

BRIEF REPORT

Part-Time Physicians...Prevalent, Connected, and Satisfied

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OBJECTIVE: The health care workforce is evolving and part-time practice is increasing. The objective of this work is to determine the relationship between part-time status, workplace conditions, and physician outcomes.

DESIGN: Minimizing error, maximizing outcome (MEMO) study surveyed generalist physicians and their patients in the upper Midwest and New York City.

MEASUREMENTS AND MAIN RESULTS: Physician survey of stress, burnout, job satisfaction, work control, intent to leave, and organizational climate. Patient survey of satisfaction and trust. Responses compared by part-time and full-time physician status; 2-part regression analyses assessed outcomes associated with part-time status. Of 751 physicians contacted, 422 (56%) participated. Eighteen percent reported part-time status ($n=77$, 31% of women, 8% of men, $p<.001$). Part-time physicians reported less burnout ($p<.01$), higher satisfaction ($p<.001$), and greater work control ($p<.001$) than full-time physicians. Intent to leave and assessments of organizational climate were similar between physician groups. A survey of 1,795 patients revealed no significant differences in satisfaction and trust between part-time and full-time physicians.

CONCLUSIONS: Part-time is a successful practice style for physicians and their patients. If favorable outcomes influence career choice, an increased demand for part-time practice is likely to occur.

KEY WORDS: physicians; workplace; part-time; work hours.
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BACKGROUND

The medical profession is facing multiple challenges, including inadequate recruitment, poor retention, and high burnout.^{1,2} A changing workforce adds to these challenges. Currently, 50% of entering medical students are female.³ Numbers of dual-career couples are increasing.⁴ Student preferences focus on work-home balance and controllable lifestyles.⁵ The majority of doctors under 50 are not interested in working longer hours for more money and 71% of young doctors identify personal time as an important factor in a desirable practice.⁶ In the search of increased flexibility, many physicians, especially women, are choosing to work part-time.⁷ Existing literature suggests that physicians and patients are satisfied with part-time work⁸; however, contributors to this satisfaction are unclear.

OBJECTIVES

We sought to determine the impact of part-time status on (1) physician stress, burnout, satisfaction, work control, and intent to leave; (2) patient satisfaction and trust; and (3) perceptions of organizational culture.

DESIGN

Participants

Subjects were participants in minimizing error, maximizing outcome (MEMO), a longitudinal study assessing effects of the ambulatory care work environment on quality of care. MEMO is based on a conceptual model linking the work environment to physician and patient outcomes.⁹ MEMO, conducted in New York City, Chicago, Milwaukee, Madison, and rural/small town Wisconsin, has been described elsewhere.⁹ General Internists and Family Physicians in targeted clinics were recruited from October 2002 through June 2003. Clinics were selected to include a diverse patient base, wide range of payers (fee-for-service plans, managed care plans, Medicare, Medicaid), and significant numbers of uninsured patients. Physicians who spent at least 4 sessions per week (50% time) delivering ambulatory care were recruited via group presentations,

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Table 1. Predictors of Part-time Status

Variable	Odds Ratio Estimate	p Value	95% Wald Confidence Limits	Part-time (n=77)	Full-time (n=343)
Age, per 5 years	1.36	<0.001	1.15–1.61	43 y	44 y
Female	13.93	<0.001	6.59–29.44	77%	37%
Divorced/ widowed/ separated	0.88	0.492	0.19–4.00	8%	5%
Married/ domestic partner	1.82	0.112	0.62–5.37	86%	83%
Single	1.000		N/A	6%	12%
Non-Hispanic White	5.64	0.001	2.09–15.25	94%	74%
Internal medicine	1.29	0.385	0.73–2.27	53%	52%
Family medicine	1.000		N/A	47%	47%

mailings, personal contacts, email messages, and telephone reminders. A recruitment target of 500 physicians was selected to provide 90% power when assessing outcomes.

Up to 6 patients per participating physician were recruited between 2003 and 2004. Some clinic managers opted to send letters of invitation; others preferred that the researcher recruit in the waiting room. Patients could also pick up recruitment flyers. Eligible patients were at least 18 years of age; saw a participating physician at least twice in the previous year; could read in English, Spanish, or Chinese; and had 1 or more tracer conditions (diabetes, hypertension, or congestive heart failure). Institutional review boards for participating organizations approved the research protocol and participants provided written consent.

Survey Content

The self-administered physician survey was derived from the Physician Worklife Survey (PWS)^{10,11} and from content analysis of MEMO focus groups. Physicians were asked if they worked full-time or part-time and reported the average number of weekly work hours. The survey included a 5-item job satisfaction measure,^{10,11} a 4-item job stress measure,¹² and single items querying burnout¹³ and intent to leave, both on 5-point scales. Work control was measured by a scale adapted from the PWS.¹⁴

Organizational climate was assessed by incorporating scales selected from Kralewski's multidimensional measure¹⁵ into a factor analysis. We identified 5 domains: (1) alignment between leadership and physician values, 8 items, alpha=0.86; (2) practice emphasis on quality, 6 items, alpha=0.88; (3) sense of trust or belonging, 5 items, alpha=0.79; (4) practice emphasis on information systems and communication, 4 items, alpha=0.70; and (5) cohesiveness, 3 items, alpha=0.66. The values alignment scale was not found in Kralewski's study. Two outcomes from the patient survey are presented here: satisfaction with the health care provider (1=very satisfied to 5=very dissatisfied) from Haas et al.,¹⁶ and a question from Kao et al.¹⁷ querying overall trust in the physician (1=not at all to 5=completely).

Data Analyses

Descriptive statistics summarized responses and *t* tests compared responses between full-time and part-time physicians and their patients. Part-time status was assessed by 2 methods: physician selection of full-time or part-time work status and average number of weekly work hours, not including night call. The median number of work hours for physicians selecting part-time status was 35; thus, we selected 35 hours per week as the cut point for part-time versus full-time. Both methods resulted in similar physician and patient findings (data not shown). Only results based on self-reported work status are presented.

A 2-step regression analysis was performed to assess outcomes associated with working part-time. An initial logistic regression determined demographic and specialty factors associated with greater propensity to work part-time. The resulting propensity scores were used to adjust for demographic imbalances. Regression analysis was subsequently used to calculate adjusted mean scores for physician outcomes. All analyses were performed in SAS version 9.1.

RESULTS

Response Rate and Characteristics of the Respondents

Of 751 physicians contacted, 449 (60%) consented to participate, and 94% of these (n=422) completed the baseline survey. This represents 84% of the target sample. Nonparticipants were more likely to be female, family physicians, and practicing in rural areas or small towns. Nearly half of participating physicians (44%) were female, 1/4 (23%) were non-white, and over 80% were married or partnered. The mean age was 43 years (SD=9.6) and respondents were evenly divided between family medicine and general Internal Medicine. One hundred-eighteen clinics were represented.

Overall, 77 physicians (18%) reported working part-time (31% of women and 8% of men, $p<.001$). The average workweek for full-time physicians, not including night call, was 49 hours (SD 12.3) compared to a mean of 34.7 hours for part-time physicians ($p<.001$). Part-time doctors reported a range of 9–53 hours per week, while full-time doctors reported 33–100 hours.

Part-time physicians were more likely than full-time physicians to be white (94 vs 74%, $p<.001$) and female (77 vs 37%, $p<.001$). Percent time in ambulatory care was similar; however, part-time physicians spent proportionately less time seeing hospitalized patients (10 vs 14%, $p<.001$) and more time in teaching and research (10 vs 6%, $p=.04$).

Table 2. Multivariate Regression Means for Part-Time and Full-Time Physicians, Adjusted by Propensity Score

Variable	Part-time (SE)	Full-time (SE)	p Value
Physician job satisfaction	3.96 (0.10)	3.61 (0.04)	<0.001
Physician job stress	3.24 (0.10)	3.36 (0.05)	0.307
Intention to leave practice	2.00 (0.14)	2.12 (0.06)	0.407
Burnout	1.90 (0.10)	2.25 (0.04)	0.002
Work control	2.70 (0.07)	2.44 (0.03)	<0.001

Factors Associated with Part-time Status

After controlling for age, marital status, race, ethnicity, and specialty, part-time physicians were likely to be older, female, and white (Table 1). Neither marital status nor medical specialty was associated with work status. After adjusting for propensity scores (Table 2), part-time physicians were more satisfied ($p < .001$) and had less burnout ($p = .002$) and more work control ($p < .001$) than full-time physicians. Stress, intent to leave, and assessment of organizational climate (data not shown) were similar between groups.

Of 1,795 patient participants, an average of 4 per physician, 65% were female and the mean age was 60. Seventy-one percent were white, 22% were African American, and 9% were from other racial categories. Patient satisfaction (1.45 for part-time vs 1.52 for full-time, $p = .206$) and trust in the physician (4.57 vs 4.50, $p = .200$) did not differ between part-time and full-time physicians.

DISCUSSION

We have shown several key findings associated with being a part-time physician. Part-time physicians reported higher satisfaction, an important finding because physician satisfaction is related in other studies to patient satisfaction and compliance, physician disability claims, inappropriate prescribing, and medical errors.¹⁸ Part-time physicians reported less burnout, also important given that burnout has been shown to be associated with reduced quality of life, absenteeism, inefficiency, and poor patient care practices.^{1,19} Higher satisfaction and less burnout in part-time physicians may be derived in part from increased control over the workplace including such issues as schedule, pace, and interruptions.¹⁹ We also found that part-time physicians spent proportionately less time than full-time physicians seeing hospitalized patients, and they were no more likely to leave the practice. Interestingly, part-time physicians spent proportionately more of their work week in teaching and research.

Similar to other studies,⁸ we found no differences in patient ratings of trust or satisfaction based on physician work status. Some investigators report associations between working fewer hours and increased productivity⁸ and higher-quality performance,²⁰ an area warranting further research. Our data support and extend prior work, demonstrating that patient satisfaction is unaffected by physician part-time status.

Strengths of this study include large numbers of female and minority respondents, inclusion of clinics ranging from rural/small town ($n = 15$) to inner city ($n = 25$) practices, and assessment of workplace factors, physician outcomes, and patient outcomes. Further research should assess the impact of physician part-time status on processes of care and disease management. Several limitations should be noted. First, results may not be generalizable to other parts of the country or to subspecialists. Second, the results are cross-sectional; thus, we cannot determine whether part-time status predicts or results from burnout. Third, response bias may be present given the small number of patients per physician. Fourth, single-item measures were used to assess patient satisfaction and trust. Finally, while a 56% response rate is less than

optimal, it is comparable to and slightly better than the 54% average response rate for physician surveys.²¹

SUMMARY

We found that part-time primary care physicians are prevalent and satisfied and describe better work control with less burnout than full-time physicians. Part-time and full-time physicians have comparable perceptions of organizational culture and similar patient satisfaction and trust. By promoting and enhancing part-time careers, organizations may be able to attract and retain a cadre of satisfied, healthy, capable, and connected physicians.

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