

# Careers of Graduates of Combined Emergency Medicine/Internal Medicine Programs

Eric D. Katz, MD, Joel T. Katz, MD

## Abstract

In 1991, the American Boards of Internal Medicine and Emergency Medicine changed their credentialing requirements to recognize training common to both disciplines. This allowed the formation of a five-year track for dual board eligibility. From 1995 to 1998, 28 physicians graduated from eight emergency medicine/internal medicine (EM/IM) programs. This study was an analysis of career outcomes of these graduates. **Objectives:** To document career outcomes of EM/IM program graduates, establish a baseline for future studies of EM/IM graduates, and elucidate the role of EM/IM graduates in medicine. **Methods:** The 28 EM/IM graduates were mailed a written questionnaire. Endpoints assessed included practice fields, practice environments, ongoing research, publications, academic appointments, board examination scores, career satisfaction, and career goals. **Results:** Surveys were obtained from 23 of 28 (82.1%) graduates. Seven (30.4%) practice EM and IM, 15 (65.2%)

practice EM exclusively, and one (4.3%) practices IM exclusively. Twelve (52.2%) are involved in research. The graduates authored a total of 30 papers or chapters. Ten (43.5%) currently work in administrative positions, but many more aspire to. The most common reasons for having chosen an EM/IM program are to be a better physician (22/23, 95.7%), to practice in both fields (15/23, 65.2%), and to become better prepared for an academic career (15/23, 65.2%). The EM/IM graduates reported high career satisfaction. **Conclusions:** Although the majority of EM/IM graduates do not practice both IM and EM, many would prefer to. The graduates are highly satisfied with their choice of residency and career. Early in career development, the graduates appear to gravitate toward academic and leadership positions. **Key words:** emergency medicine; internal medicine; residency; career outcome. *ACADEMIC EMERGENCY MEDICINE* 2002; 9:1457-1459.

The first published proposal for a five-year residency combining emergency medicine and internal medicine (EM/IM) was written in 1987 by Dr. Robert Dailey,<sup>1</sup> although he later commented that physicians who are board-certified in both fields, "... invariably practice emergency medicine."<sup>2</sup> In 1991, the American Board of Emergency Medicine (ABEM) and the American Board of Internal Medicine (ABIM) made modifications to their credentialing requirements to allow simultaneous EM and IM training over five years.<sup>3</sup>

As of 1998, eight EM/IM programs had graduated residents. While many studies have sought to predict the quality and careers of graduates of ei-

ther one of these fields, to the best of our knowledge, no studies have reported these outcomes for EM/IM graduates.

Rational decisions about EM/IM programs by medical students and hospitals should be based on a critical analysis of dual training. In order to begin shedding light on these issues, we initiated a survey of all EM/IM graduates between 1995 and 1998.

## METHODS

A 23-question survey was mailed to all physicians who had graduated from ABEM/ABIM recognized EM/IM programs by July 1998. Nonresponders were surveyed a second time. The questions focused on current practice setting, academic appointments, administrative, research and educational activities, job satisfaction, reasons for choosing an EM/IM program, and job satisfaction. Many of the questions were adapted, with permission, from ABEM's *Longitudinal Study of Emergency Physicians*.<sup>4</sup> Results were compiled and means and standard deviations were computed.

## RESULTS

Responses were obtained from 23 of 28 (82.1%) graduates. Eighteen (78.3%) reported choosing an

From the Division of Emergency Medicine, Washington University in St. Louis, St. Louis, MO (EDK); and the Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA (JTK). The authors' former affiliation is Allegheny General Hospital, Pittsburgh, PA.

Received April 9, 2002; revision received July 15, 2002; accepted July 23, 2002.

Presented at the SAEM annual meeting, San Diego, CA, May 2000, and the Association of Program Directors in Internal Medicine (APDIM) annual meeting, Philadelphia, PA, April 2000.

Address for correspondence and reprints: Eric D. Katz, MD, Assistant Residency Director, Assistant Professor, Division of Emergency Medicine, Washington University in St. Louis, Campus Box 8072, 660 South Euclid, St. Louis, MO 63110. Fax: 314-362-0478; e-mail: katze@msnotes.wustl.edu.

EM/IM program as their first choice on their National Residency Matching Program (NRMP) rank list, four listed an EM program, and one listed an orthopedic program. Eighteen graduates (78.3%) said they would definitely or probably select an EM/IM residency if they were currently beginning their training. The most common reasons given for having chosen an EM/IM residency are listed in Table 1. Each respondent was then asked to retrospectively evaluate the importance of these reasons (Table 1). Factors that should discourage students from choosing an EM/IM program include the difficulties of coordinating practice in two fields and in keeping current with two bodies of literature.

No respondent reported having failed either the IM or the EM boards, although more respondents took the EM boards (20/23, 87.0%) than the IM boards (16/23, 69.6%). Independent confirmation was not available.

All respondents indicated that they are currently in clinical practice. Seven (30.4%) practice both EM and IM, 15 (65.2%) practice EM exclusively, and one (4.3%) practices IM exclusively. When asked to divide their clinical practices into clinical (direct or supervisory patient care, consultant medical care), academic (research, didactic teaching or community service), and/or administrative (hospital, department or clinical program management) activities, five had totals surpassing 100% and were excluded from analysis. The remaining 18 respondents' current practices, on average, consist of 70.2% clinical EM, 10.3% clinical IM, 10.3% academic EM, 1.4% academic IM, 6.4% administrative

EM, and 1.4% administrative IM. In ten years, the respondents would prefer to spend, on average, 43.1% of their time in clinical EM, 10.6% in clinical IM, 17.8% in academic EM, 7.2% in academic IM, 15.6% in administrative EM, and 5.8% in administrative IM. Four of the 15 graduates who do not practice IM (26.7%) indicated that in their ideal careers, they would practice IM as well.

Of the graduates' current time spent in clinical care, 61.1% is spent on direct patient care, 35.7% on supervision of patient care, and 3.3% on consultant care. Among the ten (43%) who are in academic practice, academic time is divided into time spent on research (29.5%), didactic teaching (63.0%), and community service (7.5%). Administrative time was divided into hospital (12.5%), department (42.3%), residency (25.8%), and clinical program administration (19.3%).

Twelve of 23 graduates reported publishing at least one article at the time of the survey (range 1–5). These 12 respondents published a total of 30 papers or textbook chapters. Independent confirmation by Medline search confirmed 21 of the 30 (70%) publications the graduates claimed to have authored. Journals not listed on Medline and textbook chapters could not be accounted for.

Ten graduates (43.5%) reported having leadership positions, including EM/IM program director (1), assistant residency director (4), medical director of an ED (2), ED vice-chair (1), and director of an observation unit (2). In ten years, seven (30.4%) want to be leaders of residency programs, six (26.1%) want to be department chairs, ten (43.5%) want to be medical directors of an ED, and one wants to be an academic dean. One respondent (4.3%) plans to leave medicine for another career.

Fifteen of the 22 (68.2%) who practice EM identified their primary setting as a teaching hospital, with 12 (80%) practicing at a university affiliate and three (20%) practicing at a university hospital. Seven of the eight (87.5%) who practice IM identified their primary setting as a teaching hospital, the majority of which (71.4%) practice in university-affiliated hospitals. The majority of IM practice takes place in the inpatient setting (82.5% vs. 17.5% outpatient). Four of the eight respondents who practice IM have no outpatient practice.

Only one respondent pursued further training after finishing an EM/IM program. This person completed a one-year sports medicine fellowship, but does not practice sports medicine.

Overall, the graduates are very satisfied with their careers (4.35 ± 0.7 on a five-point scale). The graduates reported a higher level of job satisfaction with their EM careers (4.5 ± 0.7) than with their IM careers (3.75 ± 1.3).

**TABLE 1. Reasons Emergency Medicine/Internal Medicine (EM/IM) Graduates Chose Combined Training, and Retrospective Importance of the Reasons**

Reason	Number of Graduates	Importance*
To be a better physician	22 (95.7%)	4.0 ± 1.3
To practice in both fields	15 (65.2%)	4.0 ± 1.2
Better preparation for an academic career	15 (65.2%)	4.1 ± 0.8
Better preparation for leadership roles	12 (52.2%)	3.6 ± 1.1
Fear of burning out of EM	12 (52.2%)	2.7 ± 1.2
Prestige of being double-boarded	5 (21.7%)	2.2 ± 1.0
Couldn't decide between EM and IM	3 (13.0%)	2.0 ± 1.0
To practice EM and enter a critical care fellowship	1 (4.3%)	
To be a hospitalist	0 (0.0%)	2.7 ± 1.2

\*Importance was scored on a five-point scale, with 5 being most important. Results are given as mean ± standard deviation.

## DISCUSSION

This study evaluated the career paths of the first four classes of EM/IM graduates by anonymous, self-reporting survey. While the majority practice EM, one third of the responding graduates currently practice in both fields. As a recently developed training option, it remains unclear whether current career positions are reflective of a choice or of a limited set of options within existing medical structures. When asked to describe how they would prefer their practice to be divided in ten years, most would prefer to make more use of their IM training, spend more time in academic and administrative positions, and spend less time in the clinical practice of EM. Eleven (47.8%) would prefer to practice in both fields. It would seem that a hospitalist position would be most amenable to combination with an EM schedule, but the graduates considered the desire to be a hospitalist to be a poor reason to enter combined training.

More than 73% of the EM/IM graduates chose careers combining academic or leadership activities with clinical care. Whether this is a consequence of the initial career trajectories of highly motivated medical students or of the value added by the extended and overlapping experiences is unknown.

The graduates' retrospective evaluation of reasons to enter (and to avoid) an EM/IM residency is described. Medical students considering combined EM/IM programs may benefit by comparing their motivations with these responses.

## LIMITATIONS

A small sample size, the short duration of the study, and the lack of a control group limit the scientific reliability of this study. In addition, the survey format precluded independent verification of most responses. Determination of the value added by combined training requires obtaining similar data on graduates of EM and IM programs to use as a control. Comparison of EM/IM graduates with EM graduates would need to include separate evaluations of three- and four-year programs, as well as sequentially-trained double-boarded physicians. Fellowship graduates from either field would need to be included in the analysis.

This study did not address whether graduates

are in their current positions by choice or by necessity. Future studies will be needed to determine whether the graduates achieved their career goals.

In addition, we were forced to rely on applicants' recollection of reasons why they chose EM/IM training. Future studies are needed to compare applicant concerns before and after an EM/IM residency.

In 1999, the creation of a combined EM/IM and critical care pathway (EM/IM/CC) was approved. While this study did not specifically address the utility of EM/IM programs as a route to board eligibility in critical care, it should be noted that only one respondent mentioned this as a reason for entering a combined program, and none had entered a critical care fellowship.

The recent increase in the prestige and availability of hospitalist medicine positions, which are ideally suited to combination with EM careers, may affect attitudes and career paths subsequent to the timing of this study.

## CONCLUSIONS

The EM/IM pathway is relatively new, and time is needed for the careers of the graduates to fully develop. However, the first four classes of EM/IM program graduates report satisfied physicians with productive, academic careers. While the majority practice EM, almost half would practice both fields, given the opportunity. Further research is needed to determine the value added by combined training and more specifically define EM/IM graduates' roles in the medical workforce.

The authors thank the American Board of Emergency Medicine, Dr. Benjamin Munger, and Dr. Hazen Hamm for their assistance with project design and inception.

## References

1. Dailey RH. Dual residency training in emergency medicine and internal medicine [letter]. *Ann Emerg Med.* 1987; 16:921.
2. Dailey RH. In response [letter]. *Ann Emerg Med.* 1988; 17:767.
3. Guidelines for combined emergency medicine–internal medicine residency training programs. *Ann Emerg Med.* 1991; 20:101–3.
4. American Board of Emergency Medicine. Longitudinal Study of Emergency Physicians. East Lansing, MI: ABEM, 1994.