

Post-Pandemic Primary Care Burnout Drivers: Interplay of Organizational Constraints, Values (Mis)alignment, and Team-Leader Dynamics

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Purpose: Burnout has been exacerbated by post-pandemic woes, and research has examined burnout drivers; however, limited attention has been given to how values alignment with leadership, organizational constraints, psychological safety, and supervisor support simultaneously shape burnout outcomes. This study aimed to identify workplace factors most strongly associated with emotional exhaustion, depersonalization, and personal accomplishment to inform leadership strategies for improving clinician well-being.

Patients and Methods: Cross-sectional survey of 338 employees across 12 primary care clinics in a healthcare system in Portland, Oregon, from January to August 2023 (response rate: 63.5%). Eligible respondents included clinicians and support staff. Burnout was assessed using the Maslach Burnout Inventory (MBI-HSS). Independent variables included organizational constraints, values alignment with leadership, psychological safety, and two forms of supervisor support (general support and family-supportive supervisor behaviors [FSSB]). Structural Equation Modeling (SEM) was employed to examine the simultaneous relationships between workplace factors and burnout dimensions, while controlling for demographic and occupational characteristics.

Results: Lower values alignment with leaders was the strongest predictor of emotional exhaustion ($\beta = -0.15$, $p < 0.001$). Organizational constraints were associated with both emotional exhaustion ($\beta = 0.08$, $p < 0.001$) and depersonalization ($\beta = 0.05$, $p < 0.001$). Lower psychological safety was also linked to greater emotional exhaustion ($\beta = -0.04$, $p < 0.001$). For personal accomplishment, higher values alignment ($\beta = 0.10$, $p < 0.05$) and fewer organizational constraints ($\beta = -0.03$, $p < 0.001$) were positive predictors. General supervisor support was associated with greater personal accomplishment, while higher FSSB was unexpectedly associated with lower accomplishment ($\beta = -0.06$, $p < 0.001$).

Conclusion: These findings underscore the importance of aligning values with leadership and promoting psychological safety as crucial levers for mitigating emotional exhaustion. Although general supervisor support enhances personal accomplishment, the negative association with FSSB suggests more complex supervisory dynamics.

Plain Language Summary: Burnout is common among healthcare workers and has worsened since the pandemic. This study examined the impact of various workplace factors—such as the alignment of values with leaders, organizational barriers, psychological safety, and supervisor support—on burnout in primary care. We surveyed 338 clinicians and staff at 12 clinics in Portland, Oregon, in 2023. Burnout was measured using the Maslach Burnout Inventory, and we employed statistical modeling to examine the relationships among workplace factors and the three burnout components: emotional exhaustion, depersonalization, and personal accomplishment. We found that when employees felt their values did not align with those of their leaders, they were more likely to experience emotional exhaustion. Organizational barriers, such as a lack of resources, also increased exhaustion and depersonalization. Low psychological safety also contributed to exhaustion. In contrast, values alignment and supportive supervisors were linked to

a stronger sense of accomplishment. However, family-supportive supervisor behaviors were surprisingly tied to lower accomplishment, suggesting that this type of support may sometimes create challenges. Overall, our findings indicate that leadership alignment and a culture of safety are crucial for mitigating burnout, and that supervisor support may have complex effects.

Keywords: psychological safety, organizational barriers, supervisor support, clinician well-being

Introduction

Understanding the drivers of burnout in primary care during the financially strained post-pandemic period is crucial for retaining a functional healthcare workforce and ensuring high-quality patient care. Primary care clinicians were already experiencing burnout at alarmingly high rates prior to the pandemic, with studies indicating that up to 50% of clinicians exhibit at least one dimension of burnout, such as emotional exhaustion, depersonalization, or a diminished sense of personal accomplishment.¹ The COVID-19 pandemic exacerbated these stressors, increasing the intensity and frequency of burnout symptoms due to rapidly varying and uncertain situations, understaffing, long working hours, heightened patient demands, and insufficient support from multiple organizational leaders at different levels.^{2,3} In the aftermath of the pandemic, many healthcare systems are facing severe financial pressures and instituting cost-cutting measures that further strain their workforces. Clinicians experiencing burnout are more likely to reduce their work hours, retire early, or leave the profession entirely.⁴ This challenge is more pressing in light of a recent projection of a shortage of approximately 20,000 to 40,000 primary care physicians in the US by 2036.⁵

Although burnout in primary care settings has been widely examined, a critical gap remains in understanding how organizational constraints and the quality of team leader-member relationships function as simultaneous and interacting contributors to burnout. Burnout is a multidimensional construct comprising emotional exhaustion, depersonalization, and personal accomplishment. These dimensions reflect distinct aspects of occupational strain and may be differentially influenced by organizational and relational factors, warranting separate examination. Workplace stressors and organizational constraints, such as excessive workload, time pressures, and administrative burdens—such as messages from the patient portal—are recognized burnout drivers in primary care.^{6,7} These stressors also reduce the time available for patient interactions, with one study estimating that primary care clinicians reported spending more than half of their working time on tasks unrelated to direct patient care.⁸ Additionally, rigid scheduling systems, inadequate staffing, and ever-changing administrative demands intensify the pressure on clinicians and staff to meet patient needs.⁹

Studies show that supportive leadership helps alleviate the impact of stressors by aligning values and goals.^{10,11} Moreover, a salient reason for turnover is interpersonal conflict or a misalignment of values with managers or team leaders. When clinicians feel that their values, such as patient-centered care, compassion, and professionalism, align with those of their leaders, they experience a greater sense of purpose, job satisfaction, and lower burnout risk.¹ Conversely, when there is a misalignment between individual and organizational values, such as when leaders prioritize efficiency or cost-saving measures over quality care, clinicians may feel disillusioned and disconnected, amplifying burnout concerns.⁹

Studying supportive leadership is significant, as job promotions are often based on operational accomplishments, potentially overlooking the relational skills necessary to succeed as team leaders. This oversight is critical because leaders' support regarding work-life balance – an area that rose to prominence during the pandemic¹² – plays a pivotal role in alleviating burnout. The ability of supervisors and team leaders to offer flexibility and empathy regarding work-life integration becomes crucial for the well-being of healthcare workers and has been shown to reduce employee turnover.¹³ Supervisor behaviors, such as recognizing personal needs, facilitating the use of paid time off or flexible work arrangements, and providing resources for stress management, can mitigate the harmful effects of workload on emotional exhaustion.¹⁴ A study conducted during the pandemic also showed that physicians who felt valued by their leaders were less likely to experience burnout than their peers. In contrast, when supervisors are unsupportive or indifferent to work-life conflicts, healthcare clinicians are more likely to experience chronic stress.¹⁵

Finally, since the COVID-19 pandemic involved intense emotional challenges, including grief and moral distress, addressing these problems requires having a supportive space where healthcare workers can voice their needs, seek support, and collaborate on solutions. Psychological safety refers to a work environment where individuals can express

concerns, ask questions, share ideas, and admit mistakes without fear of negative consequences.¹⁶ Psychological safety allows teams to engage in critical discussions about improving patient care, safety protocols, and work processes without fear of retribution or judgment. As healthcare organizations strive to recover and rebuild in the post-pandemic era, prioritizing psychological safety is essential not only for the well-being of healthcare workers but also for maintaining the resilience and effectiveness of primary care teams in an evolving landscape.¹⁷

Despite extensive research on burnout in primary care, few studies have examined organizational constraints, values alignment with leadership, psychological safety, and supervisory support simultaneously as co-occurring drivers of burnout. Organizational stress models emphasize that structural barriers (eg, workload, resource limitations) interact with relational dynamics to shape employee well-being, while relational leadership frameworks highlight the importance of value congruence and supportive leader behaviors in sustaining motivation and engagement. Examining these factors in isolation may obscure their relative and combined contributions, particularly in the post-pandemic context, where financial pressures and workforce strain have intensified. Addressing this gap, the present study applies Structural Equation Modeling (SEM) to evaluate the simultaneous associations of modifiable organizational and relational factors with each dimension of burnout in primary care. SEM enables the examination of the magnitude and direction of organizational drivers across the three dimensions of burnout: emotional exhaustion, depersonalization, and low personal accomplishment. SEM allows a more comprehensive understanding of how work environment factors and interpersonal dynamics contribute to burnout in primary care by considering the simultaneous associations of different drivers with multiple dimensions of burnout.¹⁸

The goal of this study is to examine simultaneously modifiable factors contributing to burnout in primary care settings in a post-pandemic climate. While burnout in primary care settings has been extensively studied, a critical gap remains in understanding the interplay between organizational constraints and team leader-member relationship quality as simultaneous and interacting drivers of burnout, particularly in a post-pandemic environment. This study addresses this gap by leveraging SEM to explore the nuanced relationships between modifiable workplace factors and burnout dimensions, providing a comprehensive framework for targeted interventions in primary care.

Materials and Methods

Study Design and Participants

This cross-sectional study is based on survey data collected at 12 primary care clinics of the same healthcare system in Portland, OR. Eligible participants included all medical and support staff assigned to a clinic. Employees excluded were those who rotated to other clinics, students and residents, researchers, and clinicians without a primary appointment at a clinic. Some support staff, including janitorial and environmental health and safety personnel, were also excluded from the study. A total of 338 out of 548 employees participated in the survey (response rate 63.5%).

Survey data were collected through REDCap, a secure online data collection program. Clinic leaders shared the link to the anonymous, confidential survey via Email to all clinic members. The surveys were administered from January 2023 to August 2023, rolling the survey out in a staggered fashion by pairing clinics. Respondents were given four weeks to complete the survey. Weekly reminder emails were sent to participants who had not responded during this time. Participants received a \$20 gift card as an incentive for their participation. The procedures and methods for this study were approved by [blinded for review].

Measures

Burnout was measured using the 22-item Maslach Burnout Inventory–Human Services Survey (MBI-HSS),¹⁹ which assesses emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA). Items were rated on a 0 (“Never”) to 6 (“Every day”) scale, with subscales scored separately. Established cutoffs classify EE as low (≤ 18), moderate (19–26), and high (≥ 27); DP as low (≤ 5), moderate (6–9), and high (≥ 10); and PA as low (≤ 33), moderate (34–39), and high (≥ 40). Cronbach’s alphas exceeded .74 across dimensions.

Organizational constraints were assessed using 11 Likert-type items on workplace barriers (eg, equipment, resources, training).²⁰ Higher scores reflect greater constraints, with mean scores greater than 30 generally indicating moderate to high perceived barriers. Cronbach's $\alpha = 0.87$.

Values alignment was measured using an item from the Mini-Z survey,²¹ a validated 10-item tool adapted from the Zarit Burden Interview Scale to assess workplace stressors and alignment with leadership values. Cronbach's $\alpha = 0.83$. Single-item measures of values alignment have been widely used in healthcare workforce research due to their strong face validity, demonstrated associations with burnout outcomes, and reduced respondent burden in applied settings.²¹

Supervisor support was measured with the General Supervisor Social Support Scale,²² capturing emotional, instrumental, and appraisal support. Higher scores indicate greater perceived support (≥ 12 = moderate to high). Cronbach's $\alpha = 0.81$. Family-Supportive Supervisor Behaviors (FSSB)²² were measured using the 4-item short form, with summed scores greater than 15 reflecting strong support ($\alpha = 0.93$).

Psychological safety was assessed with the 7-item Psychological Safety Scale (PSS).¹⁶ Scores ≥ 35 indicate high psychological safety, whereas scores < 30 suggest barriers to open communication. Cronbach's $\alpha = 0.76$.

Control Variables

The survey asked participants to enter their age in years and to self-identify their gender using the following options: Female, Male, Other/Unknown/Not Reported. Likewise, the race/ethnicity options for self-identification were American Indian or Alaska Native, Asian, Black/African American, Hispanic, Latino, or Spanish Origin, Middle Eastern or North African, Native Hawaiian or Other Pacific Islander, White, Other (Prefer to self-describe). The survey also had variables for caregiver status, job title (clinician, clinic staff, or other), tenure at the current position, managerial status, and whether they worked at more than one clinic (Table 1).

Analysis Plan

Structural Equation Modeling (SEM) was employed to examine drivers of burnout in primary care. SEM was chosen for its capacity to test complex relationships among observed and latent variables simultaneously. The hypothesized model incorporated values alignment, organizational constraints, psychological safety, FSSB, and general supervisor support as exogenous variables, with the three burnout dimensions as endogenous outcomes. The models were estimated in R using maximum likelihood. Model fit was assessed using established indices, including the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). Benchmarks such as CFI/TLI ≥ 0.95 and RMSEA ≤ 0.06 guided interpretation. Sensitivity analyses were conducted to evaluate the robustness of the findings by examining alternative model specifications and addressing potential confounders.

Results

Sample Description

Table 1 shows descriptive statistics of the sample. The study sample comprises 338 participants, with an average age of 39 years. Most participants are female (72.5%), with about three-quarters identifying as non-Hispanic White. The majority of participants are clinic support members (57.7%), with 31.4% being clinicians. Most work full-time (82.5%) and do not hold managerial roles (80.8%). Additionally, 86.4% work at a single clinic, and tenure at the primary clinic varies, with 42.9% having worked there for 1–5 years, 35.8% for over 6 years, and 20.7% for less than a year. Regarding caregiving responsibilities, 43.5% do not provide care, while 37.3% care for children, and smaller percentages care for adults or both children and adults.

Table 2 shows the outcome and predictor variables. Emotional Exhaustion averaged 34.16 (SD = 12.41) out of 54, indicating a high level of exhaustion. Depersonalization had a mean of 12.67 (SD = 6.12), falling within the moderate-to-high range of 0 to 30. Personal accomplishment averaged 43.86 (SD = 7.06) out of 48, suggesting a strong sense of professional efficacy.

The Mini-Z Total score averaged 41.97 (SD = 6.49), indicating a generally high level of well-being. The supportive work environment mean was 22.49 (SD = 5.03), suggesting moderate-to-high workplace support, while workplace stress

Table 1 Description of the Sample (n = 338)

	Mean (SD)
Age	39.09 (10.78)
Gender	
Female	245 (72.5)
Male	62 (18.3)
Unknown/Not Reported	31 (9.2)
Race	
Asian	25 (7.4)
More than one race	15 (4.4)
White	222 (65.7)
Unknown/Not Reported	67 (19.8)
Black or African American	6 (1.8)
Native Hawaiian or Other Pacific Islander	3 (0.9)
Hispanic Ethnicity (any race)	35 (10.4)
Caregiver Status	
Does not provide care	147 (43.5)
Caregiver to 1 or more children	126 (37.3)
Caregiver to 1 or more dependent adults	21 (6.2)
Caregiver to both children and dependent adults	22 (6.5)
NA	22 (6.5)
Role	
Clinician	106 (31.4)
Other	37 (10.9)
Staff	195 (57.7)
Work Status	
Part-Time	35 (10.4)
Full-Time	279 (82.5)
Other	15 (4.4)
NA	9 (2.7)
Manager/lead/supervisor status	
No	273 (80.8)
Yes	62 (18.3)
NA	<5 (<5%)
Work at more than one clinic	
No	292 (86.4)
Yes	41 (12.1)
NA	5 (1.5)
Years at Primary Clinic	
<1 Year	70 (20.7)
1–5 years	145 (42.9)
6+ years	121 (35.8)
Prefer not to say	<5 (<5%)

averaged 9.51 (SD = 2.78), with lower scores indicating less stress. Psychological safety, a key factor for workplace well-being, had a mean of 39.92 (SD = 10.99) out of 49, reflecting a generally positive but variable perception of safety for interpersonal risk-taking.

Participants reported moderate levels of organizational constraints (M = 31.33, SD = 10.05), indicating perceived barriers to efficient work. Family-supportive supervisor behaviors (FSSB) averaged 17.99 (SD = 5.37) out of 20, reflecting strong supervisor support for work-life balance. General supervisor support had a mean of 14.30 (SD = 3.99), indicating moderate to high managerial support.

Table 2 Description Burnout and Psychosocial Variables (n=338)

	Mean (SD)
Emotional Exhaustion	34.16 (12.41)
Depersonalization	12.67 (6.12)
Personal Accomplishment	43.86 (7.06)
Mini Z Total	41.97 (6.49)
Organizational Constraints	31.33 (10.05)
Psychological Safety	39.92 (10.99)
Family Supportive Supervisor Behaviors	17.99 (5.37)
General Supervisor Support	14.30 (3.99)

Associations with Burnout Dimensions

Figure 1 illustrates the simultaneous associations with each of the three burnout dimensions, each rescaled to range from 0 to 6, while controlling for occupational and socio-demographic variables. The strongest driver of Emotional Exhaustion was higher alignment with clinic leaders, with a one-unit increment associated with a 0.15 decrement in the mean emotional exhaustion score ($P < 0.001$). Organizational constraints were also associated with emotional exhaustion, with a one-unit increment corresponding to a 0.08 increase in this outcome ($P < 0.001$). Finally, lower psychological safety was also associated with high emotional exhaustion, with a magnitude of -0.03 ($P < 0.001$).

Depersonalization was also associated with higher organizational constraints ($\beta = 0.05$, $p < 0.001$) and lower psychological safety ($\beta = -0.03$, $p < 0.05$). Personal accomplishment was associated with higher values alignment between team and clinic leaders ($\beta=0.10$, $P<0.05$), and lower organizational constraints ($\beta=-0.03$, $P<0.001$). While

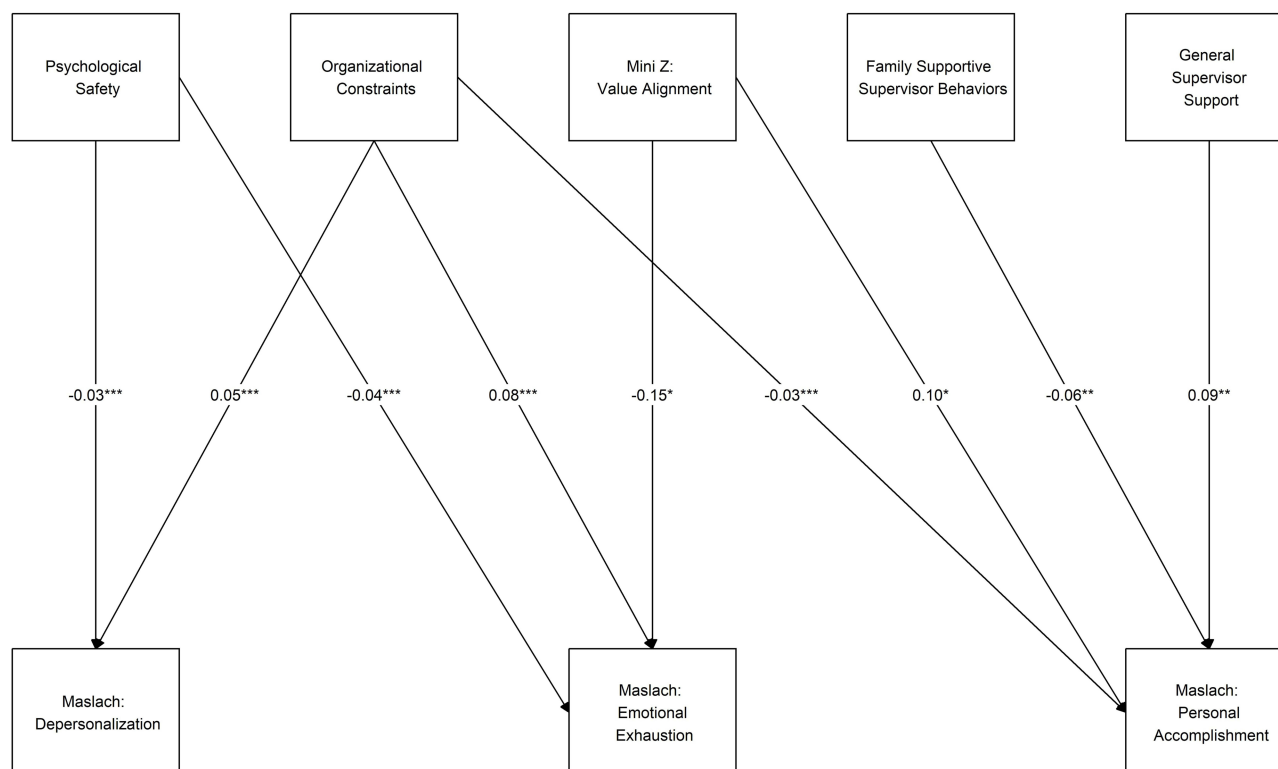


Figure 1 Structural equation model illustrating standardized associations between organizational constraints, values alignment, psychological safety, supervisory behaviors, and burnout dimensions. Standardized coefficients are displayed; * $p < 0.01$; ** $p < 0.05$; *** $p < 0.0001$.

higher general supervisor support was positively associated with personal accomplishment, higher FSSB was negatively associated with personal accomplishment to a similar magnitude ($\beta = -0.06$, $p < 0.001$).

Discussion

The COVID-19 pandemic profoundly reshaped the landscape of primary care, intensifying pre-existing stressors and creating new financial and resource challenges. The objective of this study was to examine the factors contributing to burnout among primary care employees in the post-pandemic era. This study employed Structural Equation Models (SEM) to test co-occurring burnout drivers, yielding actionable insights to guide interventions aimed at reducing burnout in primary care settings. Results from SEM reveal the complex dynamics of burnout in primary care. While emotional exhaustion—a hallmark of burnout—was strongly associated with traditional organizational constraints, such as excessive workload and resource inadequacies, the findings also highlight other influential drivers related to the relationship between team members and their team leaders. Chief among these were misalignment of values with clinic leadership and deficits in psychological safety. Values misalignment reflects a disconnect between the priorities of healthcare workers and those of their leaders, undermining motivation and engagement. Similarly, a lack of psychological safety—a workplace environment where employees feel safe to speak up, share concerns, and express vulnerability—was a critical predictor of emotional strain. These findings underscore the need to broaden the focus of burnout interventions, addressing not only operational barriers but also the relational and cultural dimensions of healthcare organizations.

Furthermore, SEM models indicated that depersonalization, a burnout component characterized by emotional detachment and cynicism toward patients, was significantly associated with lower psychological safety and higher organizational constraints. The absence of psychological safety in the workplace may exacerbate feelings of isolation and disengagement, hindering collaborative relationships and fostering an environment where employees feel unsupported and undervalued. High organizational constraints, such as bureaucratic inefficiencies and limited autonomy, further amplify these effects, creating conditions where clinicians may emotionally withdraw as a coping mechanism. Results here complement the evidence from another study that also employed SEM to examine the pathway connecting high-involvement work practices (HIWP) (eg, participative decision-making, information sharing, and supportive management) with depersonalization, finding that Person-Fit Environment fully mediated this association. Said differently, HIWP was associated with higher PFE, and the latter was associated with lower depersonalization.

Intriguingly, SEM findings indicated that personal accomplishment, a sense of efficacy and fulfillment in professional roles, was positively associated with higher levels of general supervisor support; however, it was also negatively associated with family-supportive supervisor behaviors. This apparent contradiction may reflect differing perceptions of support priorities. General supervisor support, characterized by instrumental and barrier-reducing help, bolsters a sense of achievement by addressing job-focused issues. Although higher family-supportive supervisor behaviors were associated with lower personal accomplishment, this finding likely reflects complex supervisory dynamics rather than a uniformly negative effect of family-focused support. Lower levels of family-supportive supervisor behaviors may signal that employees who report higher personal accomplishment are perhaps more likely to compartmentalize work and personal responsibilities, relying less on supervisors to navigate family-related challenges. Additionally, this finding could suggest that workers facing ongoing personal or professional challenges may seek greater family-supportive behaviors from their supervisors and, in turn, feel less accomplished due to the impact of those issues. These individuals may experience diminished feelings of efficacy if external stressors limit their ability to focus fully on their work or achieve their professional goals. These dynamics highlight the complex interplay between individual circumstances, perceptions of support, and the experience of accomplishment, warranting further investigation into how tailored supervisory practices can meet diverse employee needs while fostering resilience and satisfaction.

Results from these SEM add to the existing literature that indicates that supportive, empathetic leadership positively influences team morale, trust, and work-life balance, which can reduce burnout.^{2,15} In contrast, poor relationships with leaders, marked by a lack of trust, ineffective communication, and insufficient support, can lead to a sense of frustration and disillusionment, reducing job satisfaction and contributing to feelings of inefficacy.⁹ Additionally, supportive supervisors foster a more inclusive and compassionate workplace environment, helping team members manage the emotional challenges of primary care, which may reduce burnout rates.^{9,23} Clinicians who struggle to cope with excessive

professional and personal responsibilities are more likely to report symptoms of burnout, including emotional exhaustion and depersonalization, which directly impact their ability to provide high-quality care.²⁴

Limitations

First, the cross-sectional nature of the data limits the ability to infer causal relationships among the variables examined. While structural equation modeling provides insights into potential associations and pathways, longitudinal data would be necessary to confirm these relationships and to better understand the temporal dynamics of burnout and its drivers.

Second, the study relied on survey data collected from 338 participants with a response rate of approximately 60%. Although this response rate is reasonably adequate for survey research in healthcare settings,²⁵ non-response bias cannot be ruled out. Primary Care team members who chose not to participate may differ systematically from respondents in their experiences with burnout or perceptions of organizational factors, potentially affecting the generalizability of the findings.

A limitation of this study is the use of a single-item measure for values alignment derived from the validated Mini-Z questionnaire. While single-item measures are practical and reduce respondent burden, they may lack the depth and nuance provided by multi-item scales, potentially leading to reduced reliability and a narrower capture of the construct. Future research could consider using comprehensive multi-item scales to provide a more robust assessment of values alignment in primary care settings.

Finally, all data were self-reported, which may introduce common method bias and social desirability bias. Participants may have underreported or overreported certain behaviors, experiences, or perceptions, particularly related to sensitive topics such as values alignment or psychological safety. While efforts were made to ensure anonymity and encourage honest responses, these biases may have influenced the observed associations.

Research and Practice Implications

The present findings underscore the need for future research to explore the nuanced drivers of burnout and well-being among primary care employees, particularly in the post-pandemic context. Future studies should investigate the interplay between organizational constraints, values alignment, psychological safety, and supervisory behaviors in shaping clinicians' burnout. Longitudinal research is essential for identifying causal pathways and temporal relationships among these factors, providing deeper insights into the progression of burnout and the protective factors that emerge over time. Moreover, qualitative studies could help elucidate the experiences and perspectives of clinicians, particularly regarding the misalignment of values with leadership and the role of psychological safety in fostering engagement and well-being. Research should also focus on developing and testing targeted interventions aimed at improving organizational culture, enhancing supervisory support, and addressing structural barriers, with particular attention to how these strategies can be tailored to diverse healthcare settings and individual needs.

The findings highlight actionable strategies for healthcare organizations to mitigate burnout and promote well-being among primary care workers. Interventions should prioritize creating a workplace culture that aligns organizational values with those of clinicians, fostering shared goals and mutual respect between staff and leadership. Strengthening psychological safety within teams is also crucial; this involves training leaders to foster open communication, model vulnerability, and create environments where employees feel secure enough to voice their concerns and ideas. Supervisory support practices should be broadened to address both professional development and personal well-being, striking a balance between general guidance and sensitivity to family-related needs. Addressing organizational constraints through workload management, resource optimization, and reducing bureaucratic inefficiencies is equally essential. Taken together, these strategies can create more supportive, resilient primary care environments that promote clinician well-being and sustain high-quality patient care.

Conclusion

This study demonstrates that post-pandemic burnout in primary care is shaped not only by organizational constraints but also by relational and cultural factors within teams. Values alignment with leadership emerged as the strongest relational predictor of emotional exhaustion, followed by psychological safety, underscoring the importance of shared purpose and

safe interpersonal climates. While general supervisor support was positively associated with personal accomplishment, the inverse association with family-supportive supervisor behaviors highlights the complexity of supervisory support and the need for context-sensitive leadership practices. Together, these findings emphasize that mitigating burnout requires addressing both structural barriers and the quality of leader–team relationships to sustain a resilient primary care workforce.

Ethics Committee and Informed Consent Statement

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. This study was reviewed and approved by the Institutional Review Board at Oregon Health & Science University (STUDY00020965). Participation in the online survey was voluntary. Informed consent was obtained electronically prior to participation. On the first page of the survey (information sheet), participants were provided with details about the study purpose, procedures, risks, benefits, confidentiality, and their right to withdraw at any time without penalty. Participants indicated their consent to participate by selecting the “I agree to participate” option before proceeding to the survey questions.

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Disclosure

The authors report no conflicts of interest in this work.

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