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Career Satisfaction and Retention of a Sample of Women Physicians Who Work Reduced Hours

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ABSTRACT

Objective: To better understand the career satisfaction and factors related to retention of women physicians who work reduced hours and are in dual-earner couples in comparison to their full-time counterparts.

Methods: Survey of a random sample of female physicians between 25 and 50 years of age working within 25 miles of Boston, whose names were obtained from the Board of Registration in Medicine in Massachusetts. Interviewers conducted a 60-minute face-to-face closed-ended interview after interviewees completed a 20-minute mailed questionnaire.

Results: Fifty-one full-time physicians and 47 reduced hours physicians completed the study; the completion rate was 49.5%. The two groups were similar in age, years as a physician, mean household income, number of children, and presence of an infant in the home. Reduced hours physicians in this sample had a different relationship to experiences in the family than full-time physicians. (1) When reduced hours physicians had low marital role quality, there was an associated lower career satisfaction; full-time physicians report high career satisfaction regardless of their marital role quality. (2) When reduced hours physicians had low marital role or parental role quality, there was an associated higher intention to leave their jobs than for full-time physicians; when marital role or parental role quality was high, there was an associated lower intention to leave their jobs than for full-time physicians. (3) When reduced hours physicians perceived that work interfering with family was high, there was an associated greater intention to leave their jobs that was not apparent for full-time physicians.

Conclusions: Women physicians in this sample who worked reduced hours had stronger relationships between family experiences (marital and parental role quality and work interference with family) and professional outcomes than had their full-time counterparts. Both career satisfaction and intention to leave their employment are correlated with the quality of home life for reduced hours physicians.

INTRODUCTION

WITH THE ADVENT OF MORE dual-earner couples, increasing numbers of women physicians are seeking part-time or reduced hours employment, largely to allow greater time for family.¹

The percentage of part-time pediatricians increased from 11% to 15% between 1993 and 2000.¹ Previous work has shown that there is little difference in a number of outcomes for reduced hours physicians compared with their full-time counterparts, including job role quality and career satis-

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faction.² Working the preferred number of hours, for both full-time and reduced hours physicians, had the greatest impact on job role quality, burnout, marital role quality, and life satisfaction.² The Women Physicians' Health Study similarly found a strong association between work control and career satisfaction,³ with lack of control being a strong predictor of burnout in women, but not in men.^{3,4}

Understanding important factors in the career satisfaction and retention of part-time physicians has become increasingly valuable, as part-time physicians in clinical practices have been shown to have higher productivity than full-time physicians⁵⁻⁷ and equal to or higher quality performance, with similar patient satisfaction and ambulatory costs.⁸ The only area in which reduced hours physicians did not always have comparable outcomes to full-time physicians was in visit-based continuity of care.⁹ A study from Brigham and Women's Hospital found that part-time physicians scored higher on the Health Plan Employer Data and Information Set (HEDIS) quality measure, including access and availability of care, effectiveness of care, satisfaction with the experience of care, cost of care, and informed health-care choices.¹⁰ Reduced hours employees in other professions are also more productive than their full-time counterparts.^{11,12} Given these data, it becomes increasingly prudent and cost-effective to maximize the retention of part-time physicians.

Most women physicians who work reduced hours likely do so to accommodate family matters.¹³ Little is known, however, about the effects of family on career satisfaction for full-time and part-time physicians or of the effect of family on the reported likelihood of retention of women physicians in full-time and part-time work roles. We conducted a study of full-time and reduced hours female physicians in dual-earner couples to better understand how career satisfaction and likelihood of leaving the job were related to family indicators, such as marital role quality, parental role quality, and a work interfering with family scale.

MATERIALS AND METHODS

Sample

The sample was randomly drawn from the Board of Registration in Medicine, which licenses all physicians practicing in the Commonwealth

of Massachusetts.² First, we identified a subsample of female physicians between 25 and 50 years of age who worked within a 25-mile radius of Boston and sent them introductory letters describing the study. Next, trained screeners contacted each physician to determine if she met the eligibility criteria for inclusion in the study. A woman physician was eligible if she worked full-time or reduced hours as defined by her employer. All reduced hours physicians worked at least 20 hours per week, and all participants were in dual-earner couples, with husbands working at least 20 hours per week, and all couples had at least one child who was under high school age. Our goal was to interview 50 full-time and 50 reduced hours physicians to have adequate statistical power to test our hypothesis. However, reduced hours physicians were harder to locate than were their full-time counterparts. Therefore, we expanded our sampling strategy by asking participants to nominate eligible physicians and by asking Partners, an umbrella organization representing physicians from a number of major Boston hospitals, to send out a letter to member physicians asking eligible staff to contact us if they were interested in participating. These efforts resulted in 6 additional participants.

Data were collected between September 1999 and March 2001. The final sample consisted of 51 full-time doctors and 47 reduced hours doctors ($n = 98$). For purposes of this study, a doctor was categorized as full-time or reduced hours if her employer considered her to be so. We also queried participants, both full-time and reduced hours, to see if they were working their preferred number of hours. Among the 92 doctors obtained via random sampling, the completion or cooperation rate was 49.5% (calculated as participants divided by participants plus refusers). An additional 6 respondents were volunteers or were nominated by other doctors as eligible.

Procedures

Screeners passed on the names of eligible and willing participants to trained interviewers. These interviewers sent a recruitment package to each potential participant indicating that she would be called shortly to set up an interview. The letter described the time commitment and remuneration that participation in the study would entail. The package also included endorsements from the Massachusetts Medical Society and the

American Medical Women's Association, along with two papers describing our previous project with reduced hours physicians. Trained interviewers conducted 60-minute face-to-face closed-ended interviews with each participant at a time and place convenient to the participant. Each participant also completed a 20-minute mailed questionnaire in advance and returned it at the time of the interview. The interview and mailed survey covered various objective and subjective aspects of participants' jobs (e.g., salary, number of hours worked, career satisfaction, schedule fit), the quality of their major social roles (partner, parent, employee), and various quality of life indicators (e.g., psychological distress, life satisfaction, physical symptoms). Each physician received \$25 for her participation.

Measures

The outcomes for this analysis were (1) intention to leave the job within a year and (2) career satisfaction. Intention to leave the job was a single item question asking participants to use a 7-point scale to indicate the likelihood that they would voluntarily terminate their present employment within the next 12 months. We measured career satisfaction using a scale developed for a study of academic physicians (for a description of the sample and methods, see ref. 14). Participants used a 7-point scale to rate six aspects of career satisfaction: (1) their current work setting, (2) their potential to achieve their professional goals, (3) their overall professional practice, (4) the extent to which this practice met their expectations, (5) their overall professional research, and (6) the extent to which this research met their expectations. Cronbach's alpha was 0.86 in the present sample.

The predictors of career satisfaction and likelihood of leaving the job in 1 year were parental role quality, marital role quality, and work-family interference. We used a measure of parental role quality by Barnett et al.¹⁵ Respondents indicated on a 4-point scale the degree to which each of a list of 44 parenting items was currently either rewarding or of concern. Concern items were negatively weighted, and reward items were positively weighted in constructing the role quality score, which was the weighted average of the individual item scores. In the present sample, Cronbach's alpha was 0.92 for the rewards and 0.83 for the concerns. We measured marital role qual-

ity using a 15-item brief form¹⁶ of the marital role quality scale.¹⁷ Respondents indicated on a 4-point scale the degree to which each of a list of relationship items was currently either rewarding or of concern. Internal consistency was excellent, with Cronbach's alphas of 0.91 for rewards and 0.89 for concerns in the present sample. We assessed work-family interference using items from a scale developed by MacDermid et al.¹⁸ We selected one item each addressing the energy, strain, and behavioral components of work-family interference along with a fourth, more global item assessing the overall severity of work-family interference. Cronbach's alpha was 0.73 in the present sample.

The moderator, which is a variable that can influence the strength of the relationship between two other variables, full-time vs. reduced-hours status as defined by the employer, was scored as a dichotomous variable (1 = full-time, 2 = reduced hours). Covariates for all regression analyses included the presence of at least one preschool child at home, years as a physician, household income per capita, and negative affectivity. For moderator analyses involving marital role quality, years married was included as an additional covariate; for moderator analyses involving work-family interference, husband's work hours was included as an additional covariate.

Years as a physician and years married are self-explanatory. We assessed husband's work hours by asking respondents to estimate the number of hours their husbands worked in an average work week. Presence of a preschool child was coded as a dummy variable (1 = at least one child under 5 years of age in the home, 0 = else). We calculated household income per capita by dividing each respondent's report of yearly household income by the number of people living in the household. Because the distribution of this variable is highly skewed, we used the natural log of per capita income.

We assessed negative affectivity using the Trait Anxiety Scale,¹⁹ on which respondents indicated on a 4-point scale the degree to which they were characterized by 10 specific traits. Internal consistency was high, with a Cronbach's alpha of 0.90 in the present sample. We controlled for negative affectivity, an individual trait predisposing to a negative view of the world, because it is thought to account for spuriously high correlations between self-report measures of predictor and outcome variables, especially in cross-sectional analyses.^{20,21}

Analysis

Data were analyzed using SPSS software (Chicago, IL). We generated frequency distributions and descriptive statistics (means and standard deviations [SD]) for comparisons of responses by work status. Independent sample *t* tests were computed to test the significance of differences between full-time and reduced hours physicians.

We hypothesized that the quality of family life—which we assessed with measures of parental role quality, marital role quality, and perceptions of work-family interference—would be a stronger predictor of career satisfaction and intention to leave their jobs among reduced hours physicians than among their full-time counterparts.

To test this hypothesis, we first estimated a series of six main effects simultaneous regression models predicting two outcomes: career satisfaction and intention to leave one's job. In all models, the predictors included one of the variables assessing the quality of family life (i.e., parental role quality, marital role quality, or work-family interference) along with the hypothesized moderator, full-time vs. reduced hours status. As discussed, all models included the following covariates: presence of a preschool child, years as a physician, household income, and negative affectivity. Additional covariates included length of marriage in the analyses involving marital role quality and husband's work hours in the analyses involving work-family interference.

To test whether there was a significant moderating effect of working full-time or reduced hours, we added an interaction term of the form PREDICTOR \times MODERATOR to each regression model. In this way, we could determine whether the addition of the interaction term explained a significant proportion of the variance over and above that explained by the simpler model. A significant increase in proportion of variance explained would support the moderation hypothesis; that is, that the relationship linking quality of family life to a particular outcome was different for full-time physicians than for reduced hours physicians.

RESULTS

Our study included 51 full-time physicians. Reduced hours physicians (47) worked a mean of 32.1 hours per week (range 20–60 hours per week), and

full-time physicians worked 48.7 hours per week (range 35–90 hours per week), a difference of 16.5 hours ($p = 0.000$). There was no difference in the mean age of the physicians in the two groups (40.5 years vs. 39.9 years, $p = 0.563$) or in the number of years as a physician (10.8 years vs. 9.6 years, $p = 0.354$). Full-time physicians, however, had been working full-time for a longer period than reduced hours physicians had been working reduced hours (85.6 months vs. 48.2 months, $t(93.4) = 3.33$, $p = 0.001$). There was no difference in the mean household income (\$244,421 vs. \$229,889; $p = 0.625$), the proportion of physicians practicing in an academic setting (3 full-time physicians vs. 2 reduced hours physicians), the number of children (2.3 vs. 2.1, $p = 0.468$), or the presence of an infant in the home (19.6% vs. 17.0%; $p = 0.744$). In addition, there was no difference between the two groups in the likelihood of having a preschool (60.8% vs. 74.5%, $p = 0.150$), a school age (59.6% vs. 40.4%, $p = 0.106$), or a teenage child (27.5% vs. 14.9%, $p = 0.129$) at home.

In our sample, there was a difference between full-time and reduced hours physicians in the relationship between marital role quality and career satisfaction ($p = 0.017$). Specifically, as shown in Figure 1, the career satisfaction of reduced hours women physicians was more strongly associated with their marital role quality than was the career satisfaction of full-time women physicians. Low marital role quality was associated with low career satisfaction among the reduced hours physicians, whereas marital role quality appeared to be unrelated to career satisfaction among the full-time physicians.

There was also a significant interaction effect of full-time vs. reduced hours status on the relationship between marital role quality and intention to leave one's job ($p = 0.004$) in our sample. As shown in Figure 2, when marital role quality was low, reduced hours physicians expressed a greater intention to leave their job within a year than did full-time physicians. When marital role quality was high, however, reduced hours physicians expressed less intention to leave their jobs than did their full-time counterparts.

Full-time vs. reduced hours status in our sample was also a significant moderator of the relationship between parental role quality and intention to leave one's job ($p = 0.006$). As shown in Figure 3, when there was high parental role quality, there was no difference in intention to leave the job between the two groups. However, when

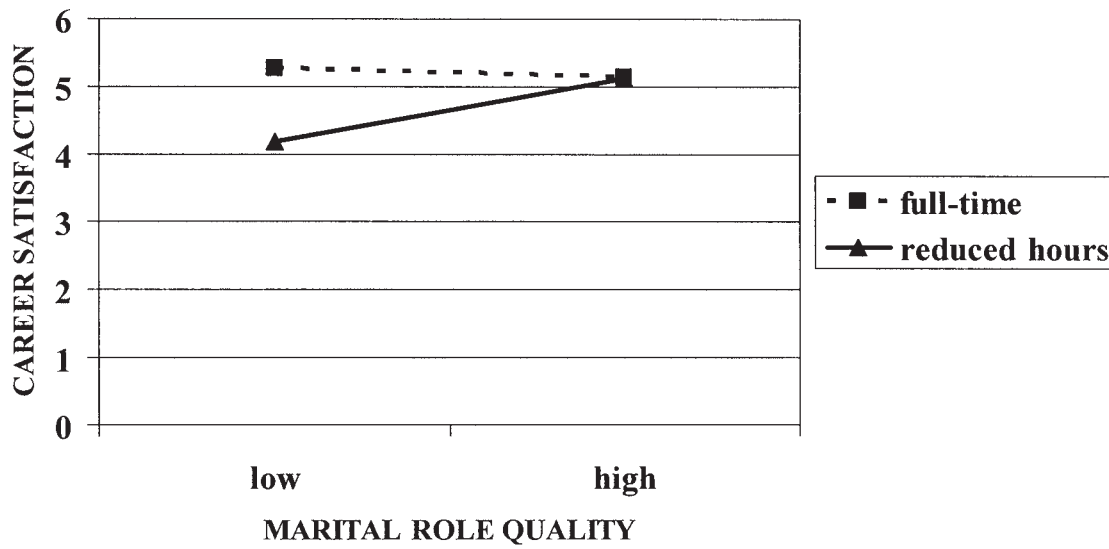


FIG. 1. Effect of marital role quality on career satisfaction, moderated by work schedule.

there was low parental role quality, reduced hours physicians were more likely than their full-time counterparts to express a greater intention to leave their jobs within 1 year.

Finally, full-time and reduced hours physicians in our sample differed in the relationship between work-family interference and intention to leave their jobs ($p = 0.038$). As shown in Figure 4, for full-time physicians, there appears to be little relationship between work-family interference and intention to leave the job. In contrast, high work-family interference for reduced hours physicians was associated with a higher intention to leave their jobs within 1 year.

DISCUSSION

In this sample, family experiences were more strongly associated with professional outcomes among women physicians who worked reduced hours than among their full-time counterparts. Career satisfaction and reported likelihood of leaving their job within a year for reduced hours women physicians were strongly related to the quality of their marital and parental roles, as well as their sense of work interfering with family. For full-time women physicians, there was much less association between family life and professional outcomes. Interestingly, when marital role qual-

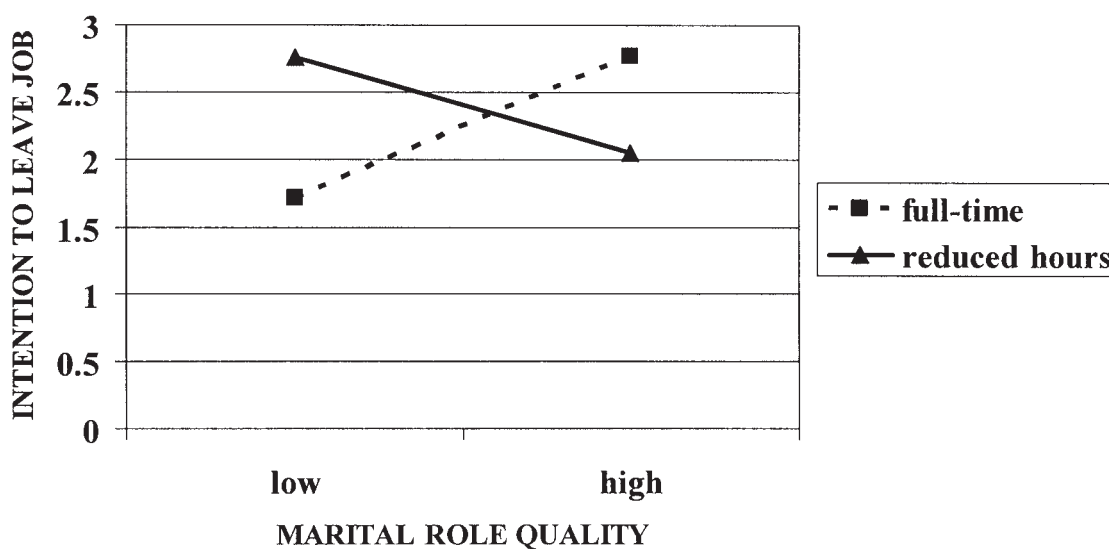


FIG. 2. Effect of marital role quality on intention to leave job, moderated by work schedule.

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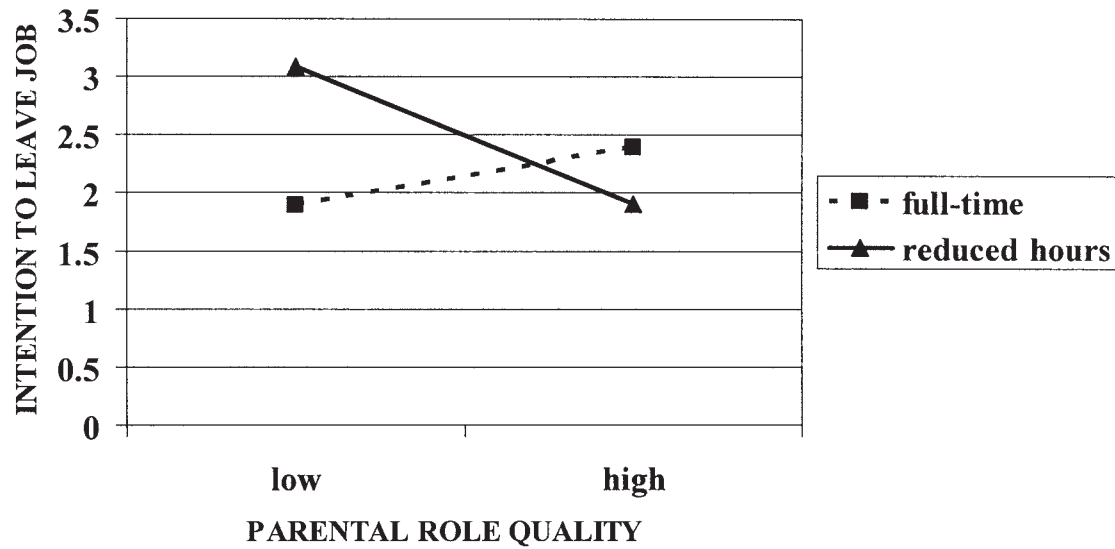


FIG. 3. Effect of parental role quality on intention to leave job, moderated by work schedule.

ity was high, full-time physicians expressed a greater intention to leave their job than did reduced hours physicians. It may be more difficult to spend greater hours away from home in these circumstances for full-time physicians, whereas part-time physicians may have better balanced the time they have to spend with their families in their work schedules. As this is a cross-sectional study, we have no way of knowing if the high marital role quality is the predictor or the outcome of the higher intention to leave the job.

Equal to or higher productivity and job performance of part-time women physicians compared with their full-time counterparts have been

found in a number of studies,^{5,10} comparing favorably to findings in other professions.^{11,12} Women physicians who choose reduced hours work may be more concerned about the ways in which they meet their obligations both at work and at home and may find that such schedules improve their ability to meet both standards. More detailed research into the reasons that women choose reduced hours, other than the overarching reason of accommodating family, is required to answer these questions.

There is a general trend in studies of various populations for both men and women to report that they want jobs that allow them to be invested

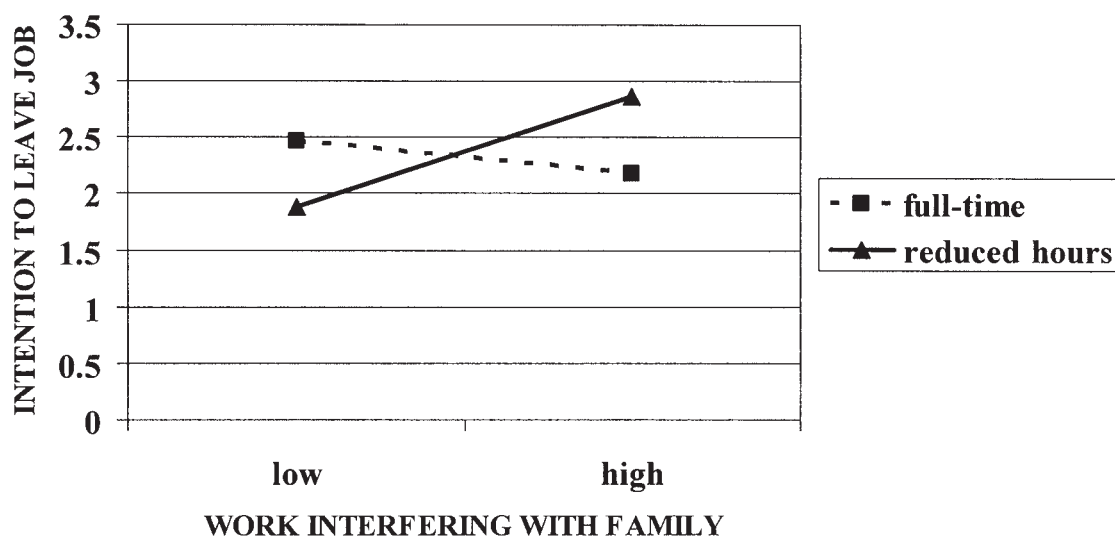


FIG. 4. Effect of work-family interference on intention to leave job, moderated by work schedule.

both in their careers and in their families. For example, in a survey of young men and women, both reported that family is at least as important to them as work,²² a study of lawyers found that men and women alike want to be both challenged at work and engaged at home,²³ and an international study of high-level male and female executives found that a sizeable subgroup (32%) were what Galinsky has termed "dual-centric," placing the same priority on their personal and family lives as on work.²⁴ With the increase in dual-earner couples, both men and women physicians appear to be seeking careers in medicine that permit reasonable lifestyles and time for family. The most sought after residencies include radiology, anesthesiology, dermatology, emergency medicine, and other specialties with predictable hours and high hourly earnings.²⁵ Primary care, including general medicine, family practice, and, to a lesser extent, pediatrics, are much less sought after, with only 52.5% of residency positions filling with U.S. graduates in internal medicine, 56.2% in family medicine, and 74.5% in pediatrics in the 2004 match.²⁵ It has even been suggested that predictions of physician shortages in some areas could accompany the increase in women physicians because of increasing demands for reduced hours positions.¹ This scenario makes the retention of reduced hours physicians assume even greater importance.

There are a number of limitations to our study. The time-consuming and in-depth quality of this work does not permit large sample sizes, which may restrict the generalizability of our findings. Similarly, our data are from one geographic region, which may vary from other areas in terms of the percent of practice in managed care contracts, other styles of practice, and unmeasured regional variations.

There are a number of strengths to our study. We have examined the relationship of marital role quality, parental role quality, and work interfering with family with intention to leave the job and career satisfaction for women physicians working reduced hours and full-time. Such a study has not previously been done. Dual-earner couples increase the complexity of job retention for employers, with factors relating to both jobs influencing the ability of retaining an employee. Better understanding of the relationship of these parameters to satisfaction and retention can enlighten employers to promote wise policies for part-time women physicians, potentially de-

creasing the economic costs involved in early loss of physicians from the workforce.

CONCLUSIONS

Part-time women physicians appear to be more sensitive than their full-time peers to family experiences in terms of their career satisfaction and their reported intention to leave their jobs. With higher productivity, similar patient satisfaction and ambulatory costs, as well as equal to higher-quality performance, employers would be wise to encourage programs for reduced hours physicians, improve conditions, and permit flexible work patterns for physicians who desire part-time or reduced hours employment.

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