



Primary Care Service Areas

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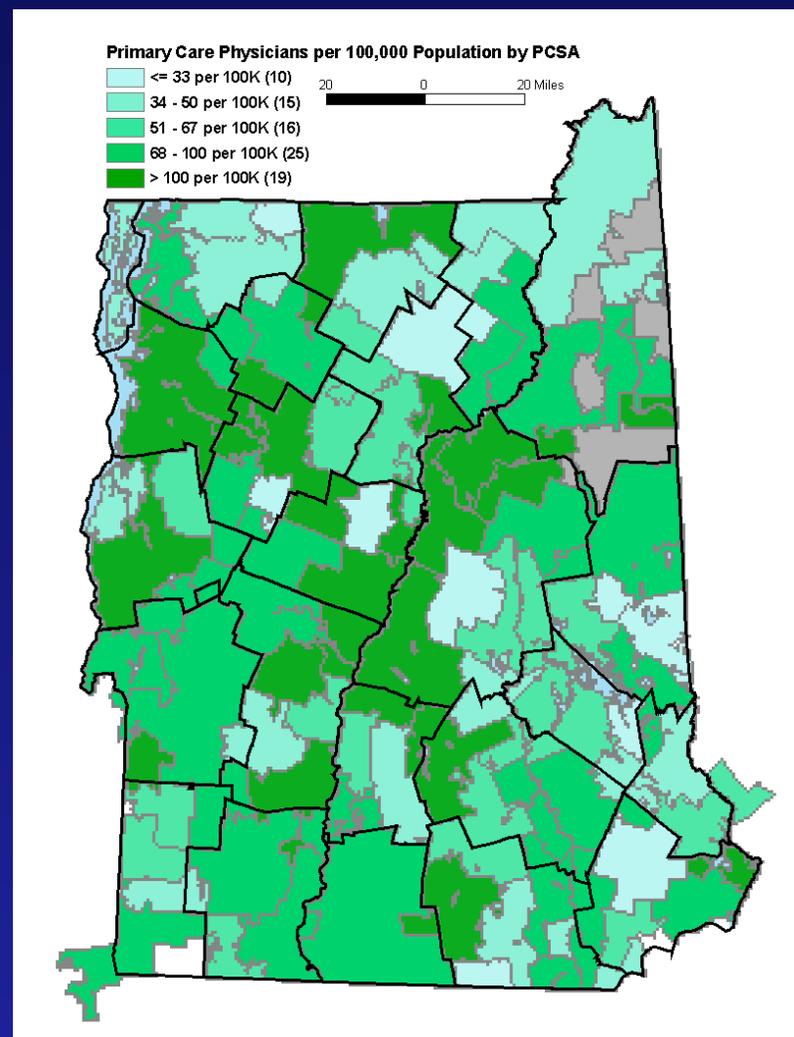
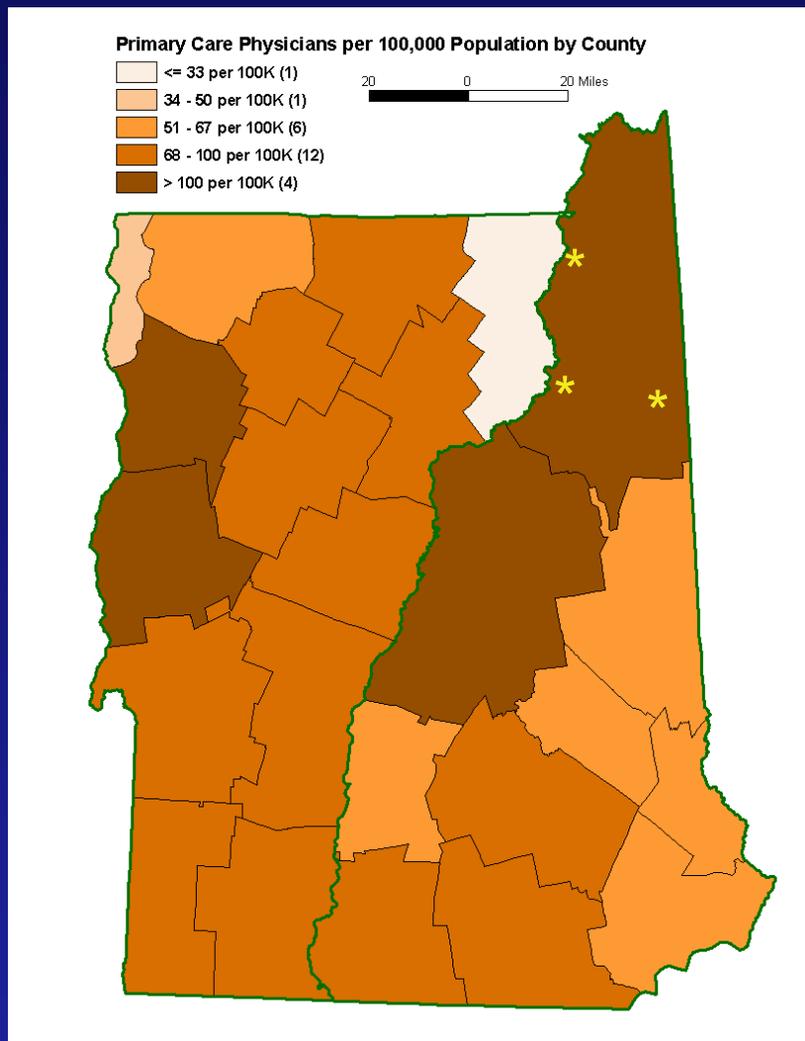
Funded by:

The Bureau of Health Professions

The Bureau of Primary Health Care

The Health Resources and Services Administration

Counties provide coarse measures of primary care physician supply



Primary Care Service Areas (PCSA)

A PCSA is the smallest geographic area that can be considered a discrete service area for primary care.

A PCSA includes a ZIP Code Tabulation Area with one or more primary care providers, and any additional contiguous ZCTAs, whose populations seek the plurality of their primary care from the same providers.

Currently defined with Medicare claims.

Methods

Primary Care Service Areas: A New Tool for the Evaluation of Primary Care Services

David C. Goodman, Stephen S. Mick, David Bott, Therese Stukel, Chiang-hua Chang, Nancy Marth, Jim Poage, and Henry J. Carretta

Objective. To develop and characterize utilization-based service areas for the United States which reflect the travel of Medicare beneficiaries to primary care clinicians.

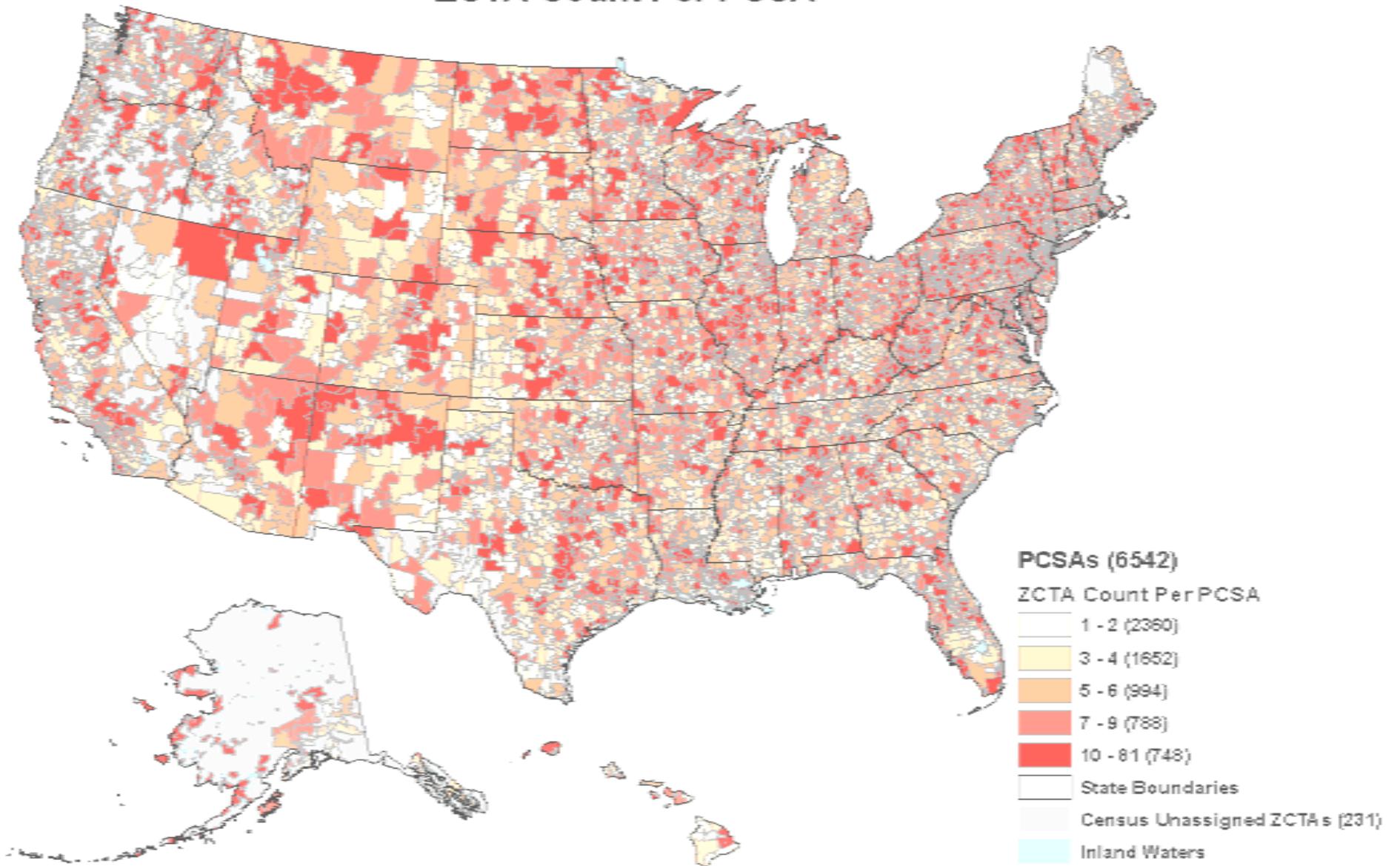
Data Source/Study Setting. The 1996–1997 Part B and 1996 Outpatient File primary care claims for fee-for-service Medicare beneficiaries aged 65 and older. The 1995 Medicaid claims from six states (1995) and commercial claims from Blue Cross Blue Shield of Michigan (1996).

Study Design. A patient origin study was conducted to assign 1999 U.S. zip codes to Primary Care Service Areas on the basis of the plurality of beneficiaries' preference for primary care clinicians. Adjustments were made to establish geographic contiguity and minimum population and service localization. Generality of areas to younger populations was tested with Medicaid and commercial claims.

Data Collection/Extraction Methods. Part B primary care claims were selected on the basis of provider specialty, place of service, and CPT code. Selection of Outpatient

Primary Care Service Areas, v2.1

ZCTA Count Per PCSA



Primary Care Service Areas

N = 6,542 (v2)

	<u>Median</u>	<u>Mean</u>	<u>Min.</u>	<u>Max.</u>
Population	14,922	42,012	1,005	1,329,444
Population Zips/ ZCTAs	3	4.9	1	81
Provider Zips ZCTAs	1	2.4	1	41
Preference Index	0.61	----	0.3	0.97
Land Area	222			10,531

Overall Preference Index = 0.67

(the percent of Medicare patients seeking primary care from within PCSA providers)

Users of PCSAs and Associated Data

- *States:*
 - For the identification of populations and areas with inadequate primary care.
- *Federal:*
 - To assess the distribution of the primary care workforce and utilization.
 - For the evaluation of programs intended to improve the availability of primary care.
- *Policy research:*
 - That requires standardized and finely detailed measures of primary care.

PCSA Database

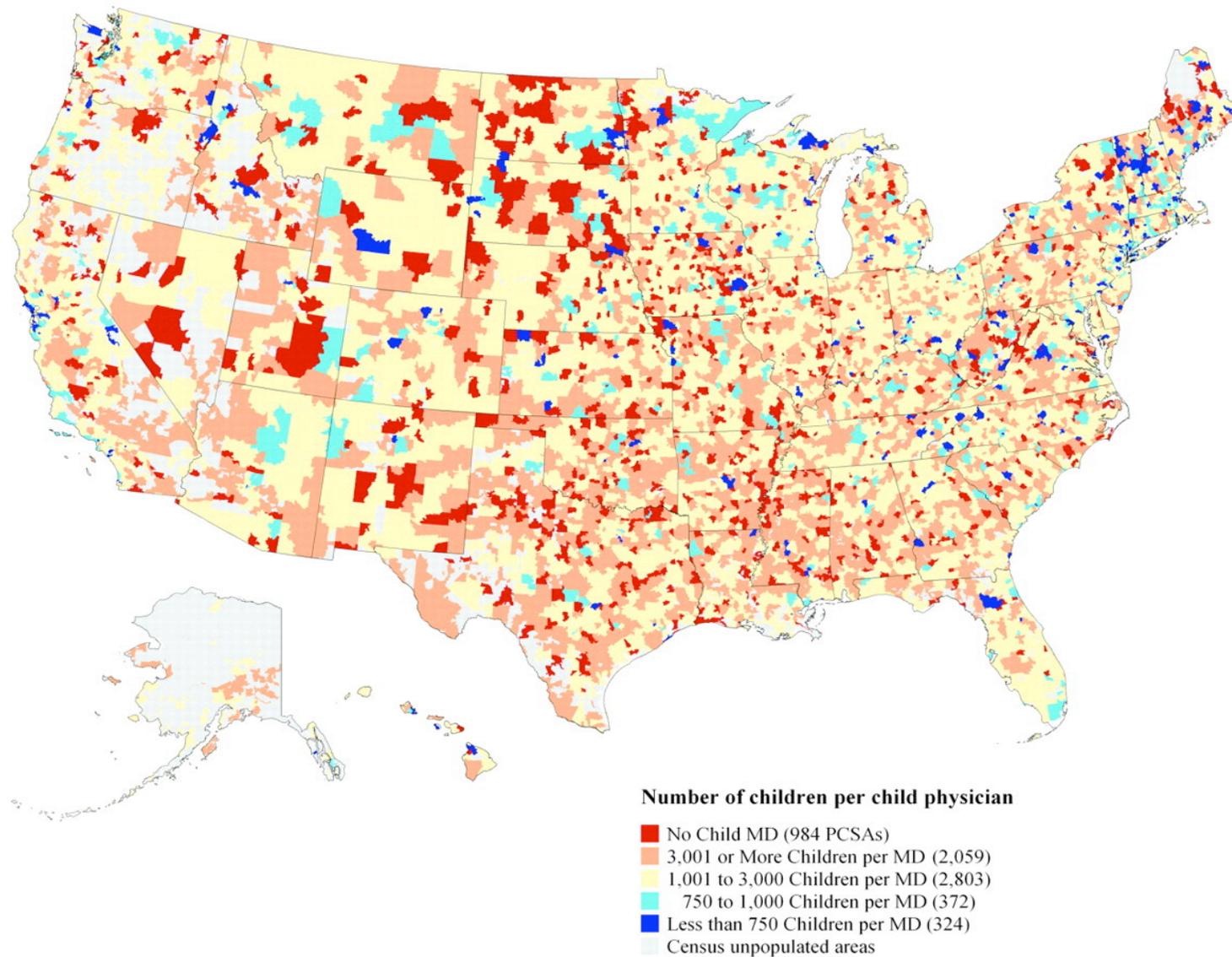
(HRSA Geospatial Warehouse, HealthLandscape,
pcsa.dartmouth.edu, www.dartmouthatlas.org)

- **Providers:** MD, DO, RHC, FQHC, Hospitals, PA.
- **Population:** Demographics, SES, linguistic isolation
- **PCSA characteristics:** #ZIPs, localization, land area
- **ZIP characteristics:** Assignment data
- **Medicare utilization and mortality**
- **Cartographic files for mapping**
- **Geographic relationships:** PCSA to HPSA/MUA, RUCAs
- **Travel burden:** minutes to 1st & 2nd nearest primary care provider.

Reasons for Using Medicare Data to Define PCSAs

- Primary care for the elderly is the most localized type of medical care.
 - Elderly seek primary care from FP and general internal medicine physicians, the most widely distributed primary care providers.
 - Elderly are more likely to see their nearest provider.
- Medicare data:
 - documents care for the entire non-HMO population ≥ 65 .
 - is available for every year.

FIGURE 1 Extremes of child physician (MD) supplies in 2006 in PCSAs (N = 6542)



Current Areas for HSPA / MUA Designation

HPSAs: rational service areas	MUAs
County or contiguous counties whose population centers are within 30 min. of each other.	A non-metro county
Portions of counties with limited access to contiguous resources (> 30 min. to resources)	A minor civil division/county census division
Metro neighborhoods and communities with strong self-identity; limited interaction with contiguous areas, min pop. 20k	A metropolitan census tract
	Group of CTs, MCDs, or CCDs that constitute a “natural neighborhood” for MUA designation

PCSAs for Evaluating Primary Care

Advantages	Disadvantages
1. Reflect existing patterns of care for a population (the elderly) that seeks care close to home.	1. Sometimes existing patterns of care are “irrational” because of deficient PCP capacity.
2. Routinely defined and available for the entire nation.	2. Too large in some places.
3. Linked to data that is updated regularly.	3. Do not incorporate local information about barriers to access.
4. Defined with a standardized method for the nation.	4. Defined with data for only the > 65 population.
5. Database includes information about PCSA “building blocks” (ZIP areas).	5. Not developed by the states/ applicants.
6. Free.	
7. Could be used as optional starting point for HSPA/MUA areas.	