# Data Update: Allied Health Vacancies and Health Workforce Diversity in NC

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*Turning Point Regional Allied Health Roundtable Meeting* 24 October 2012



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#### **Presentation Overview**

- Brief intro to the North Carolina Health Professions Data System (NC HPDS)
- Review of the 2011 NC Allied Health Vacancy Report
- Review of the state of NC Health Workforce Diversity (2009 data)



### NC Health Professions Data System (HPDS)

- Data for 19 health professions
- Derived from licensure files
  - Not a survey
  - Capture 100% of the workforce
  - Data voluntarily provided by boards, no mandate
- 30- years of data allow us to:
  - Monitor changes over time
  - Combine data on race/ethnicity with data on education and geographic characteristics



#### Area L 2011 HPDS Databook Page

# A Report on Health Care Resources in North Carolina North Carolina Health Professions 2011 DATA BOOK

#### Effective: October 2011

Cecil G. Sheps Center for Health Services Research University of North Carolina at Chapel Hill

through support provided by The North Carolina Area Health Education Centers Program The UNC-Chapel Hill Office of the Provost (Health Affairs)

#### Area L AHEC Number of Counties in Region: 5 2011 ACTIVE HEALTH PROFESSIONALS\* Physicians Nurses Registered Nurses Non-Federal Physicians 416 2.600 Nurse Practitioners 70 Primary Care Physicians 162 Certified Nurse Midwives Family Practice 52 Licensed Practical Nurses 719 General Practice 0 Internal Medicine 66 Other Health Professionals Obstetrics/Gynecology 22 Chiropractors 26 22 Pediatrics Occupational Therapists 35 Other Specialties 254 Occupational Therapy Assistants 25 Physicians per 10,000 Population\*\* 13.4 Optometrists 44 Primary Care Physicians 5.2 Pharmacists 232 per 10,000 Population \*\* **Physical Therapists** 100 Federal Physicians \*\*\* 3 Physical Therapist Assistants 125 Physician Assistants Dentists and Dental Hygienists 97 Podiatrists Dentists 86 6 Practicing Psychologists 18 Dental Hygienists 123 Psychological Associates 24 ■ DEMOGRAPHICS ■ **Respiratory Therapists** 129 Projected Population 2009 \*\*\* Employment and Income Data Labor Force 2011 145,765 Total Ages 0-19 Ages 20-64 Ages 65+ 125,693 Employed 2011 157.129 37 703 02.202 27,134 White Unemployed 2011 20.072 146,225 44,492 86,442 15,291 Nonwhite Unemployment Rate 2011 (%) 13.8 303,354 82,285 178,644 42,425 Total Per Capita Income 2010 \$31,392 100.0% 58.9% 14.0% Medicaid Eligibles 2011 % of Pop. 27.1% 02 123 HEALTH-RELATED STATISTICS = Vital Statistics 2010 (Rates are per 1,000 population) Resident Births 3,788 Total Pregnancies 4,775 Total Pregnancy Rate 83.1 Resident Deaths 3,175 Teen Pregnancies 719 Teen Pregnancy Rate 68.8 (ages 15-19) (ages 15-19) % Births <2500 gms (2009) 11.0 Infant Mortality Rates 2010 (Rates are per 1,000 population) Total 7.4 White 3.9 Nonwhite 9.2 Hospital/Facility Data General Hospital Discharges 2010<sup>+</sup> 44,116 General Hospital Beds 2011<sup>++</sup> 846 Nursing Facility Beds 2011 1,859 § Please refer to page 4 of this book for an explanation of the change in physician numbers. \* Number repetition in the these active within the profession and those newly licensed in 2011 with unknown activity status; inactives are excluded \*\* Rates are based on 2011 population data. Fixed are nation of 2011 population main. Fixed are based on 2011 population main. Fixed are based on 2011 population main. Fixed are based on 2011 population main. Counts have found for an physicians in the armod services, US Public Health Service, Indian Health Service, and the Department of Veteran Affairs. Counts of housing labels in accute care short stay housing labels in accute. Counts of housing labels in accute care short stay housing labels in accute. +++ Population data by race/ethnicity and age for 2010 and 2011 were not yet available at the time of publication

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## Area L Snapshot: 2011 HPDS Data Book Page

Chiropractors	26
Occupational Therapists	35
Occupational Therapy Assistants	25
Optometrists	44
Pharmacists	232
Physical Therapists	100
Physical Therapist Assistants	125
Physician Assistants	97
Podiatrists	6
Practicing Psychologists	18
Psychological Associates	24
Respiratory Therapists	129
Dentists and Dental Hygienists	
Dentists	86
Dental Hygienists	123



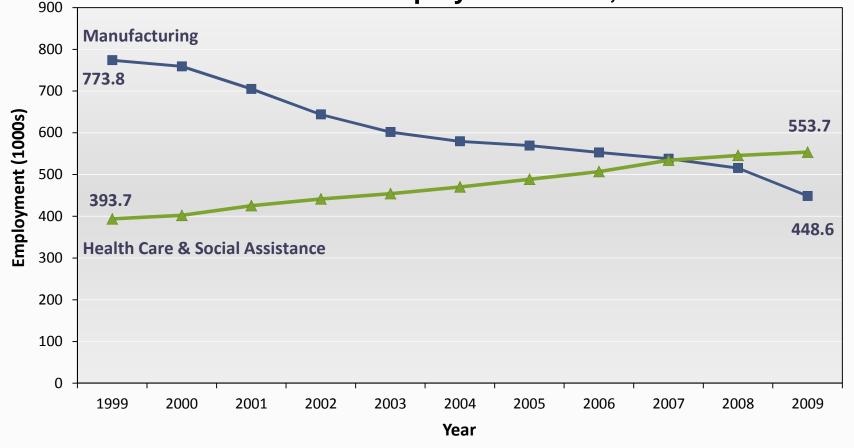
# Area L Snapshot: Unemployment Rate, August 2012

Location	Unemployment Rate
North Carolina Average	9.7%
Area L Average	13.2%
Edgecombe County	14.5%
Halifax County	13.9%
Nash County	12.0%
Northampton County	12.3%
Wilson County	13.1%



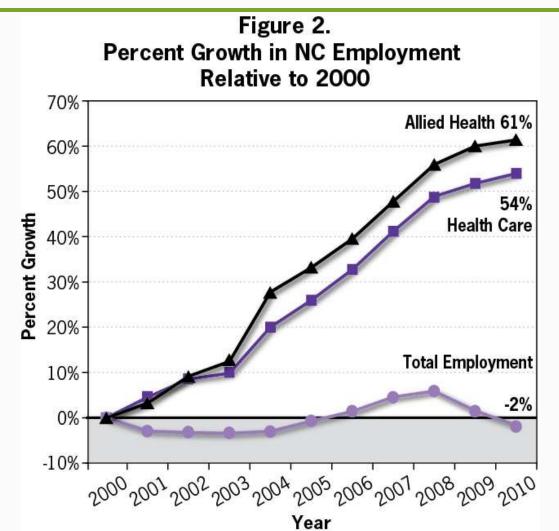
# North Carolina Health Care Employment is Growing Rapidly

Total Employment in Manufacturing and Health Care and Social Assistance Employment in NC, 1999-2009



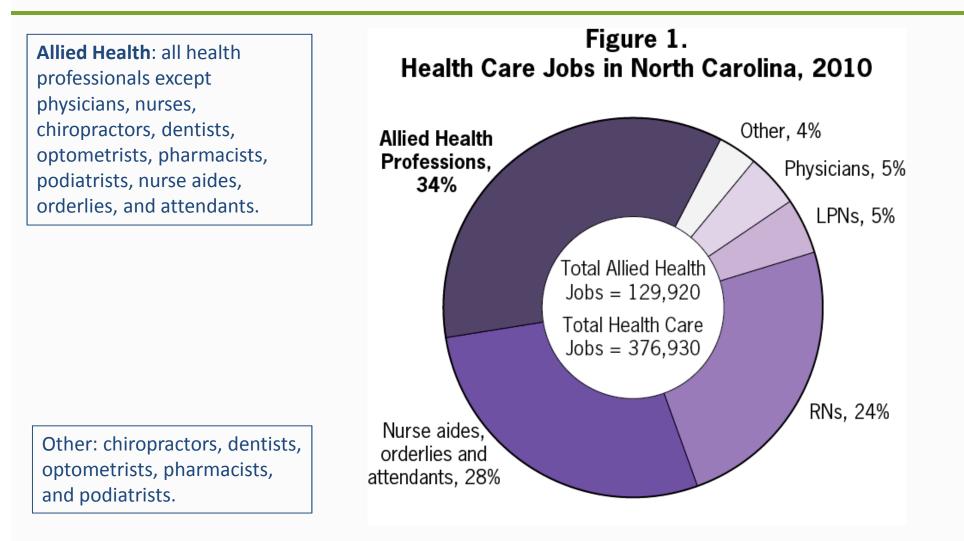
Source: North Carolina Health Professions Data System with data derived from the North Carolina Employment Security Commission, Employment and Wages by Industry, 1998-2009. http://www.ncesc1.com/lmi/industry/industryMain-NEW.asp, accessed 6/1/2010.

# And allied health is outpacing health care





### Health Care Jobs in NC, 2011





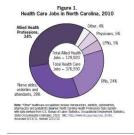
## Demand Side Data: Allied Health Job Vacancy Tracking Reports

#### March 2012

ALLIED HEALTH JOB VACANCY TRACKING REPORT Eddie Alcorn, MHA, MBA; Katie Gaul, MA; Erin Fraher, PhD, MPP

#### Introduction

Allied health professionals make up the largest proportion (34%) of the health care workforce in North Carolina (NC) (Figure 1), yet there is limited information regarding the demand for their services throughout the state. The Cecil G. Sheps Center for Health Services Research, in collaboration with the Council for Allied Health in North Carolina and the North Carolina AHEC Program, eacks to fill this gap by conducting bi-annual studies that track allied health job vacancies in the state, this report highlights the realits educators, and practitioners to ensure an adequate supply and distribution of allied health professionals in North Garolina.



The allied health job vacancy tracking project estimates workforce demand for selected health professionals in North Carolina by monitoring job vacancy advertisements from both online and print sources. There are multiple factors that could indicate a diortage including rising salaries, long waiting times for appointments, increased time needed to fill a position, and high recruitment costs. The number of vacancies advertised is one indicator of whether a profession is facing increased demand. This report reflects tracking that was conduced in Fall 2011, and is a continuation of five provious reports.

Determining which professions fall into the "allied health" workforce continues to be a topic of debate. For the purposes of this report, an exclusionary definition is assumed that defines allied health as all health professionals with the exception of physicians, nurses, chiropractors, dentists, optometrists, pharmacists, podiatrists, nurse aides, orderlies and attendants. Figure 1 shows that allied health accounted for more than one in three health care professionals in the state Historically, there has been a high growth rate in allied health employment, and this has continued even during the recent economic recession. Figure 2 shows that, while total employment decreased since 2000 (2% reduction), the health care sector experienced marked expansion (54% growth). Allied health jobs are particularly resilient to the worsening economy, and outpaced both health care and total employment with 61% growth since 2000. As policymakers consider ways to stimulate the economy and reduce unemployment, the allied health sector has the potential to serve as a job creation engine.

Support for this study comes from the North Carolina Department of Commerce. This is a collaborative effort of the Cecil G. Sheps Center for Health Services Research, The Council for Allied Health in North Carolina, and the North Carolina Area Health Education Centers Program

March 2012, October 2011, May 2011, April 2007, August 2006, and May 2005 **Purpose**: Estimate workforce demand for selected allied health professions

<u>Method</u>: Monitor weekly job listings in newspaper and online sources

Conducted in partnership with:

- Council for Allied Health in NC
- AHEC

Funded by the NC Department of Commerce



Current funding provided by the North Carolina Department of Commerce.

### Methodology

- Council members surveyed in September 2011
- Final list included 10 professions
- Ads collected over 10-weeks
   (September 18 November 26, 2011)
- Vacancy information analyzed to determine demand by profession, region, and employment setting



#### **10 Professions Monitored**

#### **Professions Tracked for the March 2012 Report**

**Clinical Laboratory Sciences** 

**Emergency Medical Services** 

Health Information Management/Technology

Imaging (PET, MRI, CT)

Medical Assistants

**Occupational Therapy Assistants** 

**Occupational Therapists** 

**Physical Therapists** 

**Physical Therapist Assistants** 

Speech-Language Pathologists

Clinical laboratory science professions added since last report. CLS had been tracked in reports from 2004-2006



# **Hospital Systems and HIM Professional Orgs Were Added to Online Sources**

#### **Online Sources** Advance for Healthcare Careers NC Office of State Personnel NC Physical Therapy Association AHIMA **NC Public Schools Application** American Speech-Language **Hearing Association** System **Carolinas HealthCare System** NC Society for Clinical Laboratory Sciences **Cone Health** NC Speech Hearing & Language Association **Duke University Health System Novant Health UNC Health Care** HIMSS Indeed.com Vidant Health (University Health Systems of Eastern Carolina) **NC** Occupational Therapy

#### **Print Sources**

Asheville Citizen Times **Charlotte Observer Fayetteville Observer Greensboro News & Record Raleigh News & Observer Rocky Mount Telegram** The Daily Reflector Wilmington Star News Wilson Daily Times Winston Salem Journal

Association

Sources added since October 2011 report



# Vacancy Data Showed High Demand for Therapy Professions and HIM

Rank	Profession	Workforce Size	Vacant Positions	Vacancy Index
1	Occupational Therapy Assistant	880	102	11.6
2	Occupational Therapist	2,660	232	8.7
3	Physical Therapist Assistant	2,020	170	8.4
4	Physical Therapist	4,530	274	6.0
5	Speech Language Pathologist	3,630	202	5.6
6	Health Information Management	5,110	202	4.0
7	Clinical Laboratory Sciences	9.090	139	1.5
8	Medical Assistant	11,970	164	1.4
9	Imaging	9,680	68	0.7
10	Emergency Medical Services	8,940	46	0.5

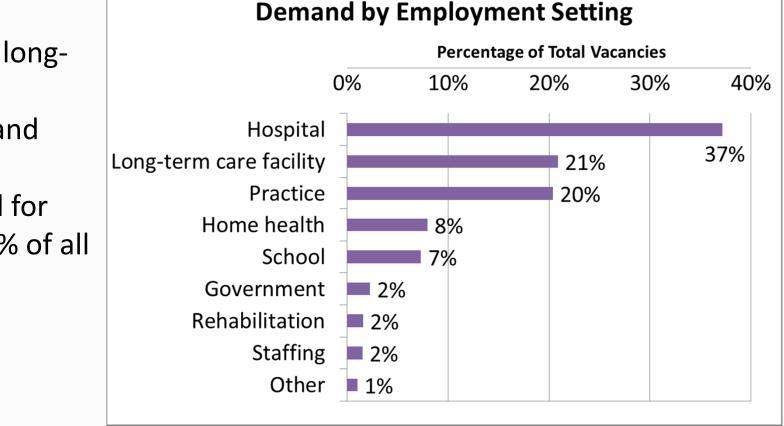
The vacancy index is calculated by dividing the number of positions advertised by the profession's total workforce size and multiplying by 100.

Sources: NC Health Professions Data System Allied Health Job Vacancy Tracking Project with funding provided by the North Carolina Department of Commerce. Job listings tracked from 9/18/11 to 11/26/11 (N=1599).



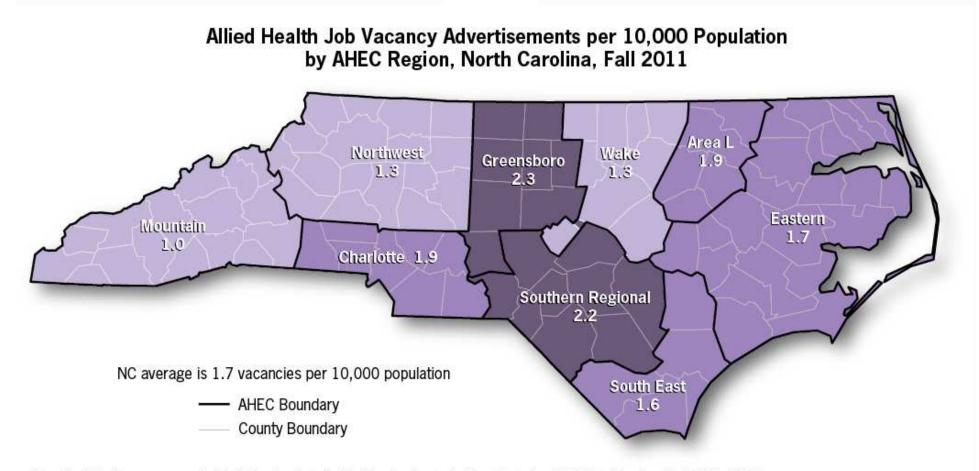
# Hospitals had Highest Number of Vacancies

Hospitals, longterm care facilities, and practices accounted for almost 80% of all vacancies.





# Greensboro and Southern Regional AHECs had the Greatest Regional Demand



Notes: North Carolina newpapers and online listings for select allied health professions tracked from September 18, 2011 to November 26, 2011 (N=1,599). Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, 2012. Population source: North Carolina Office of State Budget and Management, Socioeconomic Data, 2010. URL: http://www.osbm.state.nc.us/ncosbm/facts\_and\_figures/. Accessed 01/12/12.

Sources: NC Health Professions Data System, with funding provided by the North Carolina Department of Commerce. Job listings tracked from 9/18/11 to 11/26/11 (N=1599). Health Workforce Solutions, Labor Market Pulse Index, http://www.labormarketpulse.com/LMPI/Impi-g1-2012/



# Allied Health Job Vacancy Ads per 10,000 Pop by AHEC Region, NC

AHEC	Allied Health Vacancy Report Date					
	May-05	Aug-06	Apr-07	May-11	Oct-11	Mar-12
Area L	4.6	3.7	4.4	3.2	2.6	1.9
Charlotte	2.2	1.6	1.7	2.1	1.5	1.9
Eastern	2.0	2.3	2.5	1.9	1.7	1.7
Greensboro	3.4	2.8	2.4	2.0	1.8	2.3
Mountain	2.0	1.5	2.3	2.0	2.0	1.0
Northwest	2.4	2.0	2.4	1.3	1.5	1.3
South East (Coastal)	3.0	3.3	3.1	3.0	1.2	1.6
Southern Regional	1.9	3.4	2.8	1.6	2.2	2.2
Wake	2.7	2.4	2.2	1.6	1.1	1.3

### What does this mean for Area L?

- Allied health is a job creator.
- The demand is there... How to get people into the pipeline?
- Number of allied health vacancies in Area L have been decreasing over time... Why?
- Do these data reflect Area L's experience?



# Now to workforce diversity...



### **Diversity in the Health Workforce**

• Emerging workforce shortages...are we adequately accessing a talented pool of workers?

- Transformed health care system emphasizes population health, reducing health disparities, and community-based models of care.
  - Can we do this without increasing workforce diversity?



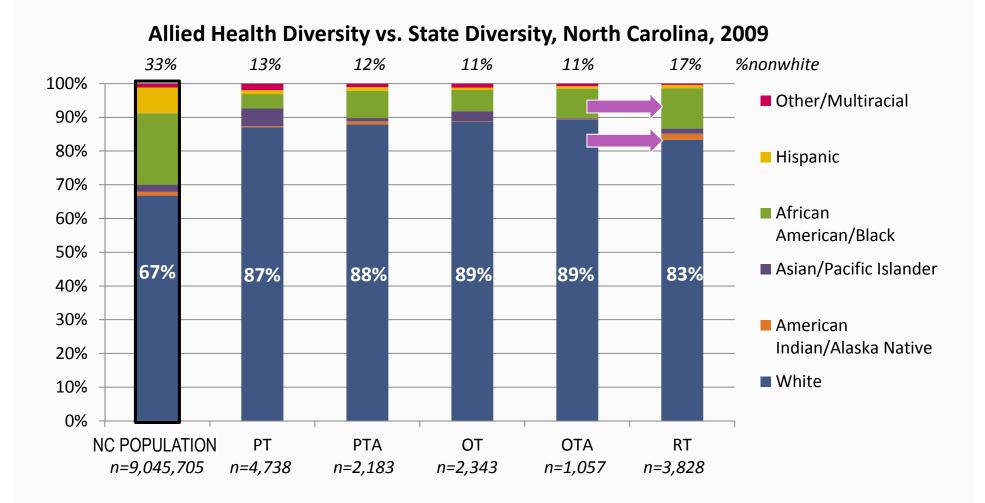
# Race/Ethnicity of Practitioners Falls Short of Matching Population Diversity

Diversity of North Carolina's Population vs. Diversity of Selected Health Professions, 2009

% nonwhite 33% 31% 27% 17% 16% 16% 12% 12% 11% 6% 100% 90% 80% Other/Multiracial 70% Hispanic/Latino 60% African American/Black 50% Asian/Pacific Islander 67% 69% 73% 83% 89% 94% 84% 84% 88% 88% 40% American Indian/Alaska Native 30% White 20% 10% RespiratoryTherapists Licensed Practical NUISES Primary Care Physicians Nurse Practitioners 0% Registered Nurses Dental Hygienists Pharmacists Dentists

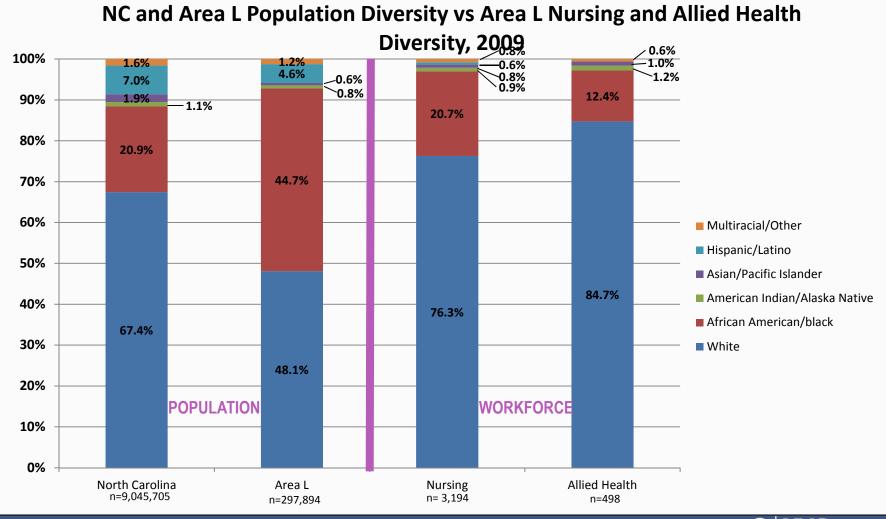


# Therapist Professions in Allied Health Surprisingly Not Diverse



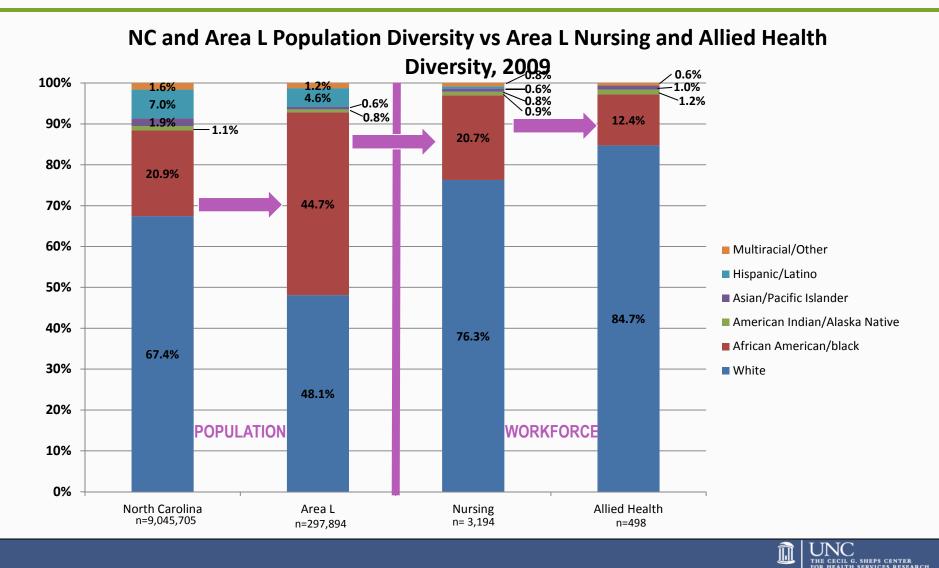
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# Area L: more diverse population, less diverse health professions

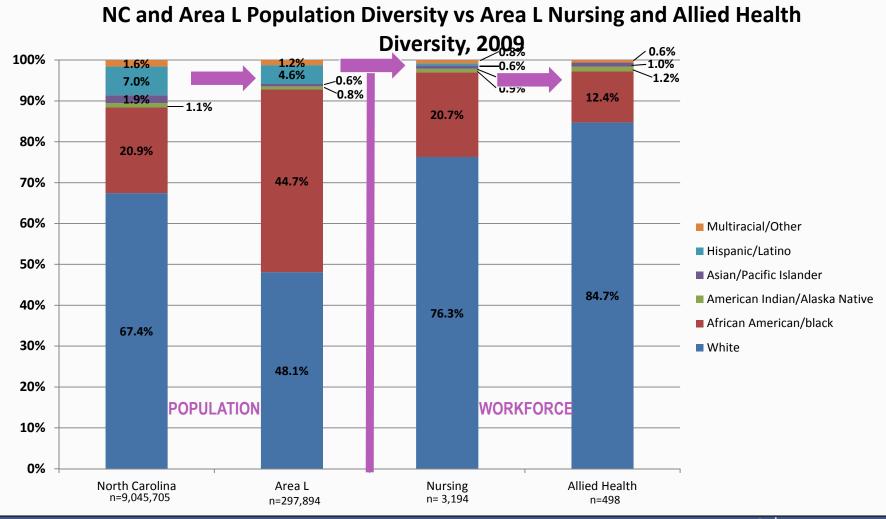




# Area L: more diverse population, less diverse health professions

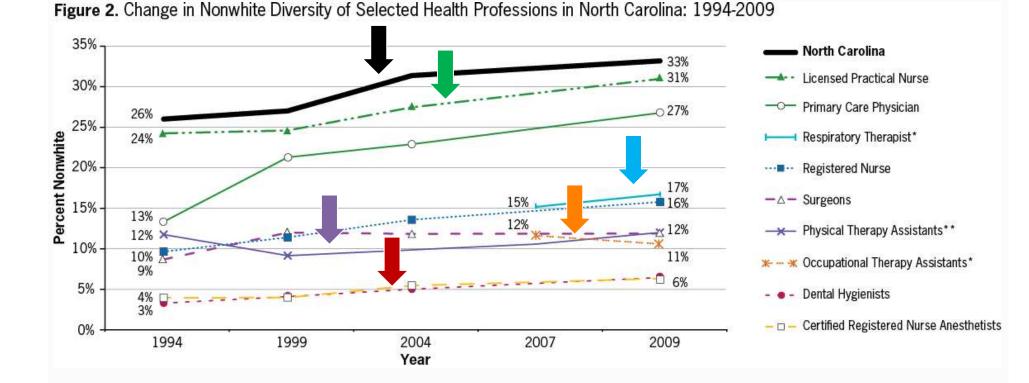


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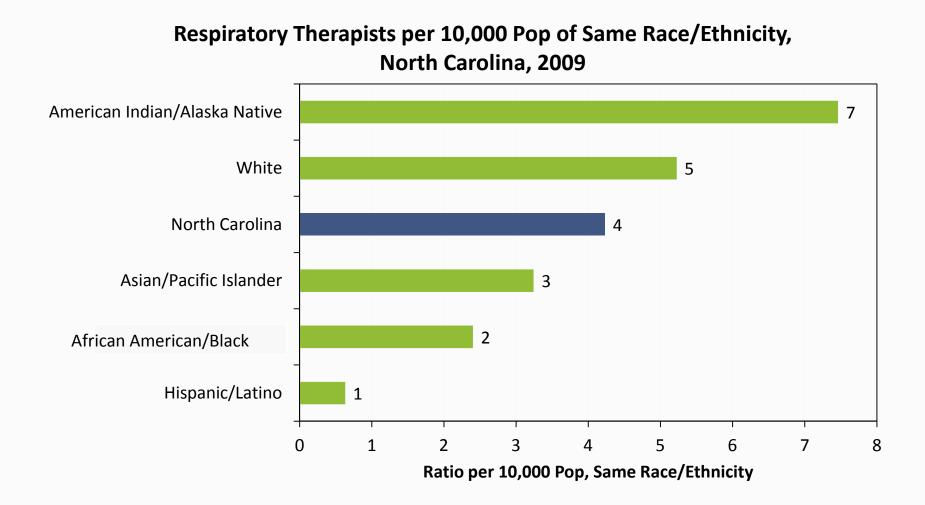
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# Health Professions are Diversifying Over Time at Different Rates



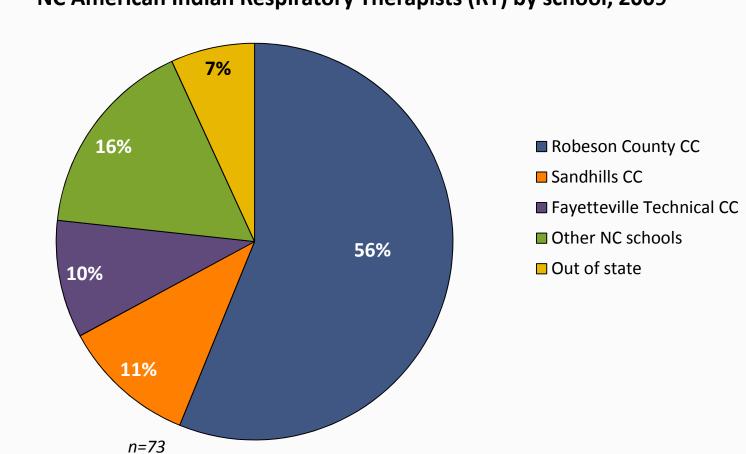
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### Respiratory Therapists Have a Higher Ratio of American Indians than Whites



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#### Robeson County Community College Provides More Than Half of All American Indian RTs

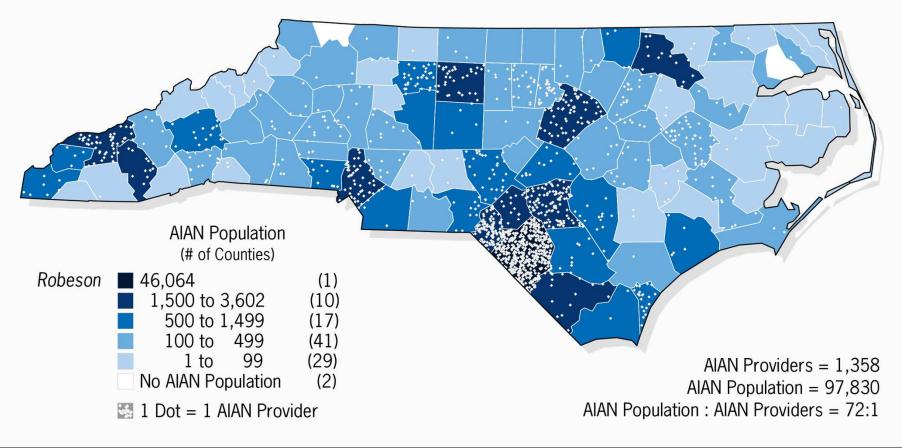


NC American Indian Respiratory Therapists (RT) by school, 2009



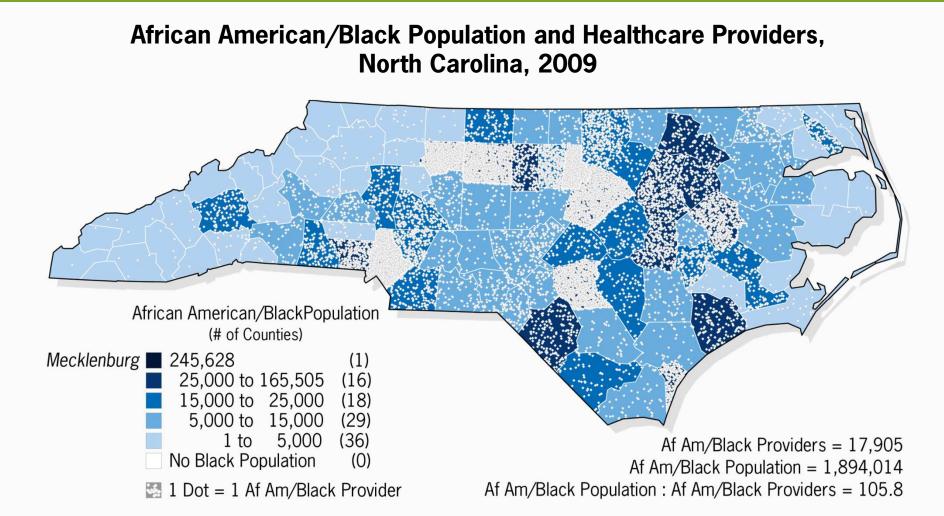
#### About 1 in 3 American Indian/Alaskan Native Health Care Practitioners are in Robeson County

#### American Indian/Alaskan Native (AIAN) Population and Healthcare Providers, North Carolina, 2009



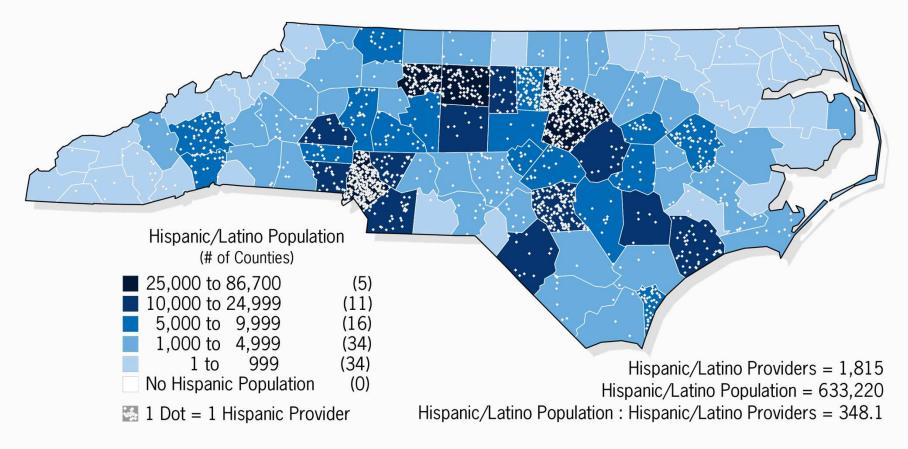


About Half of African American Practitioners are in Urban Areas but are Largest Percent of Non-White Workforce in Northeastern and Southeastern Counties



#### About Half of Hispanic/Latino Practitioners are in Urban Areas but These Areas Still Fall Short of Achieving Parity with Population

#### Hispanic/Latino Population and Healthcare Providers, North Carolina, 2009



### **Diversity Reflections**

- Lack of diversity among allied health professions, particularly among OTAs and PTAs
- In Area L has higher percentage of African American population relative to state, but hasn't achieved parity in the allied health workforce
- Why have health professions diversified at different rates?
  - LPNs are most diverse
  - Why haven't allied health professions diversified as quickly?
  - Slower to diversify—dental hygienists
- Economic development issue entry-level jobs on the career ladder



#### How will Area L use these data?





### **Questions?**

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