



Burnout and Medical Errors in Anesthesiology

Amy Vinson, MD, FAAP

What is burnout?

- Merriam-Webster: exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration



Maslach burnout inventory

1980

- Maslach (~1980)
 - 3 Major Metrics of Burnout
 - Emotional Exhaustion
 - Low Sense of Personal Accomplishment
 - Depersonalization

High Risk for Burnout



Emotional Exhaustion

and/or



Depersonalization

Burnout Syndrome



Emotional Exhaustion

+



Depersonalization

+



Low Sense of Personal Accomplishment

ANESTHESIOLOGY

Burnout Rate and Risk Factors among Anesthesiologists in the United States

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Burnout Rate and Risk Factors among Anesthesiologists in the United States

A national survey completed by 3,898 attending anesthesiologists

Assessed 3 dimensions with Maslach Burnout Inventory Human Services Survey:

- Emotional exhaustion
- Depersonalization
- Feelings of personal accomplishment



- 59% of participants were at high risk of burnout
- 14% met criteria for Burnout Syndrome:

- High scores on emotional exhaustion and depersonalization
- Low personal accomplishment score



Perceived lack of support at work (odds ratio, 10.0 [95% CI, 5.4 - 18.3]) and home (odds ratio, 2.1 [95% CI, 1.7 - 2.7]) were most strongly associated with Burnout Syndrome



- The prevalence of high risk for burnout and Burnout Syndrome was high in a large, national, survey-based study of attending anesthesiologists.
- Burnout Syndrome was highly associated with workplace factors rather than personal factors.

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Afonso AM, *et al.* ANESTHESIOLOGY, 2021.

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Figure 2: Symptoms Associated with Burnout

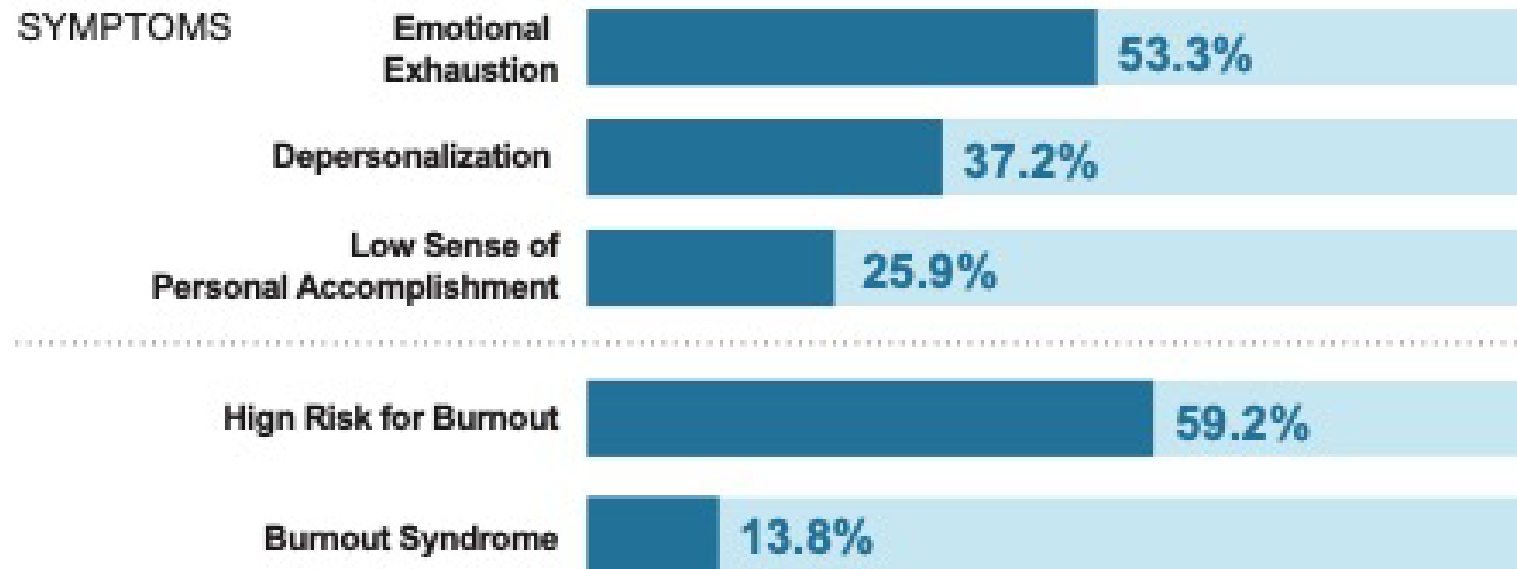


Figure 1: Burnout and Burnout Syndrome

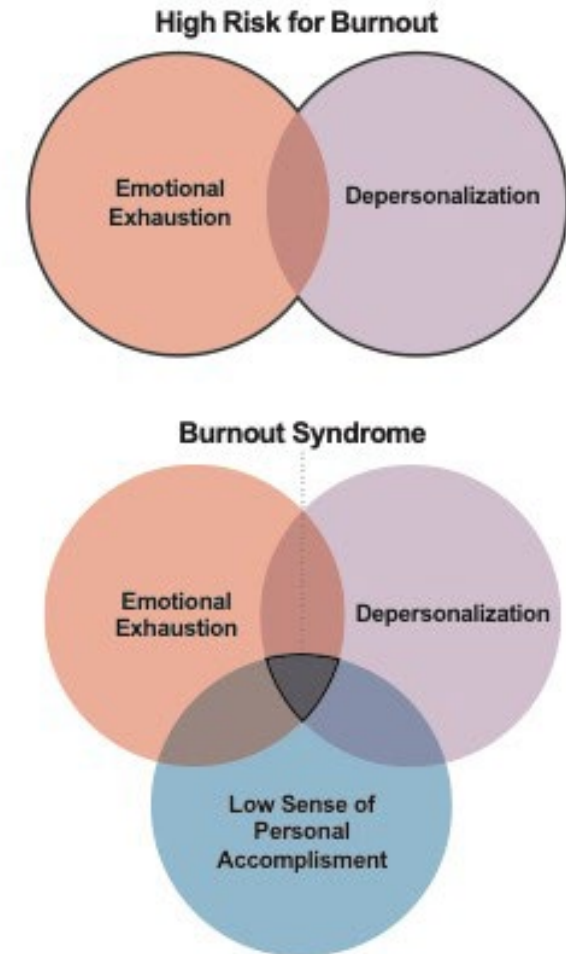
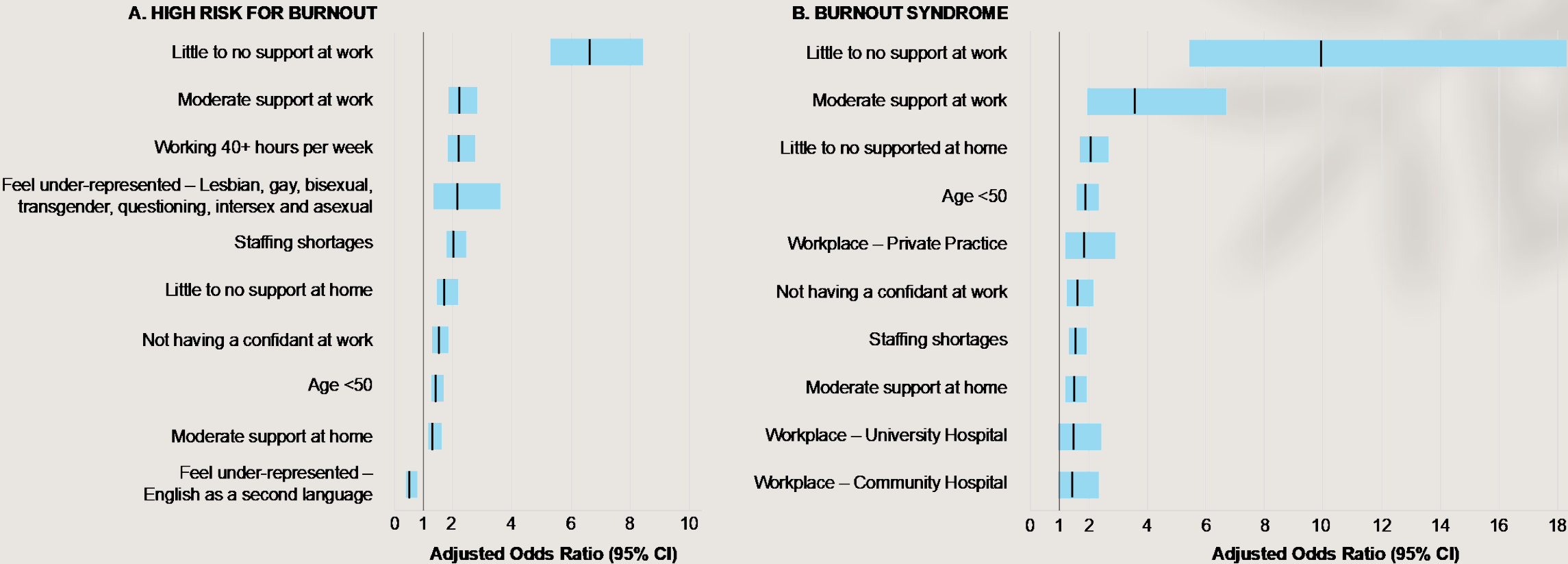


Figure 3: Risk Factors Associated with Burnout



A close-up, black and white photograph of a dandelion seed head. The seed head is composed of numerous small, feathery seeds that are spread out in all directions, creating a soft, cloud-like appearance. The background is a solid, dark gray, which makes the white seed head stand out prominently. The lighting is soft, highlighting the delicate structure of the seeds.

Then some things happened...

2022 Update

Figure 2: Change in burnout symptoms from 2020 to 2022

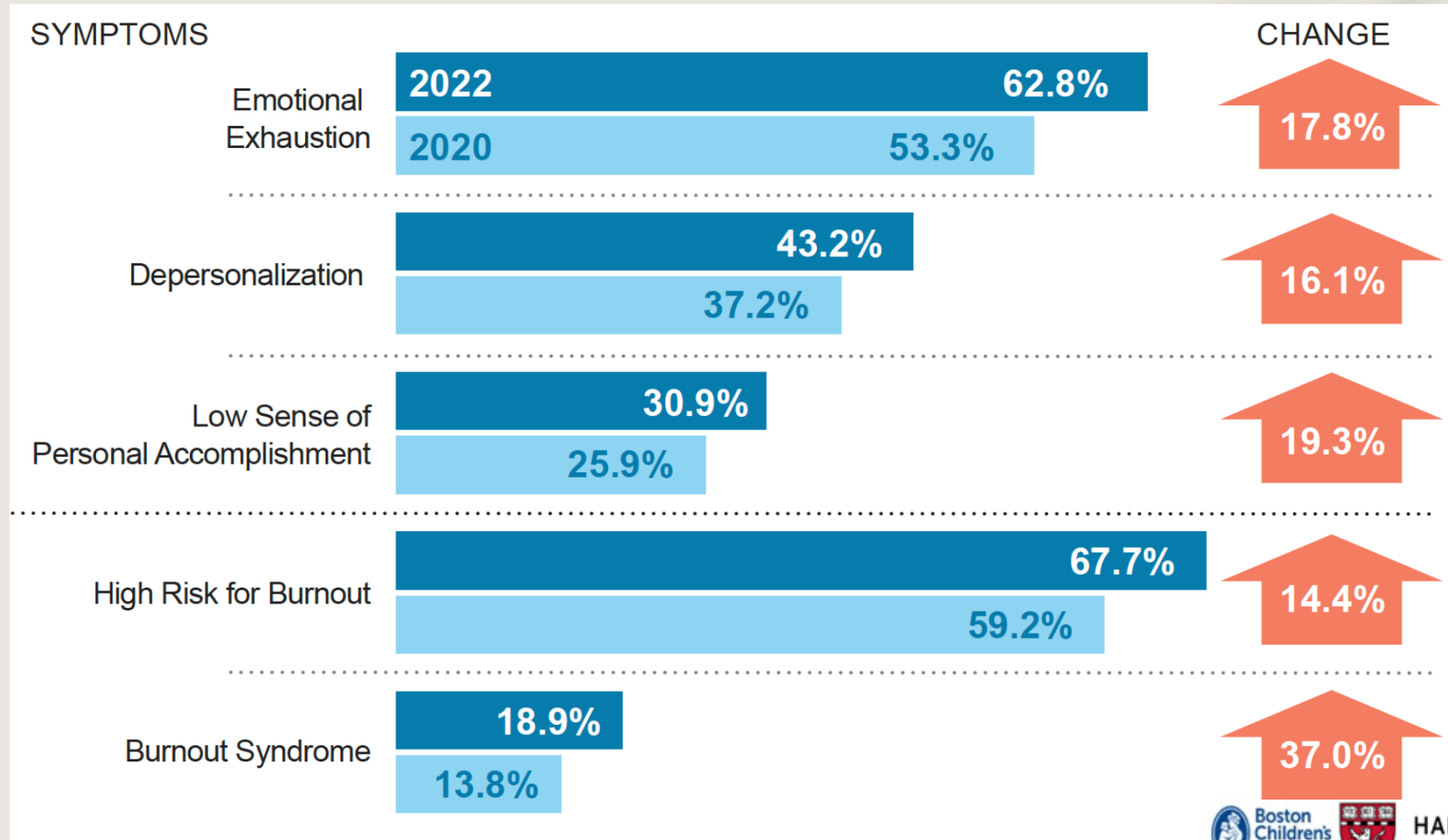


Figure 3: Geographic distribution of burnout and burnout syndrome across the United States

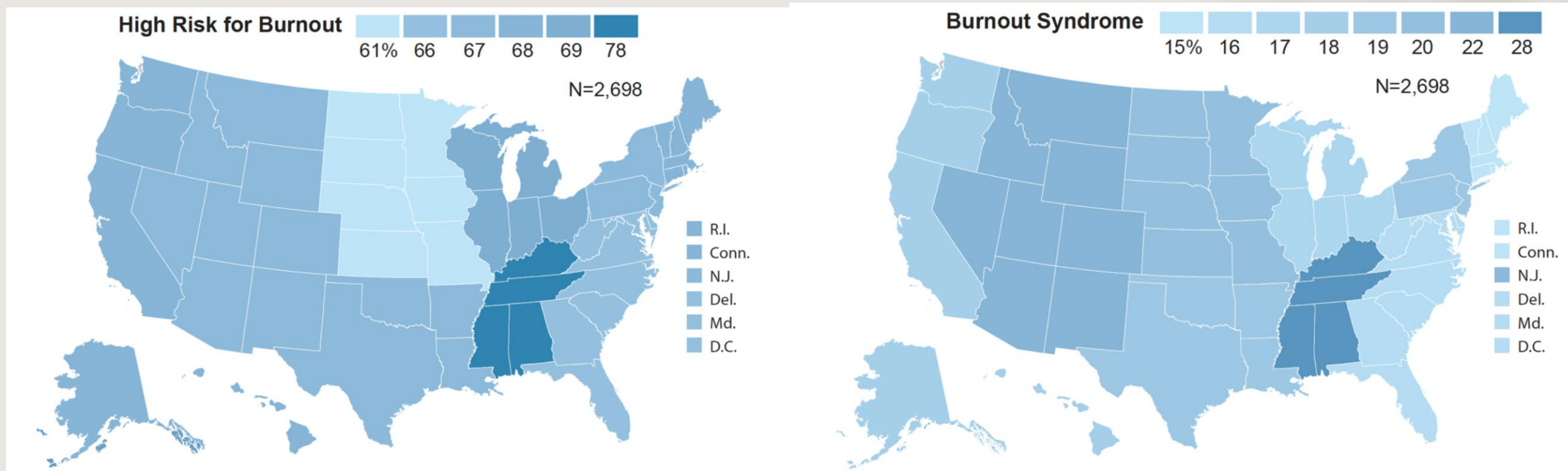
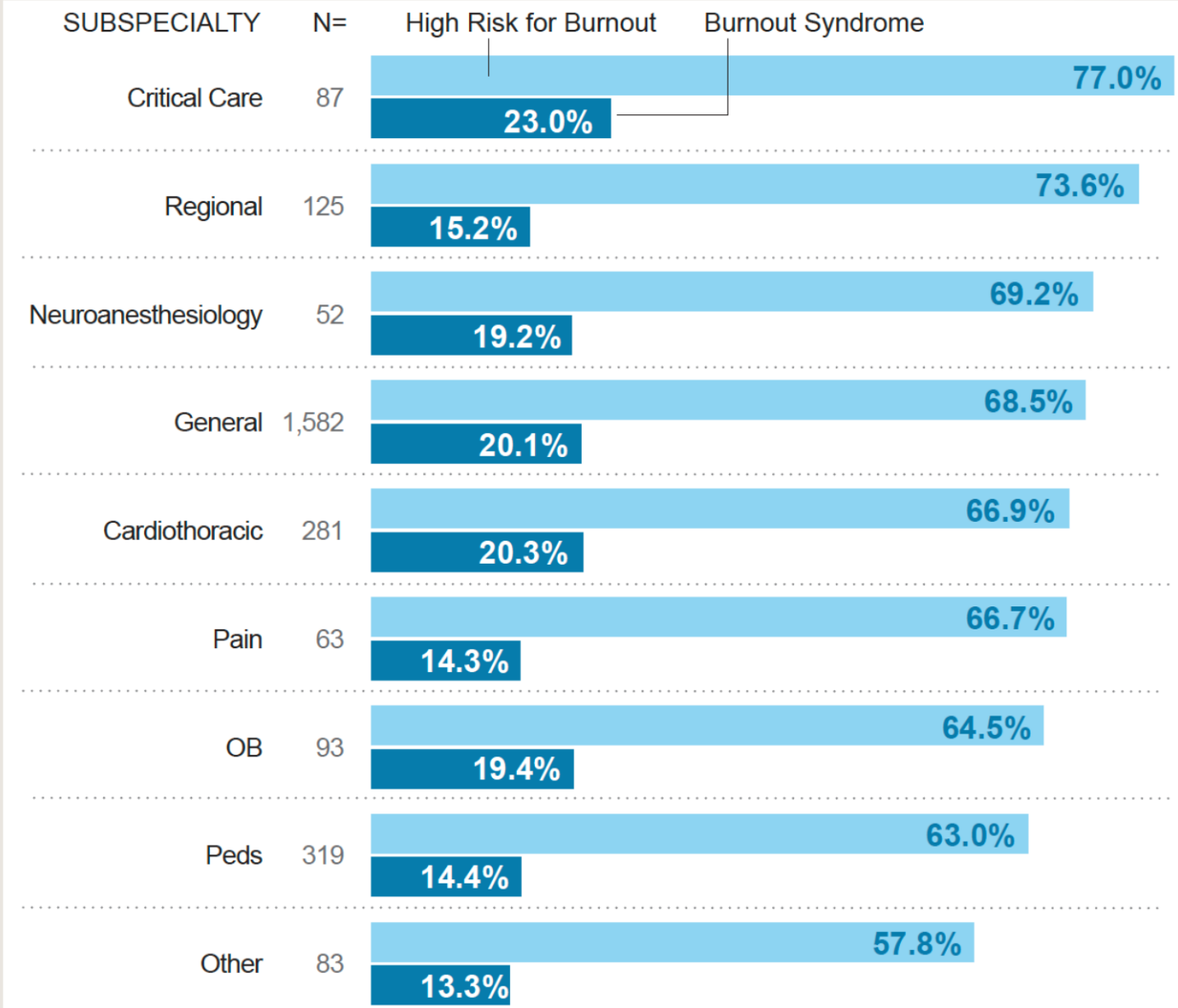


Figure 4: Burnout and burnout syndrome by subspecialty of anesthesiology



| Variable | Analysis Sample (N = 2,698) | High Risk for Burnout | Burnout Syndrome |
|--------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------|-------------------|
| Has the COVID-19 pandemic accelerated your plans for retirement? | | | |
| No | 1,676 (62.1%) | 970/1,676 (57.9%) | 228/1,676 (13.6%) |
| Yes | 1022 (37.9%) | 857/1,022 (83.9%) | 282/1,022 (27.6%) |
| How likely are you to leave your current job within the next 2 years? | | | |
| Very unlikely | 609 (22.6%) | 305/609 (50.1%) | 65/609 (10.7%) |
| Unlikely | 560 (20.8%) | 346/560 (61.8%) | 91/560 (16.3%) |
| Neutral | 559 (20.7%) | 415/559 (74.2%) | 118/559 (21.1%) |
| Likely | 446 (16.5%) | 343/446 (76.9%) | 106/446 (23.8%) |
| Very likely | 524 (19.4%) | 418/524 (79.8%) | 130/524 (24.8%) |
| Have you changed your full-time status since the beginning of 2020 or do you plan to do so in the next year? | | | |
| No | 1869 (69.3%) | 1,212/1,869 (64.9%) | 326/1,869 (17.4%) |
| Yes - I have reduced my employment status | 666 (24.7%) | 499/666 (74.9%) | 150/666 (22.5%) |
| Yes - I have increased my employment status | 59 (2.2%) | 42/59 (71.2%) | 17/59 (28.8%) |
| Yes - I am no longer practicing | 39 (1.5%) | 29/39 (74.4%) | 7/39 (18%) |
| Yes - I have returned to practice | 28 (1%) | 19/28 (67.9%) | 5/28 (17.9%) |
| Other | 37 (1.4%) | 26/37 (70.3%) | 5/37 (13.5%) |
| Data are presented as n (%). | | | |

Figure 7: Perceived beneficial interventions to address burnout among anesthesiologists

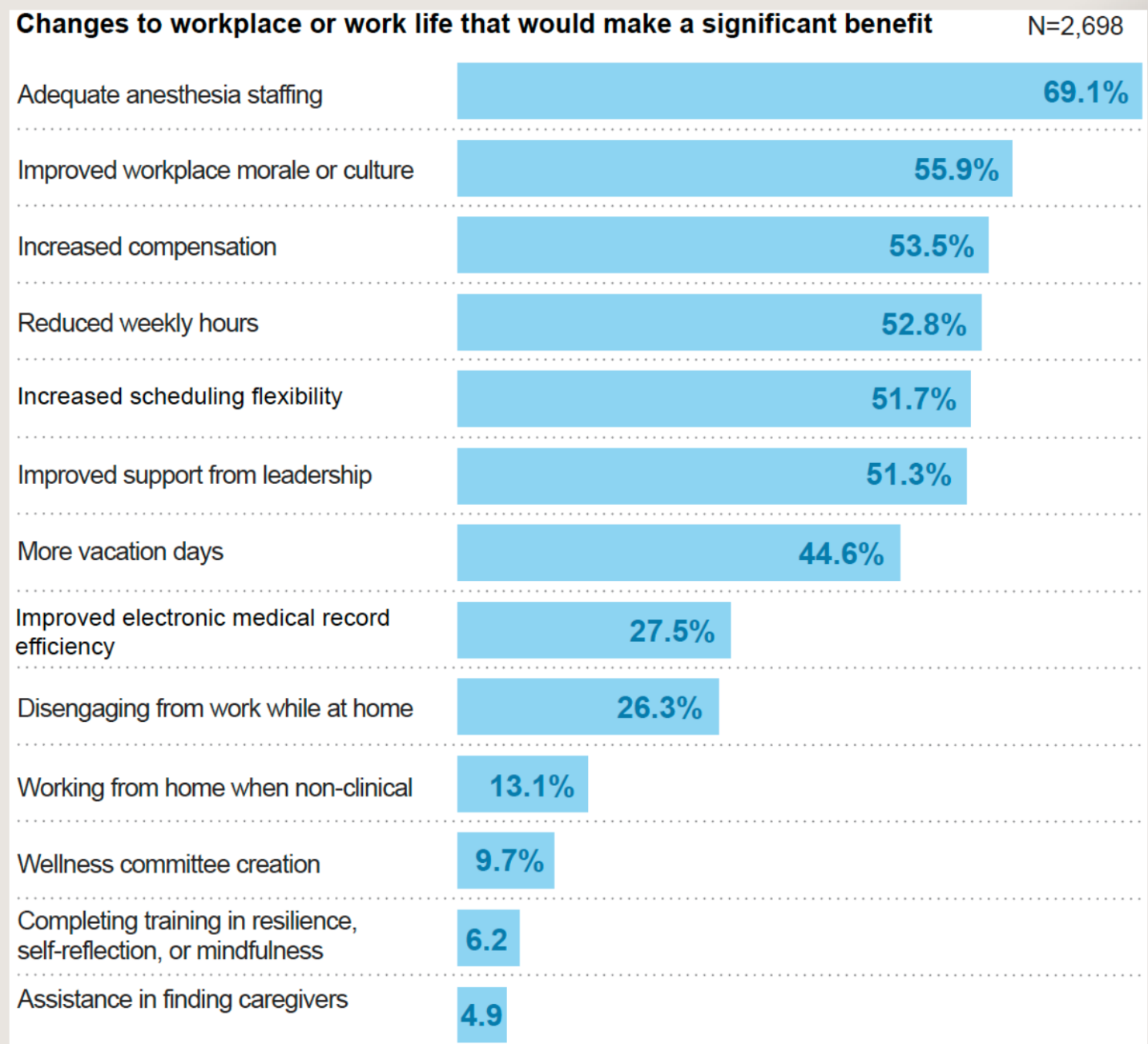
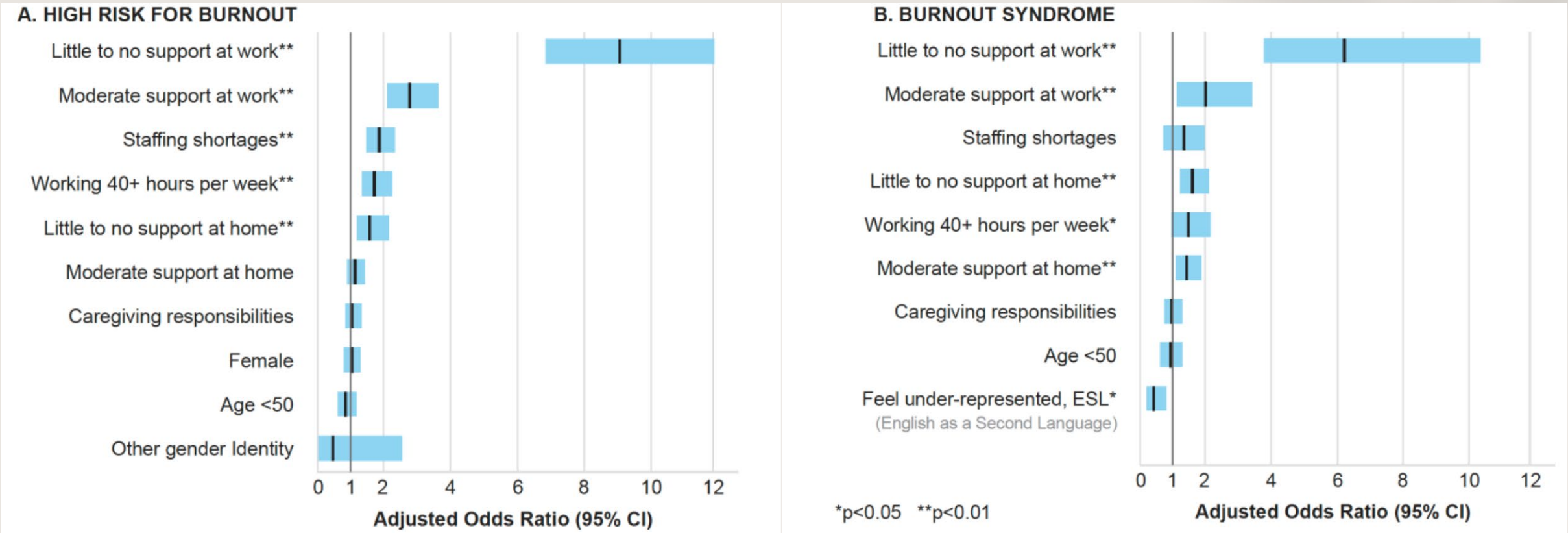


Figure 6: Independent risk factors associated with burnout and burnout syndrome



Why is this job
so hard?



Miracles aren't always easy

A PIECE OF MY
MIND

What I Learned About Adverse Events From Captain Sully It's Not What You Think

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This is not a piece about how medicine should take a cue from aviation and incorporate simulations into training. It is not about how medicine should learn from aviation and develop emergency checklists and algorithms. It is not about how medicine should learn from aviation and promote blame-free error report-

ately afterward, and the total impact took some time to process. The flight crew also took time away, and one flight crew member with 38 years of experience never returned. I was surprised to know that after a hugely successful demonstration of teamwork and skill, and a landmark safety save, all of the parties

Table 4 Most commonly reported physical and psychosocial symptoms

| Physical symptoms | n (%) | Psychosocial symptoms | n (%) |
|--------------------------|---------|--------------------------------|---------|
| Extreme fatigue | 16 (52) | Frustration | 24 (77) |
| Sleep disturbances | 14 (45) | Decreased job satisfaction | 22 (71) |
| Rapid heart rate | 13 (42) | Anger | 21 (68) |
| Increased blood pressure | 13 (42) | Extreme sadness | 21 (68) |
| Muscle tension | 12 (39) | Difficulty concentrating | 20 (65) |
| Rapid breathing | 11 (35) | Flashbacks | 20 (65) |
| | | Loss of confidence | 20 (65) |
| | | Grief | 20 (65) |
| | | Remorse | 19 (61) |
| | | Depression | 17 (55) |
| | | Repetitive/intrusive memories | 16 (52) |
| | | Self-doubt | 16 (52) |
| | | Return to work anxiety | 15 (48) |
| | | Second guessing career | 12 (39) |
| | | Fear of reputation damage | 12 (39) |
| | | Excessive excitability | 11 (35) |
| | | Avoidance of patient care area | 10 (32) |

Impact on Anesthesiologists

Anesthesia Patient Safety Foundation

Section Editor: Sorin J. Brull

The Impact of Perioperative Catastrophes on Anesthesiologists: Results of a National Survey

Farnaz M. Gazoni, MD, Peter E. Amato, MD, Zahra M. Malik, MD, and Marcel E. Durieux, MD, PhD

- 88% needed time to recover – 19% never did, 12% considered change in career
- 67% felt subsequent care compromised over next 4 hours
- 7% were given time off

Support after adverse events

Assessing levels of support for residents following adverse outcomes: A national survey of anesthesia residency programs in the United States

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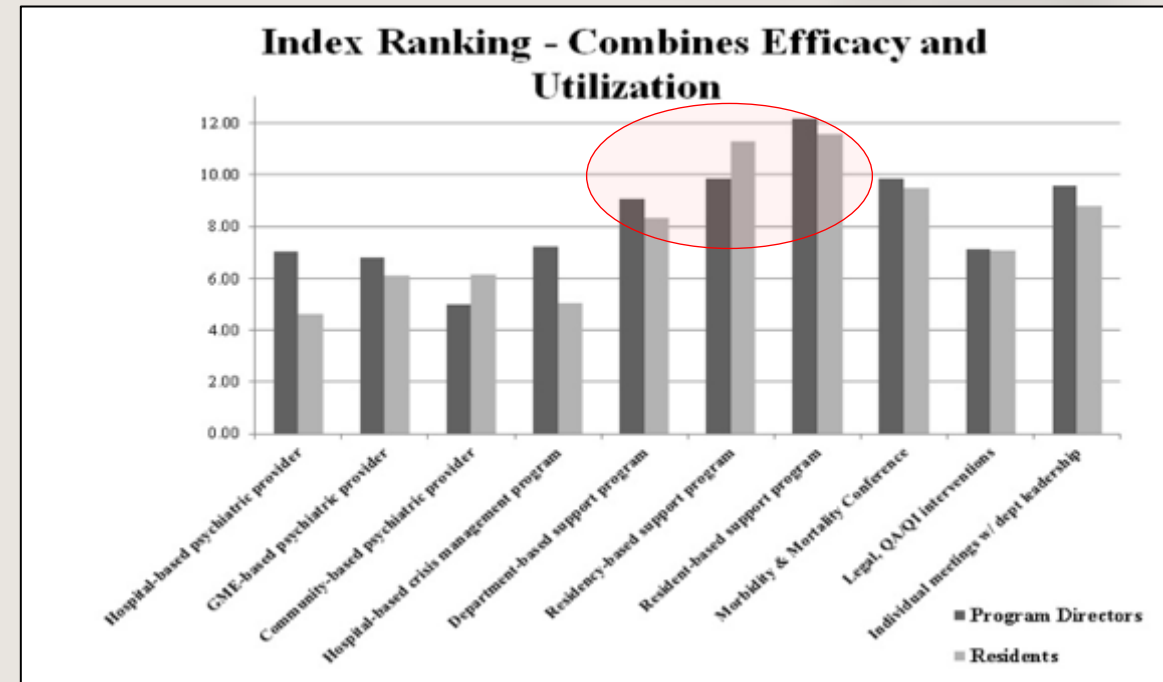
¹Boston Children's Hospital, USA and ²Beth Israel Deaconess Medical Center, USA

Abstract

Aim: The impact of physician burnout is becoming apparent in the medical community, especially among anesthesiologists and young physicians. Anesthesia residents will experience emotionally charged adverse events during their training. The objective

Support After Adverse Outcomes

- Following adverse outcomes, peer support and meetings with departmental leadership are particularly helpful
- M&M conference are an opportunity
- Department-based support programs are highly utilized
- Resource Awareness = low hanging fruit



Whatever you are
feeling...

However you are
responding....

