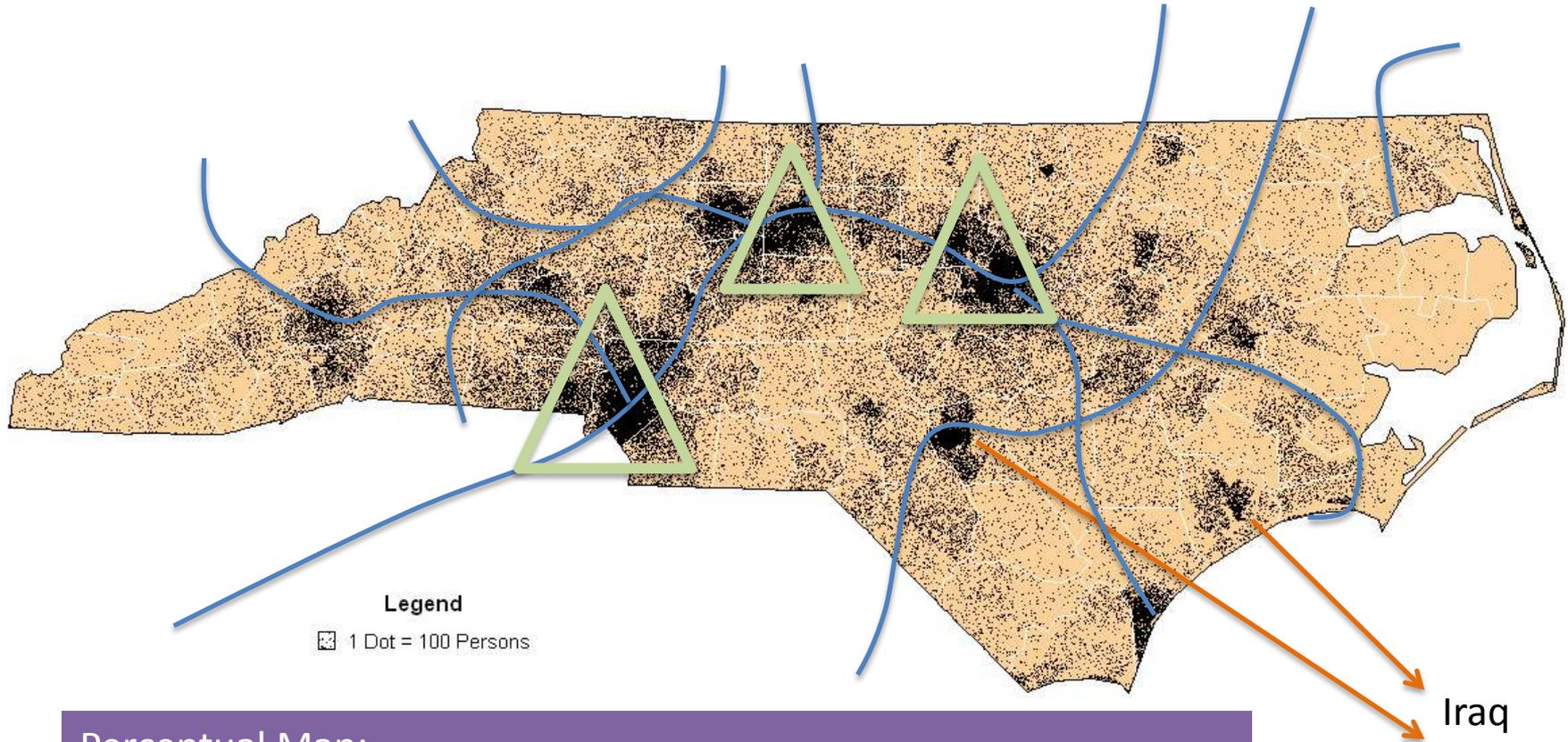




Regions North Carolina & ACOs

Thomas C. Ricketts
Cecil G. Sheps Center for Health Services
Research
The University of North Carolina at Chapel Hill

Distribution of North Carolina Population, 2005

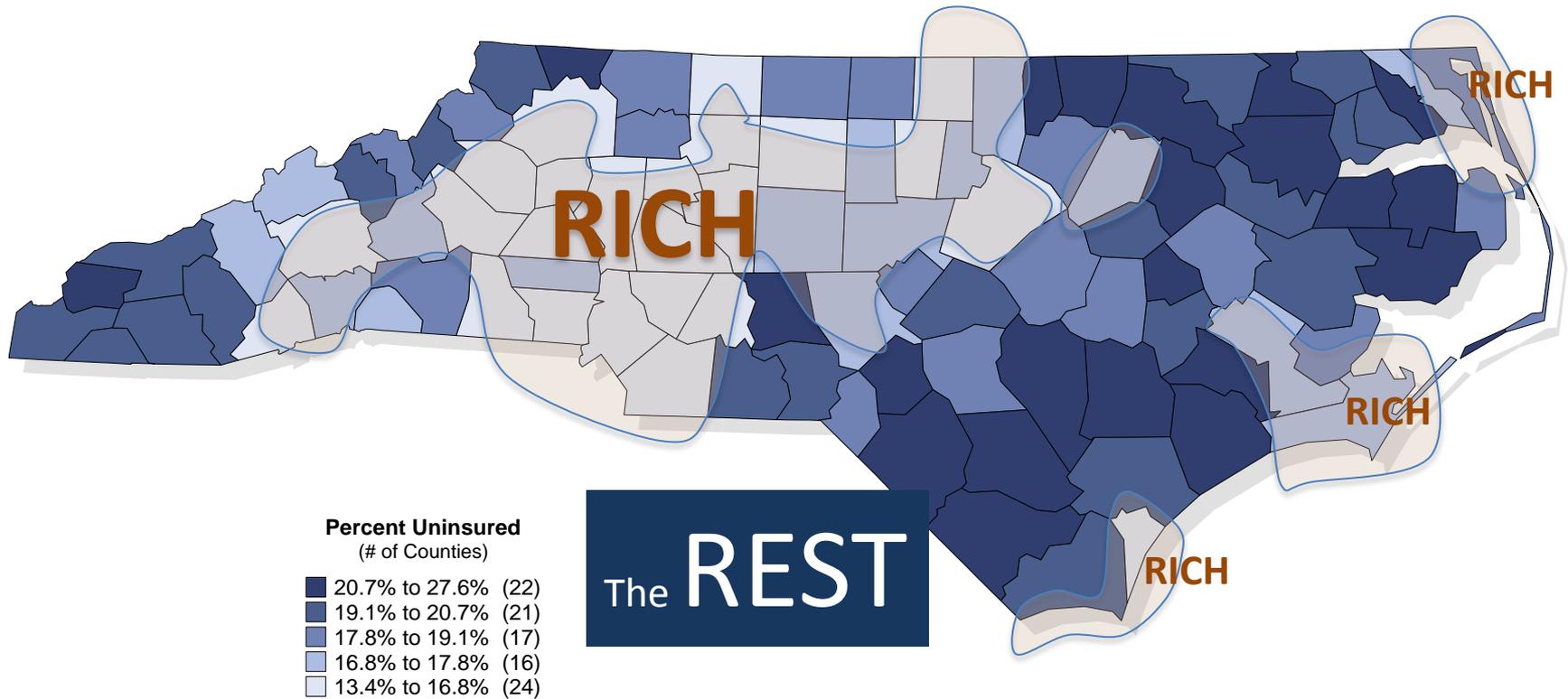


Perceptual Map:

The Southern Coast, I-95 Corridor, Southern Mountains, Foothills, Triangle, Triad, Metrolina, Military, "The view from the Interstate"

Percent of North Carolinians Aged 0-64 Without Health Insurance

Estimates for 2005

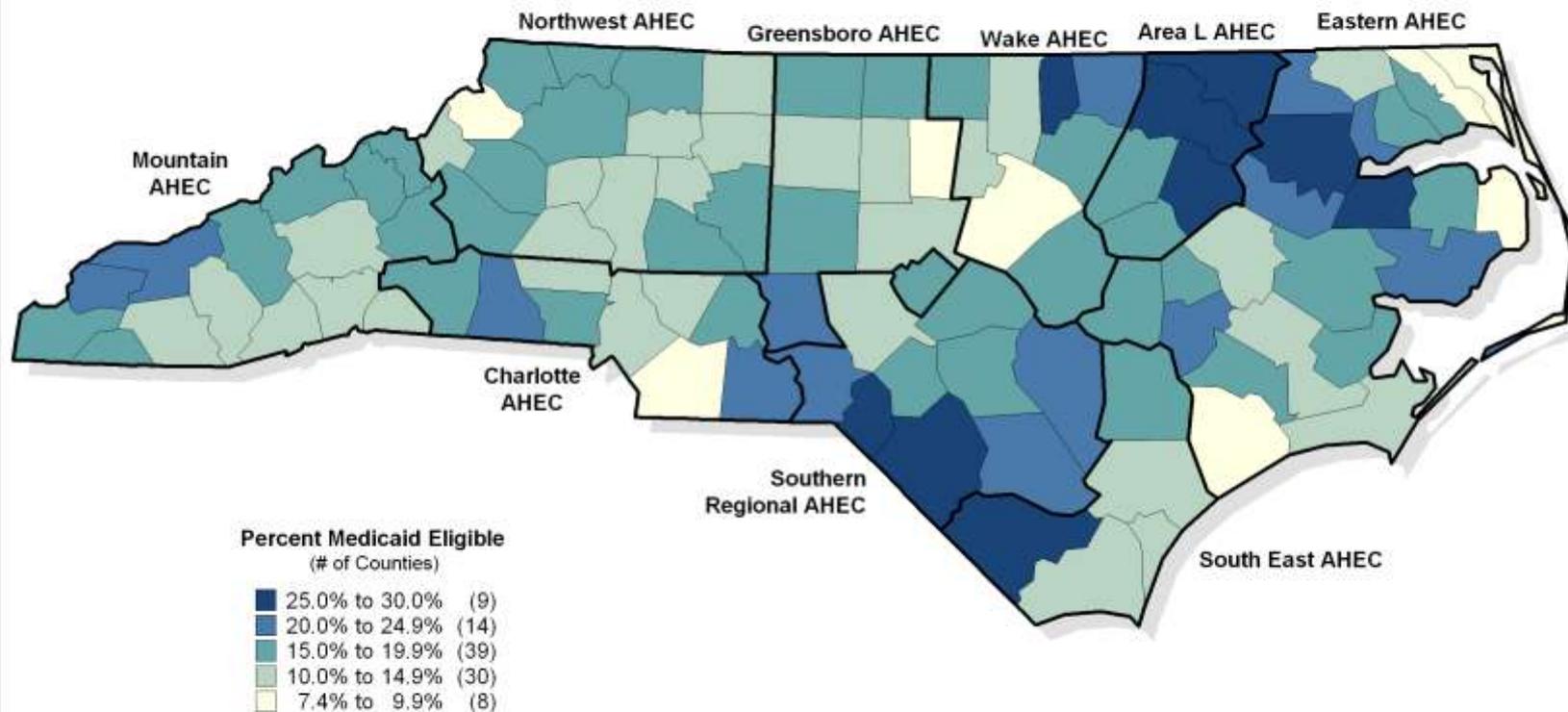


Full report available at <http://www.shepscenter.unc.edu>.

Source: Synthetic estimates based on Annual Social Economic Supplement, US Census Bureau, 2005-2006.

Produced by: Program on Health Economics and Finance, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

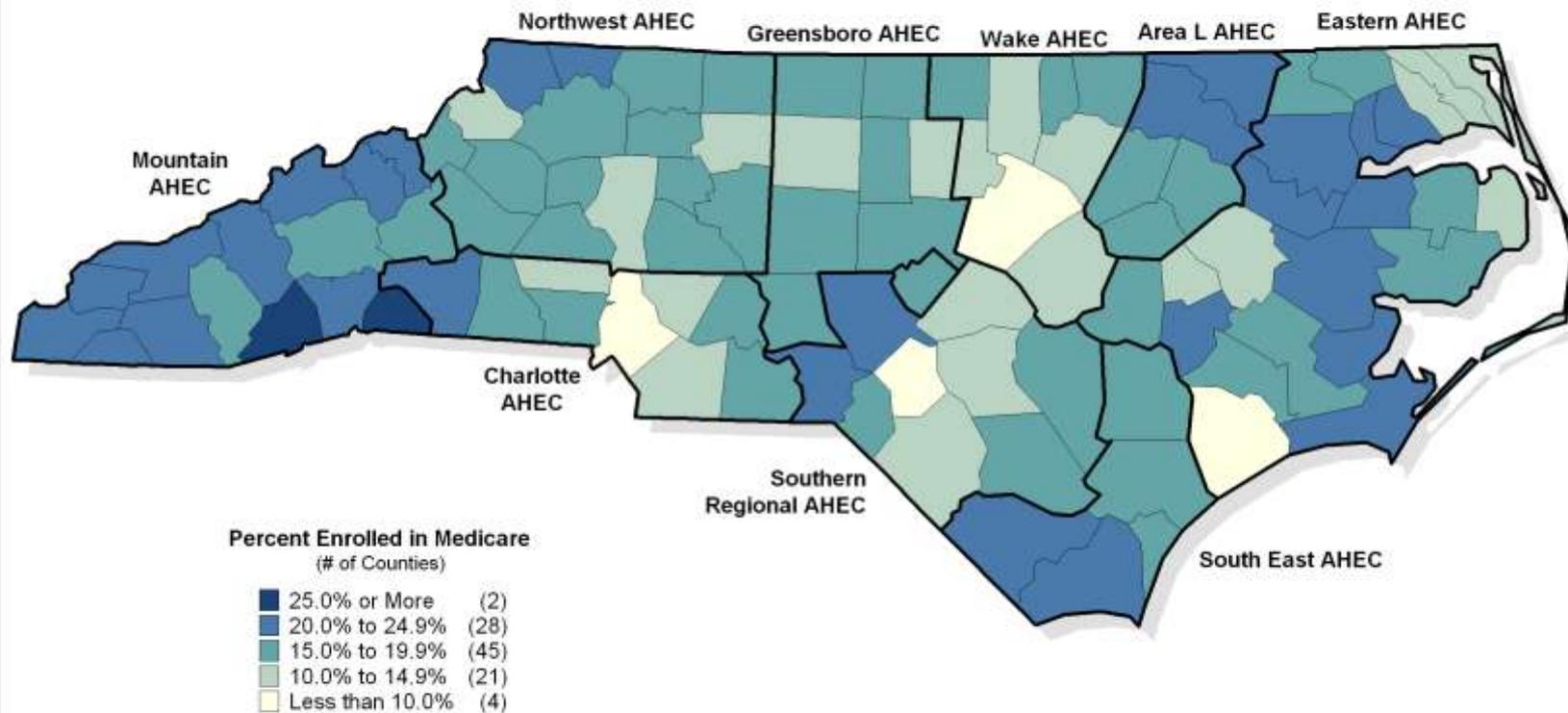
Percent of Total Population Eligible for Medicaid North Carolina, 2009



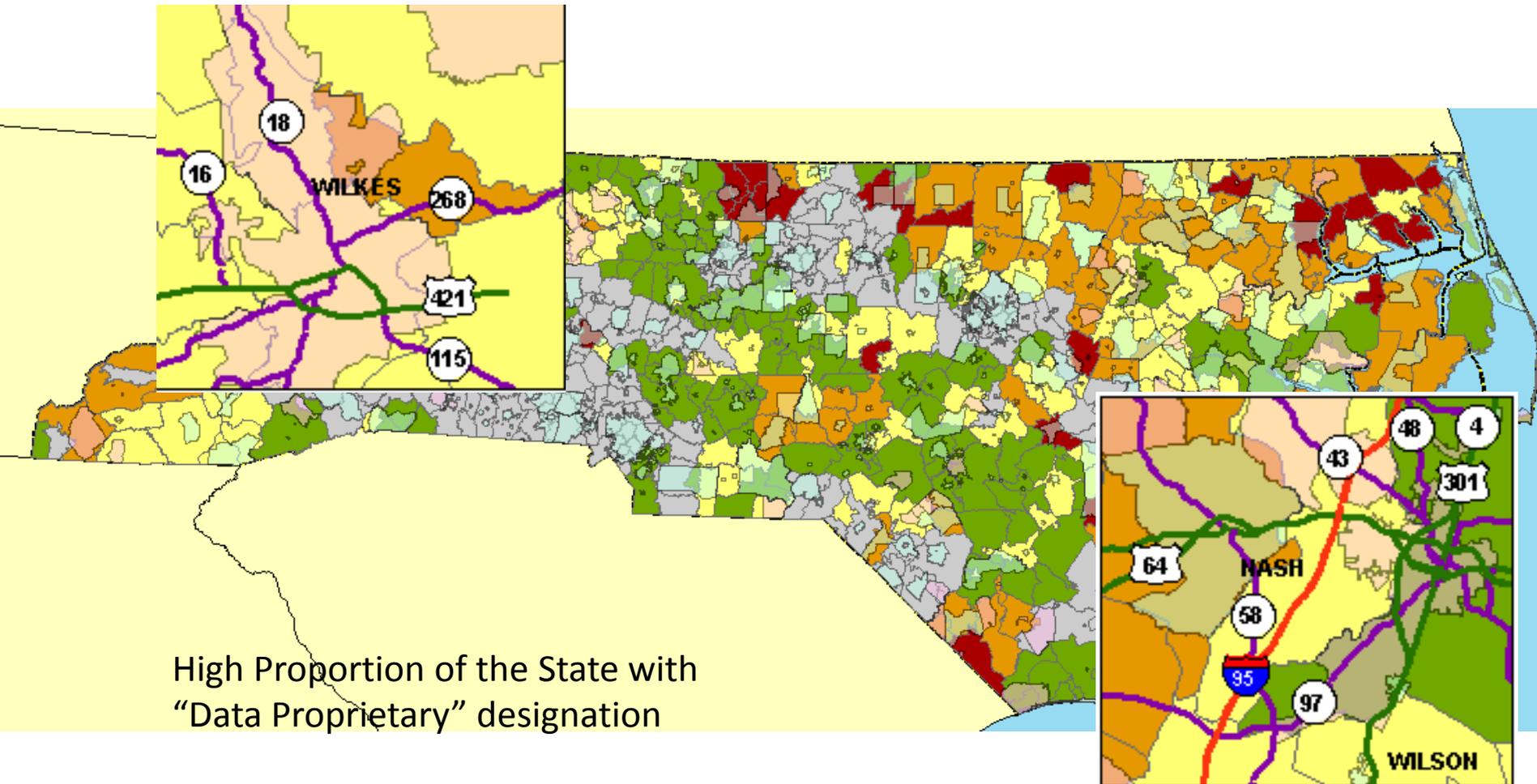
Produced by: Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Source: North Carolina Division of Medical Assistance, <http://www.dhhs.state.nc.us/dma/elig/index.htm>, accessed 4/17/09; Log Into North Carolina (LINC), 2009.

Percent Population Enrolled in Medicare North Carolina, 2007

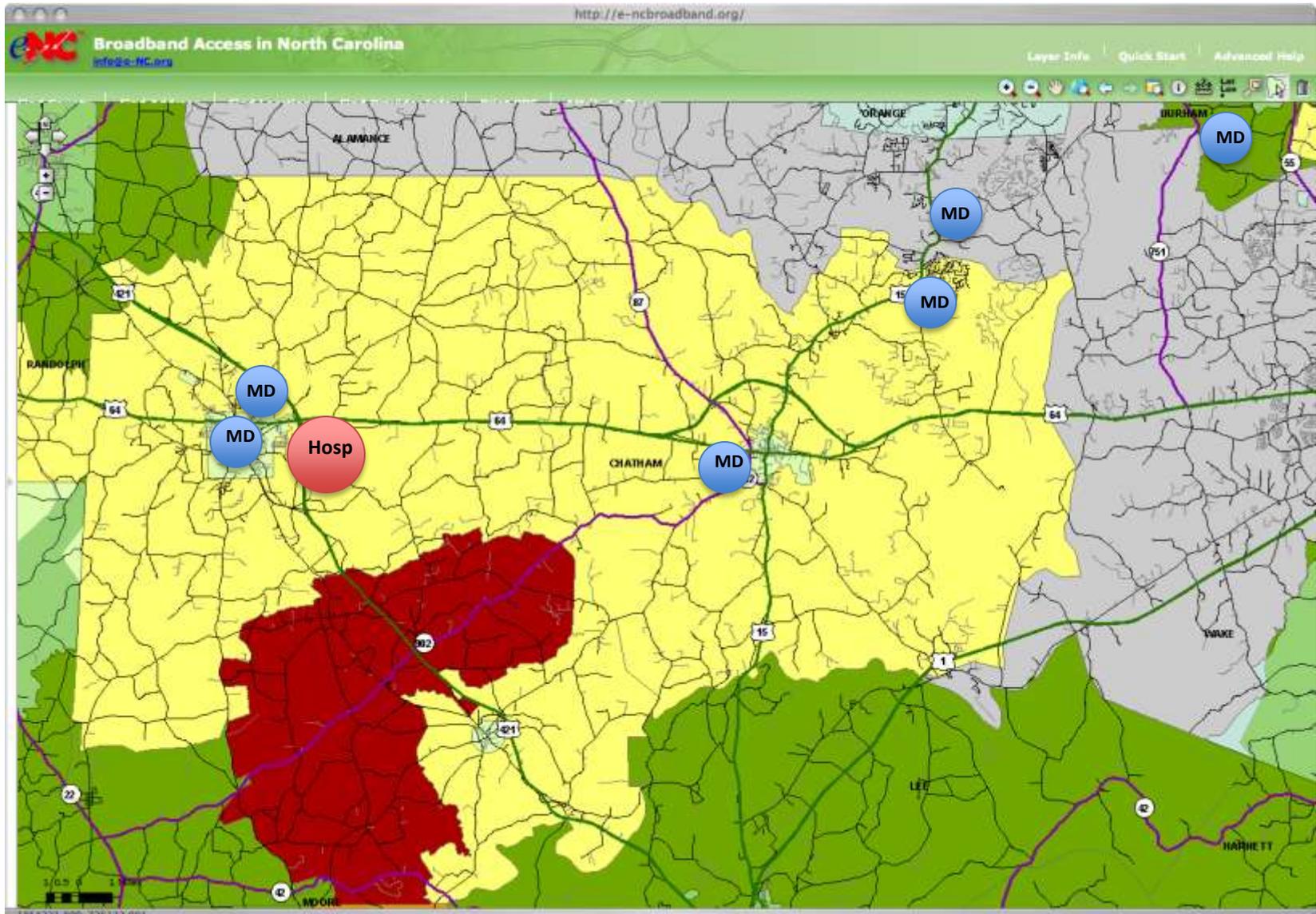


Broadband Availability

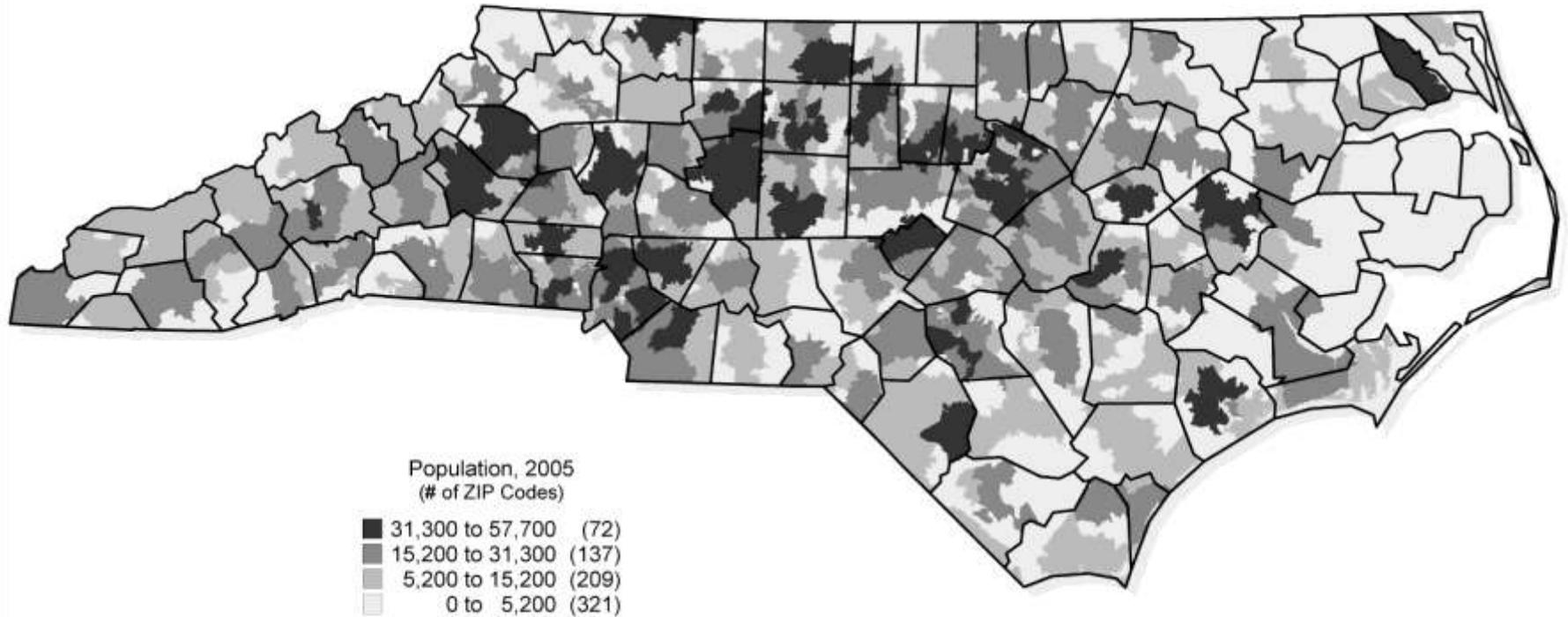


High Proportion of the State with
"Data Proprietary" designation

Connectivity-Communication



Total Population by ZIP Code, 2005 North Carolina

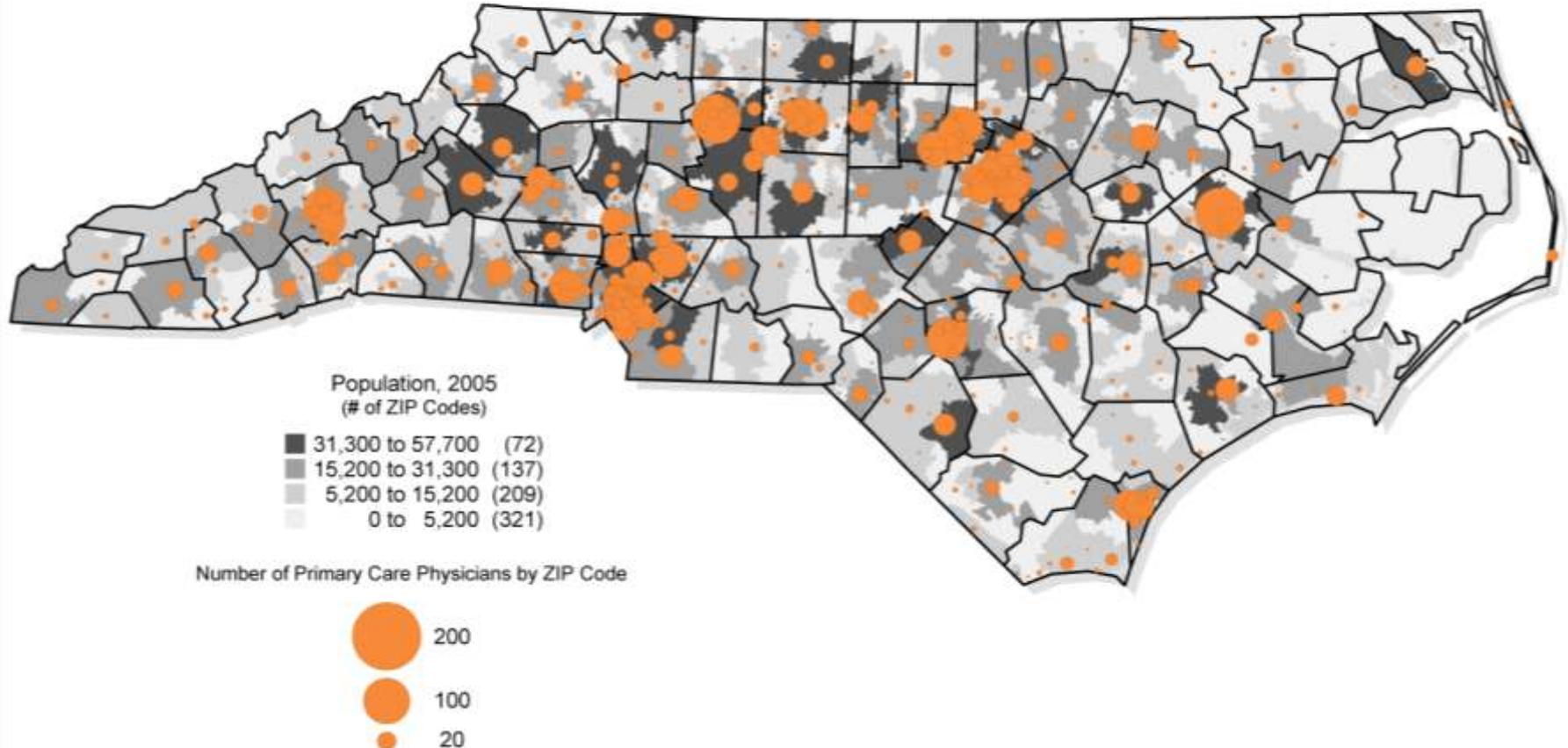


Source: 2005 Pop-Facts database for ZIP Codes; Nielsen Claritas Inc. Ithaca, NY; 2005.

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

Primary Care

Distribution of Physicians, 2007
and Total Population by ZIP Code, 2005
North Carolina



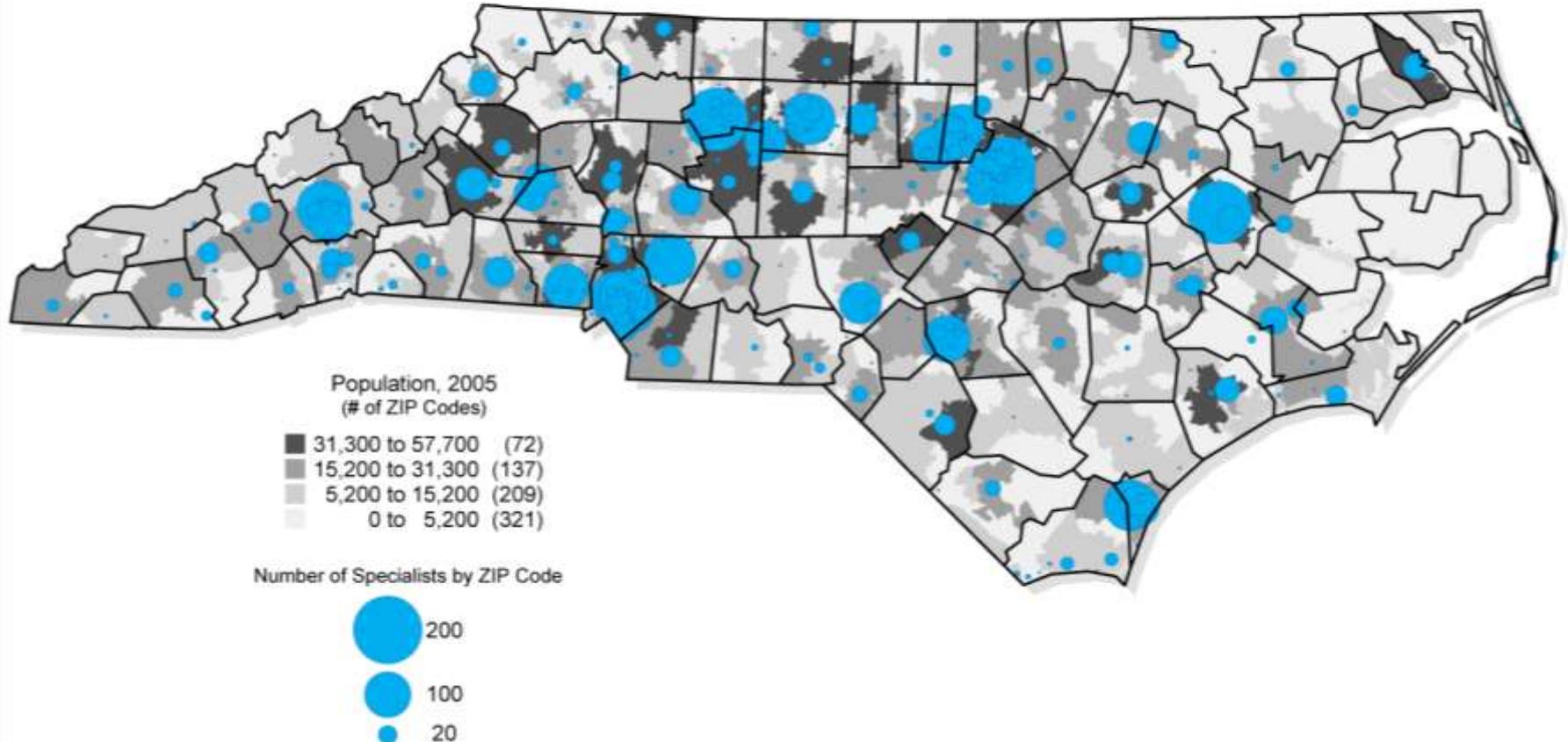
Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Medical Board, 2007.

Note: Data include active, in-state, non-federal, non-resident-in-training physicians who were licensed in NC as of October 31, 2007.

Primary care includes family practice, general practice, internal medicine, ob/gyn and pediatrics; specialists include all non-primary care specialties. Excludes³⁴ physicians with missing zip code.

Specialists

Distribution of Physicians, 2007 and Total Population by ZIP Code, 2005 North Carolina

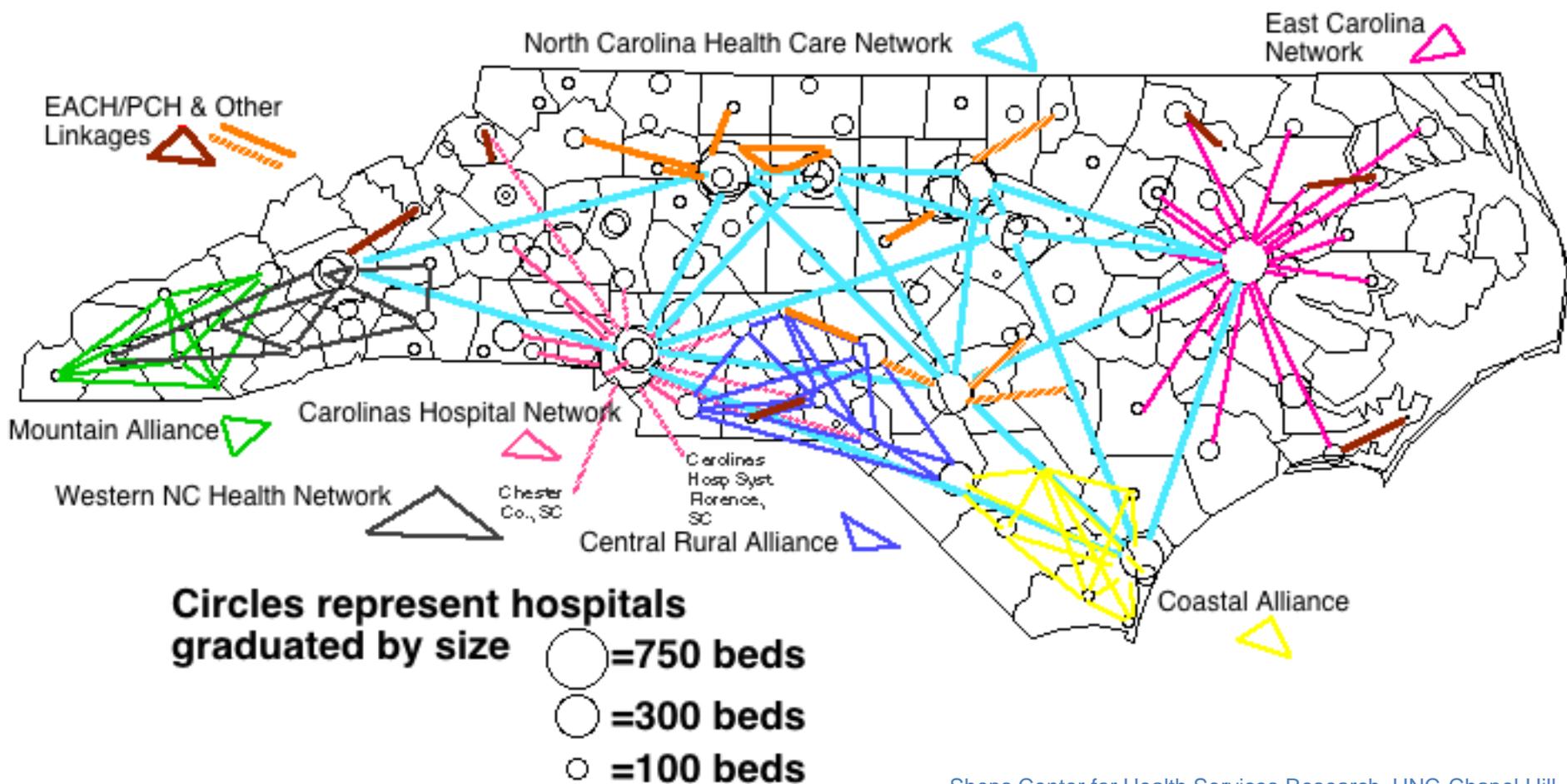


Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Medical Board, 2007.

Note: Data include active, in-state, non-federal, non-resident-in-training physicians who were licensed in NC as of October 31, 2007.

Primary care includes family practice, general practice, internal medicine, ob/gyn and pediatrics; specialists include all non-primary care specialties. Excludes 25 physicians with missing zip code.

Networking Phase I, the 1990s - Hospitals



Regional Advisory Committee (RAC) Affiliations by Hospitals March 1, 2006



RAC Listing*

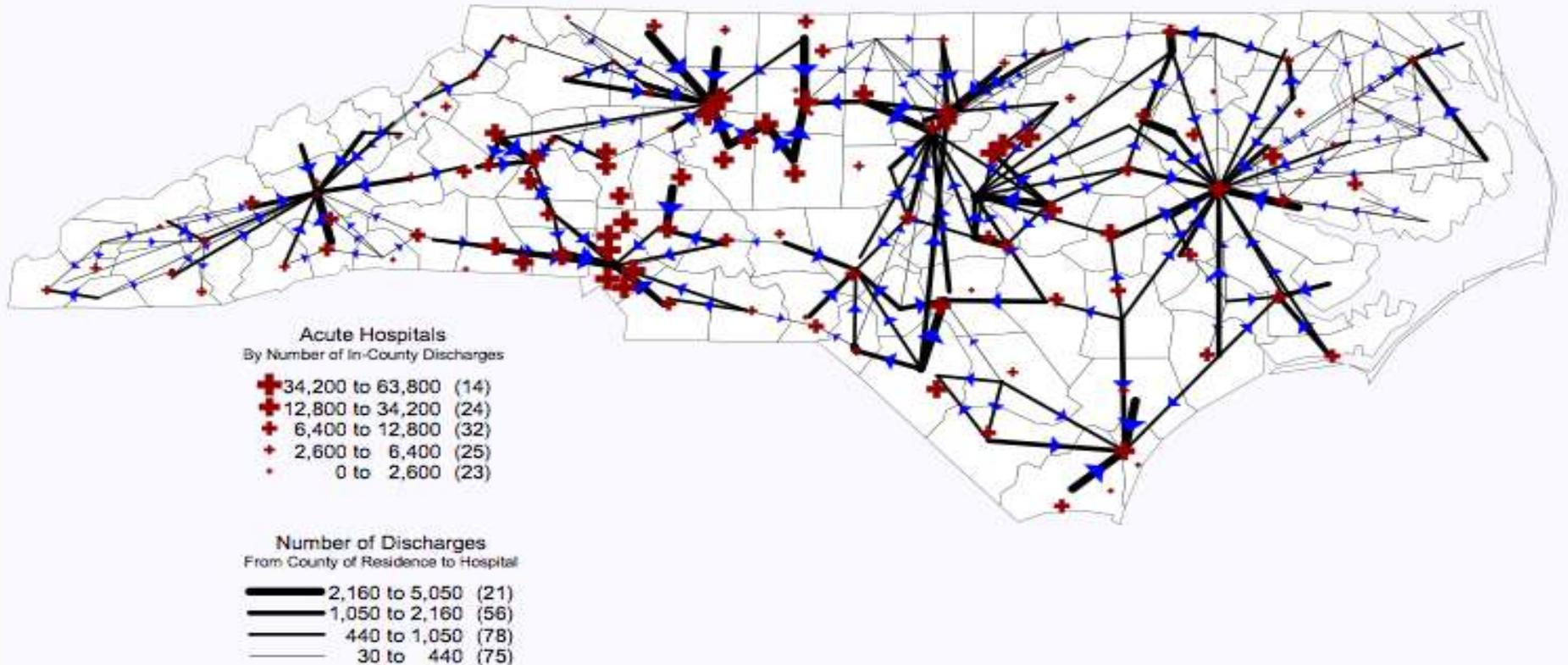
- Mountain Area Trauma RAC (Mission Hospitals)
- Metrolina Trauma Adv. Com. (Carolinas Med. Ctr.)
- Triad RAC (WFU Baptist/Moses Cone)
- Southeastern RAC (New Hanover Regional)
- Eastern RAC (Pitt Co. Memorial)
- Duke RAC (Duke Univ. Hospital)
- MidCarolina Trauma RAC (UNC)
- Capital RAC (WakeMed)

Indicates a Level I or II Trauma Center

* A county's RAC is determined by its hospital's RAC selection or, if no hospital in the county, by selection of a RAC by the primary EMS provider. A county with different colors indicates two or more hospitals with different RAC affiliations.

Map 1.

Patient Origin for North Carolina Residents and Acute Hospitals Inpatient Discharges by County of Residence and Hospital, Fiscal Year 2000



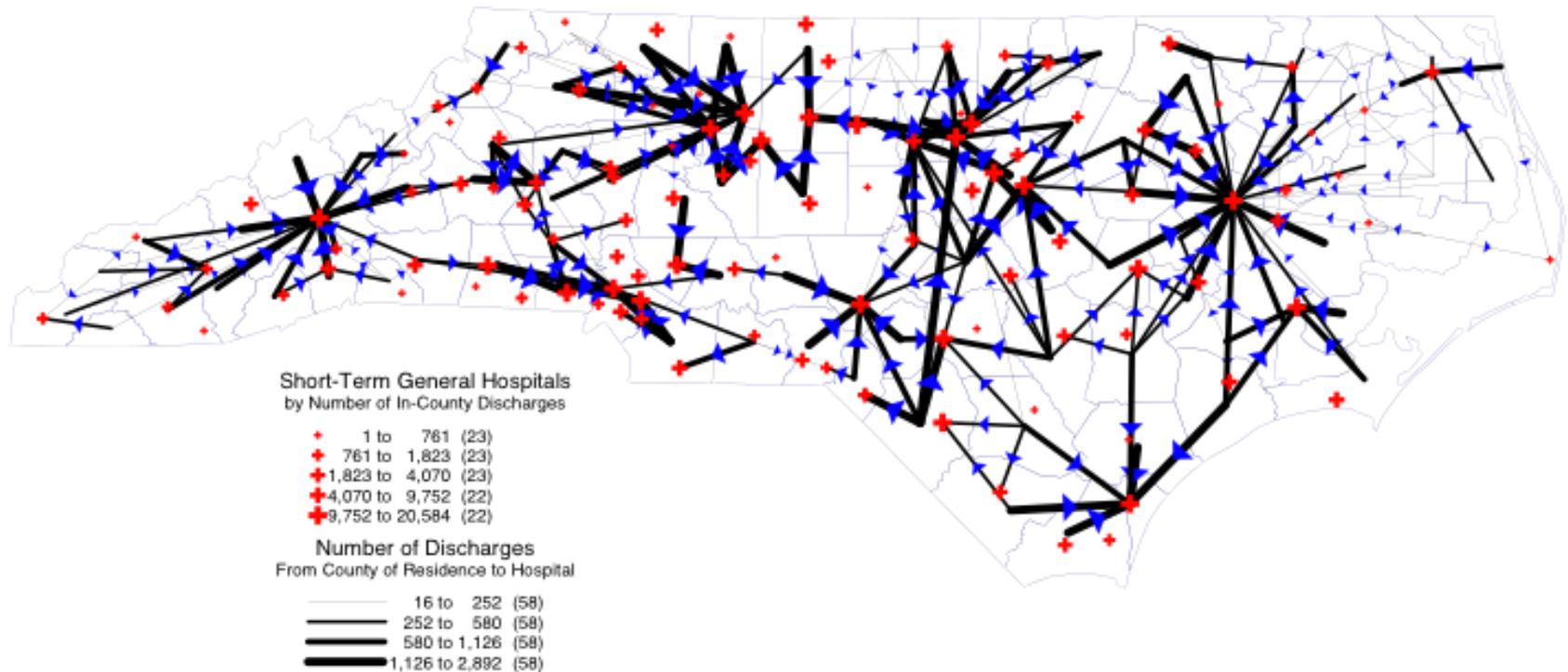
Source: Solucient, Fiscal Year 2000 (Oct. 1, 1999 - Sept. 30, 2000).
Produced by: North Carolina Rural Health Research Program, Cecil G. Sheps
Center for Health Services Research, University of North Carolina at Chapel Hill.

Notes: For any county, vectors are drawn only for hospitals receiving at least five percent of the county's admissions and counties with at least ten admissions. Admissions to psychiatric, rehabilitation and substance abuse facilities have been removed. Normal newborn admissions have also been removed.

Patient Origin for North Carolina Residents and Hospitals

Inpatient Discharges by County of Residence and Hospital

Residents Discharged from North Carolina Hospitals: October 1, 2005 to September 30, 2006



Note: For any county vectors are only drawn for hospitals receiving at least five percent of the county's Discharges.
Discharges from Psychiatric, Rehabilitation, Long Term Care, and Substance Abuse Treatment Facilities are not included.
Normal newborn discharges (DRG 391) excluded.

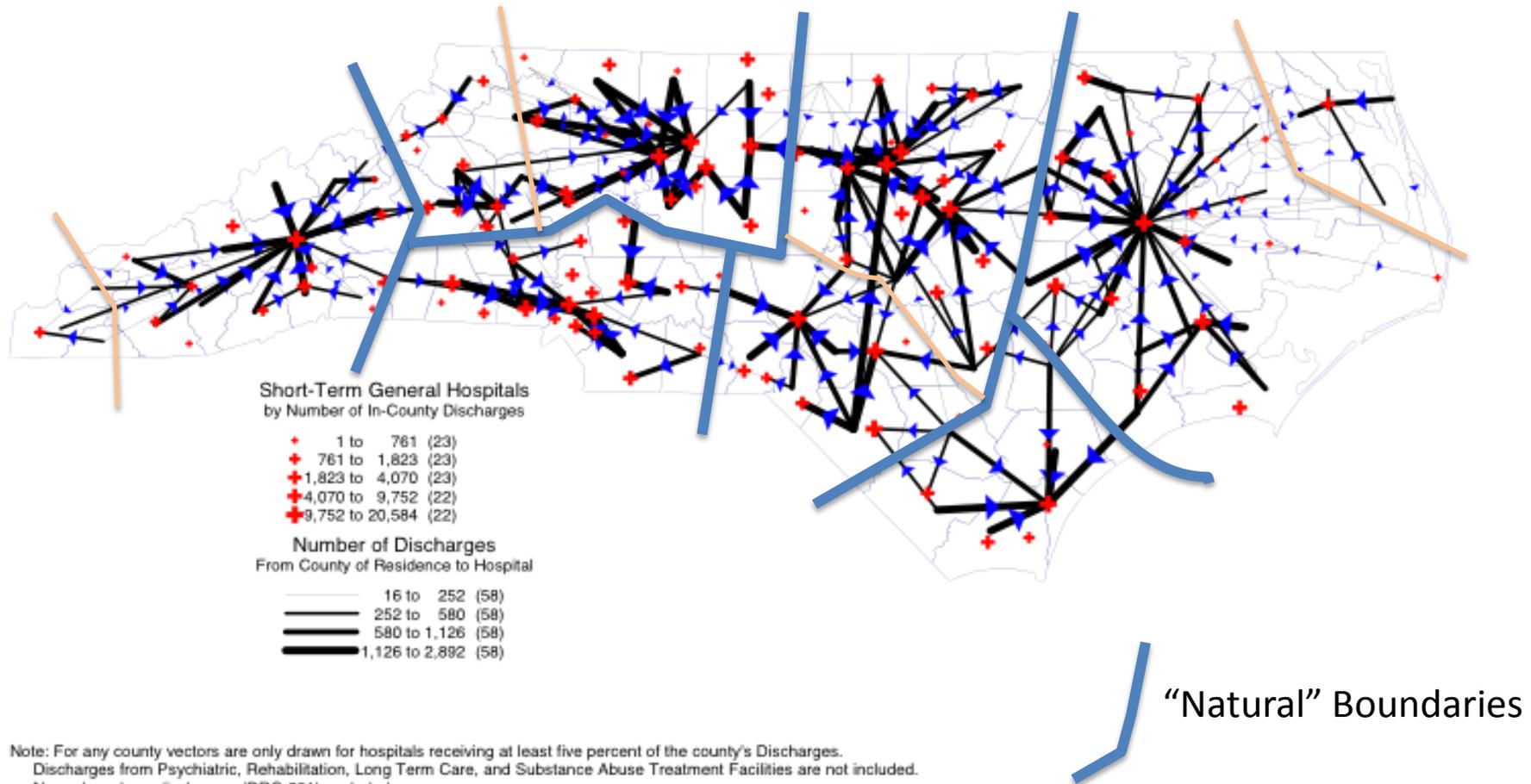
Source: Thomson Healthcare North Carolina Hospital Discharge Data, Fiscal Year 2006.

Produced By: Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Patient Origin for North Carolina Residents and Hospitals

Inpatient Discharges by County of Residence and Hospital

Residents Discharged from North Carolina Hospitals: October 1, 2005 to September 30, 2006

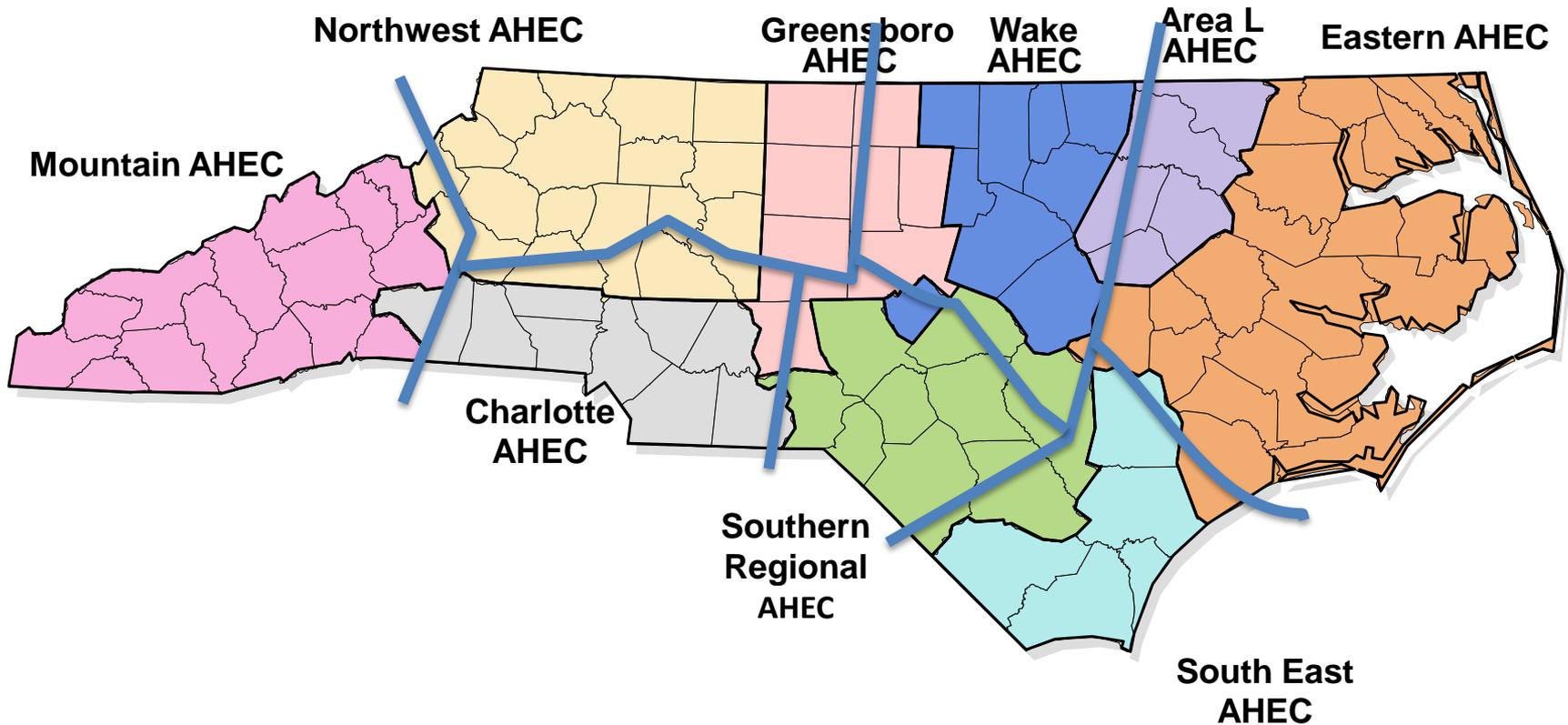


Note: For any county vectors are only drawn for hospitals receiving at least five percent of the county's Discharges.
 Discharges from Psychiatric, Rehabilitation, Long Term Care, and Substance Abuse Treatment Facilities are not included.
 Normal newborn discharges (DRG 391) excluded.

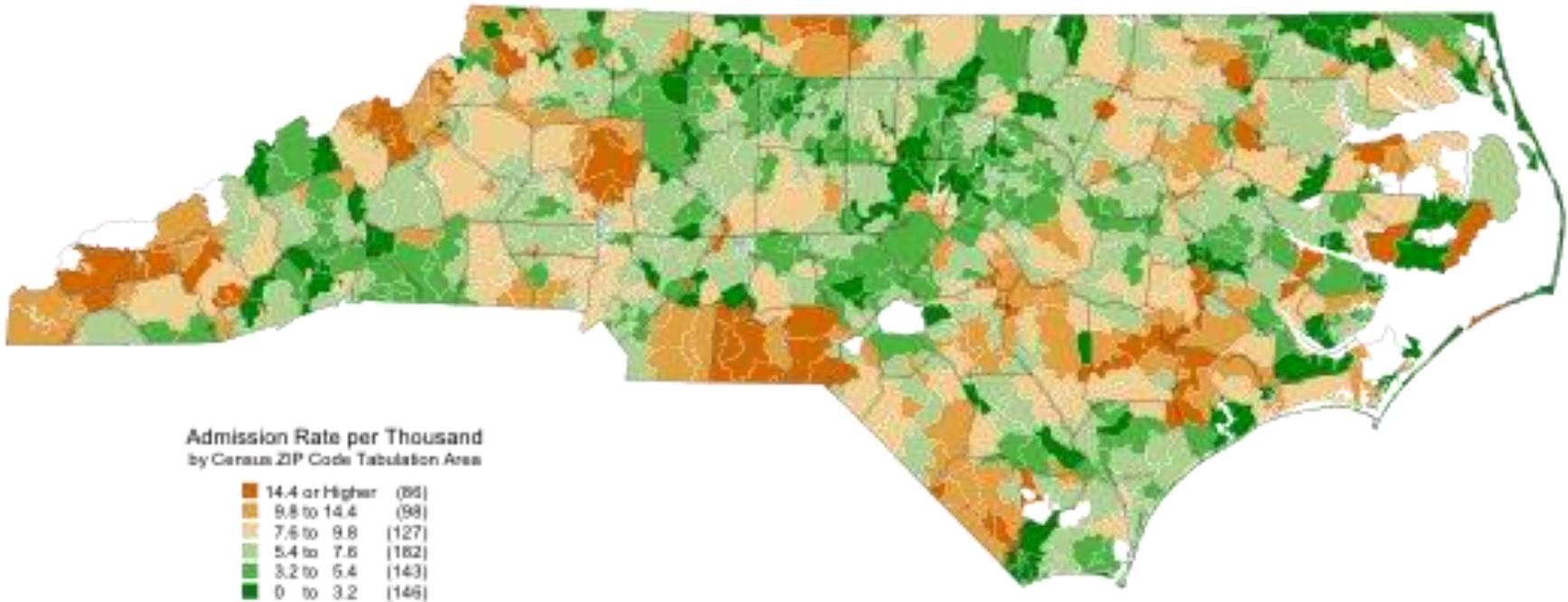
Source: Thomson Healthcare North Carolina Hospital Discharge Data, Fiscal Year 2006.

Produced By: Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

North Carolina AHEC Regions



Ambulatory Care Sensitive Condition Hospital Admissions (2005) by ZIP Code Tabulation Areas for Persons Under 18 Years



A Map of Problem-Regions

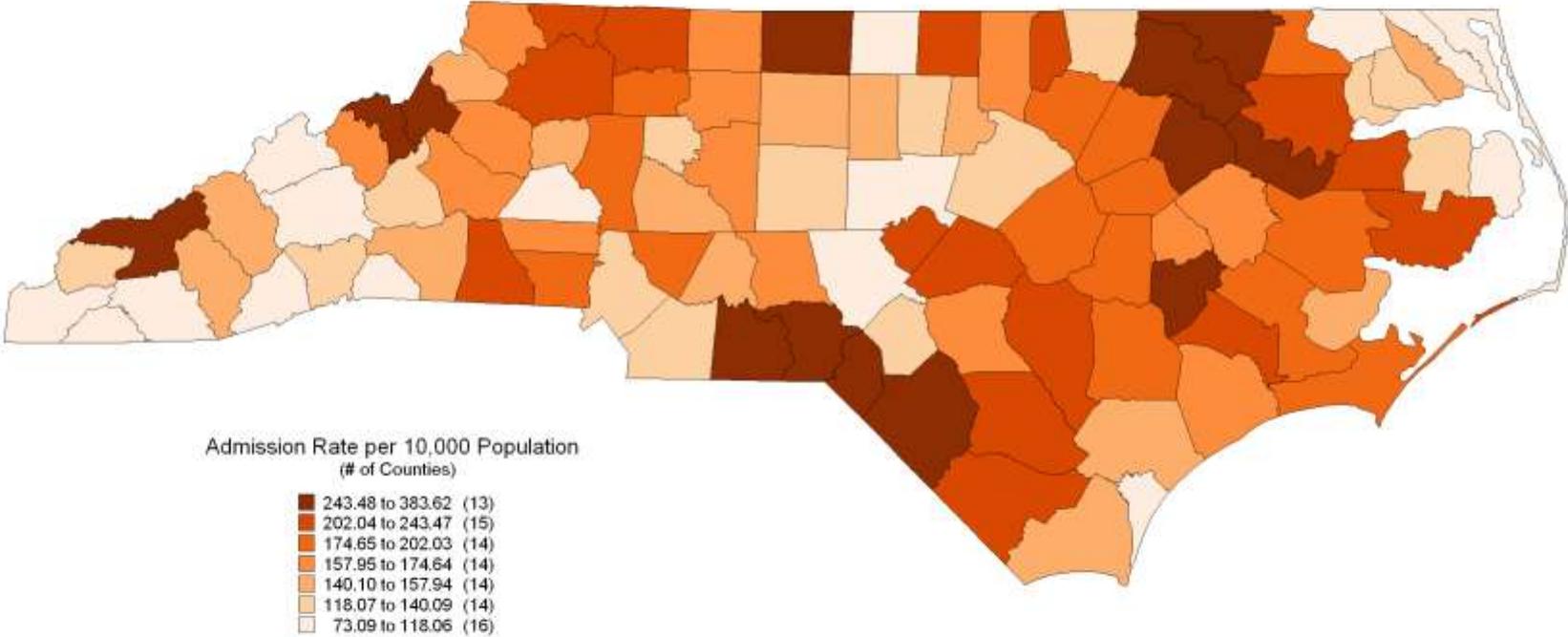
Note: Only admissions to North Carolina Hospitals are included.

Source: HCIA Inpatient Discharge Database, October 1, 2004 to September 30, 2005; US Census Bureau, 2000.

Produced by: North Carolina Rural Health Research and Policy Analysis Center, Cecil S. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Ambulatory Care Sensitive Condition Hospital Admissions (2008) All Conditions

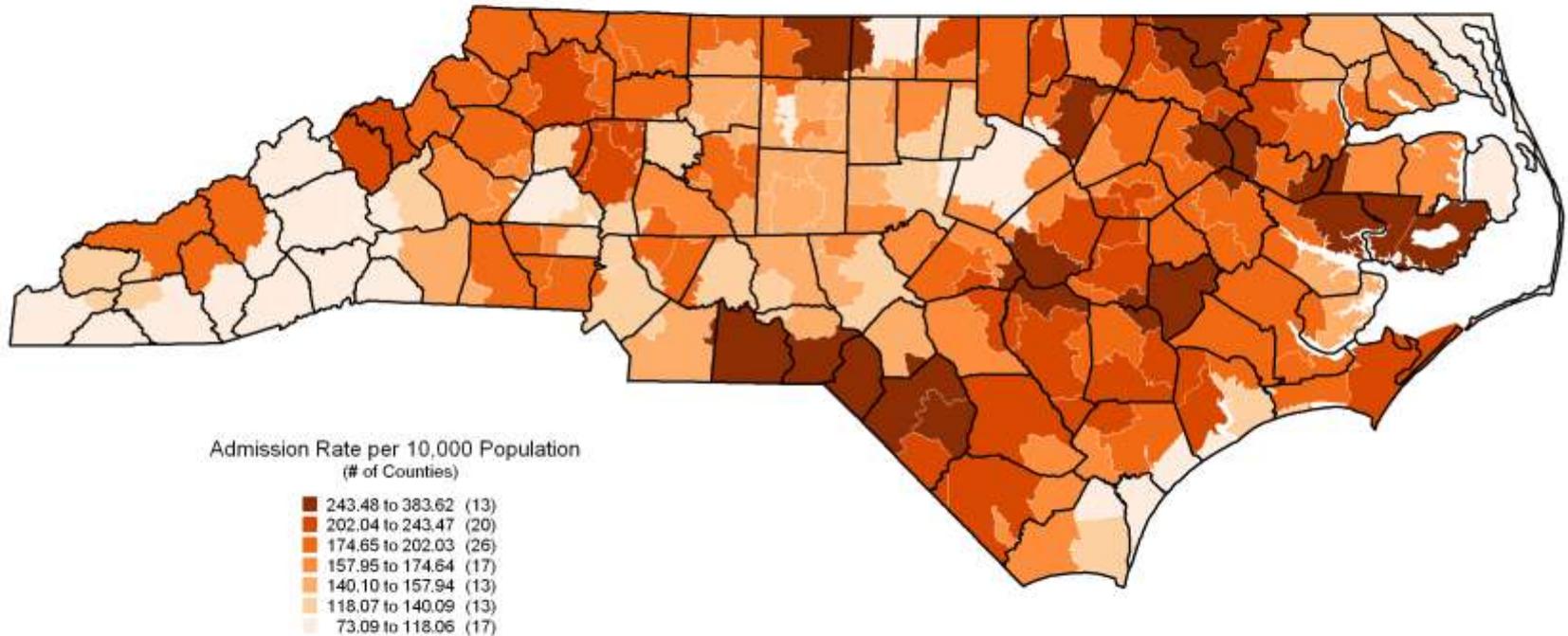
by County for All Persons



Note: Only admissions to North Carolina Hospitals are included.
Sources: Thomson Inpatient Discharge Database, October 1, 2007 to September 30, 2008; NC Office of State Budget and Management, 2008.
Produced by: North Carolina Rural Health Research and Policy Analysis Center, Cecil G. Steps Center for Health Services Research, University of North Carolina at Chapel Hill.

Ambulatory Care Sensitive Condition Hospital Admissions (2008) All Conditions

by PCSA Cluster for All Persons

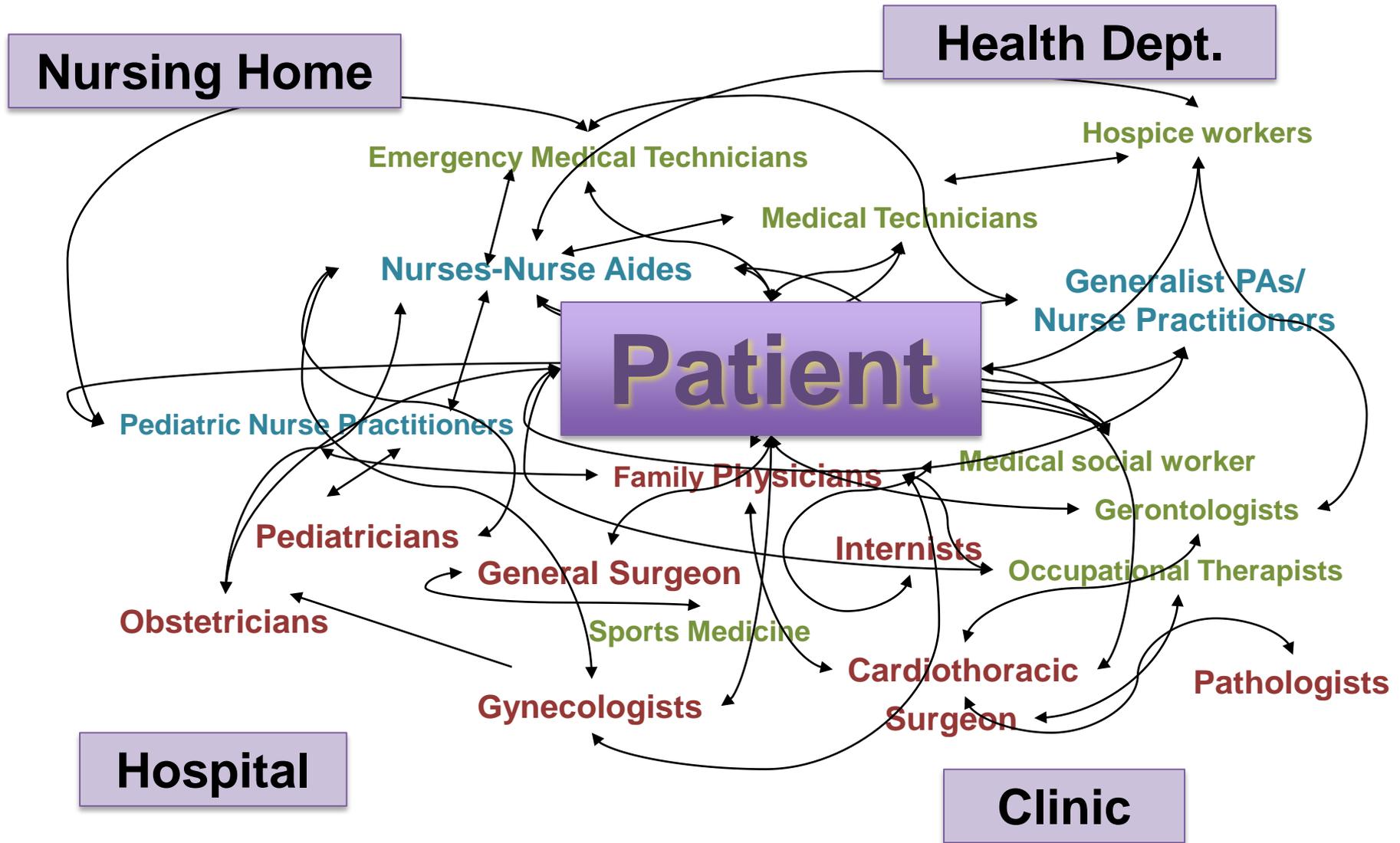


Note: Only admissions to North Carolina Hospitals are included. PCSA = Primary Care Service Area.

Sources: Thomson Inpatient Discharge Database, October 1, 2007 to September 30, 2008; 2008 Pop-Facts database for ZIP Codes; Nielsen Claritas Inc. Ithaca, NY; 2008.

Produced by: North Carolina Rural Health Research and Policy Analysis Center, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Patient-Centered Geography



Numbers of Other Physicians and Practices Among Whom Primary Care Physicians Must Coordinate Care for Fee-for-Service Medicare Beneficiaries Under Different Methods of Assigning Patients

Fee-for-Service Medicare Beneficiaries Under Different Methods of Assigning Patients

Practices or Physicians	Plurality Assignment			Total Peers (IQR), n
	Median Peers per 100 Beneficiaries (IQR), n	Median Peers (IQR), n	Median Peers (IQR), n	
Other practices as peers				
Related to care of all Medicare patients	53 (35–84)	117 (66–197)	27 (14–45)	67 (28–104)
Related only to care of primary patients with ≥ 4 chronic conditions†	36 (18–62)	86 (41–138)	24 (13–40)	61 (28–95)
Related to care provided during 1 month‡	7 (4–11)	18 (8–29)	4 (2–7)	10 (4–19)
Other physicians as peers				
Other primary care physicians	99 (70–143)	229 (125–340)	33 (22–52)	78 (41–118)
Other primary care physicians	29 (20–41)	64 (35–95)	17 (12–44)	40 (20–60)
Medical specialists	32 (20–52)	77 (40–118)	19 (11–30)	47 (22–74)
Surgeons	28 (17–44)	65 (30–104)	17 (10–28)	41 (17–69)
Emergency medicine physicians	7 (3–11)	17 (7–27)	4 (1–8)	11 (3–19)

86 peer doctors for patients with >4 conditions

CTS = Community Tracking Study; IQR = interquartile range.

* Based on Medicare claims data for 576 875 fee-for-service beneficiaries treated at least once by 1 of 2284 CTS primary care physicians in 2005. We calculated the number of peers as the sum of the number of other practices in which physicians also treated the primary patients of the CTS primary care physician plus the practice of the physician who served as the primary provider for the CTS primary care physician's other (nonprimary) Medicare patients. We identified primary patients as beneficiaries for whom the CTS primary care physician billed the greatest number of evaluation and management visits (plurality assignment) or with the added criterion that the CTS primary care physician billed for at least 50% of evaluation and management visits (majority assignment) in 2005. We resolved ties by assigning the physician who billed for the greatest total charges for that beneficiary. Primary patients accounted for a median of 50% and 30% of a CTS primary care physician's Medicare panel under plurality and majority assignments, respectively.

† We determined the number of chronic conditions by using the method of Hwang and colleagues (15). Patients with ≥ 4 conditions accounted for a median of 31% of each CTS primary care physician's Medicare patient panel.

‡ We calculated monthly medians on the basis of visits in March, June, and September 2005.