

Addressing Physician Wellness in a Rural Federally Qualified Health Center Utilizing the Physician Wellness 2.0 Framework



AVIVA HEALTH

Kody Seeley, DO

Hunter Hammersmith, DO

Roseburg Family Medicine Residency – OPTI West, Aviva Health



Abstract

Physician and provider burnout is a continued problem within the medical field with an evolving perspective on how to approach it. This study was designed to address burnout within a rural federally qualified health center as a PDSA to continually reassess and address systemic drivers of burnout for physicians and providers and assess for potential statistical and financial benefits of implementing such a system. The study utilized the validated burnout assessment tool as a shorter questionnaire and open-ended survey to identify a baseline for burnout levels prior to intervention and systemic drivers. Once this data was collected, an intervention based on feedback was implemented by addressing a driver of medical assistant turnover. After approximately 3 months, the group was re-surveyed showing an overall improvement in physicians and providers meeting criteria for moderate to severe burnout, though not meeting statistically significant change due to small sample size and complex nature of burnout. The savings in potential recruitment cost was estimated at two hundred and fifty thousand to five million dollars and continued potential generation of around 7 million dollars a year for the clinic. The implication for this paper is that further research into and development of collaborative relationships can reduce the rates of burnout experienced by physicians and providers leading to retention and better care of patients.

Methodology

A literature search was conducted using PubMed, CINAHL, Cochrane Library, and MEDLINE Complete to identify existing studies; no directly comparable studies were found.

This PDSA cycle was designed as a cohort study of providers at a rural FQHC, including physicians, resident physicians, physician associates, and nurse practitioners. A baseline survey was administered to assess burnout, followed by a repeat survey after implementation of an intervention. These tools were intended to support ongoing assessment and quality improvement.

Baseline assessment included the Burnout Assessment Tool (BAT) and a qualitative survey. The BAT was selected for its brevity to minimize survey burden and reduce loss to follow-up. It measures overall burnout and four subdomains: emotional exhaustion, mental distancing, emotional impairment, and cognitive impairment. The qualitative survey allowed participants to rank common systemic drivers of burnout and provide open-ended responses. Ranked categories included EMR inefficiencies, unscheduled work hours, documentation burden, productivity targets, interruptions during time off, limited control over scheduling, team communication challenges, and staffing shortages or turnover.

Following IRB approval and baseline data collection, the most significant drivers of burnout were identified and used to guide intervention selection in collaboration with administration. The chosen intervention—a restructuring of medical assistant compensation—was feasible and aligned with identified concerns. Approximately three months post-intervention, the BAT was re-administered. Outcomes were compared to baseline, evaluating changes in overall burnout, subgroup differences, and domain-specific scores. A p-value of 0.01 was used to determine statistical significance.

Results

Of 44 eligible providers, 33 completed the baseline survey (13 residents, 3 faculty, 14 primary care, 3 specialty). At follow-up, 32 providers responded (11 residents, 5 faculty, 14 primary care, 2 specialty), reflecting a net loss of two residents and one specialty provider, with two additional faculty respondents post-intervention.

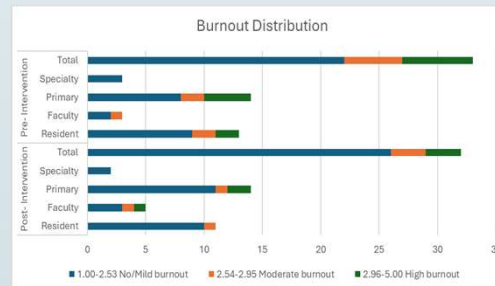
At baseline, the most commonly identified systemic drivers of burnout were EMR inefficiencies (69%), medical assistant (MA) turnover (39%), and limited control over scheduling (19.4%).

Burnout data were analyzed by provider type (primary care, resident, faculty, specialty, and overall) using total BAT scores and subdomains (emotional exhaustion, mental distancing, emotional impairment, cognitive impairment). Pre- and post-intervention comparisons using t-tests and ANOVA showed no statistically significant differences across groups (Table 1). Similarly, comparisons of total burnout scores between provider types were not significant (pre-intervention p=0.80; post-intervention p=0.50).

Results, continued

Given the small sample size, percent change was also assessed. Overall burnout decreased by 43% following the intervention. The largest reductions were observed among residents (70%) and primary care providers (50%). Specialty providers showed no change, while faculty demonstrated a 20% increase in moderate-to-severe burnout, likely reflecting the higher number of faculty respondents at follow-up. These trends are illustrated in the accompanying figure.

Group	Burnout Category	P value
Primary Care	Total Burnout	0.33
	Exhaustion	0.76
	Mental Distancing	0.41
	Emotional Impairment	0.33
	Cognitive Impairment	0.22
Resident Physician	Total Burnout	0.48
	Exhaustion	0.22
	Mental Distancing	0.37
	Emotional Impairment	0.24
	Cognitive Impairment	0.46
Residency Faculty	Total Burnout	0.39
	Exhaustion	0.24
	Mental Distancing	0.30
	Emotional Impairment	0.67
	Cognitive Impairment	0.63
Specialist Provider	Total Burnout	0.34
	Exhaustion	0.46
	Mental Distancing	0.21
	Emotional Impairment	0.56
	Cognitive Impairment	0.76
All Provider Groups	Total Burnout	0.37
	Exhaustion	0.52
	Mental Distancing	0.37
	Emotional Impairment	0.97
	Cognitive Impairment	0.26



Conclusion

No statistically significant differences in overall burnout or subdomains were observed pre- and post-intervention (lowest p=0.21), likely due to small sample size and limited statistical power. However, moderate-to-severe burnout decreased by 43%, suggesting meaningful practical impact in a small rural healthcare setting.

This reduction—from 11 to 6 affected providers—has important implications for workforce stability. Addressing systemic drivers of burnout through collaborative interventions may improve retention in rural communities, where provider loss is especially disruptive. Even modest retention gains could translate into substantial cost savings (estimated \$250,000–\$5 million in recruitment costs) and preserved revenue (approximately \$7 million), supporting organizational and community health.

This study addressed only one contributor to burnout, despite its multifactorial nature. Qualitative responses highlighted additional drivers, including EMR inefficiencies, limited recovery time, and interruptions during time off. Broader, longitudinal interventions may yield greater impact.

The goal of this PDSA cycle was to implement a structured, collaborative approach to identifying and addressing system-level stressors. While statistical significance was not achieved, the findings suggest that targeted interventions may improve both provider well-being and financial stability. Ongoing PDSA cycles and larger studies are needed to further evaluate and refine these strategies.

References

- BODENHEIMER T, SINSKY C. FROM TRIPLE TO QUADRUPLE AIM: CARE OF THE PATIENT REQUIRES CARE OF THE PROVIDER. *THE ANNALS OF FAMILY MEDICINE*. 2014;12(6):573-576. DOI:10.1370/afm.1713
- BOND AM, CASALINO LP, TAI-SEALE M, ET AL. PHYSICIAN TURNOVER IN THE UNITED STATES. PUBLISHED ONLINE JULY 11, 2023. DOI:10.7326/M23-2504
- EMINA HADZIBAJRAMOVIC, WILMAR SCHAUFFEL, HANS DE WITTE. THE ULTRA-SHORT VERSION OF THE BURNOUT ASSESSMENT TOOL (BAT-4)—DEVELOPMENT, VALIDATION, AND MEASUREMENT INVARIANCE ACROSS COUNTRIES, AGE AND GENDER. *PLoS ONE*. 2024;19(2):E0297943. DOI:10.1371/JOURNAL.PONE.0297943
- JOHN A, JEAN-BAPTISTE BOULLON-MINOIS, BAGHERI R, ET AL. THE INFLUENCE OF BURNOUT ON CARDIOVASCULAR DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS. *FRONTIERS IN PSYCHIATRY*. 2024;15. DOI:10.3389/fpsyg.2024.1326745
- MACKINNON M, MURRAY S. REFRAMING PHYSICIAN BURNOUT AS AN ORGANIZATIONAL PROBLEM: A NOVEL PRAGMATIC APPROACH TO PHYSICIAN BURNOUT. *ACADEMIC PSYCHIATRY*. 2017;42(1):123-128. DOI:10.1007/s40596-017-0689-1
- METE M, GOLDMAN C, SHANAFELT T, MARCHALIK D. IMPACT OF LEADERSHIP BEHAVIOUR ON PHYSICIAN WELL-BEING, BURNOUT, PROFESSIONAL FULFILLMENT AND INTENT TO LEAVE: A MULTICENTRE CROSS-SECTIONAL SURVEY STUDY. *BMJ OPEN*. 2022;12(6):E057554. DOI:10.1136/bmjopen-2021-025754
- PATEL R, BACHU R, ADIKEY A, MALKI M, SHAH M. FACTORS RELATED TO PHYSICIAN BURNOUT AND ITS CONSEQUENCES: A REVIEW. *BEHAVIORAL SCIENCES*. 2018;8(11). DOI:10.3390/bs8110098
- RYAN E, HORE K, POWER J, JACKSON T. THE RELATIONSHIP BETWEEN PHYSICIAN BURNOUT AND DEPRESSION, ANXIETY, SUICIDALITY AND SUBSTANCE ABUSE: A MIXED METHODS SYSTEMATIC REVIEW. *FRONTIERS IN PUBLIC HEALTH*. 2023;11. DOI:10.3389/fpubh.2023.1133484
- SHANAFELT T, BOONE S, TAN L, ET AL. BURNOUT AND SATISFACTION WITH WORK-LIFE BALANCE AMONG US PHYSICIANS RELATIVE TO THE GENERAL US POPULATION. *ARCHIVES OF INTERNAL MEDICINE*. 2012;172(18):1377. DOI:10.1001/ARCHINTERNMED.2012.3199
- SHANAFELT T. PHYSICIAN WELL-BEING 2.0: WHERE ARE WE AND WHERE ARE WE GOING? *MAYO CLINIC PROCEEDINGS*. 2021;96(10):2682-2693. DOI:10.1016/j.mayocp.2021.06.005
- PRACTICEMATCH. (2024) THE ACTUAL COST TO RECRUIT A PHYSICIAN IN 2024 | PRACTICEMATCH. PRACTICEMATCH. <https://www.practicematch.com/employers/recruitment-articles/the-actual-cost-to-recruit-a-physician-in-2024-cfm>
- GILES, C. (2023, JULY 25). HOW MUCH REVENUE DO PHYSICIANS GENERATE? NOW HEALTHCARE RECRUITING. <https://www.nprnow.com/how-much-revenue-do-physicians-generate/>