

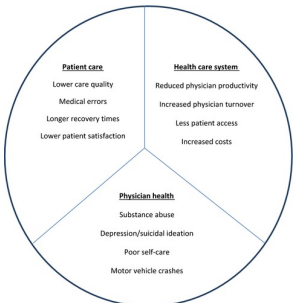
# An Analysis on Gender and Race for Burnout Among Michigan Internists

## Elan Pszenica<sup>1</sup>, Jookta Basu<sup>1</sup>, Esha Ahmed<sup>1</sup>, Hugo Davila MD<sup>1,2,3</sup>

<sup>1</sup>Oakland University William Beaumont School of Medicine, <sup>2</sup>Department of Internal Medicine, Corewell Health, <sup>3</sup>American College of Physicians

### Introduction

Burnout among physicians, particularly in the field of internal medicine, has become a significant concern in recent years. This condition is characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment, which can have detrimental effects on both healthcare providers and patient care.<sup>1</sup> While burnout is a recognized issue globally, its impact on internal medicine physicians in Michigan has not been comprehensively studied. Understanding the unique stressors faced by these physicians is critical for developing targeted interventions to reduce burnout rates and improve the overall healthcare environment. Internal medicine physicians often face intense workloads, long hours, administrative burdens, and increasing patient demands, which contribute to high levels of stress.



**Figure 1** The consequences of high burnout levels affect three key areas of healthcare: Patient care quality is reduced resulting in lower quality care, the healthcare system experiences reduced physician productivity and increased costs, and physician health is negatively impacted, resulting in higher rates of substance abuse, depression, and suicidal ideation.<sup>2</sup>

Burnout not only affects the well-being of physicians but also has a negative impact on patient care, leading to reduced quality of service, increased medical errors, and higher rates of physician turnover.<sup>2</sup> Moreover, the costs associated with burnout, such as absenteeism, reduced productivity, and the need for mental health interventions, place a significant burden on healthcare systems. Understanding the specific causes and prevalence of burnout among internal medicine physicians in Michigan is therefore essential for mitigating these adverse effects.

### Aims and Objectives

To explore the degree of burnout impacting practicing internists in Michigan.

To investigate factors influencing burnout rates in Michigan internists.

To quantify the prevalence of burnout in Internists practicing in Michigan.

To determine if there is a difference in burnout rates in physicians based on race and gender of providers.

### Methods

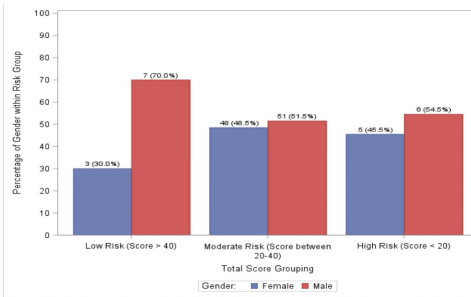
The Mini Z 2.0 Survey is a free, validated, and brief survey derived from a 2009 study published in the annals of Internal Medicine.<sup>3</sup> It works by identifying areas of challenge, satisfaction, stress, and burnout in the healthcare setting. There are two subscales in the Mini Z 2.0. The first subscale asks questions on a supportive work environment. A score  $\geq 20$  is considered a highly supportive practice. The second subscale asks questions related to work pace and EMR stress. A score  $\geq 20$  is an office with reasonable pace and manageable EMR stress. The scores are then combined and a score  $\geq 40$  is considered a joyful workplace with lower risks of burnout. A combined score between 20-40 shows moderate risk for burnout, while a score below 20 is a high risk for burnout.

**Figure 2** The mini Z survey 2.0 is represented by 10 scaled questions and 2 subscales. The first 5 questions are for subscale 1 and rate physicians on a supportive work environment. It also directly asks about levels on burnout from the physician. Questions 5-10 relate to subscale 2 and have physicians rate their work pace and EMR stress. Question 11 is an optional open question for physicians to elaborate and provide answers to their thoughts on how to improve the workplace.<sup>3</sup>

An anonymous online validated survey link was distributed through the Michigan ACP via email to registered internists in the state of Michigan and a QR code at the ACP Fall Scientific Meeting in 2023. Anonymous, unidentifiable data was collected and stored in a spreadsheet. A statistical analysis was performed on the de-identified data for different factors related to physician burnout based on respondent demographics. A total of 123 members completed the survey and were used in this study.

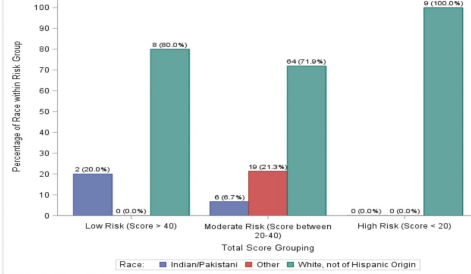
### Results

#### Supportive Work Environment by Gender (Subscale 1)



Gender, n (%)	Not Highly Supportive (Subscore < 20) (N=87)	Highly Supportive Practice (Subscore $\geq$ 20) (N=36)	Total (N=123)	P-Value
Female	42 (49.4%)	14 (40.0%)	56 (46.7%)	0.3476
Male	43 (50.6%)	21 (60.0%)	64 (53.3%)	
Missing	2	1	3	

#### Supportive Work Environment by Race (Subscale 1)



Race Grouped, n (%)	Not Highly Supportive (Subscore < 20) (N=74)	Highly Supportive Practice (Subscore $\geq$ 20) (N=34)	Total (N=108)	P-Value
Indian/Pakistani	6 (8.1%)	2 (5.9%)	8 (7.4%)	0.0749
Other	17 (23.0%)	2 (5.9%)	19 (17.6%)	
White, not of Hispanic Origin	51 (68.9%)	30 (88.2%)	81 (75.0%)	

### Conclusions

From our data we cannot conclude that there is a statistically significant difference in gender or race in relation to burnout for either subscales. The prevalence of high risk for burnout was 14/123 (11.4%) of respondents. The data shows that a majority of responses scored low on subgroups 1 and 2, marking a not very supportive workplace with high levels of work pace and EMR stress. Our results highlight that there is a growing need to further investigate and address these problems in the work place for Internists practicing in Michigan.

This study served as an preliminary investigation into the rates of burnout in Michigan and was the first of its kind to be administered through the Michigan ACP. Our results were limited by sample size, and would benefit from a larger sample size. For future studies we would recommend a larger sample size to provide more data on demographics. Our work lays a foundation for larger studies in the future to better capture the differences in how burnout is affecting Michigan Internists.

### References

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### Acknowledgements

We would like to give our Acknowledgments to the Michigan ACP chapter for their participation and support of this research study.

Thank you to Dr. Dwayne Baxa and Dr. Kara Sawarynski for their support on this project.