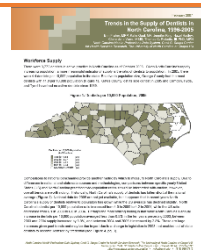


Health Workforce Data and Policy: Reports Used to Inform Policy in North Carolina

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The Program on Health Workforce Research and Policy (PHWRP) has issued a series of brief analytical papers (Policy Briefs) that use workforce data to answer policy questions and inform decisions important to the State of North Carolina. This compendium includes links to a sample of those reports¹, and summaries for each including the salient policy issue, key findings, policy response and fiscal implications (where applicable). These briefs draw on data from The North Carolina Health Professions Data System (HPDS), which is part of the PHWRP and one of the nation's oldest and continually maintained health workforce data systems.



Trends in the Supply of Dentists in North Carolina, 1996-2005 (February 2007)

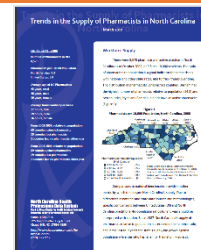
Policy Issue: Dental access in North Carolina; decide whether or not to build a new dental school in North Carolina

Key Findings:

- Supply of dentists in NC lags behind national supply
- Between 1996-2005, 33% of counties experienced decline in dentists per 10,000 population; 26 of the 33 counties are rural.
- The dental workforce is aging, especially in rural counties
- 87% of dentists are white

Policy Response: NC General Assembly and UNC General Administration approved expansion of the state's current dental school and development of a new dental school.

Fiscal Implications: Legislature appropriated \$89.6 million for new dental school at East Carolina University and \$96 million for expansion at UNC-CH.



Trends in the Supply of Pharmacists in North Carolina, 2008 (March 2010)

Policy Issue: Decide whether or not to build a new pharmacy school in North Carolina

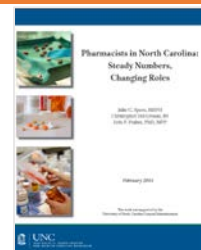
Key Findings:

- NC supply exceeds national benchmarks
- Between 2003-2008, 69 counties gained pharmacists relative to population
- In 2000, NC retail pharmacists filled roughly 12 prescriptions per hour; in 2008, they filled 13

Policy Response:

Legislature approved expansion of UNC Chapel Hill School of Pharmacy to Asheville; rejected UNC Greensboro's proposal for new pharmacy school

Fiscal Implications: Potential savings to state of nearly \$80 million in startup costs.



Pharmacists in North Carolina: Steady Numbers, Changing Roles (February 2014)

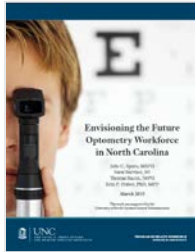
Policy Issue: Re-evaluate need for new pharmacy programs and new roles for pharmacists

Key Findings:

- NC continues to have a strong supply of pharmacists
- The majority of NC pharmacists are trained in NC
- Demand for pharmacists has declined over past decade
- New models of healthcare delivery may expand roles for pharmacists and pharmacy technicians

Policy Response: Heightened attention in General Assembly to pharmacy workforce issues.

¹ For additional products, see <http://www.shepscenter.unc.edu/programs-projects/workforce/data-publications-resources/>.



Envisioning the Future Optometry Workforce in North Carolina (March 2015)

Policy Issue: Whether, and where, to build a new optometry school in NC

Key Findings:

- NC has a strong supply of optometrists
- Ratio of NC optometrists varies significantly by county
- 61% of NC optometrists are age 50 or younger; mean age is 46
- There has been a recent increase in the number of optometry schools in the US

Policy Response: UNC General Administration recommended against starting a school of optometry in NC; a bill modifying scope of practice was introduced in 2017 session of General Assembly

Fiscal Implications: Potential savings to state of \$12-\$40 million in initial start-up costs and an estimated \$8-19 million in annual operation costs.



The Supply and Distribution of Psychiatrists in North Carolina: Pressing Issues in the Context of Mental Health Reform (March 2006)

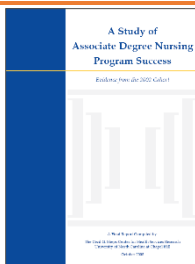
Policy Issue: State decentralizing mental health services—will there be an adequate supply of psychiatrists?

Key Findings:

- Overall supply adequate, distribution is a problem
- 44 counties qualify as mental health professional shortage areas
- Of 19 counties that qualify as primary care HPSAs, 11 have shortage of psychiatrists
- 43 counties have no child psychiatrists

Policy Response:

Legislature appropriated \$500,000 in recurring funds for NC AHEC to address maldistribution and increase NP & PA mental health training.



A Study of Associate Degree Nursing Program Success (October 2008)

Policy Issue: High attrition from North Carolina Community College System (NCCCS) ADN programs.

Key Findings:

- ADN nurses retained in high numbers
- ADNs practice close to where they were educated
- Compared to BSN cohort that graduated at same time, ADN nurses are more likely to practice in rural areas; ADNs practice in NC's most underserved communities
- ADNs work in employment settings such as long-term care, home care/hospice and mental health.
- For every 100 students who graduate from a NCCCS ADN program, 90 end up in practice in NC

Policy Response: Expanded articulation agreements with BSN programs



Trends in Medical Education in North Carolina (September 2012)

Policy Issue: Planning for the future supply, specialty mix and distribution of physicians under health reform

Key Findings:

- NC lags behind national average of med students per capita; net importer of medical graduates
- Declining number of NC-trained physicians stay in state
- Fewer physicians practice in rural areas
- NC physician workforce does not represent racial diversity of population

Policy Response: UNC Medical school expands programs in western and eastern part of state; class size expansion for UNC-CH and ECU proposed.





Trends in Graduate Medical Education in North Carolina: Challenges and Next Steps *(March 2013)*

Policy Issue: Tracking accountability of public investments in residency training in North Carolina

Key Findings:

- Med school enrollment is expanding; number of GME slots not keeping pace
- Fewer residents who train in NC stay in NC to practice
- NC increasingly reliant on physicians who completed residency outside of NC
- Overall physician supply adequate; maldistribution a problem

Policy Response: State declined to create GME Board; other work pending



The State of the Physician Workforce in North Carolina: Overall Physician Supply Will Likely Be Sufficient but Is Maldistributed by Specialty and Geography *(August 2015)*

Policy Issue: Whether to build new medical school in Charlotte, NC

Key Findings:

- NC growth in physician supply outpacing national average
- Physician supply is maldistributed by location and specialty
- Physicians who complete medical school and residency in NC are more likely to stay in NC
- The supply of non-physician clinicians (e.g. NPs, PAs, pharmacists) is growing

Policy Response: Preliminary decision not to develop independent medical school in Charlotte; proposals to develop board to oversee state GME allocations and distribution by location and specialty



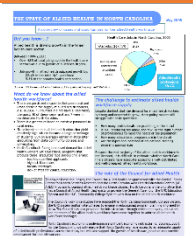
The Diversity of North Carolina's Health Care Workforce *(August 2012)*

Policy Issue: Lack of racial/ethnic diversity in health workforce

Key Findings:

- The racial/ethnic diversity of NC health care professionals does not reflect state population diversity
- NC's health professions are diversifying slowly over time and at different rates
- There are differences in racial/ethnic group representation among professions
- NC's nonwhite racial/ethnic health care practitioners cluster regionally.

Policy Response: Creation of new Alliance on Health Workforce Diversity



The State of Allied Health in North Carolina *(May 2005, October 2010)*

Policy Issue: Making link between allied health workforce vacancies and economic development in rural NC

Key Findings:

- Between 1999-2005, overall employment in NC grew by 0.2% compared to 20.2% growth in health care jobs and 45.8% increase in allied health employment
- Allied health comprised 37% of all health care jobs in 2004
- Allied health included 8 of top 10 fastest growing professions

Policy Response:

NC Department of Commerce awarded 7 planning grants of \$55,000 to **regional** partnerships to address allied health vacancies and economic development





Allied Health Job Vacancy Tracking Project: Multiple Reports (click on month and year for link) (*April 2005, August 2006, May 2007, May 2011, October 2011, March 2012*)

Policy Issue: Understanding supply, distribution and demand for allied health professionals in NC
Key Findings:

- Allied health professionals are largest proportion of health workforce (34%)
- Therapy positions show strong demand; OTAs and OTs show strongest demand
- Labor markets are regional; demand varies by profession and AHEC region
- Majority of job postings are in hospitals.

Policy Response: Development of new training programs; pipeline development programs; funding for regional skills partnerships.

Conclusions

The reports described in this *Brief* focus on the supply and distribution of the current health professions workforce in North Carolina; document the need for new educational programs, evaluate educational outcomes, inform state health professions education policy, describe the racial and ethnic diversity in the health professions, and provide information to support workforce and economic development initiatives. The reports have provided valuable information that policymakers have and continue to use to make decisions based on evidence rather than anecdote or political interest. This conscious and careful use of data in decision making has likely saved the State substantial tax dollars while assuring access to high quality appropriate care for North Carolinians.

