Numbers and Policies Bringing the Two Together

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Revelations

- I have received money from:
  - The State of NC (UNC); The American College of Surgeons: MaineHealth; Novant: Duke University; UNICEF; The École des Hautes Études en Santé Publique; The French Government; Ferguson & Stein, LLC; Bode Call & Stroupe, LLC; Cengage Learning; and on and on...
- I own stock in Duke Energy and some mixed funds

Points of View

- **National Health Care Workforce Commission**
- Director of Policy Program at Cecil G. Sheps Center for Health Services Research
- Professor of Health Policy and Management
- Citizen

My Focus Will be on Health Workforce And Health Care Workforce Policy

Health Care Workforce Commission….. at work….

Goals

- To describe how data can be used to:
  - Support a policy position
  - Assess a policy outcome
  - Drive a policy agenda
- Describe three cases where numbers were/are used to affect policy
  - The NC Medicaid program
  - The ECU School of Dental Medicine
  - Supporting access to dental services—the DHPSA

“Numbers provide the *rhetoric* of our age”

Nathan Keyfitz. The Social and Political Context of Population Forecasting in Alonso & Starr, eds. The Politics of Numbers New York: Sage, 1987

Numbers in Oral Health Policy

- Oral heath status
  - Post hoc: DMF
  - Predictive: income, education, fluoride, access
- Oral health desires
  - Demand, marketability
- Oral health care capacity
  - People in professions and roles (Dentists)
  - Ability to pay

A number...

- Proportion of children 6-9 years old at elevated caries risk who get Dental Sealants

That number can be a "**signal**" to generate policy or a "**metric**' to measure program success.

Percent of children ages 6-19 years with untreated dental caries: 15.6% (2007-2010)
Percent of adults ages 20-64 years with untreated dental caries: 23.7% (2005-2008)

A Claim?

- Tooth decay is the most common preventable chronic disease among children in the United States. If left untreated, it can negatively affect a child's physical and social development, as well as his or her school performance.

What/Where are the numbers?

Policy: Goals and Objectives

- ***Increase*** the rate of children ages 1 to 20 enrolled in Medicaid or CHIP for at least 90 continuous days who receive any preventive dental service by 10 percentage points; the national baseline is 42 percent and the national goal is 52 percent by FFY 2015.

- ***Increase*** the rate of children ages 6 to 9 enrolled in Medicaid or CHIP for at least 90 continuous days who receive a dental sealant on a permanent molar tooth by 10 percentage points; CMS is considering how to best operationalize this goal.

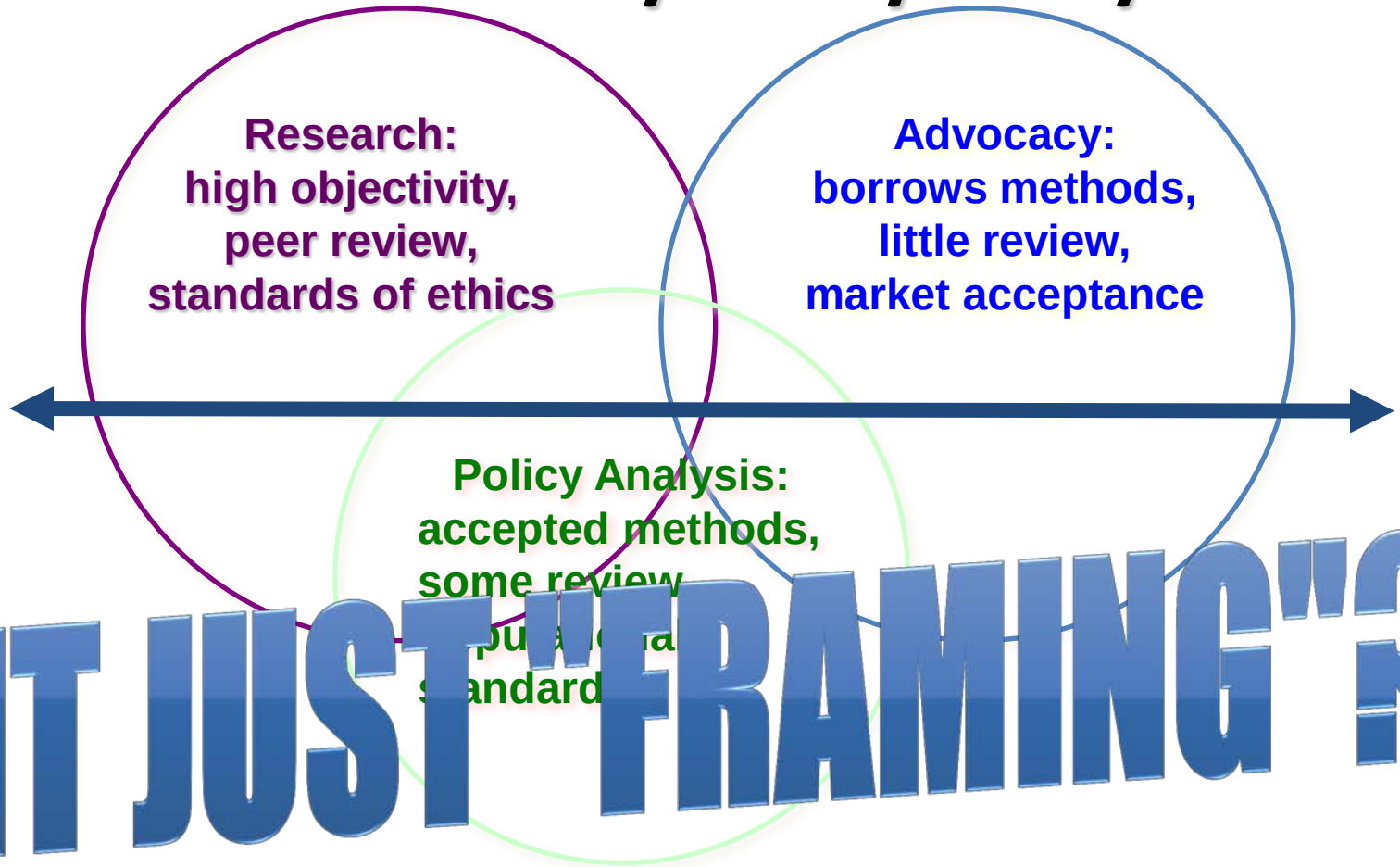
Numbers Players

- Researchers
- Policy analysts
- Advocates

When it comes to choices like "Does North Carolina need a new dental school...

- Health services researchers who focus on **workforce policy**

Context for Informing Policy:
Research-Advocacy-Policy Analysis



IS IT JUST "FRAMING"?

The New York Times

Thanks for the Facts. Now Sell Them.

By Matthew C. Nisbet and Chris Mooney Sunday, April 15, 2007; B03

Policies….

- Who does what to whom
  - Dental practice acts
  - Support for dental education
  - Market rules
- Who pays what to whom
  - Tax rules and laws, market boundaries
  - Medicaid
  - Clinics, Programs and Incentives

Policy and Politics
what's the difference?

Policy: all the rules, written, unwritten

Politics: from the Greek, Poly....

And ‘tics,”
....many small, blood sucking animals

Seriously, Politics:

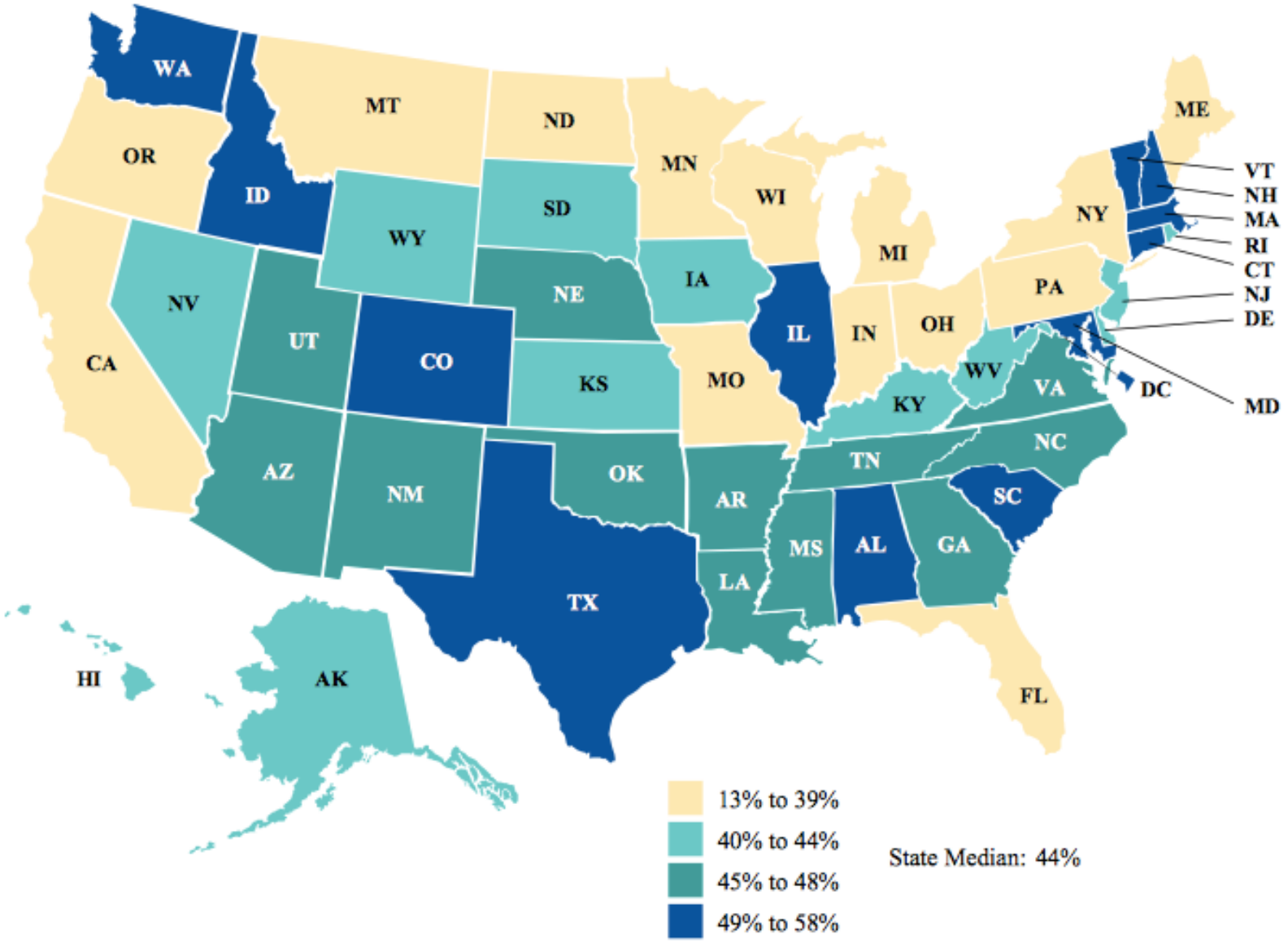
Who Gets What from Whom and How

A ***Policy Window*** Opens...

- The PPACA allows states to expand Medicaid at low initial cost.
- CHIP needs to be reauthorized and funded by Congress by September 30. (as extended by PPACA)

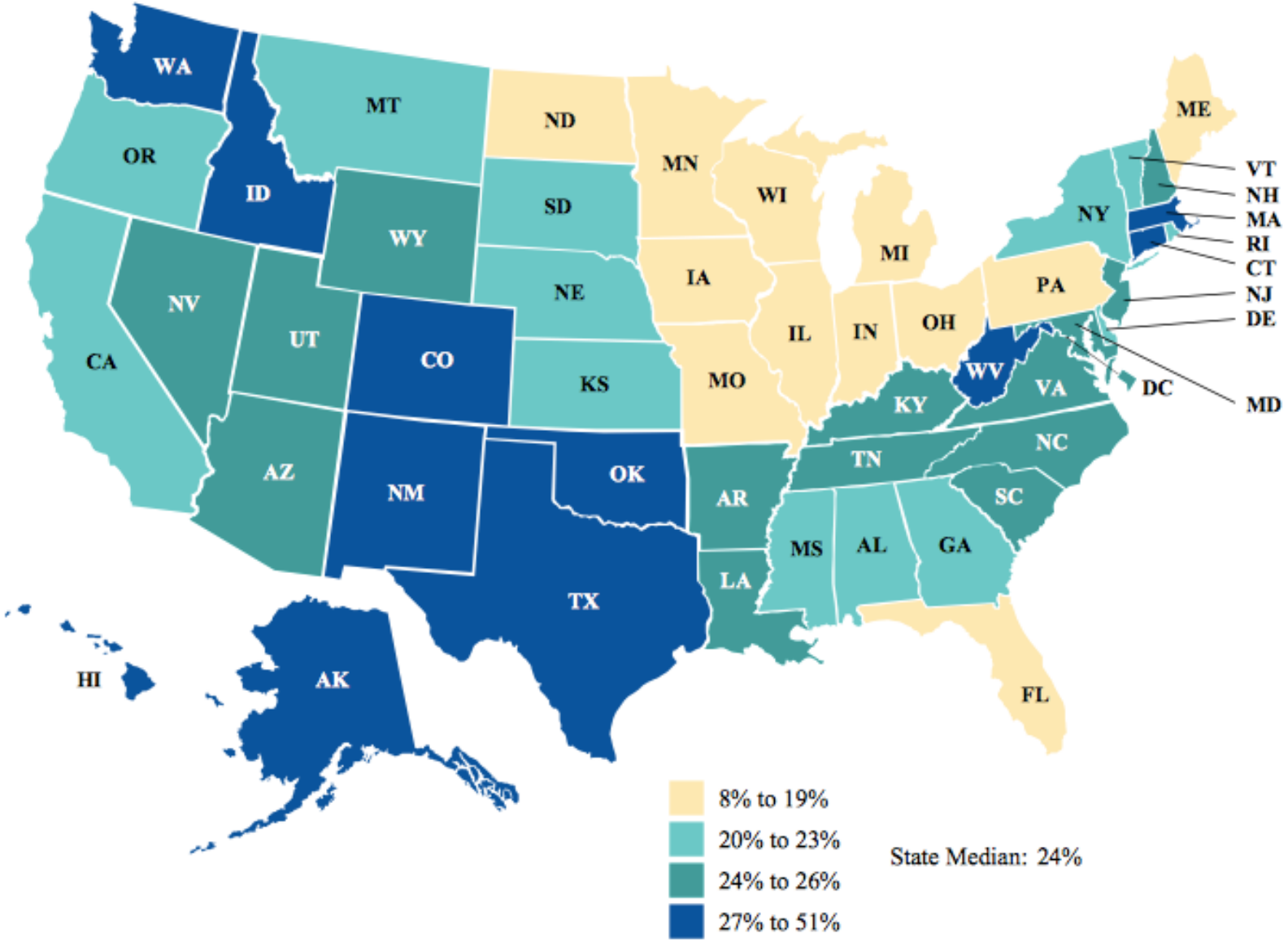
Advocates for and against need *numbers* to show need or lack of need, policy effects and potential benefits or risks.

Figure 1. Geographic Variation in the Percentage of Children Ages 1 to 20 Receiving Preventive Dental Services, FFY 2011



Source: FFY 2011 Form CMS-416 reports. Refer to the 2013 Secretary's Report for additional details (HHS 2013).

Figure 2. Geographic Variation in the Percentage of Children Ages 1 to 20 Receiving Dental Treatment Services, FFY 2011



Source: FFY 2011 Form CMS-416 reports. Refer to the 2013 Secretary's Report for additional details (HHS 2013).

ACA Effects via Medicaid

- “California to add 5 million children to Medicaid” How will that affect access to dental care?
- If North Carolina expands Medicaid this year, How will that affect access to care.

Tsai, C., C. Wides and E. Mertz (2014). "Dental workforce capacity and California's expanding pediatric Medicaid population." J Calif Dent Assoc **42**(11): 757-764, 766.

NORTH

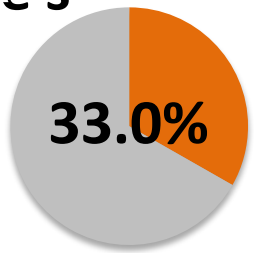
Medicaid Enrollees

1,821,4
00

18.5% of Population

Dental Care

1,465 of the State's
4,407 dentists
accept Medicaid



Safety Net Clinics

45 FQHC Sites
9 CSLCs (ECU)

1,243:1 Ratio of Medicaid Enrollees to M

COLORADO

Medicaid Enrollees

1,106,597

20.6% Of Population

Dental Care

877 of the state's
2,654 dentists
accept Medicaid

Safety Net Clinics

54 FQHCs
9 CBDCs

1,262:1 Ratio of Medicaid Enrollees to Medicaid Dentists

Medicaid in NC

- 1,465 NC dentists treated at least one Medicaid patient last year (includes 700+ accepting ***Health Choice****)
- 1,134 treated at least 10 new Medicaid patients in the the past year
  - They are listed by name on the NC DMA (Medicaid) website and are considered “more likely to accept new Medicaid patients”

*NC Child Health Insurance Program (CHIP)

Data Window

If NC expanded Medicaid would there be enough practitioners to care for the dental needs of newly eligibles?

Other Policy Windows (in order)

- Budget cycles (annual and trust fund attached)
- Campaign core issues (Health Reform for Clinton and Obama)
- Disasters and focusing events (Deamonte Driver)
- Grass roots and Astroturf—”***people*** in Eastern North Carolina want to support their University and see a problem with access to care”

To build or not to build

Table 1. Active Dentists per 10,000 Civilian Population

State	1996 Rank	1996 Ratio	2000 Rank	2000 Ratio	2003 Rank	2003 Ratio	2007 Rank	2007 Ratio
United States		6.1		6.1		6.0		6.0
Top Ranked States								
Massachusetts	4	8.1	2	8.1	2	8.2	1	8.2
Hawaii	1	8.9	1	8.2	1	8.2	2	8.1
New Jersey	5	8.1	4	7.9	3	7.9	3	8.1
New York	2	8.2	3	8.0	4	7.9	4	7.9
Neighboring States								
Virginia	22	5.8	21	5.7	21	5.7	19	5.9
Tennessee	28	5.3	28	5.3	29	5.2	37	5.0
South Carolina	**45**	**4.5**	**43**	**4.5**	**42**	**4.6**	**44**	**4.6**
Georgia	42	4.7	44	4.4	46	4.4	46	4.5
Bottom Ranked States								
North Carolina	**47**	**4.4**	**47**	**4.2**	**47**	**4.4**	**47**	**4.5**
Alabama	46	4.4	46	4.3	45	4.4	48	4.4
Arkansas	48	4.1	48	4.0	48	4.1	49	4.1
Mississippi	49	4.0	49	3.9	50	4.0	50	4.1

Interpretation

Either

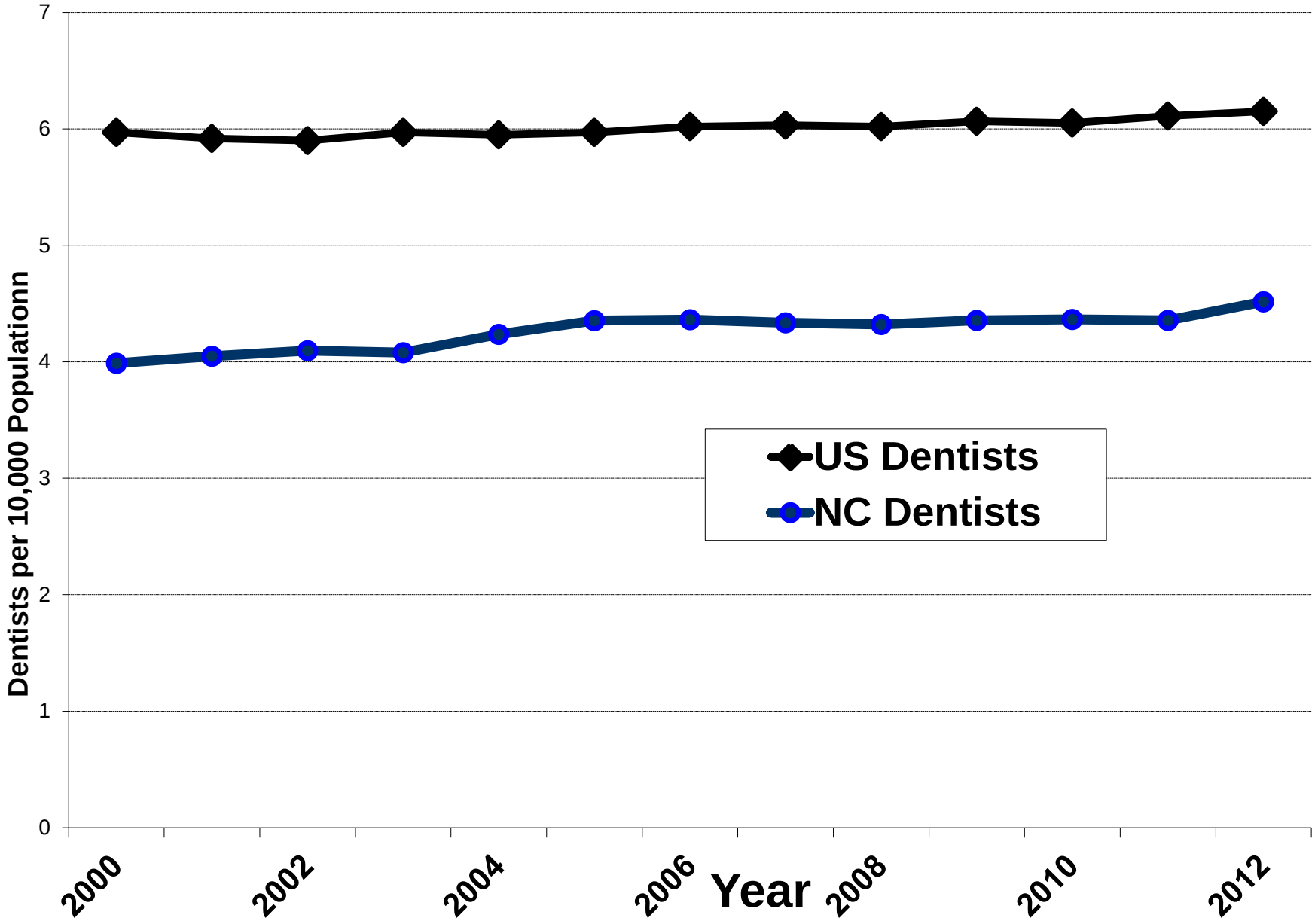
- North Carolina is woefully behind in dentists per population

Or

- North Carolina dentists are very efficient

OR

- We can't let ***South*** Carolina be better than us!


7
6
5
4
3
2
1
0
Dentists per 10,000 Populationn
US Dentists
NC Dentists
2000
2002
2004
2006
Year
2008
2010
2012

A Policy Choice:
ECU School of Dental Medicine

North Carolina Dental Workforce Is Dynamic

- About 10% of dentists either enters or exits practice in the State in a given year.

- The net gain in dentists (dentists entering practice *minus* dentists leaving practice) declined 2006-2010 but has picked up.

- A larger number of dentists left practice between 2007-2008 than in previous years but the largest growth in supply occurred in 2012.

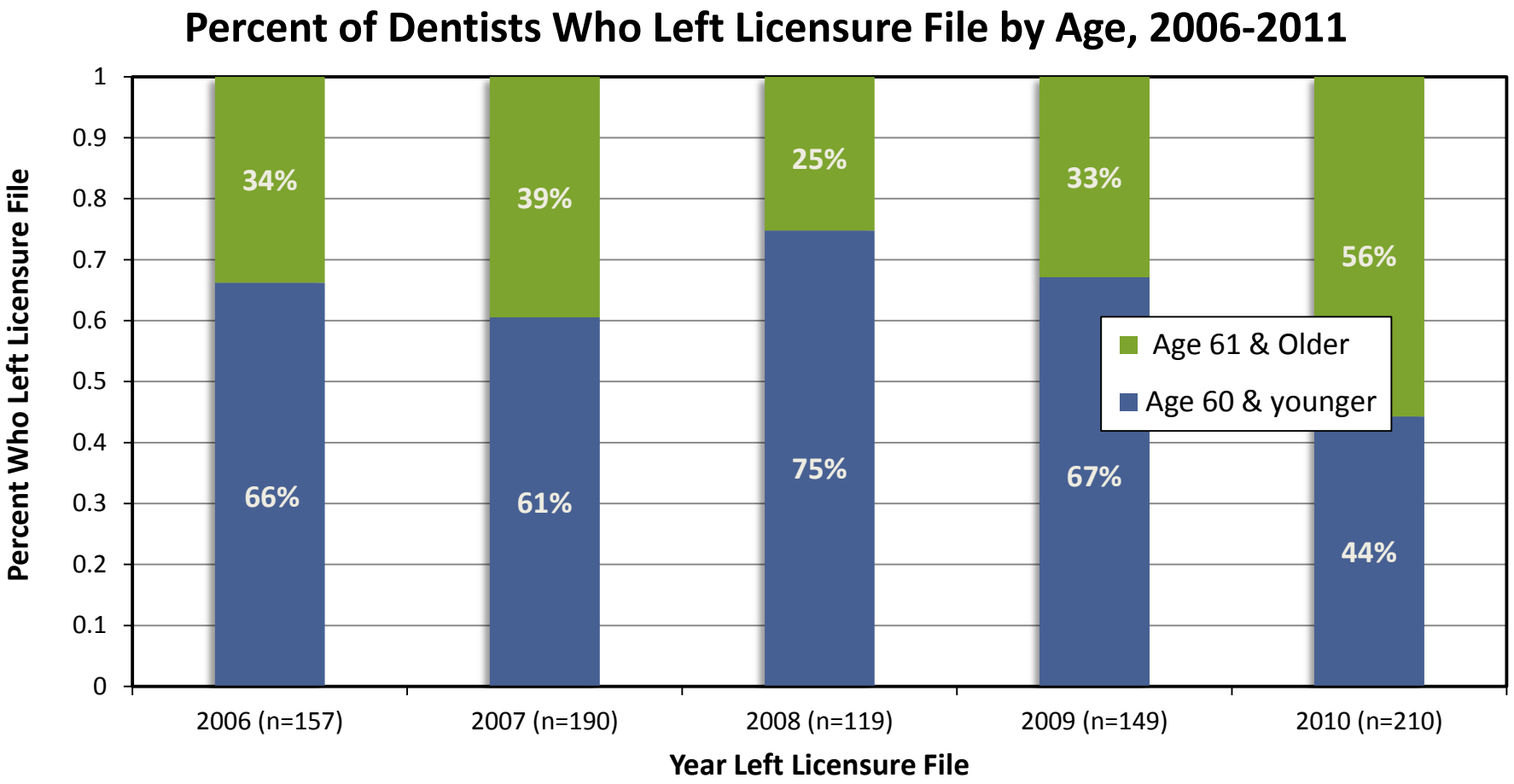
Trends look smooth but there is a ~10% churn in workforce every year

NC Dentist Supply: 2006-2011

Source: North Carolina Health Professions Data System, with data derived from the North Carolina State Board of Dental Examiners, 2006-2011. Prepared 2/28/2013.

Counts include active, instate dentists. Note: Newly licensed dentists are those who are new to file with a license date in the current or previous year. New active dentists are those who were licensed in NC in an earlier year but were either inactive or active out of state in the previous year.

Fewer dentists left workforce during recession but older dentists now retiring in greater numbers



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Now let's focus on the new entrants to the dental workforce

NC Dentist Supply: 2006-2011

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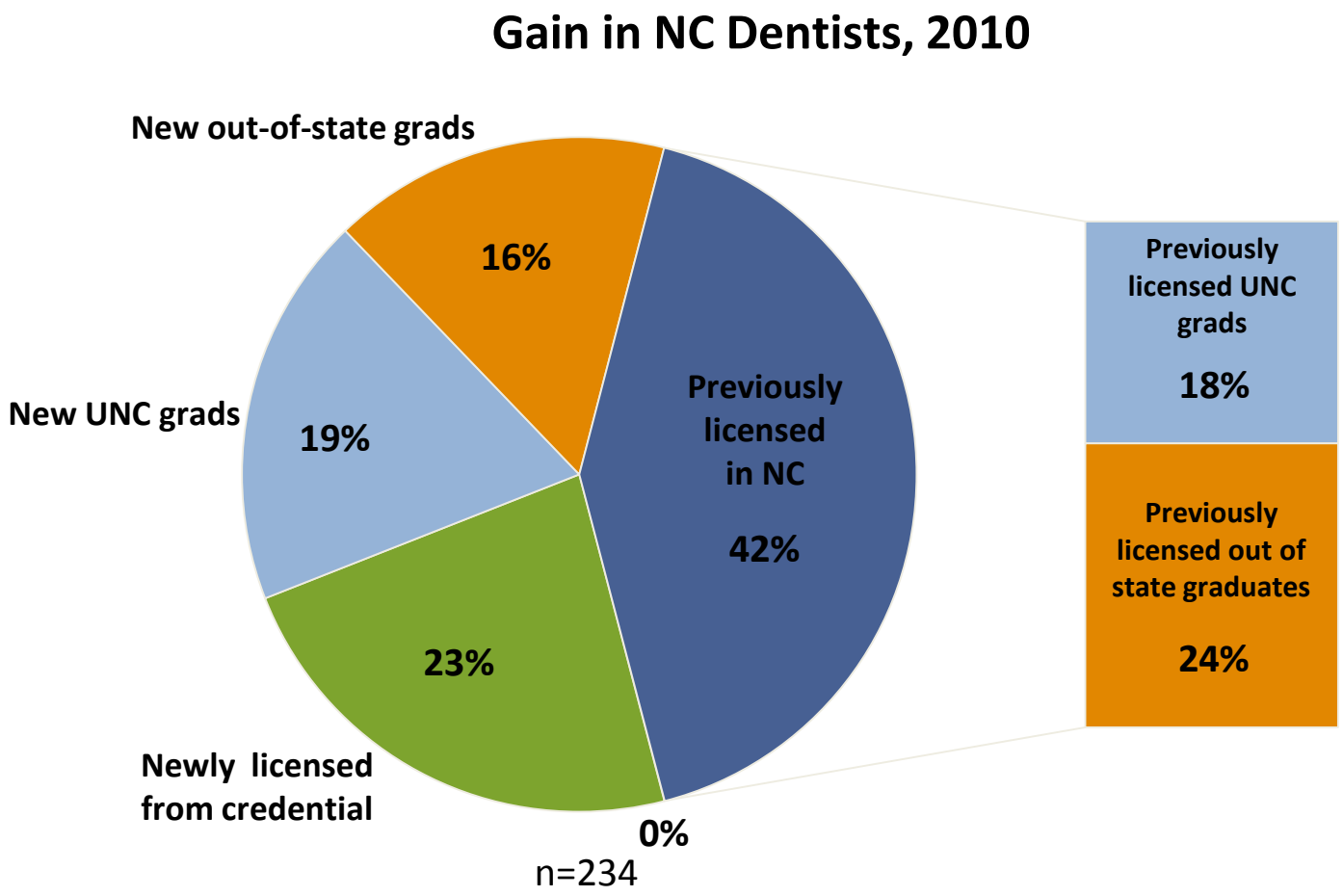
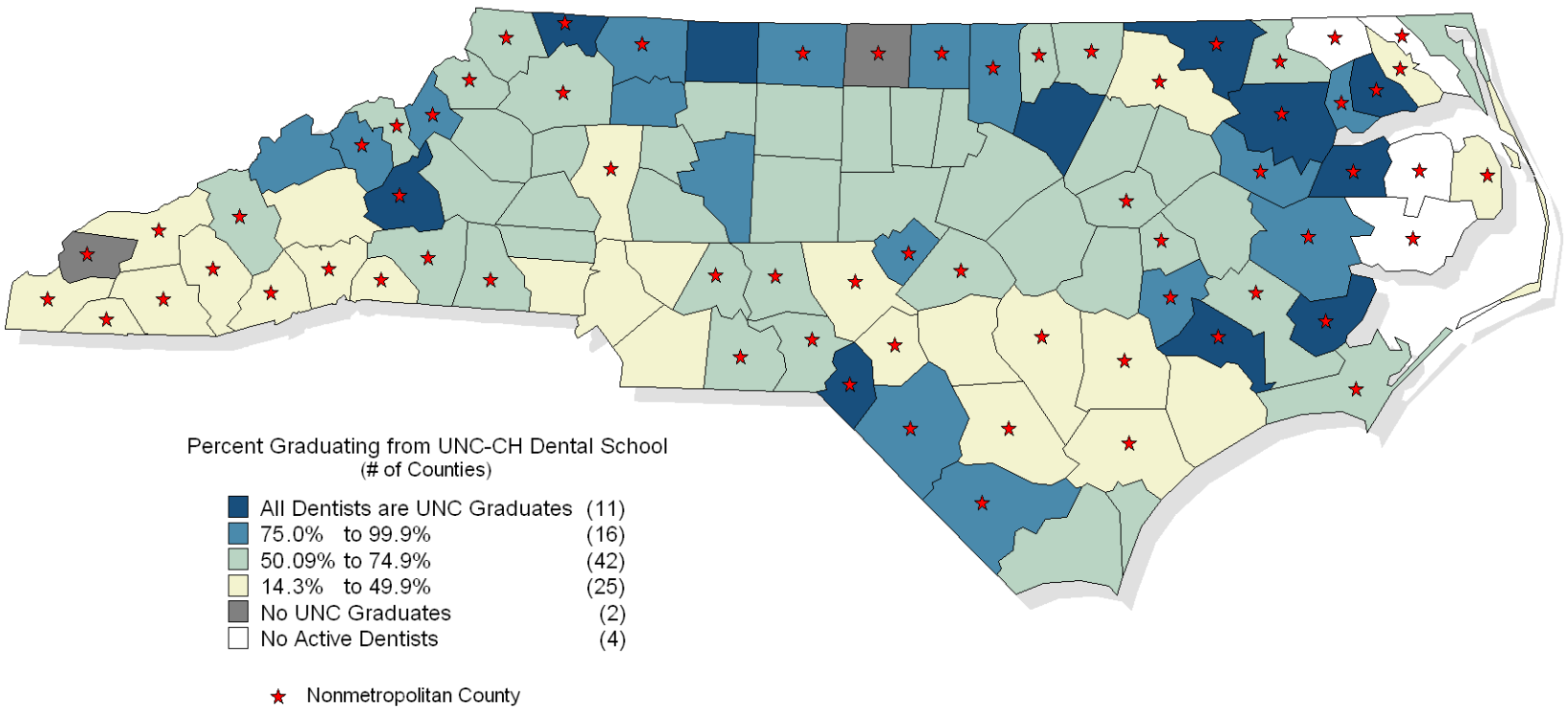
Where do our new dentists come from?



Sources: North Carolina Health Professions Data System, with data derived from the North Carolina State Board of Dental Examiners, 2010.

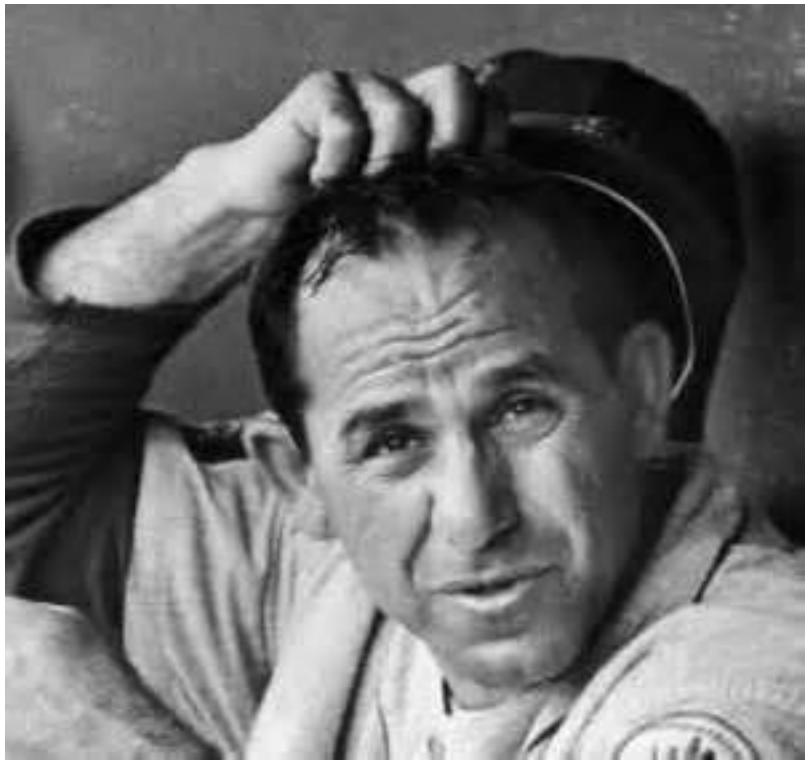
Percent of Dentists who Graduated from UNC-Chapel Hill Dental School
North Carolina, 2008



*Dentists included are active or have unknown activity status.

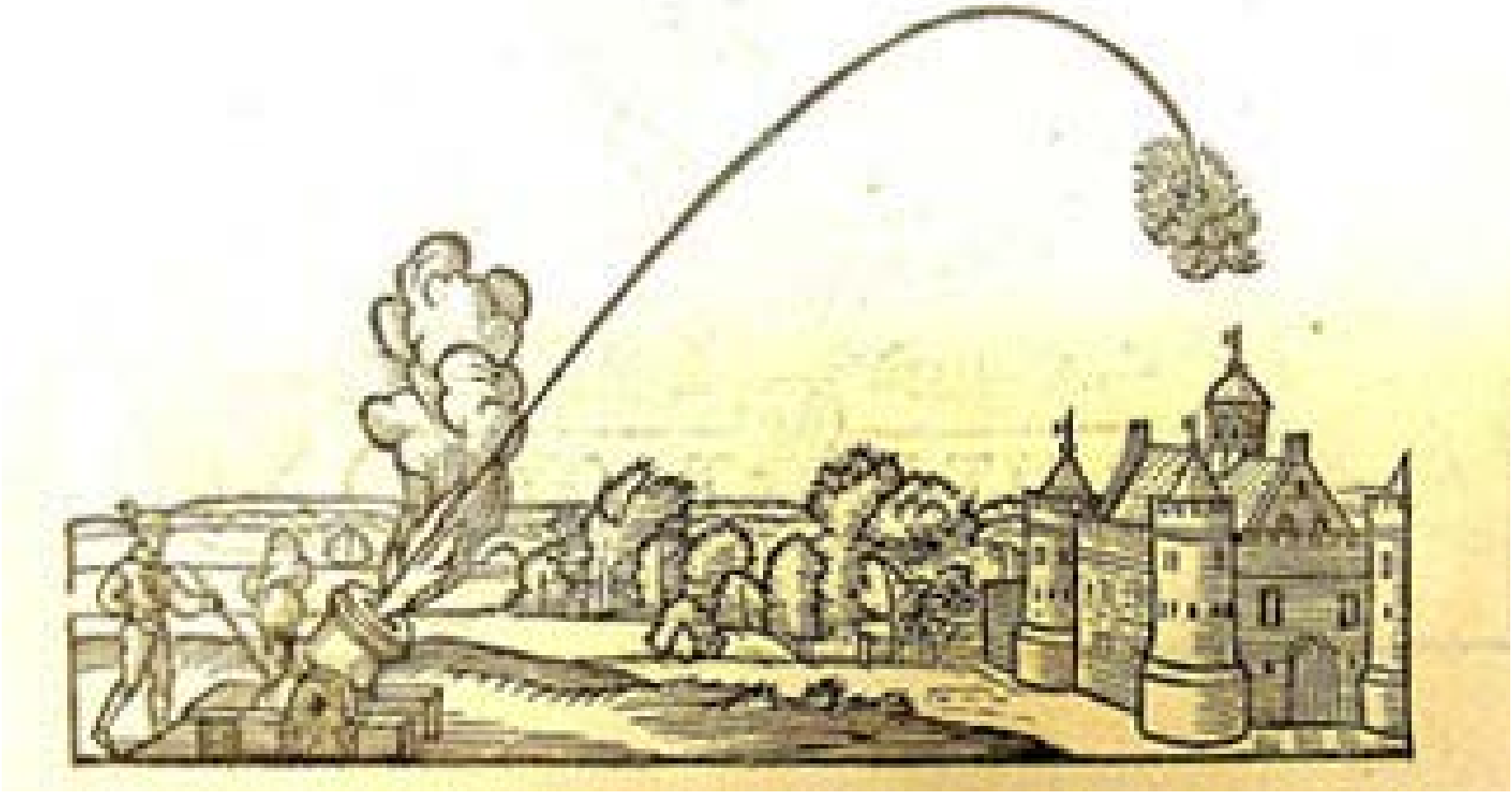
Source: North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 2008.

Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.



The future ain’t what it used to be

Projectiles, and **Projections** are intended to have a disturbing effect



They are intended to disturb current patterns

The Future? The Past

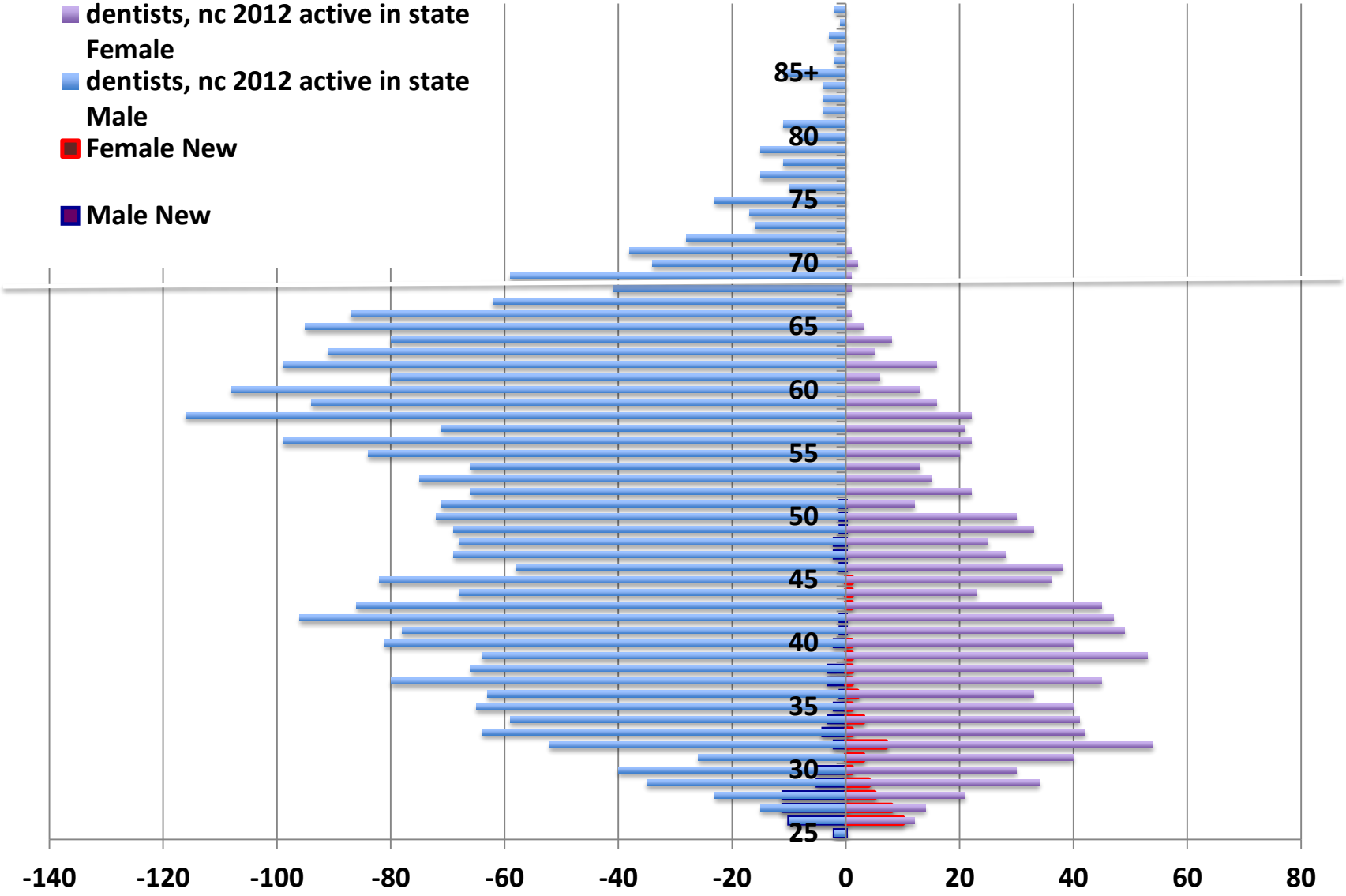
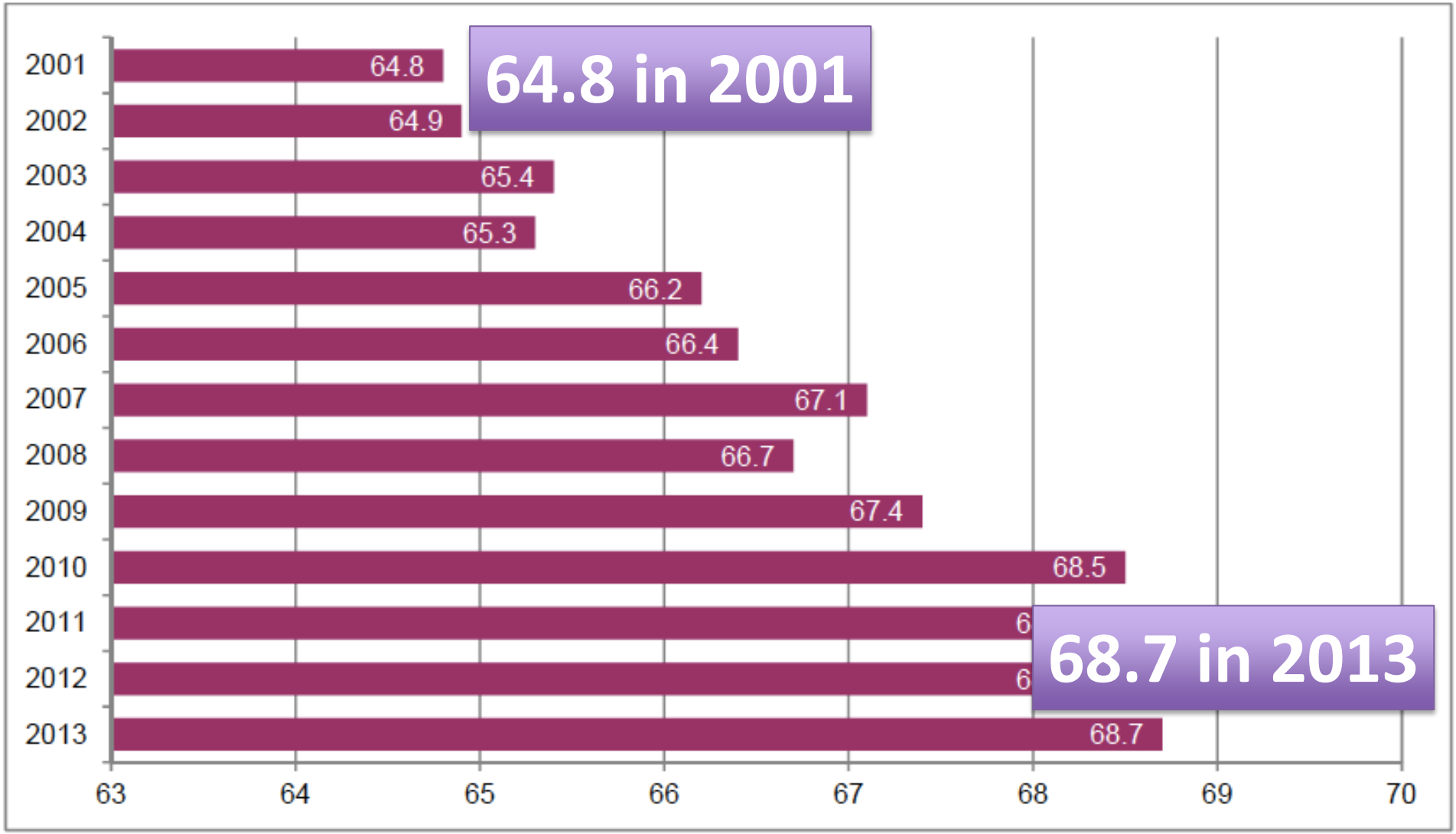


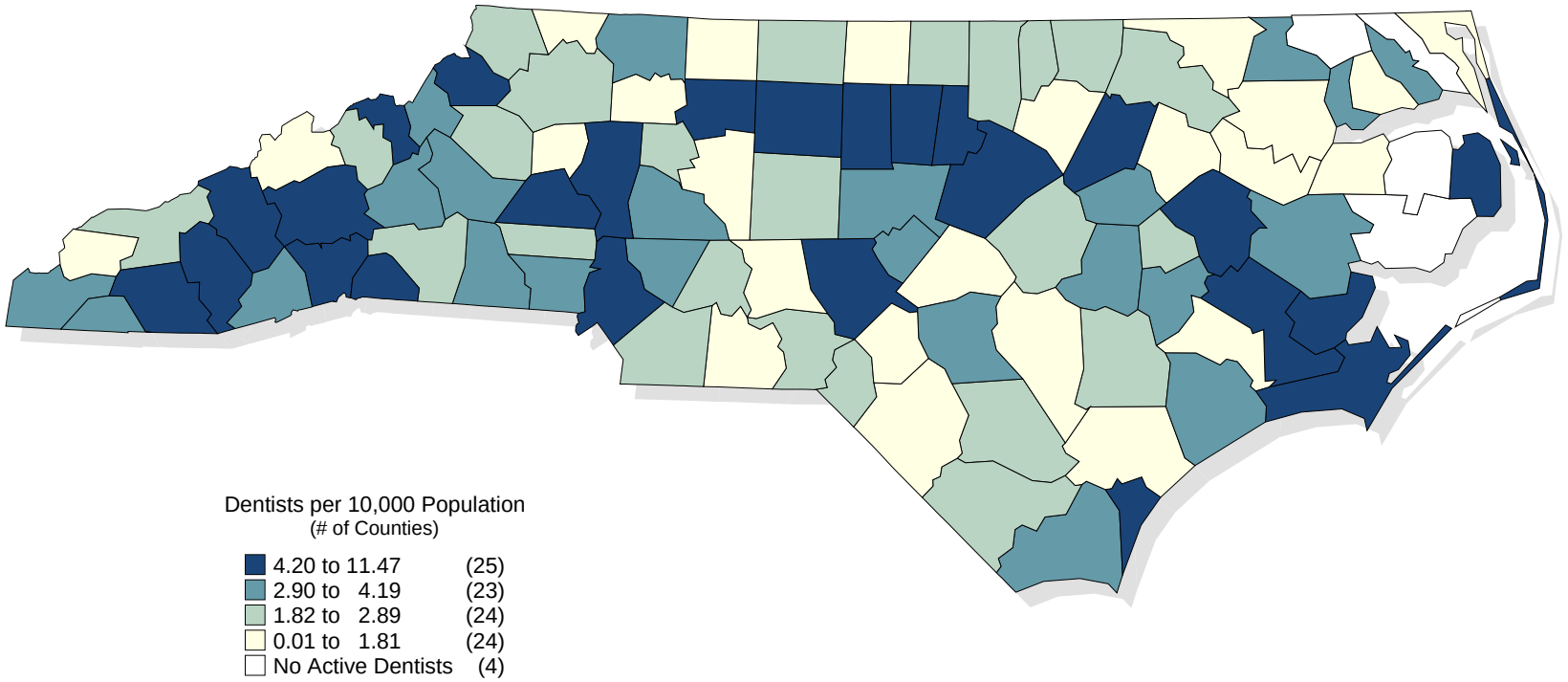
Figure 1: Dentists' Average Age at Retirement, 2001-2013



Source: ADA Health Policy Institute analysis of ADA masterfile.

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80

But what about WHERE Dentists are in North Carolina



Source: North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 2007.

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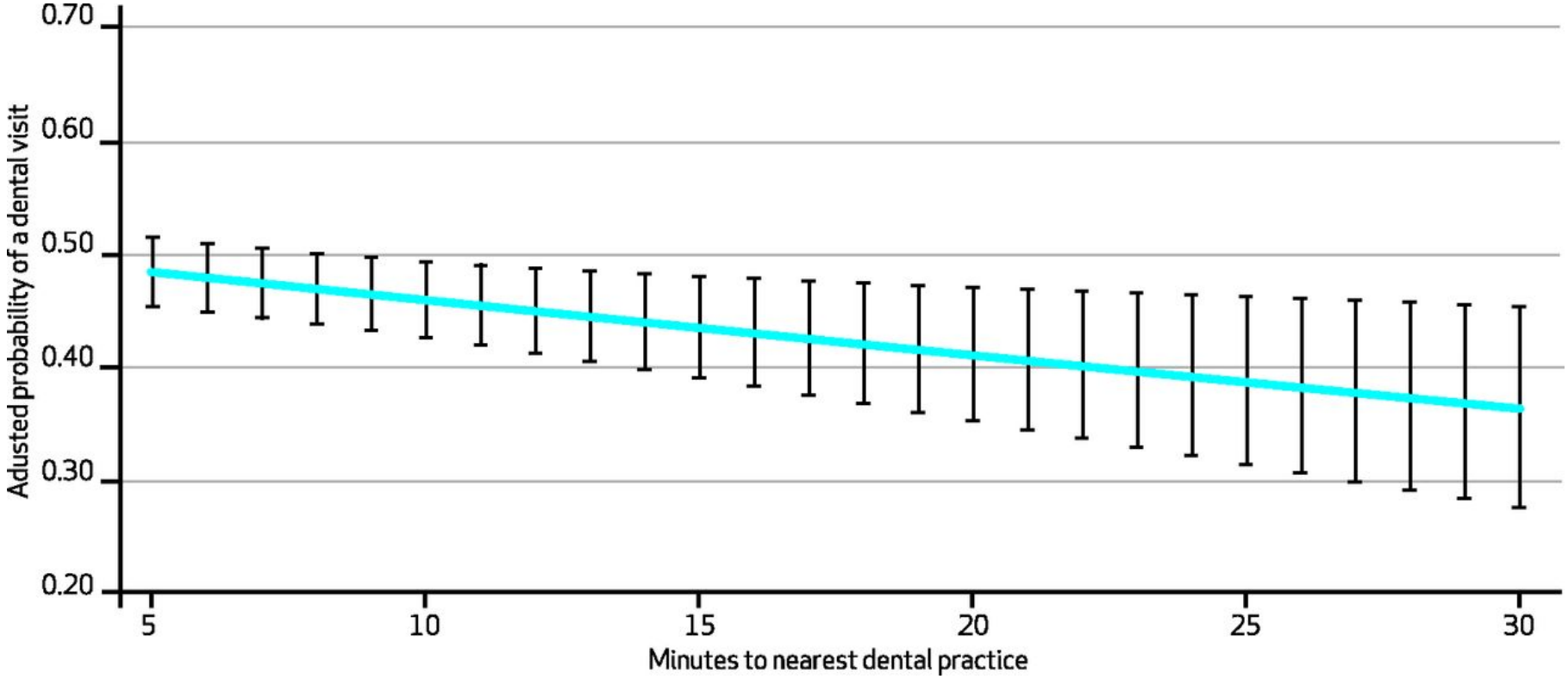
Distance makes a difference

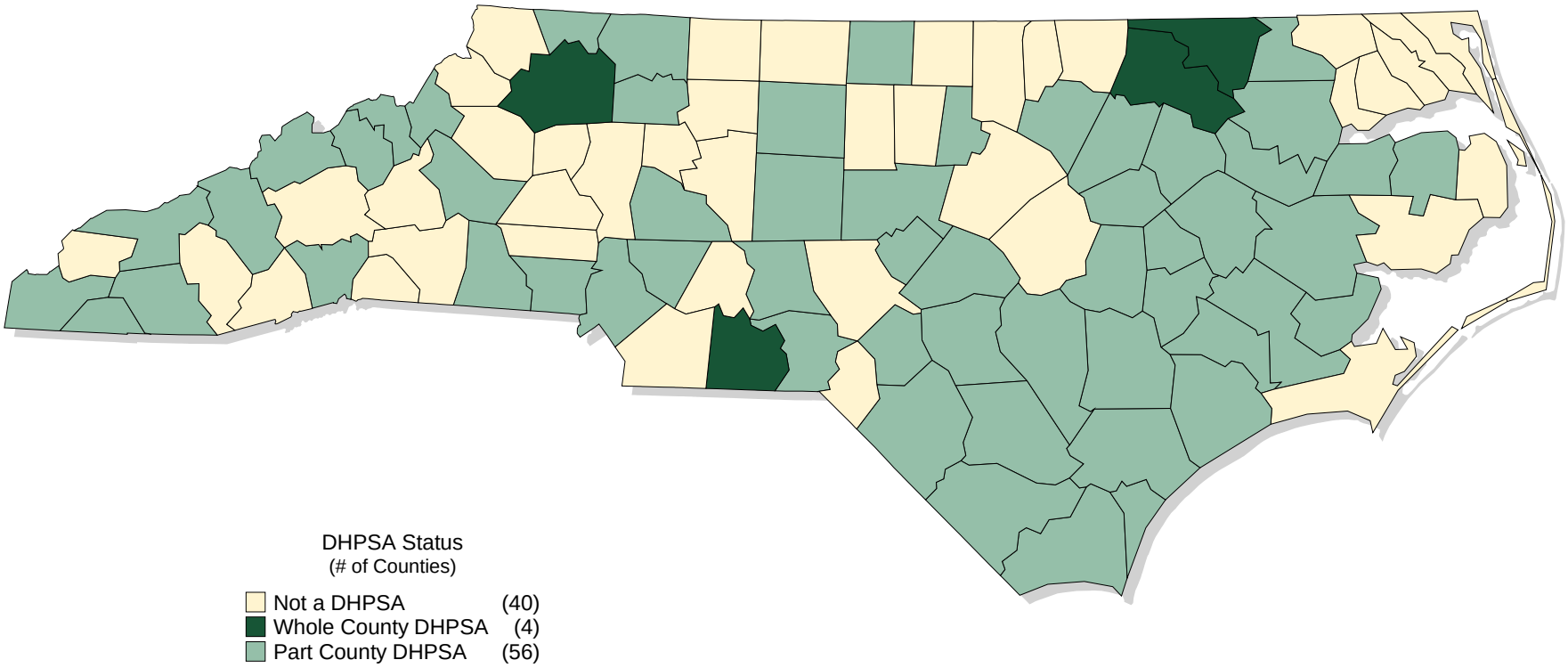
Ashley Krantz, Jessica Lee, Kimon Divaris, Diane Baker and William Vann have covered this issue well in Health Affairs (December, 2014 issue)



Health Professional Shortage Areas

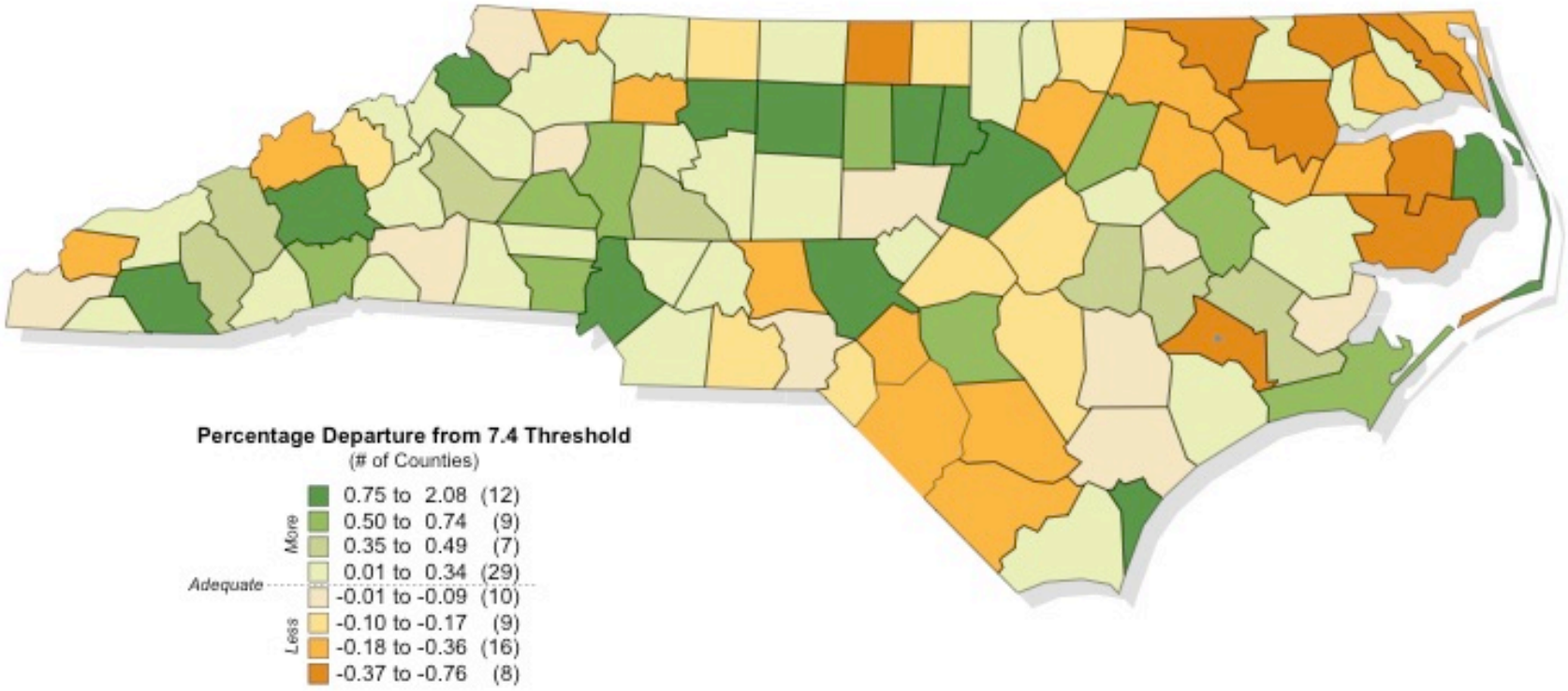
- There is a dental version, DHPSA
- Places and populations are designated by the federal government as unxderserved
- Those places become eligible for support for dentists repaying loans or other benefits
- North Carolina has 67 DHPSAs and HRSA estimates we require 263 dentists to match need; e.g. Onslow 11, Cumberland 12

Dental HPSAS



*Note: A part county HPSA is one or several sub-county areas designated as a HPSA.
Produced By: Southeast Regional Center for Health Workforce Studies, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
Source: US Department of Health & Human Services, Health Resources and Services Administration, Bureau of Health Professions, Shortage Designation Branch, February 2004.

Index of Dental Underservice:
Estimate of Need for Dental Visits and Dentist Supply
North Carolina, 2008



Note: Data based on an Index of Underservice developed by the Sheps Center for HRSA using 2008 North Carolina dentist and population data, and reflect the percentage difference from the threshold level of 7.4. Positive (green) values indicate areas where supply exceeds requirements, negative (orange) values show areas where requirements exceed supply.
Source: HRSA Index of Underservice Project, Cecil G. Sheps Center for Health Services Research; North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 2008; State Demographer's Office, 2008 County Age Groups Estimates.
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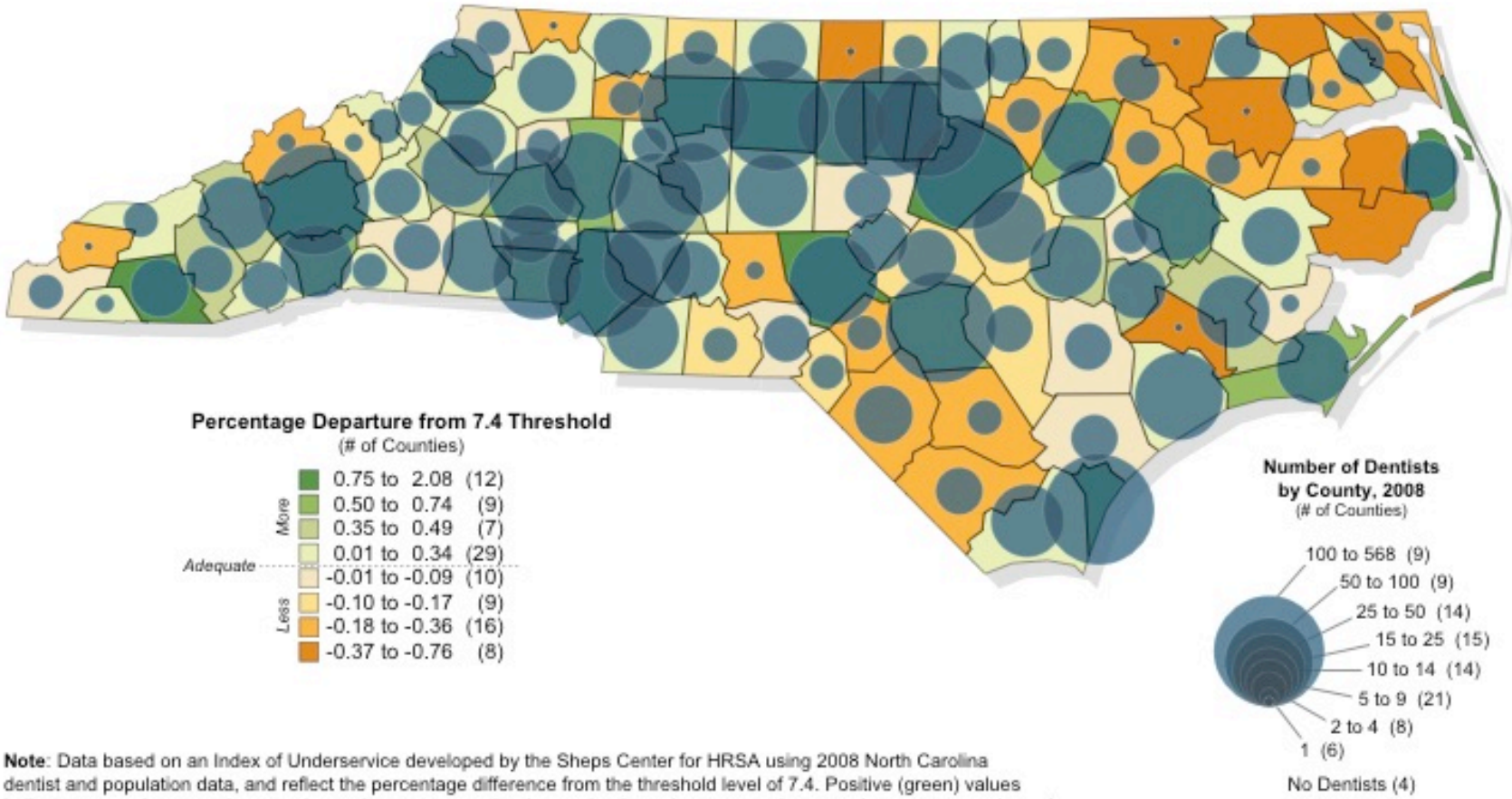

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Pressure on how NC licenses dental professionals

A US Institute of Medicine committee concluded that:

Nondental health care professionals are well situated to play an increased role in oral health care, **bu**t they require additional education and training;

and

- interprofessional, team-based care has the potential to improve care-coordination, patient outcomes, and produce cost savings, ***yet*** dental and nondental health care professionals are rarely trained to work in this manner;

and

new dental professionals and existing professionals with expanded duties may have a role to play in expanding access to care; and

efforts to broaden the diversity of the oral health care workforce have not produced marked changes.

And so....

RECOMMENDATION 4: HHS should invest in workforce innovations to improve oral health that focus on:

- Core competency development, education, and training, to allow for the use of all health care professionals in oral health care;
- Interprofessional, team-based approaches to the prevention and treatment of oral diseases;
- Best use of new and existing oral health care professionals; and
- Increasing the diversity and improving the cultural competence of the workforce providing oral health care.

Back to the numbers

How will these recommendations be supported or opposed in data?