Resident Career Planning Needs in Internal Medicine: A Qualitative Assessment

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Abstract

Background Few residency programs have centralized resources for career planning. As a consequence, little is known about residents' informational needs regarding career planning.

Objective To examine career preparation stressors, practical needs, and information that residents wished they were privy to when applying.

Methods In 2007 and 2008, we surveyed 163 recent graduates or graduating residents from 10 Yale-based and Yale-affiliated hospitals' internal medicine programs regarding their experiences with applying for positions after residency. We included questions about demographics, mentorship, stress of finding a job or fellowship, and open-ended questions to assess barriers and frustrations. Qualitative data were coded independently and a classification scheme was negotiated by consensus.

Results A total of 89 residents or recent graduates responded, and 75% of them found career planning

during residency training at least somewhat stressful. Themes regarding the application process included (1) knowledge about the process, (2) knowledge about career paths and opportunities, (3) time factors, (4) importance of adequate personal guidance and mentorship, and (5) self-knowledge regarding priorities and the desired outcome. Residents identified the following advice as most important: (1) start the process as early as possible and with a clear knowledge of the process timeline, (2) be clear about personal goals and priorities, and (3) be well-informed about a prospective employer and what that employer is looking for. Most residents felt career planning should be structured into the curriculum and should occur in the first year or throughout residency.

Conclusions This study highlights residents' desire for structured dissemination of information and counseling with regard to career planning during residency. Our data suggest that exposure to such resources may be beneficial as early as the first year of training.

Editor's Note: The online version of this article contains the survey instrument used in this study.

Background

Residency programs provide training in their respective disciplines, but few have centralized resources or courses to prepare residents for their careers beyond residency. This leads to heightened anxiety among interns and junior residents as they often scramble to navigate their career

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paths during the early years of residency.[1] Furthermore, information is often conveyed through word of mouth and informal networks, often making the process seem very haphazard. This may be especially true for those who do not have a clear sense of their career goals.

A few studies have addressed the various factors that may play key roles in the job or fellowship application process of American internal medicine residents, and they have focused on mentoring[2] and factors affecting career choices after residency.[3–5] However, there has not been a qualitative assessment of resident perspectives of career preparation needs. Such findings would have direct implications for the structuring of career preparation curricula during residency and potentially decrease uncertainty about the future during the already intense experience of residency. A more structured approach might decrease anxiety and increase physician wellness, which has significant implications for individual physician performance, decrease in burnout, and more productive health care systems.[6] In this study, we sought to examine career preparation stressors, practical needs, and practical information residents wished they had known when applying.

Methods

In fall 2007 and spring 2008, we surveyed recent graduates and graduating residents (N = 163) from 10 Yale-based and Yale-affiliated hospitals' medicine residency programs. There are 3 major training programs with direct clinical responsibilities with the Yale-New Haven Hospital (Yale Traditional, Primary Care, and Medicine/Pediatrics), and 8 nearby hospitals that participate in the Yale Affiliated Hospital program. We developed our instrument to assess the residents' experience with career planning, obtaining input from local faculty, and piloting the survey on chief residents for readability and ease of use.

We designed a 60-question survey (see supplemental APPENDIX online) to assess baseline characteristics and experiences with career planning for an intervention planned at our institution. We did not find an instrument in the literature to adapt, and we used questions we felt would capture a broad scope of responses related to career planning. The questions were reviewed by colleagues and chief residents for face validity. Most questions were multiple choice. We included several open-ended questions to assess barriers and frustrations during the application process and residents' information needs regarding career planning, and to capture a range of resident perspectives and themes. We distributed the surveys via Survey Monkey (Survey Monkey, Palo Alto, CA), an online survey administration tool, and also sent print versions through the mail to nonresponders after 3 electronic reminders. Responses were collected anonymously. Participants were not provided compensation or other incentives. This research received an exemption from the Yale Human Investigation Committee.

Qualitative data were coded independently by 2 of the authors (R.L.G. and J.R.R.), and a classification scheme was negotiated by consensus. The classification was further validated by a blinded review of the quotations by the third author, who was not previously aware of the assigned themes (D.M.W.).

Results

The response rate was 56% (89 of 163; TABLE 1). Of this group, 45 (51%) applied for jobs, 53 (60%) applied for fellowships, and 14 applied for both. Among job applicants, 28 (62%) applied for hospitalist positions, with 9 (20%) choosing academic positions and 4 (8%) applying for private practice jobs, whereas 9 did not specify which type of job they pursued.

Of the respondents, 75% found career planning during residency training at least somewhat stressful. For residents who applied for a job, 43 (96%) were either somewhat or very satisfied with how the application went. Thirty-seven (82%) reported that the position that they accepted was their first choice. For residents who applied for a fellowship, 47 (89%) were either somewhat or very satisfied with how

TABLE 1	CHARACTERISTICS OF PARTICIPANTS (N = 89)
	No. of Participants (%)
Sex	
Male	49 (55)
Female	40 (45)
Race	
African American or black	6 (7)
Non-Hispanic white	48 (54)
Hispanic	6 (7)
Asian	23 (26)
Other	6 (7)
Program type[a]	
Primary care internal	27 (31)
Traditional internal medicine	52 (60)
Medicine/pediatrics	8 (9)
Mean age, y	32
Marital status	
Married/significant partner	65 (73)
Single	23 (26)
Other	1 (1)
Outstanding educational loans[b]	
Yes	60 (68)
No	28 (32)
Medical school[b]	
Inside the United States	65 (74)
Outside the United States	23 (26)
United States citizen	
Yes	66 (74)
No	23 (26)
Program	
University	62 (70)
University affiliated	27 (30)

[a] Two respondents omitted the question.
[b] One respondent omitted the question.

the application process went, and 37 (70%) reported that the position that they accepted was their first choice. Ninety-three percent stated that career planning should be structured into the residency curriculum, with 80% stating that this teaching should occur either in the first year or throughout residency training.

TABLE 2	THEMES AND DIMENSIONS OF RESIDENTS' REPORTED INFORMATIONAL NEEDS REGARDING CAREER PLANNING
Theme	**Dimensions**
Knowledge about the application process	• Timeline of the process • Building a resume • Logistics (eg, licensing, credentialing, malpractice insurance) • Strategies for finding a position • Negotiating a contract • Knowing what employers are looking for • Knowing the impact of visa status
Knowledge about career paths and opportunities	• Private practice versus academic medicine • Nontraditional career options (eg, nonacademic and nonhospitalist options) • Career options not requiring further training • Further information about traditional career options
Time as a factor in planning	• Need to start process early • Dedicated research time in area of career choice • Coverage for interviews
Personal guidance and mentorship	• Help decide on a suitable career • Guide through the application process • Define career goals • Identify various sources of guidance • Identify mentor in the field of interest early on
Self-knowledge regarding desired outcome of process and priorities	• Know short-term and long-term goals • Balance personal life and career • Know your personal values and your worth

Themes

The following themes regarding informational needs during the career planning of residents emerged from our analysis: (1) knowledge about the application process, (2) knowledge about career paths and opportunities, (3) time as a major factor in the application process, (4) importance of adequate personal guidance and mentorship, and (5) self-knowledge regarding priorities and desired outcome of the process. The themes are detailed below and outlined in TABLE 2.

Knowledge About the Application Process Many residents reported that they did not have adequate knowledge about the process of applying for a job or fellowship, including logistics and timelines. One resident noted:

> I really felt that there was no guidance from the program with this. Specifically, in terms of the overall process and deadlines, it would have been very helpful if we had maybe one session where we went over when to start the application process, when to ask for letters of recommendation. And, then to go over the actual process itself.… There are just so many things going on at one time that it would be helpful to just hear those things to make sure you don't overlook anything.

Residents applying for jobs also reported that they would have liked more information about when to start looking for positions, as well as information about medical licensing and credentialing, including how long the process takes. Other residents noted the need for guidance on writing a curriculum vitae and cover letter, negotiating a contract and salary, networking to find information about positions, and managing the business aspects of medicine, including billing. Residents also commented on the importance of knowing the expectations and goals of prospective employers, as well as the applicant characteristics that were most desirable. International medical graduates would have liked more information on the impact of visa status on career and fellowship options.

Knowledge About Career Paths and Opportunities Several residents reported that they did not know enough about types of employment that are most commonly sought after graduating medical training, including private practice, academic medicine, and subspecialty fellowships. They desired more information about lifestyle issues, career satisfaction, and types of opportunities. In addition, residents desired further information about less commonly pursued options, including medical writing, policy, and management. One resident requested further information on "options other than academic medicine and fellowships, what the lifestyle of each specialty field is like after fellowship, and hospital medicine as a career." Another resident asked for information about careers beyond the usual choices (academic options and private practice) that do not require fellowship training.

Other residents emphasized the need to know about career options as well as how to access particular job opportunities: Residents wanted more information on "career options that are available and how to go about searching for one" and "what to look for in good positions."

Time as a Major Factor in the Application Process   Lack of sufficient time to explore career options emerged as a major theme in our assessment. Residents also reported they did not have enough built-in time during residency to improve their application by pursuing particular interests, such as research. Furthermore, a frequently mentioned stressor involved finding time during rotations to go on interviews, mainly the need to arrange for coverage on their own. One resident commented, "I was trying to find a job in a geographic area away from residency and had very little time to make the needed visits." Negotiating time to provide coverage for interviews and the application process was a commonly mentioned stressor.

In response to the question, "What is the single most important piece of information that all residents should know to help improve their success in applying for a job or fellowship?" the most frequent response was the need to start early. One resident recommended that future residents should "acquire as much information as possible as early as possible." Another commented on the importance of developing a checklist for the application process and that keeping track of residents' responsibilities would allow them to stay on top of the process.

Importance of Adequate Personal Guidance and Mentorship   Many residents reported feeling lost in the application process in terms of timeline but also in terms of building up their resume and building up a network of advisors. Despite the fact that some of the programs had assigned faculty mentors, some residents felt that this was insufficient for career planning and often sought advice from a variety of sources, including mentors who were not well suited to provide career counseling. One resident stated, "I didn't know in my intern year that I needed to start research projects… I didn't know the importance of working with a 'big name'/and or prolific researcher, and while applying I didn't know which programs to apply to." Another noted, "With my primary mentor, there was minimal conversation on what my career goals were going to be."

Other residents were more successful in locating successful mentoring, and one made the following recommendations, "Communicate with a mentor in the respective field as soon as [you are] ready to make the commitment." Another noted, "It's very important to speak with faculty [at your institution] within the specialty—this is probably the best source of information."

Self-Knowledge Regarding Priorities and Desired Outcome of Process   Some residents felt that it was helpful to define their own priorities to determine compatibility with their prospective position. Early self-reflection and thinking about one's priorities could ease the process. To many, this involved critical consideration of what would provide the greatest satisfaction for their career as well as life in general. Many seemed to struggle with finding a balance between family and their career. Others also noted the importance of realizing the value of what each resident could bring to his or her postgraduate positions. One resident stated:

> Understand your value. Be clear about your priorities and be willing to negotiate for what you want. To do that you need to be honest with yourself about what is going to make your life enjoyable, and negotiate for a position that will provide the professional satisfaction you want while affording time for the things in life that make you happy.

Another resident recommended, "Figure out what you can and are willing to commit to (where to live, lifetime vs. potential short or long term commitment, interest in lifestyle, honest financial needs, realistic nature of those needs in career path, ability to use job as a stepping stone into one's ultimate goal)." Another noted that it is important "recognize inconsistencies in short term and long term goals to ultimately decide to pursue a position that could meet each of these needs and allow flexibility."

Discussion

Our qualitative study of graduating residents identified a great deal of stress regarding the career planning process, as well as several areas that residency programs can target to provide better support to their trainees. A previous national study of recent residency graduates found that program directors underestimated the level of stress that career planning caused in their trainees.[4] Our results are similar to previous work from other studies that demonstrates that only a minority of residents and recent graduates felt that they received sufficient counseling regarding career planning.[1,7–9] Similar to these studies, the residents in our research felt particular deficits regarding the business aspects of medical practice, as well as understanding real differences between various positions and career paths. Consistent with the findings of other studies,[10] our residents desired further guidance on how to deal with the financial aspects of practice as well as how to develop personal balance in their future careers.

Few studies are available in the medical literature that rigorously assess attempts to address these deficits in the training process.[11] Some articles describe the process of attempting to secure a position in academic medicine with suggestions for trainees and their mentors, whereas others focus on job search and contract issues.[12,13] A few programs have attempted to improve career planning resources through more robust faculty advising or mentoring programs,[14] or have provided online learning tools for resident career planning.[15] Such tools can be more broadly used and assessed for their effectiveness.

Our study has several limitations. It was designed for the purpose of local data gathering from recent graduates regarding career needs. It was not designed with the power for establishing statistical significance of our findings,

although the multiple programs surveyed should enhance the generalizability of our findings. Because of the retrospective design, our findings may be affected by recall bias, because the recent graduates, especially those who applied for fellowship, may have completed the process approximately 2 years before completing our survey.

Despite these limitations, we believe that we have collected information that is important for residency program directors regarding the need to improve support for trainees, not only with the development of clinical expertise during residency, but also in how to prepare effectively for the next steps beyond residency. Furthermore, our research highlights the need, and the desire from residents, to have an established curriculum during residency that could target the 5 themes we have described. Such a curriculum would preferably begin in the first year of training to provide residents with a career placement timeline to follow during residency and begin reflection on structuring their career path. General knowledge about the application process, career paths, and opportunities should also be made known during the first year because this will help to structure their career planning. As specific career paths become more obvious to the residents, residency programs could take a proactive role in connecting residents with meaningful mentors to encourage further reflection and provide career guidance. More specific knowledge, such as the logistics of the application process and building a resume, could be introduced during the second year and the beginning of the third year. At the end of their third year, time could be set aside for graduating residents to disseminate career planning information to first-years and second-years, perhaps in the form of a panel discussion. Such a curriculum could be executed as part of a series during selected noon conferences or as part of an ambulatory curriculum.

Residents want to secure an appropriate and satisfying position and to be able to function effectively from the beginning of their careers. Educational and mentoring systems in residency can help residents determine the most satisfying career path and achieve personal life goals. This can help to improve the likelihood of producing effective, competent clinicians who can be productive over lengthy careers and be more resistant to burnout, possibly leading to improvements in the performance of our health care systems.[5]

References

1 Levey RE. Sources of stress for residents and recommendations for programs to assist them. *Acad Med*. 2001;76(2):142–150.

2 Ramanan RA, Taylor WC, Davis RB, Phillips RS. Mentoring matters: mentoring and career preparation in internal medicine residency training. *J Gen Intern Med*. 2006;21(4):340–345.

3 McDonald FS, West CP, Popkave C, Kolars JC. Educational debt and reported career plans among internal medicine residents. *Ann Intern Med*. 2008;149(6):416–420.

4 Miller RS, Dunn MR, Richter TH, Whitcomb ME. Employment-seeking experiences of resident physicians completing training during 1996. *JAMA*. 1998;280(9):777–783.

5 North MA. Evaluation of the experiences of trainees seeking employment after completion of their vocational training. *J R Coll Gen Pract*. 1985;35(270):29–33.

6 Wallace JE, Lemaire JB, Ghali WA. Physician wellness: a missing quality indicator. *Lancet*. 2009;374(9702):1714–1721.

7 Linn LS, Brook RH, Clark VA, et al. Evaluation of ambulatory care training by graduates of internal medicine residencies. *J Med Educ*. 1986;61(4):293–302.

8 Szumacher E, Warner E, Zhang L, et al. Ontario radiation oncology residents' needs in the first postgraduate year-residents' perspective survey. *Int J Radiat Oncol Biol Phys*. 2007;69(2):512–517.

9 Melgar T, Chamberlain JK, Cull WL, et al. Training experiences of U.S. combined internal medicine and pediatrics residents. *Acad Med*. 2006(5);81:440–446.

10 Gabram SG, Hoenig J, Schroeder JW Jr, et al. What are the primary concerns of recently graduated surgeons and how do they differ from those of the residency training years? *Arch Surg*. 2001;136(10):1109–1114.

11 Greenberg LW, Jewett LS, Einhorn AH, et al. Career counseling practices in pediatric residency training programs. *Am J Dis Child*. 1990;144(4):497–501.

12 Collins J. Noninterpretive skills for radiology residents: job search and contracting issues. *AJR Am J Roentgenol*. 1999;173(6):1453–1457.

13 Dungy CI, DeWitt TG, Nelson KG. Securing a faculty position: a practical guide for residents, fellows, junior faculty, and their mentors. *Ambul Pediatr*. 2005;5(4):235–239.

14 Nasmith L, Boillat M, Rubenstein H, et al. Faculty advisor program for family medicine residents. *Can Fam Physician*. 1997;43:1257–1263.

15 Abelson HT, Blewett L, Tunnessen WW Jr. Career planning for pediatric residents. *Pediatrics*. 2001;107(5):e65.