Challenges and Strategies of Medical School Expansion

The early twenty-first century will be known as a period of great expansion of medical education in the United States. Current projections indicate at least a 20 percent increase in the number of M.D. matriculants in U.S. medical schools by 2013 over the 2002 benchmark. Most of this planned expansion has come from larger enrollments at existing medical schools. This Analysis in Brief explicates the major models of expanding class size at existing medical schools and examines several challenges of medical school expansion.

Methods
We gathered data from interviews with medical school and teaching hospital officials during site visits in spring 2007 at six institutions that had expanded or planned to expand their medical student class size by at least 10 percent.1 In aggregate we interviewed—either individually or in groups—approximately 185 people during our visits, including medical school deans; associate/assistant deans for medical education, research, clinical affairs, student affairs, admissions, minority affairs, and financial aid; clerkship directors; department chairs; local hospital CEOs and staff; and students, among others. Interview questions elicited information about the challenges medical schools face in expanding their class size and what strategies they have employed to overcome those hurdles. Each study team member reviewed all interview transcripts and conducted a thematic analysis of these issues.

Models of Expansion at Existing Medical Schools
Class-size expansion at existing medical schools typically follows one of two models for growth: “in place” or through a regional campus model (see Table 1). The “in place” model involves enrolling more medical students on the existing academic medical center campus and at nearby facilities. The regional campus model can follow two paths. Traditionally, most regional campuses have focused on the clinical education of medical students (the third and fourth years); a smaller number offer first- and second-year basic science/preclinical curricula. A new trend within the medical education community is to create branch campuses that offer all four years of medical education while operating under the accreditation umbrella of the educational program on the main medical school campus.

Expansion Challenges
Regardless of whether medical schools follow the “in place” or regional campus model for expanding their medical student class size, challenges ensue. Here we explore concerns in three specific domains: student affairs, financing, and planning.

Table 1. Models of Expanding Class Size at Existing Medical Schools

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Example from this study</th>
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<tbody>
<tr>
<td>“In place”</td>
<td>Expansion occurs at the existing academic medical center campus and at nearby clinical facilities.</td>
<td>Beginning in 2006, Boston University School of Medicine increased class size from 160 to 175 within its current campus infrastructure.</td>
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<tr>
<td>Regional two-year campus</td>
<td>Branch campus at a distance from the main medical school site offers some of the medical student curriculum to a portion of the class (most commonly clinical education).</td>
<td>University of Arkansas for Medical Sciences plans to establish a clinical campus in northwest Arkansas between 2009 and 2011.</td>
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<tr>
<td>Regional four-year campus</td>
<td>Branch campus offers all four years of medical education while operating under the accreditation umbrella of the educational program on the main medical school campus.</td>
<td>Michigan State University College of Human Medicine established a new four-year medical education program in Grand Rapids; this new campus will increase overall enrollment at the medical school from 100 to 200 by 2010.</td>
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1 The six institutions included Boston University School of Medicine, Michigan State University College of Human Medicine, Oregon Health & Science University School of Medicine, Texas A&M Health Science Center College of Medicine, University of Arkansas for Medical Sciences College of Medicine, and University of Texas Medical School at Houston.
Student Affairs Challenges

Medical schools face many hurdles in maintaining student support services and administrative infrastructure in times of expansion. Admissions officers we interviewed were worried about the adequacy of the applicant pool, and minority affairs deans struggled with how to maintain a diverse student body as the class size increased. Student affairs staff cited challenges with providing a comparable level of high-quality student services to more students, sometimes on multiple campuses. Financial aid officers were worried about the adequacy of student financial aid resources.

In addition to increasing staff and enhancing the efficiency of student service delivery models, some schools approached these concerns by deliberately establishing a formal theme or overarching principle to guide their expansion efforts. For example, one school creating a regional campus adopted the theme of “one medical school, which helped ensure that students receive comparable services and a consistent curriculum regardless of location. At another institution, school leaders used the mantra of “excellent experiences for students in their education and in their lives” as a reminder to focus on high-quality student experiences and services despite a larger class.

Financial Challenges

The ability of a medical school to expand its class size is predicated, of course, on the availability of financial resources. Many of the challenges that schools faced in expansion depended first on developing accurate cost estimates, and second on securing adequate funds to pay for the additional costs—for example, new space and facilities, additional faculty members, student services staff, and equipment.

To overcome challenges involved in developing accurate cost estimates, several schools in our study formed a team of business analysts, institutional planners, information technology and media specialists, and course and clerkship directors to examine each course, year by year, in the medical student curriculum to identify hidden costs. These teams helped identify issues that might have been missed if the challenge were approached by only one office.

As with all medical schools, these expanding schools planned on several primary sources of revenue to support ongoing medical education programs, though they had no “magic bullets” for identifying revenue streams to cover the cost of medical student class-size expansion. Three of the five state-supported medical schools in the study made requests to their legislatures for increases in state appropriations, though some received less than their requested amount, and none had obtained recurring state funds for expansion at the time of this study. Additional revenue sources for each school in this study came from tuition revenues, philanthropy, and private giving.

Planning Challenges

Successful planning for medical school expansion involved understanding and managing a process with many unknown factors, including unpredictable (or unidentified) funding sources, unspecified staffing and space needs, and unclear timelines. For the six schools in this study, expansion planning required administrators and faculty members to accept that not everything could be predicted completely or with certainty; their goal was to develop plans despite these limitations.

One major challenge for many medical school deans and associate deans, faculty members, and others in the academic medicine enterprise was lack of experience. Because medical student enrollment has remained essentially flat for a quarter-century, few medical educators had direct experience in these efforts.

Medical educators and administrative leaders at the medical schools in this study all spoke to the need for adequate time to plan. Many participants observed that planning should start years in advance of the actual enrollment increase in order to get people on board; for schools proposing a regional campus, the timeline may be even more extended. A senior dean for finance summarized the importance of advance planning when he said, “Start yesterday, because you really forget just how long the timeline needs to be.”

Conclusion

This analysis examined how institutions are expanding their medical student class size; some of the student affairs, financial, and planning challenges encountered in such a process; and examples of strategies medical schools have employed to address those challenges. While there are no formulaic answers for how best to expand class size, perhaps the most common theme among the six schools included in this study was the great importance and iterative nature of planning for a larger student body and expanded academic medical enterprise.