

*Creating a Healthy Economy and a
Healthy Population:
Why We Need to Pay Attention to the
Rising Demand for Allied Health
Workers in North Carolina*

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August 22, 2006

The NC HPDS at the Cecil G. Sheps Center for Health Services Research: 3 Main Product Lines

Maintenance of Licensure Data Files for HPDS

This function is the **backbone** of our work. We collect, clean, edit, and disseminate data on eighteen licensed health professions in NC. Data are available from 1979-present

Special Projects: Service to the State and the Institution

The HPDS often undertakes special research projects at the request of the NC AHEC, UNC Board of Governors (respond to legislation, make presentations), licensure boards etc. We infuse data into policy discussions regarding the need for new educational programs, changes in licensure laws etc.

Allied Health Workforce Studies

This work is funded by the Duke Endowment and is done in collaboration with the Council for Allied Health in North Carolina and the NC AHEC. Over the past 7 years, we have developed innovative ways of assessing the need for allied health workers in North Carolina. Most recently our research has focused on the importance of the allied health workforce to North Carolina's economy

Enumerating the Allied Health Workforce: How Many and Where?

Validity, Reliability of Data, a *Spectrum*



Low

Medium

High

Optional
professional
certification

Mix of licensed and
certified professionals

Licensed
professionals

Radiologic Technicians/
Technologists

Speech-
Language
Pathology

Physicians
Nurses
Dentists



What to do about unlicensed allied health professions?

- Amount, type and quality of data available from credentialing and certifying organizations varies.
- We use data from the North Carolina Employment Commission and the Bureau of Labor Statistics (Occupational Employment Survey) to look at total employment in allied health and health care in N.C.

And.....

- What policy makers and the professions also want is a measure of demand—in response, we developed an “allied health vacancy tracking survey”
- This presentation uses both these sources of data to tell the “allied health story” in North Carolina

*Why Should Policy
Makers Care About the
Allied Health Care
Workforce?*



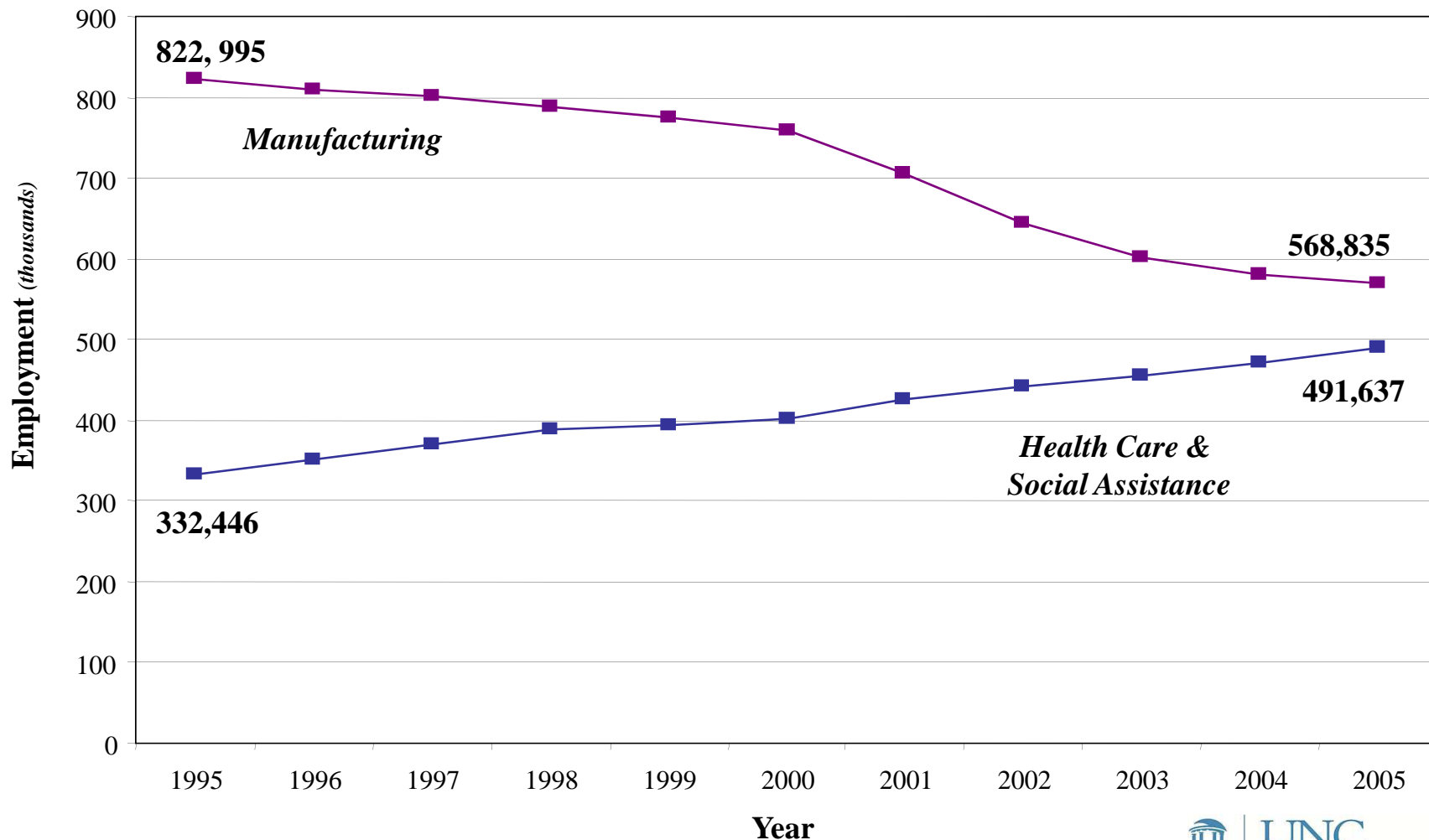
Economic Restructuring Underway

- Major decline in manufacturing employment due to:
 - International competition
 - Increased use of technology and improved productivity in domestic manufacturing sector
 - Recent economic recession

But...

- Growth in service occupations, including health care

Manufacturing and Health Care & Social Assistance Employment, NC, 1995-2005



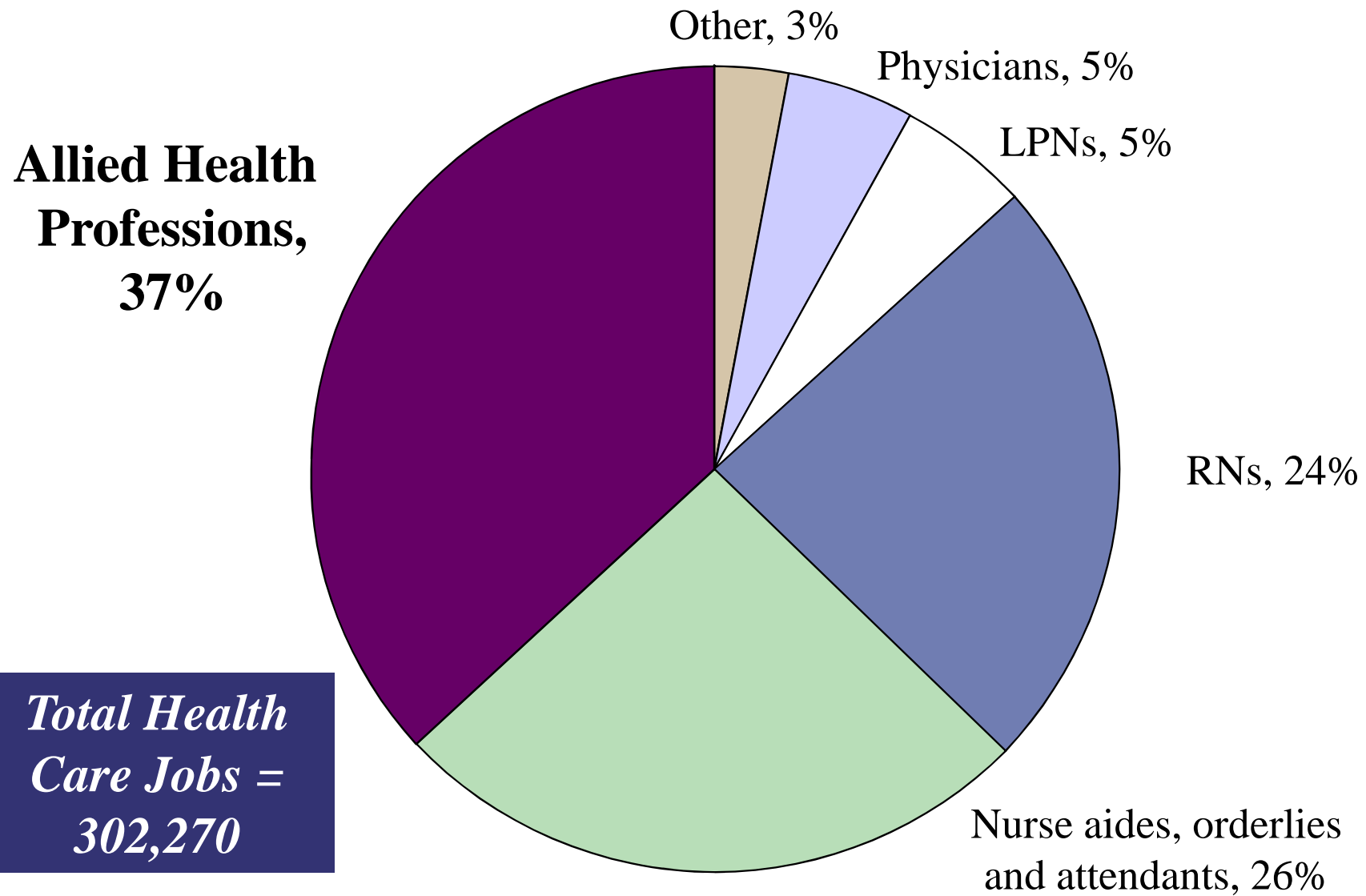
Source: North Carolina Employment Security Commission, 2006.

Manufacturing and Health Care and Social Assistant Jobs in Rural Areas of N.C.

		1990 employment	2005 employment	1990 percent of total	2005 percent of total	% growth (1990- 2005)
Manufacturing	Urban	377,937	273,729	21.8%	11.9%	-27.6%
	Rural	437,177	285,414	34.1%	18.9%	-34.7%
Health care and social assistance	Urban	153,892	283,535	8.9%	12.4%	84.2%
	Rural	106,725	207,558	8.3%	13.7%	94.5%

Source: Employment data are from the NC Employment Security Commission, the North Carolina Rural Economic Development Center, Inc., Rural Data Bank, <http://www.ncruralcenter.org/databank/counties.asp>, accessed 8/1/06.

Health Care Jobs in North Carolina, 2005



Note: "Other healthcare occupations" includes: chiropractors, dentists, optometrists, and pharmacists.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (2005). URL: <http://www.bls.gov/oes/>.



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Sample Allied Health Professions

Allied health includes individuals who:

- Perform x-rays, mammograms, MRIs and other imaging services
- Perform lead and prostate cancer marker screenings
- Monitor individuals with liver disease, diabetes and leukemia
- Provide speech, physical and occupational therapy
- Perform dental cleanings
- Provide emergency medical services (**EMTs and paramedics**)
- Dispense prescriptions (**pharmacy technicians**)
- Provide counseling services (**social workers**)
- Code and manage medical records (**health information management**)



Healthcare and Allied Health Jobs Grew, Overall Employment Remained Stagnant

Total State, Healthcare and Allied Health Employment, North Carolina, 1999-2005

	1999	2005	% Growth (1999-2005)
Total N.C. Employment	3,801,670	3,809,690	0.2%
Healthcare Jobs	251,550	302,270	20.2%
Allied Health Jobs	76,590	111,630	45.8%

Source: Bureau of Labor Statistics. Occupational Employment Statistics. State Cross-Industry Estimates: 1999-2005. URL: <http://www.bls.gov/oes/>. Accessed 06/28/2006.

North Carolina's Fastest Growing Occupations

% Change in Employment, 2002-2012

Rank	Occupation	Projected Openings	% Change
1	Medical Assistants	4,950	60.9
2	Occup. Ther. Aides	30	60.0
3	Dental Hygienists	2,590	53.9
4	Dental Assistants	3,120	53.0
5	Social and Human Services Assistants	5,110	48.4
6	Med. Record Tech.	2,620	48.3
7	Phys. Ther. Assist.	720	47.7
8	Fitness Trainers	2,780	47.6
9	Resp. Therapy Tech.	330	47.1
10	Respiratory Therapists	1,170	46.8

<http://eslmi23.esc.state.nc.us/projections/EmploymentOutlook.asp?version=aopengp&AreaType=01&Area=000037&PeriodID=06>

Hourly and Annual Wages for Selected North Carolina Occupations, 2005

Occupation	Hourly Mean Wage	Annual Mean Wage
Physicians	\$73.60	\$153,072
RNs	\$24.99	\$51,970
LPNs	\$16.80	\$34,940
Allied health professions	\$18.68	\$39,647
All Occupations (North Carolina)	\$16.57	\$34,460

Source: Bureau of Labor Statistics. Occupational Employment Statistics. State Cross-Industry Estimates: 1999-2005. URL: <http://www.bls.gov/oes/>. Accessed 06/28/2006.

The Allied Health Job Vacancy Tracking Project

- Purpose of project was to monitor newspaper and online listings for job vacancies
- Data collected February 7 – April 30, 2006
- Vacancy report data includes:
 - The number of vacancies
 - The distribution of vacancies across the state and between different professions
 - Types of employers advertising for allied health job vacancies

Collaborative effort between:



Council for Allied Health
in North Carolina



North Carolina
Area Health
Education Centers
Program



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The Allied Health Job Vacancy Tracking Project

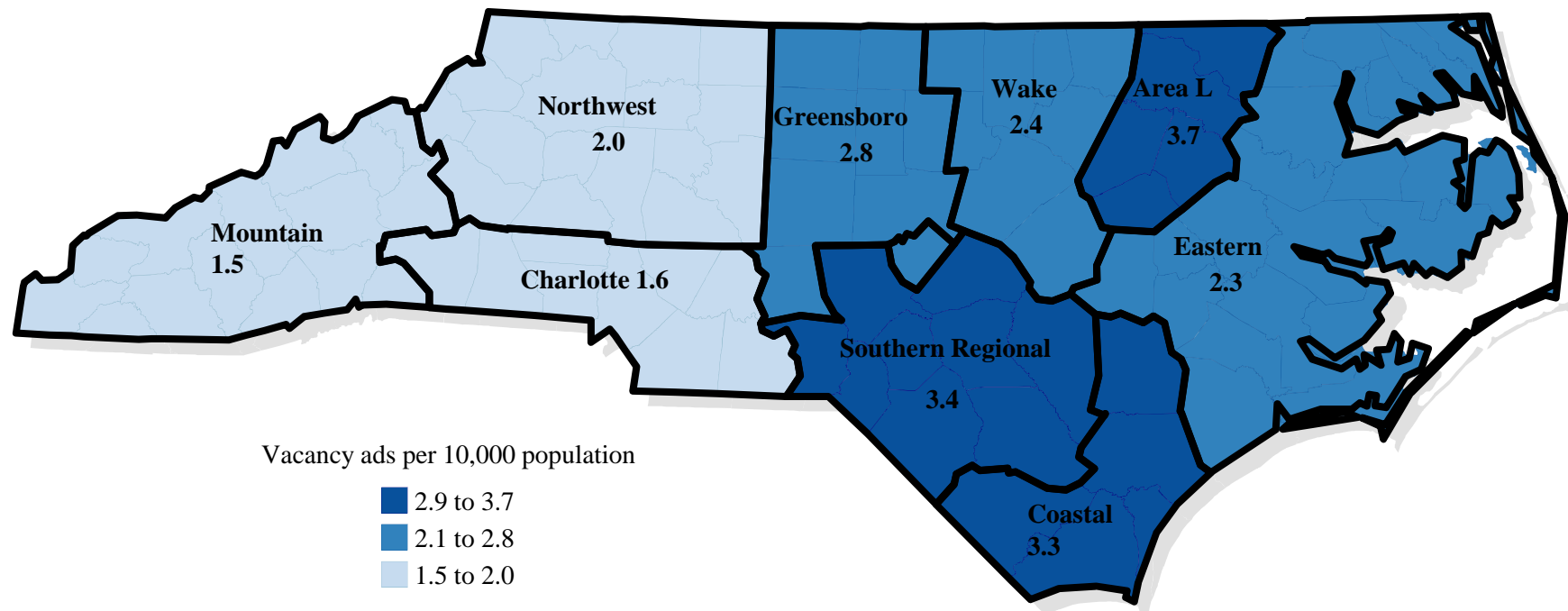
- Monitored newspapers, professional association websites, Indeed.com, and other online sources for vacancies of:
 - Medical Technologist
 - Medical Laboratory Technician
 - Occupational Therapist
 - Certified Occupational Therapy Assistant
 - Emergency Medical Technicians
 - Physical Therapist
 - Physical Therapy Assistant
 - Radiologic Technician
 - Radiologic Technologist
 - Speech Language Pathologist
 - Speech Language Pathology Assistant

NC facing high vacancy rates in some allied health professions

Vacancies per 100 employed professionals, 2006	
Profession	Vacancies
Certified Occupational Therapy Assistant	21.8
Physical Therapist	17.4
Occupational Therapist	13.4
Physical Therapy Assistant	9.8
Speech-Language Pathologist	7.5
EMT	4.1
Radiologic Technologist/Technician	4.0

Demand varies by region: Greatest demand in Area L, Coastal and Southern Regional AHECs

**Allied Health Job Vacancy Advertisements per 10,000 Population
by AHEC Region, North Carolina, 2006**



Notes: North Carolina newspaper listings for select Allied Health professions tracked from February 5 to April 23, 2006 (N=2060). Sample excludes listings missing employer location (N=108) and listings for which candidates with multiple degree types were eligible (N=78).

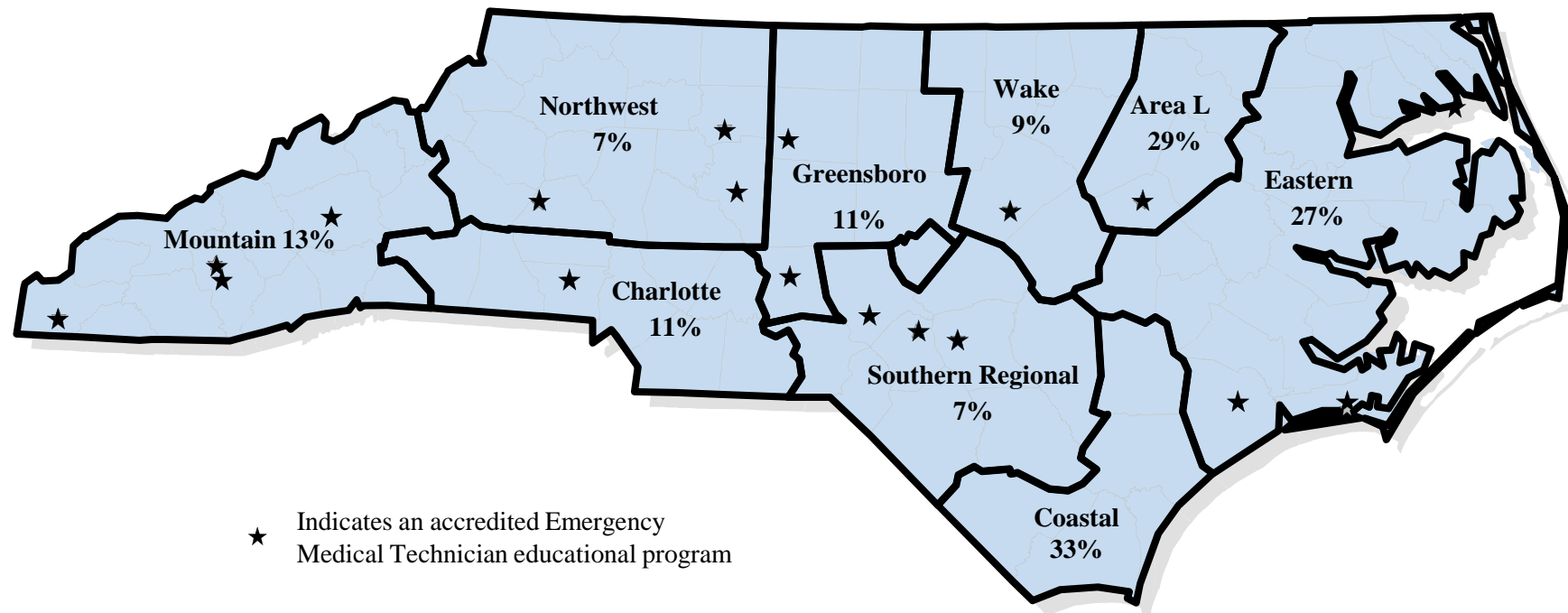
Source: North Carolina Allied Health Vacancy Tracking Project, Cecil G. Sheps Center for Health Services Research, 2006.

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



Demand for EMTs Highest in Eastern North Carolina

Ads for Emergency Medical Technicians as a Percent of Total Vacancy Ads by AHEC Region, North Carolina, 2006



Notes: North Carolina newspaper listings for select Allied Health professions tracked from February 5 to April 23, 2006 (N=2060). Sample excludes listings missing employer location (N=108) and listings for which candidates with multiple degree types were eligible (N=78).

Source: North Carolina Allied Health Vacancy Tracking Project, Cecil G. Sheps Center for Health Services Research, 2006.

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Summary of Issues: What Do We Know?

- As economy shifts from manufacturing to service employment, allied health employment is increasingly important to local and state economy
- Allied health employment in North Carolina expected to increase and the state faces high vacancy rates in some professions
- Vacancy rates are generally higher in rural, eastern North Carolina
- Vacancy rates exacerbate existing maldistribution of health care workers
- Potential investment in educating allied health workers pay large and immediate dividends due to high retention rates
- Increasing number of allied health workers has potential to increase access to employment *and* improve access to health care services

*What's Needed? Better Coordination
of Allied Health Workforce
Development Efforts*



Allied Health Workforce Development Efforts are Fragmented

- Limited collaboration exists between policy makers, educators, employers and others charged with monitoring, planning and implement workforce strategies at the local and state level.
- Workforce shortages are not unique to individual employers or parts of the state and strategies to ameliorate these strategies needs to be coordinated.

Challenges to Moving Forward

Despite promising potential, issues exist:

- Salary and benefits of entry-level allied health care jobs not high
- Better marketing needed because allied health educational programs face serious challenges:
 - Too few applicants
 - Too few *qualified* applicants
 - Attrition
 - Faculty shortages
 - Lack of clinical placements



Future Opportunities

- Create opportunities for better collaboration between health workforce entities and workforce development boards
- Target specific health care professions and/or regions of the state for allied health workforce development
- Identify “best practices”—support and duplicate statewide:
 - programs to attract students to allied health education programs
 - innovative strategies to reduce attrition from community college programs
 - distance learning and multi-institution collaborative educational programs
 - career laddering opportunities: i.e. articulation agreements and collaboration between certificate, two-year and four-year educational programs.
 - data collection efforts on allied health workforce