

Providers in Demand:
North Carolina's
Primary Care and
Specialty Supply
June 2007

North Carolina Institute of Medicine
In collaboration with the North Carolina Health Professions Data System at the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill and the North Carolina Area Health Education Centers Program
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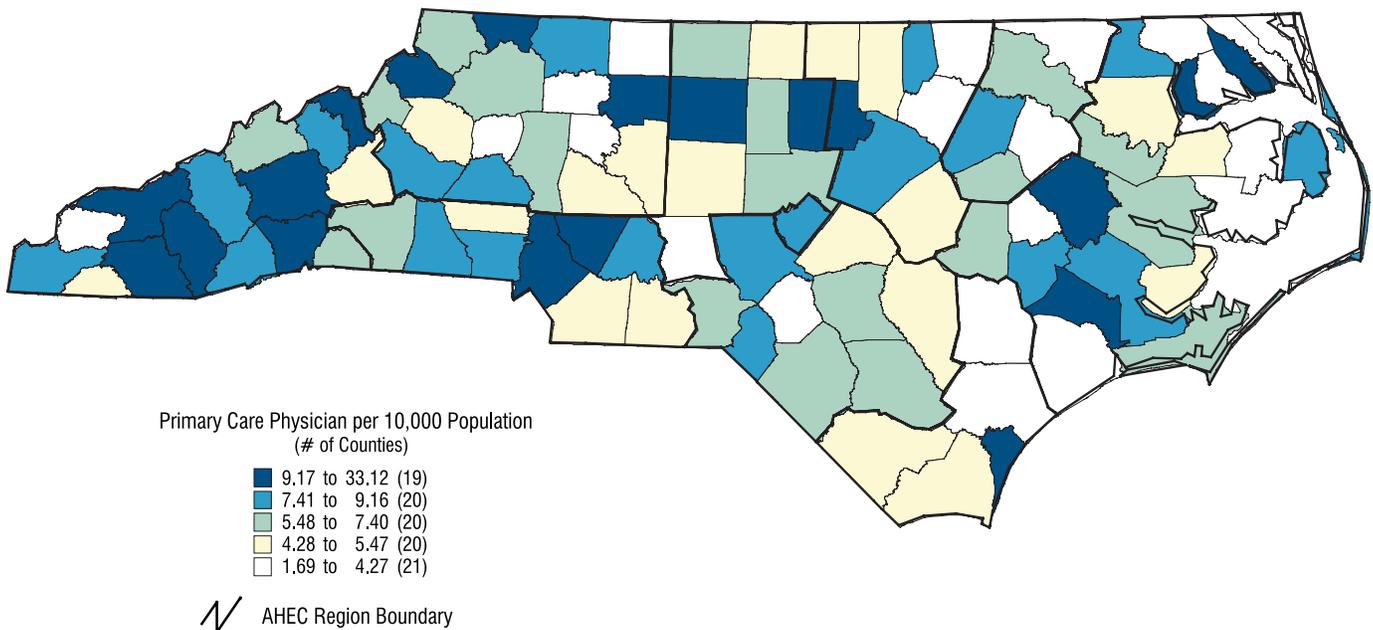
Certain Areas of North Carolina Are Facing an Acute Shortage of Healthcare Providers

Some areas of North Carolina have an abundance of health professionals, while others lack sufficient providers, forcing individuals to travel long distances for healthcare.

Healthcare providers tend to congregate around academic health centers or around major hospitals in metropolitan areas while shortages typically exist in rural areas or low-income areas of larger cities. Orange and Durham counties, which have major teaching hospitals, had the highest primary care physician-to-population ratios in 2005 with 33.7 and 22.5 per 10,000 population, respectively. By contrast, Gates and Camden counties, which are rural and have no hospitals, had the lowest primary care physician per population ratios with 0.9 and 1.1 per 10,000 population, respectively. Eight of the ten counties

with the lowest ratios of primary care physicians per 10,000 population are located in eastern North Carolina.¹ (See Map 1.) Counties that are habitually designated as primary care Health Professional Shortage Areas (HPSAs) may be considered Persistent Health Professional Shortage Areas (PHPSAs). PHPSAs are disproportionately rural and poor,² and the majority of whole-county PHPSAs are located in eastern North Carolina. Physician assistants and nurse practitioners provide a significant amount of care in rural areas compared to their physician counterparts. In 2005, they accounted for 36% of total primary care providers in whole-county HPSAs compared to 33% of primary care providers in counties not designated as HPSAs.

Map 1.
Primary Care Physicians per 10,000 Population by County, North Carolina, 2004



Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Medical Board, 2004.

Primary Care Physicians include active or unknown activity status, in-state, non-federal, non-resident-in-training allopathic and osteopathic physicians indicating a primary specialty of Family Practice, General Practice, Internal Medicine, Ob/Gyn, or Pediatrics.

Lack of primary care providers may lead to worse health outcomes. Many studies have found areas with lower primary care supply have higher mortality rates and higher hospitalization rates for conditions that should have been managed on an outpatient basis.^{3,4}

Providers choose their location of practice based on a number of factors, including training location, economic potential, and lifestyle and family preferences. Provider practices must be financially sustainable. This is a challenge for providers in rural areas that lack population density and in low-income communities where a higher proportion of people lack health insurance.⁵ Financial incentives and practice support will increase the financial viability of practices treating historically underserved areas and populations.

National research has found physicians are more likely to practice in rural communities if they have a rural background, a spouse who was raised in rural areas, or an interest in rural practice.⁶ Although minority health professionals in North Carolina do not necessarily practice in rural areas, they are more likely to serve minority and other underserved populations. Identifying health professional school applicants likely to practice in historically underserved areas or with underserved populations and nurturing their professional development will increase access to providers for underserved groups.

During medical school and residency, physicians make strong professional and social connections to their communities. As a result, physicians tend to cluster around these locations when they enter practice. Increasing the number of training opportunities in underserved areas will make physicians more likely to practice in such areas when they complete their training.

To address these issues of maldistribution, the Task Force encouraged action upon the following priority recommendations:

- Explore financial incentives to encourage providers to practice in underserved areas;
- Encourage foundations to fund demonstrations of new models of care that serve rural and urban underserved patients;
- Fund the Office of Rural Health and Community Care to recruit and provide financial support for practitioners in underserved areas; and
- Provide financial incentives to North Carolina health professional schools that produce professionals who address the underserved needs of the state.

References

1. North Carolina Health Professions 2004 Data Book. NC Health Professions Data System. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Available at: http://www.shepscenter.unc.edu/hp/2004_HPDS_DataBook.pdf. Accessed June 12, 2006.
2. Area Resource Files, Claritas, US Office of Management and Budget.
3. Starfield B, Shi L, Grover A, Macinko J. The effects of specialist supply on populations' health: Assessing the evidence. *Health Aff.* 2005.
4. Shi L, Macinko J, Starfield B, Wulu J, Regan J, Politzer R. The relationship between primary care, income inequality, and mortality in US states, 1980-1995. *J Am Board Fam Pract.* Sept-Oct 2003;16(5):412-422.
5. Holmes M, Ricketts T. *County-level Estimates of the Number of Uninsured in North Carolina: 2004 Update*. Chapel Hill, North Carolina: University of North Carolina at Chapel Hill; 2005. Available at: <http://www.unc.edu/~gholmes/ui/NorthCarolinaUninsured2004.pdf>. Accessed September 30, 2006.
6. Pathman D. Presented at: Task Force on Primary Care and Specialty Supply Steering Committee Meeting, North Carolina Institute of Medicine; March 8, 2006; Cary, North Carolina.

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For more information about North Carolina's Primary Care and Specialty Supply visit http://www.nciom.org/projects/supply/primary_specialty.html or contact Pam Silberman, JD, DrPH, President & CEO. North Carolina Institute of Medicine. 5501 Fortunes Ridge Drive, Suite E, Durham, NC 27713. 919-401-6599 ext 23. pam_silberman@nciom.org.