

## IF FEWER INTERNATIONAL MEDICAL GRADUATES ARE ALLOWED IN THE US, WHO MIGHT REPLACE THEM IN RURAL, UNDERSERVED AREAS?

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International medical graduates (IMGs) constitute an important component of the US medical workforce. Their numbers have increased rapidly over the past decade, at a time when many observers believe there is a national physician surplus. Because many IMGs practice in underserved rural communities, concerns have arisen about what might happen if fewer IMGs are available to work in such settings. This study had two aims: (1) to identify rural communities that would be most affected should restrictions on IMG entry into the United States be tightened; and (2) to report perceptions of physician recruiters and health planners about who might replace IMGs currently working in such areas. Findings suggest that one of every five adequately served rural counties would be underserved without IMGs. Further, interviews with policy stakeholders suggest that currently proposed solutions for replacing IMGs (e.g., expansion of the National Health Service Corps, reliance on state medical schools) have serious shortcomings.

### BACKGROUND

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Recent recommendations by the Council on Graduate Medical Education and six medical associations have called for a reduction in the supply of new IMGs to help lower national physician oversupply. Proposed IMG cutbacks would be achieved by curtailing access to graduate medical education, where IMGs receive J-1 visas to attend residency training programs, or by eliminating J-1 visa waivers that allow IMGs to stay in the country after their residency training is complete if they work in an underserved area. Under the recent policy recommendations, J-1 visa waivers to practice in underserved areas would be phased out entirely, returning the J-1 visa to its original intent of training physicians to bring skills back to their home countries. Although no new waivers would be granted to practice in underserved areas, IMGs already on a waiver would be allowed to complete their obligations, and currently allowed waivers for family hardship or threat of persecution would be unaffected.

Reducing national physician oversupply while still eliminating local physician shortages in underserved areas will be difficult. J-1 visa waiver requests to practice in underserved areas have increased from 70 in 1990 to 1,374 in 1995, representing a substantial presence in underserved areas. Proposals to find substitutes for IMGs have focused on relatively simple solutions; i.e., reliance on a considerable, often unspecified, expansion of the National Health Service Corps (NHSC) or on an increased role for state medical schools, but it is not known if these strategies will be successful.

### METHODS

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Data from the 1991 and 1996 American Medical Association Physician Masterfile were used, in conjunction with the 1999 Bureau of Health Professions Area Resource File, to document the number and types of rural communities that would be most affected should a cutback in IMGs occur. Data analyses were limited to rural areas, as defined by the Office of Management and Budget in 1999. Analyses were also limited to active, primary care physicians working in direct patient care.

The issue of who might replace IMGs in the rural workforce should a cutback occur was addressed through 15 semi-structured interviews with state policy makers, health planners, and physician recruiters in Florida, New York, North Dakota, and West Virginia. These four states were selected because their concentrations of IMGs in rural areas are among the highest in the nation. In three of these states, IMGs constitute at least 40% of the physician workforce in rural underserved areas; the comparable figure for New York is 23.1%.

## RESULTS

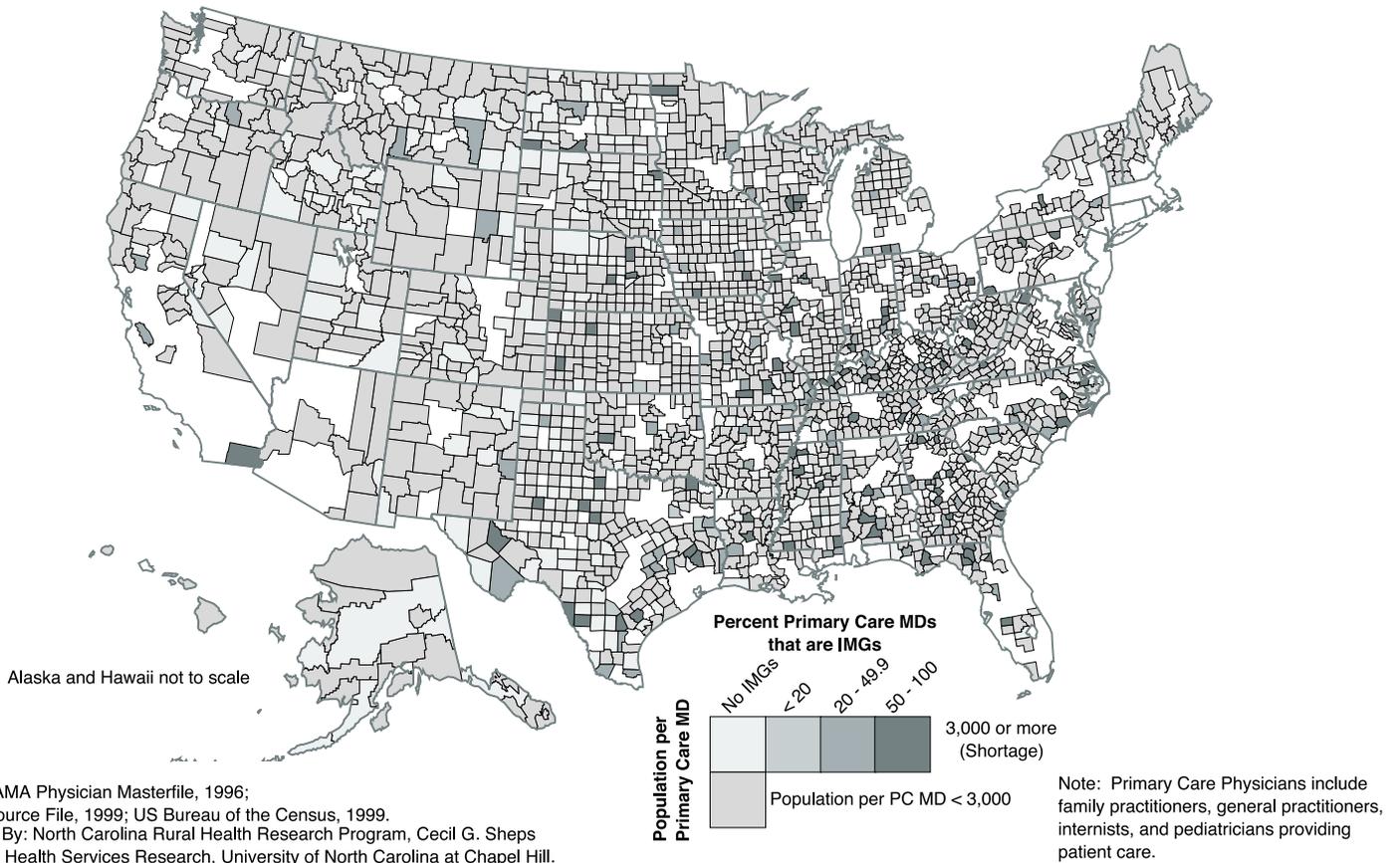
### *Identification of rural areas most vulnerable to cutbacks in IMG supply*

In the event of a change in policy that will restrict in-flow of IMGs, the most affected rural areas will be those in which new IMGs would have recently chosen to settle. Although it is impossible to know where new IMGs might locate in the future, comparison of 1991 and 1996 data from the AMA Masterfile show that almost 70% of the counties with new IMGs in 1996 had at least one IMG in 1991. Explanations of this migration pattern might include: deliberately selective recruitment of IMGs to fill physician vacancies; cultural clustering of IMGs from similar countries of origins; and the openness of towns, clinics, and individual recruiters toward hiring IMGs. Whatever the explanations, the pattern suggests that the location of counties served by IMGs in 1996 indicate where there will be potential vulnerability to underservice if a cutback occurs in the future.

The Office of Shortage Designation's threshold, a population to primary care physician ratio of 3000:1, was used to define underserved counties in Figure 1. This map shows that many physician shortage areas have strong concentrations of IMGs, especially in Appalachia and the Deep South, as well as a number of counties in the central US. Figure 2 shows rural counties that could possibly experience physician shortages if there were a cutback of IMGs: They are both just above the threshold of being underserved (population to primary care physician ratio of 2500:1 – 3000:1) and also have strong concentrations of IMGs.

Just over 30 percent of all rural counties have physician shortages as defined by the US Division of Shortage Designation. If all IMGs currently in primary care practice were removed from this calculation, one out of every five "adequately served" nonmetropolitan counties would become underserved and the percentage of rural counties with physician shortages would rise to 44.4%. In addition, with removal of IMGs, the number of rural

**Figure 1. Distribution of International Medical Graduates in Nonmetropolitan Counties with Primary Care Physician Shortages, 1996**



Source: AMA Physician Masterfile, 1996;  
 Area Resource File, 1999; US Bureau of the Census, 1999.  
 Produced By: North Carolina Rural Health Research Program, Cecil G. Sheps  
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counties with no primary care physicians would rise from 161 to 212. Of course, many IMGs currently practicing in the US are either US citizens or permanent residents, and would not be affected by future policy changes. Nonetheless, the increase in the number of counties that would be underserved if no IMGs were practicing in this country gives an indication of the magnitude of the reliance of rural counties on these types of physicians.

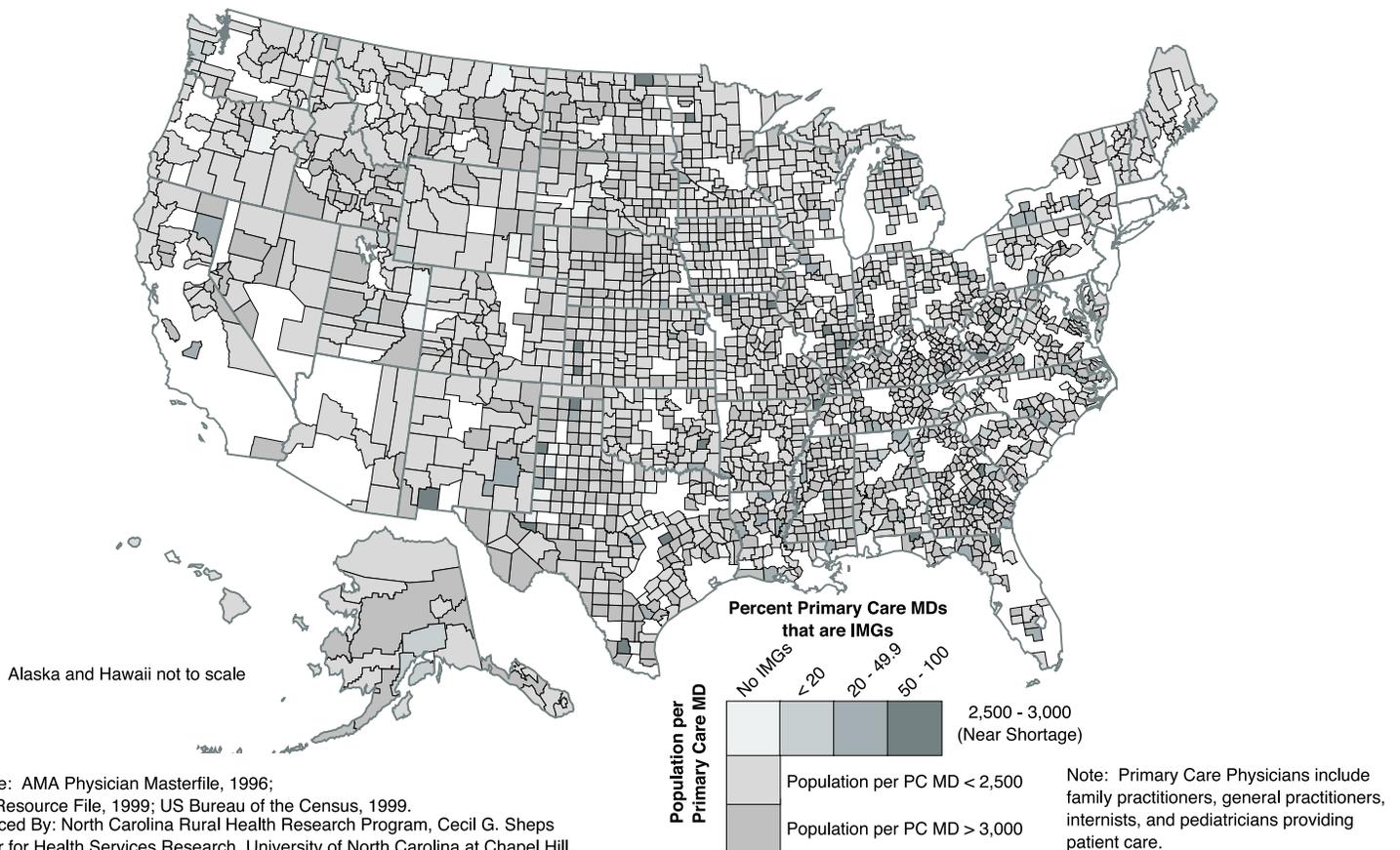
*Potential replacements for IMGs in the event of a cutback*

Interviews with physician recruiters and health planners about who might replace IMGs should restrictions on IMG entry into the United States be tightened revealed different strategies both within and among states. Indeed, which strategies to use or emphasize appeared to be a frequent concern. Participants overwhelmingly stated that many strategies to reduce underservice were already in place and would continue in the future. However, some of these strategies, such as the recruitment of additional family physicians, while considered useful and appropriate, were not seen as reasonable solutions to replacing IMGs in underserved areas, since more family physicians are already needed.

All those interviewed identified state medical schools as key players in efforts to recruit providers into needy areas and recommended a number of strategies involving state sponsored medical schools, many of which are already in place. These activities include: recruitment of medical students who are predisposed to rural practice; greater emphasis on recruitment of future rural physicians at a younger age, including high school and junior high school; rural rotations during medical school; residency training in rural areas; reversal of the trend toward subspecialization; linkages between medical schools and rural communities to improve recruitment efforts; and financial support for medical students and residents who choose to practice in rural areas.

The NHSC is often mentioned as a source of health professionals to replace IMGs. A significant expansion of the NHSC would be necessary to meet the needs of more underserved areas. As of September 1999, 1,356 physicians were in the NHSC, compared with over 2,000 IMGs with waivers to practice in underserved areas. Study participants had mixed opinions about using an expanded NHSC to replace IMGs. In Florida, all participants spoke highly of an expanded NHSC as a valuable approach to offset losses in new IMG supply. However, nearly all participants in other states were more hesitant about the possibility of expanding the NHSC to replace IMGs, worrying about flexibility in placement decisions, problems with underservice

**Figure 2. Distribution of International Medical Graduates in Nonmetropolitan Counties with Near Primary Care Physician Shortages, 1996**



designations, continuity of care, and bureaucracy. Concern was also voiced as to whether an expansion of the NHSC would be enough to fill slots currently held by IMGs.

The overwhelming majority of participants in the study states did not view nurse practitioners and physician assistants as key in replacing IMGs. Frequently mentioned concerns about increasing the number of midlevels included problems of sharing call schedules with physicians, physician oversight of these practitioners, the ratio of physicians to midlevels, unequal reimbursement, scope of practice constraints from state laws and policies, lack of opportunities, and the appropriateness of “replacing” IMGs with nonphysicians.

#### *Interstate Variation in Dependence on International Medical Graduates*

Places that have strong concentrations of IMGs are not necessarily dependent on them. For example, West Virginia and North Dakota were starkly different in dependence on IMGs even though both have strong IMG concentrations. In North Dakota, participants viewed an IMG cutback as a source of serious concern and, in the words of a rural clinic recruiter, a “major stumbling block.” At the other extreme was West Virginia, which, despite its currently high number of IMGs, has experienced a sharp reduction in its number of J-1 waiver requests, making the issue of replacing IMGs a minor issue. According to a state planner, “There are solutions if we were to get no more IMGs, but it would require new working relationships among local governments, hospitals, HMO, physicians, federal government programs and social service providers.” Another respondent explained, “it’s going to be a variety of people” who will replace IMGs, rather than one simple solution. A third study participant speculated that a growing physician surplus would lead more physicians to practice in needy areas. In his view, an IMG cutback is “not a minor issue,” but at the same time, “it’s not insurmountable.”

## **IMPLICATIONS FOR POLICY AND PLANNING**

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Given the difficulty of expanding ongoing recruitment and retention efforts, many underserved rural areas would likely remain underserved in the event of a cutback in IMGs, and many rural areas that are currently adequately served could face serious problems as well. This study illustrates the difficulty in finding a single national solution to replace IMGs, as states have variations both in recruitment and retention strategies and in IMG dependence. A recruiter in a rural region of New York summarized this difficulty, saying that all health professions have “ecological niches,” and the solution to replacing IMGs needs to be “multifactorial” and “elastic.”

Even if an expanded NHSC could partially help replace IMGs, recruiters and planners within states and local areas will need to expand creative and innovative approaches aimed at the recruitment and retention of health professionals in needy areas that are already in use. A cutback would make the task of reducing physician shortages a more pressing need in many areas that now depend on IMGs. It is quite possible that, should there be an IMG cutback, many rural communities might have to make do with less.

Although widely perceived as a national policy issue, replacing IMGs in the event of a cutback is a major, multifaceted task. It is not clear that federally-directed initiatives can effectively meet the needs of many rural, underserved areas that currently depend on IMGs. Many state and local players, including public agencies, private organizations and medical schools, will need to initiate and coordinate their own innovative solutions, despite already facing problems in the recruitment and retention of physicians.

Local communities are likely to play a major role in replacing IMGs, and they will need to find the necessary funding and devise innovative strategies to maintain adequate staffing at clinics and hospitals. There is still time to gain community input before an IMG cutback would have a pronounced impact, as many IMGs on J-1 waivers would still be under obligation to practice in underserved areas in the first few years of a cutback. Observers calling for an IMG cutback should convene meetings with medical and community leaders in rural and underserved areas that have strong concentrations of IMGs. The stakes for many rural and needy areas are too high to posit solutions from the distance without such collaboration. Even with collaboration, it seems unlikely that longstanding problems in underservice can be fixed easily.

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