Every year in the United States, approximately 1,650 and 16,600 (a total of 18,250) students graduate from accredited osteopathic and allopathic medical schools, respectively. In 2007, nearly 28,000 physicians entered into MD or DO graduate training programs in this country. The gap between these two numbers is filled by international medical graduates (IMGs). In 2007, over 9,650 new residents were IMGs, nearly 7,000 of which were non-U.S. IMGs. Thus, 35 percent of nearly 28,000 physicians entering into training are IMGs.

In 2005 the Council on Graduate Medical Education (COGME) and the Association of American Medical Colleges (AAMC) announced a physician shortage, respectively calling for a 15 percent and 30 percent increase in medical school enrollment. The 2005 COGME report to Congress estimated a physician shortage of at least 90,000 full-time physicians by 2020. In response to this predicted shortage, the AAMC has called for a 30 percent increase in medical school enrollment from the 2002 level over the next decade. The AAMC also has reported that existing medical schools can only expand by 7 percent. This will leave an annual shortage of 1,700 new physicians. While the answer may seem to be to build more medical schools, other policy options can help a state produce doctors who will practice where the state most needs them.

Simply increasing the current annual quantity of allopathic graduates by 30 percent (from a 2002 level of near 15,000 to 20,000) will only serve to increase the number of allopathic graduates and subsequently decrease the number of IMGs in residency programs across the United States. The number of total physicians in the U.S. will stay the same unless the total number of physicians training in residency programs is increased concurrently.

Cost Comparison between Medical School and Residency

Consider example State X. In response to the predicted physician shortage, State X would like to increase the number of physicians produced within the state every year from 800 to 1000, an increase of 200 physicians per year. State X may allot more funding to expand existing medical schools and/or build new medical schools or to support and sustain residency programs within the state. Compare the cost between funding medical schools and residency programs.

Producing 200 more graduates from existing medical schools will cost State X $75,000 x 200 = $15 million dollars (not including costs for building new facilities, if needed), as shown in the illustration below. In comparison, producing 200 more graduates from existing residency programs will cost State X $39,000 x 200 = $7.8 million.

Of the 200 medical school graduates, approximately historically 10 percent will go into family medicine, 13 percent into surgery, 5 percent into obstetrics-gynecology, 20 percent into internal medicine and 7 percent into pediatrics, while the other 45 percent will go into various other specialties. Typically, 50 percent or more leave the state upon graduation. On the other hand, graduates of residency programs have already chosen their specialty. Therefore, funding could be given to specialties that are most needed within State X. Family physicians distribute themselves more like the general population, unlike other specialties that tend to cluster in large urban areas and near university hospitals.

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State Support-for-Service Programs
In an effort to entice new physicians to practice in medically underserved and rural areas, many states offer support-for-service programs, including:
- Scholarships
- Service-option loans
- Loan repayment
- Direct financial incentives
- Resident support programs
- Practice subsidies
- Start-up grants

A 2004 study showed that compared to physicians without service obligations, physicians serving commitments to these state programs practiced in demonstrably medically-needier areas and cared for more uninsured patients and patients insured by Medicaid. The study also showed that service completion rates were greater than 90 percent for loan repayment, direct incentive and resident support programs. Furthermore, the study showed that these service-obligated physicians stayed in their practices longer than non-obligated physicians; 55 percent stayed at their service location over eight years.

Providing a sufficient physician workforce to meet health care access needs may require new medical schools in some states; however, supporting family medicine residency programs or providing incentives to practice in underserved areas—or both—may be a more cost-effective option.

*Plausible estimate that will vary by state.

Sources