

Long-term Plans for Those Selecting Hospital Medicine as an Initial Career Choice

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hospitalists, workforce, pediatrics, career

ABBREVIATION

ABP: American Board of Pediatrics

Dr Freed conceptualized and designed the study and drafted the initial manuscript; Dr McGuinness designed the data collection instruments, coordinated and supervised data collection, and critically reviewed the manuscript; Dr Althouse designed the data collection instruments, coordinated and supervised data collection, and critically reviewed the manuscript; Ms Moran conducted data collection and tracking, coded the responses, and reviewed and revised the manuscript; Ms Spera carried out the analyses, and reviewed and revised the manuscript; and all authors approved the final manuscript as submitted.

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abstract

BACKGROUND: The proportion of the newly graduated pediatric workforce that becomes hospitalists has been increasing slightly over the past decade. However, it is unknown what proportion of those who accept hospitalist positions as their first job intend to remain in the field longer term. This is important to workforce projections regarding the magnitude of those who will function in this role.

METHODS: The American Board of Pediatrics incorporated a structured questionnaire within the online application process to the General Pediatrics certification application. Respondents identified as residents or chief residents who selected “hospitalist position” as their immediate postresidency plan were the focus this study. We compared survey responses by gender and location of the medical school attended.

RESULTS: Since the initiation of the general pediatrics certification examination application survey, 6335 completed the questionnaire. 79% ($n = 5001$) were either in residency training or were a chief resident. Of those, 8% ($n = 376$) reported they planned to work as a pediatric hospitalist immediately after completing residency. Fewer than half (43%; $n = 161$) reported this to be their long-term career plan. This finding varied by both medical school type and by gender.

CONCLUSIONS: The majority of pediatric residents and chief residents who take hospitalist positions immediately after training do not intend for hospital practice to be the long-term focus of their careers. As the field of hospital medicine continues to develop, understanding career trajectories can help inform current and future efforts regarding the potential for different mechanisms for training and certification.

Much recent attention has been focused on those who practice hospital medicine (aka, hospitalists) and the potential for recognition of these clinicians into a defined field of practice.¹ Over the past several years, there have been efforts to establish specific training programs to prepare hospitalists for a unique role in the health care system.² Although currently variable in content and duration, such programs are growing in number. However, there are currently no fixed expectations or requirements for those who practice hospital medicine. Thus, the “price of entry” into the field is lower than formally trained subspecialists and similar to general pediatricians. As such, there are fewer barriers to changing direction, and some who begin their clinical careers as hospitalists may not remain in those roles over time.

The proportion of the newly graduated pediatric workforce who become hospitalists has been increasing slightly over the past decade.³ However, it is unknown what proportion of those who accept hospitalist positions as their first job intend to remain in the field longer term. This is important to workforce projections regarding the magnitude of those who will function in this role. To better understand the long-term career intentions of pediatric residents who plan their first jobs to be as hospitalists, we analyzed data from the American Board of Pediatrics (ABP) collected from those who have applied for the initial certifying examination in general pediatrics as part of their longitudinal survey program.

METHODS

Survey Instrument and Sample

In collaboration with the ABP Research Advisory Committee, we developed a structured questionnaire with fixed-choice, single-response items designed to be completed in 10 minutes or less. The survey focuses on exploring trends associated with career choice, career paths, and practice characteristics at the time of application for general pediatric certifying exam.

The ABP incorporated the survey, as a required component, within its online application process to the General Pediatrics certification application for all individuals applying to take the examination for the first-time.

Data Analysis

In February 2014, the research team received the raw survey data from the ABP in Microsoft Excel format and included the first-time applicants for the 2012 and 2013 General Pediatrics

certification examination. The Excel file was reviewed for accuracy in terms of survey branching and was then imported into the SAS system for statistical analysis (SAS, version 9.3) using the SAS “proc import” procedure. Postimport, the data were sorted by person identifier and date to identify any duplicate responses; if found, the response with the latest date was retained. Variable and value labels were created for each survey item, and a permanent SAS file was created. All subsequent analyses used the permanent SAS file as the source of data.

Survey respondents identified as residents or chief residents in a general pediatrics training program who selected “hospitalist position” as their immediate, postresidency plan were subset from the universe of respondents and were the primary focus of analyses. Frequency distributions for all survey items were calculated for this subset of respondents using the SAS “proc freq” procedure.

Next, we compared the survey responses by the demographic variables of gender (male vs female respondents) and location of the medical school attended (US vs international graduates), again using the SAS “proc freq” procedure. For these bivariate analyses, $P < .05$ was used as the measure of statistical significance.

A separate group of respondents who identified themselves as residents or chief residents in a general pediatrics training program who planned both to enter a fellowship program directly after residency training/chief residency and whose long-term career plans were to become a hospitalist

were also identified. There were no specific questions on the survey that identified the specific subspecialty or other focus of intended fellowships.

This project was reviewed by the Institutional Review Board for the Protection of Human Subjects at the University of Michigan.

RESULTS

Since the initiation of the general pediatrics certification examination application survey by the ABP, 6335 applicants completed the questionnaire. At the time they completed the survey, 76% ($n = 4842$) indicated they were in residency training, and 2% ($n = 159$) indicated they were a chief resident in a general pediatrics training program. The remainder indicated they were either a resident or chief resident in a combined internal medicine–pediatrics program (8%; $n = 504$), a resident in another type of residency such as allergy or dermatology (2%; $n = 96$), or in practice or fellowship training (12%; $n = 734$).

Of those who were currently in pediatric residency training, 8% ($n = 365$) reported that they planned to work as a pediatric hospitalist immediately after completing residency. Of the pediatric chief residents, 7% ($n = 11$) reported that they planned to work as hospitalists after completing their chief year.

The remainder of the analyses for this study were conducted on these 376 respondents.

Of the group that intended to have their first job be as a pediatric hospitalist, fewer than half (43%; $n = 161$) reported that providing hospitalist care was their long-term career plan

(Table 1). This finding varied by both medical school type and by gender, with more women than men planning a long-term hospitalist career, and by whether the resident was a graduate of an American or international medical school. Almost one-third of the total (29%; $n = 111$) planned to pursue pediatric subspecialty training in the future rather than continue as a hospitalist.

The most frequently cited “most important factor” in the choice of a long-term postresidency career by this group was lifestyle/spousal or family considerations (44%; $n = 163$). No differences were seen among women or men or country of medical school. The next frequently chosen “most important factor” by 38% ($n = 144$) was interest in a specific disease/disorder. Financial considerations/debt at end of training was only selected by 4% ($n = 16$).

When asked if they had changed their mind in the past 12 months regarding long-term postresidency career choice, >50% of this group had done so (Table 2). Of these, most had either changed their choice of generalist, subspecialist, or hospitalist career paths (27%; $n = 103$) or had previously been unsure of their postresidency plans (20%; $n = 73$). No significant

differences were seen among women or men or country of medical school.

More than half of respondents overall (55%; $n = 207$) reported that they did not plan to work part-time over the first 5 years of their working life. However, significant differences were seen between women and men, with women much more commonly endorsing this plan (Table 3).

Only a small fraction (10%; $n = 38$) posited that research of any type would be a major part of their career with a plurality (45%; $n = 170$) believing that it would be a minor part of their career. Responses varied significantly by gender, with more men than women planning to engage in research, but not by country of medical school (Table 4).

Residents Selecting Both Fellowship Training and Hospitalist Plans

Of the residents and chief residents who selected “fellowship training” as their postresidency intention ($n = 1945$), 36 indicated “hospitalist position” as their long-term career plan. These may be residents who intend to enter a hospitalist fellowship, general pediatric fellowship, or other graduate training program. Of these, 24 (67%) were women and 29 (81%) were American medical school graduates.

One-fourth (25%; $n = 9$) planned for research to be a major part of their careers and 67% ($n = 24$) intended it to be a minor part.

DISCUSSION

Among the most important findings from this study is that the majority of those pediatric residents and chief residents who take hospitalist positions immediately after training do not intend for hospital practice to be the long-term focus of their careers. As the field of hospital medicine continues to develop, both in pediatrics and in adult medicine, understanding the career trajectories of those who are engaged can help to inform current and future efforts regarding the potential for different mechanisms for training and certification.^{1,4} With the development of postresidency hospitalist training programs, a greater appreciation for long-term professional goals of those taking on initial employment in this arena may help define both the potential market for advanced training and the skills that will be gained uniformly across training sites.² It is possible that those whom only plan short-term forays into the field will likely be less willing to undergo additional training and may take on specific, and more limited roles, in the hospital setting.

TABLE 1 Long-term Postresidency Career Plans Among Those Who Intended Their First Job to Be As a Hospitalist ($n = 376$)

	Overall, % (n) ($n = 376$)	AMG, % (n) ($n = 317$)	IMG, % (n) ($n = 59$)	<i>P</i>	Female, % (n) ($n = 300$)	Male, % (n) ($n = 76$)	<i>P</i>
General pediatrics outpatient care with little or no inpatient care	2 (7)	2 (6)	2 (1)	.48	2 (6)	1 (1)	.04
General pediatrics outpatient care with substantial inpatient care	8 (30)	8 (24)	10 (6)		8 (25)	7 (5)	
Pediatric subspecialty care	29 (111)	28 (88)	39 (23)		26 (78)	43 (33)	
Mix of general pediatric and subspecialty care	4 (16)	4 (14)	3 (2)		4 (11)	7 (5)	
Hospitalist care only	43 (161)	45 (142)	32 (19)		45 (135)	34 (26)	
Unsure	14 (51)	13 (43)	14 (8)		15 (45)	8 (6)	

AMG, American medical school graduate; IMG, international medical school graduate.

TABLE 2 Proportion of Those Who Intended Their First Job to Be As a Hospitalist and Changed Their Mind in the Previous 12 Months Regarding Choice of Long-term Postresidency Career (n = 376)

	Overall, % (n)	AMG, % (n)	IMG, % (n)	P	Female, % (n)	Male, % (n)	P
	(n = 376)	(n = 317)	(n = 59)		(n = 300)	(n = 76)	
Did not change their mind	44 (167)	44 (140)	46 (27)	.10	43 (127)	53 (40)	.18
Yes, but only changed intended subspecialty field	5 (19)	5 (15)	7 (4)		4 (13)	8 (6)	
Yes, changed choice of generalist, subspecialist, or hospitalist career path	27 (103)	27 (86)	29 (17)		28 (84)	25 (19)	
Yes, was unsure but have now decided on postresidency plans	20 (73)	21 (67)	10 (6)		21 (64)	12 (9)	
Yes, now unsure of postresidency plans	4 (14)	3 (9)	8 (5)		4 (12)	2 (2)	

AMG, American medical school graduate; IMG, international medical school graduate.

The high proportion of those who plan to leave the field also demonstrate the limitation of only seeking to identify initial intent after residency as a proxy for future career planning.^{5,6} Furthermore, the finding that more than half of new entrants into the field plan to leave within 5 years also raises issues regarding the utility of previous studies that collected information on the opinions and attitudes of hospitalists. Although it is well known that there are different groups within the field, it is likely that those who intend for hospital medicine to be a long-term career would have a markedly different view of the profession compared with those who only intend to practice hospital medicine as a short-term employment opportunity.^{2,7} Future efforts in this regard might best be limited to, or at least stratified by, those with long-term hospitalist career intentions.

It is not surprising that some proportion of physicians entering any field of practice would move on to other areas of interest. A study in 2011 by the American Medical Group Association found that among primary care physicians (not pediatric specific), turnover in the first 2 years after a physician joins a practice was 14%, followed by 11% for the next 2 years, and >8% between years 3 and 5.⁸ With specific regard to hospital medicine, the 2012 combined American Academy of Pediatrics and American College of Physicians *Med-Ped Job Search Guide* states that “some Med-Peds physicians may not initially know what career path they wish to follow or need more time off; hence, it’s easier to leave a hospitalist position after a year or two, rather than develop a practice in the office setting and have to leave with the added responsibility of continuity of

care for those patients.”⁹ It is unknown if more of those who enter hospitalist positions immediately after training leave the field within 5 years relative to other initial positions (eg, primary care, locum tenens, emergency department) because there are no published data on this issue. Retention after service in some governmental programs has also been assessed. Short-term retention data from the National Health Service Corps demonstrate that 82% of graduates still practice in a medically underserved area in the year after the completion of their service commitment.¹⁰ Regardless, information regarding the duration of those who initially accept hospitalist positions is important when both assessing and planning for the future of the hospitalist workforce. Such findings are relevant to understanding the trends in initial positions of pediatricians after residency.

TABLE 3 Proportion of Those Who Intended Their First Job to Be As a Hospitalist and Intended to Work Part-time During the Next 5 Years (n = 374)

	Overall, % (n)	AMG, % (n)	IMG, % (n)	P	Female, % (n)	Male, % (n)	P
	(n = 374)	(n = 316)	(n = 58)		(n = 300)	(n = 74)	
Yes, I plan to work exclusively part-time during the next 5 years	2 (7)	1 (4)	5 (3)	.16	2 (6)	1 (1)	<.0001
Yes, I plan to work part-time at some point in time in the next 5 years	21 (77)	20 (63)	24 (14)		24 (71)	8 (6)	
No	55 (207)	56 (176)	54 (31)		48 (144)	85 (63)	
Unsure	22 (83)	23 (73)	17 (10)		26 (79)	6 (4)	

AMG, American medical school graduate; IMG, international medical school graduate.

TABLE 4 Proportion of Those Who Intended Their First Job to Be As a Hospitalist and Planned to Conduct Research (Basic, Clinical, or Health Services Research) During Their Career (*n* = 374)

	Overall, % (<i>n</i>) (<i>n</i> = 374)	AMG, % (<i>n</i>) (<i>n</i> = 315)	IMG, % (<i>n</i>) (<i>n</i> = 59)	<i>P</i>	Female, % (<i>n</i>) (<i>n</i> = 299)	Male, % (<i>n</i>) (<i>n</i> = 75)	<i>P</i>
Yes, research is/will be a major part of career	10 (38)	8 (26)	20 (12)	.03	7 (23)	20 (15)	.0008
Yes, research is/will be a minor part of career	45 (170)	46 (145)	42 (25)		44 (131)	52 (39)	
No	24 (88)	24 (74)	24 (14)		25 (74)	19 (14)	
Unsure	21 (78)	22 (70)	14 (8)		24 (71)	9 (7)	

AMG, American medical school graduate; IMG, international medical school graduate.

Previous work has attempted to quantify the research goals and professional needs of hospitalist physicians. These studies have mostly been survey studies with limited response rates that may affect their findings.¹¹⁻¹⁴ Future studies addressing this important issue may seek to focus on those who plan for hospital medicine to be a long-term career rather than all of those who are currently employed in the profession. Likely such studies will be more germane to these physicians, and response rates among this segment of the hospitalist workforce may be higher.

The large number of short-term hospitalists also may have an impact on current efforts to develop standards and to socialize the profession into a distinct entity. Current efforts to develop core competencies and standards of practice may be affected by the current heterogeneity among those who practice hospital medicine and the potential variability in their interest to conform to specific norms.¹⁵ As the field matures and seeks greater definition and clarity, methods to address the professional standards of these short-term hospitalist physicians will become more essential. Currently, efforts to define the quality of care, educational impact, and resource utilization of hospitalists versus other physicians may be tempered by a lack of

precision regarding the role of these short-term practitioners. Previous work has not attempted to clearly acknowledge or distinguish this group from others and thus may not show as robustly the impact of “career” hospitalists in either clinical or administrative roles.¹⁶⁻¹⁸

An important limitation of this study is that it only measures “intent” and not actual practice. As such, it is possible that some who reported intent to only spend ≤5 years as a hospitalist will find they enjoy the work so much that they remain in the field. Conversely, some who intend at this stage to make this a long-term career may also change their minds. Over time, the longitudinal workforce survey studies of the ABP will provide information on the career path and trajectories of hospitalists as well as all other general and subspecialty pediatricians. We will be able to see how “intent” predicts the ultimate career pathways undertaken by these and other pediatricians. Such information will help to guide the development of the profession and provide a clearer understanding of how different careers unfold in different venues and in academic or other settings.

Another important finding is the marked differences between women and men among this group of pediatricians with regard to future career

plans, part-time work, and the inclusion of research in their professional life. Although similar differences have been described previously, our results document the continued gender variance among young pediatricians that may affect long-term career advancement or earning potential.

The group of 36 residents or chief residents who planned both to enter a fellowship program directly after residency training/chief residency and whose long-term career plans were to become a hospitalist may represent a group with different career goals compared with those becoming beginning hospitalist roles directly after residency. The training they receive in a variety of domains including research, quality improvement, and education may have significant impact on their future career trajectories and the future of the field. Although the numbers of these individuals are few, they are likely to grow in the future as more programs are developed and codified. Future research in the ABP longitudinal data collection effort will follow the careers of these individuals to better understand their role in both academic and clinical domains.

CONCLUSIONS

The hospitalist workforce is currently in a dynamic phase. Certainly, intention regarding practice goals does not

always translate into similar actions. Longer term follow-up of these and future residency graduates will shed greater light onto the career paths and trajectories of those who initially pursue hospital practice as well as the proportion that makes it into a career. Such information will be helpful in determining the future workforce needs and capacity for the care provided by these pediatricians. It will also assist those who are currently struggling with defining the profession and its potential for professional recognition.

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