehelp.org database



## Safety Net Sites

- # FQHC and look-alikes
- # Free Clinic
- # Other
- # Public Health
- # Rural Health Clinic

## Number uninsured non-elderly

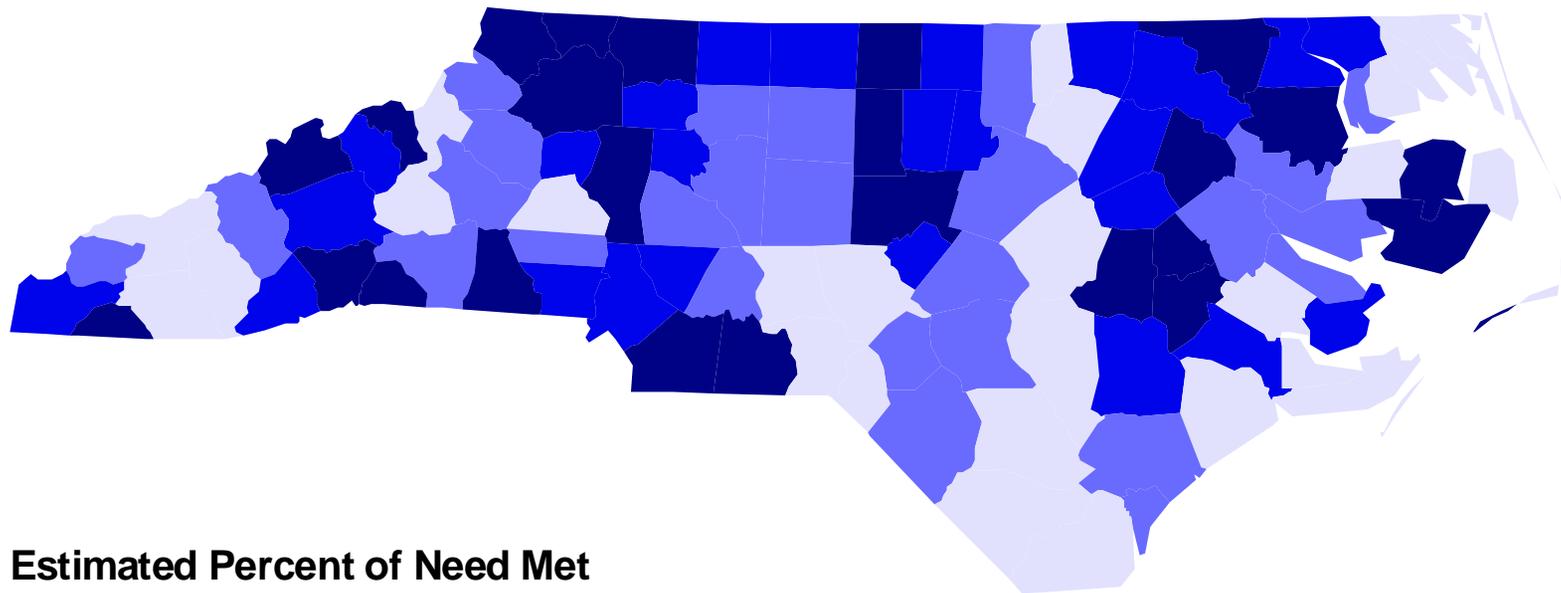
- 1072 - 3696
- 3998 - 7056
- 7302 - 11092
- 11288 - 22854
- 23975 - 141706

*Map from 2008 NCIOM Uninsured summit*

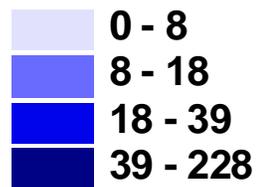
# Unmet need

- <http://www.nchealthcarehelp.org> is an NCIOM-sponsored website that connects North Carolinians with free and reduced cost healthcare services
- Participating safety net organizations report # visits and/or unduplicated clients by uninsured
  - Statistical techniques used to “smooth” and fill in missing data, but only so useful

# Estimated Percent of Uninsured Receiving Care from Safety Net Providers



## Estimated Percent of Need Met



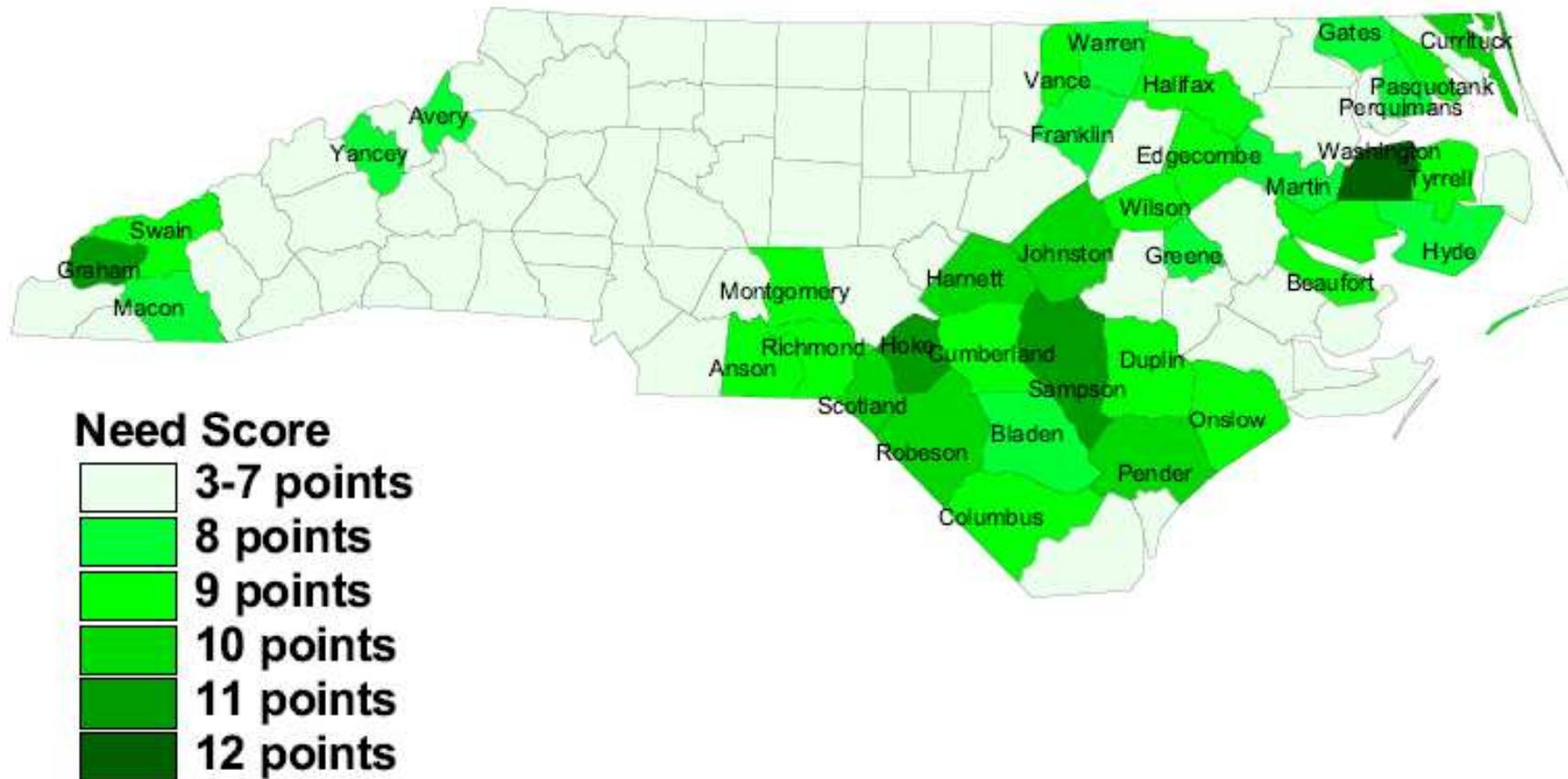
Produced by NC Institute of Medicine

Source: Data submitted to [nchealthcarehelp.org](http://nchealthcarehelp.org); County-level estimates of uninsured

# Could create an “index”

- Lots of measures of one “construct” (or “latent variable”, if we’re academics)
- Combine three into one “dimension”
  - Persistent HPSA
  - Percent uninsured
  - Percent of uninsured (not) receiving safety net services

# High Need Counties

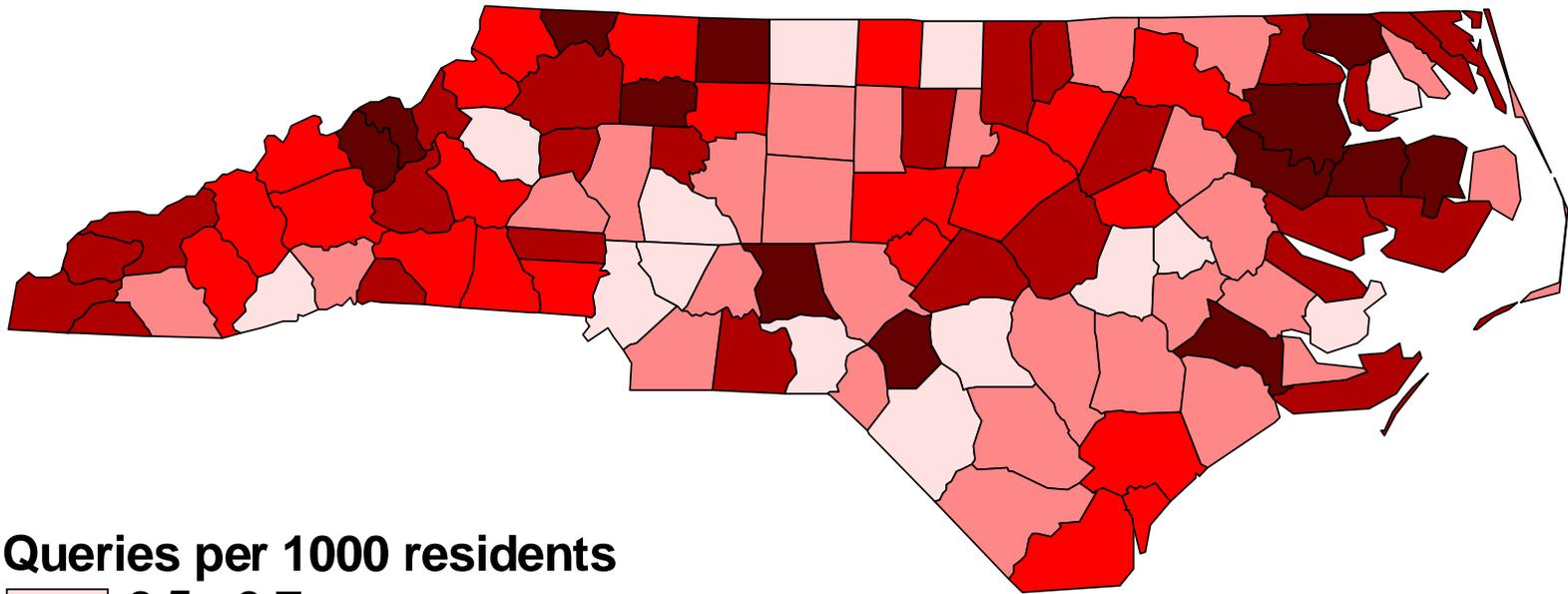


Map created by NC Institute of Medicine. Points come from three data points:

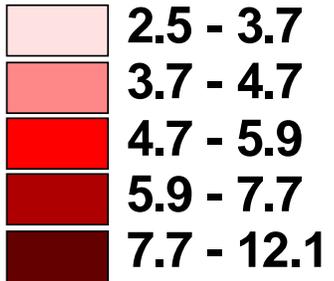
- 1) Persistent HPSAs: 1 point if not, 3 points if part county PHPSA, 4 points if whole county PHPSA
- 2) Percent Uninsured: 2006 values, 1-4 points based on quartile
- 3) Percent of Uninsured Receiving Safety Net Services: Based on NChalthcarehelp.org data, 1-4 points based on quartiles

# NCHH query data

- nchealthcarehelp.org also tracks queries (>40K in last 2 years)
  - What counties are searched most, per capita?
  - What “service types” are most in demand?
- Take with grain of salt – these queries are not all legitimate searches; plus, NCHH requires internet access and familiarity with website
  - ie, a query is neither necessary nor sufficient for “unmet need”

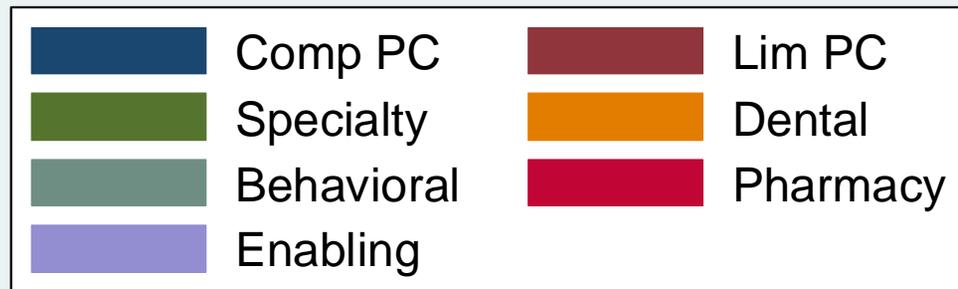
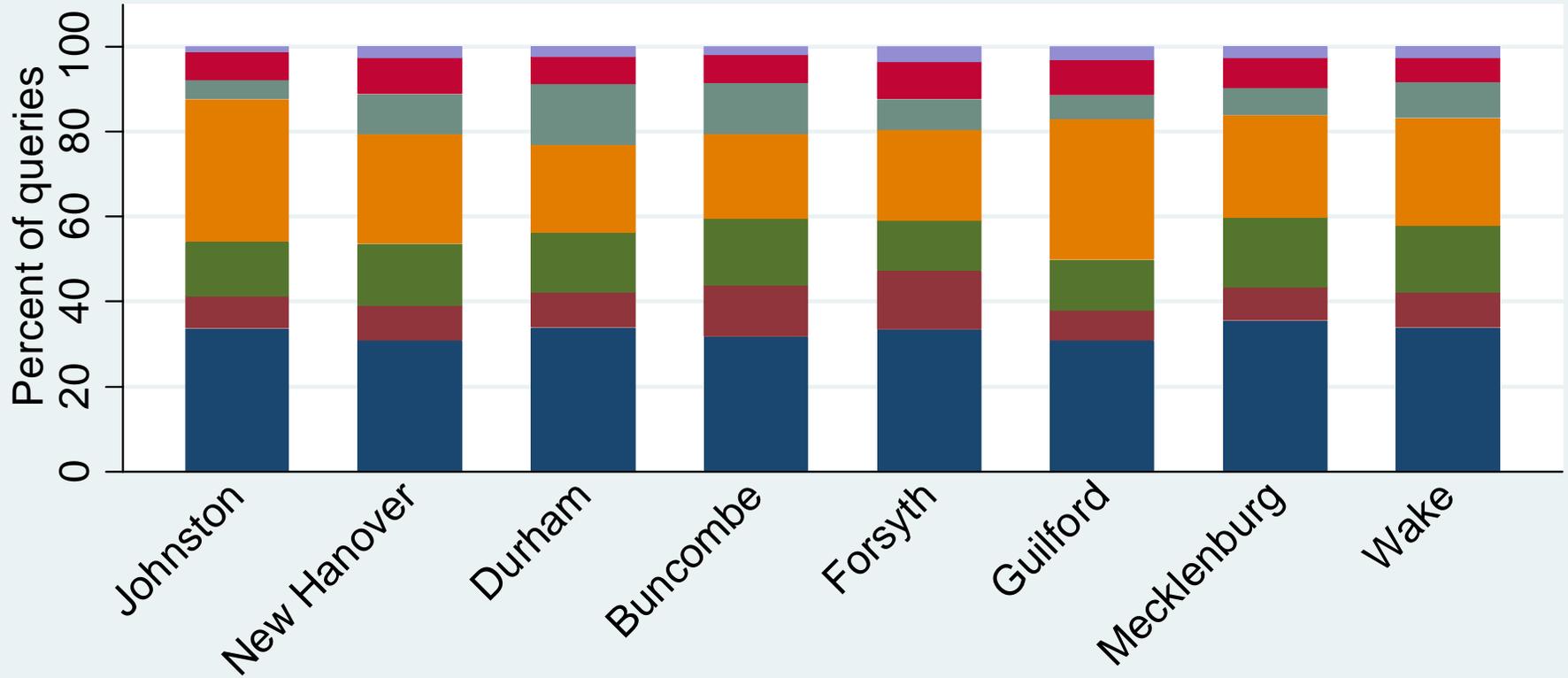


**Queries per 1000 residents**



# Queries to nchealthcarehelp.org

## 10 Counties with Most Queries



# Summary

## Areas of High Need

- Lots of ways to define and measure “high need”, but poverty is probably as good as any
- Southeast and Northeast seem to have particularly high needs
- Need for services varies geographically

# Outline

- Current: What are the areas of high need in North Carolina?
- Future: Characteristics of the North Carolina Uninsured after 2014

# ACA insurance expansions



	2011	2014
Medicaid Expansion		
Dependent Child Under ESI		
Federal High Risk Pool		
Exchange Subsidy		
Employer Tax Credit		

n.b. some programs/policies are missing – e.g. penalties

# How do people react to insurance premiums?

- Not everyone will get coverage, even if it's zero cost
- People are relatively insensitive to price (in terms of “percentage increases”)
  - For the most part, they either purchase or do not; on the margin, there are some who are sensitive to price
  - Massive increases in premiums, however, mean that even though they are relatively insensitive as a whole we are seeing declines in coverage
  - ***Recall that premiums for ESI more than doubled in last decade, but ESI coverage fell 8%***

# Projections of coverage effects of ACA



(a sample)

Congressional Budget Office

CMS Office of the Actuary

NEJM 1 Sep 2010

Hilltop Institute (Maryland)

## Appendix F. Maryland Health Care Reform Financial Modeling Tool: Detailed Analysis and Methodology

Fiscal Years	New Enrollment Projections Based on Health Reform						
	2014	2015	2016	2017	2018	2019	2020
1. Medicaid Expansion	59,245	128,710	134,202	135,111	136,021	136,930	137,839
2. Medicaid "Woodwork" Effect	4,125	23,348	29,871	33,540	33,827	34,114	34,401
3. Exchange (133-400% FPL)	88,509	178,774	180,529	182,014	183,500	184,985	186,470
<b>TOTAL</b>	<b>151,879</b>	<b>330,832</b>	<b>344,602</b>	<b>350,665</b>	<b>353,348</b>	<b>356,029</b>	<b>358,710</b>

# Results

**Table 1.**  
**Estimated Take-Up by the Uninsured in Specific Coverage Initiatives in 2011 and 2014**

<b>Provision</b>	<b>2011</b>	<b>2014</b>
"Woodwork" Medicaid	52,000	167,000
Medicaid Expansion	*	259,000
Dependent Child Under ESI	173,000	137,000
Federal High Risk Pool	7,000	*
Exchange Subsidy	*	106,000
Full Tax Credit	7,000	5,000
Partial Tax Credit	19,000	14,000
Uninsured		1,013,000
Uninsured Under Status Quo	1,596,000	1,701,000
<b>Total Non-Elderly</b>	<b>8,505,000</b>	<b>8,870,000</b>
<i>Percent non-elderly uninsured (without health reform)</i>	18.8%	19.2%
<i>Percent non-elderly uninsured (with health reform)</i>	15.7%	11.4%

What do we know about these people?

Holmes GM. Running the Numbers: Projected Changes in North Carolina Health Insurance Coverage due to Health Reform. *North Carolina Medical Journal*. May/June 2010. Volume 71(3), 306-208.

*We Do Three Types of Jobs Here...*  
**GOOD, FAST AND CHEAP**  
*You May Choose Any Two!*

**If It Is Good and Cheap  
It Will Not Be Fast.**

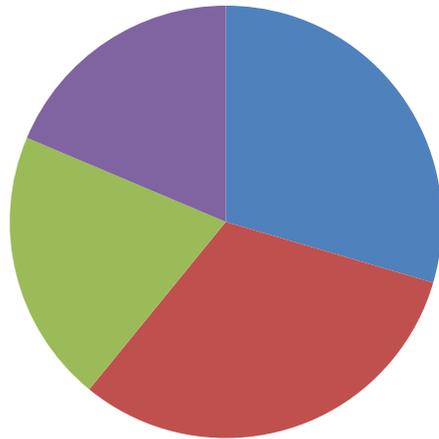
**If It Is Good and Fast  
It Will Not Be Cheap.**

**If It Is Fast and Cheap  
It Will Not Be Good.**



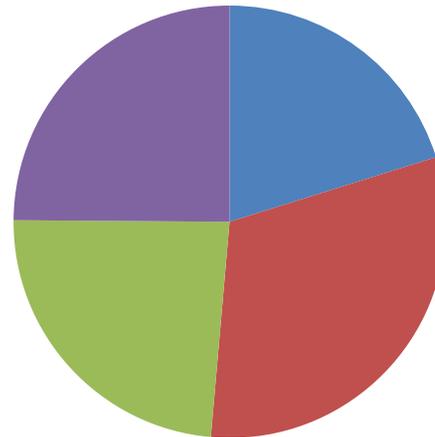
# What do the uninsured in 2014 look like?

Status Quo



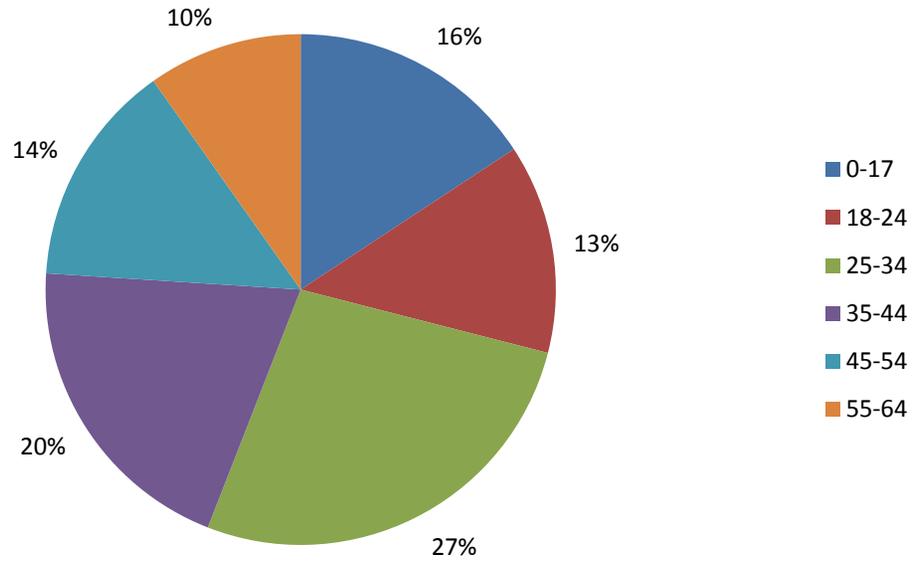
- <100% FPG
- 100-200% FPL
- 200-300% FPL
- 300%+ FPL

ACA



- <100% FPG
- 100-200% FPL
- 200-300% FPL
- 300%+ FPL

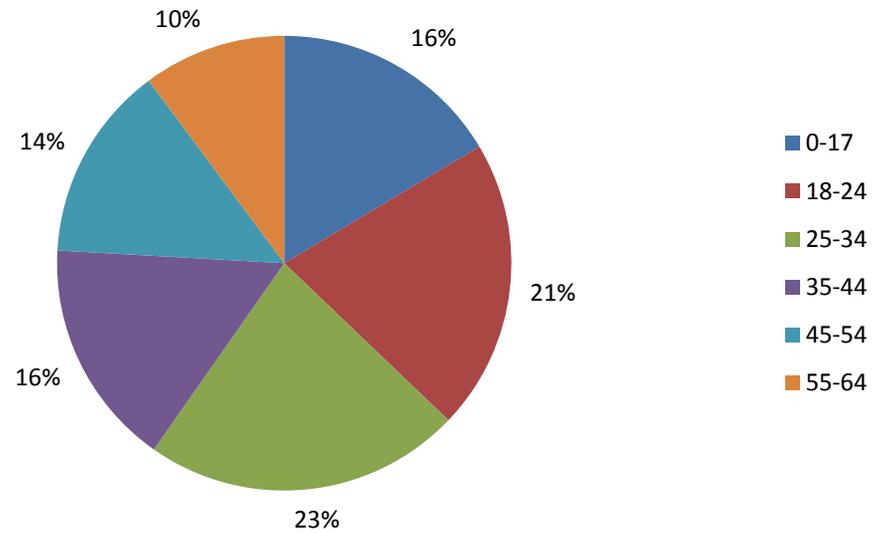
### ACA



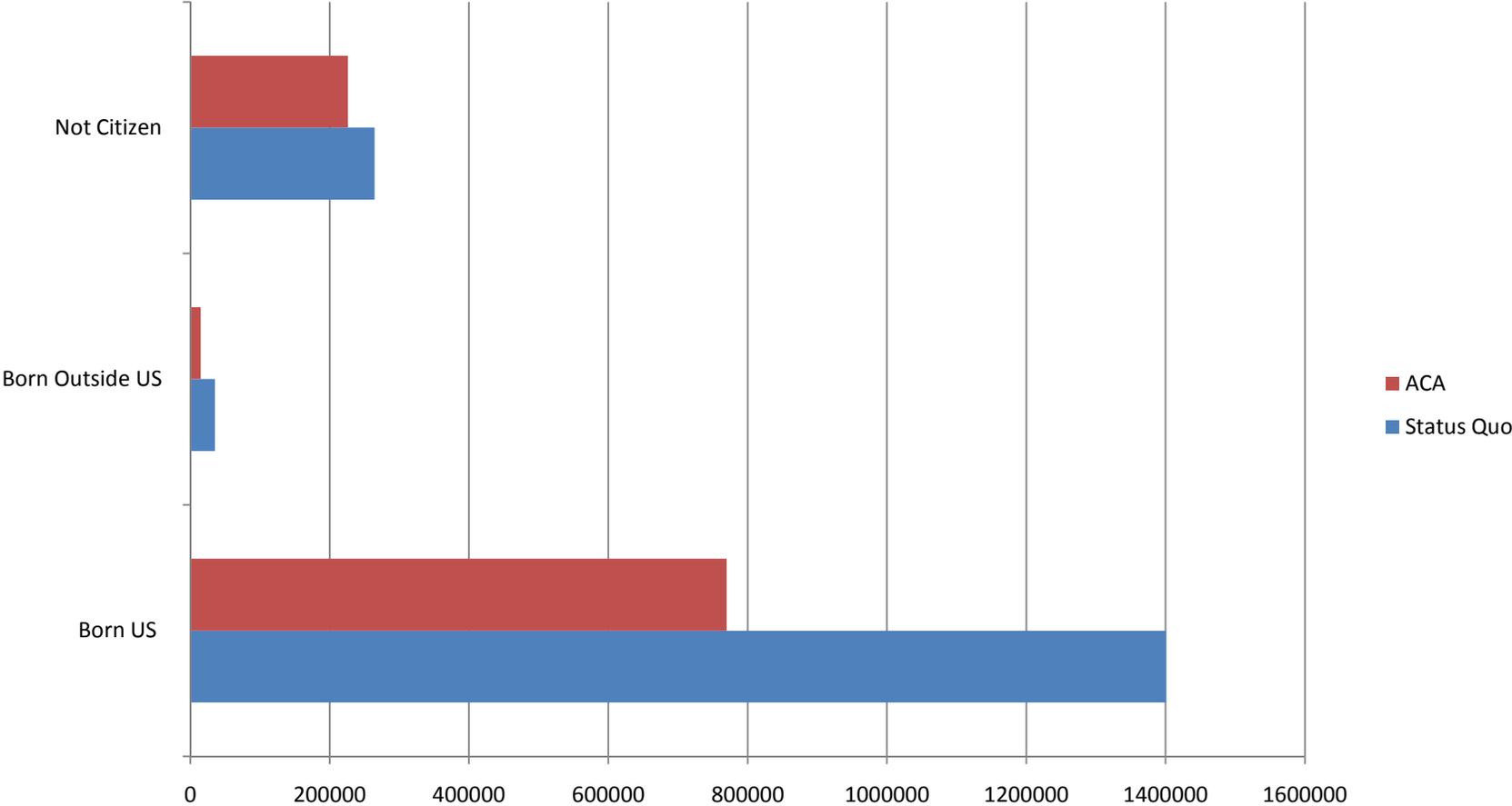
Status Quo: 21% uninsured 18-24 (to 13%)

39% of uninsured 25-44 (to 47%)

### Status Quo



# Citizenship status of uninsured (2014)



# Summary

## Characteristics of NC uninsured

- The NC uninsured after 2014 will be
  - A little older – especially a transition from the 18-24 to the 25-44
  - Higher income (% of uninsured with income < 100%FPG falls from 30% to 20%; roughly half of uninsured will have income > 200% FPG [now 40%])
  - More undocumented (from ~15% to ~22%)
    - No major changes in firm size, industry, rural/urban, labor force, health status
- Note that there are many assumptions behind these estimates; continuous revisions

Source: preliminary estimates. Not to be cited without author approval.

# Contact

Mark Holmes, PhD  
Assistant Professor  
Health Policy and Management  
UNC Gillings School of Global Public Health  
and  
Program Co-Director  
Healthcare Economics and Finance  
Cecil G. Sheps Center for Health Services Research

[mark\\_holmes@unc.edu](mailto:mark_holmes@unc.edu)

919-966-0202