Health Workforce Supply in North Carolina: Future Trends, Opportunities and Challenges

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Presentation overview

- The context
- Current challenges
- The health workforce of the future
- What do we need to do *now* to prepare for health workforce needed in the *future*?

Framing this presentation

People ask: **"Will North Carolina have the right number of health professionals it needs now and in the future?"**

Need to reframe question to:

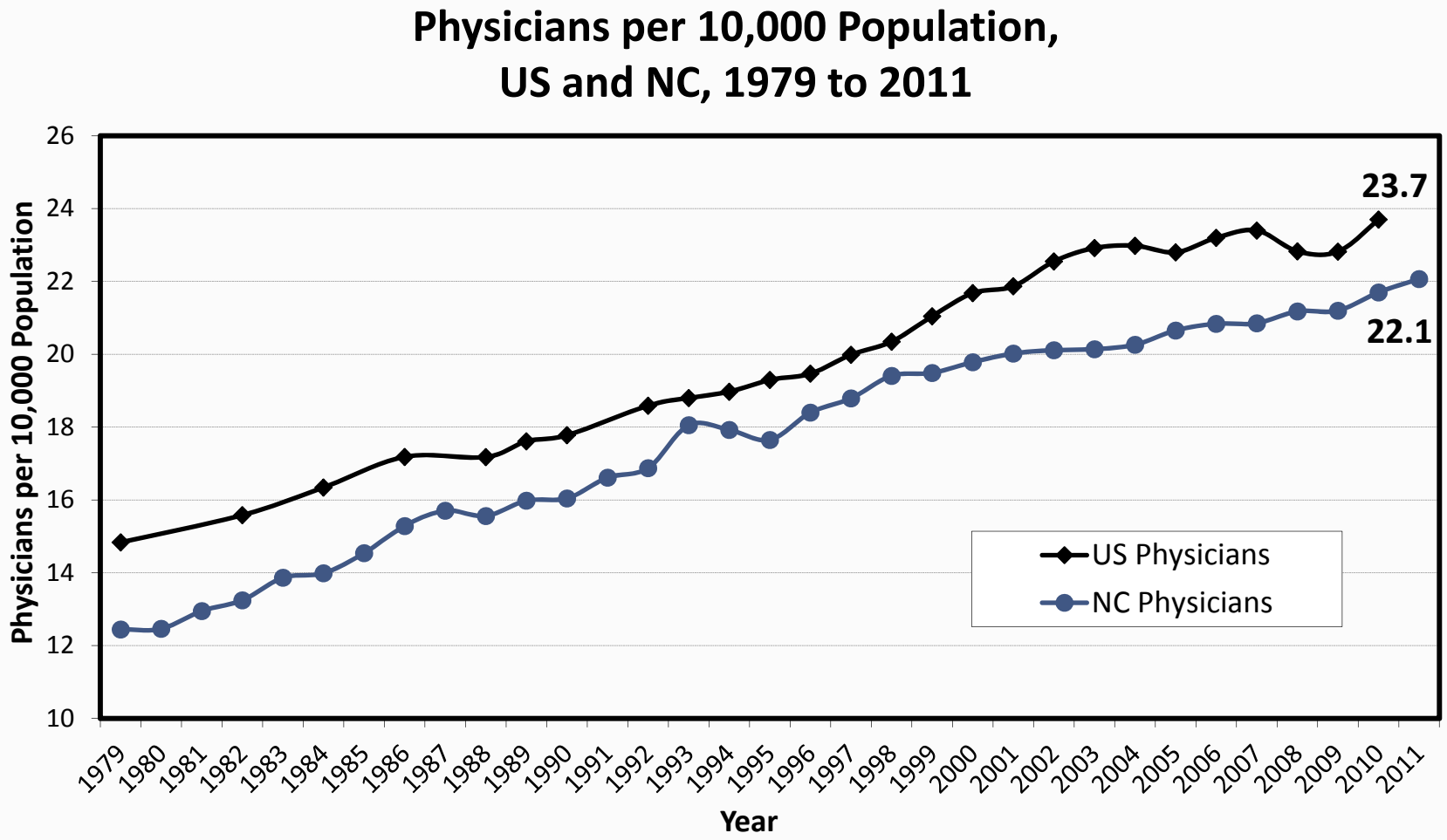
1. Will NC have the right mix of health professionals in the right specialties, geographies and practice settings?
2. What new roles and skills will be needed in a transformed health system?
3. How will we get to where we need to be?

Because whether or not North Carolina implements health reform, cost and quality pressures are driving health system change

With or without health reform, current system is not sustainable

- **Demand side driving change**: aging population, increase in chronic disease, health system consolidation, new models of care, payment policy changes, rising patient expectations
- **Supply side not keeping pace**: health workforce not well distributed and deployment is rigid because payment, regulatory, and education systems lag behind

Fears of physician shortages create headlines but we see steady increase in supply



Sources: North Carolina Health Professions Data System with data derived from the North Carolina Medical Board ,1979 to 2011; North Carolina Office of State Planning. Figures include all licensed, active, in-state, non-federal, non-resident-in-training physicians.

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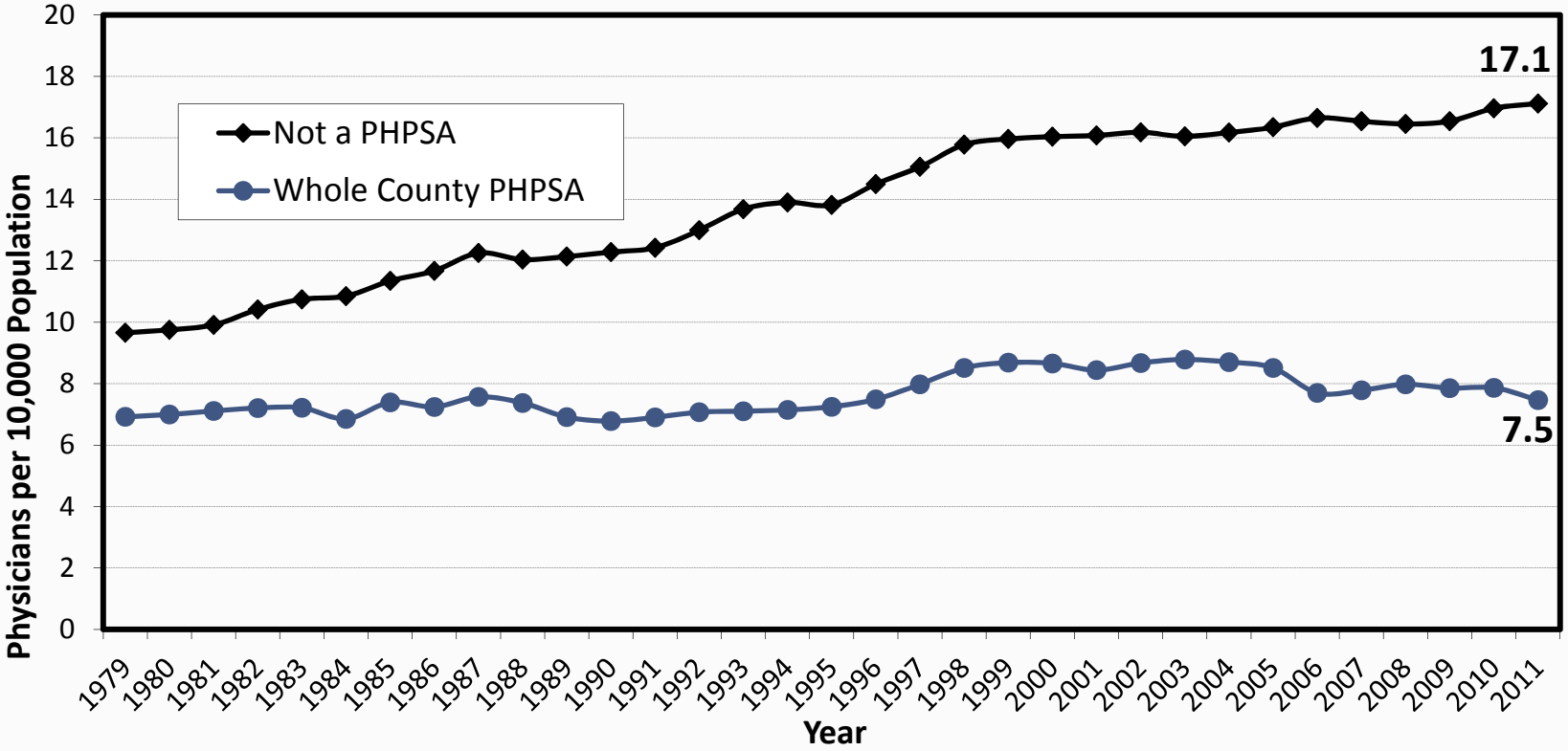
The real issue is maldistribution

Physicians per 10,000 Population by Persistent Health Professional Shortage Area (PHPSA) Status, North Carolina, 1979 to 2011

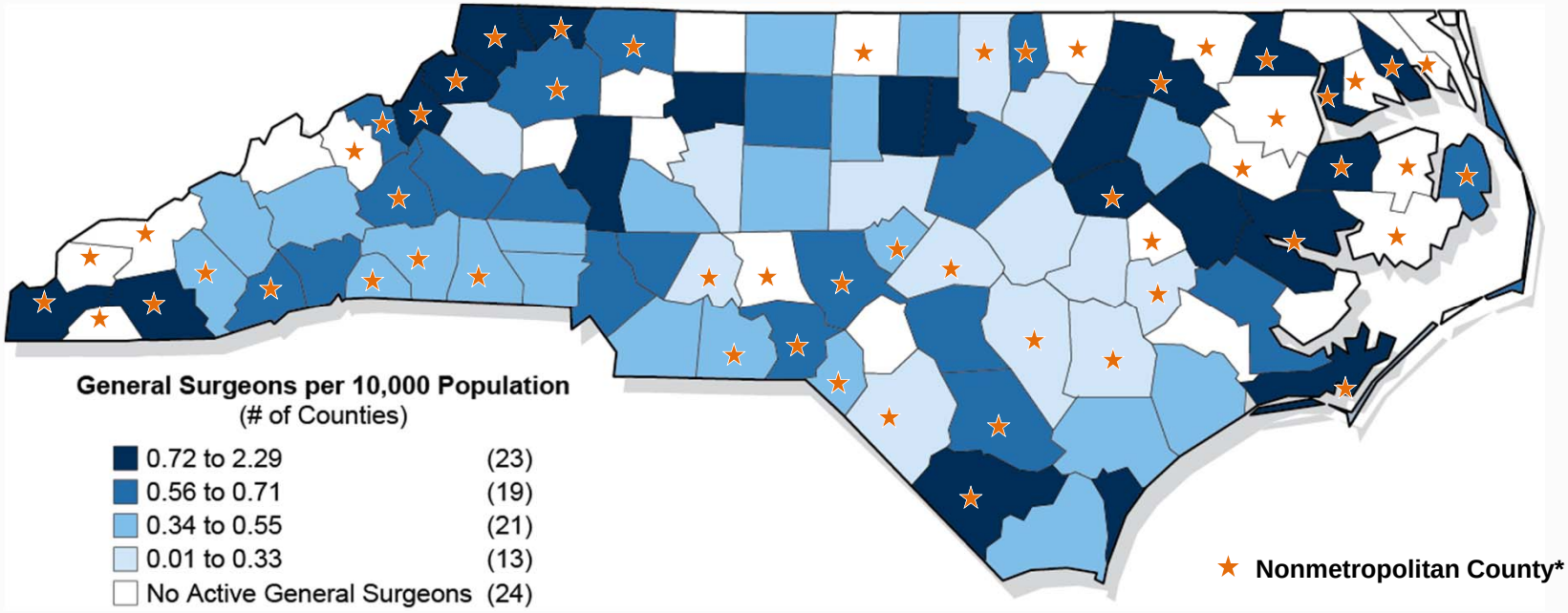


Notes: Figures include all active, in-state, non-federal, non-resident-in-training physicians licensed in NC as of October 31st of the respective year. North Carolina population data are smoothed figures based on 1980, 1990, 2000 and 2010 Censuses. As of 2012, PC PHPSA calculations updated with data from most recent ARF release. Persistent HPSAs are those designated as HPSAs by HRSA using most recent 7 HPSA designations (2004, 2007-2012).

Sources: : North Carolina Health Professions Data System with data derived from the North Carolina Medical Board ,1979 to 2011; NC Office of State Planning; North Carolina State Data Center, Office of State Budget and Management; Area Resource File, HRSA, DHHS.

Lots of discussion about primary care but 24 NC counties have no general surgeon

General Surgeons per 10,000 Population
North Carolina, 2011



Note: Data include all active, in-state, non-federal, non-resident-in-training physicians licensed in North Carolina as of Halloween, 2011, Who report a primary area of practice in "General Surgery."
Source: NC Health Professions Data System, with data derived from the North Carolina Medical Board, 2013.
Produced by: Program on Health Workforce Research and Policy, Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

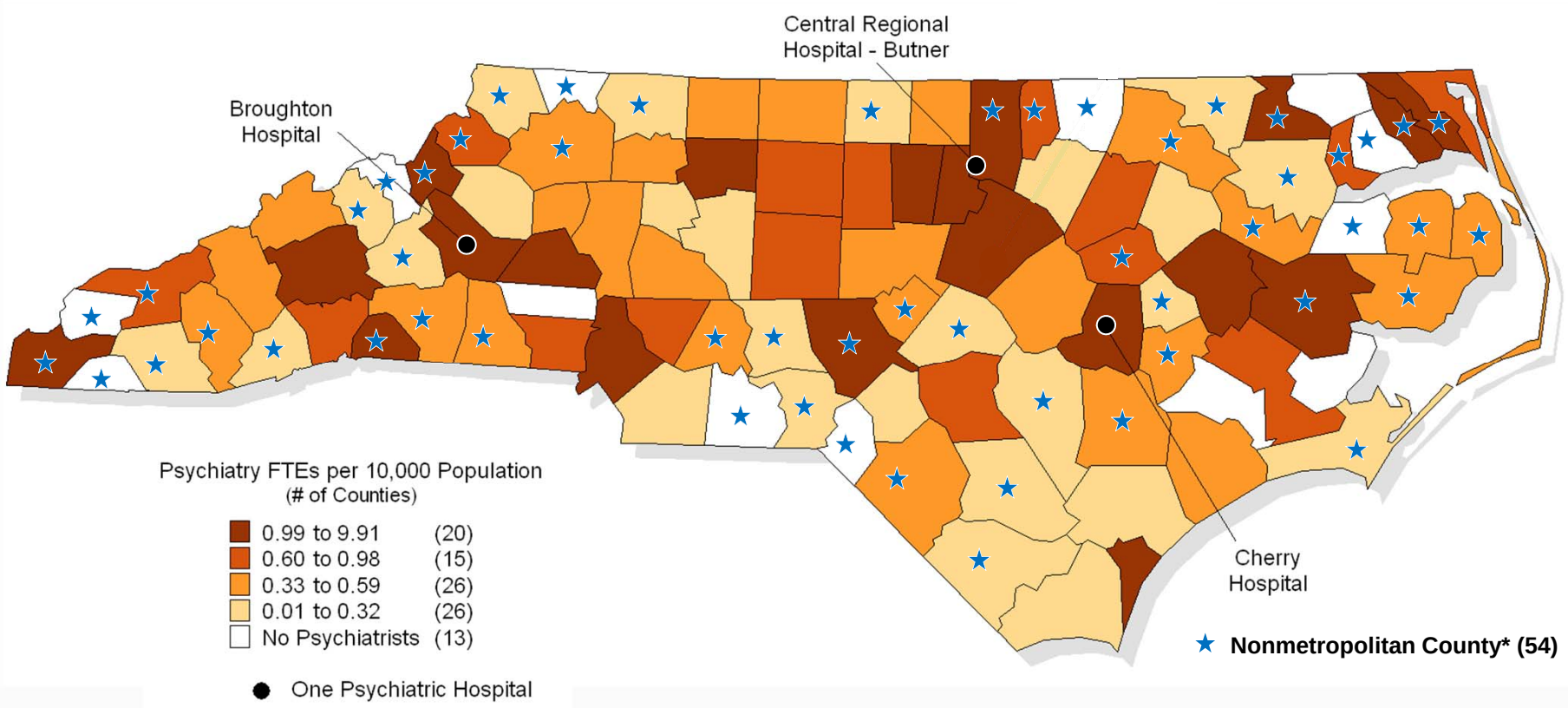
*Nonmetro source: US Census Bureau and Office of Management and Budget, March 2013. Note: "Core Based Statistical Area" (CBSA) is the OMB's collective term for Metropolitan and Micropolitan Statistical areas. Here, nonmetropolitan counties include micropolitan and counties outside of CBSAs.

"For the one-quarter of Americans who live outside metropolitan areas, general surgeons are the essential ingredient that keeps full-service medical care within reach. Without general surgeons as backup, family practitioners can't deliver babies, emergency rooms can't take trauma cases, and most internists won't do complicated procedures such as colonoscopies."

Washington Post, January 1, 2009

Half of NC's counties qualify as mental health professional shortage areas

Psychiatrist Full-Time Equivalents per 10,000 Population North Carolina, 2008



Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. **Source**: North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2008; LINC, 2010; NC DHHS, MHDDSAS, 2010. **Note**: Psychiatrists include active, instate, nonfederal, non-resident-in-training physicians who indicate a primary specialty of psychiatry, child psychiatry, psychoanalysis, psychosomatic Medicine, addiction/chemical dependency, forensic psychiatry, or geriatric psychiatry, and secondary specialties in psychiatry, child psychiatry and forensic psychiatry.

*Nonmetro source: US Census Bureau and Office of Management and Budget, March 2013. Note: "Core Based Statistical Area" (CBSA) is the OMB's collective term for Metropolitan and Micropolitan Statistical areas. Here, nonmetropolitan counties include micropolitan and counties outside of CBSAs.

NC consistently ranks near bottom of 50 states in dentist supply

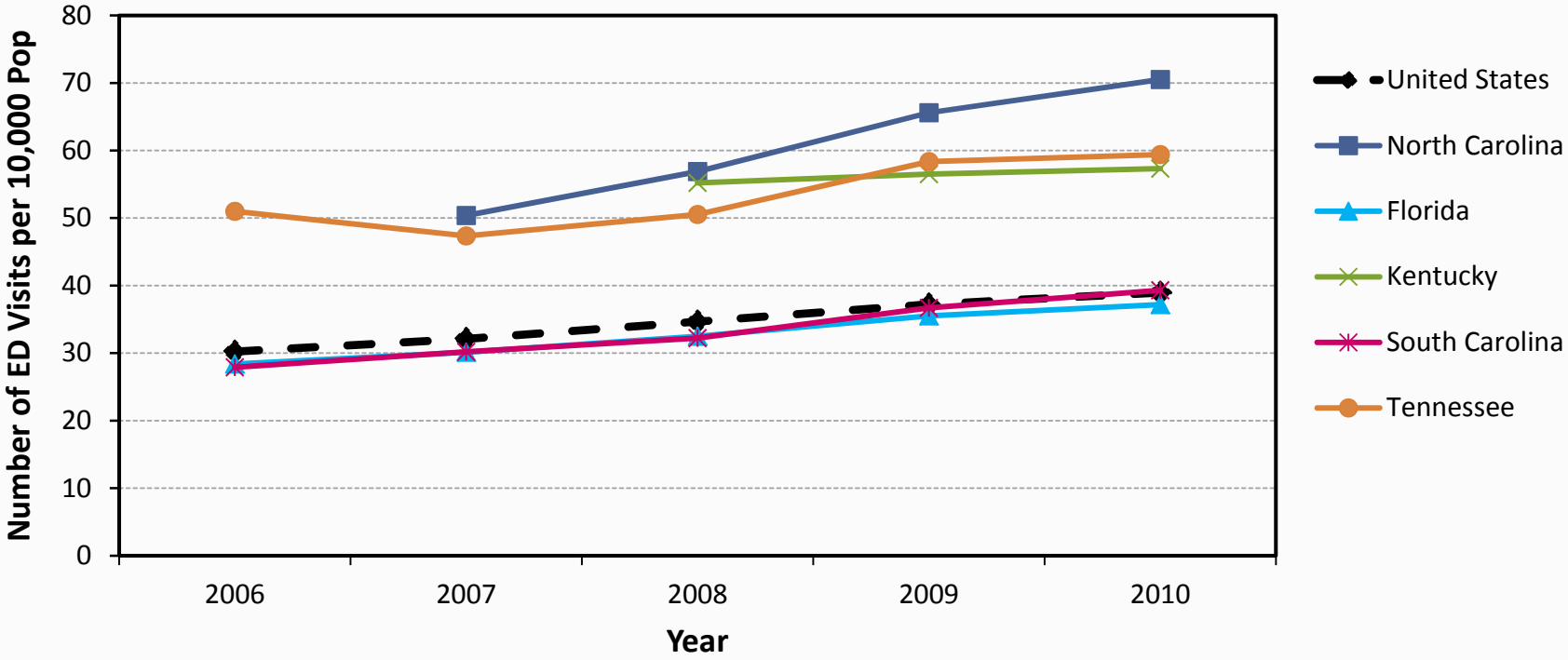
Active Dentists per 10,000 Civilian Population

	2000		2007	
	Rank	Ratio	Rank	Ratio
United States		**6.1**		**6.0**
Top Ranked				
Massachusetts	2	8.1	1	8.2
Hawaii	1	8.2	2	8.1
New Jersey	4	7.9	3	8.1
New York	3	8.0	4	7.9
Bottom Ranked				
North Carolina	47	4.2	47	4.5
Alabama	46	4.3	48	4.4
Arkansas	48	4.0	49	4.1
Mississippi	49	3.9	50	4.1

Source: Fraher E, McGee V, Hom J, Lyons J, Gaul K. We're Not Keeping Up With the Joneses: North Carolina Has Fewer Dentists per Capita Than Neighboring (and Most Other) States. *North Carolina Medical Journal*. 2012; 73(2): 111-114.

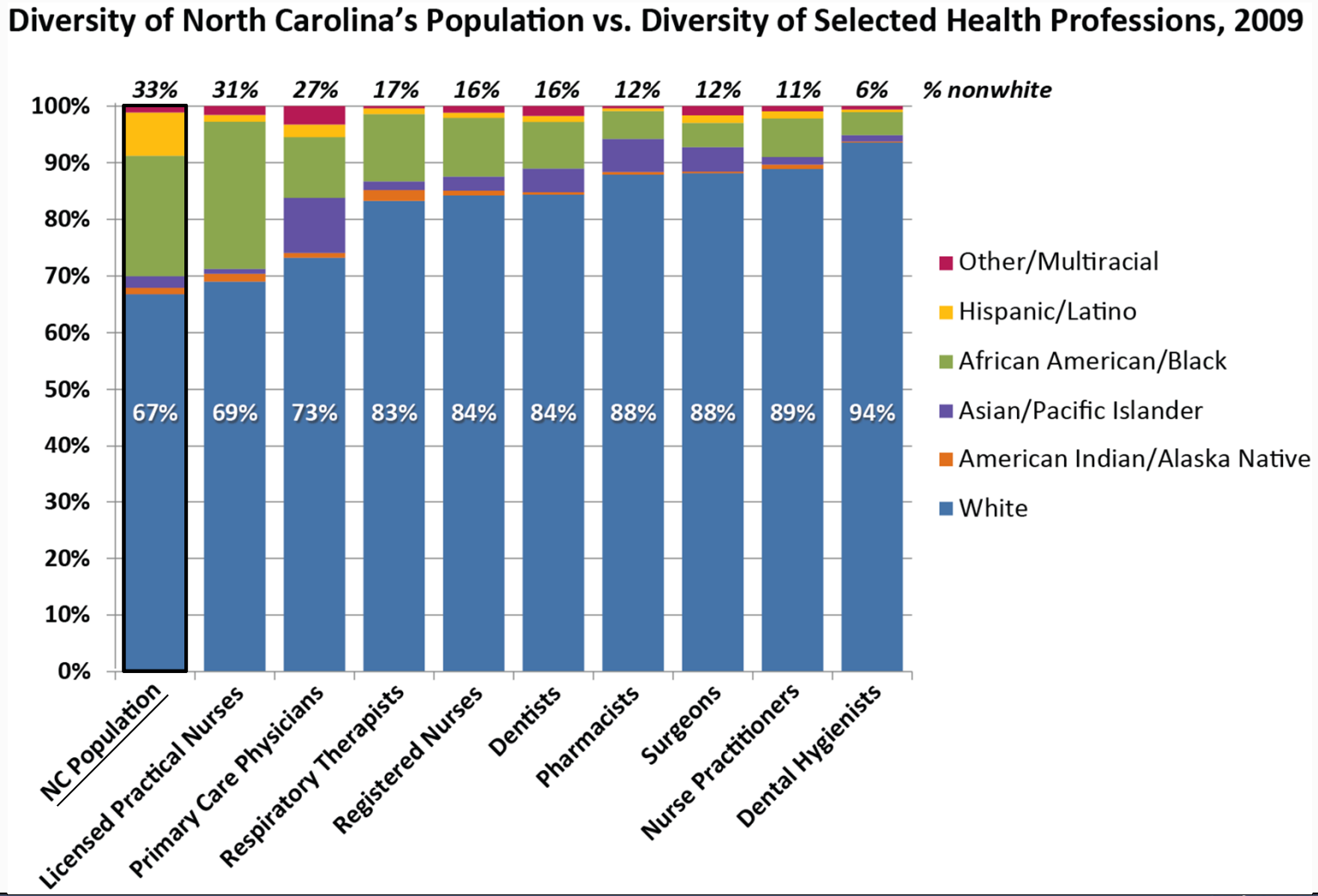
State has high and rapidly increasing number of ED visits for dental disorders

Emergency Department Visits for Dental Disorder Not Otherwise Specified, per 10,000 Population, US and Select States, 2006-2010



Source: State statistics from HCUP State Inpatient Databases and State Emergency Department Databases , Agency for Healthcare Research and Quality (AHRQ).*Weighted national estimates from HCUP Nationwide Emergency Department Sample (NEDS), Agency for Healthcare Research and Quality (AHRQ), based on data collected by individual States and provided to AHRQ by the States.

Race/Ethnicity of workforce falls short of matching NC population diversity




THE
FUTURE

Health system transformation underway

- Emphasis is on primary and preventative care
- Health care is integrated across:
  - medical sub-specialties, home health agencies and nursing homes
  - **community- and home-based** services
- Technology used to monitor health outcomes
- Payment incentives promote accountability for population health
- Designed to lower cost, increase quality, improve patient experience

Different health system means different workers

A transformed health care system will require a transformed workforce.

The people who will support health system transformation for communities and populations will require different knowledge and skills

Source: Centers for Medicare and Medicaid Services, Health Care Innovation Challenge Grant, Funding Opportunity Number: CMS-1C1-12-001 , CFDA: 93.610 , November 2011. http://www.innovations.cms.gov/Files/x/Health-Care-Innovation-Challenge-Funding-Opportunity-Announcement.pdf

Existing workers will take on new roles in new models of care

- Most workforce policy focus has been on redesigning educational curriculum for students in the pipeline
- **But it is workers already in the system who will transform care**
- **Action Needed**: more continuing education opportunities to allow workers to upgrade their skills and gain competencies needed in new models of care, such as:
  - care coordination
  - transitions of care
  - population health management
  - patient education and engagement

Existing workforce will shift from acute to ambulatory, community- and home-based settings

- Changes in payment policy and health system organization:
  - Shift from fee-for-service toward bundled care payments, risk- and value-based models
  - Fines that penalize hospitals for readmissions
  - Rapid consolidation of care
- Will increasingly shift health care—*and the health care workforce*—from expensive inpatient settings to ambulatory, community and home-based settings

Action Needed: need to shift health workforce training to community-based settings; current workforce not prepared to meet patient on "their turf"

It's not just about numbers needed in future, it's about new health professional roles

- Patient navigators
- Nurse case managers
- Care coordinators
- Community health workers
- Care transition specialists
- Living skills specialists
- Patient family activator
- Grandaids
- Paramedics
- Home health aids
- Peer and family mentors

- All these professions play role in managing patient transitions between home, community, ambulatory and acute care health settings
- Evidence shows improved care transitions reduce unnecessary hospital admissions, lower costs and improve patient satisfaction

But how do we get there from here?

Health Workforce Planning the Traditional Way

The Future: health workforce planning, Wayne Gretsky style

"I skate to where the puck is going to be, not to where it has been." *–Wayne Gretsky*

North Carolina has better capacity for planning than most states

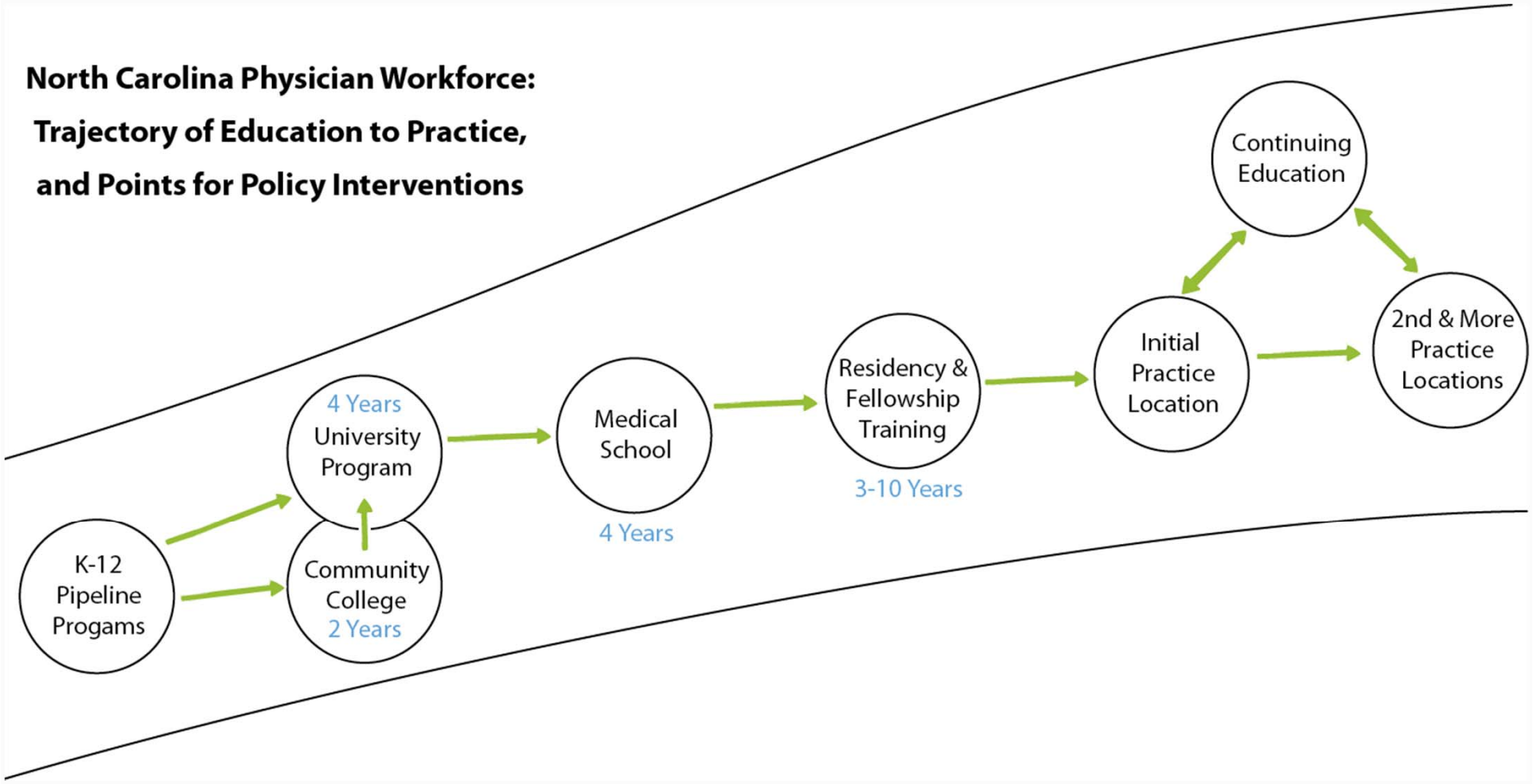
State has long history of collaborative workforce planning:

- Well-established AHEC and Office of Rural Health
- Strong public community college and university system
- History of collaboration and trust
- Better data and analytical capacity than most states

But we don't use data enough to shape future or evaluate past

Result: we are drowning in data but lacking intelligence needed to effectively shape health workforce policy

Data should be used to target funding toward programs across pipeline with highest return on investment



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