

# Allied Health Workforce Planning: What North Carolina Can Learn from New Zealand

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*Council for Allied Health in North Carolina*

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**UNC**

THE CECIL G. SHEPS CENTER  
FOR HEALTH SERVICES RESEARCH

# Presentation Overview

## **Warning:** this is an eclectic presentation

- Starts with discussion of allied health workforce policy context
- Wanders into what NC can learn from NZ
- Eventually gets to material I was asked to cover
- And then ends with a bunch of questions....



# Allied Health Workforce: The Current Policy Context

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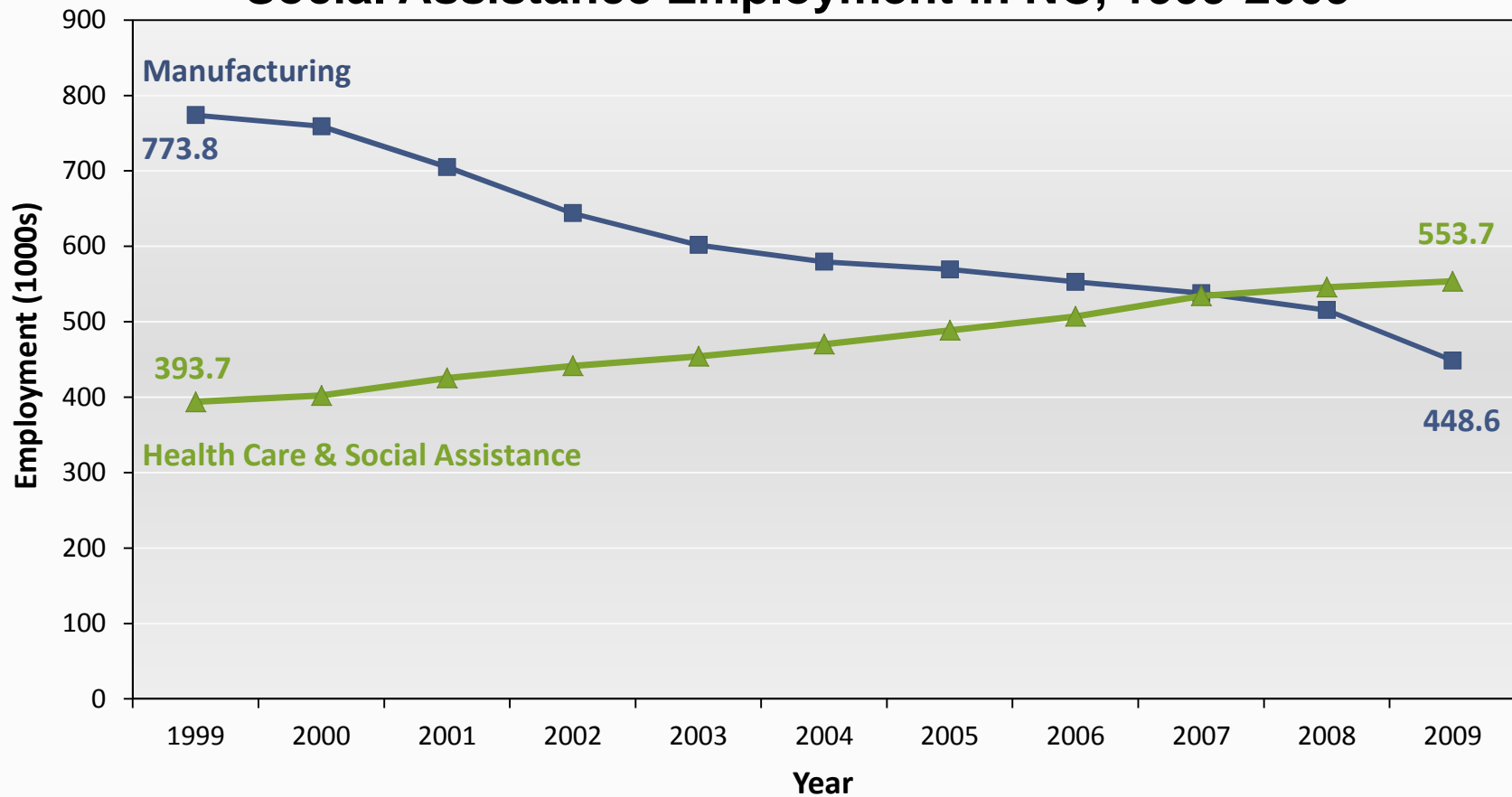
- **Demand side:** aging population, insurance expansions, rising patient expectations
- **Supply Side:** Health workforce is growing, deployment is rigid, turf wars abound and productivity is lagging

With, or without health reform, cost pressures will drive health system change



# North Carolina Health Care Employment is Growing Rapidly

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



# But More People are Doing Less

- Of \$2.6 trillion spent nationally on health care, 56% is wages for health workers
- Workforce is LESS productive now than it was 20 years ago...

Kocher and Sahni, “Rethinking Health Care Labor”, *NEJM*, October 13, 2011.



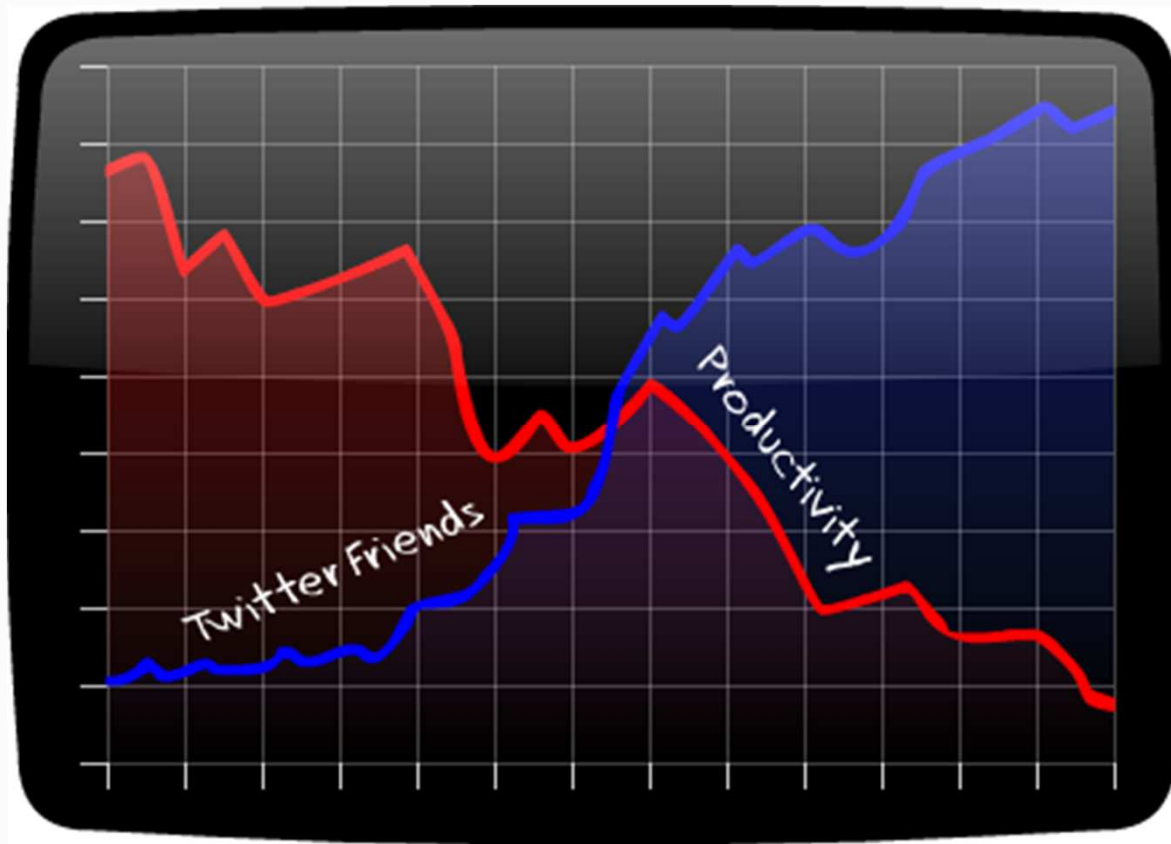
# How to Improve Productivity?



- **REDESIGN CARE PROCESSES**
- **WORK IN TEAMS**
- **CHANGE SKILL MIX**
- **WORK TO TOP OF SCOPE OF PRACTICE**



# Or...Just Put Down Your Smartphone



# Lots of Folks Talking about the Need to Transform Health Care System

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*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....in prevention, care coordination, care process re-engineering, dissemination of best practices, team-based care, continuous quality improvement, and the use of data to support a transformed system*





# How Do We Get There from Here?



# What North Carolina (and the Nation) Can Learn from New Zealand

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- Small, relatively poor country compared to Australian neighbor
- Publicly funded system with universal coverage
- Spend about 10% of GDP on health care
- NZ population is ~4.4 million, rural and ethnically diverse
- Despite smaller size and different financing system, NZ faces same health workforce issues as North Carolina



# North Carolina and New Zealand

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- Current health workforce:
  - not sustainable
  - less productive than in past
  - not meeting quality outcomes
  - poorly distributed against need
  - too many workers not practicing anywhere near top of scope of practice
  - large proportion of workforce nearing retirement
- Primary care, mental health and rehabilitation systems “not up to scratch”



# How NZ is addressing workforce challenges:

## *Clinician-Led Change*

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- Engaging clinicians in designing future health care system
- Transforming from ground up, rather than top down
- Setting outcome measures and encouraging innovation
- Asking clinicians to design ideal patient pathways by disease area and what changes would enable new models of care
- Making it personal: “how should we care for Aunt Susie with dementia?”
- Engaging “coalitions of the willing” to overcome professional resistance and “tribalism”

# How NZ is addressing workforce challenges:

## *Workforce Retention*

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- Workforce demographics mean we need to pay more attention to retention
- Higher remuneration  $\neq$  retention
- Health workers want career progression and job satisfaction
- NZ focusing efforts on building creating meaningful, rewarding work environments and careers
- Addressing issues that “irritate people”



# How NZ is addressing workforce challenges:

## *Creating New Roles*

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**How many health professionals does it take to run a health care system?**

**Depends on what they are doing**

NZ striving to:

- “Liberate workforce with spare capacity”
- Create new roles and new professions
- Evaluate outcomes—innovations have lowered costs, improved outcomes and “patients loved them”



# How NZ is addressing workforce challenges:

## *Workforce Planning Under Uncertainty*

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**Planning for new, yet unknown reality of “transformed system” requires more flexible workers and models**

- Training more generalists, fewer specialists
- Building workforce models that don’t give one “right” answer but allow policy makers to simulate effect of various scenarios



# How NZ is addressing workforce challenges:

## *Integrating workforce data and policy*

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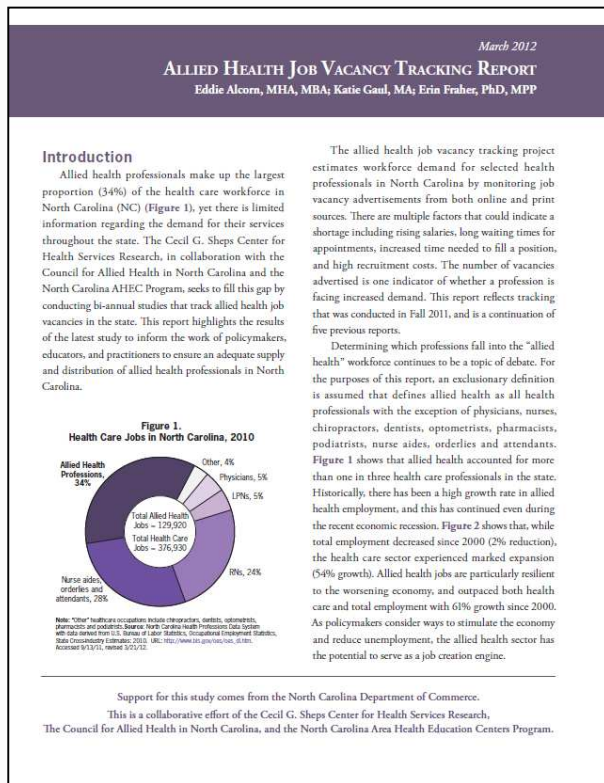
- Health Workforce NZ created in 2009 to better integrate fragmented workforce planning efforts
- Working to build “coalitions of health workforce champions” to interpret and use data to effect change
- Idea was to address fact that they were  
*“drowning in data and free of intelligence”*



# Let's Drown (or Swim) a Bit in Some Allied Health Workforce Data



# Demand Side Data: Allied Health Job Vacancy Tracking Reports



**Purpose:** Estimate workforce demand for selected allied health professions

**Method:** Monitor weekly job listings in newspaper and online sources



Most recent report is hot off the press

March 2012,  
October 2011, May 2011, April 2007,  
August 2006, and May 2005

# Allied Health Vacancy Tracking Report: Thanks to Funders

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- **Funders:**

- Department of Commerce,  
Division of Workforce Development

- **Investigators:**

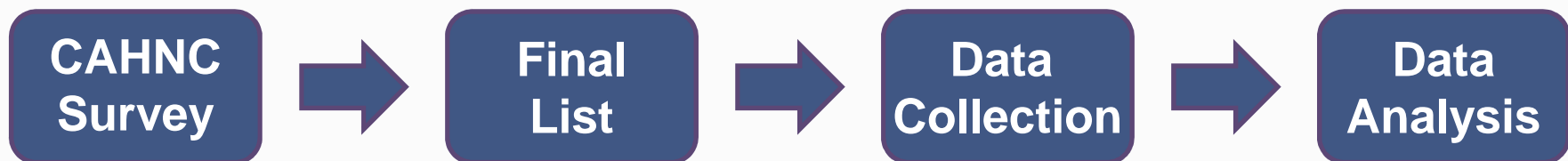
- Council for Allied Health in North Carolina
- Cecil G. Sheps Center for Health Services Research

# Methodology

(the boring stuff academics go on about)

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- 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
<b>AHIMA</b>	NC Physical Therapy Association
American Speech-Language Hearing Association	NC Public Schools Application System
<b>Carolinas HealthCare System</b>	NC Society for Clinical Laboratory Sciences
<b>Cone Health</b>	NC Speech Hearing & Language Association
<b>Duke University Health System</b>	<b>Novant Health</b>
<b>HIMSS</b>	<b>UNC Health Care</b>
Indeed.com	<b>Vidant Health (University Health Systems of Eastern Carolina)</b>
NC Occupational Therapy Association	

■ Sources added since October 2011 report

Print Sources
Asheville Citizen Times
Charlotte Observer
Fayetteville Observer
<b>Greensboro News &amp; Record</b>
Raleigh News & Observer
Rocky Mount Telegram
The Daily Reflector
Wilmington Star News
Wilson Daily Times
Winston Salem Journal

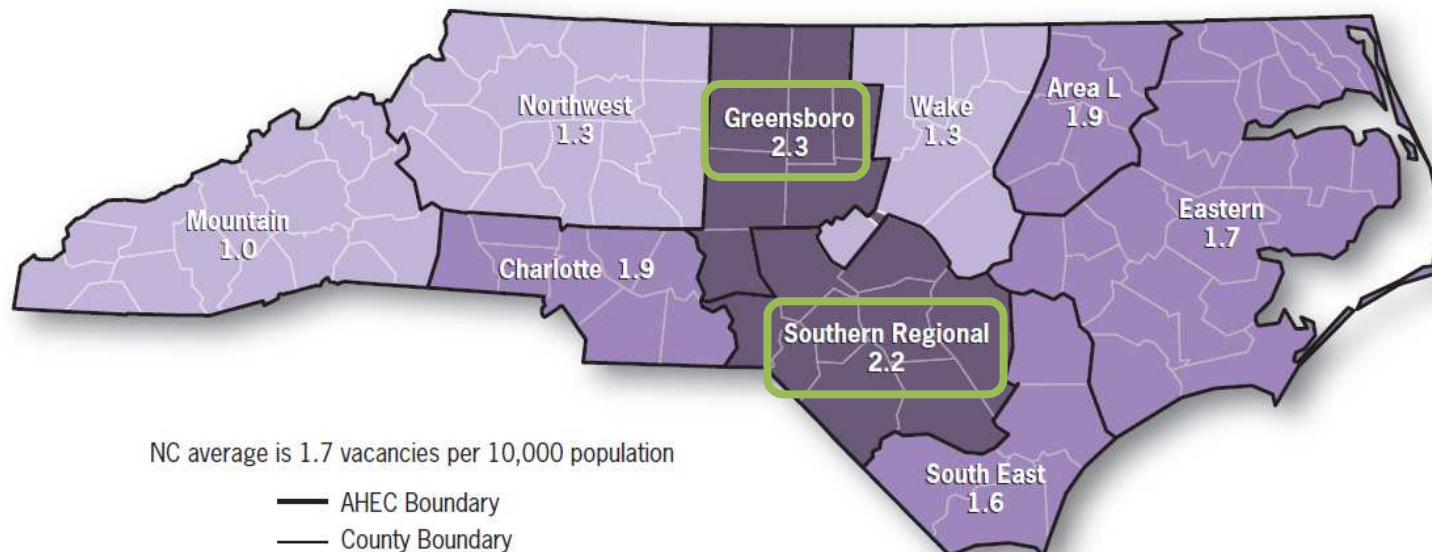
# Vacancy Data Showed High Demand for Therapy Professions and HIM

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.

# Greensboro and Southern Regional AHECs had the Greatest Regional Demand

Allied Health Job Vacancy Advertisements per 10,000 Population  
by AHEC Region, North Carolina, Fall 2011



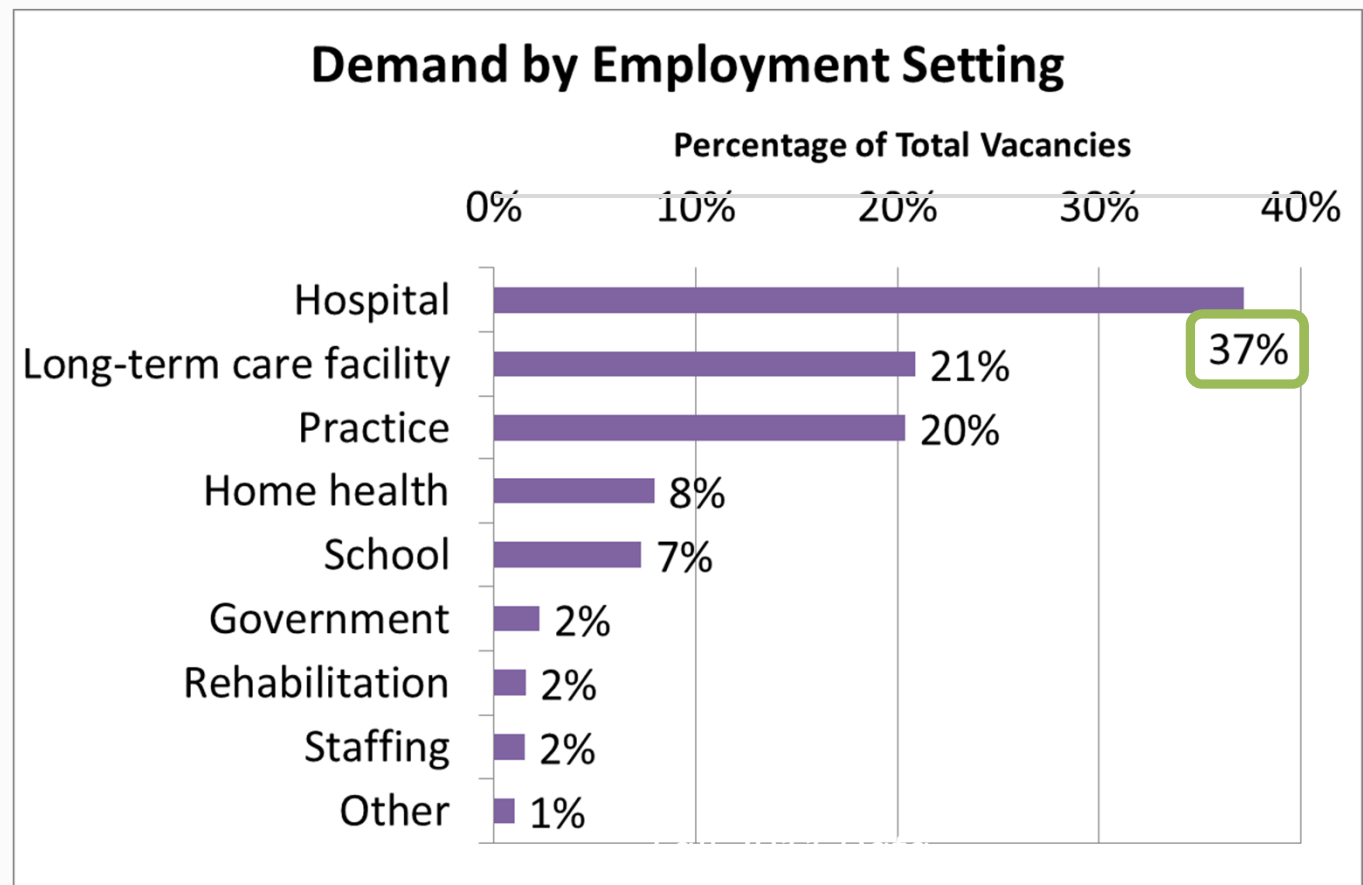
Notes: North Carolina newspapers and online listings for select allied health professions tracked from September 18, 2011 to November 26, 2011 (N=1,599).  
Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel 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/](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/). Accessed 01/12/12.

Charlotte AHEC had highest number of vacancies (346). Consistent with its top 5 national rating as area with high demand for health professionals



# Hospitals had Highest Number of Vacancies

Hospitals, long-term care facilities, and practices accounted for almost 80% of all vacancies.





## Allied Health workforce data are loved but not funded

Everyone loves data but somebody has to pay for the collection, analysis and interpretation of data

# And Are We Creating Intelligence from Our Data?

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- What do the latest data say about the allied health workforce?
- How are we using our data in North Carolina to effect real change?
- How might we better integrate data/intelligence into workforce policy decisions in NC?
- What can we do to better plan for the allied health workforce needed in the future?

# Questions?

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See our website for allied health publications:

<http://www.shepscenter.unc.edu/hp>



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# APPENDIX

# Previous reports had a similar list of professions, especially since 2006

Professions Tracked in Surveys	Fall 2004	Spring 2006	Fall 2006	Fall 2010	Spring 2010	Fall 2011
<b>1</b> Clinical Laboratory Science	X	X	X			X
<b>2</b> Emergency Medical Services		X	X	X	X	X
<b>3</b> Health Information Management				X	X	X
<b>4</b> Imaging (PET, MRI, CT)	X	X	X	X	X	X
<b>5</b> Medical Assistants			X	X	X	X
<b>6</b> Occupational Therapists	X	X	X	X	X	X
<b>7</b> Occupational Therapy Assistants		X	X	X	X	X
<b>8</b> Physical Therapists		X	X	X	X	X
<b>9</b> Physical Therapist Assistants		X	X	X	X	X
<b>10</b> Speech-Language Pathologists	X	X	X	X	X	X
<b>11</b> Speech Language Pathologist Assistants		X				X
<b>12</b> Respiratory Therapists	X		X	X	X	
<b>13</b> Recreation Therapists			X			
<b>14</b> Dental Hygienist	X					
<b>15</b> Nuclear Medicine Technologist	X					
<b>16</b> Pharmacy Technician	X					
<b>17</b> Physician Assistant	X					

■ Professions tracked in reports since 2006

Source: The Health Professions Data System, North Carolina's Workforce Tracking Project with funding provided by the North Carolina Department of Commerce.