
CONTRADICTORY POLICIES FOR FOREIGN MEDICAL GRADUATES

by Stephen S. Mick

Prologue: *By almost any accounting, foreign medical graduates (FMGs) constitute an important part of America's health care system. For the most part, though, serious study of their participation and the drawing of implications should the flow of FMGs be constricted in the future has not taken place. Recent legislation, sponsored by several key legislators, proposed to terminate Medicare support for the graduate training of FMGs. The American Hospital Association and the American Medical Association supported the legislation and the Reagan administration acquiesced to it. An alternative and less punitive measure sponsored by Rep. Henry A. Waxman (D-CA), was enacted. It required that FMGs pass both parts of a demanding test (Foreign Medical Graduate Examination in the Medical Sciences) before hospitals could receive Medicare support for the graduate medical training of such residents. In this article, Stephen Mick questions the assumptions upon which legislators, the medical profession, and other interested parties are basing their attitudes in relation to FMGs. Mick is an associate professor in the Department of Health Policy and Management at The Johns Hopkins University School of Hygiene and Public Health. He holds a doctorate in sociology from Yale University and has been studying foreign medical graduates for fifteen years.*

Recent legislative action has tried to curtail the training of foreign medical graduates (FMGs) in the context of changes in physician supply in the United States. Drastic cuts in FMG residents may have unintended and undesirable consequences for the future distribution of physicians, and return to explicit health personnel planning may be required should market forces to distribute physicians be weakened by reducing the growth in physician supply. This article shows why these controversial propositions need to be considered in policy debates.

FMGs And Physician Supply

In 1985, a flurry of proposals emanated from Congress to reform Medicare reimbursement practices for direct and indirect costs incurred by hospitals for their residency training programs. These reforms generally were tied to proposals to restrict the training of FMGs, both foreign nationals and U.S. citizens. The initiatives also would have restricted the training opportunities of FMGs by denying Medicare payment to hospitals for services provided by FMG house officers. Hence, the hospital itself would have become a point of leverage for restrictive FMG policies, and this would usher a new, unique, and risky approach to effect change in medical personnel. There have been other public and private efforts to reduce the nation's reliance on FMGs. However, none demonstrates as clearly the potentially contradictory policy objectives of reducing the size of the nation's complement of house officers by ejecting FMGs while simultaneously maintaining or even improving recent distributional gains of physicians in underserved locales, specialties, and types of practice. The hypothesis of contradictory goals inherent in these proposed cutbacks should be placed in the context of several assumptions about the U.S. physician labor pool.

FMGs' role in the "physician surplus." Often the first assumption in discussions of FMGs is that during the past ten years they have been a major cause of the so-called physician surplus in the U.S. For at least five years before 1976, there were more FMG residents than the annual number of graduates of U.S. medical schools each year, so such a view can be appreciated. FMGs are visible targets for slowing down and even reversing the growth in physician supply. But, what is the reality?

Between 1971 and 1985, there was a 16.3 percent increase in residency positions offered and a 36.5 percent increase in total positions filled by house officers of all types.¹ The first percentage is smaller than the second because there were many more unfilled positions in 1971 than in 1985 (11,037 and 1,810, respectively). During the same period, there was a 67.1 percent increase in U.S. medical graduate (USMG) residents and a 28.4 percent decrease in FMG residents, even though the internal composition among FMGs was changing in dramatic fashion numerically in

favor of U.S. citizen FMGs (U.S. FMGs). Looking at these data in another light, for every 100 residency posts offered in 1971, there were only sixteen in 1985, again reflecting the closing of the gap between the number of positions offered and filled. For every 100 USMGs in 1971, there were 167 in 1985, and, by contrast, for every 100 FMGs in 1971, there were seventy-two in 1985. Thus it is difficult to support the assumption that FMGs have contributed to the physician surplus.²

Proportions of the physician surplus. The second assumption common to most physician supply proposals is that there exists a physician surplus of gargantuan dimensions. This surplus is viewed as the vehicle through which physicians can be directed into areas of traditional shortages. Between 1965 and 1985, there is irrefutable evidence of dramatic increases in the number of medical schools (88 to 127), in the number of first-year medical students (8,759 to 16,929), in the total number of medical students (32,835 to 66,604), and in the annual number of graduates (7,574 to 16,191). However, all of these numbers either have recently declined, have leveled off, or are about to level off. In the case of the number of applicants to medical school, there has been a marked drop from 42,624 in 1974 to 32,893 in 1985—a 22.8 percent decline. These figures suggest that there are and will be fewer physicians in the training “pipeline,” making necessary downward adjustments of earlier predictions of aggregate physician surplus. This has already occurred. For example, last year, Robert Graham, formerly head of the Health Resources and Services Administration of the Department of Health and Human Services, estimated a 1990 surplus of 35,000 physicians, one-half of the Graduate Medical Education National Advisory Committee (GMENAC) prediction of 70,000 made in 1981.³

Health personnel analysts are noticing that surplus-countering forces also exist: changing internal composition of the pool (for example, more women, who tend to work fewer hours and days than men) and an aging population, which increases the demand for medical services.⁴ Innovative medical practices such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs), which owe their existence partially to physician surplus, restrict hours worked and income earned.⁵ This results in a decrease in previous levels of productivity and, in the aggregate, lessens the effect of a larger number of physicians.

The physician surplus may be somewhat overdrawn now and in the future. To be sure, there are more physicians per capita in the U.S. now than in the early 1970s. However, as has been the case for decades, larger numbers do not ameliorate aggregate distributional differences.⁶

Redistributing physicians via the marketplace. A third and critical assumption is that market forces are and will be an effective mechanism for redistributing physicians into traditionally underserved areas of medicine.⁷ It can be argued that market forces work best in dispersing

physicians when there are large numbers of “sellers” of medical care, that is, when there is a surplus of physicians.⁸ Apart from counterarguments that, even under conditions of surplus or physician abundance, the market has been less effective than the promarket arguers have claimed, reducing the number of physicians may lead to losses in any market-induced distributional gains unless there are clearly aimed programs to influence distribution directly.⁹

Furthermore, as studies over the last fifteen years have demonstrated, FMGs and USMGs are not randomly distributed in the physician labor pool. FMGs serve in disproportionate numbers in rural areas, often in solo and partnership practices, in public hospitals, in smaller not-for-profit hospitals, and in regions of the country that have experienced emigration of population because of declining industry and high unemployment.¹⁰ Poor populations and Medicaid recipients also are often reliant on FMGs.¹¹ Hence, any drastic reduction in FMGs could be expected to affect the overall distribution of physicians in unequal or differential ways. One might even argue that any successes market forces have had in the redistribution of physicians have been due in part to the substantial presence of FMGs in the labor pool.

These three assumptions provide the context for the recent legislative policy reform movement regarding FMGs and thrust the FMG back into the forefront of public concern after a period of relative obscurity. Added to this is a prevailing bias against FMG competence.

The Debate About FMG Competence

Many believe FMGs are clinically inferior despite an empirical literature on FMG-USMG competence that contains seriously divergent findings. Most results have shown that, when controlling for variables such as type of hospital of residency, age of practitioner, and specialty, no differences in quality of care rendered by the two groups are revealed. Before 1975, no direct measures were used to assess quality, and studies relied heavily on proxy measures such as achievement of professional credentials, perceived quality of clinical training, and hospital directors' subjective judgments and rankings of medical education of FMG versus USMG house officers.¹² Since then, a series of studies has used more direct quality measures and assessed the performance of both groups of physicians in a variety of settings, both inpatient and ambulatory, during residency training and afterwards.¹³ The conclusions are uniform: there are no differences regardless of measures used, for example, taking histories, conducting physical examinations, assessing appropriateness of hospital admission, justifying a diagnosis, evaluating treatment outcome, examining appropriateness of length-of-stay, or tabulating incidence of complications. Interestingly, when differences exist, they appear to be a

function of the type of hospital of training or practice.¹⁴

A report from the Medical Skills Committee of the Educational Commission for Foreign Medical Graduates (ECFMG), however, finds that a significant proportion of FMGs were found to have inadequate clinical skills compared to USMGs, when tested on the Clinical Skills Assessment (CSA) examination produced by the committee. The report also notes that the data, based on a small sample, needed to be validated with results from a larger sample.¹⁵ Important, too, is the need to integrate the findings of this study with the bulk of the research literature that finds differences in clinical competence not between FMGs and USMGs during and after residency but between physicians trained in good versus poor training programs. At the least, the competence issue, most likely subject to language ability, cultural familiarity, and comprehension of the tools and technology of an industrialized medical care system, deserves more refined study.¹⁶

One caveat is important. Except for the CSA study, all of the studies cited above have never separated foreign national FMGs from U.S. FMGs, probably because the researchers were unable to do so or because the latter were too few in number at the time of the study to make any difference. The CSA found a small difference favoring U.S. FMGs. Nevertheless, the comparative competence of U.S. FMGs versus foreign national FMGs requires more study.

The U.S. Citizen FMG

The FMG controversy also has been fueled by the presence of U.S. FMGs, and Exhibit 1 shows why. Since 1983, U.S. FMGs have outnumbered foreign national FMGs in residency posts. Roughly coinciding with their numerical rise has been an increasing controversy about the preparedness of U.S. FMGs to undertake graduate medical education in U.S. hospitals.¹⁷ Other issues include low scores on the ECFMG examination, specialty board examinations, and the Medical College Admission Test (MCAT).¹⁸ Difficulties in being accepted into the mainstream of U.S. medical practice also have been noted.¹⁹ Others have argued that U.S. FMGs need carefully supervised remedial programs to improve their performance.²⁰ However, U.S. citizens studying abroad in the late 1970s, for example, totaled between 12,000 and 15,000, and it is unlikely that most would have access to remedial programs given the small numbers they served.²¹ In fact, McGuinness and Mason estimated that 25 percent of U.S. FMGs in the 1960s and 1970s never even qualified as licensed U.S. physicians, indicating a very high attrition rate.²²

Recently, disclosures and allegations of fraudulent medical degrees, cheating on examinations, and defective curricula have been leveled at U.S. FMGs, particularly those trained in the so-called offshore schools in

Exhibit 1

Foreign National FMGs And U.S. FMGs In Residency Positions, 1971-1985

Number of FMG residents

18,000

16,000

14,000

12,000

10,000

8,000

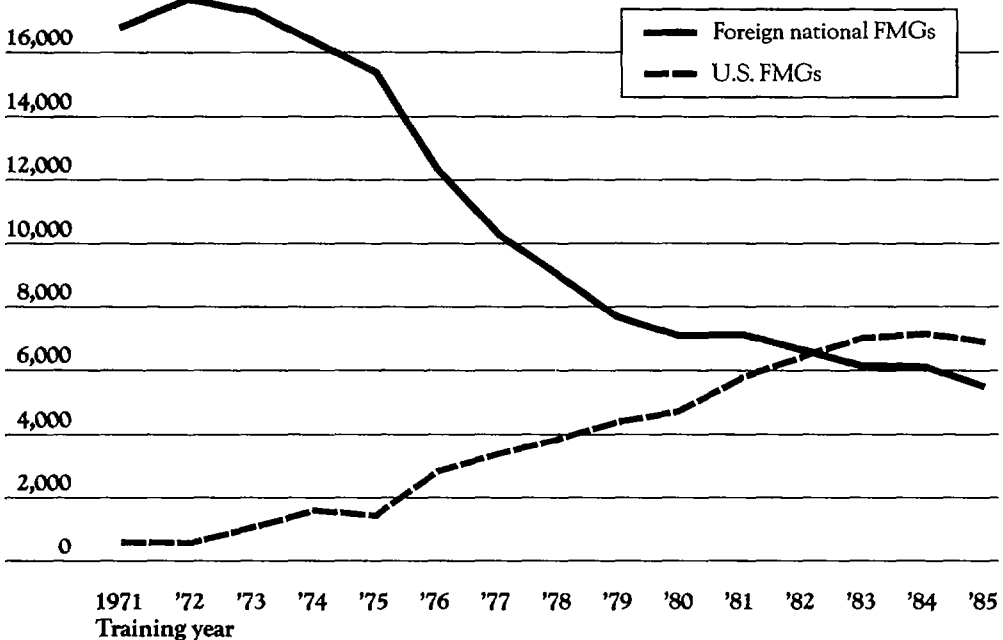
6,000

4,000

2,000

0

1971 '72 '73 '74 '75 '76 '77 '78 '79 '80 '81 '82 '83 '84 '85
Training year



the Caribbean.²³ The heightened concern about the credentials and competence of U.S. FMGs coincided in 1985 with the second of two General Accounting Office (GAO) reports on US. FMGs, which pointed out that none of the remedial recommendations the GAO had made in its earlier 1980 report had been implemented.²⁴

Hence, a new focus on U.S. FMGs has overlapped with a much longer history of policy debate regarding foreign national FMGs. Despite the ambiguity of the foregoing assumptions, the force of U.S. and foreign national FMG concerns recently has reached a new pitch.

Legislation Affecting FMGs

Congressional activity. A review of 1985 congressional activity relating to FMGs reveals the current climate of sentiment toward foreign-educated physicians in the nation. Although none of the proposals was enacted into law, the 100th Congress may well reconsider the issue in 1987. Rep. Henry Maxman (D-CA) proposed that all FMGs pass both parts of the Foreign Medical Graduate Examination in the Medical Sciences (FMGEMS) before a hospital could count them into the

payment formula for direct Medicare cost reimbursement.²⁵ In a stronger stance, Sen. Dan Quayle (R-IN), proposed a limit of 25 percent foreign-educated house officers for a large hospital receiving Medicare funds, although waivers of this limit would be possible. He also proposed a quota on the number of primary care residencies that a hospital would be required to offer, even proposing a 70 percent minimum.²⁶ Sen. Claude Pepper (D-FL) proposed that no guaranteed student loans should be allowed for students studying medicine outside the United States and Canada unless the foreign schools in question met accreditation standards.²⁷ A final example is the comprehensive approach by Senators Robert Dole (R-KS), David Durenberger (R-MN), and Lloyd Bentsen (D-TX) in S. 1158. Its three parts included a freeze on direct payments by Medicare for graduate medical education, a limitation of five years of specialty training for which Medicare would pay, or the specific number of years per specialty, whichever was less, and no funding whatsoever to hospitals for services provided by foreign national and U.S. FMGs.²⁸

In short, a cost-conscious U.S. Congress saw Medicare disbursements as a convenient vehicle through which to abate the entry of FMGs into U.S. medicine. Presumably, a dual goal of limiting the residency training opportunities for FMGs and reducing some Medicare expenditures could have been accomplished simultaneously. The "glut" of USMGs could be assumed to take up the slack left by FMGs.

Other proposals. Proposals and recommendations outside Congress also have been aimed at curbing the flow of both foreign national and U.S. FMGs. In 1981, GMENAC recommended a decreased reliance on FMGs.²⁹ The American Medical Association (AMA), in 1986, proposed reductions of FMGs, both foreign national and U.S. citizen.³⁰ However, the actual policy reaffirmed by the AMA was to continue restricting FMGs from taking the National Board of Medical Examiners' examination for licensure.³¹ In a comprehensive report, the New York State Department of Health Committee on Graduate Medical Education called for fewer residency slots for FMGs.³² In New Jersey, cuts of 1,000 residents and eliminating FMG residents have been proposed.³³

When these proposals are distilled into their most generic form, two specific mechanisms of policy leverage are unveiled. First, there is direct screening of FMGs. From the late 1950s through 1975, the ECFMG examination was the major screening device; in 1976, the Visa Qualifying Examination (VQE) was required of all foreign national FMGs who wished to obtain a visa to enter the United States. This examination was not substantially different from the newer Foreign Medical Graduate Examination in the Medical Sciences. The latter two examinations were alleged to be stiffer tests of the preparedness of FMGs for residency training than was the original ECFMG examination. Of the FMGEMS given in July 1985, the pass rates for Day 1 (basic medical science) and

Day 2 (clinical sciences) were 21 percent of 12,697 takers and 39 percent of 9,713 takers, respectively. These rates are not much different than those of earlier ECFMG tests. However, individuals sitting for both days had a much lower level of success: 16 percent.³⁴ Regardless of the debate about how stringent the Visa Qualifying Examination was (and FMGEMS is), for the last thirty years, there has been a relatively effective and consistent direct mechanism to control the preparedness of FMG aspirants into U.S. residencies.

The indirect mechanism of interest, and clearly apparent in the congressional Medicare proposals, is the application of pressure on the hospitals in which FMGs train. The threat of loss of Medicare funds to hospitals, many of which are hard-pressed to generate needed revenues, may be simply too great for the threat of loss of vital FMG staffing to overcome. This new possibility, allied with traditional restrictions against FMGs, needs to be assessed in regard to the potential future impact of their absence. Assessing the potential outcomes of direct restrictions, an earlier study hypothesized that 30 to 50 percent declines of FMGs would negatively affect the total proportionate distribution of early 1980s training cohorts (including USMGs) in traditionally underserved areas.³⁵ The additional negative impact the closure of training programs would have on smaller hospitals (unaffiliated and nonmajor teaching units) has been demonstrated.³⁶ These are the types of hospitals most vulnerable to restrictive legislation, particularly S.1158, that Congress considered but did not pass.

The hardest-hit hospitals would be those that have large FMG house officer complements. Of 4,452 residency programs in 1985, 1,094 (24.6 percent) had over 25 percent FMG house staff in training and 574 (12.9 percent) had over 50 percent FMGs.³⁷ These programs were disproportionately located in the Middle Atlantic states (New York, New Jersey, Pennsylvania) and in institutions in the East North Central region (Michigan, Illinois, Ohio). If most of these hospitals serve Medicare recipients, what would be the impact of their releasing FMGs from among the house staff?

Projections Of FMG Supply

A study completed in 1983 traced the whereabouts of a probability sample of 530 foreign national FMGs, 132 USMGs, and forty-two U.S. FMGs who were representative of all house officers in the 1973-1974 training year.³⁸ Ten years later, the locations, practice sites, and specialties of 91 percent of the foreign national FMGs, 98 percent of the USMGs, and 97 percent of the U.S. FMGs were traced successfully. Because the sample was so small, any analysis of U.S. FMGs in this report is omitted. Initial analyses revealed that foreign national FMGs were more likely to

be found in places outside standard metropolitan statistical areas (SMSAs), the federal government's indicator of rural versus urban populations. Foreign national FMGs also were more likely to be found in small SMSAs (less than 250,000 inhabitants) than were USMGs. They were also more likely to be found in solo and partnership practices, but less often in group practices of all kinds and in other forms of medical practice including research, teaching, and administration. There were no major differences in specialty choice; in particular, there was no pattern of foreign national FMGs selecting primary care specialties more frequently than USMGs. However, when a more detailed statistical analysis was performed and control variables such as U.S. region were introduced, differences in all of these areas were revealed. The facts are that discrepancies exist in the distribution of foreign national FMG-USMG patterns well after the completion of residency training. Therefore, the intriguing question is, if these discrepancies that existed for earlier cohorts also were to exist for current cohorts, would the rapid reduction of current cohorts of foreign national FMG trainees produce service delivery gaps years after they finished residency training?³⁹

The projection analysis, the details of which may be obtained by writing the author, shows that if there were a reduction of 50 percent both in the number of foreign national FMGs and in the hospitals with training programs containing at least 20 percent FMGs, ten years from now one could expect a 5.6 and 8.3 percent decline of physicians from that cohort in non-SMSAs and small SMSAs, respectively. By contrast, large SMSAs would experience a 13.8 percent increase of that cohort. These changes would result from the proportionate increase of USMGs in the cohort who already favor practicing in these areas. Reductions of 80 percent in both foreign national FMGs and so-called FMG hospitals would produce even more marked changes: an 8.9 percent decline in physicians in non-SMSAs, a 13.2 percent decline in physicians in small SMSAs, and a 21.1 percent increase in physicians in large SMSAs.

In regard to changes in practice settings, reductions of 50 percent in both foreign national FMGs and "FMG hospitals" could lead to a 16.4 percent decline of physicians in solo and partnership practices, a 5.8 percent increase in group practices, and a 10.9 percent increase in all other types of practices. As in the case of location, 80 percent decreases would simply add to these outcomes. Solo and partnership practices would decline by 26.2 percent, group practices would increase by 9.2 percent, and all other types of practices would increase by 17.4 percent.

Were these analyses repeated within regions of the United States, the findings would be uneven. These changes would be most prominent, not surprisingly, in the Middle Atlantic and East North Central states, and least prominent in the Mountain and Pacific states.

The major limitation of this analysis is that it omits U.S. FMGs. This

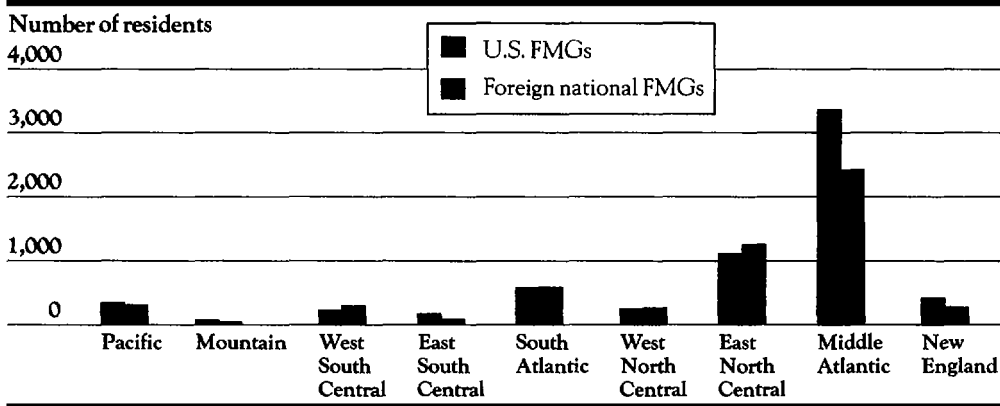
was unavoidable because of the composition of the FMG house officer pool in the 1973-1974 training year, the baseline data collection point of the study. U.S. FMGs were less than 10 percent of the FMG pool, and the data reflect this fact. Now that U.S. FMGs compose over one-half of the recent FMG resident complements, a more thorough analysis would have to include them. On the other hand, as Exhibit 2 demonstrates, the foreign national and U.S. FMG cohorts parallel one another very closely in residency training across U.S. census regions in 1985. Data for the same year reveal a strong positive correlation ($r = .96$) among states ranked by number of foreign national and U.S. FMG residents. Hence, one could tentatively conclude that, if U.S. FMGs were included in the analysis, the results would probably not differ much.

Implications And Conclusions

These data suggest that rapid and deep cuts in the number of foreign national and U.S. FMG residents without specific strategies to find replacements for their lost services could create new and aggravate old physician supply imbalances. Strategies of replacing FMGs with USMGs would need to address the following potential gaps suggested eight years ago by Butter, Wright, and Tasca in their analysis of Michigan's dependence on FMGs.⁴⁰ First, in the short run, substitutes need to be found for FMG residents in hospitals with less than full university affiliation, in smaller cities, and, obviously, those with proportionately high complements of FMGs. Second, in the long run, personnel must be considered for Middle Atlantic and East North Central regional non-SMSAs and small SMSAs, in particular. Third, also in the long run, substitutes for those FMGs in solo and partnership practice arrangements that serve

Exhibit 2

Distribution Of U.S. FMG And Foreign National FMG Residents By U.S. Census Regions, 1985



smaller population concentrations would have to be found.

Our hypothesis is that, if a key component of the physician pool is removed, one can expect to see a weakening of whatever market force physician surplus has had on their redistribution, because the aggregate supply is segmented in important ways. Therefore, the goal of a having a physician supply policy that relies heavily on market forces to distribute physicians in traditionally underserved areas may be basically incompatible with the goal of reducing the number of FMG residents, unless one of two things happens. First, one might increase the number of USMGs to assure a continued abundance to enhance the working of market forces. Second, one might contemplate a more direct regulatory approach along the lines of policy experiments attempted during the last two decades: bringing the National Health Service Corps back to life; implementing financial reimbursement and tax incentives for physicians who practice in underserved areas and institutions; developing loan forgiveness programs; and even drafting physicians. Some hold that the rapid restructuring of health care organizations in which physicians play more of an employee role will offset the problems mentioned above. Thus, rural HMOs, PPOs, and other innovations, coupled with greater medical school indebtedness of physicians, will entice physicians to practice in ways that they have eschewed in the past. There is strength to this argument. However, there is a certain circularity present in it. Much of the ability of these organizations to grow as they have has been because of an abundance of physicians in the first place. Removing the force of a large number of physicians would remove one of the principal reasons that the transformation-of medical practice has been able to occur at all.

I do not advocate renewing policies to increase the number of medical schools or to increase the size of incoming classes; rather, I am trying to demonstrate the frailty and potentially ephemeral nature of the current policy of relying on the market to solve century-old physician supply problems. Saving some federal spending on Medicare by reducing direct and indirect graduate medical education costs is one thing, but doing this by wholesale removal of FMGs may be unwise and ill-considered, because it could create a new generation of problems.

NOTES

1. Data on undergraduate and graduate medical education used in this article come from various sources including: American Medical Association, "Undergraduate Medical Education," *Journal of the American Medical Association* 238 (1977): 2767-2780; "Undergraduate Medical Education," *Journal of the American Medical Association* 240 (1978): 2819-2835; A.E. Crowley, S.I. Etzel, and E.S. Petersen, "Undergraduate Medical Education," *Journal of the American Medical Association* 256 (1986): 1557-1564; American Medical Association, "Graduate Medical Education: Annual Report on Graduate Medical Education in the United States," *Journal of the American Medical Association* 226 (1973): 921-955; and A.E. Crowley and S.I. Etzel, "Graduate Medical Education," *Journal of the American Medical Association* 256 (1986): 1585-1594.
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