

What We Know and Don't Know about the Allied Health Workforce in North Carolina

Erin Fraher, PhD, MPP, Director NC HPDS

with Meredith Kimball, Katie Gaul, and Jessica Carpenter Lyons
North Carolina Health Professions Data System (HPDS)

Presentation to the NC Institute of Medicine

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Presentation Overview

- Supply vs. demand side data
- Link between the allied health workforce and economic development
- New and emerging allied health workforce roles
- Challenges and recommendations



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Supply versus Demand Data

- **Supply side data on practitioners:**
licensure, employment, educational, professional data
- **Demand side data from employers:**
vacancies by employment setting, specialty and geography



Supply Side Data



The Allied Health Data Challenge

Validity, Reliability of Data, a *Spectrum*



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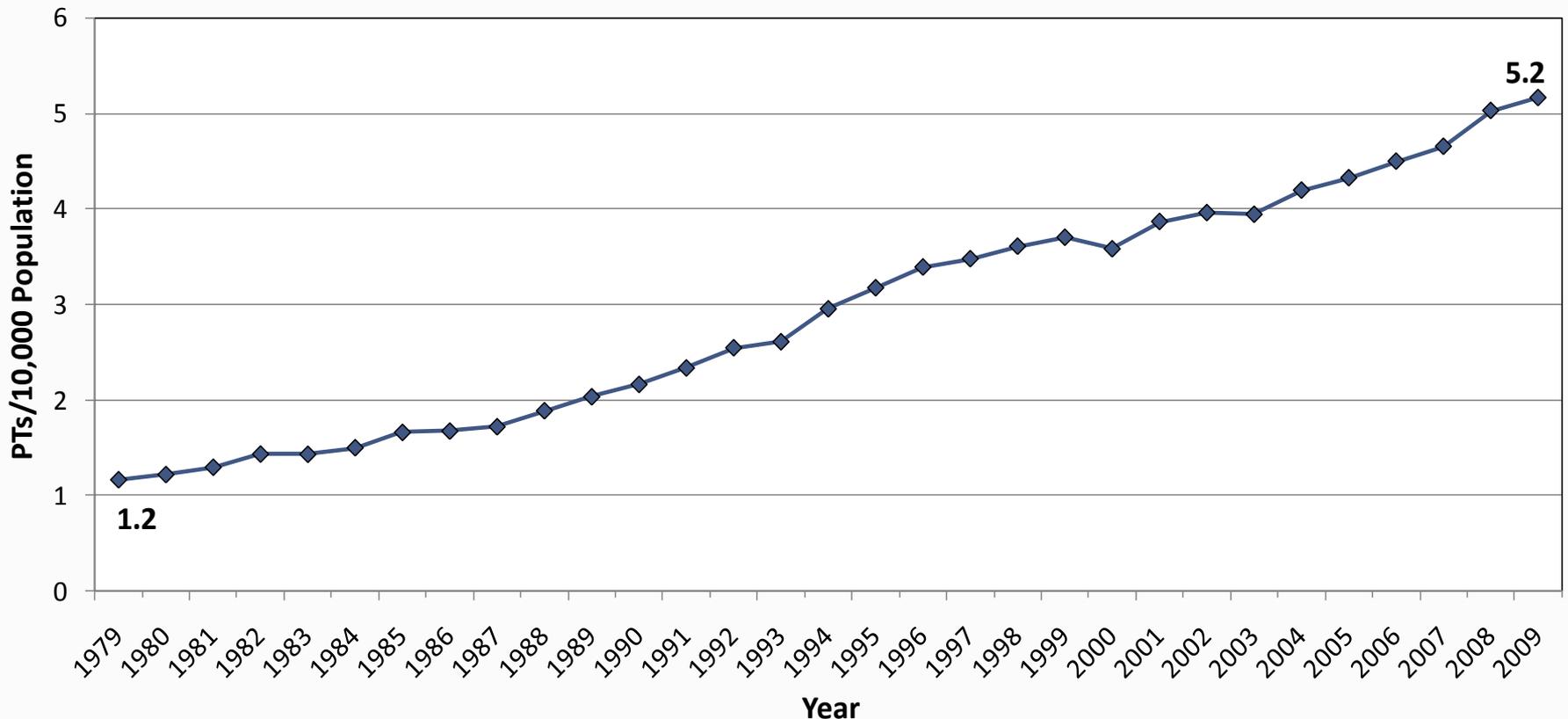
HPDS Licensure Data from 1979-2010 Allow Longitudinal and Interprofessional Comparisons

- Physicians (MDs and DOs)
- Physician Assistants
- Dentists
- **Dental Hygienists**
- Optometrists
- Pharmacists
- **Physical Therapists**
- **Physical Therapist Assistants**
- **Respiratory Therapists (2004)**
- Registered Nurses
- Nurse Practitioners
- Certified Nurse Midwives (1985)
- Licensed Practical Nurses
- Chiropractors
- Podiatrists
- Psychologists
- Psychological Associates
- **Occupational Therapists (2006)**
- **Occupational Therapy Assistants (2006)**



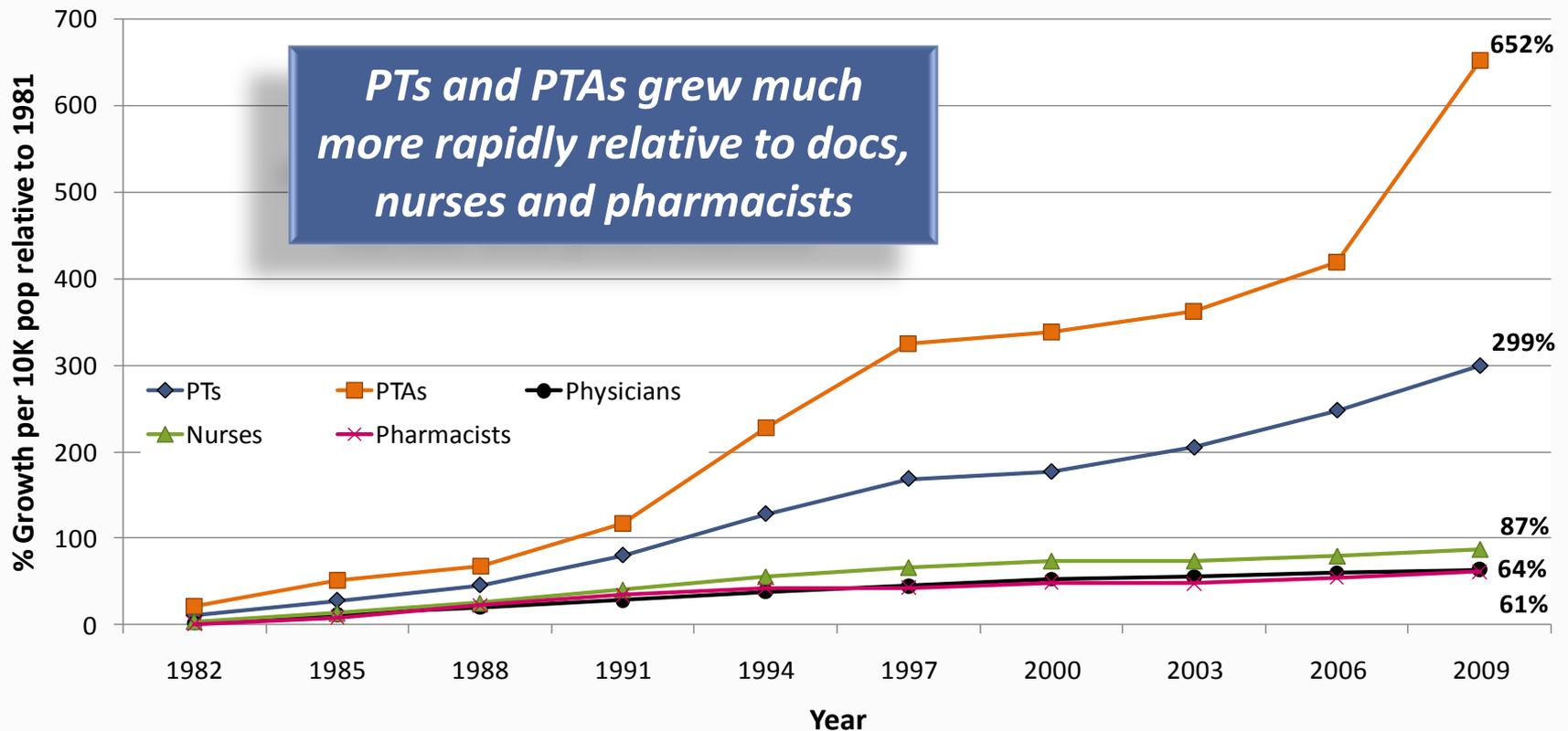
Tracking Supply: Growth in Physical Therapists per 10,000 Population

Physical Therapists per 10,000 Population North Carolina, 1979-2009



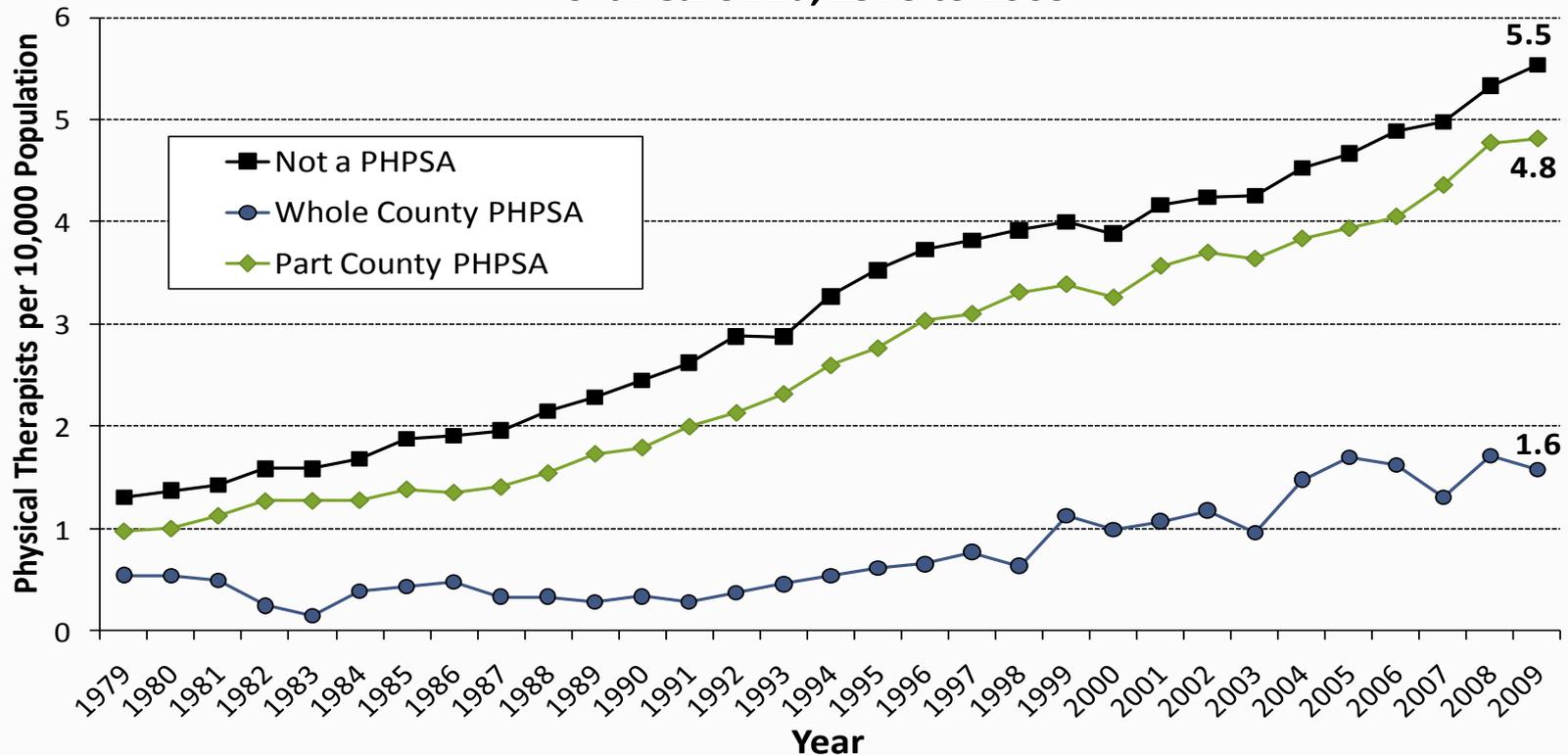
Tracking Interprofessional Supply Trends

Growth in Health Professionals per 10,000 Population Since 1981 North Carolina



Tracking Distribution: Problematic in North Carolina's Most Underserved Areas

Physical Therapists per 10,000 Population by Persistent Health Professional Shortage Area (PHPSA) Status
North Carolina, 1979 to 2009



Efforts to Expand Loan Repayment Nationally are “Dead”

H.R. 1426: Physical Therapist Student Loan Repayment

112th Congress ⓘ Eligibility Act of 2011
2011-2012

Related Legislation

Other Legislation with the Same Title

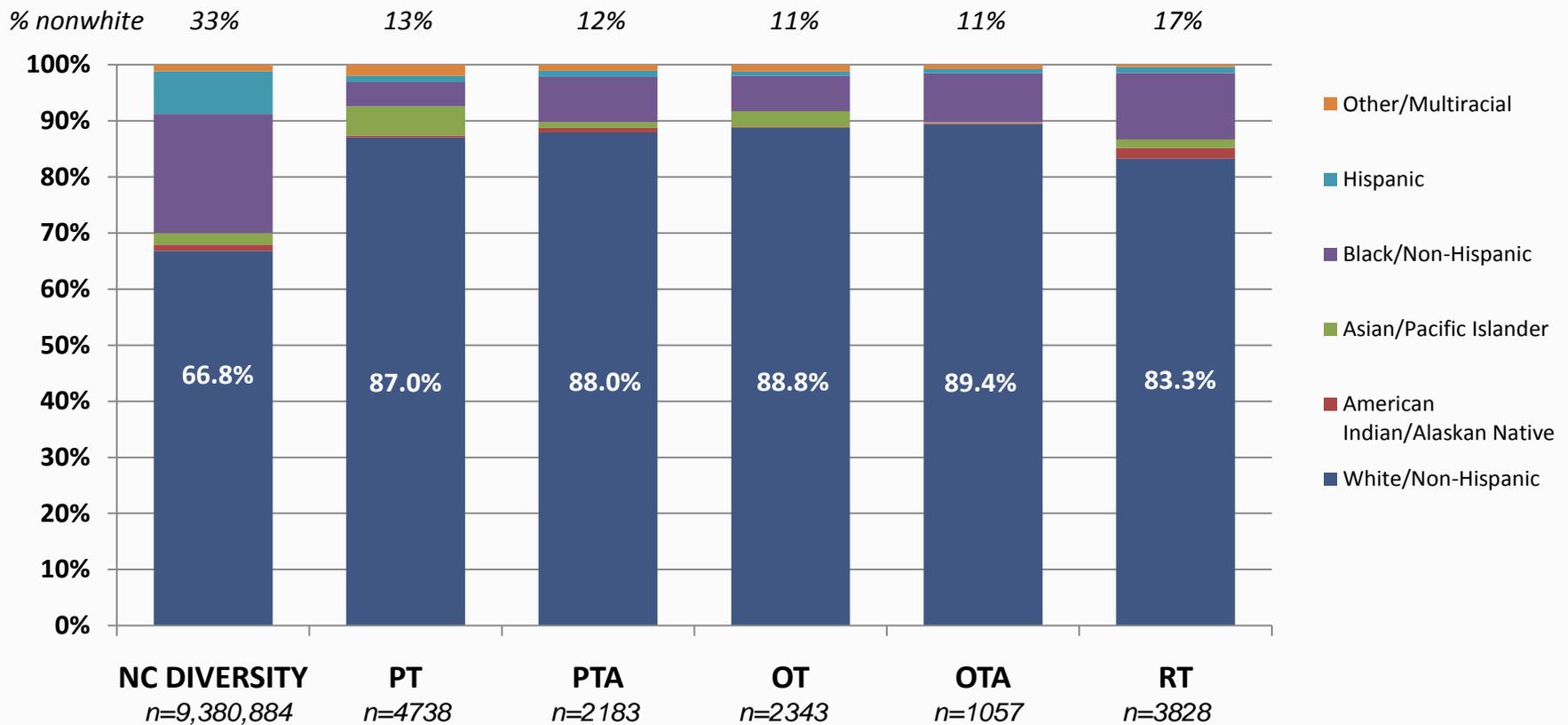
The list below shows legislation in this and previous sessions of Congress that had the same title as this bill. Often bills are incorporated into other omnibus bills, and you may be able to track the status of provisions of this bill by looking for an omnibus bill below. Note that bills may have multiple titles.

[111th Congress: S. 1057](#) *Dead*
[111th Congress: H.R. 988](#) *Dead*
[110th Congress: S. 2485](#) *Dead*
[110th Congress: H.R. 1134](#) *Dead*
[109th Congress: H.R. 5134](#) *Dead*



Tracking Workforce Diversity (or lack thereof) in Allied Health

Allied Health Diversity vs. Population Diversity, North Carolina, 2009



That's just the current state of affairs, what about the future?

Difficult to project future supply because we don't:

- Have baseline supply data for unlicensed professions
- Know numbers in the pipeline— graduation or educational program attrition rates
- Have data on hours worked by age and gender
- Know about workforce attrition/re-entry from retirement, career switches, time out for childbearing/rearing etc.



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Demand Side Data

**If you thought supply side data
were messy.....**



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How do we know how many allied health professionals we need/want/can pay for?

- Can build complex models that factor in population growth, epidemiology, health care utilization, insurance coverage, changes in productivity etc.

OR

- Develop a “barometer” of current demand through tracking vacancy rates



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Demand Side Data: Allied Health Job Vacancy Tracking Reports

May 2011

ALLIED HEALTH JOB VACANCY TRACKING REPORT
Meredith Kimball, MSPH; Erin Fraher, PhD, MPP; Katie Gaul, MA; Jessica Lyons, MS

Introduction

Allied health professionals comprise the largest proportion of the health care workforce in North Carolina (Figure 1), yet there is limited information regarding their demand 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, seeks to fill this gap by conducting bi-annual studies that track allied health job vacancies in the state. This report highlights the results of the latest study with the aim of informing the work of policy makers, employers, educators, and practitioners to ensure an adequate supply and distribution of allied health professionals in North Carolina.

The allied health job vacancy study estimates workforce demand for selected health professionals in North Carolina by tracking job vacancy advertisements both in online and print sources. Although there are multiple factors that could signal a shortage including rising salaries, longer waiting times, an increase in the number of days to fill a position, and high recruitment costs, the number of vacancies advertised is one indicator of whether a profession is facing increased demand. The work described in this report reflects tracking that was conducted in Fall 2010 and is a continuation of three previous reports published in May 2006, August 2006, and April 2007.

The definition of who falls into the "allied health professional" category continues to be the topic of debate. For the purposes of this report, an exclusionary definition is used that defines allied health professionals as all health professionals with the exception of physicians, nurses, chiropractors, dentists, optometrists, pharmacists, and podiatrists. Even without the inclusion of nurse aides, orderlies and attendants, the most current data available show that the allied health workforce comprises approximately 55% of total health care employment in North Carolina (Figure 1). What is equally compelling about the need to focus on the allied health workforce is its ability to grow despite the economic downturn. In contrast to the small rate of growth seen in overall employment in North Carolina since 1999 (2.5%), the health care sector has experienced marked expansion (46% growth). Even more resilient to the worsening

Figure 1. Health Care Jobs in North Carolina, 2009

Profession	Percentage
Allied Health Professions	55%
Physicians	5%
LPNs	5%
RNs	24%
Nurse aides, orderlies and attendants	23%

Total Allied Health Jobs = 1,281,150
Total Health Care Jobs = 364,000

Note: "Other" health care occupations include: chiropractors, dentists, optometrists, pharmacists and podiatrists. Source: North Carolina Health Professions Data System with data from U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2009). URL: <http://www.bls.gov/news.release/oes/osh0909.pdf>

Support for this study comes from the North Carolina Department of Commerce, the North Carolina Health & Wellness Trust Fund, and the Florence Rogers Charitable Trust.

Purpose: Estimate workforce demand for selected allied health professions

Method: Monitor weekly job listings in newspaper and online sources

Work in Progress: Spring 2011 report will be done by September 30th. Fall 2011 data collection will begin in September. Fall 2011 report will be done in March 2012.

May 2011,
April 2007, August 2006, April 2005



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Current funding provided by the North Carolina Department of Commerce, the North Carolina Health and Wellness Trust Fund, and the Florence Rogers Charitable Trust. Previous funding provided the Duke Endowment and the NC AHEC Program.

Allied Health Vacancy Tracking Report: Thanks to our Sponsors

- **Funders:**

- North Carolina Health & Wellness Trust
- Department of Commerce –
Division of Workforce Development
- Florence Rogers Charitable Trust

- **Investigators:**

- Council for Allied Health in North Carolina
- Cecil G. Sheps Center for Health Services Research



Methodology

(the boring stuff academics go on about)

- Council members surveyed in September 2010 to guide selection of professions
- Final list included 10 professions
- Job advertisements collected from online and print sources over 10-week span (September 19 – November 28, 2010)
- Vacancy information analyzed to determine overall and regional demand



Introducing the 10 Professions Monitored

Allied Health Professions Monitored

Emergency Medical Services

Health Information Management/Technology

Imaging (PET, MRI, CT)

Occupational Therapy Assistants

Occupational Therapists

Physical Therapists

Physical Therapist Assistants

Respiratory Therapists

Speech-Language Pathologists



Online and Newspaper Sources Monitored

Online Sources

Advance for Healthcare Careers
American Speech-Language Hearing Association
Carolina Health Care
Duke Health
Mission Hospital
NC Occupational Therapy Association
NC Physical Therapy Association
NC Speech Hearing & Language Association
North Carolina Public Schools Application System
Novant Health
Rex Health
UNC Health Care
University Health Systems of Eastern Carolina

Newspapers

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



Results: High Demand for Therapy Professions and Assistants

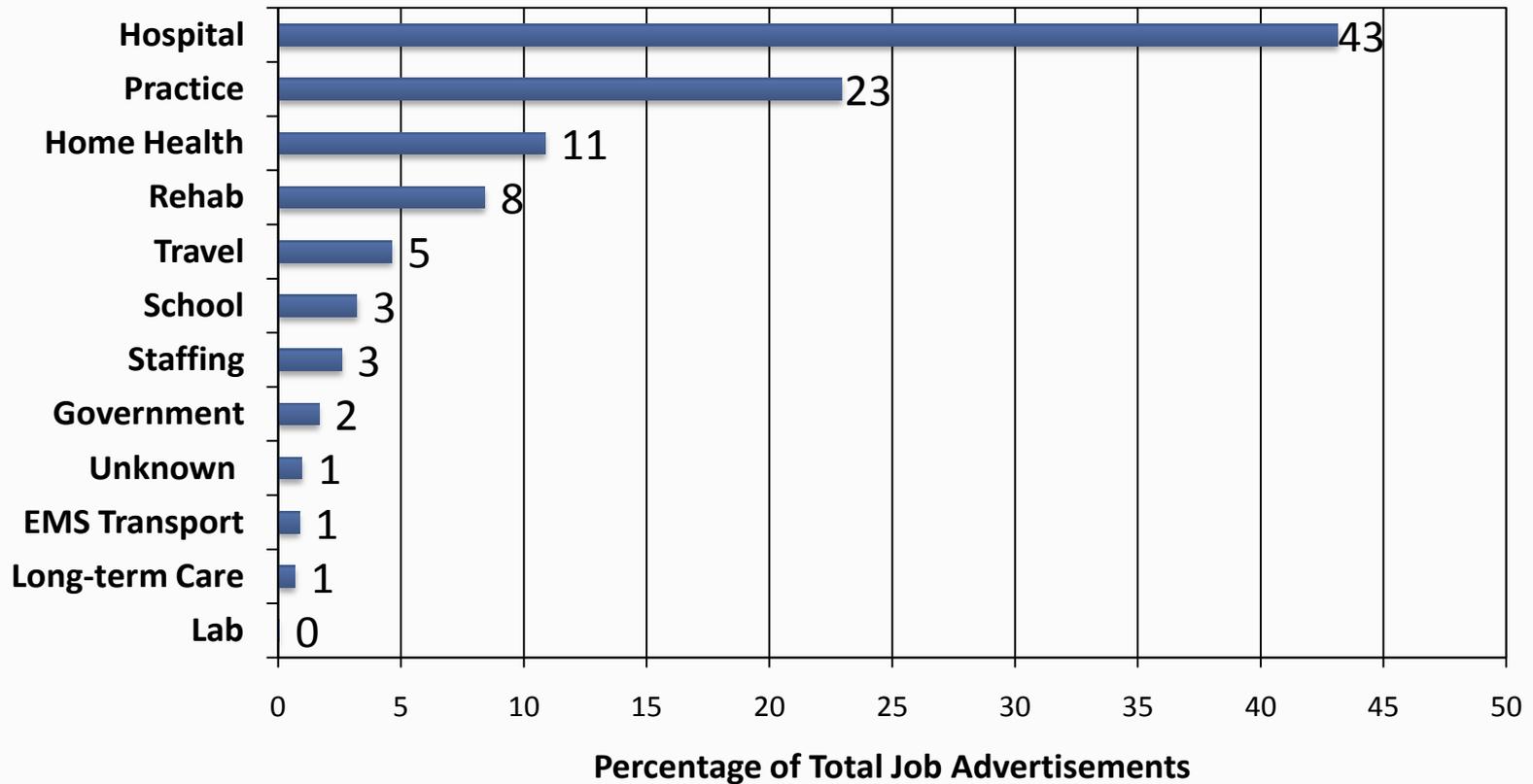
Rank	Profession	Number of Positions	Workforce Size	Vacancy Index
1	Occupational Therapy Assistant	121	900	13.4
2	Physical Therapy Assistant	274	2,150	12.7
3	Physical Therapist	523	4,340	12.1
4	Occupational Therapist	214	2,730	7.8
5	Health Information Management	152	5,130	3.0
6	Speech Language Pathologist	105	3,840	2.7
7	Respiratory Therapist	53	3,160	1.7
8	Medical Assistant	139	11,140	1.3
9	Imaging	92	9,660	1.0
10	Emergency Medical Services	75	8,930	0.8

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



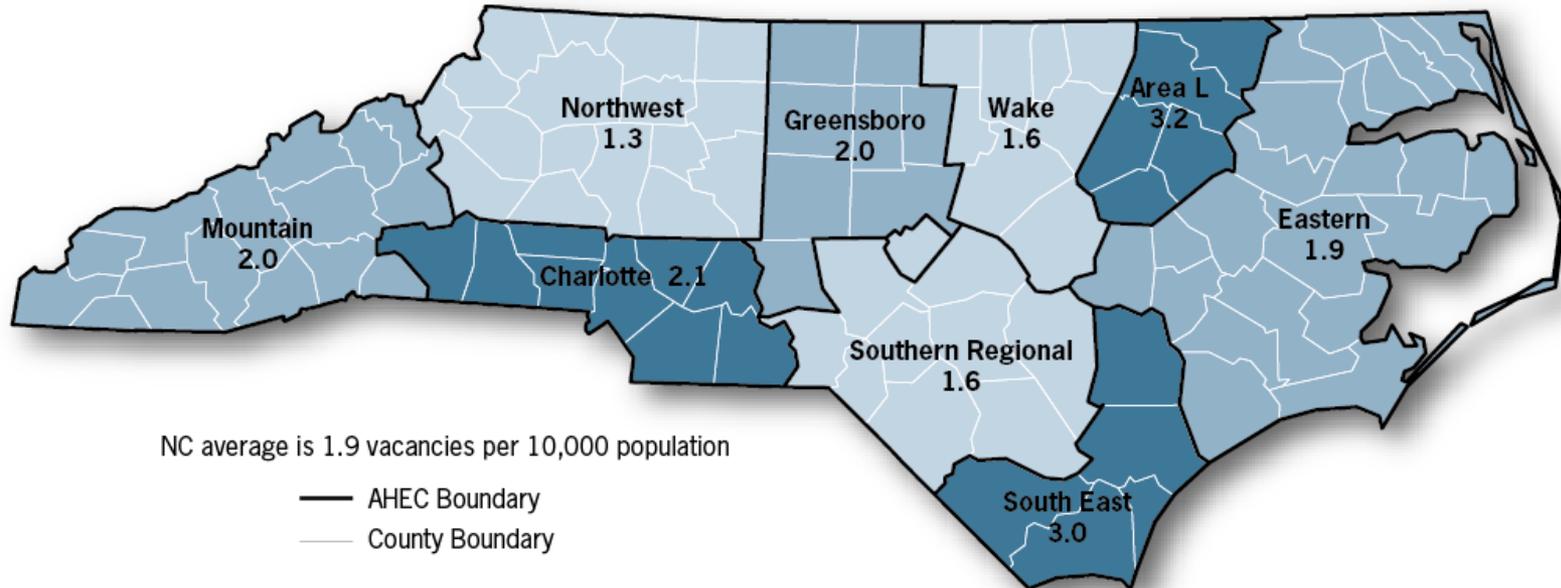
Allied Health Demand by Job Setting

Demand by employment setting



Relatively High Vacancies in Area L and South East AHECs

Allied Health Job Vacancy Advertisements per 10,000 Population
by AHEC Region, North Carolina, Fall 2010

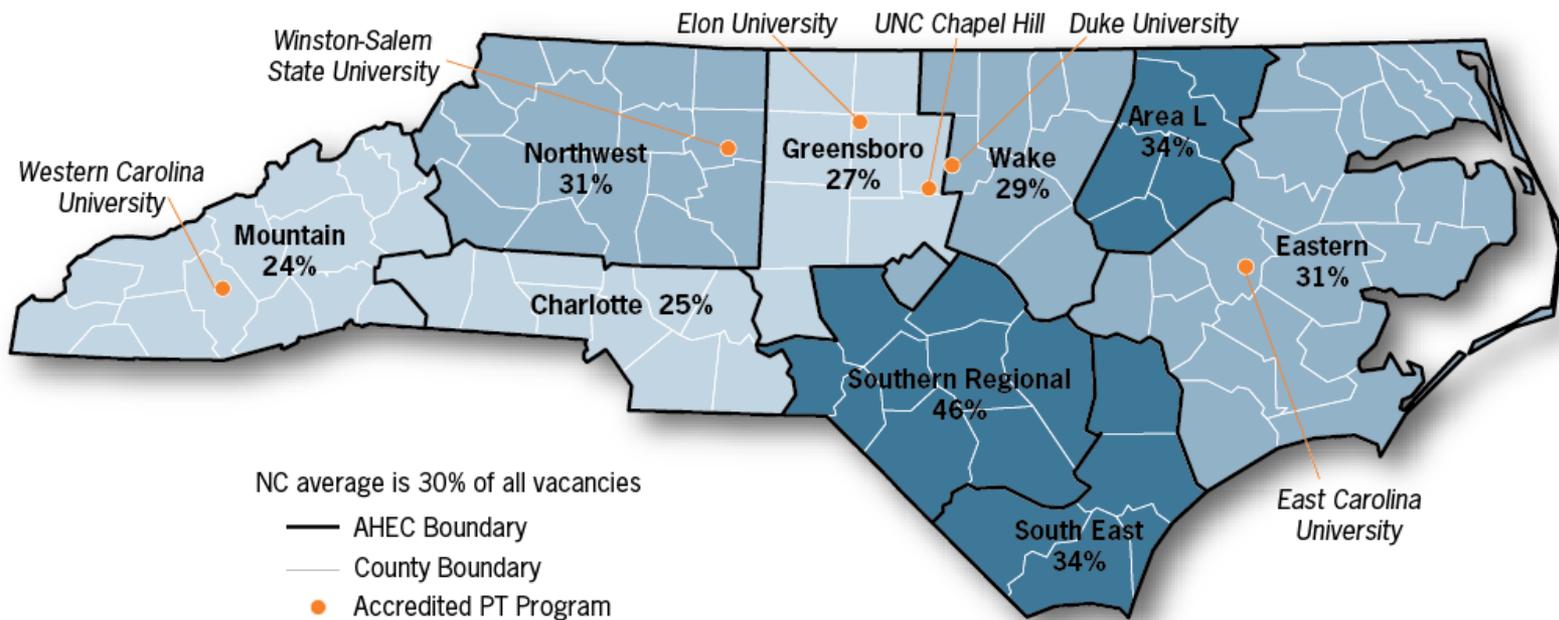


Notes: North Carolina newspaper and online listings for select allied health professions tracked from September 19 to November 28 (N=1,748).

Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, 2011.

Labor Markets are Regional

Physical Therapist Job Vacancy Advertisements as Percent of All Vacancies by AHEC Region, and Location of Accredited Physical Therapy Education Programs North Carolina, Fall 2010

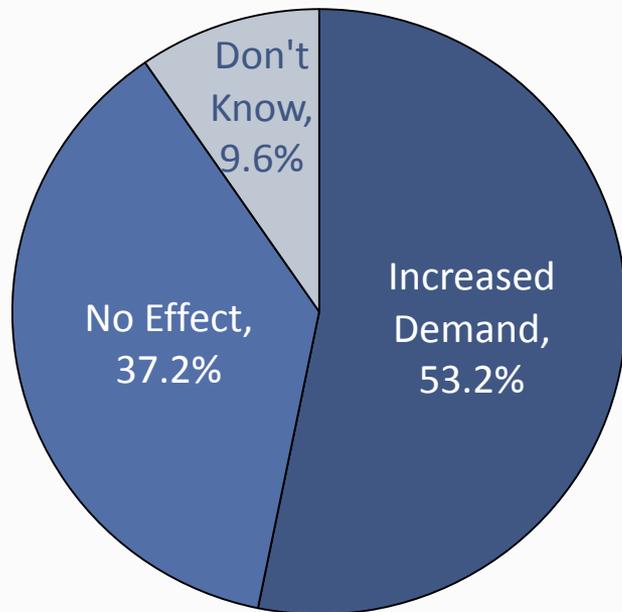


Notes: North Carolina newspaper and online listings for select allied health professions tracked from September 19 to November 28 (N=1,748).
 Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, 2011;
 North Carolina State Board of Physical Therapy Examiners, <http://www.ncptboard.org/documents/PT%20%20PTA%20School%20List.pdf>, accessed 5/13/11.

Speculating About Health Reform

(everyone else is doing it...)

Council members asked how health reform would affect demand for their profession



“Increased patient access will significantly increase the demand for allied health professionals.”

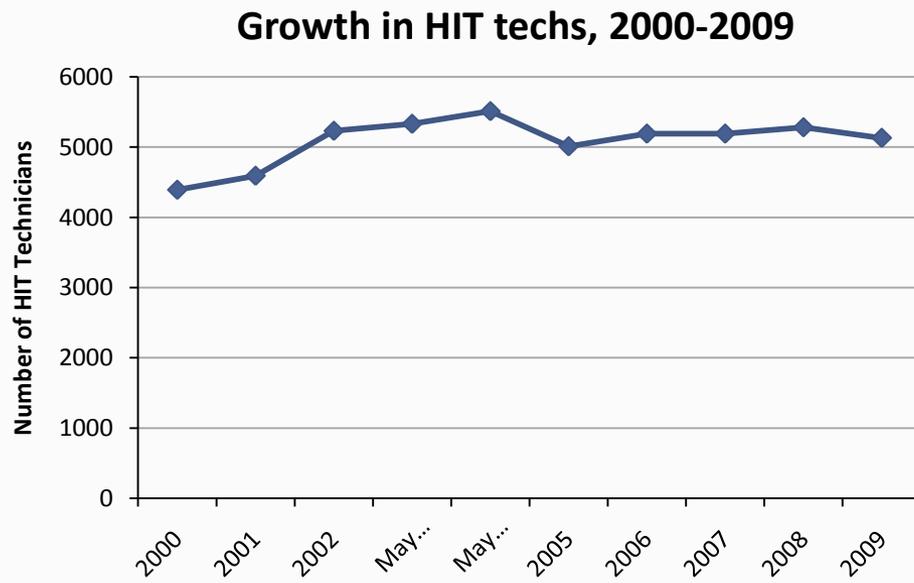
“There will be greater demand with more hospitals ...providing even better quality care for patients.”

“Hard to tell but shortage of PTs may ultimately limit size of workforce if non-PTs do PT functions.”

“Implementation of electronic health records will necessitate the demand for highly skilled HIT professionals.”

But is the HIT Workforce Growing?

US Bureau of Labor Statistics predicts employment of medical records and health information technicians expected to much faster than average through 2018



- Ranks 5th on the list of professions tracked
- Higher demand in the hospital setting
- Likely to see stronger demand as EHRs fully roll out in outpatient settings

Making the Link to Economic Development



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Even with data, had trouble getting policy makers to pay attention to allied health

- Decided to make explicit link the between **allied health workforce growth** and **economic development**
- Emphasize allied health as “jobs machine”
 - Even in recession, strong job growth
 - Potential to sustain local economies, particularly rural ones
 - Less vulnerable to outsourcing
 - Job growth likely to continue, given demographic changes, population growth, epidemiological trends, insurance expansion

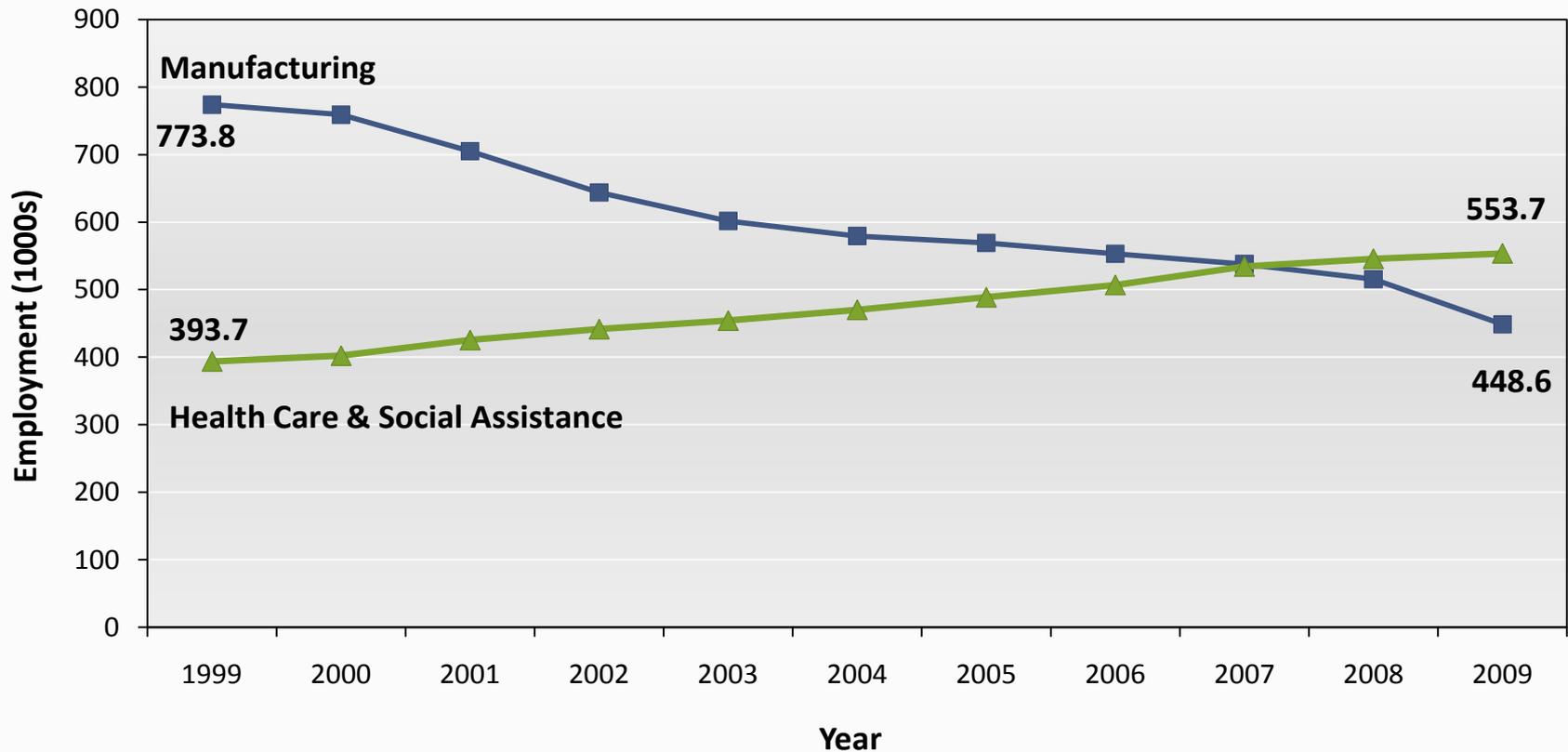


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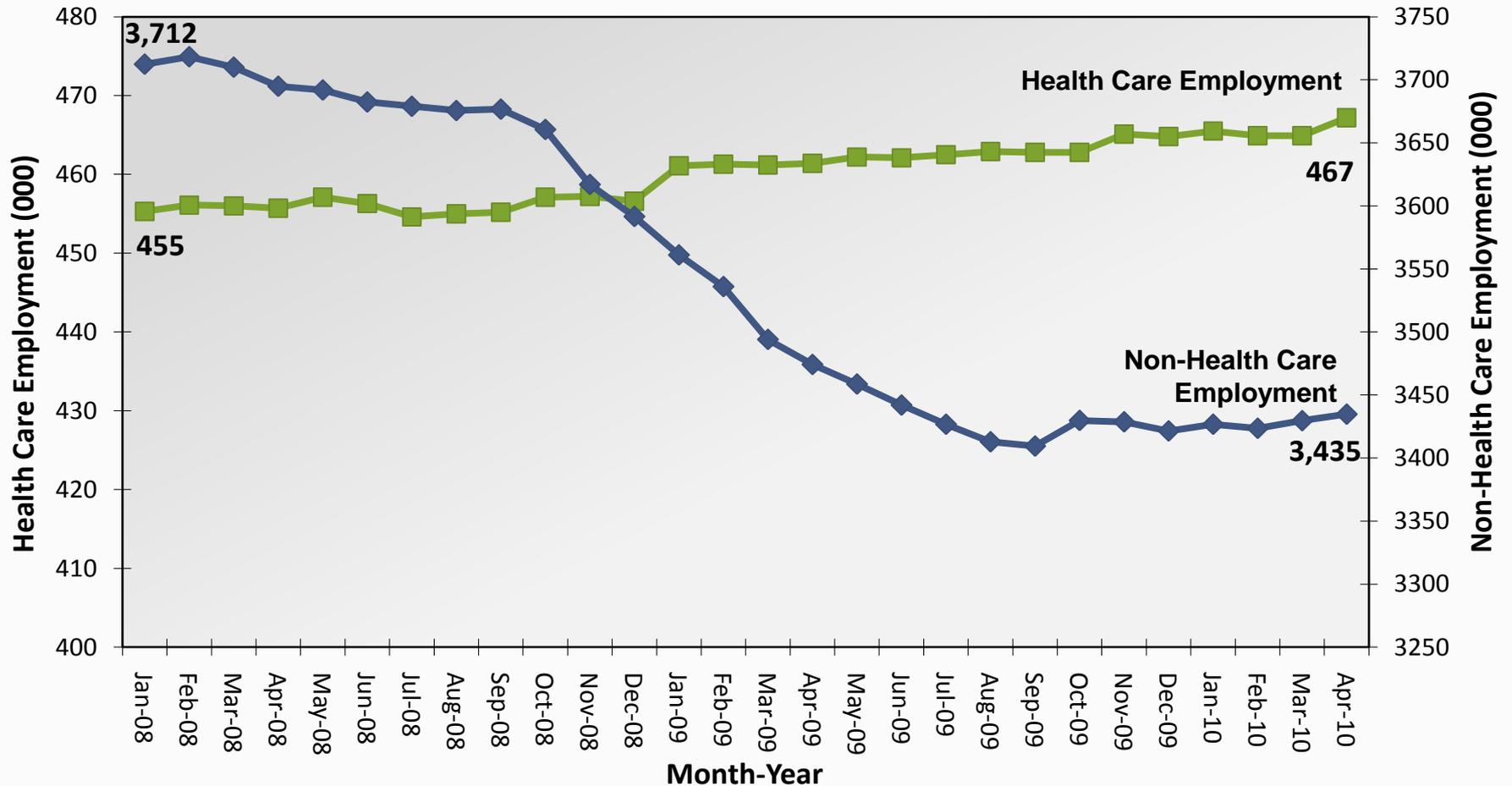
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The Transformation of North Carolina's Economy

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



Health Care vs. Non-Health Care Employment, North Carolina, January 2008-April 2010



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Lots of Potential...But State-Based Health Workforce Planning Efforts Are Fragmented

Limited collaboration exists between policy makers, educators, employers and others charged with monitoring, planning and implementing workforce strategies at the local, state and national level



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Allied Health Workforce Planning the Traditional Way



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Health Reform and the New World of Workforce Planning

- Economy is important but next generation of workforce planning will also be determined by large-scale policy change
- New world of Patient-Centered Medical Homes (PCMHs) and Accountable Care Organizations (ACOs)
- All about redesign of *how* health care is delivered, less emphasis on *who* delivers care



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North Carolina's State Health Care Workforce Planning Grant

Assess

- Key health care services provided by PCMHs
- Number and types of professionals needed in PCMHs
- How well supply matches needs of population

Identify

- Need for new programs and career ladders
- Mechanisms to retool existing workforce
- Need for new professions or credentialing to meet PCMH needs



Services and Professions in the Patient Centered Medical Home

Services and Professions adapted from the American College of Physicians definition

Primary Care Practitioners

Physicians
PAs
NPs

Team-Based Services

Nursing
Pharmacy
Administration
HIT
Mental/Behavioral Health
Direct Care
Allied Health

PCMH “Neighbors”

Specialist Physicians
Allied Health
Oral Health
Vision Care
Long-Term Care
Community Services
Other

Emerging Professional Roles

HIE/HIT
Case Management

Client Coordination
Disease Management

Health Education
Community Health



NC's Workforce Challenges

- **Supply**—particularly in the therapy professions
- **Maldistribution**
- **Lack of diversity**
- **Rapid growth of assistive personnel:** need for standardization or credentialing?
- **High attrition** from educational programs
- **Lack of educational programs** focused on “retooling” existing workforce for new roles and redesigned health care system
- **Limited understanding** of new and emerging allied health professional roles



Workforce Planning Challenges

- Limited awareness of importance of allied health workforce in terms of sheer size, impact on cost & quality of care and role as “jobs machine”
- Ergo, limited funding
- Lack of robust supply and demand data
- Belief that market will “solve” issues—lack of commitment to workforce planning
- Lack of collaborative structures for workforce policy analysis and action



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Questions?

Erin Fraher

(919) 966-5012

erin_fraher@unc.edu

Director

North Carolina Health Professions Data System

See our website for allied health publications:

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