Objective: To assess the opinions of emergency medicine (EM) residents and program directors about the value of completing a nonrequired 1-year internship before entering an EM residency program accredited by the Accreditation Council for Graduate Medical Education (ACGME).

Methods: An eight-question, self-administered online survey was e-mailed to EM residents who had completed a nonrequired internship before entering ACGME-accredited residency programs. A separate, six-question survey was e-mailed to program directors of ACGME-accredited programs that do not require an internship who had ever had a resident who had completed a nonrequired internship.

Results: Forty-six (27 [59%] osteopathic, 19 [41%] allopathic) of 113 residents and 40 of 124 program directors responded to the survey questions. Less than 4% of residents completed a separate, nonrequired 1-year internship. The most common reason for completing a nonrequired internship was to obtain licensure by the American Osteopathic Association (19 [41%]). Most residents believed that they were more proficient with history-taking and physical examinations (38 [83%]) and procedures (34 [74%]) during the first year of residency than their colleagues who did not complete an internship, but this percentage decreased over time. The program directors had similar opinions. Most osteopathic residents who completed the internship for osteopathic licensure would not have done so if it were not required. Most (39 of 40) program directors would not recommend taking a nonrequired internship.

Conclusion: Completing a 1-year internship before entering an EM residency program may better prepare physicians for their first year of residency in terms of basic clinical competency, but further study is needed in this area.

All emergency medicine (EM) residency programs approved by the American Osteopathic Association (AOA) require 4 years of graduate medical education (GME), which includes the successful completion of a 1-year internship. Similar program formats are found in EM residency programs accredited by the Accreditation Council for Graduate Medical Education (ACGME); however, most ACGME-accredited EM residency programs do not have a similar internship.

At press time, the reasons for completing a nonrequired internship and the value of this extra year of GME have never been studied to my knowledge. The current study was undertaken to determine why medical residents would complete a nonrequired internship before beginning residency training, and to assess the opinions of EM residents and program directors about the value of this additional year of training.

Methods

The institutional review board of the Geisinger Health System (Danville, Pa) approved the survey instrument and study methods. The 124 ACGME-accredited EM residency programs that do not require separate internship training were contacted in October 2003 to determine the number of current EM residents who had completed a nonrequired internship before entering residency training. Program directors were contacted via telephone using the contact information provided in the online residency catalog on the Society for Academic Emergency Medicine Web site. Resident program directors were asked whether they had any current EM residents who had completed a nonrequired internship before entering residency training. Program directors were contacted via telephone using the contact information provided in the online residency catalog on the Society for Academic Emergency Medicine Web site. Resident program directors were asked whether they had any current EM residents who had completed a nonrequired internship before entering residency training. Osteopathic EM residency programs were excluded from this survey because they require internships.

Group means were calculated to compare the opinions of the overall respondents and various subgroups of responding EM residents and program directors using Microsoft Excel 2003 (Microsoft Corp; Redmond, Wash) and SPSS for Windows (version 10.0; SPSS; Chicago, Ill).

In November 2003, residency program directors who reported having current residents who had completed a nonrequired internship were asked to forward to them an e-mail explaining the eight-question resident survey and its purpose, as well as a link to the survey Web site. A separate e-mail was sent to program directors explaining the survey and its pur-
pose, as well as a link to the survey Web site for the six-question program director survey. A follow-up e-mail was sent to nonrespondents in December 2003.

The surveys asked for residents’ self-perceptions and program directors’ perceptions of their residents’ performance during each year of residency training on the following items:

- perceived proficiency in history-taking and physical examination skills compared with colleagues who did not complete an internship
- perceived procedural proficiency (eg, chest tubes, central lines, intubations, etc) compared with colleagues who did not complete an internship
- perceived value of internship during residency training

In addition, residents were asked why they completed a nonrequired internship and how they felt about having completed the internship. Program directors were asked whether they would recommend that osteopathic trainees complete an internship before entering an ACGME-accredited residency program.

Results

One hundred thirteen residents from 30 EM residency programs were identified as having completed a nonrequired internship, and 46 completed surveys were returned (27 [59%] osteopathic, 19 [41%] allopathic), for a response rate of 41%. Of 124 program directors identified, 47 responded: 40 completed the survey, and 7 responded that they had no applicable residents, yielding an overall response rate of 38%.

Table 1 lists the demographic characteristics of survey respondents.

Reasons given by respondents for completing a separate internship are listed in Table 2. The reason most frequently given by osteopathic physicians was to obtain AOA licensure (19 [70%]). Failing to match directly into EM residency programs from medical school was the reason most frequently given by allopathic physicians (6 [32%]).

Most residents (38 [83%]) perceived themselves to be more proficient with history-taking and physical examinations during the first year of their residency training compared with their colleagues who did not complete a separate preresidency internship. However, this additional proficiency steadily decreased with each year of residency training to be more in line with their counterparts. By the start of the fourth year, only 2 (4%) residents perceived that they were more proficient than their counterparts. More than half (23 [57%]) of the responding program directors also felt that these residents were more proficient during the first year of their EM residency, but the program directors’ perception of residents’ proficiency also steadily declined after the first year of residency. No program directors felt that these residents were more proficient in these skills than their counterparts during their fourth year. Table 2 lists the reasons why survey respondents completed a nonrequired internship before residency training.

* Data are given as No. (%). Percentages do not total 100 because of rounding.

Abbreviations: AOA, American Osteopathic Association; DO, osteopathic physician; EM, emergency medicine; IM, internal medicine; MD, allopathic physician; NA, not applicable; Peds, pediatrics; PGY, postgraduate year.

### Table 1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>EM Residents (n=46)</th>
<th>EM Program Directors (n=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residency format</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ PGY 1-3</td>
<td>38 (83)</td>
<td>33 (83)</td>
</tr>
<tr>
<td>□ PGY 1-4</td>
<td>7 (15)</td>
<td>6 (15)</td>
</tr>
<tr>
<td>□ PGY 1-5 (EM/IM or EM/Peds)</td>
<td>1 (2)</td>
<td>1 (3)</td>
</tr>
<tr>
<td><strong>Internship accreditation/approval</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ ACGME</td>
<td>19 (41)</td>
<td>NA</td>
</tr>
<tr>
<td>□ AOA</td>
<td>19 (41)</td>
<td>NA</td>
</tr>
<tr>
<td>□ Dual</td>
<td>8 (17)</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Medical degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ DO</td>
<td>27 (59)</td>
<td>NA</td>
</tr>
<tr>
<td>□ MD</td>
<td>19 (41)</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Year in residency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ First</td>
<td>23 (50)</td>
<td>NA</td>
</tr>
<tr>
<td>□ Second</td>
<td>8 (17)</td>
<td>NA</td>
</tr>
<tr>
<td>□ Third</td>
<td>13 (28)</td>
<td>NA</td>
</tr>
<tr>
<td>□ Fourth</td>
<td>2 (4)</td>
<td>NA</td>
</tr>
</tbody>
</table>

* Data are given as No. (%). Percentages do not total 100 because of rounding.

Abbreviations: AOA, American Osteopathic Association; DO, osteopathic physician; EM, emergency medicine; IM, internal medicine; MD, allopathic physician; NA, not applicable.

### Table 2

<table>
<thead>
<tr>
<th>EM Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason</td>
</tr>
<tr>
<td>Required for AOA licensure</td>
</tr>
<tr>
<td>Did not match directly into EM residency from medical school</td>
</tr>
<tr>
<td>Required for military service</td>
</tr>
<tr>
<td>Wanted additional time to decide on career path</td>
</tr>
<tr>
<td>Career change</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

* Data are given as No. (%). Percentages do not total 100 because of rounding.

Abbreviations: AOA, American Osteopathic Association; DO, osteopathic physician; EM, emergency medicine; MD, allopathic physician; NA, not applicable.
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year of residency training. Most (34 [74%]) residents also perceived themselves to be more proficient with basic medical procedures during the first year of residency training, but by the fourth year, this perception was held by only 1 (2%) resident. This initial gain in proficiency was also noted by their program directors (18 [45%]), an opinion that dropped to 0 after the second year.

Most (35 [76%]) residents felt that the internship was “extremely” or “moderately” valuable for patient care during their first year of residency training. As residents progressed through their training, many continued to perceive the internship to be of current value, but the percentage steadily declined to 9% at the start of the fourth year. Program directors seemed less convinced of the internship’s value, with 11 (27%) rating the internship as “extremely” or “moderately” valuable during the first residency year in the emergency department and 0 during the fourth year.

Most (33 [72%]) residents were glad that they had completed the internship, with 30 (65%) indicating that they would take it “if they had to do it all over again.” However, most osteopathic physicians who completed the internship because of licensure requirements would not have done so if it were not required (18 [67%]). In addition, 39 of 40 program directors would not recommend that medical trainees complete a nonrequired internship before beginning an ACGME-accredited EM residency program.

Comment
The issue of EM residency length and format has been debated.1 Studies on EM residency training have examined various issues, including scholarly activities,2-3 career choices,4-5 selection criteria of residents,6 and funding.7 No study to date, however, has examined the reasons physicians have for completing a nonrequired internship.

Most osteopathic physicians (70%) cited AOA licensure as the reason for completing the internship, but the reasons cited by allopathic physicians were more varied. Given the relatively small number of osteopathic and allopathic survey respondents (27 vs 19), meaningful comparison between osteopathic and allopathic physicians is not possible.

Many osteopathic medical graduates complete their residency training in ACGME-accredited residency programs.8 However, most ACGME-accredited EM residency programs do not include an internship year. Currently, there are five states (Florida, Michigan, Oklahoma, Pennsylvania, and West Virginia) that require osteopathic physicians to complete a rotating internship in order to obtain an unrestricted medical license. While certain hardship provisions exist, in general, osteopathic physicians who complete a residency program that does not include an internship must also complete a separate rotating internship if they wish to practice in one of these five states.

Both residents and program directors indicated that medical trainees who had completed a separate internship were initially more proficient than their colleagues who entered residency training directly from medical school. This initial increase in proficiency is not surprising. What is notable is that this advantage seemed to disappear as residents progressed through their training. There are several possible explanations for this finding.

When physicians enter EM residency programs directly from medical school, most lack substantial experience with basic EM procedures such as intubation, placement of central venous catheters and chest tubes, and laceration repair. Many of these procedures are not difficult on a cognitive level, and can be learned in a year. As a result, any resident with at least 1 year of residency training should be as comfortable with these procedures as a second- or third-year EM resident.

In addition, the GME provided by a rotating internship is likely of value to the new EM resident, who is developing and refining his or her approach to interviewing patients, working in a hospital, and interacting with consultants and colleagues. However, the field of EM is a discrete specialty with a unique body of knowledge. As the resident progresses in his or her training, the general information becomes less valuable as more detailed information and complex clinical reasoning are required.

Another possible explanation for the decreasing value of the traditional rotating internship after the first year of EM residency training is in the similarity of the two experiences. A review of the first-year curriculum of EM residency programs indicates that most programs are broad in scope, including rotations in family medicine, obstetrics and gynecology, pediatrics, and surgery—the typical components of a rotating internship.10

Many residents reported that their internship was a valuable experience. Most osteopathic physicians, however, felt that the perceived benefit of this additional training was not worth the extra time investment, and most indicated that they would not have completed the internship if it were not required for licensure.

Recently, there has been much discussion in the osteopathic medical profession regarding the value of the traditional rotating internship.11-18 While it is beyond the scope of the current study to make recommendations about requirements for licensure, additional study regarding this requirement would be beneficial.

Based on the 41% response rate to the resident survey, it may not be possible to generalize the results to the entire population of residents who complete a nonrequired internship. It is possible that residents who did not respond to the survey had a different perspective on their internship experiences.

Survey findings are more uncertain with regard to the program directors. Given the relative infrequency of residents...
who completed this nonrequired internship (<4%), in all likelihood, the total number of program directors who never had such a resident is higher than seven. It is possible that many program directors did not respond to the survey because they had no relevant experiences. As a result, the answers of the program directors who responded may more accurately reflect this group of program directors overall than the 38% response rate might otherwise indicate.

Conclusion

Emergency medicine residents who completed a nonrequired rotating internship and their program directors believe that this additional year of training increases resident proficiency during the first year of residency training compared with those who did not complete an internship. The perceived differences in proficiency were shown to decrease with each subsequent year, however. Most osteopathic residents who completed the internship for licensure requirements would not have done so if it were not required. However, respondents in general felt that the internship provided a valuable learning experience.

References


