COTH/APM SURVEY OF
INITIATIVES TO CHANGE
THE SIZE AND CONFIGURATION
OF INTERNAL MEDICINE TRAINING PROGRAMS

Preliminary Results

OCTOBER 1995
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Acknowledgments

The COTH/APM Study Group on the Future of Graduate Medical Education was formed in August 1994 to develop materials to assist departments of internal medicine and teaching hospitals in efforts to modify the size of training programs and change their structure to increase the training of general internists. A survey instrument fielded to collect baseline data on current initiatives to change program size and structure was prepared under the guidance of, and multiple drafts of the results were reviewed and comments provided by the members of the Study Group.

The members of the COTH/APM Study Group are grateful to the programs and institutions that provided a wealth of information about their current initiatives, the processes used to reduce size and reconfigure training programs, challenges faced in this process, and reasons why institutions had not engaged in downsizing or reconfiguration activities to date. Finally, the Study Group also would like to recognize the individuals who provided helpful comments on the survey instrument and this manuscript, including James Terwilliger, Malcolm Cox, M.D., David Altman, M.D., and Alan Burgener.

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EXECUTIVE SUMMARY

Objectives:
The Association of American Medical Colleges (AAMC) Council of Teaching Hospitals and the Association of Professors of Medicine (APM) formed a Study Group on the Future of Graduate Medical Education in 1994. Its objective was to assist departments of internal medicine and teaching hospitals that want to modify the size and configuration of their internal medicine training programs or to enhance the training of general internists. Recognizing that the development of materials to help programs trying to change should be based on current data on the size and configuration of programs, the Study Group initiated a survey.

Methodology and Response Rate:
In early 1995, an eight-page questionnaire, asking about programs' changes in size and efforts to enhance production of general internists and to move training to ambulatory settings, was sent to the 418 internal medicine training programs accredited by the Accreditation Council for Graduate Medical Education. Eighty percent (335) of the programs responded. Responding programs trained 82 percent of internal medicine housestaff in accredited programs; 50 percent offered fellowship training.

Findings:
Between 1992-93 and 1994-95, the number of internal medicine programs that increased trainees significantly exceeded those that initiated reductions in program size. Twenty percent of the respondents reported reductions in internal medicine trainees; nearly twice that number (38 percent) added housestaff. Positions added outnumbered positions reduced fourfold, resulting in a net increase of over 1,500 trainees. Asked about their plans for the coming years, 22 percent of the respondents reported plans to reduce training positions; 19 percent of programs reported plans to add trainees. Across all respondents, the number of positions programs plan to reduce is slightly greater than the number of trainees they plan to add, resulting in a net decrease of 211 trainees (a .8% reduction over the housestaff complement in academic year 1994-95).

Thirty-five percent of respondents (116 programs) reported reconfiguring their programs to train more general internists. Less than one-half of these (48 programs) converted internal medicine residency and fellowship positions to create these generalist slots. At institutions converting existing positions, a total of 573 residency and 16 fellowship positions were converted. Another 227 residency and 17 fellowship slots are targeted for future conversion to general internal medicine. The other respondents reported that they emphasized general internal medicine within existing programs. Fifty-three percent of the participants reported increasing the percentage of time trainees spend in ambulatory settings by more than 10 percentage points.

Strategies used to reduce training positions included cutting positions offered; consolidating programs; and reducing fellowship positions while lengthening training. Several programs established an internal medicine primary care track and an academic subspecialty track, with the latter focused on trainees pursuing an advanced degree. Challenges were similar for institutions reducing positions and those reconfiguring the structure of their programs to increase generalism. For many programs, the predominant issue was covering inpatient units. Coping strategies included increasing clinical responsibilities of faculty; developing night floats; employing house physicians, 'moonlighters,' or non-physician providers; and shifting coverage among housestaff.
Programs that did not reduce nor plan to reduce trainees were asked for the reasons for this decision. Many reported that they operated well-balanced, high-quality programs; experienced no problems in recruiting; and their graduates entered practice as general internists. Several programs indicated that they were already at the smallest size acceptable to the Residency Review Committee for Internal Medicine (RRC-IM). A third group reported that housestaff were needed for patient service, especially in inpatient settings. Respondents added that emphasis on ambulatory training was already reducing trainee availability in inpatient settings. The group that reported not being able to downsize due to service demand included a sizable share of urban public hospitals.

Conclusions:
Across all respondents, only a minor percentage of total positions were reduced. Programs were far more likely to change configuration to enhance training of general internists. The findings also point to a lack of agreement among respondents that reductions in internal medicine training programs are currently desirable. Many respondents commented on the high quality of their programs, reasoning that it may not be appropriate to decrease their size, given the quality of the training they offer, and suggested that reductions should occur in other, lower-quality programs. Another possible explanation for a lack of significant reductions may be that internal medicine trains both generalists and subspecialists, and that programs may be responding to confusing incentives that encourage them to train additional generalists, while exhorting them to reduce training of subspecialists. Finally, programs may be concerned that voluntary reductions initiated now may be 'compounded' by potential future, mandated cuts.

Future Studies and Initiatives:
Future efforts by the Study Group will include analyses of institution that have successfully reduced the size of their training program or reconfigured it to produce more general internists. Findings from this effort will be used to develop case studies and models for training programs that wish to change their size and configuration. Among other activities, future efforts will also focus on the support that will assist hospitals that indicated that they cannot reduce trainees, due to patient service demand, in finding alternative coverage for their patient care activities.
SURVEY OF INITIATIVES TO CHANGE THE SIZE AND CONFIGURATION OF INTERNAL MEDICINE TRAINING PROGRAMS
Preliminary Results

Background

How internal medicine training programs should respond to the pressure to reduce their size, change their configuration to produce generalists, and move training to ambulatory settings has been the subject of much speculation, with little formal investigation performed to date. To respond to the need for information for programs to carry out these objectives, the Association of American Medical Colleges (AAMC) Council of Teaching Hospitals and the Association of Professors of Medicine (APM) in 1994 formed a Study Group on the Future of Graduate Medical Education. The Study Group conducted a survey of internal medicine training programs across the nation to identify those that have successfully reduced the size and/or reconfigured their program to enhance generalist training, to enable it to base its efforts on current baseline data regarding changes in internal medicine training programs.

Methodology and Response Rate

In the Spring of 1995, an eight-page questionnaire, containing forced-choice items and open-ended questions, was sent to the 418 internal medicine programs in the United States that are accredited by the Accreditation Council for Graduate Medical Education (ACGME). At programs that were sponsored by member institutions of the Council of Teaching Hospitals (COTH), the questionnaire was sent to the CEO’s office; the program directors of the internal medicine residency training program received the questionnaire at the other institutions. The survey instrument requested information about reductions and increases in internal medicine training positions between 1992-93 and 1994-95 and planned future changes in the size of the training programs. The questionnaire also asked about efforts to increase production of general internists and to shift training to ambulatory care.

Eighty percent (335 programs) of the 418 accredited internal medicine training programs responded. Respondents represent 82.5 percent of the nation’s residents and fellows in accredited programs (25,300 of approximately 30,700 internal medicine trainees in the most recent AAMC Graduate Medical Education Census). One-half of the respondents (166 programs) offered fellowship training. An estimated 5,700 residents and fellows annually completed internal medicine training at responding programs; 46 percent of graduates were reported to enter practice as general internists.

<p>| Table 1 |
|-----------------|-----------------|-----------------|
| Changes in Respondents’ Program Size, 1992/93 - 1994/95 and Planned |</p>
<table>
<thead>
<tr>
<th>% of Respondents</th>
<th>Total positions changed</th>
<th>Average positions changed per program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992/93-1994/95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reductions</td>
<td>67</td>
<td>20.0%</td>
</tr>
<tr>
<td>Increases</td>
<td>127</td>
<td>37.9%</td>
</tr>
<tr>
<td>Net Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned Changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reductions</td>
<td>75</td>
<td>22.4%</td>
</tr>
<tr>
<td>Increases</td>
<td>63</td>
<td>18.8%</td>
</tr>
<tr>
<td>Net Change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Changes in Program Size and Configuration

Table 1 shows the net impact of implemented and planned changes in housestaff complement. Between 1992-93 and 1994-95, positions added across all respondents totaled approximately four times the number of positions respondents reported reducing. This resulted in a net increase of 1,562 positions, corresponding to a 6.6 percent increase over the 23,700 trainees at responding institutions in 1992-93. The 67 respondents reporting reductions, decreased their trainee complement on average by 7.6 positions, while the 127 respondents that reported adding trainees added an average of 16.3 positions each.

Efforts to change the structure of the training program to emphasize the training of internal medicine generalists were reported by 117 programs (35 of respondents). Less than one-half of these (48 programs) formally changed the structure of their training program by converting existing internal medicine residency and fellowship positions into generalist slots.

When asked about plans for future changes, 75 respondents (22.4 percent) reported plans for reducing a total of 526 training slots. Sixty-three programs (18.8 percent) reported plans to add a total of 315 trainee slots. The net impact of the planned changes in the size of training programs will be a future decrease of 211 positions; representing a 0.8 percent reduction over the 25,300 internal medicine trainees at responding programs in 1994-95. Also, another 121 programs (36.1 percent) indicated plans to change their configuration, increasing emphasis on the training of general internists.

Table 2 shows the positions eliminated and added by responding programs between 1992-93 and 1994-95. Respondents most often mentioned reducing categorical internal medicine positions and positions in cardiology and preliminary internal medicine. However, categorical internal medicine was also the discipline in which respondents most frequently added positions, followed by internal medicine primary care tracks and internal medicine/pediatrics positions. Three programs reported establishing general internal medicine fellowships, generally with an orientation toward academic practice and health services research.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Reductions and Increases in IM Trainees, 1992/93 - 1994/95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residency positions</td>
<td>Reductions: 30 programs</td>
</tr>
<tr>
<td>Fellowship positions</td>
<td>18 programs</td>
</tr>
<tr>
<td>Residency and fellowship positions</td>
<td>7 programs</td>
</tr>
<tr>
<td>Fellowship program(s)</td>
<td>8 programs</td>
</tr>
<tr>
<td>Fellowship programs and other (resid. and/or fellowship) positions</td>
<td>4 programs</td>
</tr>
<tr>
<td>Total</td>
<td>67 programs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Positions most often reduced</th>
<th>Times mentioned</th>
<th>Positions most often increased</th>
<th>Times mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residency positions</td>
<td>Preliminary</td>
<td>21</td>
<td>Categorical</td>
</tr>
<tr>
<td>Categorical</td>
<td>12</td>
<td>Gen./Prim. Care</td>
<td>18</td>
</tr>
<tr>
<td>Fellowship positions</td>
<td>Cardiology</td>
<td>21</td>
<td>Cardiology</td>
</tr>
<tr>
<td>IM Prim Care Fel.</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fellowship programs</td>
<td>Rheumatology</td>
<td>4</td>
<td>IM Prim Care Fel.</td>
</tr>
<tr>
<td>Cardiology</td>
<td>4</td>
<td>Cardiology</td>
<td>3</td>
</tr>
</tbody>
</table>
to add positions in categorical internal medicine, internal medicine primary care tracks, or internal medicine/pediatrics.

Nearly three-fourths of respondents (246 programs) reported no plans for future reductions in their internal medicine trainee complement.

Strategies for Reducing Training Positions

The 67 programs that reported reductions used one or more of the following approaches, with the largest group (35 programs) formally initiating reductions in training slots before offering positions in the National Residency Matching Program (NRMP) or otherwise advertising them. A smaller group (nine respondents) reported that positions not filled in the match were withdrawn. Respondents added that these were frequently residency positions in preliminary and categorical internal medicine and fellowship positions in cardiology and rheumatology. Nine programs reported that lengthening the training period for fellows allowed them to reduce the number of entering fellowship positions without decreasing their trainee complement. Six institutions reported combining programs, primarily incorporating formerly freestanding residency or fellowship programs into programs at university-based institutions. Five respondents indicated that, similar to the Department of Internal Medicine at the University of California at Los Angeles, their programs converted some or all positions in their subspecialty programs to ‘academically oriented’ positions and required completion of an advanced degree in a health-related field during training. The remaining respondents used a variety of processes to decrease trainees.

Programs reported several commonly experienced challenges in reducing positions. The largest group, 50 percent of respondents to this question, mentioned the need to continue patient care in inpatient units with a smaller housestaff complement. Programs resolved this issue by increasing the clinical responsibilities of faculty; creating night float systems; employing house physicians and non-physician providers; and shifting coverage among housestaff (such as increasing the responsibilities of second- and third-year residents to compensate for reductions in first-year positions). Approximately 15 percent reported some problems with ACGME accreditation after reducing positions or closing fellowship programs. Many of these programs were already at or close to the lowest size acceptable to the Residency Review Committee for Internal Medicine (RRC-IM). Several respondents also mentioned more general concerns about losing fellows for clinical and research activities.

When non-physicians replaced housestaff, institutions reported concerns with attending and referring physician satisfaction; this problem was reported by 12 percent of respondents. For attending physicians, these often centered on differences in supervision requirements, with a perception voiced by a number of participants that non-physicians required more ‘supervision’ than residents and fellows. Respondents also commented that concerns were voiced by attending and referring physicians accustomed to physician coverage, contrasted with coverage by non-physician providers. Several respondents indicated that they resolved these issues by hiring moonlighting physicians.

Programs that Did Not Reduce Nor Plan to Reduce

Of the 260 programs that reported that they had not decreased internal medicine training positions, 111 provided their reasons. Most responses fell into the four categories shown in Table 3 on page 6. Nearly one-half of these respondents (52 programs) reported that they operated well-balanced programs that offered high-quality training; experienced no problems in recruiting; and that their programs filled largely with U.S. graduates. Many of these programs also noted that most of their graduates entered practice as general internists and, as the nation or their region needs additional generalists, reductions in program size would not be appropriate.

Twenty respondents noted they could not reduce their internal medicine trainee complement because housestaff were critically needed to cover service demands in inpatient and (to a lesser degree) ambulatory settings. These programs, many located at urban and public hospitals, reported that an
Table 3
Reasons for Not Changing Size or Composition

<table>
<thead>
<tr>
<th>Programs that neither changed nor were planning to change the size and/or composition offered four common reasons for their decision to maintain program size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of respondents answering this question:</td>
</tr>
<tr>
<td>47% No need to reduce - &quot;the program is balanced, we recruit well, our graduates find positions, and we fill primarily with U.S. grads.&quot;</td>
</tr>
<tr>
<td>18% Housestaff are needed for patient care at hospitals with increasing internal medicine admissions and high-acuity patients.</td>
</tr>
<tr>
<td>15% Current size of the programs is such that reductions would result in problems with the ACGME/RRC requirements for 'critical mass.'</td>
</tr>
<tr>
<td>5% The program is in a growth mode - &quot;we are adding, not reducing.&quot;</td>
</tr>
</tbody>
</table>

emphasis on primary and ambulatory training had already reduced the residents available to cover inpatient services. Some reported that, while inpatient volume for other specialties was declining, internal medicine admissions were increasing. These increases were frequently accompanied by a corresponding growth in ambulatory service volume, often for high-acuity patients with chronic conditions. Their responses also stressed that ongoing efforts to move residents to ambulatory care sites also prohibited them from downsizing.

A third group (17 programs) noted that reductions were not possible, since their programs are already at the smallest size acceptable to the RRC for Internal Medicine (RRC-IM) to allow for peer interaction, inquiry, and an appropriate professional milieu. Eleven of these programs noted that their institutions did not possess fellowship programs and that the majority of their graduates entered practice as general internists. A third group (6 institutions) stated that their programs were in a 'growth mode,' filling all positions and may already be forced to turn away acceptable applicants.

Strategies for Adding Training Positions

Programs reporting increases in their trainee complement indicated that this was achieved using two approaches. One was to add positions, when internal institutional support was available. Where this internal support was lacking, respondents reported that they created dedicated positions for special purposes, generally primary care-oriented positions. Some respondents reported that they had received support from grant or foundation funding, from funding commitments by affiliated hospitals or from state funding expressly dedicated for this purpose.

Respondents reported four common sets of issues experienced when adding training positions. Of the 127 programs that added positions, 108 provided information on this topic. Several reported that they encountered more than one issue in adding positions. Forty-six programs mentioned that the greatest challenge was providing sufficient learning opportunities and clinical resources (teaching patients, supervising faculty and space in ambulatory settings) for the added trainees. Programs resolved this by seeking relationships with ambulatory clinical facilities that offered trainees access to patients, and by expanding existing, or establishing new, facilities.

Thirty-one respondents mentioned supervision of added trainees as a challenge. Institutions resolved this by hiring additional full-time faculty, or by using volunteer faculty, including private physicians in office settings. Several respondents commented that applicant quality for the additional positions, largely in general or primary care internal medicine, was frequently below a desirable level. They added that the increased positions forced them to accept
these applicants or leave positions unfilled. Another 30 respondents reported that funding the added positions represented a challenge, however, nearly all respondents indicated that they were able to overcome this particular challenge.

Programs that reported no recent increases nor plans to add internal medicine training positions, provided four reasons why they did not increase the size of their programs. These were a lack of funding; a lack of additional training resources; a lack of qualified applicants; and the fact that there may already be an oversupply of physicians, making it unnecessary to train additional physicians and resulting in fewer career opportunities available to graduates. Several commented on the lack of positions for graduates of internal medicine subspecialty fellowship programs.

Changes in Program Composition

Information on changes in the composition of programs to emphasize general internal medicine are shown in Table 4. Between 1992-93 and 1994-95, 117 respondents reported that they changed the composition of their training programs to produce more general internists. However, less than one-half of these respondents reporting that they changed composition of their programs. Forty-eight programs converted existing positions, often preliminary internal medicine slots, to general internal medicine or internal medicine primary care track positions. Respondents converted a total of 589 positions (573 residency and 16 fellowship positions) between 1992-93 and 1994-95. This corresponds to 2.3 percent of all positions at responding training programs. The remainder indicated that their programs increased emphasis on general internal medicine within the existing categorical internal medicine programs.

Another 121 programs reported plans to change the composition of their program to enhance training of general internists. These programs plan to convert another 227 residency and 17 fellowship positions to train general or primary care internists. Generally, both positions already converted and those targeted for future conversion were preliminary internal medicine positions that were shifted to categorical positions or, to a lesser extent, categorical positions that were converted to positions in a primary care track.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Reconfiguring Training to Emphasize General Internal Medicine 1992/93 - 1994/95 and Future Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992/93-1994/95</td>
<td>Future Plans</td>
</tr>
<tr>
<td>Programs converting positions</td>
<td>117</td>
</tr>
<tr>
<td>Existing Positions converted to General Internal Medicine slots</td>
<td></td>
</tr>
<tr>
<td>Residency positions converted</td>
<td>573</td>
</tr>
<tr>
<td>Fellowship positions converted</td>
<td>16</td>
</tr>
<tr>
<td>Total Converted</td>
<td>589</td>
</tr>
</tbody>
</table>

Positions reduced to create added generalist slots (times mentioned by respondents in parentheses)

Residency positions
- Preliminary (33)
- Categorical (21)

Fellowship positions
- Cardiology (4)
- Endocrinology (2)
- Gastroenterology (2)

Relatively few fellowship positions (16 between 1992-93 and 1994-95 and 17 in respondents’ planned initiatives) were converted or are targeted for conversion to enhance generalist education.

The majority of programs that had not changed, and are not planning to change, their composition offered one of three explanations. First, the largest group, one-third of the 94 respondents to this question noted that they currently produced a high proportion of generalists, emphasized
general and ambulatory internal medicine, and, in some instances, already offered an internal medicine primary care track. Second, a somewhat smaller group (23 programs) reported that added emphasis on ambulatory and general internal medicine was not feasible, since trainees were needed in inpatient hospital settings, where the patient volume may already be too high for the existing resident complement on inpatient rotations. Finally, the third group (14 programs) noted that they would like to change their composition and emphasize primary and ambulatory care, but that issues including funding, faculty, ambulatory space, and training opportunities, specifically access to appropriate patient populations for general internal medicine teaching, prevented them from implementing these plans. Several voiced concerns that emphasizing general internal medicine could result in lower fill rates for their programs. The remainder provided a variety of reasons that prevented them from reconfiguring their training program.

Approaches for Changing Programs' Composition to Produce Additional Generalists

Strategies used to increase the percentage of general internists fell into four categories. In addition to the 48 programs (41 percent of programs reporting reconfiguring training), which reported that they shifted existing positions, another 40 percent of the programs responding to this question (47 programs) reported that they did not create general internist/primary care internal medicine training programs nor converted existing positions to general internal medicine. Instead, programs in the second group increased emphasis on general and ambulatory training within the existing training program. Examples included increasing ambulatory rotations for all residents; shifting training to office-based settings; and using an academic group practice or 'firm' model. Programs also reported that they shifted existing positions from an orientation toward subsequent fellowship training to residency education leading toward general internal medicine practice. Thirteen programs in this group reported that, in addition to this shift, they had made substantive curricular changes, such as adding mandatory or elective rotations in non-internal medicine disciplines, including dermatology, gynecology, women's health and others. A third group, comprising 4 percent (5 programs) indicated that they had added dedicated new positions for the training of generalists. Finally, an equal percentage of programs reported shifting non-internal medicine positions, such as transitional year slots, to general internal medicine. The remaining respondents used a variety of approaches or combinations of the approaches described above.

Shifting Internal Medicine Training to Ambulatory Settings

Approximately one-half of the respondents (176 programs) reported that, between 1992-93 and 1994-95, their programs had increased training in ambulatory settings by more than 10 percentage points (e.g., from 20 to 30 percent). Programs that increased training in ambulatory care noted that the strategies used, and the issues encountered, in shifting training to ambulatory sites were similar to those in reconfiguring programs to emphasize general internal medicine. Programs developed mandatory and elective ambulatory rotations for all years of training. In addition, subspecialty electives and some fellowship training were shifted to ambulatory care.

In addition to this, several respondents reported offering electives combining inpatient and ambulatory experiences. Programs reported adding new ambulatory sites to their rotations by acquiring or building new sites, and through entering affiliations with freestanding ambulatory clinics, private physician offices, community clinics, Health Maintenance Organizations (HMOs), and others. Some of these sites offered interesting and non-traditional experiences for trainees, including rotations in dermatology, treatment of HIV/AIDS and sexually transmitted diseases, gynecology and women's health care, and provision of health care to homeless persons. A variety of practitioners supervised and taught in these ambulatory settings, with the type of practitioner depending largely on the setting. They included full-time and voluntary faculty, and community physicians in private practice settings. In some settings, such as HMOs and community clinics that used a team concept, non-physician providers also participated in the educational process.
Challenges in Changing Program Composition and in Moving Training to Ambulatory Care

Similar to respondents that reported reductions in training positions, programs that changed composition to train more general internists, and to a lesser degree, programs that reported increasing trainees' ambulatory care experiences, reported that inpatient coverage provided the major challenge as the training program shifted its focus. Several reported that this issue had not been resolved to date; others noted that non-trainee providers had assumed some or all of the coverage. These included faculty and house physicians, nurse practitioners, and physician assistants. Several also reported converting units from teaching services to services staffed solely by private attending physicians. When non-physician providers were used, issues mentioned by respondents were very similar to those reported when non-physicians replaced housestaff after decreases in training program size. A few respondents also commented on faculty and non-teaching attending physician dissatisfaction due to the increase in clinical responsibility.

A second challenge concerned the need for additional ambulatory sites and patients. Respondents addressed this by contracting with non-hospital sites and/or by opening additional ambulatory facilities for patient care and teaching. A number of programs indicated that a third obstacle was the availability of faculty to supervise and mentor general internal medicine trainees. Most added that this had not been resolved, largely due to a shortage of qualified general internists, and in some cases, a lack of funding to attract them to academic practice or to given institutions. Several programs reported that using community physicians as teachers and mentors resulted in considerable efforts to recruit, train, evaluate, and retain them. Programs reported that issues centering on curriculum changes were quite readily resolved by program directors, faculty and graduate medical education committees.

A largely unresolved issue reported was a lack of applicants interested in pursuing careers as general internists. As one respondent remarked "Some medical students and housestaff physicians still yearn for 'blood and guts' and inpatient time, and feel ambulatory care training is too slow or too 'healthy'." Several respondents also commented that individuals interested in subsequent fellowship training were often not attracted to their programs after the emphasis on general internal medicine was implemented.

Impact on Medical Student Education

Overall, respondents were equivocal about whether the impact of reducing trainee positions on medical students was beneficial or detrimental. Programs that reduced trainees were much more likely to comment on a detrimental impact on medical student education, citing the loss of residents as teachers and changes in faculty members' roles after the reduction in housestaff as reasons for this. In contrast to this, programs that reconfigured to increase training of general internists reported that this change had a positive influence on medical student education, as generalist faculty and residents were better role models for the students. In addition, among programs that reduced trainees and those that increased resident exposure to ambulatory care, some commented that medical student education in inpatient settings improved after the number of residents decreased or residents were shifted to ambulatory care, as the faculty remaining on the inpatient services had more time to teach the students.

At many institutions, after the program began to emphasize general and ambulatory care internal medicine, medical students were shifted to ambulatory settings along with the residents. Programs commented that disadvantages of moving students to ambulatory settings included a decreased exposure of students to inpatient care, and that residents and students 'competed' for space, patients and the time of supervising faculty in the ambulatory settings.

Involvement of Faculty in Decisions to Reduce or Reconfigure

The degree to which faculty were involved in the initiatives to reduce or reconfigure the training programs varied among respondents. In nearly
one-third of the institutions that reported changes, faculty physicians were formally included on committees that decided on and implemented the changes or were represented on standing committees, such as the institutional GME committee, that supervised their implementation. At 20 percent of responding programs, faculty members were not represented among the committees or individuals who planned the changes, but the proposals were discussed with the faculty and the faculty agreed on the need. Another 20 percent reported that faculty physicians were not initially consulted about decisions to reduce or reconfigure the training program. In these institutions, the decisions were made by department/division chairs, program directors or other entities, such as hospital administration. Faculty were informed of the decision only after it had been reached. Various degrees of participation by and systems for involvement of faculty were reported by the remaining respondents.

The Role of Local Circumstances

Some respondents indicated that local circumstances had encouraged them to reduce the size or change the configuration of their training programs. These for generalists and especially graduates prepared in primary care and ambulatory internal medicine, dermatology, women's health and office orthopedics, were factors in the decision to reconfigure the training program. Notwithstanding the responses citing an impact of 'market forces' on programs' decisions to reduce trainees or reconfigure, analysis of reductions by state, to look for evidence of a possible impact of advanced health care markets on GME, did not find greater reductions in states with higher market consolidation, with one exception. Reductions in fellowship positions in California alone accounted for nearly one-third of the 204 fellowship positions eliminated by respondents over the three-year period analyzed and represented a significant reduction (25 percent) of the internal medicine fellowship positions in the state. However, equally large percentages of internal medicine subspecialty positions were reduced in several states at other stages of managed care market evolution.

A second group, approximately 20 percent of the respondents, indicated that their reduction in training positions was the result of reductions or projected future reductions in funding for physician training. The third group (16 percent) reported reducing positions in response to a decline in the number of qualified applicants. A fourth group, 15 percent of respondents to this question, noted that their initiatives to emphasize generalism were fostered by graduates' interest in generalist careers, as well as their success in recruiting these graduates.

Table 5
Outcome to Date: Six common observations

<table>
<thead>
<tr>
<th>Percent of respondents answering this question:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>The change was just implemented; it is too soon to tell.</td>
</tr>
<tr>
<td>21%</td>
<td>The initiative is a partial success, but important limitations remain.</td>
</tr>
<tr>
<td>15%</td>
<td>The impact is very positive; the initiative met its goals.</td>
</tr>
<tr>
<td>10%</td>
<td>The impact is largely negative; loss of residents for inpatient care and problems with coverage and other areas, outweigh any positive impact.</td>
</tr>
<tr>
<td>5%</td>
<td>The impact is minor; the program was already moving in this direction.</td>
</tr>
<tr>
<td>5%</td>
<td>The initiative had no impact on program quality or recruitment; U.S. graduates continue to be less than enthusiastic about primary care.</td>
</tr>
</tbody>
</table>

responses fell into four categories. The first and, by far largest, group (42 percent of the respondents to this question) stated that market forces, primarily managed care penetration and the demands of local group practices and other entities hiring graduates, influenced their decisions to reduce or reconfigure. Some of these added that local and regional demand
reported that their initiatives were partially successful, commented that parts of the organization, such as subspecialty faculty, remain concerned about the changes that are occurring in the training program. Ten percent of responding programs reported that the initiative, to date, has had primarily a negative impact. These respondents indicated that loss of residents in patient care settings, and the resulting problems, outweighed any positive effect the change may have had on the quality of the training program. Five percent of the respondents noted that their initiative did not impact recruitment, adding that U.S. graduates continue to be less than enthusiastic about general internal medicine, compared to some non-generalist specialties that command higher incomes. However, a larger group of respondents (15 percent) commented on an upturn in U.S. graduates' interest in careers as general internists. Finally, another five percent noted that the initiative merely 'formalized' changes that were already occurring in the program.

Conclusions

The findings of the COTH/ APM Survey show that between 1992-93 and 1994-95, additions of trainees in internal medicine training programs substantially outweighed reductions. In the coming years, this trend may reverse, as the planned changes would result in a net decrease of over 200 training positions. Figure 1 shows that, even within the additions and reductions responding programs made between 1992-93 and 1994-95, the trend was toward smaller increases in program size, accompanied by a growing number of reduction in positions made annually.

Nonetheless, given the overall trainee complement, the reductions found were relatively minor, indicating internal medicine's program leadership is currently not seriously considering sizable decreases in the size of training programs. It is worth noting that, despite a national dialogue about a likely overabundance of subspecialists, no significant reductions in fellowship positions occurred. This finding of the COTH/ APM Survey is similar to the preliminary results from the 1994-95 National Study of Internal Medicine Manpower (NaSIMM) Subspecialty Survey. The NaSIMM survey found that 28 percent of the directors of internal medicine subspecialty programs reported decreases in their number of training positions1. This percentage is only slightly higher than the 26 percent of programs that reduced subspecialty positions (43 of the 166 responding programs that offered fellowship training) found in the survey conducted by the COTH/ APM Study Group. It should be noted here that, unlike the NaSIMM questionnaire, the COTH/ APM survey was not sent directly to the program directors of respondents' internal medicine subspecialty training programs. It thus may not reflect the opinions or plans of this group. However, the purpose of the COTH/ APM survey was to obtain an 'institutional' summary of initiatives at respondents' Departments of Internal Medicine and at their sponsoring institutions. Thus, it is hoped that the input of subspecialty training program directors was sought by the individual or group completing the survey.

Among the respondents that did not reduce positions, a great many indicated that they operate high-quality training programs. These added that, if reductions are needed, they should occur at other, lower-quality programs, and that reductions in trainees at internal medicine programs known for their high quality, while other programs maintain or
increase their size, would not be in the best interest of trainees or the profession. Across the respondents to the COTH/APM survey, this view was coupled with a lack of agreement within the internal medicine community that reductions are currently needed or appropriate. Some respondents also noted concern that voluntary reductions could be 'compounded' by potential future cuts in positions, mandated at the federal or state level.

Another possible interpretation for a lack of large-scale reductions in trainees is that programs may be responding to a complex set of issues facing internal medicine. These include projections of an overall physician surplus, combined with an often-voiced need for additional generalists. Internal medicine includes subspecialties that most workforce projections consider to be in oversupply, as well as general internists, which may create 'conflicting objectives' for training programs. The findings of the COTH/APM survey appear to reflect this dichotomy. One example is that categorical internal medicine positions, which do not offer indications about their generalist/non-generalist orientation, were added as well as reduced by respondents. Other potential evidence may be the observation that, while programs did not make sizable cuts in trainees, significant percentages of respondents converted existing positions or the orientation of programs to general internal medicine, and more than one-half increased time in ambulatory care.

While the planned increases are minor, the fact that some programs are planning future increases, especially increases in subspecialty positions, is worth pointing out. It should be noted that the COTH/APM Survey was fielded before the new ACGME Program Requirements for Internal Medicine became effective July 1, 1995. Under the new requirements, increases in program size will require approval by the Residency Review Committee for Internal Medicine (RRC-IM)². This should constrain the ability of programs to add positions without undergoing a specific review by the RRC. The RRC is currently establishing the procedures for this review. However, efforts to downsize would also be subjected to review by the Committee to assess whether the reductions interfere with RRC requirements for curriculum, peer interaction and the balancing of education and service.

**Future Efforts of the Study Group**

In view of the need to balance education and service, the respondents that indicated that they cannot reduce or reconfigure their training programs, due to service demands, are of particular importance. To respond to the dilemmas potentially faced by these programs, the second phase of the COTH/APM Study will, among other issues, explore cost-effective alternatives for covering inpatient services in conjunction with reductions in training programs. This would allow these institutions to reduce positions or to move trainees to the most educationally appropriate settings.

To fulfill the Study Group's goal to develop resources for programs and hospitals wishing to change the size or configuration of internal medicine training at their institutions, the second phase of efforts will develop case studies and models of successful initiatives. These would be presented to constituents of AAMC and APM, teaching hospital executives, academic department leaders, medical educators, policy makers and other interested groups and individuals. The Study Group also hopes to use the results of the first and second phase of its efforts in the development of a set of questions that programs may want to consider before initiating efforts to modify their size or configuration. This approach may be useful, since responses for a given institution will likely be impacted by local circumstances.

While the Study Group's efforts are aimed primarily at internal medicine training programs, it is hoped that the lessons learned in this effort will also be applicable to programs in other specialties.


²ACGME, Program Requirements for Residency Education in Internal Medicine and Program Requirements for Residency Education in the Subspecialties of Internal Medicine, *Essentials and Information Items 1995-96.*