

A Qualitative Analysis of Career Transitions Made by Internal Medicine–Pediatrics Residency Training Graduates

Harriett Burns, Lauriane Auvergne, Lindsey E. Haynes-Maslow, E. Allen Liles Jr., Eliana M. Perrin, Michael J. Steiner

BACKGROUND Physicians who complete combined residency training in internal medicine and pediatrics (med-peds) have a variety of career options after training. Little is known about career transitions among this group or among other broadly trained physicians.

METHODS To better understand these career transitions, we conducted semistructured, in-depth, telephone interviews of graduates of the University of North Carolina–Chapel Hill School of Medicine med-peds program who self-identified as having had a career transition since completing training. We qualitatively analyzed interview transcripts, to develop themes describing their career transitions.

RESULTS Of 106 physicians who graduated during 1980–2007, 20 participated in interviews. Participants identified factors such as personality, work environment, lifestyle, family, and finances as important to career transition. Five other themes emerged from the data; the following 4 were confirmed by follow-up interviews: (1) experiences during residency were not sufficient to predict future job satisfaction; work after the completion of training was necessary to discover career preferences; (2) a major factor motivating job change was a perceived lack of control in the workplace; (3) participants described a sense of regret if they did not continue to see both adult and pediatric patients as a result of their career change; (4) participants appreciated their broad training and, regardless of career path, would choose to pursue combined residency training again.

LIMITATIONS We included only a small number of graduates from a single institution. We did not interview graduates who had no career transitions after training.

CONCLUSIONS There are many professional opportunities for physicians trained in med-peds. Four consistent themes surfaced during interviews about med-peds career transitions. Future research should explore how to use these themes to help physicians make career choices and employers retain physicians.

Combined internal medicine and pediatrics (med-peds) residency training prepares graduates for a variety of career options. The most recent study of career outcomes indicates that approximately 80% of med-peds graduates are board certified in both internal medicine and pediatrics and see both adult and pediatric patients [1]. Providing primary care to patients of all ages continues to be the most frequently chosen career for med-peds graduates, but many also choose subspecialty, academic medicine, and hospitalist positions [2, 3].

Previous research documents that career expectations of med-peds physicians have changed over time. A 1999 study revealed that 73% of medical students who chose med-peds for residency intended to practice primary care [4]. During the same year, a national study demonstrated that, among med-peds graduates in the prior 10 years, 54% described their current practices as community office practices [3]. Trainee intentions and actual med-peds practice trends have shifted. Among recent med-peds interns, 42% anticipated entering a subspecialty fellowship program [5]. Two other studies of graduating med-peds residents showed that, after graduation, 55% initially chose to practice primary care and 18%–22% entered a subspecialty fellowship program [1, 2]. Despite the increased information provided by these studies, little is known about the overall trajectory of individual

med-peds careers, specifically with regard to what motivates graduates to make career transitions.

Understanding career transitions for a group of broadly trained physicians has implications for counseling trainees about future career choices, developing policy to attract and retain physicians within certain fields, and controlling the overall costs of training. In particular, given the increasing shortage of primary care physicians in certain areas of North Carolina [6], identifying what motivates this group of physicians (from a North Carolina training program) to seek certain jobs may affect how we address such shortages. For this study, we sought to explore the factors leading to career transitions among med-peds graduates. We used qualitative methods to examine this complex social process and generate hypotheses about career transitions.

Methods

Participants. Potential subjects were identified using a master list of all graduates from the University of North

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Address correspondence to Dr. Harriett Burns, 405 Lakeshore Ln, Chapel Hill, NC 27514 (harriett.burns@gmail.com).

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Carolina (UNC)-Chapel Hill School of Medicine med-peds program (N = 106). This program, with its earliest participants in the 1960s and its first residents accepted through the National Resident Matching Program in 1980, is one of the oldest med-peds programs in the country [7]. We e-mailed all graduates who had current e-mail addresses on file to identify potential participants; individuals who started med-peds residency at UNC-Chapel Hill but did not complete all 4 years of training were not contacted. Eligibility for participation in the study was determined by asking the question, "Have you been at your practice the entire time since you completed training?" The first 21 respondents who indicated they had made a career transition were contacted by telephone to achieve a sample size of 20 subjects (one was excluded because the individual discussed a planned career change rather than one that had taken place). All 20 subjects successfully completed a semistructured, in-depth telephone interview lasting approximately 30 minutes. No compensation was provided. The UNC-Chapel Hill institutional review board granted approval for this study in December 2008.

Data collection. After telephone consent was obtained, we asked participants 7 questions (Table A1, Appendix, available only in the online edition of the NCMJ). We used a set of open-ended prompts designed to elicit full responses when necessary. All interviews were recorded digitally and subsequently transcribed verbatim. Only the transcribers (L.A., L.E.H.-M., and H.B.) had access to the recordings and transcriptions.

Data analysis. Prior to interviewing candidates, we generated a list of factors we predicted might influence career transition. We included these factors, such as family, finances, and geographic location, a priori because they have previously been identified as influential to career satisfaction [8]. We modified and built upon this list as we reviewed the transcribed interviews. By use of methods based in grounded theory [9], 3 of us (L.E.H.-M., L.A., and H.B.) performed initial coding, focused coding, and consensus coding in the following manner. First, we independently coded randomly selected interviews. Next, we discussed the codes we had generated, defined them, and, through consensus, selected 14 codes we believed would adequately capture both the a priori and emergent factors related to career change (Table A2, Appendix, available only in the online edition of the NCMJ).

We reformatted transcript responses into analyzable units (ie, short paragraphs) and performed a second phase of coding, assigning the 14 focused codes to all representative paragraphs using ATLAS.ti software, version 5.0 (ATLAS.ti Scientific Software Development). Discussion following the second phase led to resolution of all disagreements in the assignment of codes. Once we completed consensus coding, we used ATLAS.ti to examine co-occurrences of codes. Through this examination, we developed a set of themes to describe interview responses. Because of our study size, we

did not perform extensive integrative interpretation of the pattern of co-occurrences.

Member checking. We contacted 4 of the graduates initially interviewed, to validate these themes by use of a process known as "member checking" [10, 11]. In a second, 30-minute interview, 3 of us (L.A., L.E.H.-M., and H.B.) obtained verbal consent and then shared our key themes with the interviewees. We asked them to comment on the themes and to decide whether the themes applied to their experience. We transcribed the interviews and reviewed responses for supportive and contradictory comments.

Results

Participants. Twenty former med-peds residents were interviewed regarding the career transition they considered to be most significant since completing training. Some described a change of practice location but not of practice type; some described a change or narrowing of practice type but within the same institution; and some described a change of both location and type of practice. No participants made a transition to a field that would be considered outside the realm of med-peds training. The primary difference between the group interviewed and the entire group of graduates was the percentage of graduates seeing only children or adults (60% vs 40%; Table 1).

Emergent themes. Participants touched on all the a priori factors we predicted might influence career transitions. In addition to these factors, our qualitative data analysis yielded 5 emergent themes that help describe interview responses. First, experiences during residency were not sufficient to predict future job satisfaction; work after the completion of training was necessary to discover career preferences. One participant explained, "One thing I have learned over time is that you really don't know what your situation is going to be like until you are actually in it. When you are looking for a job, they are going to woo you and everything is going to seem wonderful, and you don't know what it is going to be like until you get there."

One might predict that the experiences during residency would allow physicians to know which type of work they would most enjoy after training. Most participants, however, explained that they discovered most about what they liked and disliked during their first job or jobs following residency. In general, this process of discovery was viewed as positive; as one participant explained, "[Work after residency] allows people to evolve in ways they might not have predicted but are yet quite valuable."

Second, a major factor motivating career change was a perceived lack of control in the workplace. Most participants did not describe their career transition as stemming from a desire to assume different responsibilities but rather as from wanting more control over their work environment. One participant said, "During my time in primary care, I just became more frustrated by the problems in the medical care system that I really couldn't address on a day-to-day basis..."

TABLE 1.
Characteristics of Internal Medicine-Pediatrics (Med-Peds)
Residency Training Graduates

Characteristic	Interviewed graduates	All graduates
Female sex	11/20 (55)	54/106 (51)
Time since completing residency, years, mean (range)	11.8 (4-28)	13.6 (2-29)
Had at least 1 career change since completing training ^{a,b}	20/20 (100)	68/106 (64)
Practice type ^a		
Primary care medicine ^c	9/20 (45)	50/106 (47)
Academic medicine	2/20 (10)	10/106 (9)
Subspecialty	5/20 (25)	29/106 (27)
Hospitalist	3/20 (15)	8/106 (8)
International medicine	1/20 (5)	3/106 (3)
Emergency medicine	0	2/106 (2)
Not practicing medicine	0	4/106 (4)
Patient population ^d		
Adults only	6/20 (30)	23/102 (22)
Children only	6/20 (30)	18/102 (18)
Both adults and children	8/20 (40)	61/102 (60)

Note. Data are no. of graduates with the characteristic/overall no. in the analysis (%). All graduates complete training at the University of North Carolina (UNC)-Chapel Hill School of Medicine med-peds program during 1980-2007.

^aData are as of June 2009 and are based on information from the UNC-Chapel Hill med-peds database, interviews and discussion with current and previous program directors, and verification through state licensing boards.

^bTraining includes subspecialty training or a chief resident year, when applicable.

^cIncludes individuals who are associated with a teaching hospital.

^dData for all graduates exclude 4 individuals who were not practicing medicine.

and that led me to want to work on sort of the bigger picture rather than the day-to-day care of patients." Participants also desired more control over the patient or work schedule, the administrative system, and their ability to act in leadership roles. One participant summed up this need for control: "I think what I sought in a new job was a lot more control of what I would do day-to-day and control in the overall direction [of the practice]."

Third, participants described a sense of regret if their career change did not allow them to continue to see both adult and pediatric patients. One participant said, "I am perhaps a little regretful that I don't still feel on top of internal medicine." The feeling of regret stemmed from a sense of obligation to their broad training or from a fear of losing skills.

The regret, however, was often accompanied by a sense of relief. The participant who no longer felt "on top" of internal medicine went on to say, "But in general, both in terms of economics and lifestyle, I feel that I am living a much better life than I would have otherwise." In addition to expressing relief, participants generally described being content with their current positions, even if, in this position, they were not caring for both types of patients. One said, "Giving up things

is hard, and there is a little grief process along with that, but if you make the right choice then it's worth it."

Fourth, participants appreciated their broad training and, regardless of career path, would choose to do combined residency again. Participants frequently explained that they did not consider the extra training a "waste of time." One said, "It's not wasted training even if you don't end up employing it on a day-to-day basis." Of those who ultimately chose to practice only internal medicine or pediatrics, many felt that training in the discipline they no longer practiced enhanced their skills in the discipline they did continue. One participant who provided only pediatric care said, "I think people, if they are not comfortable in their combined practice...need to just feel okay about narrowing down to one because...I still have a different perspective on pediatrics...because of my adult training—much different. I feel like it enhanced my ability to take care of sick kids immensely" (Table A3, Appendix, available only in the online edition of the NCMJ).

Member checking. Six initially interviewed participants were invited to comment on the emergent themes as part of the member-checking phase meant to validate our findings. Four successfully completed the follow-up interviews; 2 did not respond to the invitation. In their current practice, 2 members saw both children and adults in primary care practices, 1 saw adults as a subspecialist, and 1 saw children as a subspecialist. We asked them to comment on all emergent themes, including a fifth theme (that one major factor in selecting a new position was needing to "fit in") that was omitted from our results on the basis of their comments.

With regard to the need to experience jobs outside of residency to predict career satisfaction, all 6 members generally agreed. One felt this did not apply because of his unique experiences prior to residency, but he had seen this pattern among med-peds colleagues. Others elaborated on what made residency different from jobs after training. One said, "In some ways residency is not the real world. You're not the decision maker; you're a trainee. You're not in the setting as it's really going to be when you're out."

There was also agreement that control was an important factor in career decisions. Members expressed ongoing frustrations with lack of control: "I think that what's happened with medicine over the last 10 years is more a corporatization of it so that...we, doctors [have] sort of lost control over the business management portion of it."

Members responded strongly to the theme of guilt or regret about giving up one aspect of training. Several felt the word "guilt" was too weighty, but could relate to the theme. One used the term "hidden guilt." The 2 members who continue to see both children and adults could imagine how guilt or regret might affect those who did not continue to see both. One said, "We're all type A's. We're all motivated by guilt, and so I'm not at all surprised...I felt a little bad when I gave up doing inpatient." All seemed to conclude that either "regret" over not practicing one discipline or a sense of needing to narrow one's field (or both) were often

inevitable during the career of a med-peds graduate.

Members again expressed how much they valued med-peds training and extolled the flexibility and the preparedness it provided, echoing the fourth theme of satisfaction with residency choice. Finally, we asked members to comment on a fifth theme emerging from the initial interviews. We did not include this theme in our results because members felt it did not accurately describe their experiences (Table A4, Appendix, available only in the online edition of the NCMJ).

Discussion

Med-peds training offers graduates many career options at the end of residency and beyond. The primary objective of our study was to understand the factors that motivate med-peds physicians to change jobs. After interviewing former UNC-Chapel Hill med-peds residents about a career transition each had made since the completion of training, 4 themes emerged that helped describe interview responses and allowed us generate hypotheses about career transition. Perhaps the most important discovery is that, though some med-peds graduates may ultimately see only adult or only pediatric patients, they continue to be happy with the combined training and would not have chosen a different route. This, along with other themes centered on work experience, control, and regret provide useful information about how med-peds graduates form particular career paths within a wide range of opportunities.

Prior to our study, only quantitative results for practice patterns were available in the literature. In an older study, Lannon and colleagues [3] surveyed med-peds physicians who graduated between 1986 and 1995, using data obtained from the American Boards of Pediatrics and Internal Medicine. Their findings provide a better idea of ongoing career outcomes: 54% of the med-peds physicians they surveyed were based in a community office practice, 20% were based in hospitals, and 90% saw both children and adult patients. Sixty-eight percent of the respondents, however, completed residency 5 years or less prior to the study [3], compared with a mean interval of 11.8 years prior to our study. Two additional studies surveyed program directors about career outcomes, but, again, the career outcomes are described only for residents who graduated during the 6-year period before the surveys were conducted [1, 12]. In a study that built on the findings by Lannon and colleagues [3], Fortuna and colleagues [14] described survey data from 2000-2006 that showed that 93% of med-peds graduates were in private practice at the time they were surveyed, indicating that the trends may be shifting. Our sample was small and purposive rather than random, but our participants had a different pattern of current practice. The results here, while suggesting different practice patterns, also provide rich context about career outcomes at various stages—important to a career likely to last over 30 years.

In the process of our investigation we discovered a sec-

ondary finding that, to our knowledge, has not been described in the literature. After determining the current practices of all UNC-Chapel Hill med-peds graduates from 1980 through 2007, we found that a much higher proportion of graduates from this single institution see only children or only adults in their practices (40%; Table 1), compared with the proportion described in the literature (10%-23%) [1, 3, 12]. Among graduates who have changed jobs, the proportion is even greater (50%; data not shown). While it is possible that this pattern is unique to UNC-Chapel Hill, it could also be related to the fact that we investigated the current practices of physicians who were further along in their careers (ie, 11.8 years for interviewees and 13.6 years for all graduates). Our small sample size precluded us from determining whether length of time since graduation influenced practice pattern.

Given what may be a trend among med-peds graduates of narrowing their practice during their careers, one wonders whether such broad training is necessary or desirable. Additionally, it raises questions about what happens in the career trajectory of other broadly trained physicians. Similar to med-peds graduates, most family physicians in primary care (87%) see both adults and children [13], although when looking at overall patient visits, med-peds physicians actually see more children than do family physicians [14]. These studies provide a sense about the patient population among primary care physicians, but with increasing subspecialties, fellowship opportunities, and academic roles, one wonders whether and how family physicians are narrowing their scope of practice. Our finding that med-peds graduates are content with their residency training choice supports the concept that broad training is desirable regardless of career outcomes.

Our study also supports findings from the literature about what contributes to physicians' job satisfaction. Other investigators have found that control plays a role in the desire to change jobs [8, 15]. McMurray and colleagues [8] developed a model of physician job satisfaction using qualitative data and described day-to-day practice issues and administrative issues as central to job satisfaction. Landon and colleagues [15p447] examined job satisfaction among a variety of physicians and found that perceived clinical autonomy was "the most consistent and powerful predictor of changes in their levels of job satisfaction over time."

There are several limitations to our study. First, we interviewed a small number of med-peds graduates from a single institution. Our study was intentionally exploratory in nature and, as is true for most qualitative research, sampling was purposive not random. Participants described both minor and more-major career transitions and, because of the small sample size, we could not draw conclusions about different types of career transitions. Second, we relied on potential participants to self-identify as having had a career change and to volunteer to be interviewed. Our results, therefore, may not be generalizable. Third, we were interested in career transition and, therefore, interviewed only med-peds gradu-

ates who had changed their practice since training. To fully understand the career paths of med-peds graduates, further research could interview graduates who stay in the same practice or leave medicine altogether. Finally, participants may have been constrained by the fact that the research was conducted at their training site.

Our study was meant to develop hypotheses about career transitions among med-peds graduates that could be confirmed either by further study or by resonance with others' experiences. On the basis of our findings, we believe program directors should emphasize the usefulness of exploring different opportunities after residency and remind residents that their experiences may not predict future career satisfaction. We hypothesize that working to provide more control to physicians would improve retention and attract physicians into areas where there are shortages of physicians. Finally, we believe the usefulness of broad training is as important as ever both to satisfy the needs of the health care community and to satisfy med-peds physicians personally throughout their careers. **NCMJ**

Harriett Burns, MD, MPH Charles Drew Community Health Center, Burlington, North Carolina.

Lauriane Auvergne, BBA School of Medicine, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina.

Lindsey E. Haynes-Maslow, MHA Gillings School of Global Public Health, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina.

E. Allen Liles Jr., MD Department of Pediatrics, Department of Medicine, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina.

Eliana M. Perrin, MD, MPH Department of Pediatrics, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina.

Michael J. Steiner, MD Department of Pediatrics, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina.

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