

# Physician Job satisfaction, job dissatisfaction, and physician turnover

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- **OBJECTIVES:** We studied how physicians' relative satisfaction and/or dissatisfaction with 10 distinct aspects of their work protected against or promoted their plans for leaving their jobs.
- **STUDY DESIGN:** We used a cross-sectional mail survey.
- **POPULATION:** We used questionnaire data from 1939 practicing generalists and specialists across the United States.
- **OUTCOMES MEASURED:** Using logistic regression analysis, we assessed whether physicians in the top and bottom quartiles of satisfaction for each of 10 aspects of their work and communities were more or less likely to anticipate leaving their jobs within 2 years, compared with physicians in mid-satisfaction quartiles. Separate analyses were compiled for generalists vs specialists, and physicians by age groups (27-44 years, 45-54 years, and 55 years and older).
- **RESULTS:** Generalists and specialists had generally comparable levels of satisfaction, whereas physicians in the oldest age group indicated greater satisfaction than younger physicians in 8 of the 10 work areas. One quarter (27%) of physicians anticipated a moderate-to-definite likelihood of leaving their practices within 2 years. The percentage that anticipated leaving varied with physicians' age, starting at 29% of those 34 years or younger, steadily decreasing with age until a nadir of 22% of those from 45 to 49 years, then reversing direction to steadily increase thereafter. Across the 5 groups (ie, the 2 specialty clusters and 3 age groups), there were only 14 instances in which physicians in the lowest satisfaction quartiles were more likely to anticipate leaving than those of average satisfaction. In only 2 cases were physicians in the highest satisfaction quartiles less likely to anticipate leaving. Relative dissatisfaction with pay and with relationships with communities was associated with plans for leaving in nearly all physician groups. For specific specialty and age groups, anticipated departure also correlated with relative dissatisfaction with other selected areas of work.
- **CONCLUSIONS:** To promote retention, these data suggest that physicians and their employers should avoid physician dissatisfaction in particular; building particularly high levels of satisfaction generally is not helpful for

this end. Avoiding relative dissatisfaction with pay and with community relationships appears broadly important.

**key words Physicians; job satisfaction; personnel turnover; health personnel. (J Fam Pract 2002; 51:00)**

Until recently, the satisfaction of physicians was studied only among those working in special settings, such as in rural and urban underserved areas. In these settings, a less than satisfying work environment sometimes leads physicians to leave their jobs, with subsequent costs for needy communities.<sup>1,2</sup> Now, with US physicians often employed by others, physicians' autonomy constrained, medicine managed as a business, and incomes falling for some specialties, the satisfaction of rank and file physicians in all locations and specialties can no longer be assumed.<sup>3-5</sup> Indeed, unhappiness is increasing among physicians, with growing numbers considering job changes, nonclinical work, and early retirement.<sup>6-8</sup> Some physicians regret ever pursuing a medical career.<sup>8-10</sup>

Dissatisfaction among physicians is a concern even if medical work still pays handsomely and medical schools still have an abundance of applicants. Physicians' satisfaction relates to their job effectiveness, including the quality of care they render, their patients' compliance with recommended care, patients' satisfaction with care, and patients' health outcomes.<sup>6,9,11-15</sup> The most obvious consequence of a dissatisfying job, however, is that physicians will quit to work elsewhere, disrupting patient-physician continuity and creating organizational instability and replacement costs, estimated at nearly \$250,000 per physician lost.<sup>16-18</sup> A job change also brings personal and financial costs to physicians and their families.

Although common experience and prior studies show that physicians' job satisfaction generally influences whether they leave their jobs, little more is known about how satisfaction relates to job changes for physicians. From studies of other professions, we know that satisfaction is a multidimensional concept in which individuals can be satisfied with some aspects of work while dissatisfied with others.<sup>16,19</sup> Further, we know that workers' satisfaction with only some aspects of work correlates with turnover.<sup>16,20</sup> For example, in 1 recent study rural generalist physicians who were satisfied with their local communities remained longer in their jobs, whereas their satisfaction with most other aspects of work, including with autonomy and doctor-patient relationships, was unrelated to their retention.<sup>2</sup> The effects of workers' satisfaction and dissatisfaction may also require separate assessment, because greater dissatisfaction with a given aspect of work may lead a worker to leave a job, but increasingly higher levels of satisfaction with the same issue may not lead to ever-increasing chances of retention, or vice versa.<sup>15,21</sup>

The goal of this study was to better understand the relationship between physicians' satisfaction with various aspects of their work and whether or not they have thoughts or plans to leave their jobs. We assessed whether anticipated job departure related to satisfaction at both the upper and lower ends of its range; that is, whether particularly high satisfaction levels relative to other physicians protected against job change plans and significant relative dissatisfaction promoted such plans. We also assessed how the satisfaction/job-change relationship varied for physician groups with differing needs and values, specifically for generalists compared with specialists, and for younger, midcareer, and older physicians.

## ■ METHODS

### Subjects, survey mailings, and response rates

A sampling frame, previously described,<sup>22,23</sup> was constructed from the American Medical Association's Physician Masterfile. The target population was the 171,252 civilian physicians listed as participating in direct patient care (rather than in training, administration, teaching, inactive, etc), including generalists (family physicians, general internists, and general pediatricians; general practitioners were not included) and specialists (medical and pediatric nonsurgical subspecialists) in the United States. We stratified the frame into geographic regions of high and low penetration of

managed care, non-Hispanic white vs other physician ethnicity, and the 5-targeted specialty groupings.

We drew a random sample of 5704 physicians, oversampling smaller strata. Questionnaires and up to 3 follow-up mailings were sent to the sample from January through September 1997. A total of 2325 physicians responded, 52% when corrected for noncontact and ineligibility.<sup>24</sup> Based on information on the Masterfile, response rates did not differ by age, for those in office vs hospital-based practices, or for those in communities of high vs low managed care penetration. However, response rates were higher for subspecialists than for generalists, US medical graduates than for international graduates, and those for whom race-ethnicity was listed as black, "missing," or "other" than for those listed as Hispanic, non-Hispanic white, or Asian. Statistical weighting in analyses adjusted for group contact and response rate differences.

We dropped the 218 respondents who worked less than 25 hours per week in activities related to patient care and another 169 physicians who primarily practiced outside of their specialty, such as general internists who worked as endocrinologists or oncologists. Analyses were based on the remaining 1939 physicians.

## Questionnaire design and analyses

The questionnaire included 36 declarative statements about physicians' views and regard for various features of their work and practices, to which respondents provided Likert-scaled responses from "strongly agree" to "strongly disagree."<sup>22</sup> Representative statements were, "I feel a strong personal connection with my patients" and "My total compensation package is fair." These items were drawn from previous studies of physician satisfaction, from issues raised in physician focus groups we assembled, and through the suggestions of experts. We then used exploratory factor analysis with a pilot physician sample, followed by confirmatory factor analysis with a validation physician sample to group these items into 10 scales reflecting physicians' satisfaction with 10 aspects of their work.<sup>22,23</sup> Scale alpha coefficients of reliability ranged from 0.65 to 0.77.

Physicians' anticipated departure from their jobs was measured through a questionnaire item asking "What is the likelihood that you will leave your current practice situation within two years?", with allowable responses of "none," "slight," "moderate," "likely," and "definitely." Social psychology research has substantiated the use of people's expressed intentions as measures of their future behavior.<sup>25</sup> Prior studies<sup>26-28</sup> have used anticipated departure and anticipated retention as expeditious proxy indicators for actual job departure and retention, with correlation coefficients between workers' plans to leave and subsequent departure typically measured at about 0.5. In the only validating physician study, rural physicians in Western Australia much more often left their practices if they had predicted 10 years earlier that they would (odds ratio [OR], 3.3).<sup>29</sup> Shorter-term predictions, such as the 2-year time horizon used in this study, should be even more accurate.

This study's dichotomous outcome indicator-whether physicians anticipated leaving their jobs within 2 years-defined planned "leavers" as those who indicated a moderate, likely, or definite likelihood of leaving their practices; planned "retainees" were those who envisioned only a slight or no chance of leaving. This cut point was selected for both its face validity-falling at the scale point at which leaving became a real possibility for subjects and no longer an unlikely event-and because it yielded an adequately balanced split in outcome values.

In analyses, levels of satisfaction with the 10 aspects of work and anticipated job departure were described for generalists, specialists, and physicians in 3 age groups. We compared groups on satisfaction levels and anticipated departure rates with t tests and 1-way analysis of variance.

We used logistic regression analysis to model separately the anticipated departure of each of the 5 groups. We entered satisfaction levels for each of the 10 areas of work into the models as 2 dichotomous (dummy) variables, yielding 20 satisfaction indicator variables. Ten of these indicators reflected values in the top quartile of satisfaction (ie, top quartile vs lower 3 quartiles) in each area of work and another 10 indicators reflected values in the lowest quartile of satisfaction (bottom quartile vs upper 3 quartiles). Cut points for the middle vs high satisfaction groups for the 10 areas of work ranged from 3.0 to 4.25 on the satisfaction scale (in which 1 indicated dissatisfaction; 3, neutral; and 5, satisfaction); for the middle vs lower satisfaction group, cut points ranged from 2.0 to 3.33. The inclusion of dichotomous indicators of high and low satisfaction for each area of work treated the middle 2 satisfaction quartiles statistically as the omitted,

comparison category. This analytic approach modeled the effects on anticipated departure of relatively high and low satisfaction levels for each area of work, compared with more typical, midrange satisfaction levels, simultaneously controlling for relative satisfaction in the other 9 areas of work. We also included control variables for sex, age, and whether physicians owned their practices.

The logistic models for the 5 physician groups were repeated with the more parsimonious forward stepwise variable selection approach to test the robustness of the model findings and as a functional colinearity check.<sup>30</sup> With only 1 exception of the 100 satisfaction-departure associations tested across the 5 physician groups, the findings were identical to those of the full logistic models. We reported only the full logistic models.

The statistical significance level was set at .01, to partially adjust for this study's numerous comparisons.

## ■ RESULTS

Unweighted characterizations of the 1939 eligible respondent physicians found that 70% were male and 72% non-Hispanic white, with a median age of 46 years (range, 27-88 years). Most were married (84%) and had children (85%). There were 459 family physicians (24%), 375 general internists (19%), 494 general pediatricians (25%), and 611 pediatric and medical subspecialists (32%). Eighteen percent worked in solo practices, 36% worked in small groups, and the rest worked in larger groups. Most (57%) owned their practices. Physicians had worked in their current practices for a median duration of 9 years when surveyed (range, 0-58 years).

### Satisfaction scores

As a whole, the generalist and specialist physicians reported midrange satisfaction levels in the 10 areas of work assessed (**Table 1**). For 2 work facets-administrative responsibilities and having adequate personal time-the average satisfaction scores for both groups indicated overall dissatisfaction. Physicians indicated greatest satisfaction with their intrinsic rewards from patient care, specifically their personal connection with and gratitude from patients.

The mean satisfaction scores of generalists and specialists were comparable for 7 of the 10 aspects of practice. In the remaining 3 areas, the generalist-specialist differences in satisfaction were small. Satisfaction scores varied more often with age, with physicians 55 years and older more satisfied than younger physicians in 8 of the 10 areas queried.

### Anticipated job turnover

In total, 27.1% of physicians foresaw leaving their practices within the next 2 years: 13.8% believed leaving was likely or definite and 13.3% believed they had a moderate chance of leaving. Generalist and specialist physicians perceived similar chances of leaving (26.7% vs 30.0%, respectively;  $P = .31$ ), with and without adjusting for age and sex. In contrast, physicians of various age groups anticipated different likelihoods of leaving (**Figure 1**), with a 29% rate for the youngest group, a nadir of 22% to 23% for physicians aged 45 to 54 years, and again higher rates for older physicians, reaching 63% for those 70 years and older ( $P < .001$ ).

Those who anticipated leaving their jobs within 2 years frequently also anticipated leaving the practice of clinical medicine entirely within 5 years, including 84% of leavers older than 54 years, 50% of leavers 45 to 54 years, and even 33% of leavers younger than 45 years.

### Satisfaction with work and anticipated job turnover

Overall observations. In analyses that controlled for satisfaction with other facets of work and for several physician characteristics, we found that physicians' regard for only some aspects of work was associated with their anticipated departure from their jobs (**Table 2** and **Table 3**). Further, we found that physicians who were relatively dissatisfied with a variety of aspects of their work more often foresaw leaving their jobs than those with median satisfaction levels. In contrast, intentions to leave were generally just as likely for those of high and median satisfaction levels.**Figure 2** shows

the typical relationship between satisfaction and anticipated departure. In this example, as in most instances, the transition from lower to higher likelihood of anticipated departure occurs only when physicians' feelings drop below neutral into dissatisfied levels.

Generalists and specialists. Among generalists and compared with those of average satisfaction (the omitted group in the statistical models), leaving one's job was anticipated more often by those less satisfied with their pay (OR, 3.65;  $P < .0001$ ), with their relationships with their communities (OR, 2.26;  $P < .0001$ ), and with their relationships with the nonphysician staff in their offices (OR, 1.59;  $P < .01$ ) **Table 2**. Only for 1 area of work, patient care issues (eg, feeling overwhelmed with patients' demands and feeling that time constraints prevented good relationships with patients), were generalists in the highest satisfaction quartile less likely to anticipate leaving their practices than generalists with midrange satisfaction scores (OR, 0.60;  $P < .01$ ).

For specialists, those reporting lowest satisfaction with their pay (OR, 3.24;  $P = .01$ ) and community relationships (OR, 3.89;  $P < .01$ ) anticipated leaving more often than those with midrange scores **Table 2**. For no aspects of work were the most satisfied specialists less likely to anticipate leaving than specialists of average satisfaction.

Younger, midcareer, and older physicians. Among physicians in the youngest group-aged 27 through 44 years-those who were least satisfied with their pay (OR, 4.62;  $P < .0001$ ) and with their relationships with their communities (OR, 2.79;  $P < .0001$ ) more often anticipated leaving their jobs than those of median satisfaction **Table 3**. For no facets of work among younger physicians were those who were most satisfied less likely to anticipate leaving.

For physicians aged 45 through 54 years, anticipated job departure was more common for those least satisfied with 5 areas of work, including again those least satisfied with pay (OR, 11.60;  $P < .0001$ ) and with their community relationships (OR, 2.11;  $P < .01$ ). One unexpected association was noted for these midcareer physicians: those in the highest quartile of satisfaction with their pay more often anticipated leaving their practices than those with midrange pay satisfaction scores (OR, 3.36;  $P < .01$ ).

In the oldest physician group, those least satisfied with their community relationships (OR, 3.31;  $P < .01$ ) and least satisfied with the administrative aspects of their work (OR, 2.64;  $P < .01$ ) more often anticipated leaving their jobs. Fewer of those most satisfied with patient care issues foresaw leaving (OR, 0.30;  $P < .01$ ). Unexpectedly, older physicians who were least satisfied with their relationships with other physicians were less likely to anticipate leaving their practices (OR, 0.36;  $P < .01$ ).

## ■ DISCUSSION

Our study has demonstrated 3 aspects of how physicians' regard for their work relates to their plans to leave their jobs: (1) physicians' plans to leave correlate with their satisfaction with only some aspects of their work; (2) the aspects of work for which satisfaction is associated with plans for leaving differ somewhat for generalists and specialists, and for physicians at various stages of their careers; and (3) anticipated job departure is more common among physicians who are relatively dissatisfied with any of a variety of aspects of their work, whereas satisfaction higher than median levels generally does not protect physicians from thoughts of leaving their jobs. To our knowledge, these last 2 features of the relationship between satisfaction and anticipated departure have not been demonstrated previously.

Even when physicians are displeased with a given aspect of their work, they are not always inclined to leave their jobs. For example, physicians in this and other studies<sup>2,31</sup> were least satisfied with the administrative requirements of their work, yet dissatisfaction in this area was not associated with the departure plans of most physician groups. In some cases, a dissatisfying issue is simply not important enough to individuals to warrant a job change. Physicians also have options to leaving, such as problem-solving with managers and coworkers, and taking comfort in the more satisfying aspects of their work.<sup>32</sup> Thus, to know when dissatisfaction leads to job changes, one must actually test for statistical associations between the 2.

In tests of this kind in the present study, we found 14 instances in which physicians in the lowest satisfaction quartiles were more likely to anticipate leaving than were those of average satisfaction. We found only 2 situations in which physicians in the highest satisfaction quartiles were less likely to anticipate leaving. To promote retention, these data

suggest that physicians and their employers should avoid relative dissatisfaction in particular. These data also suggest that building ever-increasing higher levels of satisfaction generally does not prevent turnover. Thus, to foster workforce stability, practice managers should address aspects of physicians' work or jobs causing them dissatisfaction, or more specifically, satisfaction lower than that of physicians working elsewhere. For aspects of work about which physicians are already satisfied, managers need not foster even higher satisfaction.

### **Satisfaction with specific aspects of work and turnover**

Relative dissatisfaction with one's community was associated with departure plans for all physician groups. An individual's relationship with a community—measured in this study through questions about feeling “at home,” a sense of belonging, respected, and strongly connected<sup>23</sup>—is basic to human existence,<sup>33,34</sup> but its importance has been underappreciated in physicians' lives and careers.<sup>33,35</sup> Practices might promote workforce stability by providing opportunities and incentives for employed physicians to participate in local and state professional and community service organizations. Expectations can be set and time allocated for physicians to work with school health programs and volunteer clinics, speak to community groups, and become involved in other ways that build a sense of membership and contribution. These activities will be new for some physicians, will not always come naturally, and may need to be taught and encouraged.

Relative dissatisfaction with pay was associated with departure plans for all of this study's physician groups, except for physicians older than 55 years. Further and unexpectedly, midcareer physicians who were particularly satisfied with their pay were also more likely to anticipate leaving. Perhaps midcareer physicians who are and feel well paid also more often feel that they can afford to retire or pursue second careers. We have no data to test this explanation. Similarly, we cannot know why older physicians who were least satisfied with their collegial relationships less often planned to leave their jobs. We wondered if this surprising finding was a result of confounding by physicians' employment in group vs solo practices; we reasoned that among older physicians, those in solo practice may not get along as well with local physicians, but for unrelated reasons may be more attached to their practices and thus less likely to retire or otherwise plan to leave. This possibility proved not to be the case when we added an indicator of solo vs group practice to the statistical model for the older physician group.

How physicians felt about their relationships with patients and about their autonomy was not related to their intentions to leave their practices. Perhaps these once-central features of doctoring have lost their importance to physicians, or maybe physicians believe they will not find better relationships or more autonomy elsewhere, and thus see no benefit in changing jobs.

### **Age, satisfaction, and anticipated job changes**

As in previous studies,<sup>36,37</sup> the older physicians of this study were generally more satisfied than the younger physicians. Older physicians, nevertheless, more often anticipated leaving their jobs. We suspect that in many cases an older physician's thoughts of leaving a position are related to their retirement plans, but our data did not allow us to explore this relationship in detail. We also suspect that physicians' satisfaction with their jobs influences their plans not only for leaving that particular job but also their plans for leaving the practice of medicine entirely; however, satisfaction with somewhat different aspects of work may influence each of the 2 types of career moves. For example, relative dissatisfaction with relationships with patients may push a physician toward retirement even though it did not seem to promote thoughts of a job change for this study's physicians.

Common beliefs about physicians' careers would have predicted the “J”-shape relationship between anticipated job departure rates and increasing physician age (**Figure 1**). Young physicians fresh from training are thought to change jobs once or twice during an initial period of professional experimentation, then settle into suitable practice situations and raise their families. Later in life, job departures again become more common when children leave home, work takes on new meaning in middle age, and physicians become interested in and able to retire or pursue new jobs or second careers. Data from this study generally confirm these common notions, although the nadir in anticipated job departures

occurred later than we expected.

## Limitations

This study's 52% response rate, although typical for physician studies,<sup>38</sup> may have yielded results not representative of physicians as a whole. To assess this possibility, we compared survey data from this study's early and late respondents and found meaningful time trends in only 4 of 140 questionnaire items, providing some evidence that nonrespondents-if assumed to be in effect very late respondents-were similar to respondents. Nevertheless, to help adjust for any response bias we weighted analyses.

Statistical associations may not reflect causal relationships in a cross-sectional study such as this. Further, this study's findings may have differed if actual job departure was available as an outcome measure, even though anticipated departure is a validated and frequently used proxy indicator of workers who will leave their jobs.<sup>26-28</sup> A measure of convergent validity was demonstrated in this study, as 16 of the 18 statistical associations between anticipated departure and satisfaction were in the expected direction, and age fluctuated with anticipated departure as we had expected it would with actual departure.

## Conclusions and implications

These findings suggest that physicians who are relatively dissatisfied with specific aspects of their work more often plan to leave their jobs, and that these particular work aspects differ somewhat with age and specialty. Practice managers and employers concerned with maintaining a stable physician workforce should address relative dissatisfaction among physicians-particularly with income and community relationships-but need not build high levels of satisfaction. Physicians looking for stable employment should seek positions that they feel offer appropriate compensation and are located in communities to which they can connect. Once there, they should devote time and energy building ties in their communities.

Further research must confirm whether retention indeed improves by remediating relative dissatisfaction with the areas of physicians' work flagged as important in this study. It also remains to be seen whether other outcomes of physicians' work, such as the quality of care they provide, also relate primarily to relative dissatisfaction rather than satisfaction, and, specifically, to dissatisfaction with the same aspects of work seeming to affect job departure plans.

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