



AAFP Center for Policy Studies

Impact of Proposed Rule on Designation of Medically Underserved Populations and Health Professional Shortage Areas: 73 Fed. Reg. 11232, et seq (February 29, 2008)

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The Department of Health and Human Services recently proposed to restructure the primary care shortage area designation process. Preliminary analyses using the proposed new methods point to dramatic impact on the landscape of shortage areas, with loss of designation for areas containing 31.8 million persons and 31,000 primary care physicians, and gains for 11.5 million persons and 5,100 primary care physicians.

Introduction: This notice of proposed rule making (NPRM) is a major attempt to revise and consolidate the process for designating Medically Underserved Areas and Populations (MUA/Ps) and Primary Care Health Professional Shortage Areas (HPSAs).¹ It follows an earlier failed proposal in 1998-99 (NPRM1) and attempts to correct problem of both the current designation process and address perceived shortcomings of the NPRM1 approach. This notice was presented to the public February 29, 2008 with a 60 day period for comments prior to implementation. Changes to the designation process have far-reaching consequences for providers and populations in underserved areas, as 34 federal programs depend on these shortage designations for eligibility and funding preference purposes.^{2,3} This brief summarizes a preliminary analysis of the impact of the updates and changes on the potential designation of current HPSAs, MUAs and undesignated areas and the population, providers, and health care delivery sites within each.

Current Methods for Designation: Currently, a geographic area can be designated as a primary care HPSA if it 1) is a rational service area (RSA) for the delivery of primary care, 2) has less than one primary care physician per 3,500 people, or less than one PCP per 3000 people with unusually high needs for primary care services or insufficient capacity of nearby providers and 3) its contiguous areas are overutilized or too distant to

¹ Department of Health and Human Services, "Designation of Medically Underserved Populations and Health Professional Shortage Areas," *Federal Register* 73(41):11232-81, Feb. 29, 2008.

² Health Resources and Services Administration. "Shortage Designation." www.bhpr.hrsa.gov/shortage.

³ Government Accountability Office. October 2006. "Health Professional Shortage Areas: Problems Remain with Primary Care Shortage Area Designation System." GAO-07-84

meet local needs.(<http://bhpr.hrsa.gov/shortage/hpsacritpcm.htm>). Roughly 24% of U.S. counties are RSAs that currently qualify for whole-county HPSA status, but smaller qualifying RSAs (homogenous neighborhoods, communities or population clusters) are found in an additional 40% of U.S. counties. Medically Underserved Areas are geographies (contiguous county areas or smaller) that reach a certain score or lower on the Index of Medical Underservice (IMU), which is a summary of weighted values for four characteristics of these areas: 1) the ratio of primary medical care physicians per 1,000 population, 2) infant mortality rate, 3) percentage of the population with incomes below the poverty level, and 4) percentage of the population age 65 or over. The same criteria can be applied to underserved population groups within an area of residence to declare a Medically Underserved Population (MUP). There are approximately 1,435 whole county MUAs and 1,090 counties with subcounty MUA or MUP designations. The stated goals of the NPRM process are:

- To establish a uniform HPSA and MUA designation process and criteria.
- To enable greater universal application by using national data, thus reducing the need for independent data collection (state/local data and population group data can be submitted if national data does not result in designation).
- To automate the scoring process, thus minimizing state and local efforts in gathering data and updating designations.
- To expand the state role in defining rational service areas and identifying underserved populations and unusual local conditions.
- To reduce the need for population group designations, which typically are more resource-intensive, by adjusting an area's base ratio, which should increase the designation of areas with concentrations of underserved populations.

The new process by which a 'rational service area' – counties plus state and locally-designated aggregations of smaller areas - would achieve shortage designation involves six steps

- 1) Calculate the "effective barrier free population" – the utilization rate of the population if it did not have any barriers to care, adjusted for age and gender. This calculation relies on 1996 estimates of the number of visits per physician from the Medical Expenditure Panel Survey.
- 2) Obtain a count of the number of full-time equivalent(FTE) PCPs (primary care providers), which includes not just physicians as in the current system but includes a discounted FTE count for hospital residents, nurse practitioners, physician assistants and certified nurse midwives.
- 3) Calculate the base population-to-provider ratio (the proxy for need for services) by dividing the effective barrier-free population by the number of FTE PCPs.

- 4) Adjust the base population-to-provider ratio for community characteristics that impact available resources – develop “weighted scores” using nine variables, which indicate a greater need for services but a lower utilization rate than the average “barrier-free” population. The variables are 1) percent non-white, 2) percent Hispanic, 3) percent of population greater than 65 years, 4) percent of population earning less than 200% of FPL 5) unemployment rate, 6) standardized mortality rate 7) low birth weight rate, 8) infant mortality rate, and 9) population density.
- 5) Add the resulting scores are added to the base ratio to derive the adjusted population-to-provider ratio (the proxy for the relative need for services in the area). Determine if the adjusted ratio is greater than the threshold for under-service – compare the adjusted population-to-provider ratio to the predetermined threshold ratio of under-service (proposed at 3000:1).
- 6) Determine tiers of shortages – remove the number of federally-sponsored PCPs (NHSC personnel, providers obligated under State Loan Repayment Program, physicians working under J-1 visa waivers, all other PCPs providing services at Section 330-supported health centers) from the total number of FTE PCPs.
 - i. Tier 1 designation – areas that continue to exceed the threshold even when all federally-sponsored PCPs are included.
 - ii. Tier 2 designation – areas that exceed the threshold only when the federally-sponsored PCPs are excluded.

Updated Data Analysis: Our analysis borrows and benefits from an updated impact testing of the proposed new methodology for designation of underserved areas contracted by DHHS and executed by the Sheps Center in 2007. This impact testing was an update to that done in 2000-01, using data from 1998-1999. This update included some revisions to the originally proposed methodology, including updated weights and adjustment more reflective of recent access surveys and population data. Using Ricketts Area-level files, we were able to produce estimates of the impact of the proposed regulations on all current HPSAs and MUAs, including estimates of the number of people, physicians, and health centers that might be impacted

Results: Impact on People, Populations, and Safety Net Facilities: Using data made available by the Sheps Center, we estimate loss of designation for 605 current HPSAs, containing 32 million persons 31,565 primary care physicians (about half of them family physicians) (Table 1). We estimate loss of designation for 917 current MUAs, containing 31 million persons, and nearly 39,000 primary care physicians (Table 2). We also estimate new designations for 381 counties, which include 12 million persons, 5,105 primary care physicians federally qualified health centers. Tables 3 -5 break these down by existing HPSAs and MUAs, as well as by persons, physicians and FQHCs.

Table 1

Summary Table

Impact of "Automated" Redesignation of Current HPSAs Based on National Data.

		Proposed Regulations	
		Yes	No
Current Regulations	Yes	Areas=1,807 Affecting 46 Million people and 20,001 PC Physicians	Areas=605 Affecting 32 Million people and 31,565 PC Physicians
	No	Areas=381 Affecting 12 Million people and 5,105 PC Physicians	Areas=1,730 Affecting 210 Million people and 217,619 PC Physicians

Note: The 1730 areas not covered by either current regulations or proposed regulations include 739 whole counties and the part of 991 counties not currently included in HPSAs. Calculations are based on data made available to Robert Graham Center by Dr. Thomas Ricketts.

Table 2

Summary Table

Impact of "Automated" Redesignation of Current MUAs Based on National Data.

		Proposed Regulations	
		Yes	No
Current Regulations	Yes	Areas=2,837 Affecting 57 Million people and 26,074 PC Physicians	Areas=917 Affecting 31 Million people and 38,828 PC Physicians
	No	Areas=170 Affecting 4 Million people and 1,538 PC Physicians	Areas=1,195 Affecting 208 Million people and 207,850 PC Physicians

Note: The 1730 areas not covered by either current regulations or proposed regulations include 446 whole counties and the area within 749 counties not currently included in MUAs. Calculations are based on data made available to Robert Graham Center by Dr. Thomas Ricketts.

Significance: Given the array of entitlements and federal, state, and local assignments of resources that depend on these designations, the potential effects of a revised system are vast and their political and economic importance considerable. In 1998, the last proposed designation revision generated 800 public comments, principally citing concern over the negative impact on existing safety net programs, which resulted in its withdrawal for further testing and revision.

Concerns: The proposed regulations document is concerning for several reasons (See Table 5 (Appendix) for details):

- The use of a dated information assessment doesn't permit transparency in the assessment of impact of these proposed changes. HRSA should make an updated impact analysis, using contemporary data, available to all constituents prior to closure of a comment period.
- Inner city urban areas and populations risk a negative impact, due to the strong weighting of low population density in the designation process.
- The impact analysis relies on multiple data sources,
 - Of mixed quality, particularly regarding non-physician providers
 - And frequently intersecting old and contemporary data
- The proposed implementation process is not clearly defined
- The three levels of determination appear to open the door for radical increases in the number of shortage areas, potentially obscuring areas of greatest need. Specifically,
 - There exists a strong potential for manipulations of rational service area (RSA) geographies to meet new designation criteria
 - The second step of the designation process as described many allow jurisdictions with more resources to achieve designation.
 - There are a large number of partial HPSAs apparently eligible to become full county HPSAs.

Potential benefits: There are several potentially positive outcomes from these rules, including:

- The automatic designation of some underserved counties, especially in rural areas and jurisdictions without resources
- The designations of new safety net clinics based on their patient data and measures of underserved populations served
- That physicians may be better-reimbursed for care of underserved people in some areas
- That underserved populations surrounded by otherwise well-off people receive resources that they would not have previously

APPENDIX:

Table 3. Additional Information Regarding HPSA Impact Based on Tier 2 with Low Income Approach

Current Designation	Not Designated by New Method				Designated by New Methods			
	Total	Number of Areas	Population	PC Physicians in Area	Total	Number of Areas	Population	PC Physicians in Area
Single County	755	83	1,862,003	1,457	672	10,991,236	3,814	
Geographic Part County	686	104	3,279,969	3,184	582	15,231,261	6,433	
Low Income Population	971	418	26,749,479	26,924	553	19,366,156	9,754	
Subtotal	2,412	605	31,891,451	31,565	1,807	45,588,653	20,001	
Undesignated Counties	1,120	739	79,514,888	74,755	381	11,514,428	5,105	
Designation								

Table 4. Additional Information Regarding MUA Impact Based on Tier 2 with Low Income Approach

Current Designation	Not Designated by New Method				Designated by New Methods			
	Total	Number of Areas	Population	PC Physicians in Area	Number of Areas	Population	PC Physicians in Area	PC Physicians in Area
Single County	1,434	262	11,424,365	8,596	1,172	25,297,055	10,505	
Geographic Part County	2,008	506	9,906,605	21,054	1,502	25,229,277	12,611	
Low Income Population	312	149	9,552,651	9,178	163	6,197,354	2,958	
Subtotal	3,754	917	30,883,621	38,828	2,837	56,723,686	26,074	
Undesignated Counties Designation	616	446	36,353,475	32,697	170	3,834,314	1,538	

Analysis based on data supplied by Thomas Ricketts used in his "Final Report" analysis. Tables 1' and 2' correspond to the first two Tables in the executive summary of Rickett's paper.

Table 5. CHCs Potentially Losing Geographic Designation

	Not Designated by New Method		Designated by New Methods	
	CHC	RHCS	CHC	RHCS
	Number of Areas		Number of Areas	
Current Single County Designation	1,434	262	283	345
Geographic Part County	2,008	506	630	233
Low Income Population	312	149	216	129
Subtotal	3,754	917	1,129	707
Undesignated Counties	616	446	245	297
No Designation				
			1,172	954
				1,448
				305
				129
				1,882
				175