

RESEARCH LETTERS

Career Satisfaction and Burnout in Academic Hospital Medicine

The number of hospitalists in academic medical centers has grown rapidly, producing a field with few senior members, potentially impeding the academic success and career sustainability of academic hospitalists, not to mention contributing to burnout.¹ However, little is known about career promotion, job satisfaction, stress, and rates of burnout in academic hospital medicine or how these factors affect scholarly success and productivity.

Methods. We performed a cross-sectional 61-question e-mail survey of hospitalists at 20 academic medical centers in the United States. Hospital medicine faculty at each site were identified via their group leader; members of each group then received an e-mail survey up to 5 times.

Burnout was assessed using the previously validated question:

Using your own definition of "burnout," select one of the following: 1 = "I have no symptoms of burnout," 2 = "I don't always have as much energy as I once did, but I don't feel burned out," 3 = "I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion," 4 = "The symptoms of burnout that I am experiencing won't go away," 5 = "I feel completely burned out and wonder if I can go on."

A score of 3 or higher was consistent with burnout.²

Levels of stress and satisfaction were assessed using a 5-point Likert scale with responses of 4 ("somewhat") and 5 ("high") interpreted as high stress and satisfaction. Working relationships were assessed using a similar Likert scale with 4 ("very good") and 5 ("excellent") interpreted as good relationships. Academic output was assessed using self-report of teaching, publications, and presentations.

Results. Of 420 hospitalists, 266 (63%) completed the survey (Table 1). Of the respondents, 57% reported having 20% or less protected time for scholarly activity, while 1 in 5 spent more than 80% of their time on nonteaching services. Most (86%) were at the instructor or assistant professor rank. Most respondents had no first-author peer-reviewed publications or presentations at a grand rounds or national meeting.

Although most were satisfied with their job (75%), their division chief support (63%), and their ability to control their schedule (54%), the majority reported high lev-

els of stress (67%). Approximately 1 in 4 (23%) reported some degree of burnout (Table 2).

Table 1. Characteristics of 266 Respondents

Characteristic	Respondents No. (%)
Training	
MD	261 (98)
DO	5 (2)
Male sex	140 (54)
Age, y (n = 263)	
≤30	26 (10)
31-40	185 (70)
41-50	47 (18)
>50	5 (2)
Years since graduation from medical school (n = 264)	
3-5	78 (30)
6-10	100 (38)
11-15	59 (22)
16-20	13 (5)
>20	14 (5)
Years as a hospitalist (n = 265)	
<1	32 (12)
1-4	131 (50)
5-8	61 (23)
≥9	41 (15)
Years in academic medicine (n = 263)	
<1	38 (14)
1-4	116 (44)
5-8	65 (25)
≥9	44 (17)
Specialty (n = 270)	
Internal medicine	245 (92)
Internal medicine subspecialty	13 (5)
Med-peds	10 (4)
Family medicine	2 (1)
Academic rank	
Instructor/adjunct	87 (33)
Assistant professor	139 (53)
Associate professor	27 (10)
Professor	11 (4)
Hospitalist group leader in charge of hospitalists	33 (12)
GIM chief in charge of hospitalists	233 (88)
Primary academic role	
Clinician-investigator	32 (12)
Clinician-educator	167 (63)
Clinician-administrator	34 (13)
Clinician-nonteaching	33 (12)
Primary hospital where majority of clinical time is spent (n = 261)	
University	214 (82)
County/public hospital	14 (5)
Community teaching	19 (7)
Community non-teaching	10 (4)
Other	4 (2)

(continued)

Table 1. Characteristics of 266 Respondents (continued)

Characteristic	Respondents No. (%)
Percentage of work hours "protected" for scholarly activity or administrative duties, nonclinical (n = 264)	
≤10	111 (42)
11-20	40 (15)
21-30	34 (13)
31-50	31 (12)
>50	48 (18)
Percentage of clinical time spent with patient care on non-teaching services (n = 265)	
≤20	104 (39)
21-40	39 (15)
41-60	27 (10)
61-80	42 (16)
>80	53 (20)
Percentage of clinical time spent in direct patient care with trainees (n = 265)	
≤20	80 (30)
21-40	59 (22)
41-60	40 (15)
61-80	32 (12)
>80	54 (20)
Can identify a mentor	112 (42)
Mentor other academic hospitalist faculty (n = 255)	78 (31)
No oral abstracts or posters presented at national meetings (n = 266)	117 (44)
No first author peer-reviewed publications (n = 264)	134 (51)
No senior author peer-reviewed publications (n = 262)	214 (82)
No non-peer-reviewed publications, books, chapters (n = 264)	138 (52)
Given Medical Grand Rounds at own institution (n = 265)	69 (26)
Given Medical Grand Rounds at another academic institution (n = 265)	63 (24)
Led a teaching session at a national meeting (n = 266)	67 (25)
Prepared to take on a greater mentorship role in own program (n = 265)	140 (53)
Level of confidence in own teaching (n = 262)	
Very high	61 (23)
High	102 (39)
Average	90 (34)
Low	9 (3)
Very low	0

Abbreviations: DO, doctor of osteopathic medicine; MD, doctor of medicine; med-peds, internal medicine-pediatrics.

Predictors of low overall job satisfaction (**Table 3**) included the following: training in a medical subspecialty; practicing at a nonuniversity hospital; and low satisfaction with the amount of personal/family time, amount of control over work schedule, and level of support from their division chief. Predictors of burnout (**Table 3**) included low satisfaction with the amount of personal/family time and low satisfaction with control over their work schedule.

Low job satisfaction was associated with nonstatistically significant trends toward fewer peer-reviewed first-author publications, lower teaching skills confidence, and lack of institutional grand rounds presentation. Burn-

Table 2. Hospitalist Satisfaction, Stress, Work Life, and Burnout Among 266 Respondents

	Respondents, No. (%)
Satisfaction (n = 266)	
Satisfaction with current job as hospitalist (n = 265)	
High	85 (32)
Somewhat high	113 (43)
Average	48 (18)
Somewhat low	13 (5)
Low	6 (2)
Satisfaction with amount of personal and family time	
High	58 (22)
Somewhat high	86 (32)
Average	74 (28)
Somewhat low	37 (14)
Low	11 (4)
Satisfaction with amount of control over work schedule	
High	54 (20)
Somewhat high	91 (34)
Average	82 (31)
Somewhat low	31 (12)
Low	8 (3)
Satisfaction with support from hospital administration (n = 263)	
High	24 (9)
Somewhat high	87 (33)
Average	107 (41)
Somewhat low	26 (10)
Low	19 (7)
Satisfaction with support from division chief	
High	87 (33)
Somewhat high	81 (30)
Average	52 (20)
Somewhat low	21 (8)
Low	17 (6)
I am the division chief	8 (3)
Stress (n = 265)	
Typical stress level at work	
High	31 (12)
Somewhat high	146 (55)
Average	79 (30)
Somewhat low	8 (3)
Low	1 (0)
Work life (n = 266)	
Working relationship with consultants	
Excellent	66 (25)
Very good	120 (45)
Good	56 (21)
Fair	22 (8)
Poor	2 (1)

(continued)

out was associated with a nonstatistically significant trend toward lack of institutional grand rounds presentation (**Table 4**).

Comment. Although academic hospitalists are generally satisfied with their career choice, rates of low career satisfaction, stress, and burnout appear higher than those that have been reported elsewhere.^{3,4} The only prior evaluation of hospitalist burnout, surveying both community and academic hospitalists, reported that 12.9% of hos-

Table 2. Hospitalist Satisfaction, Stress, Work Life, and Burnout Among 266 Respondents (continued)

	Respondents, No. (%)
Working relationship with nurses	
Excellent	112 (42)
Very good	101 (38)
Good	45 (17)
Fair	8 (3)
Poor	0
Working relationship with other hospitalists in group (n = 265)	
Excellent	143 (54)
Very good	99 (37)
Good	21 (8)
Fair	2 (1)
Poor	0
Burnout (n = 265)	
"I have no symptoms of burnout"	
"I don't always have as much energy as I once did, but I don't feel burned out"	151 (57)
"I am definitely burning out, and have one or more symptoms of burnout, such as physical and emotional exhaustion"	54 (20)
"The symptoms of burnout that I am experiencing won't go away"	5 (2)
"I feel completely burned out and wonder if I can go on"	3 (1)
Level of understanding of criteria for promotion at own institution (n = 265)	
Excellent	36 (14)
Very good	72 (27)
Good	63 (24)
Fair	67 (25)
Poor	27 (10)
Level of confidence in evaluation of medical students and residents (n = 263)	
Very high	58 (22)
High	118 (45)
Average	81 (31)
Low	5 (2)
Very low	1 (0.1)

pitalists were burned out, while an additional 25% were at risk for burnout.⁴

Our data confirm known causes of burnout (eg, lack of control over work schedule) but suggest additional potential associations, such as lack of division chief support. While we observed that low satisfaction and burnout were associated with lower academic productivity, we cannot discern the causal link between these factors. However, we are able to develop a picture of an "at risk academic hospitalist," as one who has fewer peer-reviewed publications, lower confidence in their teaching skills, and a lower likelihood of having presented institutional grand rounds.

Previous research suggests that "career fit" appears to be a driver of physician burnout,⁵ providing another potential way to interpret our results. Hospitalists in our study likely chose to work in an academic environment to partake in scholarly activity. While most described their roles as ones generally considered "academic" (eg, clinician educators), many had large nonteaching clinical roles. This discordance between self-identified job goals and actual work reported represents a clear lack of ca-

Table 3. Factors Associated With Low Satisfaction and With Reports of Burnout

Associated Factors	OR (95% CI)
Factors associated with low satisfaction	
Specialty	
Internal medicine	1 [Reference]
Internal medicine subspecialty	15.24 (1.97-118.24)
Other	0.47 (0.07-3.15)
Low satisfaction with amount of personal and family time	2.37 (1.10-5.11)
Low satisfaction with amount of control over work schedule	4.82 (2.17-10.74)
Low satisfaction with level of support from division chief	3.81 (1.80-8.06)
Primary hospital where majority of clinical time is spent	
University	1 [Reference]
Other	3.47 (1.42-8.47)
Factors associated with reports of burnout	
Low satisfaction with amount of personal and family time	2.51 (1.29-4.87)
Low satisfaction with amount of control over work schedule	5.35 (2.65-10.80)

Abbreviations: CI, confidence interval; OR, odds ratio.

Table 4. Association Between Burnout or Low Satisfaction and Academic Productivity in 154 Academic Hospitalists Practicing Less Than 5 Years

Academic Productivity	Burnout OR (95% CI)	Low Satisfaction OR (95% CI)
Any peer-reviewed first-author publication	1.41 (0.54-3.64)	0.85 (0.35-2.05)
Gave institutional grand rounds	0.22 (0.04-1.17)	0.54 (0.16-1.74)
Gave rounds at another institution	1.19 (0.36-3.95)	1.44 (0.49-4.23)
Led teaching session at a national meeting	1.45 (0.46-4.62)	1.09 (0.35-3.40)
High level of confidence in teaching	1.08 (0.46-2.57)	0.49 (0.22-1.11)
Any oral abstract or poster presented at a national meeting	0.83 (0.33-2.09)	1.40 (0.56-3.50)
Feeling ready to mentor others	0.83 (0.32-2.12)	0.96 (0.40-2.33)
Any senior author peer-reviewed publication	2.11 (0.66-6.77)	2.45 (0.81-7.44)
Any non-peer-reviewed publications	0.85 (0.33-2.22)	1.22 (0.50-2.96)
Mentor other academic hospitalist faculty	0.57 (0.16-2.08)	0.44 (0.10-2.01)
High level of understanding of criteria for promotion at own institution	1.04 (0.45-2.43)	0.42 (0.19-0.95)
High level of confidence in evaluation of medical students and residents	1.27 (0.59-2.73)	0.88 (0.41-1.88)

Abbreviations: CI, confidence interval; OR, odds ratio.

reer fit, and one that may also partially explain the high rate of burnout we observed.

Academic leaders should develop faculty plans to ensure academic career fit. This should include mentorship, faculty development, and balance between academic activities and rising clinical needs. Since hospitalist

groups are generally funded by hospitals, we were surprised that perceptions of hospital support were not associated with risks for burnout and low satisfaction. This suggests that even though relationships with their hospital are critical for financial and strategic success,¹ direct support from divisions appears to be more critical for hospitalists' career satisfaction and burnout. Nearly 90% of respondents reported to a general internal medicine chief, which suggests a need for general internal medicine division chief support to balance work demands, schedules, and protected time in a manner consistent with academic success.

Our study had several important limitations. First, we studied only a subset of hospitalists from primarily larger academic institutions known to the study authors. It is likely that scholarly infrastructure, support, and expectations are different in these institutions than other types of teaching hospitals, reducing the generalizability of our data. Next, our study design was prone to response bias and we did not assess the actual vs reported academic productivity of respondents. Finally, low satisfaction, stress, and burnout were assessed through subjective assessment tools.

In conclusion, few academic hospitalists have succeeded in achieving senior levels of promotion. This is likely owing, in part, to the youth of the field and inadequate amounts of protected scholarly time fueled by high demands for nonteaching clinical work. However, the resultant high levels of stress and burnout and low satisfaction may also present a real threat to the vitality of a budding field. Targeted efforts and interventions are needed to stem this tide in order to create fulfilling, sustainable, and scholarly, robust academic hospitalist careers.

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HEALTH CARE REFORM

Enforcement Actions Involving Medicaid Fraud and Abuse, 1996-2009

Medicaid expenditures in 2008 were \$321 billion, accounting for 16% of domestic health care spending and coverage of 60 million individuals.¹ Overall, Medicaid accounts for the second largest state budgetary expenditures (17%). In recent years, state officials have focused on identifying fraud in an effort to control Medicaid expenditures. Twenty-three states and the District of Columbia adopted state False Claims Act (FCA) legislation to facilitate fraud investigations.² This legislation, modeled after federal legislation, allows private citizens, termed *qui tam* relators, to file lawsuits alleging fraud by Medicaid contractors and to be awarded part of the recoveries. Historically, 90% of Medicare fraud has involved *qui tam* relators, resulting in financial recoveries of \$9.3 billion between 1996 and 2005.³ No study has reported similar data for Medicaid. We report on Medicaid FCA investigations from 1996 through 2009.

Methods. Data sources included Web sites maintained by state attorneys general and the Lexis/Nexis News database (1996 through 2009) (search terms *False Claims Act AND Medicaid* and individual state names). Data on industry, date, violation, and recovery amount were abstracted.

Results. Between 1996 and 2000, no concluded Medicaid fraud FCA cases were found. Between 2001 and 2005, total recoveries for the 12 concluded cases were \$99 million. All of these cases had been initiated by *qui tam* relators. Between 2006 and 2009, 44 state-led FCA health care cases were concluded, and \$5.4 billion was recovered. Only one-third of these cases were initiated by *qui*