Developing High-Functioning Teams: Factors Associated With Operating as a "Real Team" and Implications for Patient-Centered Medical Home Development

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Abstract

Team-based care is a foundation of health care redesign models like the patient-centered medical home (PCMH). Yet few practices rigorously examine how the implementation of PCMH relates to teamwork. We identified factors associated with the perception of a practice operating as a real team. An online workforce survey was conducted with all staff of 12 primary care sites of Cambridge Health Alliance at different stages of PCMH transformation. Bivariate and multivariate analyses of factors associated with teamwork perceptions were conducted. In multivariate models, having effective leadership was the main factor associated with practice teamwork perceptions (odds ratio [OR], 10.49; 95% confidence interval [CI], 5.39-20.43); in addition, practicing at a site in an intermediate stage of PCMH transformation was also associated with enhanced team perceptions (OR, 2.44; 95% CI, 1.28-4.64). In a model excluding effective leadership, respondents at sites in an intermediate stage of PCMH transformation (OR, 1.95; 95% CI, 1.1-3.4) and who had higher care team behaviors (such as huddles and weekly meetings; OR, 3.41; 95% CI, 1.30-8.92), higher care team perceptions (OR, 2.65; 95% CI, 1.15-6.11), and higher job satisfaction (OR, 2.00; 95% CI, 1.02-3.92) had higher practice teamwork perceptions. This study highlights the strong association between effective leadership, care team behaviors and perceptions, and job satisfaction with perceptions that practices operate as real teams. Although we cannot infer causality with these cross-sectional data, this study raises the possibility that providing attention to these factors may be important in augmenting practice teamwork perceptions.

Keywords

team-based care, team, PCMH, high-functioning

Introduction

Fueled by the recognition that managing health care costs and population health requires redistribution of primary care clinicians' work among teams of individuals, thousands of primary care sites are transforming to patient-centered medical homes (PCMHs). To provide the recommended acute, chronic, and preventive care for panels of 2500 patients, primary care physicians would need to spend 21.7 hours daily, which they cannot. It is estimated that half of the tasks that primary care physicians currently do can be completed by other team members. Thus, central to PCMH transformation is the development of high-functioning practice-based teams.

Understanding primary care teams is essential given evidence that high-functioning teams and PCMHs support achievement of the quadruple aim⁶ of enhanced patient experience,^{7,8} improved population health,⁹ reduced costs,^{7,10,11}

and improved joy in work. Yet, most practices do not measure associations with high-functioning teams.^{7,12,13} Of concern is that teams, poorly implemented, can potentially

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decrease work satisfaction. Indeed, PCMH implementation is associated with increased physician burnout in some cases. ¹⁴ It is imperative, therefore, to identify factors associated with primary care teams.

Studies of health care teams have identified factors associated with high-functioning teams, including care team behaviors (such as huddles)¹⁵ and effective leadership.¹⁶ However, these factors were identified through qualitative methods and do not allow examination of the association between these factors and perceptions of practices operating as real teams. As primary care sites transform to team-based care, they will benefit from understanding elements associated with perceptions of practices operating as real teams.

The objective of this study was to identify factors associated with the perception of a practice operating as a real team in a health care setting. We examined the relationship between the perception that practice operates as a real team and other key factors identified in literature as being associated with teams, including effective leadership, care team supportive structures, care team behaviors, and job satisfaction and burnout. ^{15,16}

Methods

Setting

Cambridge Health Alliance (CHA), an integrated delivery and public health system, cares for 140 000 people in Eastern Massachusetts. CHA serves low-income, racially, ethnically, and linguistically diverse populations; 82% of its revenues come from public funding sources, its patients are 65% nonwhite, and 30% primarily speak a non-English language. In 2009, CHA began transforming its 12 primary care practices to PCMHs. In groups of 2 to 3, these practices entered into national and state learning PCMH collaboratives. The central administration at CHA selected which sites and when they should join these collaboratives, and provided central support to sites to help them through the process of transformation. Throughout the process, the central administration at CHA placed a strong emphasis on teams and team-based care. At the time of this study, 2 sites were considered advanced PCMHs based on years spent in transformation (>2 years, received National Committee for Quality Assurance [NCQA] level 3 PCMH recognition in 2010), 4 were intermediate (0-2 years), and 4 were early (had yet to begin).

Survey Development

We developed an online 55-item survey with questions drawn from validated instruments, including the Dartmouth Teamwork Survey¹⁷ and the Safety Net Medical Home Initiative Workforce Survey,¹⁴ as well as questions modified from other surveys (such as the National Health Service Innovation Survey¹⁸). Domains included (1) practice

teamwork perceptions, (2) care team behaviors (eg, huddle frequency) and care team perceptions (eg, care team operates as real team), (3) perception of job satisfaction and burnout, and (4) perceptions of effective leadership (please see appendix for source of items). Practice teamwork perceptions inquired about perceptions of the practice operating as a real team; practices are commonly understood to be particular clinical site. Within practices, participants worked on interdisciplinary care teams with a subset of providers, medical assistant, nurses, and patient access representatives. Thus, care team behavior and perceptions questions addressed the frequency of particular behaviors and participants' perceptions of those care teams. Perceptions of effective leadership were assessed by agreement with the statement "Leadership creates an environment where things can be accomplished," a question used in the Safety Net Medical Home Initiative Workforce Survey. 14 Responses generally included Likert scales ranging from "strongly agree" to "strongly disagree." We pilot tested the survey with 2 sites. The study was approved by the CHA institutional review board.

Data Collection

We sent the anonymous and voluntary online survey to all 609 staff members at 12 primary care sites 3 times via e-mail between January and April 2012.

Variables

Practice teamwork perceptions. The primary outcome, teamwork perception, was derived from agreement to the statement "People in the practice operate as a real team." Responses were dichotomized into high (agree or strongly agree) and low practice teamwork perceptions (strongly disagree, disagree, neither disagree nor agree).

Care team behavior and care team perception scale scores. We constructed a care team behavior scale score from 4 questions assessing the frequency of care team behaviors in a given month including the number of times a team talked about high-risk patients, planned care patients, and how to improve the practice, as well as huddling. We assigned the following number of points per response: 1: less than once per month, 2: once per month, 3: several times per month, 4: once a week, 5: several times a week, and 6: daily or more often. We calculated average responses and dichotomized responses into higher (≥4 points, representing the upper 15% of respondents) and lower (<4 points, representing the lower 85% of respondents) care team behavior categories.

We constructed a care team perception scale score from 5 questions asking respondents how much they agreed with the following statements: "People in my care team operate as a real team"; "When we experience a problem in my care team, we make a serious effort to figure out what's really going on"; "Candid and open communication exists

between physicians and other practice staff on my care team"; "I know what the priority goals are in my team"; and "Employees in my care team report a strong sense of connection to their work." We assigned the following number of points per response: 1: strongly disagree, 2: disagree, 3: neither agree nor disagree, 4: agree, and 5: strongly agree. We calculated average response across the items and dichotomized responses into higher (≥4.75 points, representing the upper 15% of respondents) and lower (<4.75 points, representing the lower 85% of respondents) care team perception categories.

For both scales, we dichotomized the responses for ease of interpretation, and to ensure sufficient sample sizes in each group. We selected the particular cutoffs to ensure meaningful high groups. For example, because most of the care team behaviors are more appropriately completed more than several times per month, we set the cutoff at this point to create a meaningful high category. Internal consistency of scale scores was high (Cronbach alpha values of 0.79 for care team behaviors and 0.90 for care team perception).

Other variables. Other independent variables included job satisfaction, length of employment at CHA, symptoms of job burnout, and effective leadership. Those agreeing or strongly agreeing with the statement "Overall, I am satisfied with my current job" were considered to have high job satisfaction. Respondents agreeing or strongly agreeing with the statement "Leadership in the practice creates an environment where things can be accomplished" were considered to have effective leadership. Respondents were categorized as having no symptoms of burnout, mild burnout (≥1 symptom), or severe burnout (symptoms that would not go away or feeling completely burned out). Respondents' primary roles were collapsed into the following categories: provider (primary care MD/NP/PA, OB/Gyn, mental health LICSW/MD/PhD/ other, specialist, resident), administrator, clinical RN, front desk/reception, medical assistant, and other patient care (navigator, nutritionist, etc).

Site-specific measures included stage of PCMH transformation (advanced, intermediate, or early), total primary care panel size, and proportion of patients >65 years old.

Data Analysis

We conducted bivariate analyses comparing respondents' practice teamwork perception (high vs low) using chisquare or independent samples t tests. Because we sought to understand the relationship of care team behaviors and perceptions with practice teamwork perceptions, we limited our analysis to those participants who reported they were on a care team. To better understand the independent relationship between practice teamwork perception and other variables, we conducted multivariable logistic regression analyses. We excluded respondents due to missing data on 1 or more variables in both models (N = 12). We also

Table 1. Characteristics of Sample.

	All respondents $\frac{(N = 297)}{n \text{ (\%)}}$
Primary role	
Provider	124 (42)
Clinical RN	46 (16)
Medical assistant	60 (20)
Front desk/reception	39 (I3)
Administrator	13 (4)
Other patient care (navigator,	15 (5)
nutrition, etc)	,
Tenure at institution	
Less than 3 y	63 (21)
3 to 5 y	54 (18)
More than 5 y	180 (61)
Site characteristics	
Stage of PCMH transformation	
Early/not started	130 (44)
Intermediate	115 (39)
Advanced	52 (18)
Other	Mean (SD)
Panel size	8577 (1711)
Percent of panel with mental	21.3 (6.4)
health/substance abuse disorders	` '
Percent of panel above age 65	12.0 (6.0)

Note. PCMH = patient-centered medical home; RN= registered nurse.

conducted secondary analyses excluding effective leadership to better understand other factors associated with team perception. All analyses were conducted using SAS 9.4 (SAS Institute, Cary, North Carolina). *P* values <.05 were considered to be statistically significant.

Results

Surveys were completed by 428 employees (70% response rate). We excluded participants reporting they were not on a care team (n = 72), who did not answer the question on care team (n = 26), or who did not answer the primary outcome question (n = 33), yielding a final sample size of 297 (see Table 1). Nonresponders and responders who were excluded because they reported they were not on a care team were found across all stages of PCMH transition. Participants not answering the primary outcome question did not differ from participants answering the question on the basis of role, tenure, site-specific measures, satisfaction, burnout, and care team perceptions but were more likely to have higher care team behaviors (12% vs 2%, P = .003)

Respondents held various roles with 41% providers, 16% clinical RNs, 20% medical assistants, and 22% other (front desk/reception, administrators, and other). In all, 44% were from sites at an early stage of PCMH transformation, whereas 39% were at an intermediate and 18% were at an advanced

Table 2. Responses to Key Questions.

	All respondents (N = 297)
	n (%)
Job satisfaction	
High	211 (71)
Low	86 (29)
Symptoms of burnout	
None	175 (59)
Mild	95 (32)
Severe	27 (9)
Effective leadership	
Yes	183 (62)
No	113 (38)
Care team behaviors	
Higher	38 (13)
Lower	249 (87)
Care team perception	` '
Higher	45 (15)
Lower	247 (85)

stage of PCMH transformation. The majority (61%) had worked at CHA for >5 years. In all, 71% reported high job satisfaction and 59% indicated no symptoms of burnout. In all, 62% reported having effective leadership.

Factors Associated With Practice Teamwork Perception

Overall, 56% of respondents reported high and 46% reported low practice teamwork perceptions (Table 2). In bivariate analyses (Table 3), stage of PCMH transformation, job satisfaction, symptoms of burnout, care team behaviors, care team perception, and effective leadership were associated with practice teamwork perceptions. Among those practicing at early PCMH transformation stage sites, 46% had high practice teamwork perceptions, as compared with 54% among those practicing advanced PCMH transformation stage sites (P = .004). Among those with high job satisfaction, 63% had high practice teamwork perceptions as compared with 37% of those with low job satisfaction (P = .0002).

The distribution of practice teamwork perception differed by level of burnout (P = .039); high practice teamwork perceptions were reported by 59% of those with no symptoms of burnout and 33% of those with severe symptoms of burnout. In all, 77% of those with effective leadership had higher practice teamwork perceptions, whereas only 24% of those without effective leadership had higher practice teamwork perceptions (P < .0001). Respondents with higher care team behaviors were more likely (82%) to report high practice teamwork perceptions as compared with those with low care team behaviors (53%; P = .0008). Similarly, those with

higher care team perceptions (78%) were more likely to report high practice teamwork perceptions as compared with those with low care team perceptions (52%, P = .002).

In multivariate analyses (Table 4), effective leadership was the main factor associated with high practice teamwork perception (model 1). Those reporting effective leadership were 10 times as likely to have high practice teamwork perception compared with those without effective leadership (odds ratio [OR], 10.49; 95% confidence interval [CI], 5.39-20.43). Working intermediate PCMH transformation stage sites (as compared with early stage; OR, 2.44; 95% CI, 1.28-4.64) was the only other factor associated high practice teamwork perception. While no other variables achieved statistical significance, the ORs for higher care team behaviors and higher care team perception were greater than 2.0, suggesting that these factors contributed to practice teamwork perceptions.

Given the strength of effective leadership, we conducted secondary analyses excluding leadership to identify other factors influencing team-based perceptions (model 2). In model 2, respondents with higher care team behaviors (OR, 3.41; 95% CI, 1.30-8.92), higher care team perceptions (OR, 2.65; 95% CI, 1.15-6.11), and high job satisfaction (OR, 2.00; 95% CI, 1.02-3.92) were more likely to report higher practice teamwork perceptions. In addition, respondents intermediate PCMH transformation stage sites (OR, 1.95; 95% CI, 1.1-3.4) had higher practice teamwork perceptions; although participants at advanced PCMH transformation stage sites were more likely to have higher practice teamwork perceptions than early sites, this did not reach statistical significance (OR, 1.73; 95% CI, 0.75-3.97).

Discussion

In our sample of primary care staff on care teams at 12 practices of a public safety net institution, effective leadership was the key factor associated with high practice teamwork perceptions; respondents who reported having effective leadership were 10 times as likely to have high practice teamwork perceptions. Another key factor was stage of PCMH transformation; respondents at intermediate PCMH transformation stage sites were more than twice as likely to report high practice teamwork perceptions than those in early stages. In models excluding effective leadership, working at intermediate PCMH transformation stage sites, having high care team behaviors, high care team perceptions, and high job satisfaction were associated with high practice teamwork perceptions; for each of these, respondents were 2 to 3 times as likely to have high practice teamwork perceptions.

While the importance of leadership engagement in PCMH transformation has previously been examined qualitatively, ¹⁶ this is the first time that the strong association between effective leadership and practice teamwork perceptions has been demonstrated in a health care setting. This finding may provide further evidence for the concept that coaching leaders

Table 3. Bivariate Associations With Higher Practice Teamwork Perceptions.

	Higher practice teamwork perception (n = 167) n (%)	Lower practice teamwork $\frac{\text{perception (n = 130)}}{\text{n (\%)}}$	P value*
Primary role			
Provider	70 (56)	54 (44)	.81
Clinical RN	22 (48)	24 (52)	
Medical assistant	34 (57)	26 (43)	
Front desk/reception	23 (59)	16 (41)	
Administrator	8 (62)	5 (38)	
Other patient care (navigator, nutrition, etc)	10 (67)	5 (33)	
Tenure at institution			
Less than 3 y	38 (60)	25 (40)	.46
3-5 y	33 (61)	21 (39)	
More than 5 y	96 (53)	84 (47)	
Job satisfaction	` ,	, ,	
High	133 (63)	78 (37)	.0002
Low	34 (40)	52 (60)	
Symptoms of burnout	, ,	. ,	
None	104 (59)	71 (41)	.039
Mild	54 (57)	41 (43)	
Severe	9 (33)	18 (67)	
Facilitative leadership	, ,	` '	
Yes	140 (77)	43 (24)	<.0001
No	27 (24)	86 (76)	
Care team behaviors	` '	` '	
Higher	31 (82)	7 (18)	.0008
Lower	I3I (53)	118 (47)	
Care team perception	` '	` '	
Higher	35 (78)	10 (22)	.002
Lower	129 (52)	118 (48)	
Site characteristics	` '	` '	
Stage of PCMH transformation			
Early/not started	60 (46)	70 (54)	.004
Intermediate	70 (61)	45 (39)	
Advanced	37 (71)	15 (29)	
Other	Mean (SD)	Mean (SD)	
Panel size	8563 (1621)	8595 (1827)	.87
Percent of panel above age 65	11.7 (6.1)	12.5 (5.8)	.26

Note. PCMH = patient-centered medical home; RN= registered nurse.

on how to support teams is a critical strategy for the emergence of a team-based model of care. Alternatively, it may suggest that when practice teamwork exists, leaders may then be able to facilitate operations more effectively.

At the same time, our finding that staff who reported high care team behaviors (such as huddles) and care team perceptions had higher practice teamwork perceptions points to these factors as potential enabling factors of team development. While the cross-sectional nature of this study does not allow assessment of whether care team behaviors and perceptions lead to practice teamwork perception or vice versa, the association nonetheless provides insight

into areas of focus for team building. That is, fostering care team behaviors, encouraging care teams operating as a real team, and fostering practice teamwork perceptions are interrelated; processes to encourage one aspect (eg, care team behaviors) may support others (eg, practice teamwork perceptions).

Our finding that PCMH transformation stage was associated with practice teamwork perceptions adds to the PCMH development literature. A key goal of PCMHs is to develop team-based care. While substantial efforts have centered on the impact of PCMHs on quality, costs, and patient experience, 7-12 fewer resources are dedicated to examining and

^{*}P values < .05 are bolded.

Table 4. Multitvariate Associations With Higher Practice Teamwork Perceptions.*

	Model 1: With leadership	Model 2: Without leadership	
	OR (95% CI)	OR (95% CI)	
Primary role			
Provider	1.00 (Ref.)	1.00 (Ref.)	
Clinical RN	0.95 (0.39-2.32)	0.82 (0.38-1.78)	
Medical assistant	0.79 (0.34-1.87)	0.78 (0.36-1.68)	
Front desk/reception	1.07 (0.40-2.85)	0.93 (0.39-2.20)	
Administrator	0.78 (0.19-3.17)	0.89 (0.25-3.15)	
Other patient care (navigator, nutrition, etc)	3.12 (0.74-13.17)	1.29 (0.37-4.47)	
Tenure			
Less than 3 y	1.00 (Ref.)	1.00 (Ref.)	
3-5 y	1.01 (0.37-2.73)	0.71 (0.29-1.72)	
More than 5 y	0.86 (0.41-1.78)	0.65 (0.34-1.25)	
Job satisfaction			
Low	1.00 (Ref.)	1.00 (Ref.)	
High	1.00 (0.45-2.21)	2.00 (1.02-3.92)	
Symptoms of burnout			
Severe	1.00 (Ref.)	1.00 (Ref.)	
Mild	1.45 (0.47-4.48)	1.63 (0.59-4.49)	
None	1.39 (0.43-4.47)	1.63 (0.56-4.72)	
Effective leadership			
No	1.00 (Ref.)	_	
Yes	10.49 (5.39-20.43)	_	
Care team behaviors			
Lower	1.00 (Ref.)	1.00 (Ref.)	
Higher	2.24 (0.78-6.44)	3.41 (1.30-8.92)	
Care team perception			
Lower	1.00 (Ref.)	1.00 (Ref.)	
Higher	1.96 (0.77-4.98)	2.65 (1.15-6.11)	
Site characteristics			
Stage of PCMH transformation			
Early/not started	1.00 (Ref.)	1.00 (Ref.)	
Intermediate	2.44 (1.28-4.64)	1.95 (1.11-3.42)	
Advanced	1.54 (0.60-3.97)	1.73 (0.75-3.97)	
Other			
Panel size	1.00 (1.00-1.00)	1.00 (1.00-1.00)	
Percent of panel above age 65	0.96 (0.92-1.01)	0.98 (0.93-1.02)	

Note. Forty-five observations were excluded due to missing data on I or more variables in both models (full model N = 285 out of 330 surveys). CI = confidence interval; PCMH = patient-centered medical home; RN= registered nurse.

*P values < .05 are bolded.

monitoring team functioning in PCMHs, a key intermediary step. In our study, intermediate PCMH transformation stage was significantly associated with higher practice teamwork perceptions; while participants at advanced PCMH transformation stage sites had higher practice teamwork perceptions, the lack of significance for this factor may be due to the smaller number (n = 52). Thus, our finding may suggest that the current wave toward PCMH transformation may lead to higher practice teamwork perceptions. Alternatively, because team formation is an early step of PCMH transformation, it may be that practices at the intermediate and advanced stages were at equivalent levels of team formation.

The significant association between higher practice teamwork perceptions and higher job satisfaction needs to be underscored in the context of the current primary care workforce crisis. The creation of PCMH teams in health care has been associated with greater job satisfaction in some but not all settings. ^{19,20} However, the elements of PCMHs that are associated with increased job satisfaction have not yet been elucidated. This study adds to the literature by raising the possibility that structures enabling high practice teamwork perceptions may help foster increased job satisfaction. An alternative interpretation is that higher job satisfaction may be a prerequisite for practices to then operate as real teams.

Creating and maintaining effective practice teams requires resources. This study adds to the growing literature²¹⁻²³ highlighting the need for primary care redesign models and payment methods to account for enabling team activities, such as huddles and team meetings, to achieve effective practice teamwork. While other enabling structures such as collocation and coscheduling may also promote team effectiveness, further evaluation of the relationship between these elements and team effectiveness is required. In fact, rigorous measurement and monitoring of team effectiveness and enabling structures, as well as rigorous application of improvement frameworks, may be a core metric of primary care transformation.

The current political climate, with the uncertainly about the future of the Affordable Care Act (ACA), raises concerns for safety net hospitals. While further research is needed, this study raises the possibility that focusing on effective leadership and PCMH transformation may lead to high practice teamwork perceptions. Because team-based care has been associated with improved patient experience, ^{7,8} improved population health, ⁹ and reduced costs, ^{7,10,11} focus on these factors may help improve these outcomes, many of which safety net hospitals strive to achieve.

This study should be interpreted in the context of several limitations. It was conducted at 12 primary care practices of a single institution, and therefore, findings may not be generalizable to other settings. In addition, the primary care sites were not randomly assigned to PCMH development; thus, the "early sites" likely have nonmeasured variables that the organization thought would increase the odds of success at PCMH. The associations are derived from cross-sectional data, and causality cannot be inferred. Due to the complexity of objectively measuring team performance, ^{24,25} as other studies of team functioning have done, ^{26,27} we examined the subjective measure of practice teamwork perception. While

our measures of care team behaviors and perceptions had good internal consistency, we lack other measures of validity and reliability of these measures (such as test-retest). Similarly, due to the anonymous nature of the survey and our resulting lack of information on team membership, we were unable to assess interrater agreement on the care team measures. For some respondents, the substitution principle and halo effects may have led to high levels of correlations among items. That is, if a respondent encountered a question that was hard to answer quickly, they may have replaced that question with one that was easier to answer (substitution principle).²⁸ At the same time, the strong emphasis placed by the central administration on teams and team-based care raises the possibility of a halo effect. The halo effect suggests that when we rate individuals, and likely teams and institutions, we often do this globally and generally with the halo of some overall feeling about the object of the questions.²⁹ Our examination of practice teamwork perceptions and effective leadership were single questions, which may limit their reliability and validity.

Concluding Comments

This study highlights the strong association between effective leadership, PCMH transformation, care team behaviors and perceptions, and job satisfaction with perceptions that practices operate as real teams. It may therefore suggest that attention to supporting and monitoring these structures may be critical for team development, or that facilitating practices operating as real teams may lead to some of these elements. For example, as primary care systems transform to teambased models of care, providing resources for and focusing on the development of effective leadership and enabling team structures may augment practice teamwork perception, a critical element of high-functioning team development.

Appendix

Source of Questions.

Practice perception	
People in this practice operate as a real team	Adapted from (Lewis et al ¹⁴)
Care team perception	
Please state how much you agree with the following statements about your CARE TEAM	
People on my care team operate as a real team	Adapted from (Lewis et al 14)
When we experience a problem in my care team, we make a serious effort to figure out what's really going on	(Lewis et al ¹⁴)
Candid and open communication exists between physicians and other practice staff	(Lewis et al ¹⁴)
I know what the priority goals are in my team	Created by authors
Employees in my team report a strong sense of connection to their work	Created by authors
Care team behaviors	
In a given month, how often does your care team:	
Huddle before patient care sessions?	Created by authors
Meet as a team to talk about high-risk patients?	Created by authors

(continued)

Appendix. (continued)

Meet as a team to talk about our planned care patients?

Meet as a team to talk about how to improve our practice?

Other

Overall, I am satisfied with my current job

Using your own definition of "burnout," please check one:

a. I enjoy my work. I have no symptoms of burnout.

- b. Occasionally, I am under stress at work, but I don't feel burned out.
- c. I have one or more symptoms of burnout, such as physical or emotional exhaustion.
- d. The symptoms of burnout that I'm experiencing won't go away. I think about frustrations at work
 a lot.

e. I feel completely burned out and often wonder if I can go on.

Leadership in the practice creates an environment where things can be accomplished

Adapted from (Lewis et al¹⁴)

Created by authors

Created by authors

(Lewis et al 14)

(Rohland et al³⁰)

Declaration of Conflicting Interests

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