Association Between Practice Setting and Pediatric Hospitalist Career Satisfaction

abstract

BACKGROUND: Pediatric hospital medicine has become a viable long-term career choice. To retain qualified physicians, both academic and community hospital leaders seek to improve their job satisfaction.

OBJECTIVE: The goal of this study was to determine whether practice in a community versus academic setting is associated with pediatric hospitalists’ career satisfaction.

METHODS: The study was based on data from an anonymous electronic cross-sectional survey sent to the American Academy of Pediatrics Section on Hospital Medicine Listserv between November 2009 and January 2010. Questions were rated on a standard 5-point Likert scale. A total career satisfaction score was calculated for each respondent by summing across all 23 questions. Multivariate logistic regression was conducted to assess job satisfaction according to practice setting.

RESULTS: A total of 222 pediatric hospitalists responded. Sixty-six percent of respondents practiced in an academic setting and 34% in a community hospital. Fifty-eight percent of academic and 42% of community hospitalists were satisfied with their careers, defined as a mean per-question Likert score ≥4. Adjusting for gender, average daily census, percentage of complex patients, years as a hospitalist, and years since residency graduation, academic hospitalists were more likely than community hospitalists to be satisfied with their careers (adjusted odds ratio: 2.43 [95% confidence interval: 1.25–4.72]; P = .009).

CONCLUSIONS: Pediatric hospitalists practicing in academic settings seem more likely to be satisfied with their careers than those in a community hospital. Overall, however, there is room for improvement in career satisfaction for both groups. Further study is warranted to confirm and clarify these findings on a larger scale, perhaps with oversampling of community hospitalists.

INTRODUCTION

As new pediatric hospitalist programs emerge across the country, each is designed to meet the unique needs of specific communities and institutions. Some pediatric hospitalists exclusively manage inpatient wards, whereas others may have emergency department, transport, sedation, comanagement, well newborn, or NICU responsibilities. Some hospitalists work in freestanding tertiary care children’s hospitals, some in academic pediatric wards within adult hospitals, and others in community hospitals.

Regardless of setting, academic and community hospitalists share certain challenges. Variable schedules, heavy workloads, and rapidly evolving responsibilities...
can lead to burnout and high turnover rates. \(^2\) In 2006, the Society of Hospital Medicine (SHM) issued a white paper addressing these concerns. They identified 4 essential pillars of career satisfaction: reward/recognition, workload/schedule, autonomy/control, and community/environment.\(^2\)

In 2010, our group used these pillars as a framework to design and administer a survey to the American Academy of Pediatrics (AAP) Section on Hospital Medicine (SOHM) Listserv. Because little was known about pediatric hospitalist career satisfaction, our primary goal was to identify which factors were important to hospitalists and to clarify the role of mentorship.\(^4\) We found that although hospitalists were generally satisfied with their careers, lack of mentorship was a significant problem regardless of age, gender, or practice setting. Comprising both academic and community hospitalists, our group also aimed to explore the association between practice setting and career satisfaction.

Several previous studies have shown greater satisfaction and less burnout among academic physicians. Female emergency department physicians practicing in academic hospitals were more than twice as likely to be satisfied with their careers compared with their community hospital peers.\(^5\) Adult hospitalists working in university hospitals were 3 times less likely to suffer burnout than those in other settings.\(^6\)

In 2010, the SHM conducted a survey that found no difference in hospitalist career satisfaction across practice models.\(^7\) However, the sample size of pediatric hospitalists was too small to characterize them independently from their adult hospitalist peers or to control for other variables. To the best of our knowledge, the current study is the first to exclusively investigate pediatric hospitalist career satisfaction, with the largest sample of pediatric hospitalists to date. Our objective was to determine whether practice in a community versus an academic hospital setting is associated with pediatric hospitalists’ career satisfaction.

**METHODS**

**Study Design**

An anonymous electronic cross-sectional survey of pediatric hospitalists was conducted from November 2009 to January 2010. The AAP SOHM Listserv functioned as a convenience sample, representing the single largest listing of pediatric hospitalists. The Listserv is open to members of the AAP SOHM, as well as practitioners spending ≥50% of their time as pediatric hospitalists, trainees considering a career in hospital medicine, and providers interested in practicing pediatric hospital medicine within the next year.\(^8\)

An e-mail announcing the study was sent to the ~1100 members of the Listserv. The survey was sent in conjunction with a complex care survey at the request of the SOHM to avoid overburdening Listserv participants with multiple e-mails. No identifying data were collected or stored. Three reminder e-mails were sent to all Listserv members encouraging participation. The study was approved by the Children’s National Medical Center institutional review board.

**Survey Development**

The survey was created by using applicable questions from the Physician Work Life Study (PWLS).\(^9\) Conducted in the late 1990s, the PWLS was a large, rigorously validated survey of adult and pediatric primary care and nonsurgical specialists that measured physician job satisfaction.\(^10\) Additional questions were designed to address the 4 pillars of career satisfaction identified by the 2006 SHM white paper: reward/recognition, workload/schedule, autonomy/control, and community/environment.\(^2\) All satisfaction questions were rated on a 5-point Likert scale, where 5 equaled strongly agree, 4 was agree, 3 equaled no opinion, 2 was disagree, and 1 equaled strongly disagree. It was determined a priori that a respondent would be considered satisfied if the Likert score was ≥4. Demographic and clinical practice characteristics were collected by self-report. The survey was pilot tested in small groups and revised for content and readability based on the feedback received.

To create an organizational framework for the large amount of data obtained, a group of 6 hospitalists retrospectively placed each satisfaction statement into 1 of 6 domains. The first 4 domains consisted of the 4 pillars from the 2006 SHM white paper. The other 2 domains, global job satisfaction and global specialty satisfaction, were taken from the PWLS. Although some statements overlapped between domains, the group was surveyed and domains discussed until consensus was reached.

**Statistical Analysis**

Deidentified data were obtained from the SurveyMonkey Web site and imported into SAS version 9.2 (SAS Institute, Inc, Cary, NC) for analysis. Respondents who self-identified as working in a freestanding academic children’s hospital, an academic children’s hospital or ward within an adult hospital, or other academic setting were defined as “academic hospitalists.” Respondents who self-identified as practicing in a children’s hospital or ward within a community hospital
were defined as “community hospitalists.” We compared the responses of academic and community hospitalists for each satisfaction question by using the Mann-Whitney $U$ test.

A total career satisfaction score was then calculated for each respondent by summing across all 23 questions. Likert scales were inverted for negatively phrased questions. Respondents were deemed satisfied if their mean per-question Likert score was $\geq 4$. Finally, multivariable logistic regression was performed. The model was designed to include the independent variables with the greatest potential impact on satisfaction. For the logistic model to converge, average daily census was dichotomized into $<10$ patients versus $\geq 10$ patients. Similarly, responses regarding the percentage of complex patients were condensed into $\leq 40\%$ versus $>40\%$ complex. Years since residency graduation and years as a hospitalist were run as continuous variables.

**RESULTS**

A total of 222 pediatric hospitalists responded. Twenty-two were excluded for leaving $\geq 1$ question incomplete. Sixty-six percent practiced in an academic setting (34% at a freestanding academic children’s hospital, 30% at an academic children’s hospital or ward within an adult hospital, and 3% in another academic setting), and 34% of respondents worked at a community hospital. Twelve percent had completed a fellowship, primarily in infectious disease or hospital medicine. Sixty-nine percent were female; 35% completed residency within the past 5 years (mean: 9.6 years; median: 7 years), and 63% had been hospitalists for $\leq 5$ years (mean: 5.7 years; median: 4 years). The majority of respondents cared for an average daily census of 10 to 14 patients. Typically, 21% to 40% of their patients had complex medical needs (Table 1).

Overall, 58% of academic hospitalists and 42% of community hospitalists were satisfied with their careers, defined as a mean per-question Likert score $\geq 4$. Academic hospitalists were significantly more likely to report sufficient opportunities for professional advancement and promotion ($P \leq .001$), to regard their colleagues as professionally stimulating ($P \leq .001$), to feel valued by their administrations ($P = .003$), to be able to refer to consultants when they felt it necessary ($P = .01$), and to have chosen hospital medicine as a career ($P = .04$). Academic hospitalists were less likely to be working as a hospitalist temporarily ($P = .03$), to consider changing specialty ($P = .04$), and to consider leaving clinical practice ($P = .05$). Among other things, academic and community hospitalists were equally likely to find their clinical work personally rewarding (94% vs 92%; $P = .65$), to feel their compensation was fair (67% vs 61%; $P = .77$), to feel respected by the community (88% vs 97%; $P = .16$), and to be pleased overall with their work (95% vs 91%; $P = .13$). There was no statistical difference in satisfaction with mentorship, which was low for both groups (48% vs 35%; $P = .23$) (Table 2).

Analysis of the statistical model showed excellent calibration (Hosmer-Lemeshow test: 0.80) and modest discrimination (c-statistic: 0.65). Adjusting for gender, average daily census, and years as a hospitalist were run as continuous variables.

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<th>TABLE 1 Demographic Characteristics</th>
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percentage of complex patients, years as a hospitalist, and years since residency graduation, academic hospitalists were more than twice as likely as community hospitalists to be satisfied with their careers (adjusted odds ratio: 2.43 [95% confidence interval: 1.25–4.72]; \(P = .009\)). None of the covariates had a significant impact on career satisfaction when measured individually (Fig 1).

**DISCUSSION**

To our knowledge, this survey is the first to investigate the association between practice setting and pediatric hospitalist satisfaction. Overall, 58% of academic hospitalists and 42% of community hospitalists were satisfied. After adjusting for gender, average daily census, percentage of complex patients, years as a hospitalist, and years since residency graduation, we found that academic hospitalists were more than twice as likely as community hospitalists to be satisfied with their careers. Community hospitalists perceived a lack of reward and recognition, with just 62% feeling valued by their administrations and 59% reporting sufficient opportunities for promotion. They also scored lower in global specialty satisfaction, with more community hospitalists considering a
change in specialty and fewer having chosen hospital medicine as a career. Academic and community hospitalists were equally but substantially concerned with salary, work–life balance, mentorship, and office space.

There may be several reasons why academic hospitalists are more satisfied with their careers than community hospitalists. Our study found that academic hospitalists were more likely to feel valued by their administrations. Previous surveys found that pediatric academic hospitalists are more likely to hold leadership roles in hospital administration or quality improvement initiatives. Community hospitalists may have less protected time to pursue nonclinical activities valued by hospital leadership. As a minority within the adult hospital setting, pediatricians may have a smaller presence and voice. This situation may be exacerbated by the fact that on average, pediatric hospitalists collect just 57 cents in revenue for every dollar of compensation paid. Academic pediatric hospitalist programs may also be more mature and established, providing a stronger platform to address concerns at the leadership level.

Perhaps not surprisingly, academic hospitalists were more likely to report sufficient opportunities for advancement and promotion. Traditional academic ranking and promotion are not expected in the community setting. Some community hospitalists may have less protected time to pursue nonclinical activities valued by hospital leadership. As a minority within the adult hospital setting, pediatricians may have a smaller presence and voice. This situation may be exacerbated by the fact that on average, pediatric hospitalists collect just 57 cents in revenue for every dollar of compensation paid. Academic pediatric hospitalist programs may also be more mature and established, providing a stronger platform to address concerns at the leadership level.

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Previous studies have shown that nonacademic hospitalists spend a greater percentage of time providing inpatient clinical care (71% vs 52%; \( P < .0001 \)). Community hospitalists may perform more clerical work and other tasks that are traditionally completed by residents or subspecialists in academic centers. Community hospitalists are more likely to cover a variety of roles, such as working in the NICU or as part of comanagement or transport teams. They are more likely to perform lumbar punctures, central lines, and circumcisions. Although many community hospitalists thrive in this environment, some may feel pulled in different directions. Further studies could investigate whether specific clinical roles are associated with lower satisfaction, and if so, how to appropriately lead to dissatisfaction. Although not every community hospitalist struggles with recognition and promotion, this survey touched on an important association that should be carefully investigated in future research.

Our study also found that academic hospitalists were more likely to regard their colleagues as professionally stimulating. Having a greater variety of subspecialists may add to the learning climate in an academic setting. Academic hospitalist groups tend to be larger (9.0 vs 4.5 full-time equivalents), possibly allowing greater interaction with colleagues. Community hospitals may be staffed by just a single physician per shift. Some may enjoy that independence while others may find it isolating. Community hospitalist programs may improve collegial interactions by facilitating subspecialist guest speakers at grand rounds, frequent group meetings, or informal case conferences.

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compensate for this issue. Age of the program may also be a factor. Adult community hospitalist programs tend to be more established, having had time to temper variability and provide a structure that supports the 4 pillars of satisfaction. That structure may have contributed to the similar satisfaction rates seen across practice settings in the SHM survey.

Academic pediatric hospitalists have been found to spend a greater percentage of time teaching than do community hospitalists (19% vs 12%; \( P < .0001 \)) and are more likely to hold leadership roles in education.\(^1\) Previous research has shown that physicians involved in clinical teaching are twice as likely to report career satisfaction.\(^3\) Teaching may provide another layer of meaning to one's career, a break from clinical duties, or greater schedule flexibility.

Our study found that community hospitalists were more likely to consider leaving clinical practice or changing specialty, and they were more likely to be working as hospitalists temporarily until beginning their careers of choice. Although the rate of specialty dissatisfaction was low even for community hospitalists, it represents a classic cause-and-effect conundrum. Do some pediatricians consider community hospital positions as inherently transient, never intending them as a career? Or do they become dissatisfied over time and then want to leave? Perhaps less-established community programs attract pediatricians who are more uncertain about their career goals. Future surveys should directly address this issue.

Interestingly, neither patient complexity nor patient load had a significant effect on pediatric hospitalist career satisfaction after controlling for other factors. A similarly small percentage of both academic and community hospitalists felt overwhelmed by the volume of work (25% vs 24%; \( P = .71 \)). They reported comparable levels of satisfaction with work–life balance (67% vs 62%; \( P = .36 \)), although both groups had significant room for improvement in this area.

As reported in our original paper, lack of mentorship is a significant problem regardless of practice setting.\(^4\) Both academic and community hospitalists reported low mentorship satisfaction (48% vs 35%; \( P = .23 \)). It is possible that academic hospitalists feel the most acute need for a mentor, as the nonclinical expectations may be unfamiliar and not covered during residency training. However, academic and community hospitalists did not statistically differ in prioritizing the creation of mentorship programs when asked which interventions would most improve their satisfaction (\( P = .529 \)).\(^4\) Although mentorship was an important factor in overall hospitalist satisfaction, it does not seem to play a role in the relationship between practice setting and career satisfaction in these data.

There are several limitations to the current study. First, it is difficult to estimate response rate. The actual number of Listserv members is unknown due to duplicate and inactive accounts. Although there were 1100 e-mail addresses on the Listserv in 2009, just 380 “active” members posted to the Listserv that year.\(^13\) Other published studies of the Listserv have had similarly low response rates, possibly due in part to this discrepancy. In addition, because the survey was anonymous, it is impossible to know whether respondents were geographically diverse or if a few large programs were overrepresented.

Another significant concern is selection bias. We used a convenience sample (Listserv members) because a complete listing of pediatric hospitalists is not available in any national database. Other contact lists such as the general AAP or SHM Listserv were not included because we anticipated significant overlap, concerned that the response rate would be even lower for groups less targeted to hospitalist pediatricians. The 2010 SHM survey encountered that issue, receiving 117 responses from pediatric hospitalists despite oversampling of pediatricians.\(^7\)

Our study population (ie, the SOHM Listserv members) represents a specific demographic group that is likely to be more academic and perhaps more invested in hospital medicine as a career. Combining this background with the complex care survey may have further increased the number of academic respondents. It is difficult to assess the severity of this problem, as there are few reliable statistics regarding the numbers of community versus academic hospitalists. Sixty-six percent of our survey respondents worked in academic settings. The 2012 SHM/Medical Group Management Association survey received responses from 30 pediatric hospital medicine group leaders representing ~364 hospitalists, of whom 53% were academic.\(^2\) A Pediatric Research in Inpatient Settings (PRIS)-sponsored survey about family-centered rounds and an SOHM Listserv study on research productivity each had ~80% academic respondents, perhaps not surprising given their research focus.\(^13,14\)
Surveys using any of the major organizational Listservs are at risk for missing large groups of community hospitalists, who may be more physically and professionally remote. This elusive group likely has substantially different career concerns and motivations affecting professional satisfaction. Community hospitalists may weigh the 4 pillars of satisfaction differently or perhaps they do not resonate in the same way. It is difficult to determine how these differences in goals may have affected our results. Extensive and detailed surveys of community hospitalists have thus far been difficult given the lack of centralized contact information. It is critical for our professional societies to reach out to community programs to create an updated database through which meaningful and accurate research can be conducted. Our survey results may apply only to our unique sample population and should not be taken to represent hospitalist satisfaction as a whole. However, our results do provide a direction and impetus for future research.

As a largely new survey instrument, our questions may not have fully captured the key elements of career satisfaction or may have overemphasized certain areas at the expense of others. The modest c-statistic suggests that unmeasured confounding factors could be influencing results. In addition, the term “academic” is somewhat subjective. Although typically used to connote teaching responsibilities and association with a medical school, to some it may simply signify a commitment to evidenced-based medicine and local quality improvement. Respondents classified themselves as academic or community hospitalists, and because the survey was anonymous, it is impossible to corroborate their responses. Furthermore, community programs have variable access to specialists and likely exist on a continuum with tertiary centers. Future surveys should collect more specific demographic data such as work schedule and percent effort in the clinical, educational, research, and administrative areas to further define the relationship between roles as hospitalists and career satisfaction.

**CONCLUSIONS**

In our study, pediatric hospitalists practicing in academic settings seemed more satisfied with their careers than those in community hospitals. Community hospitalists perceived a lack of recognition, reporting fewer opportunities for promotion, and lesser acknowledgment by hospital administration. They were also more likely to consider a career change. Academic and community hospitalists were equally and substantially concerned with salary, work-life balance, mentorship, and office space. Although academic hospitalists were more satisfied overall, both groups have room for improvement if we are to maximize retention and recruitment for this growing field. Although limited in scope, this study highlights the need for further research and the importance of creating a centralized database that includes a proportionate share of community hospitalist voices.

**REFERENCES**


