SCHOOL OF MEDICINE

DEPARTMENT OF ANESTHESIOLOGY & CRITICAL CARE MEDICINE

Burnout in Anesthesia Residency: A Quality Improvement Project

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Introduction

Burnout (BO) is a syndrome characterized by depersonalization (detachment from patients), emotional exhaustion and loss of sense of achievement. [1]

Wellness varies by individual, and is characterized by dynamic self-awareness and positive perception that results in healthy adaptive choices. A combination of mental, physical, emotional, intellectual and social states that allow engagement with work. [1]

Many features of anesthesiology training and practice may make individuals prone to developing burnout [1,2,3]

Intrinsic Attributes of Anesthesiology Associated with Burnout [1,2,3]
High work demands (resident hours, case load)
Low autonomy (clinical decision making, consulting provider)
Lack of social support (institutionally, family, peers)
Acute stress (administering emergency care)
Chronic stress and fatigue
Negative perception from outside
Time constraints
Lack of control of Schedule
Financial stress

Table 1: The degree to which these factors increase Risk of Burnout (ROB) may differ in individuals. However, as training progresses signs of burnout typically increase.[3]

Methods and Materials

A UNM anesthesia resident task force implemented a QI Project with the goal of improving departmental burnout using the PDSA (Plan Do Study Act) cycle model. Biannual Maslach Burnout Inventory (MBI) surveys were sent department wide. The initial survey was used to assess Burnout (BO) and Risk of Burnout (ROB) within our department.

After the first survey, we presented our interim findings and data to the department in Grand Rounds, and publicized resources for those experiencing burnout. A second MBI with additional questions related to COVID19 was administered six months later. Between the second and third surveys, several departmental interventions developed organically, which we retrospectively observed. These interventions involved a new consistent early next day schedule release, resident/midlevel work equity, and improving resident social connectedness. Our final survey inquired about the effectiveness of these "interventions" and included a final MBI Survey.

Results

Survey #1: 61% participation (no sub-groups)

21% BO or ROB

- 6% high emotional exhaustion
- 48% high depersonalization
- 43% low on personal achievement index

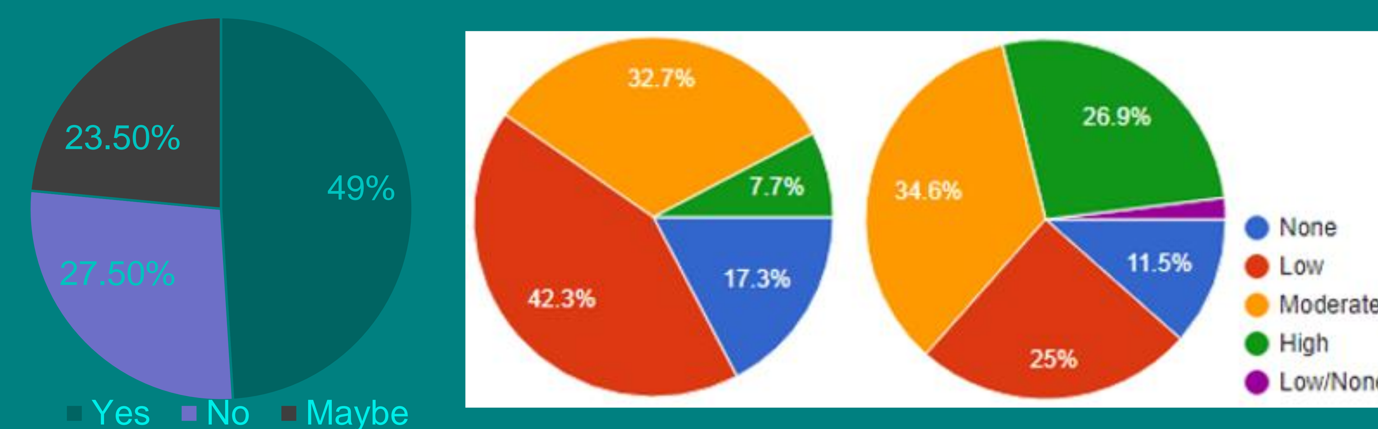
Survey #2 COVID ERA: 41% participation

25% BO or ROB

No difference between sub-groups (Attendings/Midlevels/Residents)

Has COVID Significantly increased your feelings of burnout?

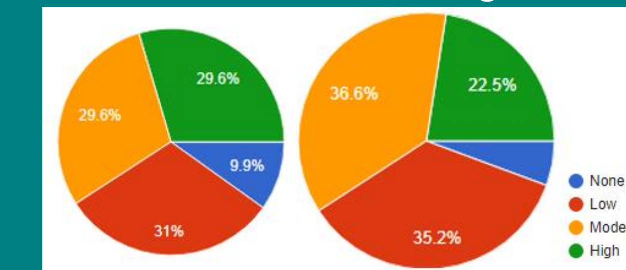
Perceived level of Burn out 6 months ago (left) and Now (right)



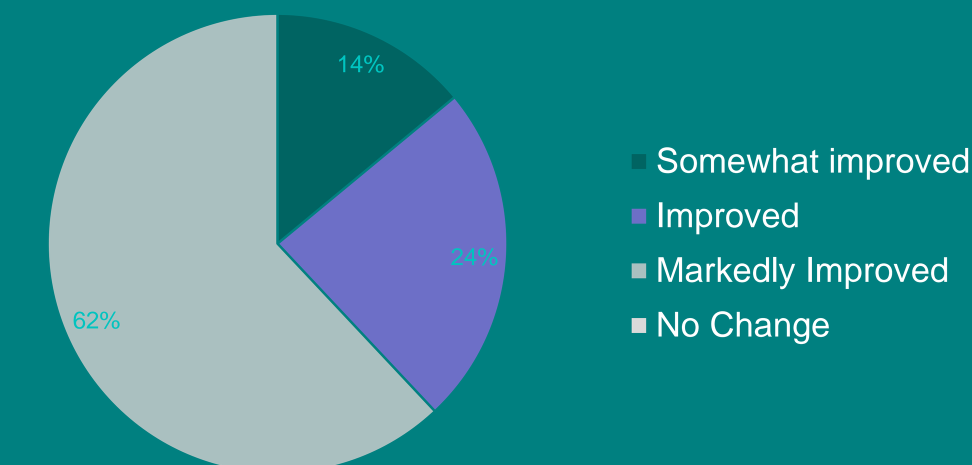
Survey #3 (post "interventions")

- **30%** BO or ROB within the department (55% participation)
- **Resident 52%** | **Attending 27%** | **Midlevel 0%**

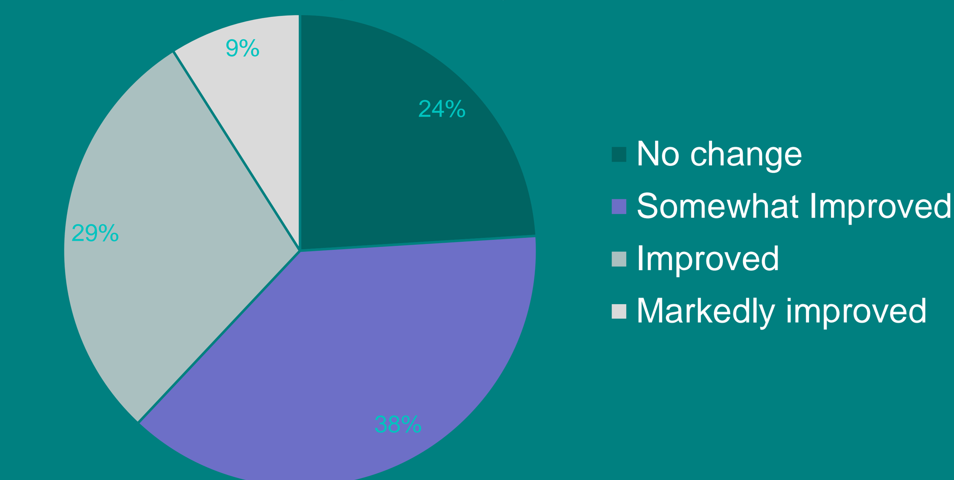
Perceived Burnout 6 months ago versus Now



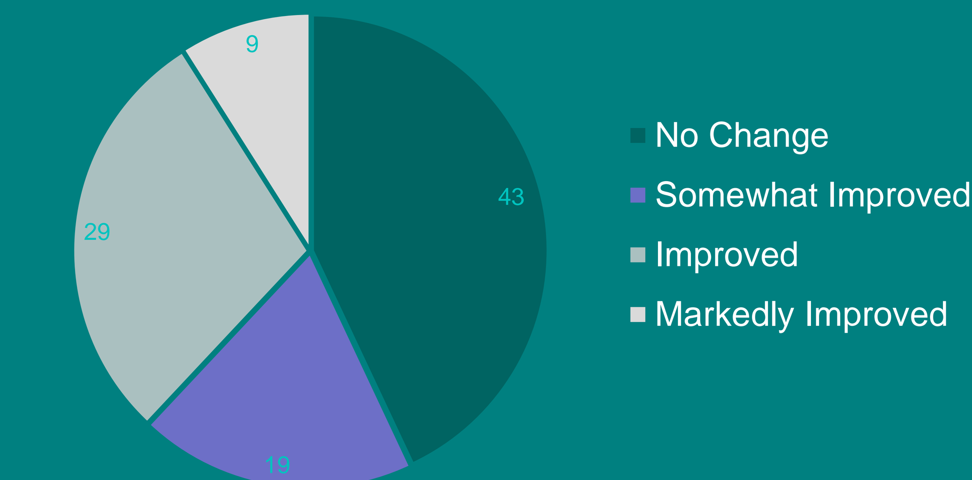
How has consistent early release of next day OR (1500) schedule improved your sense of wellness?



How has the Department's policy change regarding breaks for residents and mid-levels improved your sense of wellness?



How have the resident led efforts to connect socially (secure text threads, social distanced meet ups etc.) improved your sense of wellness?



Conclusion

- Burnout is not only detrimental to physicians but also a patient safety issue [3]
- A National Survey in 2020 revealed 41% of anesthesiologist's are experiencing BO [4] and up to 57% Anesthesiology residents by CA-3 year [3]
- Overcoming BO in Anesthesiology is challenging due to the inherent attributes of practice and systemic barriers [1,2,3]
- **62%** of residents surveyed reported prioritizing earlier next day schedule release markedly improved their sense of wellness.
- To a lesser extent, break equity and social connectedness had some positive effect on residents' perception of wellness
- COVID19 & Loss of residents leading to increased work burden likely contributing factors

References

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2. Answine JF, Lu AC, Levy TSM. Burnout, Wellness, and Resilience in Anesthesiology. *International Anesthesiology Clinics.* 2019;57(3):138-145.
3. Pinyavat T, Mulaikal TA. Fostering physician well-being in anesthesiology. *International Anesthesiology Clinics.* 2020;Publish Ahead of Print. doi:10.1097/AIA.0000000000000300
4. https://www.medscape.com/slideshow/2020-lifestyle-burnout-6012460