

6-2010

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Sarah A. Bunton
Portland State University

April Corrice

William T. Mallon

Let us know how access to this document benefits you.

Follow this and additional works at: https://pdxscholar.library.pdx.edu/elp_fac

 Part of the [Higher Education and Teaching Commons](#)

Citation Details

Bunton, S.A., Corrice, A.M., & Mallon, W.T. (2010, June). Clinical faculty satisfaction with the academic medicine workplace. Washington, DC: Association of American Medical Colleges

This Technical Report is brought to you for free and open access. It has been accepted for inclusion in Educational Leadership and Policy Faculty Publications and Presentations by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.



Tomorrow's Doctors, Tomorrow's Cures®



Faculty **Forward**

The Alliance for Advancing the
Academic Medicine Workplace

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Sarah A. Bunton, PhD
April M. Corrice, BA
William T. Mallon, EdD

Learn

Serve

Lead

June 2010

Association of
American Medical Colleges

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Sarah A. Bunton, PhD
April M. Corrice, BA
William T. Mallon, EdD

Published by
Association of American Medical Colleges
Washington, D.C.

© 2010 Association of American Medical Colleges

May be reproduced and distributed, with attribution for educational or noncommercial purposes only.
Free PDF versions of this report are available for download at: www.aamc.org/publications

More information about the AAMC Faculty Forward program is available at: www.aamc.org/facultyforward.
For questions or comments about this report, please contact Sarah A. Bunton, PhD at: sbunton@aamc.org

FOREWORD

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Does it matter whether your medical school is a great place to work?

On a daily basis, clinical faculty work tirelessly to prepare students for a lifetime of learning, to collaborate as part of interprofessional teams, and to provide high-quality, patient-centered care. However, the reality is that, within the next 10 years, medical schools will lose half of their faculty members to other institutions, private settings, or to generational retirement waves. In addition to leaving institutions in short supply of talented faculty members, this migration will also put institutional performance at risk.

Understanding the strategic role played by faculty satisfaction in high-performing institutions is vital to the success of our institutions. To deepen this understanding, the AAMC in 2009 launched Faculty Forward—a capacity-building initiative to help schools develop the organizational cultures more likely to attract and retain excellent faculty.

As part of that initiative, the AAMC recently fielded a survey covering several key dimensions of workplace satisfaction. Administered to thousands of clinical faculty members at 23 medical schools, the results revealed a high degree of satisfaction. However, the survey also uncovered substantial variation in satisfaction among clinical specialties. This report serves to highlight the dimensions of workplace satisfaction experienced by clinical faculty and the impact this level of satisfaction has on both the individual and on their respective institution. When combined with the Faculty Forward initiative, this report is a powerful, evidence-based resource that can be used to advance cultural change.

Faculty satisfaction is a topic none of us in academic medicine can afford to ignore. Our faculty are among academic medicine's greatest resources, and we must do all we can to ensure their institutions are great places to work.



Darrell G. Kirch, M.D.
President and CEO
AAMC

EXECUTIVE SUMMARY

Faculty members in US academic medical centers face multiple pressures, including increasing clinical productivity while also providing quality education to medical students and residents. With the resulting potential for decreased job satisfaction and burnout, understanding these issues is paramount—especially given the associations of job satisfaction and important outcome measures like quality of patient care and retention. The turnover of these faculty could rise and pose great financial and human capital costs to institutions. Despite the challenging context in which clinical faculty find themselves, current understanding of the facets of clinical faculty workplace satisfaction, especially by specialty area, is limited.

We undertook this research to describe dimensions of workplace satisfaction of full-time MD clinical faculty physicians at US academic medical centers and to examine the factors associated with satisfaction and intent to leave academic medicine. Data in this report reflect faculty responses to a 51-item questionnaire administered to all full-time faculty members at 23 US medical schools. The institutions self-selected to have the survey administered to their faculty members as part of the Faculty Forward initiative of the Association of American Medical Colleges (AAMC) — a collaboration between the AAMC and US medical schools to understand and improve faculty workplace satisfaction, retention, and organizational performance. While 9638 faculty completed the survey, the analyses here focus on the 6265 clinical MDs who responded. Response rates of full-time MD clinical faculty varied across the medical schools from a high of 75.1% to a low of 17.1% (median = 52.8%, 6265/13,180).

Salient research questions and findings include:

1. What is the overall level of satisfaction with academic medical center workplaces among full-time MD clinical faculty?

Results indicate that, overall, 63.1% of responding faculty were satisfied or very satisfied with their medical schools as places to work, and 70.8% of the faculty were satisfied or very satisfied with their departments as places to work, though that varied by specialty. Senior faculty were more likely to be dissatisfied or very dissatisfied with their medical schools than were junior faculty. Over four-fifths of the faculty respondents reported that if they were to do it over, they would again choose an academic career.

2. How does workplace satisfaction differ among these faculty by specialty?

MD clinical faculty in dermatology, general pediatrics, general internal medicine, and family medicine were the most satisfied with their medical schools as places to work (75.3%, 72.4%, 70.8%, and 69.6% respectively); faculty in anesthesiology, general surgery, specialty surgery, and emergency medicine were the least likely to be satisfied or very satisfied (51.1%, 51.3%, 57.7%, and 59.2% respectively). MD clinical faculty in otolaryngology, dermatology, family medicine, and general pediatrics were the most likely to be satisfied or very satisfied with their departments as places to work (91.7%, 81.5%, 81.2%, and 80.6%, respectively), whereas faculty in subspecialty medicine, anesthesiology, pathology, and general surgery were the least likely to be satisfied or very satisfied (62.3%, 64.0%, 64.4%, and 66.1%, respectively).

3. How do these faculty across specialties differ in their intent to leave their institutions in the next 1-2 years?

MD clinical faculty in ophthalmology, pathology, emergency medicine, and subspecialty medicine reported the highest likelihood of leaving their organizations in 1-2 years (10.0%, 9.5%, 9.3%, and 8.5%, respectively). Faculty in dermatology, subspecialty pediatrics, otolaryngology, and radiology reported the lowest likelihood of leaving their organizations (5.0%, 4.3%, 3.7%, and 2.9%, respectively).

These findings suggest first, that the majority — just under two-thirds — of full-time MD clinical faculty members are satisfied with their workplace settings, but workplace satisfaction of academic physicians varies greatly among specialties. These findings are slightly lower than global measures of job satisfaction in other national studies of US physicians. Second, findings suggest that current understanding of medical faculty satisfaction may be enhanced through additional explorations by specialty area. We found that three of the top four departments with the highest percentages of faculty who are satisfied with their medical school as a whole are primary-care oriented, which is somewhat surprising and may suggest a difference between academic primary care providers and those in private or community practice settings. Third, results suggest that faculty members in specialties with the highest levels of workplace satisfaction are often the least likely to plan to leave their organizations, and those with the lowest satisfaction levels are sometimes the most likely to plan to leave, suggesting a link between satisfaction and retention.

CONTENTS

List of Tables	vi
Acknowledgements	vii
Introduction	1
Methods	3
Results	7
Overall Satisfaction with Workplace Settings of Academic Medical Centers	7
Workplace Satisfaction Differences Across Departments	8
Intent to Leave	9
Discussion11
References15

LIST OF TABLES

Table 1:
Organizational Characteristics and Faculty Counts of Schools in Study vs. All Medical Schools4

Table 2:
Respondent Demographic Characteristics and Response Rates of MD Clinical Faculty.6

Table 3:
MD Clinical Faculty Satisfaction with Time Spent on Various Activities7

Table 4:
MD Clinical Faculty Satisfaction with Medical School, Department, and Academic Career8

Table 5:
Clinical MD Faculty Intent to Leave9

ACKNOWLEDGEMENTS

First, we would like to thank the task force chairs and the deans at each of the 23 institutions that were participants of the Faculty Forward program and this survey effort. We also thank the nearly 10,000 faculty members at those institutions who took the time to complete the survey.

Second, we thank the following individuals for helpful feedback on earlier drafts of this monograph: R. Kevin Grigsby, DSW, Euphia Hsu Smith, MPH, and Shannon Fox, PhD, all of the Association of American Medical Colleges; and Benjamin D. Ehst, MD, PhD at Oregon Health & Science University. We also thank Cathy A. Trower, MBA, PhD, and Kiernan Mathews, EdM, of the Collaborative on Academic Careers (COACHE) at the Harvard Graduate School of Education for their partnership in instrument development, IRB approval process, survey administration, data collection, and data cleaning.

INTRODUCTION

Job satisfaction has been of significant interest to the physician community because of its association with a number of important measures, including quality of patient care,¹⁻⁴ career choice,^{5,6} and retention.⁷⁻¹⁰ Faculty satisfaction has been of longstanding interest to institutions of higher education for many of the same reasons, including the empirical links between job satisfaction and increased organizational performance¹¹ and faculty retention.^{12,13} Understanding job satisfaction of faculty members at US academic medical centers is especially important because these educators are at the nexus of clinical care and education. In response, the current study examines several facets of the workplace satisfaction of US clinical faculty members.

A confluence of factors has impacted the roles of clinical faculty at US medical schools over the past decade. With changes in the delivery and financing of healthcare, clinical faculty are under increasing pressures to meet clinical productivity metrics, impinging on their ability to participate in research and teaching.¹⁴ At the same time, these faculty members typically have comparable expectations for promotion as other university faculty but are far less likely to enjoy the perquisites of academic tenure.¹⁵ Specifically, they move through the academic promotion ladder more slowly than other faculty,¹⁶ and typically have a portion of their salaries at risk.¹⁷ Perhaps, in part, in response to these increased burdens, 5 of every 10 clinical faculty members leave employment at their academic medical center within 10 years, while 4 depart academic medicine entirely.¹⁸ The loss of these faculty to outside positions poses great financial and human capital costs to the institution.¹⁹

Despite the challenging context in which clinical faculty find themselves and the associations of job satisfaction with important patient care and educational outcome measures, we know little about how medical faculty workplace satisfaction differs across specialties. Such variation can be expected due to differences among specialties in career interest, salaries, and practice patterns and contexts, and may have differential effects on outcomes. For instance, faculty satisfaction differences by specialty could influence the future physician workforce if satisfied faculty are more likely than dissatisfied faculty to advise students to pursue their specialty.

To examine these issues, we undertook our analysis with 3 primary research questions in mind:

- 1) What is the overall level of satisfaction with academic medical center workplaces among full-time MD clinical faculty?
- 2) How does satisfaction differ among these faculty by specialty?
- 3) How do these faculty across specialties differ in their intent to leave their institutions in the next 1-2 years?

METHODS

Data source

Data for this study are from a spring 2009 web-based administration of a medical school faculty job satisfaction survey. We administered the survey to the census of all full-time faculty members at 23 US LCME-accredited (Liaison Committee on Medical Education) medical schools. The institutions self-selected to have the survey administered to their faculty members as part of the Faculty Forward initiative of the Association of American Medical Colleges (AAMC) to understand

and improve faculty workplace vitality. The survey population varied at each school (high=1861; low=376), with an average of 826 faculty per institution (total faculty population=19001). These 23 institutions are reasonably representative of all LCME-accredited medical schools (Table 1). Faculty members were eligible to complete the survey if they had a full-time medical school appointment (as determined by each school) and had a valid email address.

Faculty Forward: The Alliance for Advancing the Academic Medicine Workplace

Faculty Forward is collaboration between the AAMC and U.S. medical schools to apply evidence-based approaches to improve faculty satisfaction, retention, and organizational performance. By helping schools build their capacity for creating dynamic, high performance institutional cultures, Faculty Forward helps to support each participating school's efforts to make their academic medical center a great place to work.

Central to the Faculty Forward process is a comprehensive faculty survey that provides medical school leaders with information to identify issues driving faculty satisfaction at their school, as well as ongoing support through implementation tools, process guidelines, educational resources, and opportunities to participate in facilitated discussions with experts in organizational improvement and change.

For more information see: www.aamc.org/facultyforward
or email facultyforward@aamc.org

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Table 1. Organizational Characteristics and Faculty Counts of Schools in Study vs. All Medical Schools

	No. (%) within 23 participating schools ^a	No. (%) within all 126 medical schools ^b
Ownership Type and Relationship to Parent University^c		
Private (all types)	6 (26.1)	50 (39.7)
Public medical schools that are part of a university	11 (47.8)	53 (42.1)
Public freestanding medical schools (in state systems, health sciences universities, or the federal government) or consortiums	6 (26.1)	23 (18.3)
Faculty Counts		
All full-time clinical faculty ^d	16046 (84.5)	109966 (86.3)
All full-time basic science faculty	2943 (15.5)	17523 (13.7)
Average number of all basic science and clinical faculty per institution	826 (100.0)	1012 (100.0)

^a The 23 participating institutions in our study include: Jefferson Medical College of Thomas Jefferson University; Louisiana State University School of Medicine in New Orleans; Medical College of Georgia; New York Medical College; Northwestern University Feinberg School of Medicine; Saint Louis University School of Medicine; Stanford University School of Medicine; Texas Tech University Health Sciences Center School of Medicine; The Brody School of Medicine at East Carolina University; The School of Medicine at Stony Brook University Medical Center; Uniformed Services University of the Health Sciences; University of California, Davis, School of Medicine; University of Florida College of Medicine; University of Massachusetts Medical School; University of Mississippi School of Medicine; University of Missouri-Columbia School of Medicine; University of New Mexico School of Medicine; University of Oklahoma College of Medicine; University of Pennsylvania School of Medicine; University of South Carolina School of Medicine; University of South Florida College of Medicine; University of Texas School of Medicine at San Antonio; and University of Virginia School of Medicine.

^b The “all 126 medical schools” column includes the 126 LCME-accredited US medical schools with enrolled students at the time of the survey; four schools with provisional LCME-accreditation at that time were not included because they did not enroll students until Fall 2009. “All medical schools” faculty counts source: AAMC Faculty Roster. U.S. medical school faculty, 2009. Available at: <http://www.aamc.org/data/facultyroster/usmsf09/usmsf09.htm>. Accessed February 19, 2010.

^c For more information on organizational characteristics, see: <http://www.aamc.org/data/ocd/start.htm>

^d Counts reflect all full-time faculty in clinical departments (regardless of degree)

Procedure

In April of 2009, we emailed all survey-eligible faculty at the 23 medical schools a survey invitation with an individualized web link. The invitation noted that the study's purpose was to assess faculty satisfaction and that responses would be confidential. Non-responders received up to three reminder messages to complete the survey. The Committee on the Use of Human Subjects at Harvard University approved this study and procedure.

Survey instrument

The 51-item survey instrument was based on a review of related surveys on faculty and physician job satisfaction, the extant literature, in-depth focus groups, cognitive interviews, and a pilot administration. The survey includes nine satisfaction domains: nature of work; climate and culture; mentoring and feedback; promotion; compensation and benefits; recruitment and retention; governance and operations; clinical practice; and global satisfaction. The instrument contains primarily 5-point Likert scale items, with scales most frequently on satisfaction (*very dissatisfied* to *very satisfied*) and agreement (*strongly disagree* to *strongly agree*). The survey contains a few importance-scale items and yes/no questions. For interpretation ease, we collapsed the 5-point Likert scales into 3 categories (e.g., satisfied/very satisfied, neither satisfied nor dissatisfied, and dissatisfied/very dissatisfied).

Response Rates

The response rate for the survey-eligible MD clinical faculty that we focus on in this study was 47.5% (n=6265), while the overall response rate of all faculty was 50.7% (n=9638). Response rates of MD clinical faculty varied across demographic groups (Table 2) and across individual institutions, ranging from

75.1% to 17.1%. These calculated response rates are conservative, as we assumed that all non-respondents were survey-eligible. The response rates achieved in this study are comparable to those obtained in other national surveys of physician job satisfaction.^{6,20,21}

Based on the schools' organizational characteristics, we categorized three types of the participating academic medical centers, which obtained varying response rates: public medical schools that are part of a university (n=11, 54.7%); public medical schools that are a part of a freestanding system or are a federally-owned freestanding school (n=6, 39.2%); and private medical schools (n=6, 45.9%).

For MD clinical faculty, we found a gender non-response bias. Specifically, women faculty were more likely to respond to the survey than were men faculty ($\chi^2 = 12.2$; $P < .001$). Therefore, the results of the current study may be slightly over-representative of women faculty members. However, researchers suggest that non-response bias may be of less concern in surveys of physicians than of other populations.²²

Data Analyses

The primary analysis involved the use of descriptive summary statistics for levels of satisfaction and agreement on survey items. We used χ^2 analyses to assess significant differences between groups on the collapsed Likert-scale items and the dichotomous items. We defined statistical significance as $P < .05$ for 2-sided tests. We performed all analyses using PASW Statistics version 17.

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Table 2. Respondent Demographic Characteristics and Response Rates of MD Clinical Faculty

	No. (%) of respondents	Response rate (%)
MD Clinical faculty overall	6265 (100.0)	47.5
<i>Gender</i>		
Male	4234 (67.6)	46.8
Female	2031 (32.4)	50.1
<i>Race/ethnicity</i>		
Majority (white, Asian)	5702 (91.0)	50.3
Minority	563 (9.0)	47.4
<i>Rank</i>		
Senior faculty	3332 (55.3)	-
Junior faculty	2698 (44.7)	-
<i>Department</i>		
Anesthesiology	402 (6.4)	45.6
Dermatology	86 (1.4)	55.1
Emergency Medicine	241 (3.9)	51.9
Family Medicine/Practice	346 (5.5)	59.3
Internal Medicine—General	363 (5.8)	37.1
Medicine—Subspecialty	1129 (18.0)	46.6
Neurology	227 (3.6)	46.6
OB/GYN	347 (5.5)	54.9
Ophthalmology	104 (1.7)	43.7
Otolaryngology	112 (1.8)	54.6
Pathology	247 (3.9)	50.6
Pediatrics—General	300 (4.8)	40.5
Pediatrics—Subspecialty	830 (13.3)	61.9
Psychiatry	307 (4.9)	48.3
Radiology	347 (5.5)	43.4
Surgery—General	118 (1.9)	25.1
Surgery—Specialty/Other	643 (10.3)	46.9

Notes: Minority faculty includes all faculty of a race/ethnicity different from white or Asian. Senior rank faculty include full or associate professors; junior rank faculty include assistant professors (instructors, lecturers, etc., are excluded). We did not collect information on response rates by rank.

RESULTS

Overall Satisfaction with Workplace Settings of Academic Medical Centers

The majority of MD clinical faculty reported being satisfied on global measures of satisfaction. Just under two-thirds of the faculty reported feeling satisfied or very satisfied with their medical school as a place to work (3739, 63.1%), and slightly more were satisfied or very satisfied with their department as a place to work (4198, 70.8%). Senior faculty (i.e., associate and full professors) were more likely to be dissatisfied or very dissatisfied with their medical school as a place to work than were junior faculty (i.e., assistant professors; 538 [16.7%] vs. 325 [12.7%]; $\chi^2=28.6$; $P<.001$). Over four-fifths of the faculty respondents reported that if they were to do it over, they would again choose an academic career (4741, 84.9%), though senior faculty were more likely to agree or strongly agree than were junior faculty (2754 [88.5%] vs. 1848 [78.6%], $\chi^2=106.3$; $P<.001$).

Because work style and preferences have an impact on workplace satisfaction, we investigated the typical work hours of faculty and time spent on different activities. Overall, MD clinical faculty were more likely to be satisfied or very satisfied with their medical schools and departments as places to work if they were satisfied or very satisfied with their number of hours worked per week ($\chi^2=752.9$, $P<.001$; and $\chi^2=768.2$, $P<.001$; respectively). On average, respondents reported working 59.9 hours per week, with men working

slightly more hours than women (60.8 vs. 58.0; $P<.001$) and senior faculty working slightly more hours than junior faculty (61.5 vs. 58.3, $P<.001$). Just over half of faculty reported being satisfied or very satisfied with hours worked (3266, 52.3%). Although they reported working more hours, men were more likely to be satisfied or very satisfied with their hours worked than were women (2310 [54.7%] vs. 956 [47.2%], respectively; $\chi^2=52.5$; $P<.001$). No significant rank differences were noted.

Our results demonstrate that MD clinical faculty were most satisfied with the time they spend on teaching and education activities (4241, 69.5% satisfied or very satisfied) and least satisfied with time on research (2360, 40.5% satisfied or very satisfied; see Table 3). A large majority of those who were dissatisfied with their time spent on research felt that they spent too little time on these activities (2182, 97.9%). Men were more likely to be satisfied or very satisfied than were women with time on teaching and education (2928 [70.7%] vs. 1313 [67.0%]; $\chi^2=10.8$; $P<.01$), research (1664 [41.8%] vs. 696 [37.7%]; $\chi^2=26.5$; $P<.001$), and patient care (2851 [70.2%] vs. 1319 [68.6%]; $\chi^2=15.5$; $P<.001$). Senior faculty were more likely to be satisfied or very satisfied than were junior faculty with time on research (1375 [43.2%] vs. 884 [36.4%]; $\chi^2=42.6$; $P<.001$) and administration (1668 [51.8%] vs. 1116 [45.4%]; $\chi^2=27.1$; $P<.001$), while junior faculty were more likely to be satisfied or very satisfied with time on patient care (1854 [71.9%] vs. 2151 [67.5%]; $\chi^2=13.3$; $P<.01$).

Table 3. MD Clinical Faculty Satisfaction with Time Spent on Various Activities

	Overall	Gender comparisons			Rank comparisons		
	No. (%) satisfied or very satisfied	No. (%) satisfied or very satisfied			No. (%) satisfied or very satisfied		
		Male	Female	χ^2 P value	Senior	Junior	χ^2 P value
Teaching/education	4241 (69.5)	2928 (70.7)	1313 (67.0)	.004	2298 (70.3)	1787 (68.4)	.08
Research/scholarship	2360 (40.5)	1664 (41.8)	696 (37.7)	<.001	1375 (43.2)	884 (36.4)	<.001
Patient care/client services	4170 (69.7)	2851 (70.2)	1319 (68.6)	<.001	2151 (67.5)	1854 (71.9)	.001
Administration	2886 (49.1)	1982 (49.5)	904 (48.4)	.23	1668 (51.8)	1116 (45.4)	<.001

Clinical Faculty Satisfaction with the Academic Medicine Workplace

Workplace Satisfaction Differences Across Departments

With regard to satisfaction with their medical school as a whole, MD clinical faculty in dermatology, general pediatrics, and general internal medicine were the most likely to be satisfied or very satisfied (61, 75.3%; 205, 72.4%; and 243, 70.8%; respectively; see Table 4). MD clinical faculty in anesthesiology, general surgery, and specialty surgery were the least likely to be satisfied or very satisfied (189, 51.1%; 59, 51.3%; and 349, 57.7%; respectively).

MD clinical faculty in otolaryngology, dermatology, and family medicine were the most likely to be satisfied or very satisfied with their departments as places to work (100, 91.7%; 66, 81.5%; and 272, 81.2%; respectively), whereas faculty in subspecialty medicine (including allergy, cardiology, and geriatrics, among others), anesthesiology, and pathology were the least likely to be satisfied or very satisfied (665, 62.3%; 236, 64.0%; and 152, 64.4%; respectively).

When asked whether they would again choose an academic career, MD clinical faculty in neurology,

Table 4. MD Clinical Faculty Satisfaction with Medical School, Department, and Academic Career

	Satisfaction with medical school as a place to work		Satisfaction with department as a place to work		Agreement with choosing an academic career again	
	No. (%) satisfied or very satisfied	Department ranking ^a	No. (%) satisfied or very satisfied	Department ranking	No. (%) agree or strongly disagree	Department ranking
Anesthesiology	189 (51.1)	17	236 (64.0)	16	258 (76.6)	17
Dermatology	61 (75.3)	1	66 (81.5)	2	61 (81.3)	14
Emergency Medicine	135 (59.2)	14	163 (71.8)	8	179 (81.7)	13
Family Medicine/Practice	233 (69.6)	4	272 (81.2)	3	263 (85.1)	8
Internal Medicine – General	243 (70.8)	3	239 (69.7)	11	292 (91.0)	2
Medicine – Subspecialty	649 (60.9)	11	665 (62.3)	17	876 (86.7)	5
Neurology	145 (67.8)	5	155 (72.4)	7	186 (91.2)	1
OB/GYN	221 (67.0)	7	243 (73.6)	6	259 (83.3)	12
Ophthalmology	58 (59.8)	13	66 (68.0)	12	77 (83.7)	11
Otolaryngology	73 (67.0)	6	100 (91.7)	1	89 (85.6)	7
Pathology	143 (60.6)	12	152 (64.4)	15	182 (83.9)	10
Pediatrics – General	205 (72.4)	2	228 (80.6)	4	238 (88.1)	4
Pediatrics – Subspecialty	515 (65.1)	8	598 (75.6)	5	640 (85.9)	6
Psychiatry	181 (62.0)	9	196 (67.1)	13	215 (79.6)	16
Radiology	197 (61.4)	10	231 (71.7)	9	235 (79.7)	15
Surgery – General	59 (51.3)	16	76 (66.1)	14	102 (90.3)	3
Surgery – Specialty/Other	349 (57.7)	15	428 (70.6)	10	495 (85.1)	9

^a Department rankings are based on percentages; a lower number denotes a better ranking.

Clinical Faculty Satisfaction with the Academic Medicine Workplace

general internal medicine, and general surgery were the most likely to agree or strongly agree (186, 91.2%; 292, 91.0%; 102, 90.3%; respectively). Faculty in anesthesiology, psychiatry, and radiology were the least likely to agree or strongly agree with this statement (258, 76.6%; 215, 79.6%; and 235, 79.7%; respectively).

Intent to Leave

For our analysis of faculty members' intent to leave their organizations, we filtered out those MD clinical faculty who planned on retiring in 1-2 years (n=157). We asked the remaining faculty (n=5739) to indicate whether they planned to leave their medical school in the next 1-2 years. We found a strong association between intent to leave one's medical school and global

satisfaction with one's medical school and department as places to work; faculty who intended to leave were more likely to be dissatisfied or very dissatisfied with both their medical school ($\chi^2=512.2$; $P<.001$) and department ($\chi^2=709.5$; $P<.001$) as places to work.

Faculty in the areas of ophthalmology, pathology, and emergency medicine reported the highest likelihood of leaving their organizations in the subsequent 1-2 years: 9, 10.0%; 22, 9.5%; and 21, 9.3%; reporting plans to leave; respectively (see Table 5). In contrast, faculty in subspecialty pediatrics, otolaryngology, and radiology reported the lowest likelihood of leaving their organizations (33, 4.3%; 4, 3.7%; and 9, 2.9%; reporting plans to leave in the subsequent 1-2 years; respectively).

Table 5. Clinical MD Faculty Intent to Leave

	Yes, I plan to leave in the next 1-2 years		No, I plan on staying for at least that long	I don't know
	No. (%)	Department ranking ^a	No. (%)	No. (%)
Anesthesiology	27 (7.4)	12	235 (64.7)	101 (27.8)
Dermatology	4 (5.0)	4	59 (73.8)	17 (21.3)
Emergency Medicine	21 (9.3)	15	154 (68.4)	50 (22.2)
Family Medicine/Practice	21 (6.5)	7	239 (73.5)	65 (20.0)
Internal Medicine – General	23 (6.9)	10	229 (69.0)	80 (24.1)
Medicine – Subspecialty	87 (8.5)	14	703 (68.4)	238 (23.2)
Neurology	16 (7.7)	13	150 (71.8)	43 (20.6)
OB/GYN	21 (6.6)	9	224 (70.9)	71 (22.5)
Ophthalmology	9 (10.0)	17	60 (66.7)	21 (23.3)
Otolaryngology	4 (3.7)	2	90 (83.3)	14 (13.0)
Pathology	22 (9.5)	16	150 (64.9)	59 (25.5)
Pediatrics – General	15 (5.5)	5	208 (76.2)	50 (18.3)
Pediatrics – Subspecialty	33 (4.3)	3	582 (76.3)	148 (19.4)
Psychiatry	18 (6.4)	6	191 (67.7)	73 (25.9)
Radiology	9 (2.9)	1	233 (74.2)	72 (22.9)
Surgery – General	8 (7.4)	11	67 (62.0)	33 (30.6)
Surgery – Specialty/Other	38 (6.5)	8	401 (68.5)	146 (25.0)

^a Department rankings are based on the percentage of faculty planning to leave in the next 1-2 years (excluding those who plan on retiring in 1-2 years); a lower number denotes a better ranking.

DISCUSSION

Medical faculty job and workplace satisfaction is of interest to the academic medicine community because of its association with significant outcome measures, including patient care and faculty retention. Understanding workplace satisfaction of academic faculty members at US medical centers is especially important because they are clinicians as well as the educators for physicians of tomorrow. In that regard, their satisfaction or dissatisfaction could impact clinical quality, educational quality, and medical students' career choices. In this national study of workplace satisfaction of MD clinical faculty members at US medical schools, we find several notable results.

Overall Satisfaction

Despite the changing health care system and pressures that academics are facing with regard to access, cost, and quality of the services they provide, just under two-thirds of the MD clinical faculty report satisfaction with their medical school as a place to work (3739, 63.1%). This percentage is comparable to the levels reported by basic scientists in our survey (1111, 62.8%), but slightly lower than global measures of job satisfaction in other national studies of US physicians.^{23,24} Just over two-thirds of the MD clinical faculty respondents (4198, 70.8%) are satisfied or very satisfied with their department as a place to work. This number is slightly lower than what the basic scientists in our survey reported (1312, 74.1%), but MD clinical faculty are more likely than their basic science counterparts to agree or strongly agree that they would again choose an academic career (4741 [84.9%] vs. 1388 [82.8%]; $P < .01$). That the overall level of clinical faculty satisfaction is lower than those found in past surveys might be cause for concern. However, we administered this survey in spring 2009 — during the most severe economic conditions in 70 years — and it may be that job satisfaction across all sectors is lower than in years prior.

Department Differences and Intent to Leave

A second notable result from this study is that workplace satisfaction varies significantly across departments. The top four departments with the highest percentages of faculty who are satisfied with their medical school as a whole are dermatology, general pediatrics, general internal medicine, and family medicine. That dermatology leads the pack is, perhaps, not surprising given the specialty's stable work hours (especially important to younger generations of physicians²⁵), strong patient-physician interactions,²⁶ and increasing scientific knowledge in the field.²⁷ Far more surprising is that the next three specialties with highest levels of satisfaction are primary-care oriented: general pediatrics, general internal medicine, and family medicine. Given the extensive attention in the professional literature and media about workforce shortages, declining reimbursement, and stress and demands in primary care,^{28,29} these findings may suggest a difference between academic primary care providers and those in private or community practice settings. Family practice physicians in this study, in particular, are more satisfied relative to other departments than recent research has suggested.³⁰

Our findings show that clinical faculty in anesthesiology, general surgery, and specialty surgery are the least satisfied with their medical school as places to work. The lower levels of satisfaction among anesthesiologists may reflect high malpractice rates in the field. We speculate that general surgeons may have lower rates of satisfaction for different reasons, including dissatisfaction with income potential compared to specialist surgeons, and retraining requirements to keep up to date with advances in the field (e.g., laparoscopic procedures). Lower rates of satisfaction among specialty surgeons may

Clinical Faculty Satisfaction with the Academic Medicine Workplace

reflect feelings about the marketplace in general, comparisons to private practice peers, and high stress environments.^{31,32}

These differences in rates of faculty satisfaction among departments raise several questions. Are there drivers of satisfaction for the specialties that are controllable by the employing organization? Some factors that contribute to workplace satisfaction may be external forces that the medical school or department cannot influence, yet others may be in the purview of schools to address. Medical schools and departments might need different tools and strategies to improve workplace satisfaction for clinical faculty depending on their discipline.

Next, given the association we found between workplace satisfaction and intent to leave, and given the empirical association between intent to leave and actual employee turnover,⁷⁻⁹ our data are indeed troubling for academic medical centers in general, and some departments in particular. The cost of physician turnover has been previously calculated,^{33,34} with wide-ranging results. Using one model for academic

physicians,³⁴ the impending cost to the 23 academic medical centers for not retaining those faculty who intend to leave employment in the subsequent 1-2 years would be a staggering \$108,272,951 (see box for calculation). Academic medical centers might give attention to improving the academic workplace to increase faculty satisfaction and vitality, reduce turnover, and mitigate the lost productivity and huge financial impact that accompanies such turnover.

It is important to understand the findings of this study in context. First, the survey data are self-reported and may be subjective. Second, the data are cross-sectional and cannot reflect levels of satisfaction over time. Third, the survey was not designed to understand physician career satisfaction across a random national sample of clinical faculty in all medical schools; rather, the survey was administered to a census of all faculty at 23 medical schools to understand satisfaction with the academic medical center workplace settings. The schools in our study reflect the diversity of the population of all MD-granting medical schools, except they are slightly over-representative of public

Calculation of Replacing Faculty in Current Study Who Have the Intent to Leave Their Organizations

	No. of faculty with the intent to leave their medical school in the next 1-2 years	Mean cost of replacing one faculty member (US\$) ^a	Cost of replacing faculty in current sample (US\$) ^b
Generalists	72	115,554	8,319,888
Subspecialists	271	286,503	77,642,313
Surgery specialists	38	587,123	22,310,750
Total	381	—	108,272,951
Average per institution	17	—	4,707,520

^a Mean cost of replacing one faculty member source: Schloss EP, Flanagan DM, Culler CL, Wright AL. Some hidden costs of faculty turnover in clinical departments in one academic medical center. *Acad Med.* 2009;84(1):32-36.

^b Cost of replacing faculty in current sample was calculated by multiplying the number of faculty respondents with the intent to leave their organizations by the mean cost of replacing one faculty member; the total row is the sum of the cost of replacing all generalists, subspecialists, and surgery specialists; the average per institution is the total divided by 23 (the number of medical schools in our study).

Clinical Faculty Satisfaction with the Academic Medicine Workplace

institutions. Fourth, response rates in the survey vary by department and by school. Despite these limitations, these data, drawn from nearly one-fifth of all US academic medical centers — which, to our knowledge, constitutes the largest undertaking in examining faculty workplace satisfaction at multiple schools to date — provide much insight into many nuances of faculty workplace satisfaction.

In sum, faculty job satisfaction remains important for academic medical centers because of its associations with patient care, educational quality, and employee retention. Understanding departmental differences at US medical schools is essential, as workplace satisfaction and intent to leave vary significantly across specialties. Institutions may require varying strategies to increase faculty workplace satisfaction across different departments in order to influence positive change within their organizations. Future research could investigate the factors impacting satisfaction levels within individual departments and targeted interventions of improving workplace vitality at the department level.

REFERENCES

- ¹ Weisman CS, Nathanson CA. Professional satisfaction and client outcomes: A comparative organizational analysis. *Med Care*. 1985;23:1179-1192.
- ² Hass JS, Cook EF, Puopolo AL, Burstin HR, Cleary PD, Brennan TA. Is the professional satisfaction of general internists associated with patient satisfaction? *J Gen Intern Med*. 2000;15:122-128.
- ³ Fahrenkopf AM, Sectish TL, Burger LK, Sharek PJ, Lewin D, Chiang VW, Edwards S, Wiedermann BL, Landrigan CP. Rates of medication errors among depressed and burnt out residents: Prospective cohort study. *British Med J*. 2008;336(7642):488-491.
- ⁴ Lin LS, Brook RH, Clark VA, Davies AR, Fink A, Kosecoff J. Physician and patient satisfaction as factors related to the organization of internal medicine group practices. *Med Care*. 1985;23(10):1171-1178.
- ⁵ Osborn EH. Factors influencing students' choices of primary care or other specialties. *Acad Med*. 1993;68:572-574.
- ⁶ Wetterneck TB, Linzer M, McMurray JE, et al. Worklife and satisfaction of general internists. *Arch Intern Med*. 2002;162(2):649-656.
- ⁷ Landon BE, Reschovsky JD, Pham HH, Blumenthal D. Leaving medicine: The consequences of physician dissatisfaction. *Med Care*. 2006;44:234-242.
- ⁸ Pathman DE, Konrad TR, Williams ES, Scheckler WE, Linzer M, Douglas J. Physician job satisfaction, dissatisfaction, and turnover. *J Fam Pract*. 2002;51(7):593.
- ⁹ Buchbinder SB, Wilson M, Melick CF, Powe NR. Primary care physician job satisfaction and turnover. *Am J Manage Care*. 2001;7(7):701-713.
- ¹⁰ Bergus GR, Randall CS, Winniford MD, Mueller CW, Johnson SR. Job satisfaction and workplace characteristics of primary and specialty care physicians at a bimodal medical school. *Acad Med*. 2001;76(11):1148-1152.
- ¹¹ Ostroff C. The relationship between satisfaction, attitudes, and performance: An organizational level analysis. *J of Appl Psychol*. 1992;77:963-974.
- ¹² Rosser VJ. Faculty members' intentions to leave: A national study on their worklife and satisfaction. *J Res in Higher Educ*. 2004;45(3):285-309.
- ¹³ Johnsrud JK, Rosser VJ. Faculty members' morale and their intention to leave: A multilevel explanation. *J Higher Educ*. 2002;73(4):518-542.
- ¹⁴ Barzansky P, Kenagy G. The full-time clinical faculty: What goes around, comes around. *Acad Med*. 2010;85(2):260-265.

- ¹⁵ Bunton SA, Mallon WT. The continued evolution of faculty appointment and tenure policies at U.S. medical schools. *Acad Med*. 2007;82(3):281-289.
- ¹⁶ Thomas PA, Diener-West M, Canto MI, Martin DR, Post WS, Streiff MB. Results of an academic promotion and career path survey of faculty at the Johns Hopkins University School of Medicine. *Acad Med*. 2004;79:258-264
- ¹⁷ Mallon WT, Vernon D. *Handbook of Academic Medicine: How Medical Schools and Teaching Hospitals Work*. 2nd ed. Washington, DC: Association of American Medical Colleges; 2009.
- ¹⁸ Alexander H, Lang J. The long-term retention and attrition of U.S. medical school faculty. *Analysis in Brief*. Washington DC: AAMC. 2008;8(4):1-2.
- ¹⁹ Schollen SL, Bland CJ, Finstad DA, Taylor AL. Organizational climate and family life: How these factors affect the status of women at one medical school. *Acad Med*. 2009;84(1):87-94.
- ²⁰ Keeton K, Fenner DE, Johnson TRB, Hayward RA. Predictors of physician career satisfaction, work-life balance, and burnout. *Obstet Gynecol*. 2007;109:949-955.
- ²¹ McNearney TA, Hunnicutt SE, Maganti R, Rice J. What factors relate to job satisfaction among rheumatologists?. *J Clin Rheumatol*. 2008;14(3):133-137.
- ²² Kellerman S, Harold J. Physician response to surveys: A review of the literature. *Am J Prev Med*. 2001;20:61-71.
- ²³ Leigh JP, Kravitz RL, Schembri M, Samuels SJ, Mobley S. Physician career satisfaction across specialties. *Arch Intern Med*. 2002;162:1577-1584.
- ²⁴ Landon BE, Reschovsky J, Blumenthal D. Changes in career satisfaction among primary care and specialist physicians, 1997-2001. *JAMA*. 2003;289(4):442-449.
- ²⁵ Lambert TW, Davidson, JM, Evans, J., Goldacre, MJ. Doctors reasons for rejecting initial choices of specialties as long-term careers. *Med Educ*. 2003;37:312-318.
- ²⁶ Kimball AB. Dermatology: A unique case of specialty workforce economics. *J of Amer Acad Derm*. 2003;48(2):265-270.
- ²⁷ Weinberg DJ, Engasser PG. Dermatologists in Kaiser Permanente-Northern California: Satisfaction, perceived constraints, and policy options. *Arch Derm*. 1996;132:1057-1063.
- ²⁸ Colwill JM, Cultice JM, Kruse RL. Will generalist physician supply meet demands of an increasing and aging population? *Health Aff*. 2008;27(3):w232-241. Available at: <http://content.healthaffairs.org/cgi/reprint/27/3/w232>. Accessed February 21, 2010.
- ²⁹ Salsberg E, Grover A. Physician workforce shortages: Implications and issues for academic health centers and policymakers. *Acad Med*. 2006;81(9):782-787.

³⁰ Leigh JP, Tancredi DJ, Kravitz RL. Physician career satisfaction within specialties. *BMC Health Services Research*. 2009;9:166. Available at: <http://www.biomedcentral.com/content/pdf/1472-6963-9-166.pdf>. Accessed February 1, 2010.

³¹ Lepnurm R, Dobsom R, Backman A, Keegan D. Factors explaining career satisfaction among psychiatrists and surgeons in Canada. *J of the Amer College of Cardiol*. 2004;44(2):221-232.

³² Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and career satisfaction among American surgeons. *Ann Surg*. 2009;250(3):463-471.

³³ Waldman JD, Kelly F, Aurora S, Smith H L. The shocking cost of turnover in health care. *Health Care Manage Rev*. 2004;29(1):2-7.

³⁴ Schloss EP, Flanagan DM, Culler CL, Wright AL. Some hidden costs of faculty turnover in clinical departments in one academic medical center. *Acad Med*. 2009;84(1):32-36.



**Association of
American Medical Colleges**

2450 N Street, N.W., Washington, D.C. 20037-1127

T 202 828 0400 **F** 202 828 1125

www.aamc.org