Where Have All the General Internists Gone?

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BACKGROUND: A shortage of primary care physicians is expected, due in part to decreasing numbers of physicians entering general internal medicine (GIM). Practicing general internists may contribute to the shortage by leaving internal medicine (IM) for other careers in and out of medicine.

OBJECTIVE: To better understand mid-career attrition in IM.

DESIGN AND PARTICIPANTS: Mail survey to a national sample of internists originally certified by the American Board of Internal Medicine in GIM or an IM subspecialty during the years 1990 to 1995.

MAIN MEASURES: Self-reported current status as working in IM, working in another medical or non-medical field, not currently working but plan to return, or retired; and career satisfaction.

KEY RESULTS: Nine percent of all internists in the 1990–1995 certification cohorts and a significantly larger proportion of general internists (17%) than IM subspecialists [(4%) $P<0.001$] had left IM at mid career. A significantly lower proportion of general internists (70%) than IM subspecialists [(77%) ($P<0.008$)] were satisfied with their career. The proportion of general internists who had left IM in 2006 (19%) was not significantly different from the 21% who left in 2004 ($P=0.45$). The proportion of general internists who left IM was not significantly different in earlier (1990–92; 19%) versus later (1993–95; 15%) certification cohorts ($P=0.15$).

CONCLUSIONS: About one in six general internists leave IM by mid-career compared to one in 25 IM subspecialists. Although research finds that doctors leave medicine because of dissatisfaction, this study was inconclusive about whether general internists left IM in greater proportion than IM subspecialists for this reason. A more likely explanation is that GIM serves as a stepping stone to careers outside of IM.

KEY WORDS: primary care physicians; general internal medicine; physician shortage.
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INTRODUCTION

The supply and distribution of physicians will not likely be adequate to meet the health care needs of US citizens in coming decades. The shortage of primary care physicians may reach 46,000 FTEs by 2025, which accounts for over one-third of the total predicted shortfall and is greater than shortages predicted for any other specialty area [1].

The decreasing numbers of new entrants into General Internal Medicine (GIM) contribute to primary care shortages [2–5] and underscore the importance of increasing the attractiveness of primary care careers and of retaining those who enter the field. Reports of dissatisfaction with medical practice are numerous [6–9], and dissatisfied physicians are more likely to leave medicine [10]. General internists may be particularly discontented and more likely to leave internal medicine (IM) due to a widening income gap between primary care physicians and many specialists [11–12], increasing demands, growing expectations and accountability for providing high quality care, and payment based on the ability to perform in a challenging environment [13]. In addition, attrition in GIM may be greater than in IM subspecialties because GIM serves as a stepping stone to other careers. Consistent with these explanations, our previous research indicated that in 2004 a larger proportion of general internists than IM subspecialists (21% vs. 4%) were no longer working in IM approximately 10 years after their initial certification [14]. In order to refine our understanding of mid-career attrition in IM, we conducted a national survey of internists to determine if more general internists than IM subspecialists are dissatisfied with their career and if general internists leave IM in greater proportion than IM subspecialists. We also assessed differences in attrition between (1) the 1990–1992 certification cohort of general internists in 2006 and 2004 and (2) between the 1993–1995 and the 1990–1992 certification cohort.

METHODS

Sampling Frame, Design, and Analyses

The sampling frame was 33,364 IM physicians in the US who passed an American Board of Internal Medicine (ABIM) certification examination in general internal medicine or an IM subspecialty between 1990 and 1995 and needed to renew their certificate 10 years later through the Maintenance of Certification (MOC) program. The sampling frame was grouped into 12 strata based on two certification cohort groups (certified 1990–1992 and certified 1993–1995); three MOC groups (completed MOC; enrolled in MOC, not completed; not

Table 1. Estimated Status of Internal Medicine Physicians Originally Certified Between 1990 and 1995

		Highest certification	
	All respondents n (%, 95% CI)	GIM n (%, 95% CI)	IM Subspecialists n (%, 95% CI)
Working in IM	1,901 (90.7, 89.4–92.0)	733 (83.2, 80.6–85.8)	1,168 (96.1, 94.8–97.3)
Working in other medical field	99 (5.5, 4.5–6.6)	78 (10.3, 8.1–12.6)	21 (2.1, 1.1–3.0)
Working in non-medical field	11 (0.5, 0.2–0.8)	7 (0.9, 0.2,1.6)	4 (0.2, 0.0–0.5)
Not working, plan to return to IM	23 (1.3, 0.8–01.9)	16 (2.4,1.2–3.6)	7 (0.6, 0.1–1.1)
Not working, plan to return, but not necessarily IM	9 (0.7, 0.2–1.2)	8 (1.6, 0.4–2.7)	1 (0.1, 0.0–0.2)
Retired	15 (1.2, 0.6–1.8)	8 (1.6, 0.5–2.8)	7 (0.9, 0.2–1.6)
Total	2,058 (100)	850 (100)	1,208 (100)

enrolled); and two specialty groups, representing the highest level of certification (GIM and IM subspecialty). A stratified random sample of 3,610 was selected. Survey data were collected from September 2006 to February 2007. Physicians received a pre-notification letter, followed by an eight-page self-administered questionnaire (36 questions, 10 of which are the focus of this paper. See Appendix) and three repeat surveys to non-responders. The third survey contained a $2.00 bill. Cover letters informed respondents that they had been selected randomly, assured them that their responses would be handled confidentially and that their identity would not be used in either analyses or reporting of the results of this project. Estimates of percents, means, 95% confidence intervals, and standard errors were computed using SAS 9.1 and SPSS 12.0 to correctly account for the stratified sample design and sample response rates. Table 2 compares the sampling frame with the whole and respondent samples. The respondent sample was weighted to the population to adjust for hypothesis-based disproportionate sampling and non-response.

RESULTS

Among the 3,610 in the sample, 27 were found to be out-of-frame, so the eligible sample was adjusted to 3,583. Survey responses included 2,058 useable returns (57% response rate). Response rates by specialty were 58% for GIM and 57% for IM subspecialty. Cohort response rates were 54% for 1990–1992 and 59% for 1993–1995. MOC status response rates were 61% for those who completed the program, 48% for those enrolled but not completed, and 39% for those not enrolled. Although we expected this pattern of response rates, we used ABIM certification data and AMA Masterfile information for a sensitivity study of potential response bias. The analysis suggested that our final weighted results may overestimate attrition in IM by a few percentage points. Importantly, the magnitude of differences among specialties and cohorts, which is our primary focus, remains the same.

Career Status

Nine percent of internists are no longer working in internal medicine or its subspecialties about a decade after their original certification in GIM or an IM subspecialty. About six percent are working in another medical field, less than one percent left medicine, one percent retired, and two percent are temporarily not working but plan to return to the

Table 2. Comparison of Sampling Frame with Whole and Respondent Samples (Unweighted)

Characteristic	Frame (33,364)	Whole sample (3,583)	Respondents (2,058)
Age	49.7 (5.7) range 37–88	49.3 (5.6) range 38–80	49.2 (5.7) range 39–80
Gender			
Male	24,450 (73%)	2,608 (73%)	1,443 (70%)
Female	8,914 (27%)	965 (27%)	615 (30%)
US region			
South	10,874 (33%)	1,199 (34%)	660 (32%)
West	6,572 (20%)	688 (19%)	418 (20%)
Northeast	9,101 (27%)	979 (27%)	587 (29%)
Midwest	6,817 (20%)	717 (20.0%)	393 (19%)
Specialty			
GIM	13,947 (42%)	1,457 (41%)	850 (41%)
IM subspecialists	19,417 (58%)	2,126 (59%)	1,208 (59%)
Cohort			
1990–92	15,710 (47%)	1,279 (36%)[1]	695 (34%)
1993–95	17,654 (53%)	2,304 (64%)[1]	1,363 (66%)
MOC			
Completed	25,496 (76%)	2,807 (78%)	1,725 (84%)
Enrolled not completed	3,334 (10%),	410 (11%)	196 (10%),
Not enrolled	4,534 (14%)	366 (10%)[2]	137 (7%)

Sampling was disproportionate by design due to a primary focus on the 1993–1995 cohort and to assure a sufficient number of responses from those not enrolled in MOC, who were known to respond at a lower rate

1. Cohort sampling: sampling ratio of the (1993–1995) to (1990–1992) cohorts was ≈1.8:1

2. Not enrolled in MOC sampling: sampling of those not enrolled in MOC was designed to ensure at least 50 respondents for GIM and IM subspecialties, assuming a 40% response rate (p>99%)

workforce, although not necessarily in internal medicine (Table 1).

Attrition and Career Satisfaction

Larger proportions of general internists than IM subspecialists are no longer working in internal medicine or its subspecialties (17% vs. 4%; $P<0.001$). Overall, three-quarters of internists working in IM are somewhat or very satisfied with their current career [74% (95% CI, 72% to 76%)]; however, a greater proportion of those who left IM are satisfied with their career [87% (95% CI, 80% to 92%)] than those still working in IM [74% (95% CI, 72% to 76%), $P<0.01$], and a lower proportion of general internists [70% (95% CI, 67% to 73%) than IM subspecialists [77% (95% CI, 74% to 79%; $P<0.008$) are satisfied with their career.

Time and Cohort Differences in Leaving IM

The 19% of general internists who left IM in 2006 is not significantly different from the 21% who left in 2004 ($P=0.45$), nor is attrition in the 1990–1992 cohort of IM subspecialists in 2006 (4%) significantly different from attrition in 2004 (4%; $P=0.87$). The 15% attrition in the 1993–1995 cohort of general internists is not significantly different from attrition in the 1990–1992 cohort (19%; $P=0.15$) (Table 2).

DISCUSSION

This research is based on a national random sample of internal medicine physicians in the US and obtained a respectable response rate; however, limitations include the participation of volunteer respondents, use of self-report data, and a cross-sectional design. Attrition and career dissatisfaction are greater among general internists than IM subspecialists. Attrition in the 1990–1992 cohort did not change between 2004 and 2006 and is not greater among the younger 1993–1995 cohort.

One possible explanation for these findings, consistent with existing research, is that career dissatisfaction motivates decisions to leave IM. But the evidence for this relationship is not conclusive in our study. First, most general internists and IM subspecialists are satisfied with their career. While general internists are more likely to leave IM and are somewhat less satisfied than subspecialists, they may not have left *because* they were less satisfied. Likewise, those who left IM are more satisfied with their current career than those still working in IM, but dissatisfaction with IM may not be the reason they left the field. Second, based on an open-ended question asking those who left IM why they left, only 22% indicated negative aspects such as long hours, limited income, or hassles (e.g., “frustrating and unrewarding … not compatible with family life;” “better compensation and better hours;” “reimbursement and insurance hassles”). The majority (57%) left IM because of a change in interest or to take advantage of a preferred opportunity (e.g., “looking for new challenges;” “preferred Emergency Medicine;” “change in clinical interest”). Third, we did *not* find that those leaving IM left disproportionately from small or private practice environments where financial pressures [15, 16] and hence frustrations and general dissatisfaction may be greater (24% of those no longer working in IM were previously employed in a private practice while working in IM compared to 56% of those still working in IM). Internists leave IM most commonly from settings other than small or private practices to practice emergency medicine, which draws on similar medical expertise.

Considering these findings and the stability of attrition in IM across time and cohorts, we suspect that a more likely explanation for the greater attrition in GIM than in IM subspecialties is that the “general” nature of GIM makes it a convenient stepping stone to careers outside of internal medicine and to some non-medical fields. In the words of one respondent: “[I] didn’t ‘leave [IM]’ *per se*—had always been focused on prevention and policy. IM was an important stepping stone in my training.”

Policies and organizational support should continue to focus on increasing interest in GIM among students and residents, but must also ensure the attractiveness of GIM practice among those working in the specialty. We found that a sizeable minority (40%) of internists who have left IM are open to returning. Changes in the practice environment might entice them back to the field.

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Conflict of Interest: *The lead author is employed by the American College of Physicians, Inc; other authors are employed by the American Board of Internal Medicine. Both organizations may benefit financially as the number of general internists increases.*

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APPENDIX

Survey Instrument

Respondents described their current status as (a) working in the field of IM or its subspecialties; (b) working in a medical field other than IM or its subspecialties; (c) working in a non-medical field; (d) not currently working but plan to return to IM or its subspecialties; or (e) retired. Respondents currently working but not in IM (b and c above) were asked to write in a response to the question "Why did you leave internal medicine or its subspecialty areas?" and to indicate whether or not they (a) intend to return to IM or its subspecialties, (b) might consider returning, or (c) do not intend to return. Current and past primary employer, principal medical specialty, and number of physicians in practice or primary work setting were assessed with close-ended response options. US region, location of medical school, and gender were obtained from ABIM's administrative records. Respondents indicated their career satisfaction by answering the question "Thinking very generally about your overall satisfaction with your current career, how satisfied are you right now?" (-2= very dissatisfied; -1= somewhat dissatisfied; 0= neutral; +1= somewhat satisfied; +2= very satisfied).