



# ACPH 2021

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# Abstract book

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\* Being a research-based conference, the agenda is determined by the abstract submissions received.

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## **Oral presentations**

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Anxiety, depression and mental health

# Do practicing health care providers suffer more symptoms of anxiety and depression than the general public?

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## Learning objectives

1. Determine the relative rates and impact of symptoms of anxiety and depression in practicing healthcare providers as compared to the general public.
2. Assess whether being a practicing healthcare provider mediated the effect of these symptoms on daily life.

## Background

Burnout has been recognized in healthcare providers, but the prevalence of symptoms of depression and anxiety among this group vis-à-vis the general population remains poorly understood. We sought to determine whether “health diagnosing and treating practitioners” who provide direct patient care were more likely to report these symptoms than the general population.

## Methods

The National Health Interview Survey, administered annually by the CDC, is the largest source of health information designed to be representative of the US civilian non-institutionalized population. Participants were asked their occupation, and for healthcare workers, whether they were involved in direct patient care. Further, they were asked how often during the past 30 days they felt (a) so sad nothing could cheer them up, (b) restless or fidgety, (c) hopeless, (d) that everything was an effort, and (e) worthless. Responses were dichotomized into “all of the time/most of the time/some of the time” vs. “a little/none of the time”. They were also asked how much they felt these feelings interfered with their life or activities. Responses were dichotomized into “a lot/some” vs. “a little/not at all”.

## Results

Of the 24,780 respondents (representing 243,155,441 people in the population), 2.49% were practicing healthcare providers (PHPs). Compared to the general population, they were less likely to report feelings of

sadness (7.52% vs. 12.05%,  $p=0.007$ ), restlessness (16.51% vs. 21.65%,  $p=0.021$ ), hopelessness (3.68% vs. 7.44%,  $p<0.001$ ), as though everything was an effort (12.45% vs. 18.86%,  $p=0.001$ ), and worthlessness (2.83% vs. 6.32%,  $p<0.001$ ) at least some of the time. PHPs however were more likely to report that these feelings interfered with their life or activities, at least somewhat (81.10% vs. 75.30%,  $p=0.012$ ). Controlling for age, race, education, income, gender, insurance and region, being a PHP was no longer protective against sadness (OR=1.05; 95% CI: 0.65-1.70,  $p=0.830$ ), restlessness (OR=0.87; 95% CI: 0.63-1.20,  $p=0.395$ ), hopelessness (OR=0.88; 95% CI: 0.52-1.51,  $p=0.654$ ), feeling as though everything was an effort (OR=0.81; 95% CI: 0.57-1.17,  $p=0.270$ ) or worthlessness (OR=0.81; 95% CI: 0.44-1.49,  $p=0.495$ ). However, PHP status remained an independent predictor of these feelings adversely affecting one’s life or activities (OR: 1.38; 95% CI: 1.01-1.88,  $p=0.041$ ).

## Conclusion

While PHPs experience symptoms of anxiety and depression at similar rates to the general public, when controlling for sociodemographic factors, they are more likely to state that these feelings adversely affect their life or activities, suggesting that the practice of healthcare itself may intensify the impact of these feelings.

# Immunocompromised status and mental health risk among health care workers

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## Learning objectives

1. Learn about the rates of various mental health symptoms among healthcare workers during the COVID-19 pandemic.
2. Learn about risk factors for increased mental health symptoms among healthcare personnel.
3. Consider priorities for health systems in reducing stress among employees during a pandemic.

## Project objective/background

The mental health of healthcare workers (HCWs) is critical to their long-term well-being and future disaster preparedness. Goal 1 of this study was to identify rates of mental health problems experienced by HCWs. Goal 2 was to test a model of risk stemming from pandemic-related stressors.

## Methods/approach

This cross-sectional study included HCWs (N = 2,246 [1,573 clinical providers; 673 non-clinical staff]) in the Rocky Mountain West who voluntarily completed an online survey in April/May 2020. Respondents completed measures for acute traumatic stress, depression, anxiety, alcohol use, and sleep. Logistic regressions stratified by professional role (clinical versus non-clinical) were specified to predict positive vs. negative screening outcomes as a function of five pandemic-related stressors (immunocompromised self; immunocompromised household member; care provision to infected patients; clinical management role; positive cases).

## Results

More than half of HCWs surveyed (52.5%) screened positive for acute traumatic stress, depression, or anxiety, with ~20% reporting problematic alcohol use, and variable insufficient sleep from ~10% off shift to ~50% on shift. Clinical employees with an immunocompromised household member had increased odds of screening positive for a mental health problem. Non-clinical HCWs who were immunocompromised were at elevated risk for screening positive a mental health problem. Being female, minority status, and younger increased odds for mental health problems.

## Conclusion

To partially alleviate the mental health burden of HCWs involved in response to the SARS-CoV-2 pandemic, healthcare organizations can implement policies to protect immunocompromised HCWs and their families (e.g., vaccine priorities, telework options).



# Oral presentations

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Consequences

# Coping with COVID-19 for Caregivers: Results from a national survey

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## Learning objectives

1. Summarize the purpose and focus areas of the Coping with COVID-19 for Caregivers survey.
2. Describe the key insights derived from the survey results related to healthcare workers' experiences during COVID-19.
3. Express the importance of ongoing efforts around professional and organizational well-being and the potential long-term impact of stress experienced during COVID-19 among healthcare workers.

## Project objective/background

The American Medical Association (AMA) launched the **Coping with COVID-19 for Caregivers** survey in response to the COVID-19 pandemic and its impact on the well-being of healthcare workers. The no-cost survey was developed with the intended use of tracking trends in stress levels of healthcare workers, identifying specific drivers of stress, and allowing health systems to develop supportive resources and relevant interventions based on these drivers.

## Methods/approach

Since its launch in April 2020, the survey has been distributed within over 200 hospitals and clinics in the US and collected over 65,000 responses. Surveys are comprised of a 20-question instrument with optional custom questions determined by each organization. Electronic surveys and response data are housed within the existing AMA Data Lab platform. To engage potential respondent organizations, the AMA utilized an initial invitation to 50 health systems and has since used a rolling approach to recruitment through the external-facing registration platform (<http://clinician.health/>).

## Results

A recent summary of more than 60,000 responses collected from April 6 – December 31, 2020, highlighted experiences of health system staff. Half of respondents (50%) reported at least some symptoms of burnout, including 16%

of respondents reporting persistent symptoms of burnout that will not go away, and 3% of respondents reporting feeling completely burned out. Burnout symptoms remained relatively stable across time, with highest levels occurring in April and November. Over a third of all respondents (36%) reported symptoms of anxiety and depression “moderately” or “to a great extent” because of the impact of COVID-19. Across all role types, self-reported fear of exposure to COVID-19 was high. Overall, 62% of all survey respondents reported worrying “moderately” or “to a great extent” about exposing themselves and their families to COVID-19. Subsets of the findings have been published in Mayo Clinic Proceedings: Innovations, Quality & Outcomes and in EClinicalMedicine - The Lancet. Data collection remains ongoing and presentation of results would be inclusive of all data collected at the time of presentation.

## Conclusion

Amidst the ongoing COVID-19 pandemic, it is important for health care organizations to create and ensure an infrastructure and resources to support physicians, nurses, and care team members. Survey findings indicate a strong need for health systems to provide ongoing support to all healthcare workers, to maintain a focus on individual and organizational well-being, and to continually monitor the long-term impact of stress brought on by the pandemic.

# Pandemic-driven post-traumatic growth

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## Learning objectives

1. What is post-traumatic growth?
2. Consider the proportion and degree to which medical professionals may have experienced the acute phase the COVID-19 pandemic as an acute traumatic event.
3. Explore whether the post-traumatic growth may be possible as a result of this disaster.

## Project objective/background

The COVID-19 viral pandemic posed a mortal threat to the population and disrupted citizens' sense of safety and stability. In the acute phase, medical professionals faced heavy workloads and uncertainties about the risks and their abilities to care for patients with the novel disease. Many witnessed excessive death and suffering and perceived threat of infection for themselves and loved ones. The prevalence of severe stress among clinicians related to this event is unknown. While these experiences may increase risk for Post-Traumatic Stress Disorder, it might also prompt reflection and post-traumatic growth (PTG). This study examines the prevalence and severity of stress among clinicians, and the proportion who experienced PTG.

## Methods/approach

Acute traumatic stress was assessed using a single-item adapted from DSM-V (yet to be validated). Responses were dichotomized into "never-sometimes" and "fairly-very often". PTG was assessed with a 6-item version of the Post-traumatic Growth Inventory (Tedeschi & Calhoun, 1996) abbreviated and validated by Pietrzak et. al (2010). The six domains assessed include: reprioritizing what is important in life, greater appreciation for each day, sense ability to handle difficulties, greater self-reliance, greater acceptance of circumstance, and stronger faith. PTG across the domains was defined as having experienced to a "great degree" and compared across groups. The odds ratio was calculated by unadjusted 2x2 contingency table.

## Results

Of 7414 medical staff (MD, APP, GME) invited to participate, 2469 completed the wellness survey. 1794 and 1716 responded to the traumatic stress item and 6-item PTG assessment, respectively. Overall, 37.6% reported a great deal of PTG in at least one of six domains. Overall, 45.7% reported exposure or threat of death fairly to very often. Clinicians with such exposure were more likely to experience PTG (45.5% v. 31.0%,  $p < 0.001$ ; OR 1.86, CI 1.52-2.28). Those who had experienced greater exposure to acute traumatic stress were statistically more likely to experience PTG in all six domains (Table).

## Conclusion

This study documents that, although it has been a traumatic event, a large proportion of healthcare professionals have spontaneous PTG in the aftermath of the COVID-19 pandemic. In addition to preventing adverse mental health outcomes, there may be opportunities for healthcare organizations to promote positive post-traumatic growth. Greater clarity around organizational, professional, and personal priorities, values, and abilities could strengthen healthcare. Further analysis is required to know if PTG is protective against burnout, depression, and anxiety.

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Olson K, Shanafelt T, Southwick S. Pandemic-Driven Posttraumatic Growth for Organizations and Individuals. *JAMA*. 2020

| POST-TRAUMATIC GROWTH IN MEDICAL PROFESSIONALS OFTEN EXPOSED TO DEATH OR THREAT OF DEATH DURING COVID-19 COMPARED TO THOSE WITH LESS PERCEIVED EXPOSURE  |                       |                         |       |                         |                         |       |                       |                         |       |  |          |
|--|-----------------------|-------------------------|-------|-------------------------|-------------------------|-------|-----------------------|-------------------------|-------|--|----------|
| During the COVID-19 crisis, how much exposure to death or threat of death did you perceive for yourself or your loved ones, or through witnessing it in others, or through repeatedly hearing the extreme adverse details? |                       |                         |       |                         |                         |       |                       |                         |       |  |          |
| Domain of Post-traumatic growth <sup>1</sup> (N=1716 total)  | never-sometimes (969) |                         |       | fairly-very often (814) |                         |       | Unknown exposure (11) |                         |       | Comparison between proportions never-sometimes and fairly-very often 2-sample z-test |          |
|  | n                     | great-very great degree | total | n                       | great-very great degree | total | n                     | great-very great degree | total | Z <sup>2</sup>   | P-value  |
| I changed my priorities about what is important in life  | 143                   | 15.5%                   | 922   | 234                     | 30.0%                   | 780   | 3                     | 27.3                    | 11    | -7.17  | <0.0001  |
| I can better appreciate each day   | 143                   | 15.6%                   | 919   | 197                     | 25.4%                   | 777   | 1                     | 9.1%                    | 11    | -5.02  | <0.0001  |
| I know better that I can handle difficulties   | 141                   | 15.3%                   | 920   | 186                     | 23.9%                   | 777   | 1                     | 9.1%                    | 11    | -4.48  | <0.0001  |
| I have a greater feeling of self-reliance  | 149                   | 16.2%                   | 919   | 184                     | 23.85                   | 774   | 1                     | 9.1%                    | 11    | -3.90  | <0.0001  |
| I am better able to accept the way things work out   | 130                   | 14.2%                   | 914   | 157                     | 20.4%                   | 770   | 1                     | 9.1%                    | 11    | -3.35  | =0.0008  |
| I have a stronger religious faith  | 70                    | 7.6%                    | 917   | 85                      | 11.0%                   | 773   | 0                     | 0%                      | 11    | -2.40  | =0.01684 |
| >=1 POST-TRAUMATIC GROWTH  | 286                   | 31.0%                   | 924   | 355                     | 45.5%                   | 781   | 4                     | 36.4%                   | 11    | -6.16  | <0.0001  |

Standard descriptive statistics are shown to describe the frequencies and proportions for each item's responses. The proportion of PTG in each domain was statistically significant in relation to exposure to this potential covid-19 acute traumatic stress and between groups registering a great degree of PTG within a domain across those who were and weren't often exposed to this potential acute traumatic stress. (p<0.05). If medical staff were fairly or very often exposed to the covid-19 acute traumatic stress they were more likely to experience some PTG than those who were less exposed, after adjusting for age, race, gender, specialty, delivery network, OR 1.66 (1.31-2.10).



# Oral presentations

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Drivers and contributors

# Drivers of burnout and professional fulfillment among academic medical faculty

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## Learning objectives

1. To characterize rates of burnout and professional fulfillment among academic medical faculty.
2. To describe drivers of burnout and professional fulfillment in this population.
3. To detail potential organizational responses that address these drivers.

## Project objective/background

Burnout is prevalent in the physician workforce and has negative effects on both individual physicians and care delivery more broadly. We sought to describe rates of burnout and professional fulfillment and characterize the factors associated with burnout and professional fulfillment at a major academic medical center.

## Methods

In Summer 2019, an adaptation of the Stanford Physician Wellness Survey was administered to all physician faculty in the Brigham and Women's Physicians Organization (BWPO; the BWPO employs the physicians of Brigham Health, an academic medical center affiliated with Harvard Medical School). The survey included validated measures of burnout and professional fulfillment. It also assessed culture of wellness, personal resilience, and efficiency of practice factors associated with burnout. Generalized estimating equations clustered by department (chi-square) were used to compare burnout and professional fulfillment rates by gender and academic rank. The relationship between burnout and professional fulfillment scores and culture of wellness, personal resilience, and efficiency of practice factors was explored via multivariable linear regression.

## Results

Our survey sample included 1,070 physicians (50% response rate), 44.7% of whom were female. 36.5% of respondents were instructors, 27.8% assistant professors, 13.1% associate professors, and 10.7% full professors. Departments with the most respondents included medicine, anesthesiology, and radiology. The overall rate

of burnout was 40%, while that of professional fulfillment was 38%. For female faculty and those at the instructor level (versus other academic ranks), rates of burnout were higher and rates of professional fulfillment were lower.

In multivariable models adjusting for age and gender with clustering by department, greater sleep-related impairment, lower perceived gratitude, and lower organizational/personal values alignment significantly predicted higher burnout and lower professional fulfillment scores (all  $p < 0.001$ ). Lower self-valuation predicted higher burnout scores ( $p < 0.001$ ), and lower organizational leadership ratings predicted lower professional fulfillment scores ( $p < 0.001$ ).

We are leveraging information about factors associated with burnout and professional fulfillment in our institution (which we refer to as drivers) to design and deploy targeted interventions centrally. These include resource packages for chairs and wellbeing champions regarding drivers, hosting of wellbeing conversations that facilitate knowledge sharing among departments, an internal wellbeing grant program in which projects are rated on potential to address drivers, and mapping an internal inventory of wellbeing projects to drivers.

## Conclusion

Burnout and lack of professional fulfillment are prevalent among academic faculty. We have identified the factors associated with these phenomena and are leveraging this knowledge to design targeted interventions and learning opportunities aimed at enhancing quality of care and workplace satisfaction.

# Identification and comparison of top-ranked workplace factors contributing to oncology-provider burnout during COVID-19 to pre-pandemic factors

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## Learning objectives

1. Describe steps for conducting Contextual Inquiry in clinical settings during COVID-19 pandemic.
2. Identify top-ranked and highest priority socio-technical workplace factors contributing to oncology-provider burnout pre- and during COVID-19.
3. Compare top-ranked and highest priority socio-technical workplace factors contributing to oncology-provider burnout pre- and during COVID-19.

## Project objective/background

With burnout already at high-levels prior to the onset of COVID-19, the pandemic has introduced additional systemic stressors to oncology-providers working in the rapidly changing care-setting. Before COVID-19 onset, Contextual Inquiry, a systems-analytic process based on studying provider-experience within the specific workplace context, was used to identify the critical socio-technical workplace factors contributing to oncology-provider burnout at a major academic healthcare system. Through this process, the top factors contributing to oncology-provider burnout were identified. The goal of this study was to follow-up on the previous work by i) assessing the socio-technical workplace factors contributing to oncology-provider burnout during COVID-19 and ii) identifying how these factors may have changed in light of the COVID-19 pandemic.

## Methods/approach

Our Contextual Inquiry methodology, gathering data assessing factors contributing to oncology-provider burnout, captured:

Quantitative Data: During the pre-COVID-19 assessment, a survey was administered to 31 oncology-providers (response rate of 67%). The survey assessed the extent to which socio-technical workplace factors contribute to oncology-provider burnout (e.g., departmental relationships, inefficient work-processes, technology-implementations) and burnout (i.e., 2-item Maslach Burnout Inventory). During COVID-19 assessment, the

survey is being administered to oncology-providers assessing these and additional COVID-19-related factors contributing to their burnout.

Qualitative Data: During the pre-COVID-19 assessment, researchers shadowed 10 oncology providers as they engaged in clinical-care, capturing work-processes, roles, and relationships. Post-shadowing, oncology-providers were interviewed regarding their top priorities for improving sub-optimal workplace factors. The qualitative data-collection will be replicated during COVID-19; with 6 oncology providers expected to participate in shadowing, followed by interviews gathering top priorities.

## Results

For the pre-COVID-19 assessment results, quantitative and qualitative data were integrated through data-triangulation. The most highly ranked socio-technical workplace factors identified as contributing to burnout included: time spent on tasks below license (survey results; Mean=6.00 on 7 point scale, [standard deviation=1.45]), performing duties others should complete (5.71 [1.45]), time spent on EHR documentation (6.10 [1.55]), and insufficient end-of-life patient-care support (5.33 [1.31]). 57% of oncology-providers reported elevated burnout. Top-ranking workplace factors contributing to burnout from the assessment conducted during COVID-19 will be presented and compared to the pre-COVID-19 findings to show how the top factors have shifted with COVID-19 pandemic onset.

## Conclusion

Prior to COVID-19 pandemic, the Contextual Inquiry results demonstrated a complex network of socio-technical workplace factors oncology-providers viewed as contributing to elevated levels of burnout. There is a need to better understand the impact the COVID-19 pandemic has had on the oncology-provider work-environment and burnout.



# Oral presentations

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Gender and well-being

# Changes in clinician well-being and needs over time during the COVID-19 pandemic and the increased burden on female clinicians

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## Learning objectives

1. To measure changes in burnout and well-being of clinicians during the COVID-19 pandemic
2. To understand whether efforts to support clinicians may have improved clinician experience
3. To understand the differential impact of the COVID-19 pandemic by gender

## Project objective/background

COVID-19 has dramatically changed clinicians' personal and professional lives. At Sutter Health, the Joy of Work (JOW) team sought to support clinicians by conducting repeated surveys which were used to ask about well-being, gather actionable information, and identify improvement opportunities.

## Methods/approach

We developed 5 core questions about leadership, safety at work, caregiving, what can be done to support clinicians, and burnout (using a validated single-item measure), and asked them on surveys distributed by our research team and by NRC Health in June-August and again in October-December, 2020. In summer 10,916 surveys were distributed, and 9318 in the fall, to clinicians in 8 affiliated medical groups and 17 Sutter hospitals across northern California.

## Results

3470 (31.8%) surveys were returned in summer and 4556 (48.9%) in fall. The burnout rate was 30.1% in summer and 29.0% in fall. Burnout was more common among women than men (summer: 38.4% vs. 24.6%,  $p<0.001$ ; fall 35.1% vs. 21.7%  $p<0.001$ ). Between summer and fall, the proportion of clinicians concerned about safety decreased (42.7% to 21.7%  $p<0.001$ ), and the proportion who believed their concerns would be acted upon increased (53.9% to 60.7%,  $p<0.001$ ). Of participants with caregiving responsibilities,

the proportion indicating that childcare/caregiving impacted work was 32.6% (summer) vs 31.7% (fall), and more women reported this than men (summer 42.2% vs. 23.7%,  $p<0.001$  and fall 36.7% vs. 26.0%,  $p<0.001$ ).

When asked "what can be done to better support you?" the most frequent response was "more personal protective equipment (PPE)" (summer 37.1% vs. fall 26.6%,  $p<0.001$ ) and "provide more flexibility with schedules" (summer 26.5% vs. fall 21.9%,  $p<0.001$ ). More women than men wanted flexibility with schedules (summer 32.5% vs. 22.6%, fall 25.3% vs. 18.4%,  $p<0.001$ ), and support for mental health needs (summer 16.9% vs. 10.7%, fall 19.1% vs. 11.1%,  $p<0.001$ ).

## Conclusion

Over time, in this population the pandemic has disproportionately impacted women who reported more burnout, caregiving challenges, and desire for mental health support. The JOW team worked with organizational leadership and operations to implement changes, including working with supply chain leaders to secure sufficient supply of PPE, more flexibility with schedules including video visits and hybrid care models, and enabling more mental health education, peer support, and well-being resources. These efforts may have influenced decreased rates of concern about safety, requests for more PPE, flexibility with schedules, and mental health needs.

# Relationship between gender and sacrifices made for career among early career pediatricians

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## Learning objectives

1. Recognize gender disparities related to family planning decisions among early career pediatricians.
2. Discuss the role of partnered status in early career perceptions of career sacrifices.
3. Explore ways organizations might better support women physicians related to family planning decisions.

## Project objective/background

Careers in medicine can be intense and demanding, beginning with several years of training. As a result, pediatricians may make sacrifices in their personal lives for their career. Our objective was to examine the relationship between sacrifices early career pediatricians (ECP) report making for their career and the relationship to gender, marital/partnered ("partnered") status, and parenthood.

## Methods/approach

National data from a 2019 survey of ECPs who recently graduated residency (2016-18), as part of the AAP Pediatrician Life and Career Experience Study. Chi-square tests analyzed gender, partnered, and parenthood differences in a) personal sacrifices (a lot vs some or no sacrifices) made for one's career and b) agreement that their career was worth the sacrifices made to become a physician (strongly agree/agree vs disagree/strongly disagree).

## Results

Of 918 ECPs in the cohort, 90% responded to this survey. 75% identified as women, 77% married/partnered ("partnered"), and 43% had children. Mean age=33 years, and 33% were in fellowship training.

Forty-one percent reported making "a lot" of sacrifices in their personal life for their career, with no variation by gender or parenthood. Pediatricians who were partnered were less likely than those without partners to report a lot of sacrifices (39% vs 48%  $p<0.05$ ). Among those

without partners, women were more likely than men to report making sacrifices for their career as it pertained to finding a spouse, partner or significant other (60% vs 41%  $p<0.05$ ).

Among respondents without children, women were more likely than men to report sacrifices related to their decision in whether or not to have children (30% vs 16%,  $p<0.01$ ). Among respondents with children, 59% delayed starting a family because of training or job responsibilities, with women significantly more likely than men to delay parenthood (67% vs 38%,  $p<0.001$ ).

The majority (77%) agreed or strongly agreed their career was worth the sacrifices made, with women less likely to agree compared to men (74% vs 86%,  $p<0.001$ ) and no significant difference by parenthood or partnered status.

## Conclusion

Most ECPs believe their sacrifices to become a pediatrician were worth it. Women reported greater challenges in several areas. Women ECPs were more likely to delay finding a spouse and having children due to career or training responsibilities, and less likely to perceive their career as worth the sacrifices made. Efforts should be made to better support women pediatricians' family planning.



# Oral presentations

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Identifying contributors

# Communication, Culture and Engagement Physician Task Force: An Appreciative Inquiry approach to address burnout

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## Learning objectives

1. Describe the Appreciative Inquiry Approach as it relates to a physician task force
2. Illustrate how structured, facilitated sessions can identify themes and priorities to address burnout
3. Understand how physician engagement can be enhanced during a pandemic conducting solution focused discussions

## Project objective/background

Physician burnout and low professional fulfillment is a problem across the cancer care spectrum, with high levels of burnout in hematology/oncology physicians. The Communication, Culture and Engagement Task Force was assembled during the COVID-19 pandemic to unite physicians across a large, academic cancer center in order to generate recommendations to cancer center leadership meant to improve communication, culture and engagement.

## Methods/approach

Physicians belonging to the Yale Cancer Center academic sections (medical oncology, hematology, neuro-oncology and palliative care) were invited to participate in the task force. The group included representation of various characteristics (rank, gender, family life, practice location). Six sessions were conducted between June-August, 2020. The Progress Principle and Appreciative Inquiry (AI) approach was reviewed at the beginning of each session. A structured, "world café" approach utilized group polling, facilitated brainstorming, priority ranking survey and "ease and impact" graphing. Final recommendations were reported to leadership at the final meeting.

## Results

22 physicians participated, representing 18% of total faculty. Brainstorm sessions resulted in 9 themes and 25 subthemes. Themes and subthemes were grouped into 6 categories (Table 1). A survey of all faculty was distributed to ask participants to rank the categories by priority. The top 3 categories were further analyzed and vetted by the task force on "ease and impact" scales. The final recommendations included the results of the top 3 categories as well as "low hanging fruit" from bottom classifications.

## Conclusion

Physician engagement is essential to make meaningful progress in addressing institutional factors of burnout. Using a structured AI approach to engage physicians helps promote shared purpose, elucidate needs and identify core themes impacting burnout. This effort has implications for other cancer centers who want to empower physicians and create a collaborative forum for input. Future areas of focus will include deep dive sessions to further define specific organizational interventions.

*Continued on the next page*

| Rank | Category  | Subthemes   |
|------|---|---|
| 1    | Develop policies to promote flexibility   | Tailor work effort, Optimize clinic schedule  |
| 2    | Develop team-based interventions to personalize improvements                    | Work with individual teams to address burnout, Conduct team building, Explore innovations for team structure, Identify and share best practices, Create forums for common issues to be resolved |
| 3    | Structure rewards and incentives to foster individual and organizational health | Explore rewards for compassionate and team-based care, Enhance recognition of excellent clinical care, Celebrate achievements and milestones  |
| 4    | Implement strategies to promote retention                                       | Unify onboarding experience, Provide coaching, Conduct exit surveys/Retention interviews  |
| 5    | Include faculty in decision-making  | Create suggestion box, Allow submission of agenda items, Include faculty in decision-making process   |
| 6    | Implement programs that promote connection                                      | Provide time for small group bonding, Communication and Bias training, Speaker series, Fund research projects, Align mission statements   |

# Crowdsourcing wellness: Using voice of the physician to improve wellness metrics

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## Learning objectives

1. Learn about crowdsourcing and how it can be a powerful tool for capturing voice of the physician
2. Understand Human-Centered Design and why it is such a powerful method for promoting resiliency
3. Hear the experience of one medical group in applying these techniques in a physician population and demonstrating how they have improved physician wellness

## Project objective/background

The Southeast Permanente Medical Group (TSPMG), an exclusive partner of Kaiser Permanente, is a multi-specialty medical group in the Atlanta metropolitan area employing over 850 physicians and associate practitioners. The vision of the TSPMG Wellness Committee is “to be the premier model for employee and clinician health and wellness”. One creative approach used by the committee was partnering with the TSPMG Innovation Team to address the topic of improving clinician wellness by using Human-Centered Design to give providers an inclusive voice in furthering our wellness journey.

## Methods/approach

- Applied tenets of Human-Centered Design, a creative problem-solving method that puts people and their needs at the center of all solutions
- Used crowdsourcing via IdeaScale campaign in Fall 2018 to generate wellness solutions. The campaign was focused on the Quadruple Aim by asking our clinicians this question: “What areas can we focus on improving to make our organization a place of joy?” Responses were framed using the Stanford WellMD Professional Fulfillment Model
- Ideas, comments, and votes from crowdsourcing directed improvement efforts
- Tracked utilization/outcome data via external vendors and internal Likert-scale surveys

## Results

- Crowdsourcing campaign yielded 63 ideas, 181 comments, and 527 votes. Piloted ideas included a child/

elder care benefit, pop-up wellness lounges, inspiring e-mail quotes, and a healthy food truck at a deserving clinic

- Eighty-eight percent of employees stated that they would continue to implement at least one of the wellness techniques experienced in the wellness lounges (ASMR, massage, aromatherapy, virtual reality)
- Over seventy employees registered for the child/elder care benefit, with 160 days of used benefit from February – December 2020
- Overall, aggregate favorable scores in wellness surveys increased from 66% to 78% from 2016-2020. Favorable responses to specific questions over the same timeframe were as follows:
  - o “KP provides an environment that supports health and wellness” increased from 68% to 80%
  - o “My supervisor encourages me to take care of my health” increased from 56% to 75%
  - o “People encourage each other to take care of their health” increased from 66% to 79%

## Conclusion

Human-Centered Design is an effective methodology for designing wellness solutions for health care workers by putting them at the center of solutions. It also contributes to perceptions around the culture of wellness.

The child/elder care benefit was launched just before the COVID-19 pandemic hit, with anecdotal information suggesting that this benefit led to increased resiliency and reduced anxiety for our providers during extraordinary circumstances.

# “I need to have a fulfilling job”: A qualitative study of professional well-being in surgeons

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## Learning objectives

1. How to conduct a qualitative research project which can also have improvement goals for a healthcare organization.
2. Discuss the elements of a conceptual model of professional well-being among surgeons.

## Background

Burnout rates among surgeons are high. Burnout has been shown to negatively impact quality of care, patient safety and healthcare costs. The purpose of this study was to examine perceived protective factors that promote professional wellbeing.

## Methods/approach

Using a purposive sampling method, 25 semi-structured 30-60-minute interviews were conducted with surgeons with varying sub-specialties, career-lengths, and positions. Abductive exploratory analysis was used to code and interpret interview transcripts and to build a conceptual model of surgeon wellness.

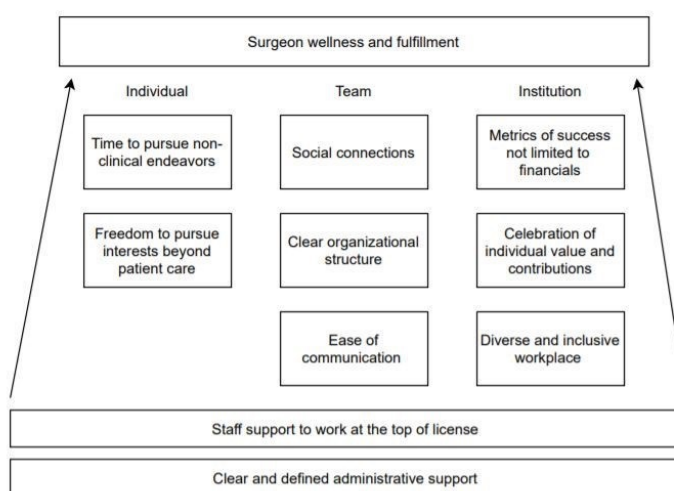
## Results

Protective factors that contribute to well-being were placed into one of three levels of implementation; individual, team-level, and institutional (figure). Individual factors for well-being included autonomy and adequate time to pursue non-clinical endeavors. Team level factors consisted of adaptability, boundaries, and cohesion. Institutionally,

participants described a greater sense of well-being at work when performance evaluations were not only related to financial metrics and when individuals were recognized for their contributions.

## Conclusion

The conceptual model highlights factors important for the professional wellbeing of surgeons. This model can be utilized to improve professional fulfillment.





# Oral presentations

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Interventions

# An upstream and downstream approach to threat management in medicine

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## Learning objectives

1. Understand what systems should be in place within a medical practice or organization to address verbal, written, or physical threats from patients and families to physicians and staff – including sexual harassment
2. Incorporate evidence-based de-escalation tools to minimize escalation of incivility to disruption or threats of violence/actual violence
3. Recognize what tools are potentially available within a medical organization to address all levels of threats

## Project objective/background

Humanity in medicine begins with the wellness of our most important resource – our people. A workforce that can deliver care in a psychologically and physically safe environment leads to more engaged healthcare teams, decreased absenteeism, positive financial performance, and improved patient outcomes. The desire to make a difference and to connect with others drives individuals with a passion for healing to hospitals and medical practices throughout the world. Unfortunately, healthcare settings have become the epicenter of workplace threats and overt violence. Mental illness, substance abuse, social media, societal polarization, changing workforce demographics, and consumerism have all contributed to this current state. It is now incumbent on healthcare systems to develop strategies and tools to prevent and address these workplace risks.

In order to roll out an all-encompassing threat management program a multifaceted approach was used which included the following steps:

- Leadership modeling of a culture of safety and wellness for physicians and staff
- Policy development and hard wiring that sets standards of conduct for patients, families, physicians, and staff
- Physician and Staff training on de-escalation, boundary setting, and patient/family accountability
- Methodology created to foster individual and organizational reporting/escalation of threats such as incivility, disruption, and violence

- Victim support through well trained teams and individuals
- Multidisciplinary response teams with the ability to assist and intervene when certain behavior and threats require immediate and ongoing action

## Results

Since instituting all the formal elements of our program, we have seen a 20% increase in the reporting of threats to our threat management team in the last year. This suggests that we are creating a psychologically safe environment where physicians and staff are comfortable reporting inappropriate conduct and behavior.

Furthermore, the total number of legitimate threats of violence has decreased by 15% over the last year. We conclude that our efforts around “seeing something and saying something” with earlier intervention within lower risk situations has decreased the risk of patients and families escalating further. We feel that “what we permit we promote” and that downstream interventions, including the involvement of behavioral health, serves as a de-escalation tool to level-set from the very beginning.

## Conclusion

Since implementation of our intervention, our medical group has seen an increase in the reporting of threats, improved satisfaction with our responses to threats, and an overall decrease in the severity of threats. We believe this is due to our “see something say something” culture and our ability to address lower-level threats before they intensify and develop into more problematic scenarios.

# Decreasing burnout and isolation during anesthesia fellowship training through a year-long integrated coaching program

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## Learning objectives

1. Discuss strategies to advocate for and implement an effective coaching program within a large academic fellowship program.
2. Discuss strategies to both optimize engagement in and increase the impact of coaching in a fellowship program.
3. Share the short-term impacts of 1:1 coaching on fellows.

## Background

Professional group coaching is an evidence-based intervention known to lessen burnout and emotional exhaustion, and improve resilience and quality of life for physicians.

The need for coaching and mentorship is even more important for those in fellowship, a critical time in physician development. Coaching helps fellows approach their careers differently from the outset. It is an opportunity to prevent burnout and exhaustion and to lessen the impact of these on learning and quality of care. This program was designed as an integral component of fellowship training- to help ease the transition to becoming thriving attending physicians and respond to additional stress on fellows during the pandemic and social injustice experienced during 2020.

## Methods

An initial pilot program of group coaching was offered May-July 2020 in response to COVID stress. Based on feedback from participants, and ongoing stress, the program was extended for the 2020-2021 academic year. The year-long program includes 6 individual coaching opportunities each month and one drop-in group coaching session. Participation is voluntary and open to all. The fellowship program has 60 fellows in various subspecialties of Anesthesia including but not limited to CCM, Cardiac, Ob, Peds, Adult and Peds Pain, and Pain Psych. A feedback survey is sent quarterly to any fellow

who has participated in 1:1 coaching. Utilization by each subspecialty is tracked.

## Results

After the initial 3-month pilot in 2020, the fellows that participated reported informally that coaching is “one of the best things about their fellowship in terms of feeling that the department cares for their well-being.”

Halfway through the year-long academic offering, 20 fellows have participated in 1:1 coaching (30%). 100% of those who returned the survey (72% response rate) said that they found coaching helpful. 100 percent said they would recommend it to their colleagues. 91.7% said that they felt more in control, 83.3% said they were less stressed and felt less isolated and alone. 50% reported feeling less burnt out.

A few verbatim comments: Coaching “normalized my experience, made me feel more connected to my peers,” “even after one session, it helped give me a framework to address some of the challenges I’m facing personally.” Helped to “mitigate feelings of burnout and helplessness.”

## Conclusion

Offering 1:1 coaching as an integral part of fellowship training is likely a helpful intervention to decrease stress, isolation, and burnout, and to help increase a sense of control in Anesthesia fellows.

# Heartfulness meditation improves loneliness and sleep in physicians and advance practice providers during COVID-19 pandemic

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## Learning objectives

1. Discuss the prevalence of Loneliness and Sleep problems in Physicians and APPs
2. Explore the specialties and roles at risk.
3. Apply tools of Heartfulness Meditation to improve loneliness and sleep
4. Support ongoing National efforts to respond to psychological impact of COVID 19

## Project objective/background

Unprecedented work pressures and social isolation during COVID-19 pandemic may worsen loneliness and sleep problems among health care professionals. Sleep problems significantly impair mental wellbeing and are associated with reduced safety, increased errors and ultimately impacting quality of care for patients. Meditation practices are known to have a positive impact on psychological well-being and sleep. The objective of this study was to investigate if a novel remote, heart-based meditation program via audio relaxation techniques through a Heartfulness trainer leads to measurable changes in improvement of sleep and perception of loneliness in physicians and advance practice providers.

## Methods/approach

Physicians and advance practice providers at 4 US hospitals under WellSpan Health System were randomly assigned to receive either remote Heartfulness Meditation program or no intervention (control group) in a prospective four-week randomized control study design. University of California Los Angeles (UCLA) Loneliness and Pittsburgh Sleep Quality Index (PSQI) scores were collected at baseline and after the program duration of 4 weeks.

## Results

Of the 155 subjects enrolled in the study, 50% were lonely and 97% had sleep problems. Younger participants aged 30 and under had higher loneliness and sleep problems. Resident physicians were lonelier (72%) compared to attending physicians and advance practice providers. All resident physicians and APPs had a PSQI score of 5 or greater and were considered to have sleep problems. Among those who completed the study, the mean UCLA loneliness scores decreased from 42.1 to 39.4 in the Heartfulness group (N=40,  $p=0.009$ ) and 42.2 to 41.15 in the control group (N=57,  $p=0.254$ ). The mean PSQI scores decreased from 10.75 to 9.14 in the Heartfulness group (N=41,  $p=0.001$ ) and 9.41 to 8.87 in the control group (N=58,  $p=0.122$ ).

## Conclusion

The current study is one of the first attempts to assess a combination of loneliness and sleep problems among physicians and advance practice providers during COVID-19 pandemic in the US. A significant burden of loneliness and sleep problems was identified. An improvement of sleep and loneliness was noted with the practice of Heartfulness meditation. Given the hectic schedules among healthcare workers, a virtually accessible program that could be easily incorporated into daily routine seems feasible.

# Leveraging social media during a global pandemic to share mindfulness, create connection, and promote healing and personal growth in healthcare professionals

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## Learning objectives

1. Learn to utilize social media platforms to foster community.
2. Learn to utilize virtual platforms for live educational & interactive sessions to reduce stress and burnout amongst healthcare professionals
3. Acquire an understanding of mindfulness-based offerings that appeal to healthcare professionals

## Background

The Mindful Healthcare Collective website and Facebook Group were created as an innovative grassroots solution to address unprecedented stress and isolation felt by healthcare professionals during the pandemic. A virtual space for healthcare professionals to connect, heal, restore, and grow was created. The Collective leadership consists of a diverse group of 9 female physicians who have additional training in mindfulness, coaching, physician wellness, and integrative medicine. The collective's leadership team offers regular free live sessions. All sessions are based on evidence-based tools to reduce stress and burnout.

## Methods

The FB group was started in April 2020. In February 2021, 1900 members from around the world have joined. The collective is free to anyone working in healthcare. Programming includes 2-3 weekly sessions of mindful yoga, coaching, emotional freedom technique, writing meditation, cooking classes, and mindfulness. Each hour-long session is live, virtually available, and includes didactic, interactive audience participation, and guided mindfulness practices. Book club is also offered bi-monthly with authors Dr. Ron Epstein, Professor Rhonda Magee, and sessions led by Dr. Michael Krasner, and Dr. Patricia Luck. Within the Facebook Group itself, member participation posts are encouraged to share moments of mindfulness.

## Results

Since April 2020 we have offered over 100 live Zoom sessions. Between 10-40 participants attend each session. Topics vary, but have the goal of reducing stress, anxiety, and providing space for safe, confidential sharing of experience, trauma, shame, and anti-racism.

In October, 2020, a poll was posted requesting feedback. 45 members responded. 86.6% (39) of the respondents chose "I love the variety and offerings. Keep doing what you are doing!" 13.3 (6) of the respondents chose "I would like more sessions available on Facebook Live."

Some unsolicited qualitative feedback from group members: "I appreciate this group and the wisdom you all share. The posts... remind me that I am part of a healing community of like minded physicians nurturing ourselves and each other during these pandemic times." "I appreciate when tidbits pop up on my feed. Keep it up!" "I love knowing you all are out there. It's very comforting."

## Conclusion

Grass roots physician-led collaborative efforts can be a powerful conduit to reduce stress amongst healthcare professionals. A FB group, website and online sessions focused on mindfulness for healthcare professionals can be utilized as an effective way to create community, connectedness, inclusion, promote resiliency, and help sustain physician well-being especially during a pandemic.

# The low commitment, rotating Message-a-Colleague program has a positive impact on participants in a surgical department

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## Learning objectives

1. Members of a surgical department noted a positive impact from casual, structured contact with colleagues.
2. A weekly messaging program increased the sense of connection with colleagues.
3. Most participants in a weekly messaging program find the time commitment to be small or insignificant.

## Project objective/background

Throughout the past year, feelings of isolation and disconnection have increased on a global scale, and these social determinants have been linked to deterioration in both physical and mental well-being<sup>1,2,3</sup>. We developed a program to combat these feelings through casual, structured contact between departmental colleagues while avoiding an increase in temporal or emotional burden. The Message-a-Colleague program is a low commitment program that provides rotating assignments to send (and receive) a single message once a week to a designated colleague.

## Methods/approach

The 4-week program was implemented at Yale-New Haven Hospital within the Department of Surgery. Members of all roles within the department were invited to opt-in via email recruitment. Each week, participants received a new assignment to send a single text message or email to a designated colleague (same-role) and received a message from another. At the conclusion of the program, invites for an IRB-approved online exit survey were sent via email.

## Results

Between December 2020 and January 2021, 50 individuals opted-in and participated in the Message-a-Colleague program. Participants included faculty, residents/fellows, advanced practice providers (APPs), and office-based/administrative staff. Of these 50, 28 (56%) completed the

exit survey. Overall, the program was very well received (median score 10/10; IQR 8-10). Most participants noted a positive impact on the stress or outlook of their day from both composing a message for a colleague (85.71%) and receiving a message from a colleague (100%). This positive impact for composing and receiving a message was found to persist across patient-facing roles (80% and 100%, respectively) and work-from-home roles (100% and 100%, respectively). Most participants also noted that the time commitment was small or insignificant for both composing (96.43%) and receiving (96.15%) a message. There was a highly significant increase in the sense of connection among participants prior to (median: 4.5/10) and after the program (median 7/10; U=141; P<0.001).

## Conclusion

The Message-a-Colleague program was perceived by participants as a low investment of time, but resulted in subjective benefit in stress or outlook, and increased the sense of connectedness among colleagues within a surgical department.

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# Oral presentations

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New models of care

# Burnout and professional fulfillment related to the rapid uptake of telehealth due to COVID-19

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## Learning objectives

1. Learn how the medical community experienced the rapid uptake of telehealth due to COVID-19.
2. Learn how the rapid adoption of telehealth affected burnout and professional fulfillment for the medical community.
3. Explore high-yield opportunities to improve the telehealth experience and the well-being of medical professionals.

## Project objective/background

The COVID-19 pandemic of 2020 required social distancing to stop the spread of the virus. Out of necessity, the healthcare delivery system in the US rapidly adopted tele-medicine to maintain contact with and care for patients. While health systems have reported exponential escalation in use of tele-medicine, the experience and effect on professional fulfillment and burnout has not been well studied.

## Methods/approach

Tele-health experience items were created from recurring themes discussed by national groups representing physicians, policymakers, medical malpractice insurers, payers, and health system information officers and operations experts. Items were reduced a priori to represent the most actionable items for this initial roll-out phase. The Professional Fulfillment index was used according to published conventions to assess burnout and professional fulfillment amongst medical professionals across five unique regional delivery networks. Standard descriptive statistics describe the data. Associations were established by logistic regression adjusted for age, race, gender, specialty, and delivery network.

## Results

Of 7414 medical staff (physicians, APPs, residents and fellows) invited, 2317 completed the wellness metrics and 1861 responded to the telehealth assessment. Of those, 55.8% use telehealth. Of those that use telehealth,

responses were largely favorable during the acute phase of the pandemic. A minority thought the transition to telehealth was difficult (14.7%), inadequate for patient care (40.7%), less able to see as many patients (16.9%), dissatisfied with telehealth (22.5%). Potential opportunities to improve telehealth and professional improvement, include better integration into the electronic health record (OR 1.83), virtual rooming assistance and technical troubleshooting and support (both OR 1.78), billing and compliance training (OR 1.67), scheduling assistance (OR 1.56), ability to procure information traditionally provided by the physical exam (OR 1.56), ability to communicate easily without mishap (OR 1.47). Additionally, adequate ability to add multiple people to the eVisit may further reduce burnout (OR 0.62). Majority of medical staff (63%), whether or not they used telehealth, felt their daily digital screen time was slightly to extremely inappropriate and was associated with burnout and professional fulfillment, OR 0.63 and OR 2.01 respectively. (Table attached)

## Conclusion

Overall, the transition to telehealth was favorable and generally adequate for care during the acute phase of the pandemic, likely to remain post-pandemic. However, a third of the medical staff report inadequacies which may be remedied to improve the function and experience. The most high-yield opportunities may be to make telehealth easier and reduce daily digital screen time. Further analysis will determine if some specialties are more effected than others, to focused efforts accordingly.

# Enhancing teamwork through development of medical assistants

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## Learning objectives

1. Describe the importance of medical assistant and physician job satisfaction and retention
2. Outline interventions that may increase professional fulfillment for physicians and medical assistants
3. List methods to support multidisciplinary teams to effectively and efficiently care for patients

## Project objective/background

We are committed to identifying and developing innovative solutions to enhance efficacy of practice, driven by the empowerment of our teams. With the support of an AMA Transformation Initiative grant, we tested the impact of providing medical assistants (MAs) with enhanced skills training to boost efficiency of practice and professional fulfillment levels for both physicians and MAs.

## Methods/approach

We created a partnership with Cuyahoga Community College to develop a curriculum that provides MAs with skills to enhance rooming and discharge, order entry and electronic health record (EHR) capabilities. Two cohorts of MAs completed 16 weekly sessions conducted after business hours. Impacts of this enhanced training were assessed through:

1. Mini-Z/Stanford Clinician Well-Being pre-post at start, 6 mos. and end
2. Retrospective skills assessments
3. Qualitative formal interviews with physicians, utilizing the same open-ended question set, analyzed for themes by two reviewers
4. Qualitative informal feedback requests from MAs in the classroom setting and via email by the instructor, which were analyzed for themes by the project team.
5. EHR activity analysis
  - a. Work after work
  - b. Chart closure rate
  - c. Throughput
  - d. Order entry
  - e. Team roles (who does what % of the encounter)

## Results/conclusion

### Objective: Increase MA and Provider job satisfaction

- Satisfaction for all trained MAs increased
- A few physicians noted they themselves learned new EPIC usability from their MAs based on the knowledge obtained in our training.

### Objective: Increase Provider and MA professional fulfillment and decrease burnout

- Staff felt they had significantly more time to focus on patients after MAs completed training
- Staff felt they had significantly more resources to provide optimal care after MAs completed training
- Providers in the intervention group spent less time in EPIC on unscheduled days and outside of work hours

### Objective: Increase the provider's ability to effectively and efficiently treat patients

- Providers in the intervention group felt they had significantly more resources to achieve optimal care than the control group
- Increased communication with the patient and about the patient to the doctor were the most noticed and appreciated improvements in MA performance noted by the physicians.
- All skill sets improved for trained MAs
  - Increased MA EPIC knowledge
  - Increased communication between MD/MA and with the patient
  - The study group closed more visits on the same day

- Physicians also noticed increased MA participation in rooming and order entry
- Informal MA student feedback, coupled with the responses from the physician interviews highlighted that the most successful components of the curriculum were:
  - Professionalism/patient and internal team communication
  - Rooming
  - EPIC/order entry (most useful according to MA feedback)
- Not all physician/MA teams had discussed the training. We realized that sustainability options should include a built in physician/MA communication component that is supported by structure and reminders.
- Having team members complete orders seemed to have more of a negative impact than a positive one at the interim.

# Improving physician well-being by adopting a team-based approach for addressing osteoporosis screening and treatment

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**Learning objectives**

1. Identify an area of repetitive, task-based work by physicians that can be supported with a team-based approach
2. Demonstrate how a team-based approach can benefit patient outcomes and physician satisfaction.
3. Describe a way to utilize the electronic medical record to reduce physician workload

**Project objective/background**

Burnout affects nearly 50% of physician in the United States. Repetitive tasks contribute to physician's overall workload and mitigate Joy In Work. In the midst of a pandemic these tasks seem even more trivial in a physician's day to day work. Bone density screening is one such repetitive task. In this abstract we show how our teams-based approach can reduce physician workload, support physician well-being, and improve bone density screening and treatment.

**Methods/approach**

In a large integrated healthcare delivery system serving >4.5 million patients we implemented several changes to improve support to clinicians in addressing bone density test ordering and results. In 2009 we developed one team in each of our thirteen medical centers, consisting of a Physician Mentor, an Advanced Practice Provider, (APP) and administrative support, to address a limited number of the screening DEXA results in the physician's inbox. Abnormal results received a consultation with an APP and appropriate treatment was prescribed, normal results were notified via letter. In 2011, we created an EHR alert to flag

patients due for screening at their appointment with back office staff responsible for pending orders for appropriate testing. In 2018 we optimized systems so that all results of screening DEXA results were addressed by the centralized teams, and in November 2019 DEXA results from one medical center were diverted from the PCP's in basket completely, instead going directly to the centralized team, with routine audits ensuring completion.

**Results**

From 2009-2018 osteoporosis screening rates improved from 79.3% to 91.2%. In 2018 approximately 120,000 bone density tests were addressed by our team-based approach. In 2018 PCPs were 86% satisfied with this system. Starting in late 2019 in one medical center, 550 DEXA results bypassed completely the PCPs inbox/month, handled instead by the medical center team.

**Conclusion**

Leveraging EHR data, back office staff, and centralized processes can reduce physician workload, create a more fulfilling practice, while increasing osteoporosis screening rates. In the future we hope to have all screening DEXA results bypass the physician's inbox.

# Redeployment and burnout among health care workers during the COVID-19 pandemic

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## Learning objectives

1. Evaluate the role of redeployment on burnout of healthcare workers during the covid-19 pandemic
2. Understand the extent of burnout in relationship to redeployment and time to recovery
3. Evaluate additional factors which can be addressed to help mitigate burnout in the setting of redeployment

## Project objective/background

The COVID-19 Pandemic has required many healthcare workers to be deployed to other units and to employ a different set of skills outside their usual skill set. The aim of this study is to examine the effects of redeployment of healthcare workers and burnout. Subset analysis was to identify the effects of redeployment on modifiable personal, professional and hospital resources.

## Methods/approach

We distributed an online questionnaire via Qualtrics to all healthcare workers at an urban academic community hospital within six weeks of first COVID-19 admission and every five days thereafter. A total of 13 surveys were administered from 4/14/20 to 6/16/20 that identified if participants were working in or out of their usual role. Those working out of their usual role at that assessment time, were regarded as redeployed for that period. Primary outcome was burnout, assessed with a single validated item<sup>1</sup>. The survey also assessed sociodemographic information, self-efficacy, perceived support from the hospital, meaningful work, and professional development.

## Results

Out of the 383 participants who responded to the initial survey (19.7% of clinical staff), 146 participants (40.9%) were redeployed on the initial survey. As the study progressed, 193 individuals (54.1%) were redeployed

at least once. Initially, those who were redeployed had significantly higher levels of burnout (Mean burnout score 2.49; SD = .92) than those who were not redeployed (Mean burnout score 2.0). Over time among those who were ever redeployed, level of burnout was higher and self-efficacy scores were lower compared to those never redeployed. The rate of decline in burnout over time varied depending on redeployment and the time of return to usual role. The effect of redeployment on burnout persisted even after returning to their usual role. Redeployment was negatively associated with self-efficacy and hospital support, both of which were unique predictors of burnout. In particular, those who were redeployed at any point reported they did not have enough energy and felt less capable of caring for their own health than those who were not redeployed.

## Conclusion

Redeployment is essential to meet clinical demands during a pandemic, however hospitals and supervisors need to recognize the emotional and physical demands associated with redeployment. The findings on self-efficacy suggest that interventions focused on providing information and supporting people's efforts at self-care might be valuable. Improving speed and efficiency of knowledge sharing may enhance self-efficacy. Developing new orientation and training procedures for redeployed staff may also be useful.

# Reinventing the after-hours call experience for physicians prior to and during the COVID-19 pandemic and offloading the high volume of COVID-19 clinical calls during the pandemic: Deployment of an enterprise-wide nurse triage call center to improve patient and provider satisfaction and well-being

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## Learning objectives

1. Recognize the burden of after-hours patient calls on provider well-being and satisfaction and the compounded burden of incoming messages regarding COVID-19 concerns during the pandemic
2. Learn how the development of an enterprise-wide nurse triage call center can successfully address patient care needs while improving provider and patient satisfaction and coordination of care
3. Identify the key drivers for success in decreasing patient calls to providers, decreasing physician triage of incoming messages and providing COVID-19 test results during the pandemic and ensuring high quality clinical triage

## Project objective/background

After-hours calls and the overwhelming volume of messages to physicians increases burnout. Prior to 2015, physicians at Stanford Health Care were required to serve as “first call,” which consisted of answering patient calls after-hours. Many physicians were also rounding or performing surgery while on call. The high call volume forced physicians to cancel personal activities and often awakened them at night. The call system was causing patient/provider dissatisfaction. During the daytime, physicians are expected to manage a high volume of incoming messages while at the same time performing clinical duties.

## Methods/approach

To address these issues, Stanford Health Care launched Clinical Advice Services (CAS), a call center where clinical assistants and nurses utilize triage protocols to best address patient calls. The CAS team created the SHC clinical triage call center with attention to Lean methodologies. CAS partnered with leaders throughout the institution to develop customized nurse triage protocols and monitor quality metrics. The team set a goal of reducing physician call volume by 90%. CAS created a quality committee to review data, including escalation to physicians, top protocols used, and patient/provider satisfaction. During the pandemic, CAS took over 24-hour triage of COVID-19 related calls and provided all COVID-19 positive results reporting to patients.

## Results

CAS is fully deployed and has accepted over 1 million patient calls. Primary care patients are the top utilizers of the service. Less than 10% of primary care calls require escalation to physicians and less than 5% of all calls require triage to the Emergency Department (ED). Patient satisfaction is consistently above 95%. CAS received the prestigious URAC national health call center accreditation, which validates its attention to quality. During the pandemic, CAS has managed over 35,000 calls regarding COVID-19 that would otherwise been sent directly to physicians and has taken over COVID-19 positive results reporting for the entire enterprise.

## Conclusion

To address the high burden of calls to physicians and improve patient experience, establishing a health call center can lead to improved provider and patient satisfaction and well-being. A multidisciplinary call center can elevate health care teams to provide quality care to patients and decrease physician burnout, especially during times of crisis such as the COVID-19 pandemic. Monitoring quality metrics, utilization of nurse triage protocols, and physician escalations can ensure a successful program. Future directions include expanding daytime clinical support and leveraging technology to decrease call burden.



# Oral presentations

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Novel measurement

# Developing an instrument to assess interdisciplinary teamwork in health care

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## Learning objectives

1. What are considered attributes of optimal teamwork?
2. What attributes are most associated with medical staff perceptions of optimal teamwork, professional fulfillment, and burnout?
3. How might these findings be operationalized in the healthcare setting?

## Project objective/background

In Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-being, National Academy of Medicine recommended improving interprofessional teamwork to reduce burnout. Previously, in To Err is Human, they attributed 70% of medical errors to faulty communication, coordination, and collaboration. Thus, optimal teamwork may improve clinician well-being and access to a safe high-quality patient experience by high-performing professionals (quadruple aim). We sought a teamwork instrument inclusive of important aspects of teamwork, and exclusive of other factors such as leadership and desired outcomes (quadruple aim, patient care), such that teamwork itself could be isolated and studied across disciplines and settings, combined with instruments specific to other factors. We sought to understand optimal teamwork, associations with well-being.

## Methods/approach

Professional fulfillment and burnout were assessed by Professional Fulfillment Index and dichotomized according to conventions. Optimal teamwork was dichotomized as "strongly agree" (vs. "strongly disagree to somewhat agree") on a single-item metric, yet to be validated. After literature review, 21 candidate items were written to represent consensus on core teamwork themes, with 1-5pt Likert scale of agreement. Data was created from standard descriptive statistics and logistic regression adjusted for age, race, gender, specialty, and hospital

delivery network to assess the association of teamwork traits with outcomes. Exploratory Factor Analysis (EFA) retaining factors with Eigenvalues  $>1$ , and items within factors with loadings  $>0.6$ .

## Results

Of 7414 medical staff invited to participate, 2317 completed the PFI. Included, 1910 completed the teamwork assessment. All 21-items were statistically significant in relation to optimal teamwork, professional fulfillment, and burnout ( $p < 0.001$ ). Interdisciplinary teamwork was perceived as optimal when the goals and roles are clear and well-aligned and there is mutual support without judgement or competition, with situational awareness and willingness to respond to the needs of others without hesitation. Items related to feeling supported were most associated with professionally fulfillment (OR = 2.0 for each one-point increase in agreement). After EFA, the instrument was reduced to a single scale with 17-items (eliminating selecting teammates, setting expectations, and adequate staffing) resulting in an average inter-item covariance of 0.73 and Cronbach alpha 0.97. Overall average interdisciplinary teamwork score was significantly associated with medical staff professional fulfillment (OR 3.60, CI 3.08-4.20) and burnout (OR 0.31, CI 0.27-0.35, respectively) on 5-pt Likert. (Table)

## Conclusion

All teamwork items were significantly related to “optimal teamwork”, professional fulfillment, and burnout. Characteristics comprising optimal teamwork may be different from the outcome of feeling supported, thus professionally fulfilled. Further analysis, refinement, validation is forthcoming.

## Toward Understanding and Assessing Teamwork in Healthcare

**WHAT IS OPTIMAL TEAMWORK: ASSOCIATIONS WITH BURNOUT.**  
All factors statistically significant in relation to optimal teamwork and burnout. (p value <0.001). Orthogonal rotation shows clustering themes, explains 89% variance. Cronbach alpha 0.96. Univariate unadjusted odds ratios.

|  | Responses | Mean (+/-SD) | Optimal teamwork    | Professional Fulfillment | Burnout          |
|--|-----------|--------------|---------------------|--------------------------|------------------|
| <b>Optimal Teamwork</b>  | 1910      | 3.62 1.11    | OR                  | OR                       | OR               |
| There is mutual support beyond self-interest or judgement.   | 1895      | 3.86 1.03    | 12.11 (8.80-16.65)  | 2.34 (2.02-2.70)         | 0.47 (0.41-0.53) |
| Everyone maintains situational awareness, anticipates and responds to the needs of others.               | 1896      | 3.65 1.03    | 12.15 (8.91-16.57)  | 2.19 (1.91-2.51)         | 0.47 (0.41-0.53) |
| Our goals are well-aligned in everything we do.  | 1901      | 3.65 1.07    | 18.64 (13.27-26.17) | 2.24 (1.96-2.57)         | 0.47 (0.42-0.53) |
| No one is reluctant or holds back in offering to assist.   | 1901      | 3.76 1.08    | 7.13 (5.45-9.32)    | 1.97 (1.73-2.34)         | 0.49 (0.44-0.56) |
| We collaborate rather than compete.  | 1904      | 4.05 0.99    | 13.06 (9.07-18.82)  | 2.06 (1.78-1.98)         | 0.48 (0.42-0.55) |
| Our roles, abilities, and scope of work are clear without assumption.                                    | 1902      | 3.61 1.11    | 7.28 (5.57-9.52)    | 2.06 (1.81-2.33)         | 0.57 (0.51-0.64) |
| Questioning attitudes are welcome and all opinions are respectfully considered.                          | 1898      | 3.75 1.05    | 7.05 (5.40-9.21)    | 2.32 (2.02-2.67)         | 0.48 (0.43-0.55) |
| Psychological safety exists to address and learn from honest mistakes.                                   | 1891      | 3.70 1.04    | 5.42 (4.27-6.87)    | 2.35 (2.04-2.71)         | 0.48 (0.43-0.55) |
| Psychological safety exists to disagree or challenge without fear of backlash, politics, or retribution. | 1895      | 3.57 1.11    | 4.53 (3.65-5.63)    | 2.21 (1.94-2.51)         | 0.48 (0.43-0.54) |
| Conflict resolution is direct without need for venting, triangulating, or being artificial.              | 1891      | 3.32 1.15    | 3.58 (2.96-4.33)    | 2.07 (1.84-2.34)         | 0.50 (0.44-0.56) |
| Members of the clinical team do their job in a way that makes it easier for me to do mine.               | 1888      | 3.72 1.06    | 6.91 (5.53-8.97)    | 2.31 (2.01-2.67)         | 0.47 (0.42-0.53) |
| I do my job in a way that makes it easier for others to do theirs.                                       | 1893      | 4.19 0.74    | 6.17 (4.66-8.19)    | 2.37 (1.98-2.82)         | 0.56 (0.47-0.66) |
| I feel supported by the frontline clinical staff   | 1890      | 3.96 0.95    | 5.88 (4.53-7.64)    | 2.35 (2.02-2.74)         | 0.47 (0.42-0.55) |
| Decisions about operations are explicit and information is transparent and clearly communicated.         | 1889      | 3.35 1.16    | 3.12 (2.61-3.75)    | 1.94 (1.72-2.17)         | 0.54 (0.48-0.60) |
| We maintain a transparent score card of success for which we share responsibility.                       | 1871      | 3.35 1.11    | 3.32 (2.77-3.99)    | 2.06 (1.82-2.33)         | 0.53 (0.47-0.59) |
| Accountability is clear and upheld fairly.   | 1878      | 3.49 1.11    | 4.11 (3.34-5.06)    | 2.18 (1.92-2.48)         | 0.50 (0.44-0.56) |
| Recognition (good and bad) is fairly distributed, without favoritism or politics.                        | 1884      | 3.44 1.14    | 3.24 (2.69-3.89)    | 2.21 (1.94-2.51)         | 0.46 (0.41-0.52) |
| We are adequately staffed to function as a team.   | 1887      | 3.03 1.32    | 1.93 (1.71-2.18)    | 1.75 (1.59-1.93)         | 0.58 (0.53-0.64) |
| I am involved in setting expectations for the clinical team.   | 1885      | 3.31 1.26    | 1.71 (1.50-1.94)    | 1.67 (1.51-1.85)         | 0.60 (0.54-0.66) |
| I am involved in selecting the people on the clinical team.  | 1878      | 2.72 1.40    | 1.48 (1.33-1.64)    | 1.38 (1.27-1.50)         | 0.74 (0.67-0.80) |

Mean on Likert scale of agreement 1-5. All items statistically related to optimal teamwork, professional fulfillment, and burnout (Pearson's chi square p<0.001 for all items). Logistic regression adjusted for age, race, gender, specialty, delivery network to establish associations (OR).

Teamwork composite score including factors determined by EPA with Eigenvalues >1, factor loading >0.6 (= loading on to one factor, eliminating "setting expectations", "selecting teammates", "adequate staffing" with factor loading <0.6). 17-items retained. Avg interitem covariance 0.73. Cronbach alpha 0.97 KMO 0.9703

|                                 | Responses | Mean (+/-SD) | Optimal teamwork | Professional Fulfillment | Burnout          |
|---------------------------------|-----------|--------------|------------------|--------------------------|------------------|
| <b>Teamwork Composite Score</b> | 1899      | 3.44 0.87    |                  | 3.60 (3.08-4.20)         | 0.31 (0.27-0.35) |

# The value of COVID-19 disaster stress self-assessment

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## Learning objectives

1. Demonstrate the utility of a stress self-assessment pulse survey (YSSA).
2. Understand the signs and symptoms of stress most commonly experienced by healthcare workers in the acute phase of the pandemic.
3. Consider the risk for adverse psychological consequences, who is at risk, and what might be done to mitigate the risk.

## Project objective/background

The Coronavirus (COVID-19) pandemic has put an enormous strain on healthcare workers. How healthcare workers appraise the disaster-related stress symptoms provides individuals and organizations awareness of the risk of adverse psychological outcomes and the opportunity to intervene.

## Methods/approach

A brief, rapid two-part self-assessment tool was created for the appraisal of A) a traumatic event and associated appraisal of the events related to the acute coronavirus disaster, and B) individual stress symptoms. A cross-sectional survey was collected from 8299 healthcare workers associated with a large academic healthcare system across six delivery networks in proximity to the epicenter during the acute disaster phase of the COVID-19 pandemic (May-June 2020).

## Results

Findings indicate one-third of respondents reported high stress related to both the fear of exposure to the virus or threat of death (32%) and the lack of confidence in managing work and family demands (31%), while 21% endorsed moderate to high sense of feeling out of control (21%). The latter two stress appraisals were most strongly predictive of escalating moderate-high stress symptoms.

The majority of respondents (53%) reported moderate to high increases in stress symptoms, most notably tiredness and exhaustion (68%), sleep difficulties (57%), irritability (56%), anxiousness (54-56%), depressive symptoms (20-29%), isolation (23-35%), cognitive deficits (20-37%), somatic complaints (26-30%), grief (18%), and increased alcohol use (16%). The high appraisal of stressors associated with high stress symptoms were greater among younger, female, and non-MD respondents. Gender was not an independent risk factor when controlling for all other factors. Physicians may under-appraise their stress symptoms. Those 40-49, women, MDs have the greatest discrepancy between stress appraised and stress symptoms. Non-clinical academics and clinical private practitioners reported a greater stress load. The 11-18% of respondents feeling of guilt/shame or blame maybe associated with moral injury.

## Conclusion

A large proportion of healthcare workers are at risk for anxiety, depression, PTSD, and burnout. These risks could be compounded for those cut off from social support, unlikely to disclose symptoms or seek help. Irritability and cognitive deficits could affect professionalism and patient safety. These findings support an urgent organizational response to provide robust mental health services.

*Continued on the next page*

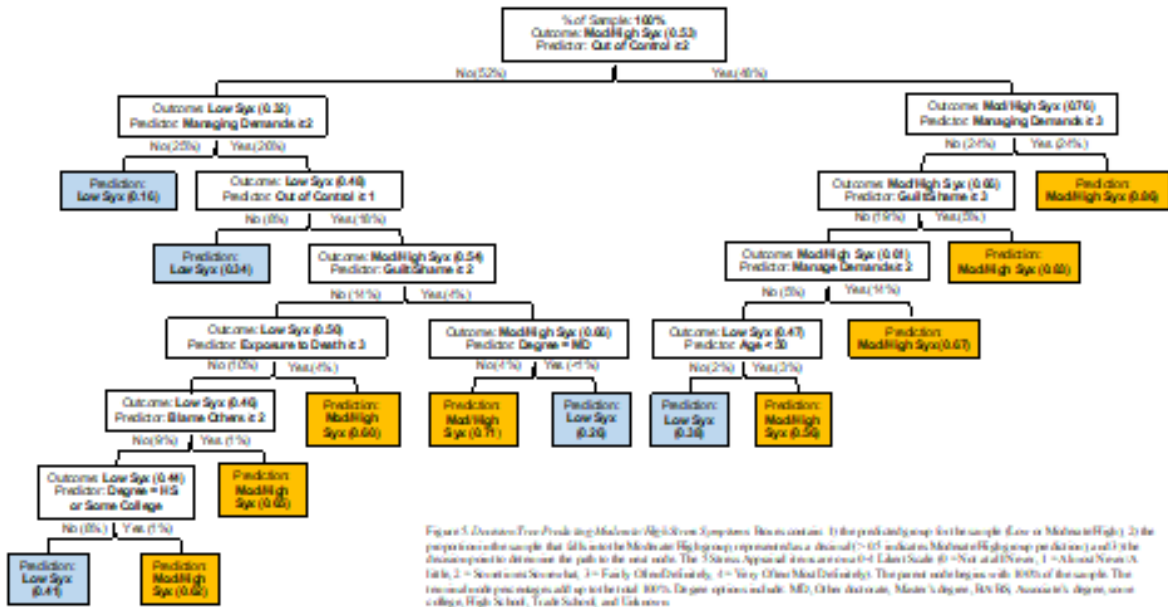


Figure 5. *Decision Tree Predicting Moderate/High Stress Symptoms*. Box is contains: 1) the predicting step for the sample (Low or Moderate/High); 2) the proportion of the sample that did not be Moderate/High group represented when a decision ("No" indicates Moderate/High group predicted) and 3) the proportion of the sample that did not be Moderate/High group represented when a decision ("Yes" indicates Moderate/High group predicted) and 4) the proportion of the sample that did not be Moderate/High group represented when a decision ("No" indicates Moderate/High group predicted) and 5) the proportion of the sample that did not be Moderate/High group represented when a decision ("Yes" indicates Moderate/High group predicted). The 5 Stress Appraisal items are rated 0-4. Likert Scale: 0 = Not at all Stress, 1 = Almost Never, 2 = Several times Stressful, 3 = Fairly Often Stressful, 4 = Very Often Stressful. The percent within boxes are 100% of the sample. The percent within parentheses add up to be total 100%. Degree options include: MD, Other doctorate, Master's degree, RN/BS, Associate's degree, some college, High School, Trade School, and Unknown.

# Using a hospitalist morale index (HMI) to measure well-being during the COVID-19 pandemic

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## Learning objectives

1. Describe how to monitor system-wide hospitalist well-being using the Hospitalist Morale Index (HMI)
2. Understand how the HMI relates to measures of morale, quality of life, and burnout
3. Understand the potential impact of demographic or clinical factors on well-being

## Project objective/background

Measuring, monitoring, and enhancing provider well-being during the COVID-19 pandemic is essential. This study evaluates a Hospitalist Morale Index (HMI) as a measure of well-being compared to other morale, quality of life, and burnout measures.

## Methods/approach

HMI is a scale comprising 5 domains: clinical, workload, leadership, appreciation & acknowledgement, and material rewards. Overall and domain scores are weighted means of items based on importance and satisfaction ratings, ranging from 0 (low) to 5 (high). We surveyed hospitalists in 5 programs on quality of life, morale, burnout, depression, and thoughts of leaving medicine or the group. Demographic factors included age, sex, race/ethnicity, and having children. Clinical factors included academic role, position, years as a hospitalist and with current group, number of groups worked for, and percent clinical. We used ANOVA and logistic regression to determine the association of HMI between groups and outcomes, accounting for site clustering.

## Results

Of the 183 hospitalists, 141 (77%) responded; 54% were women, 42% Caucasian, 39% Asian, 5% African-American and 1% Latino. The majority of physicians were 35-44 years old (44%), with 28% <35 years old. By position, median 90% clinical time [IQR: 65%, 100%], 46% were Clinical

Associates, 42% Faculty Physicians, 12% PA/NPs; 45% identified as academic. By experience, 51% worked as a hospitalist for >7 years, 12% <1 year, and 37% 1-7 years; for 62%, this was their first group.

Average HMI score was 3.00 (SD  $\pm 0.77$ ). For HMI and its domains, there was no significant association between measured demographic and clinical variables except for position, where NP/PAs had a lower overall HMI compared with Clinical Associates and Faculty Physicians (2.5, 3.1, 3.1, respectively;  $p=0.04$ ) and those with children reported higher HMI, workload, and leadership scores (all  $p<0.02$ ). An increase of 1 HMI point significantly increased good quality of life (OR 5.24; 95% CI 2.56, 10.74) and decreased emotional exhaustion (OR 0.51; CI 0.27, 0.98), depersonalization (OR 0.13; CI 0.04, 0.43), feeling depressed (OR 0.43; CI 0.21, 0.87), poor ratings of personal (OR 0.22; CI 0.10, 0.45) and group (OR 0.40; CI 0.21, 0.75) morale, and thoughts of leaving within 3 months (OR 0.27; CI 0.13, 0.53), from the group (OR 0.27; CI 0.14, 0.54) and hospital medicine (OR 0.34; CI 0.17, 0.69).

## Conclusion

Higher HMI was associated with positive well-being measures. There was no significant association between HMI and most demographic and clinical variables, suggesting its robustness across groups to monitor hospitalist well-being during and after the pandemic.



## **Oral presentations**

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Psychological impact of the COVID-19 growth

# Protective factors against psychological distress among frontline health care workers facing COVID-19: Exploring personal behaviors and system factors

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## Learning objectives

1. Identify individual behaviors and system factors that protect against psychological distress.
2. Define thresholds of exercise, sleep, and leadership support that are associated with reduced distress.
3. Highlight important opportunities for hospital leadership to support healthy habits in their community.

## Project objective/background

In the Spring of 2020, the COVID-19 pandemic struck the United States. While several studies have demonstrated the negative psychological impact of COVID-19 on frontline healthcare workers (FHCWs), few have examined protective factors for increased wellbeing. This study examines both individual behaviors (sleep, physical exercise, hobbies, etc.) and systemic factors (leadership support, camaraderie, etc.) in order to identify potential targets to optimize recovery.

## Methods/approach

Data were collected between 4/14/2020 – 5/11/2020 through an anonymous electronic survey of 6,026 FHCWs directly involved in the care of COVID-19 patients at an urban tertiary care hospital in NYC. 2,579 FHCWs completed the survey. Outcomes measured included rates of psychopathology such as COVID-19 related PTSD, MDD, and GAD. Data concerning psychosocial stressors, restorative behaviors (sleep, physical activity, mindfulness activities, consuming content, and hobbies), and questions on team/hospital support and perceived value at work were obtained.

## Results

A multivariable logistic regression and relative importance analysis of protective factors and reduced rates of psychopathology found sleep and leadership support to be a significant interaction (Wald  $X^2 = 4.19$ ,  $P = 0.041$ ,  $OR = 0.89$  [0.80 - 1.00]). Significant single effects included

team camaraderie (Wald  $X^2 = 10.21$ ,  $P = 0.001$ ,  $OR = 0.78$  [0.66 - 0.91]), physical exercise (Wald  $X^2 = 7.48$ ,  $P = 0.006$ ,  $OR = 0.93$  [0.88 - 0.98]), and hobbies (Wald  $X^2 = 5.27$ ,  $P = 0.022$ ,  $OR = 0.95$  [0.90 - 0.99]). The threshold of exercise days associated with protection from psychopathology was found to be 4 days, with 5 and 6-7 days of exercise per week showing further reductions. For the interaction, among workers who slept a median of 6 hours/night, high leadership support was associated with reduced rates of psychopathology; among workers who slept a median of 7 or 8 hours/night, medium-to-high levels of leadership support were associated with further reductions in a “dose response” manner.

## Conclusion

Our findings are consistent with past studies showing that sleep and physical exercise impact overall well-being. It is also evident that leadership support and team camaraderie are critical to help combat negative psychological sequelae. Taken together, these findings highlight important opportunities for hospital leadership to support healthy habits in their communities. For example, leaders can mobilize resources for early detection and screening of sleep disturbances, engagement in hobbies, and promotion of physical activity challenges. They can also work to increase perceptions of support and value in the workplace by encouraging supervisors to vocally acknowledge hard work, deliver positive feedback, enhance morale, and boost camaraderie.

# Psychological impact of the COVID-19 pandemic on frontline health care workers in New York City: A longitudinal analysis of consequences & opportunities

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## Learning objectives

Participants will be able to...

1. Describe rates and correlates of psychiatric symptoms, burnout, resilience, & posttraumatic growth among health care workers during the pandemic peak and six-months later.
2. Detail interventions that were employed to manage the crisis and support health care workers.
3. Understand the factors associated with various symptom trajectories between the pandemic peak and six-month follow-up.

## Project objective/background

This study explores a range of psychological outcomes experienced by health care workers serving on the frontlines of the COVID-19 pandemic in NYC during the peak and at six-month follow-up, including symptoms of/protection from psychopathology and burnout and the presence of posttraumatic growth (PTG).

## Methods/approach

A survey-based study of frontline health care workers was administered during the pandemic surge and six months follow-up at a single urban academic hospital. Occupational and personal exposure characteristics and symptoms of COVID-19-related posttraumatic stress disorder (PTSD), major depressive disorder (MDD), and generalized anxiety disorder (GAD), burnout, resilience, and PTG were ascertained. Multivariable logistic regression and relative importance analyses were conducted to identify factors associated with the outcomes at baseline and follow-up, and McNemar's tests were used to explore changes over time.

## Results

Participants included 2,579 health care workers at baseline and 1,620 at follow-up; 787 responded to both surveys. At baseline, 39% of the population had at least one positive psychiatric screen and 39% screened positively for burnout. At follow-up, 22% had at least one positive psychiatric screen and 41% screened positively for burnout. Of the 787, 60.4% never endorsed psychiatric symptoms

and 44.6% never endorsed burnout; 16.0% and 28.3% screened positively for psychiatric symptoms and burnout, respectively, at both baseline and follow-up. 19.1% and 10.6% had remitted psychiatric symptoms and burnout from baseline to follow-up; 4.5% and 16.5% had new onset psychiatric symptoms and burnout, respectively, at follow-up. Three quarters of the sample at follow-up reported moderate or greater posttraumatic growth on at least one PTG-scale item. Correlates of PTG included higher intrusive thoughts at baseline, profession (PAs/NPs, RNs, trainees), endorsing a greater sense of purpose, more camaraderie, higher engagement in self-reflective activities, and higher perceived leadership support at baseline. Participants highly valued financial support resources, clear time-off policies, stress reduction activities, access to food/ snacks/ PPE, and scrubs, travel options, and clear system-wide communications to help alleviate the stress of the crisis.

## Conclusion

Psychiatric symptoms among health care workers were significantly higher during the pandemic surge than at follow-up; burnout remained relatively high. PTG was present in ~3/4 of health care workers, and those with psychiatric symptoms at baseline were more likely to endorse growth, indicating that distress may be necessary to manifest PTG. Institutional resources are necessary to help support workers' mental health, curb distress and burnout, and promote the development of resilience and PTG in the wake of a crisis.



## **Oral presentations**

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Supporting physicians and access to care

# A multidimensional approach to physician support during a pandemic

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## Learning objectives

1. Identify specific forms of pandemic-related support that are valued by physicians
2. Evaluate potential strategies to implement support mechanisms within their organization
3. Consider expanding applicable resources to support physicians' wellness and mental health

## Background

The COVID-19 pandemic has resulted in an array of unprecedented stressors confronting the healthcare community. To mitigate the impact of these stressors on physicians, we have employed a multi-faceted approach. This includes attention to essential needs, designing tools/resources for an increasingly dynamic practice environment, expansion of programs to support emotional/mental health, and expanded benefits to decrease the pandemic-related impact on physicians' family and personal life.

## Methods/approach

Early in the pandemic, a COVID-19 Physician Support Taskforce was convened and charged with understanding the evolving pandemic-related needs, generating proposals for physician support, and strategizing how best to deploy the robust resources, programs, and support personnel already in place. Through the work of this taskforce and widespread engagement with executive leaders, physician HR, physician education, EAP, physician wellness leaders and other groups, we offered our close to 10,000 physicians a broadened selection of resources and programs throughout the pandemic. These include and are not limited to:

- A COVID-19 Physician support website with links to relevant updates, tools for practice support, and resources to help physicians care for themselves and their families
- Expansion of childcare and financial support benefits
- A pandemic-focused virtual educational series addressing topics related to wellness, resilience, mental health, parenting, stress, self-compassion, professional development, and culturally responsive care.

- A 24/7 support line for physicians - providing confidential assessment and linkage to mental health and self-care resources based on need and preference
- Peer support programs across medical centers
- A comprehensive package of tools, resources, and equipment to support physicians in transition to working remotely

## Results

These resources were offered to physicians beginning March 2020. Measures such as participation rates in the benefit programs, website usage rates, and participation in the virtual programming and peer support were tracked. For example:

- The family resources page on the support website has received more than 4,200 views since its inception
- More than 1,000 physicians attended the inaugural live virtual wellness presentation
- Over 99% of our physicians completed an online program supporting the transition to virtual care

In addition, an organizational survey deployed in late 2020 included questions about the perceived value of the various forms of support. 5965 physicians responded and 62% of respondents agreed or strongly agreed that the additional support offered during the pandemic had been of value to them.

## Conclusion

A large percentage of our physicians have taken advantage of and found value in expanded support, resources and programming offered during the ongoing COVID-19 pandemic.

# Medical student mental health: Student burnout, treatment acquisition and barriers to care at a single institution

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## Learning objectives

1. Learn how a single medical school developed an assessment to evaluate student burnout, well-being, and access to mental health care.
2. Understand common barriers to accessing mental health care for students
3. Be inspired by changes that have been implemented since the conclusion of this work

## Project objective/background

Medical students demonstrate levels of burnout and depression disproportionately higher than their non-medical peers. Despite this, little is known about rates of treatment acquisition and barriers to receiving care amongst students with mental health concerns. This study further characterizes rates of burnout, use of professional services, and obstacles to treatment for medical students at one institution.

## Methods/approach

In June 2020, a 31-question survey was sent to 531 current and recently graduated medical students from the University of Michigan Medical School. Participation was anonymous and voluntary, and response to each question was optional. Results were collected for two weeks. Outcomes included self-reported measures of burnout, use of and satisfaction with professional mental healthcare services, barriers to care, comfort discussing mental health concerns with others, and suggestions for improvement.

## Results

The survey gathered 307 unique responses. Nearly half (48.2%, n=148) of all students reported experiencing at least one symptom of burnout, and the majority (80.8%, n=243) reported concern for their overall emotional well-being during medical school. Two-thirds (66.1%, n=203) further indicated having a new or previously diagnosed

mental health concern in medical school, with over one-third (36.9%, n=75) of these students sharing they have never sought treatment. The most commonly reported barriers to care included lack of time, fear of negative career repercussions, and cost.

## Conclusion

This survey demonstrated extraordinary concern for emotional well-being and unexpectedly high rates of diagnosed or perceived mental health concerns amongst medical students. Our institution is not immune to burnout and depression; these issues are only exacerbated when financial concerns, stigma, time, and fear prevent students from getting the help they need. Using student-driven feedback, these results are currently promoting structural changes at our institution, including implementation of more robust professional mental health services and re-evaluation of the curriculum. By designing proactive programming that connects students with mental health care early and often, coupled with access to professional care that intentionally eliminates the most common barriers to its use, this work imagines a more comprehensive system of care that holistically protects those at all levels of professional medical training. These efforts are helping redefine what a supportive learning environment looks like and can hopefully provide a more robust mental healthcare model for other institutions in the future.



# Oral presentations

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Well-being of trainees

# Culture and experiences surrounding pregnancy and child-rearing among residents and fellows

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## Learning objectives

1. Examine the perceived culture and experiences surrounding pregnancy and childrearing
2. Identify stressors reported by the survey respondents
3. Devise policies to shift the culture surrounding pregnancy and child-rearing in training programs

## Background

The ACGME released guidelines regarding provisions for breastfeeding effective July 1st, 2019. As of July 2021, the ABMS will require all training programs to give 6 weeks of caregiver, medical, or parental leave. These initiatives are a step in the right direction but residency programs need to do more to foster environments in which trainees with families or wanting to start families feel supported.

## Methods

In 2016 and 2017, all residents and fellows in ACGME programs were invited to complete an optional, anonymous survey of well-being. Of the 27,000 trainees who responded, 5,255 also documented personal experiences about factors affecting their well-being in an open-comments section. We completed a retrospective, line-by-line qualitative assessment of the comments using thematic analysis with a grounded theory approach. For this project, we coded over 300 comments pertaining to pregnancy, child-rearing, and breastfeeding.

## Results

Respondents reported a lack of support and either an explicit or implied bias against pregnancy and child-

rearing within their programs. Males reported concerns with finances and time away from their families. Females reported anxiety contemplating pregnancy as well as post-partum and breastfeeding concerns.

## Conclusion

The majority of trainees spend their prime reproductive years (26 - 35) in training and the impact of parenthood on the residency experience cannot be ignored. The findings of this analysis can inform programs on adaptations that can be made to current policies to better support trainees with or considering starting a family. Parental leave is required by law; however, its implementation is widely variable. Some programs have been able to accommodate flexible leave without disrupting trainees' educational timeline, and an initiative by the ABMS to make 6 weeks of parental leave mandatory will take effect in July 2021. Programs can also support trainees with families in other ways, such as providing resources for childcare. While these changes can help ease certain stresses, there also needs to be a shift in programmatic culture to reflect that having or starting a family during training is a common occurrence and should not be considered an inconvenience to a program.

# Teaching future doctors skills to support each other: Impact of Mental Health First Aid Training on medical students

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## Learning objectives

1. Understand the utility of Mental Health First Aid Training (MHFAT) as a resource to guide student response to a mental health crisis
2. Evaluate the effect of MHFAT on student self-reported knowledge, confidence, and attitudes towards mental health crises
3. Assess the potential for MHFAT to promote wellness by enhancing peer support

## Project objective/background

Studies show medical students have a higher prevalence of anxiety and depression than age-matched peers and up to 11% admit to suicidal thoughts in the past year<sup>1</sup>. Studies show the importance of peer engagement to support those experiencing distress<sup>2</sup>. Mental Health First Aid Training (MHFAT) is an established course that teaches participants to recognize and respond to a mental health crisis, yet little is known about its impact on US medical students. Following favorable results with a small pilot, this study aims to evaluate the longitudinal impact of MHFAT upon a large cohort of first-year medical students, and its potential to aid wider efforts to improve peer support.

## Methods/approach

MHFAT was administered to the entire class of first-year medical students via four zoom-based sessions, as part of orientation curriculum at a large urban medical school. A focus group of faculty and students developed survey questions based on those provided by MHFAT. Surveys assessed students' self-reported attitudes, confidence, and knowledge about mental health problems, ways to intervene, and utility of the training. Surveys were administered to participants (n=290) before (94% response rate), immediately after training (71% response rate), and eight months later (50% response rate). Respondents indicated their level of agreement with statements on a 5-point Likert scale, with higher scores reflecting more positive outcomes. A combined mean percentage score for each attribute was calculated.

## Results

Student attitude mean ratings across 6 items show a significant improvement from pre-survey to the post-survey ( $t(590) = -4.58, p < .0001$ ) but the difference at 8-month follow-up is not significant. Student confidence mean ratings across 9 items show a significant rise from the pre-survey ( $t(590) = 11.89, p < .0001$ ) which remains significantly higher than the pre-survey mean at 8-month follow-up ( $t(590) = 3.25, p < .005$ ). Student knowledge mean ratings across 5 items show a significant rise from the pre-survey to the post-survey ( $t(590) = 11.69, p < .0001$ ) which also remains higher than the pre-survey at 8-month follow-up ( $t(590) = 5.04, p < .0001$ ). Almost 95% of students believe they will use the skills they learned in the future with a peer or friend and 96% believe future classes should receive it.

## Conclusion

This study demonstrates an increase in student self-reported knowledge, attitudes, and confidence immediately following MHFAT, with many reporting they will use the skills gained outside of their clinical life. At 8-month follow-up, although some of the impact faded, student knowledge and confidence remained higher than at baseline, most students who spoke to others about mental health felt MHFAT helped them to respond, and almost all stated future classes should receive this training. Continuing this topic longitudinally may further sustain its impact and is a topic for future study. Considering most medical students who experience mental health

symptoms during training turn to a peer/colleague for support, empowering the student body to recognize and support peers in distress may improve wellbeing.

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# Waiting on the world to change: The long view of the development of burnout in physician trainees

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## Learning objectives

1. Participants will be able to observe a common pattern of development of burnout in the PGY1 year of residency training.
2. Participants will consider that this pattern is quite stable in our 15 years of data collection.
3. Participants will be able to engage in implications of this long cohort study.

## Project objective/background

Physician trainee burnout is well established and of concern. The ACGME has brought increasing focus to the prevention of burnout in training; but has the world changed in the past professional generation? To examine the nature of burnout over time, we administered burnout measures quarterly in successive PGY1 resident physicians for 15 years.

## Methods/approach

From 2005 to 2019, all residents entering training programs at a Midwestern community hospital in year one (PGY-1) were administered The Maslach Burnout Inventory (MBI). The MBI consists of three subscales: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA). Burnout is recognized when individuals have high scores in both EE and DP, and low scores in PA. Resident training programs included primary care, surgical, emergency, obstetrics, and others. The MBI was completed quarterly (Q1, Q2, Q3, and Q4). Statistical analysis was both descriptive and paired sample t-tests.

## Results

A combined 587 PGY-1 resident physicians completed surveys across the 15 years studied. The overall combined PGY-1 resident years (n=587) had mean EE scores of 14.15,

DP scores of 5.95, and PA scores of 37.12 at the beginning of the year, indicating low levels of burnout. By Q4, there was a relative 71% increase in EE (24.13), 73% increase in DP (10.32), and 9% decrease in PA (33.76) indicating a progression to average levels of burnout. Individual change scores from Q1 to Q4 (n=375) were also compared using a paired samples t-test. There were significant differences in residents' scores from Q1 (EE  $\mu=14.24$ , SD 8.11; DP  $\mu=6.00$ , SD 4.61; PA  $\mu=37.41$ , SD 6.12) to Q4 (EE  $\mu=24.28$ , SD 11.62;  $p<.000$ ; DP  $\mu=10.31$ , SD 6.57;  $p<.000$ ; PA  $\mu=33.91$  SD 7.39;  $p<.000$ ). Patterns of scores for each cohort reveal remarkable consistency regarding the development of burnout across the PGY1 year.

## Conclusion

Resident physicians experience changes in burnout across the PGY1 year, beginning with low levels of burnout, and ending with average levels of burnout. Personal accomplishment scores appeared to endure better than the other facets of burnout. The pattern of burnout development has been stable for 15 years, indicating that the field of medicine has yet to improve the educational experience with respect to preventing burnout for young trainee physicians.



# Oral presentations

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Work-life interface

# A data driven strategy to address the experiences of female physician faculty

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## Learning objectives

1. Identify differential rates of burnout and professional fulfillment among male versus female physician faculty
2. Identify areas in which the experiences of female faculty differ from those of male faculty
3. Describe potential interventions for enhancing the experiences of female faculty

## Project objective/background

Burnout is a critical issue affecting physicians. It has negative effects on physician health and career fulfillment, as well as healthcare practice and workforce availability. We sought to characterize rates of burnout and professional fulfillment among female physician faculty, characterize domains in which the experiences of female faculty differ from those of male faculty, and develop programming accordingly.

## Methods/approach

In Summer 2019, an adaptation of the Stanford Physician Wellness Survey was administered to all physician faculty in the Brigham and Women's Physicians Organization (BWPO). The BWPO employs the physicians of Brigham Health, an academic medical center affiliated with Harvard Medical School. This survey includes validated measures of burnout and professional fulfillment, as well as culture of wellness, personal resilience, and efficiency of practice factors associated with burnout. Chi-squared tests were used to compare burnout and professional fulfillment rates by gender. T-tests were used to compare ratings of culture of wellness, personal resilience, and efficiency of practice factors.

Based on these and prior survey findings, we launched five coaching programs for female faculty. Each program targeted a specific career phase, and via both individual and group sessions, covered topics such as leadership development, networking, communication, and time management. Participants were surveyed about program perceptions post-participation. We have additionally launched professional development programming aimed at supporting women in diverse career tracks, developing

allies for female faculty, and creating a female faculty network across the institution.

## Results

Our survey sample included 1,070 physicians (50% response rate), 44.7% of whom were female. Rates of burnout were significantly higher (48% vs. 33%) and rates of professional fulfillment were significantly lower (29% vs. 46%) for female versus male faculty (both  $p < 0.05$ ). Female faculty reported a more negative effect of work on personal relationships, and significantly lower ratings of feeling like they were contributing professionally at work, self-compassion, and organizational leadership (all  $p < 0.05$ ).

135 female faculty participated in the five coaching programs. Of 43 respondents to an evaluation survey, 70% thought the programs improved their personal wellbeing and 63% felt the programs furthered their ability to advance towards professional goals. Evaluations of professional development offerings and networking opportunities are ongoing.

## Conclusion

Female physician faculty have significantly higher burnout rates and lower professional fulfillment rates. They have lower ratings of self-compassion, organizational leadership, feelings of professional contribution, and impact of work on personal relationships. Targeted programming consisting of coaching, professional development opportunities, and networking opportunities may serve as a starting point for addressing these differences.

# Exploration of career choices and job satisfaction among early career pediatricians

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## Learning objectives

1. Discuss the relationship between gender and early career decisions among pediatricians.
2. Describe gender-based differences in career satisfaction among early career pediatricians.
3. Recognize parenthood as a predictor for early career part-time work among pediatricians.

## Project objective/background

Women pediatricians report lower satisfaction with work-life balance and greater time spent on household caregiving responsibilities than men colleagues, suggesting parenthood may differentially impact women and men's careers. Little is known regarding the relationship of gender and parenthood with career choices and job satisfaction among recent residency graduates. The objective of this study was to examine gender and parenthood differences in early career choices and job satisfaction among early career pediatricians (ECP).

## Methods/approach

National data from a 2019 survey of ECPs who graduated residency between 2016-2018, as a part of the American Academy of Pediatrics longitudinal study, Pediatrician Life and Career Experience Study. Respondents were asked about parenthood, fellowship training, part-time work hours, and satisfaction with job aspects (4-point Likert scale). Chi-squared tests examined relationships of gender and parenthood with fellowship training, part-time hours, and measures of job satisfaction.

## Results

830 pediatricians responded (90% participation). Mean age=33 years. 75% were women and 43% parents. 41% of women and 48% of men were parents,  $p=0.11$ .

33% were in fellowship training with fewer women and parents in training compared to men and those without

children (31% vs 39%  $p<0.05$  and 24% vs 40%  $p<0.001$ , respectively). Among parents, 23% of women and 26% of men were in fellowship training,  $p=0.50$ . Among those without children, 36% of women and 51% of men were in fellowship training,  $p<0.01$ .

Overall, 11% reported part-time or reduced hours. One fellowship trainee reported such hours (0.4%), compared to 16% of post-training pediatricians. Among post-training pediatricians, parents and women were more likely than those without children and men to work part-time hours (24% vs 9%,  $p<0.001$  and 19% vs 6%,  $p<0.01$ , respectively). Women parents were much more likely to work part-time than men parents (30% vs 5%  $p<0.001$ ) (Table).

Overall, most were somewhat or completely satisfied with opportunities related to learning (85%), recognition (78%), flexibility for work-life balance (71%), and job earnings (65%), with no variation by parenthood status. Men were more likely to be satisfied with learning opportunities (91% vs 83%  $p=0.01$ ) and recognition (83% vs 76%  $p=0.04$ ), compared to women.

## Conclusion

Women and parents are less likely to be in fellowship training and more likely to work part-time early in their careers. Women report high, but less satisfaction compared to men related to learning opportunities and recognition. Initiatives targeting these areas may improve gender based inequities in pediatrician well-being.

# Understanding the impact of COVID-19 on faculty needs for childcare/eldercare, flexibility and work-life balance

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## Learning objectives

1. Describe the issues facing physicians with respect to childcare/eldercare flexibility, and work/life balance during the pandemic.
2. Describe the approach taken by an academic medical center to solicit real time feedback.
3. To inform short and long-term solutions to meet faculty needs.

## Project objective/background

Massachusetts was impacted early in the COVID-19 pandemic. Since March 2020 state restrictions decreased the supply of childcare, and schools operated on predominantly virtual or hybrid models. Simultaneously, physicians were challenged to increase in-person volume, and maintain virtual visits. We sought to understand the impact of this situation on physicians, and identify opportunities to mitigate negative effects and physician burnout.

## Methods/approach

Brigham and Women's Physicians Organization employs the 1800 physicians of Brigham and Women's Hospital (BWH), an academic medical center affiliated with Harvard Medical School. Its leadership prioritized learning about the pandemic's impact on physician worklife, through inviting all physicians to participate in focus groups. Eight focus groups were held virtually in September 2020. A total of 75 faculty participated, equivalent to 4% of the total physician population. Fourteen clinical departments were represented by 58 female and 17 male participants. The facilitated sessions sought feedback from faculty about their experiences with childcare/eldercare, expectations and actual experiences of flexibility, and work/life balance.

## Results

Access to asymptomatic testing for physicians and their families emerged as the most pressing issue, given that symptomatic children cannot attend group childcare, resulting in physicians being unable to present

to work. Leadership escalated this issue to the Mass General Brigham system leadership, and soon thereafter asymptomatic testing for all employees became available. Occupational Health supports employees to find testing for their family.

Feedback on the emergency childcare/eldercare options offered by the organization during the pandemic identified opportunities to align with varied clinical schedules, and that the more profound need was for increased availability of permanent options. Hearing the varied approaches of departments provided insight about improving backup systems for coverage and last-minute rescheduling, and harmonizing policies for time off for COVID testing or care of family.

Participants noted that work/life boundaries had disappeared during COVID, moral distress had increased, and that new flexible work solutions were essential to manage these pressures long-term.

## Conclusion

Focus groups gave us effective and direct connection with our physicians during the pandemic. Participants felt their experiences and opinions were valued, and expressed gratitude for the opportunity to debrief with peers and be heard by leadership. We learned that access to testing and reliable, high quality childcare/eldercare are essential for our physicians' wellbeing. The work ahead is to increase childcare options, integrate flexible work arrangements, improve job do-ability, and explore which ways of expressing gratitude resonate best with our physicians.



# Workshops

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# Addressing the challenges of women physicians: The organizational approach

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## Learning objectives

1. Describe organizational challenges for women physicians in the medical profession
2. Describe ways to improve organizational systems and policies to facilitate inclusion, equity and well-being for women physicians
3. Commit to one idea to bring back to one's home institution

## Project objective/background

Women have historically experienced greater burnout and less representation in leadership in the medical profession. The root causes include an interplay between systemic and individual factors, both of which can be targeted to improve professional advancement and well-being for women physicians.

## Session description

In this session, we will lead the group in considering organizational and systemic barriers that organizations can improve upon to create a more equitable and inclusive working environment for women physicians. After naming these challenges (examples might include: salary equity, child bearing/rearing leave, time and space for lactation, representation in leadership), the group will work through examples of organizational improvements that help to ameliorate these barriers.

The large group will be engaged through several methods including polling, small group breakouts for idea generation and problem solving, and a commitment to one idea to bring back to the leadership at one's organization. The group will be provided with a handout of the solution ideas generated in the workshop as well as resources for further information. The final 15 minutes will be reserved for Q&A.

## Session plan and timeline

- Introduction and icebreaker [5 minutes]
- Identifying the key organizational challenges of women physicians
  - Short presentation of background research [4 minutes]
  - Interactive activity: polling/ranking on top challenges participants have observed/experienced [5 minutes]
- Linking top organizational challenges of women physicians to specific solutions
  - Short presentation: examples of initiatives and policies that facilitate inclusion, equity and well-being for women physicians [5 minutes]
  - Interactive activity: in small groups, brainstorm other possible action ideas [10 minutes]
  - Group debrief (to be captured on flipchart or similar) [11 minutes]
- Creating change at your home organization
  - Interactive activity: in dyads, identify at least one idea to bring back to home organizations (SMART goal) [4 minutes]
- Conclusion [1 minute]
- Q and A [15 minutes]

# Fast tracking change management and enhancing well-being during the COVID-19 pandemic crisis

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## Learning objectives

1. Define the principles of change management and their impact on well-being.
2. Create a template for using change management principles that will serve as a roadmap to advance well-being initiatives during a crisis.
3. Discuss ideas on how to support the development of change leaders and establish best practices for innovation during a crisis situation.

## Project objective/background

The COVID-19 pandemic created unprecedented stress and disruption for health care organizations. Change management is a systematic response to organizational change and is a leadership activity relevant at every level of the organization. Successful change management comprises a number of leadership strategies, including the McKinsey and Kotter's frameworks, that can reduce chaos in a crisis situation. Attendees will learn about a comprehensive approach to change management as a rapid response to the COVID-19 pandemic and how doing so can impact the well-being of individuals within a health care system. Participants will be able to create a template for impacting change in their program and organization during a crisis situation while maintaining a focus on well-being. The session will highlight a number of change management principles and best practices that can be established to help build a plan of action for making it through turmoil and emerging more aligned with the organization's mission during a major crisis. Attendees will also exchange ideas on how to develop into change leaders and establish best practices for innovation during a crisis situation.

## Session plan and timeline

### Didactic:

|              |        |
|--------------|--------|
| Introduction | 5 mins |
| Background   | 5 mins |

|   |         |
|---|---------|
| Principles of Change Management and Its Effects on Well-being | 10 mins |
|---|---------|

|                                   |         |
|-----------------------------------|---------|
| Change Management During COVID-19 | 10 mins |
|-----------------------------------|---------|

|                  |        |
|------------------|--------|
| Small Group Work | 20 min |
|------------------|--------|

Attendees in small groups will discuss change management strategies in a crisis situation. The small group discussion will allow participants to discuss best practices and exchange ideas on how to implement change management within an institution during chaos and ultimately foster a stable learning environment and enhance the well-being of individuals. At the end of the small groups, participants will have developed a template based on change management principles that can serve as a roadmap for effective implementation of wellness projects.

|                                     |         |
|-------------------------------------|---------|
| Full Group Debrief, Q+A and Summary | 10 mins |
|-------------------------------------|---------|

## Session description

The interactive workshop will provide an opportunity for attendees to learn about the core principles for change management that are essential to use during a time of crisis. The speakers will share resources that can be utilized to create a template for effective change management. The small group discussion will allow a forum to exchange best practices and further enhance knowledge regarding the interaction of change management and well-being.

# Getting off the struggle bus: Creating an exceptional faculty experience for academic physicians

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## Learning objectives

1. Participants will be able to identify and prioritize areas of improvement to promote exceptional faculty experiences
2. Participants will experience a community-based approach to peer-learning which they can replicate at their home institutions
3. Participants will be able to strategize multiple methods for improving physician faculty satisfaction and experience to take home to their home institutions

## Project objective/background

The concept of the Exceptional Patient Experience pioneered by University of Utah Health is a strong framework to analyze other parts of an academic health center. As the faculty provide patient care, teach students and perform research, an exceptional faculty experience is vital to the success of an academic health center. In order to explore what an exceptional faculty experience would look like for faculty at the University of Utah Health, we designed and conducted a survey that uses sense-making methodology which allowed us to see the underlying, and oftentimes hidden, components either contributing to or distracting from physician faculty having an exceptional experience. Our project aimed to: unpack ideal conditions leading a physician faculty member to have an exceptional faculty experience and to build a conceptual model of exceptional faculty experience specific to University of Utah Health Sciences.

## Session plan and timeline

- I. Introduction to the Exceptional Faculty Experience Project (5-minutes)
  - a. Background
  - b. Purpose
  - c. Methodology
- II. Activity: Six Degrees of Separation (15-minutes)
  - a. Participants are asked to write down a list of 5 things that would make their experience as an academic physician truly exceptional experience/workplace

- b. Participants asked to share with a person sitting next to them
- c. Participant pairs asked to share common/shared elements (which we will write on butcher paper)
- d. Debrief: Circle common themes

- III. Results from the Exceptional Faculty Experience Project (5-minutes)
  - a. Demographics (n=136)
  - b. Qualitative excerpts
  - c. Conceptual model
- IV. Activity: Struggle Bus (20-minutes)
  - a. A piece of blue painter's tape is laid out on the floor
  - b. A volunteer is asked to name a struggle they're having that make their experience as an academic physician less than exceptional
  - c. Those who can relate are asked to stand on the blue line (metaphorical struggle bus)
  - d. Ask volunteers who didn't get on the struggle bus to share how they avoid or conquer this struggle
- V. Wrap up & thank everyone for participation (5-minutes)
- VI. Q&A (10-minutes)

## Session description

During this interactive workshop, participants will learn about a research and quality improvement project being done at University of Utah Health. The project takes a future-facing look at an exceptional faculty experience for academic physicians. Participants will engage in two crowd-sourced activities to identify areas of improvement and strategies to navigate them.

# Healing breaths: Harnessing SKY Breath Meditation to promote individual physician resilience and organizational connectedness during a dual pandemic

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## Learning objectives

1. Examine the evidence base underlying physiologic benefits of SKY Breath Meditation for professions dealing with acute and chronic stress.
2. Experience the real-time impact of hands-on application of breathing techniques.
3. Discuss the implementation and evaluation of the virtual SKY Breath Meditation program at an academic children's hospital during the pandemic, including its impact on individual resilience and organizational culture.

## Project objective/background

**Project Background:** The dual pandemics of COVID-19 and structural racism have impacted the resilience of physicians and healthcare systems. Sudarshan Kriya Yoga (SKY) Breath Meditation has been shown to rapidly improve anxiety, post-traumatic stress, and related biomarkers among various populations, including combat veterans. A 2019 pilot study of the in-person SKY workshop at a children's hospital found significant reductions in anxiety and emotional exhaustion among healthcare professionals (HCPs).

**Project Evaluation:** In Spring and Summer 2020, over 200 HCPs at the same children's hospital participated in the virtual SKY Breath workshop, as well as 99 HCPs in five other regions across the United States. Well-being measures (burnout, anxiety, engagement and sleep) significantly improved after the intervention. Online program feedback and testimonials underwent qualitative analysis. Most prevalent themes included relaxation (centeredness, calm) and transformation (life-changing). Themes of organizational change were also identified, including gratitude, team connectedness, and normalization of self-care.

## Session plan and timeline

1. The Science of Breath (10 minutes): Presenters examine the evidence base connecting breath to well-being, and data on the physiologic benefits of SKY Breath.

2. Hands-on Breath Practice (8 minutes): Participants are taught alternate nostril breathing and practice for 5 minutes, after which they share its impact.
3. Implementation (7 minutes): Presenters discuss the logistics of how they implemented the SKY workshop in an online format during the pandemic and lessons learned.
4. Break-out Narrative Storytelling (10 minutes): Participants break out into groups of two to experience narrative storytelling, a component of the SKY workshop curriculum. Facilitators debrief on the effect of storytelling on connectedness.
5. Evaluation (10 minutes): Presenters review key quantitative and qualitative outcomes of the SKY workshop, including individual resilience metrics and unanticipated themes of organizational cultural transformation.
6. Q&A (15 minutes)

## Session description

This interactive workshop will explore the critical role of virtual resilience programming as part of an organization's well-being blueprint, particularly in response to the dual pandemic. Workshop participants will experience first-hand the healing power of breathing techniques and will appreciate how a foundational self-care program can result in organizational cultural transformation.

Participants will experience breath-based relaxation hands-on and examine the evidence base underlying physiologic benefits of SKY Breath Meditation. The session will explore a case study of SKY Breath Meditation workshop implementation as part of a children's hospital's pandemic response. Finally, the process for quantitative and qualitative program evaluation will be reviewed, including key individual and organizational outcomes.

# Innovative wellness curriculum development: How to impact system well-being infrastructure for learners and established providers

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## Learning objectives

1. Describe the development and design of the COMPADRE wellness curriculum as a model of how to impact system wellbeing.
2. Experience and gain tools to teach a part of the COMPADRE wellness curriculum.
3. Design or improve their own wellness curriculum to be customized for their unique needs and infrastructure.

## Project objective/background

There is significant focus on the need to address burnout, wellbeing, and mental health across the medical education continuum. The urgency to find meaningful and more structured interventions has been magnified by the impact of the COVID pandemic on the healthcare workforce. The California Oregon Medical Partnerships to Address Disparities in Rural Education and Health (COMPADRE) Program, an AMA Reimagining Residency grant recipient, addresses physician workforce shortages and prepares learners for practice in under-resourced communities (rural, urban underserved, and rural). COMPADRE includes a significant wellness curriculum focused on building community, connection, peer support and resilience. The proposed workshop will offer participants exposure to the curriculum and an infrastructure to create and modify their own curriculum to fit their individual settings. The applicability of the model to both in-person and virtual settings will be addressed as well as the use of the curriculum generally and in the context of the pandemic.

## Session plan and timeline

This workshop will address how to develop a flexible and impactful wellness curriculum applicable to both learners and established providers.

The interactive session will include understanding the significant steps in the design of the COMPADRE wellness curriculum (31 GME programs and 2 medical schools); experiencing part of the curriculum; and identifying how to incorporate and modify the curriculum to be used across diverse systems.

- Introduction: What is COMPADRE Wellness? The development and design of the curriculum will be presented including goals, rationale, and initial implementation- Didactic. (10min)
- Experience the Curriculum: Participants will experience one module from the COMPADRE Wellness curriculum. Using narrative medicine practices, they will reflect on their origin story and answer the given prompts. Where do I come from and what makes each of us unique?
- Small group writing and sharing. (15min)
- Improving/Creating an Individualized Infrastructure: Participants will work together with a structured worksheet to design and/or modify the wellness curriculum to fit the unique needs of participants' settings or institutions and then share with group for feedback. - Pairs/small group learning and problem-solving. (20min)
- Questions and Wrap up. (15min)

## Session description

The need to address mental health and well-being has led to the development of varied initiatives and curriculum across the medical education continuum. This workshop offers a lens into the wellness program development process for a large consortium of GME and UME faculty and learners. The session will highlight how to build and customize a wellness curriculum based on the unique needs/resources/mission of the stakeholders, the existing infrastructure of the institution and the ultimate goals of impacting well-being. Participants will experience a segment of the curriculum and then engage in a more personalized exercise to further develop their own wellness vision and plan.

# Leaders can improve their physicians' morale through participatory management: The Coaching for Clinician Engagement Program

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## Learning objectives

1. Appreciate the impact of participatory management
2. Observe and practice four specific high-impact participatory management skills
3. Consider the costs and benefits of implementing participatory management training and support in your home organization

## Project objective/background

Clinician leaders have the power to engage and inspire people who report to them or instead to demoralize them. Leaders who engage and inspire use a participatory style of management as opposed to an authoritarian style or a hands-off style. As we have demonstrated and reported previously, this style can be taught, and well-being of leaders and their reports can be improved.

At Atrius Health, we designed the Coaching for Clinician Engagement (CFCE) Program to teach participatory management to clinical leaders. The program includes (1) group experiential training in the rationale and techniques of participatory management and (2) individualized coaching with experienced physician coaches to support implementation and pursue self-identified development goals.

To date, we have delivered the CFCE Program to sixty clinical leaders in three service lines, who together manage hundreds of clinicians. Training time invested per leader was 12 hours over six months. Evaluation in our first service line showed improved efficacy, greater use of participatory management, and improved wellbeing for leaders, and improved work satisfaction for reporting clinicians.

## Workshop description

In this workshop we will share our training and coaching curriculum, using a combination of didactic and demonstration tools. We will also update our results to encompass all three services lines. Finally, we will discuss with participants how to implement a similar program in their organization.

## Workshop plan/outline

- Review the rationale for participatory management (5 min)
- Describe our program and results (5 min)
- Present and demonstrate the four high-impact key participatory management tools we teach (20 min)
- Participants practice using these tools (role-play) (15 min)
- Discuss with participants the costs and benefits of implementing a program to increase participatory management (15 min)

# Local Practice Improvement (LPI): Recovering group agency and restoring practice morale

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## Learning objectives

1. Appreciate the impact on morale of group problem-solving agency
2. Be introduced to the local practice improvement approach for restoring group problem-solving agency
3. Be introduced to and practice high-impact facilitation approaches which support the improvement process

## Project objective/background

Clinicians are protected from burnout through participating in a cohesive group that is empowered to make local decisions. In contrast, during times of crisis/prolonged high stress, as front-line clinicians have experienced during the Covid pandemic, individuals often retreat from actively participating in their group so as to preserve their ability to function. This stress response, while natural, can nevertheless be damaging both practically, in that practice problems may go unresolved, and psychologically, in that clinicians may feel helpless and disengaged.

At Atrius Health we designed and implemented a Local Practice Improvement (LPI) program to reverse clinicians' retreat, restore problem-solving agency to the practice, and improve clinicians' morale. We combined standard improvement processes<sup>4</sup> with high-engagement facilitation strategies to lead practice clinician groups to evaluate their burnout and engagement, identify the main local drivers, and persist to resolve one significant pressing concern, within a three month time-frame.

In our pilot program, burnout was reduced from 75% to 30%, and capacity was built in the practice to continue the process on their own. To date, we have worked directly with four practices to run their LPI projects, and results have been positive for each. Encouraged by this, we are scaling up the program during February-May 2021. Rather than directly consulting to the practices,

we will instead teach practice leaders to run their own LPI projects. We have a three month curriculum of four monthly group meetings, in which practice leaders learn LPI concepts, practice practical steps, plan and implement their LPI, and return to review and replan. We will evaluate success of the scale-up by comparing wellbeing and burnout of practice clinicians before and after implementing their LPIs.

## Session plan, description, and outline

In the proposed workshop we share our curriculum, using a combination of didactic, demonstration, and experiential methods. We will emphasize the importance of the high-engagement facilitation strategies that we teach practice leaders. We will also share conclusions about the success of scaling up the intervention.

- Present the rationale for the LPI model (5 min)
- Present our LPI curriculum as delivered to practice leaders. Participants will be provided with worksheets to apply the curriculum to their own practice (20 min)
- Demonstrate critical facilitation strategies as taught in our LPI course. Participants will practice them (role play) (20 min)
- Q and A – practical implementation issues (15 min)

# Meeting the psychosocial needs of staff during the COVID-19 pandemic

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## Learning objectives

1. Identify psychosocial needs and stressors of healthcare workers during a pandemic
2. Create flexible mental health and psychosocial support program during a pandemic
3. Identify individual and structural factors supporting health care worker resilience

## Project objective/background

As COVID-19 began to peak in New York State in early March 2020, a large, urban health system there rapidly organized a multitiered approach to supporting its workforce. Initial survey data showed elevated rates of depression, anxiety, and posttraumatic stress in their health care workers. This workshop will focus on their process of needs assessment and psychosocial support. Program evaluation showed that recharge spaces had thousands of visits and markedly reduced staff stress. Eighty clinicians volunteering as “mental health liaisons” provided virtual and in-person support and operated a 24/7 crisis line. Staff support provided by chaplains doubled from pre-pandemic levels. A new resilience-focused Center provided 72 resilience workshops with 64 employees since July 2020 and had 500 treatment encounters with staff since October 2020 with high adherence. Results from ongoing program evaluation efforts will inform sustainable wellness programming for health care workers that will outlast the pandemic.

## Session plan and timeline

Introduction and Background (5 minutes)  
Needs Assessment Approach and Findings of psychosocial and Mental Health Needs (10 minutes)  
Approach to psychosocial support (15 minutes)  
Small group work on resource grid (15 minutes)  
Large group report out (10 minutes)  
Summary and questions (5 minutes)

## Session description

This workshop will open with a review the psychosocial supports for staff provided by a large New York-based hospital system in response to the COVID-19 pandemic. We will discuss our overall approach, which was organized around: 1) needs assessment, 2) program design, implementation, and evaluation, and 3) strategic communication. Key innovative examples that will be highlighted include our highly utilized “recharge rooms,” leadership support efforts, large-scale spiritual care support provided by hospital chaplains, and the opening of a Center focused on supporting the resilience and mental health of the entire workforce. This Center provides resilience workshops, outreach, digital health resources, and clinical care to health system workers at no cost. In the second half of the workshop, we will transition to a participant activity around crafting a psychosocial support plan for staff that is specific to the resources of their home institutions. The session will end with a large-group report-out and overall recommendations for staff support efforts.

# Navigating qualitative well-being data: An introduction to template analysis

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## Learning objectives

1. Identify and describe the six steps of template analysis
2. Recognize how qualitative analysis is used in wellbeing research
3. Apply template analysis to qualitative research data
4. Reflect on opportunities to leverage template analysis in wellbeing research

## Project objective/background

Interest in applied qualitative research methodology is growing as medical educators seek to understand learner wellbeing and burnout during Covid-19. For many educators who are interested in conducting qualitative wellbeing research within educational settings and are looking for an appropriate starting point, however, there is limited research that shapes theory and application of a rigorous research design. Template analysis is a form of thematic analysis that emphasizes the use of a coding 'template' which summarizes qualitative data into hierarchical coding structures. Distinctive to template analysis, is a synthesized, six-stage approach that is used to describe the process of data collection and analysis.

This session will introduce the principles and practice of template analysis. It aims to support educators who are planning to undertake qualitative wellbeing research, those who have already collected data and are unsure how to analyze it, and those who are supervising learners using qualitative data. While focused broadly, this workshop will be a mix of short lectures, practical activity, and group work.

## Session plan and timeline

1. 15 minutes – background of template analysis and overview of case study
2. 15 minutes – explanation of qualitative framework (handout)
3. 10 minutes – activity – coding a learner comment (activity)

4. 5 minute – debrief
5. 10 minutes – taking template analysis back to your institution
6. 5 minutes – Q&A

## Session description

This workshop will begin by outlining the theoretical foundation, philosophical assumptions, and application of template analysis. Participants will then be given a research framework outlining the six steps of template analysis. This framework will be presented as a roadmap to conducting qualitative research.

Participants will then break into small groups. Each group will be given a quote from a case study on learner mistreatment and will be asked to code it using the framework. After the groups have discussed their quotes, they will be encouraged to rejoin the larger group to discuss the pertinent points and challenges that came from the small group activity. The results of this discussion will be used to illustrate didactic points about how template analysis can be used to analyze wellbeing data. The group will also discuss how individual coder biases can influence coding. One example is attitudes around resident work hours. Finally, research design considerations will be discussed to reflect high standards of ethical practice for conducting qualitative research and how participants can design practical and methodologically sound research.

# Not wasting a crisis: A comprehensive approach to fostering well-being in health care systems during reconstruction

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## Learning objectives

By the end of this workshop, participants will be able to:

1. Describe one model to address healthcare worker well-being as part of the ongoing COVID-19 response
2. Explain how to use a comprehensive approach to further posttraumatic growth across a healthcare system
3. Identify next steps and resources for activating change within their own health system

## Project objective/background

In March 2020, our academic health center created a Resilience Working Group to address healthcare worker (HCW) well-being as part of the COVID-19 response. This interdisciplinary collective had four sub groups: leadership messaging and communication, workforce needs, recognition and appreciation, and emotional support. We integrated community disaster response, population health, and posttraumatic growth models to guide our interventions, which occurred at the organizational, department and individual levels. Evaluation efforts included program utilization data, qualitative feedback and three separate employee engagement surveys. Initial results suggested high burnout among HCW, a strong sense of camaraderie, feeling appreciated by leadership, and a need for ongoing, tailored support.

## Session plan and timeline

1. Individual Reflection & Group Discussion: "Reflect on how your institution is currently addressing well-being as part of the ongoing COVID-19 response, what is one thing that is going well and what is one challenge?" (10 min)
2. Background: Information on how we integrated community disaster response, population health and posttraumatic growth models to address HCW well-being (10 min)
3. Pair & Share: In pairs or at table discuss the prompt, "Briefly describe one or two current initiatives to address HCW well-being at your institution." (10 min)

4. Comprehensive Approach: Information and examples on how we are currently addressing HCW well-being at the organizational, department/team, and individual levels. This includes sharing results from our well-being and programming surveys. (18 min)
5. Individual Reflection: Given the information shared today, what next steps will you take to further well-being at your institution? (2 min)
6. Closing & Discussion: Highlight handouts and share links to resources; if necessary, use prompt, "What are you taking away from this workshop?" (10 min)

## Session description

The purpose of this workshop is two-fold: 1) to provide time and space for physicians, leaders, and those who support physician well-being to connect and reflect, and 2) to learn practical, evidence-based strategies to further HCW well-being during the Reconstruction phase of disaster recovery (SAMHSA, 2000). This will be accomplished by reviewing key well-being models that guided our comprehensive approach; providing specific examples of our current interventions, including how we used well-being data to guide our efforts; and allotting time for brainstorming and discussion. Printed handouts and website links to our institutional well-being resources will be provided. We hope that this didactic and experiential learning experience will empower participants to continue making good use of the COVID-19 crisis.

# Peer support is not what it used to be: Maximizing utilization, adapting in real-time, and training to meet evolving needs in a crisis

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## Learning objectives

1. Describe how to respond to evolving needs by training peer supporters in new ways.
2. Explain how to pivot or adapt a program, and how this can facilitate culture change.
3. Identify at least two tools to increase utilization of their program.

## Project objective/background

Physicians experience multiple barriers to obtaining emotional support—ranging from stigma and concerns about licensure or credentialing to isolation to expense and access. Peer Support programs successfully address many of these obstacles. The COVID-19 pandemic has increased stressors for physicians markedly—exposure to grief, moral distress, anxieties about becoming ill oneself, unprecedented change and demands for adaptation within the health delivery system, financial loss, as well as reductions in the normal boundaries between work, home and family (school closures/remote school, telemedicine from home). Both the magnitude and type of stressors have accelerated the need for new Peer Support programs and prompted adaptation and innovation of existing programs. This workshop draws on the experiences of seven organizations as they have initiated or pivoted existing Peer Support structures to meet well-being needs at their organizations. In this workshop, participants will have the opportunity to explore, in a case-based interactive format, fundamental questions such as key considerations in starting or adapting an existing program, how to evolve that training of peer supporters to meet changing needs over time, and strategies for increasing utilization and engagement with their peer support program.

## Session plan and timeline

- Brief intros (5 minutes)
- 45 minutes of interactivity centered around 3 case presentations with interactive work and didactics
  1. Case 1—Evolving needs and training to meet them. Training Peer Supporters to respond effectively when the stressor is racism.
  2. Case 2—Pivoting an existing Peer Support Program to respond to a specific crisis, or to be ready for a post-crisis “new normal”.
  3. Case 3—Tools to increase utilization.
- Wrap up and Q and A (10 minutes)

## Session description

In this session, faculty from seven institutions who have started or adapted Peer Support programs in 2020 will work through an interactive, case-based format with participants to explore how to respond to new support needs through Peer Supporter training, how to adapt a program to endure through and/or after a crisis, and how to increase utilization and reach of a Peer Support Program.

# So, you want to be a chief wellness officer? Write your own job description

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## Learning objectives

By the end of this workshop, participants will be able to:

1. Discuss the Chief Wellness Officer's (CWO) range of job responsibilities, competencies and position in organizational structure.
2. Explain what a CWO role is and what it is not.
3. Develop an outline of a CWO job description for home institution.

## Project objective/background

In order to address the widespread epidemic of clinician burnout, physician thought-leaders have recommended the creation of a new healthcare organization senior leadership position, the Chief Wellness Officer (CWO). A key responsibility of the CWO is to ensure that professional well-being is a major consideration in all decisions that impact workflow, work environment and institutional culture. There is an evolving understanding of the CWO's range of job responsibilities, competencies and position in the organization. Many institutions have yet to appoint a CWO. In this workshop, CWOs from around the country will help workshop participants identify elements of the CWO role best suited to their home institutions.

## Session plan and timeline

- Introductions (20 minutes): CWO's from across the country will describe their CWO role, including what they have in common and what is unique to their institution.
- Develop an outline of what a CWO role would look like at your institution (25 minutes)
  - a. Participants will be divided into one of three groups and given one of three assignments: to discuss CWO job responsibilities, to discuss organizational structure and partnerships needed to support the work of a CWO, or to discuss what competencies, skill sets, and experiences are recommended for a CWO.

b. Large group debrief.

c. Each participant will be given a one-page outline of a CWO job description, with category headings. Participants will be asked to complete the CWO job description outline based on what has been discussed and their knowledge of their home institution.

- Large group discussion, questions and answers, key points (15 minutes)

## Session description

Through the process of discussing job responsibilities, skill sets, competencies, and organizational structures, and of completing a draft outline of a CWO job description, participants will develop a deeper understanding of the CWO role. They will learn what the CWO role is and what it is not, and key strategies the CWO utilizes to ensure that professional well-being is included in decisions that impact organizational culture and work processes. The CWOs from around the country will share their own experiences in advocating for and crafting their role description within their organizations' cultures, provide practical experience regarding setting expectations and describe how their role has evolved.

# Stumbling upon wellness: Pearls and pitfalls when starting a new division wellness committee

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## Learning objectives

1. List five fundamental steps to consider when starting a Wellness Committee.
2. Understand three common pitfalls when starting a Wellness Committee.
3. Develop a strategic plan for starting a Wellness Committee appropriate for your clinical practice.

## Project objective/background

Starting a physician wellness committee can be challenging given disparate perceptions and goals of wellness champions, leadership and clinicians; limited resources; varying clinical contexts; and limited evidence based guidance. This workshop reviews the successes and failures of a new academic General Internal Medicine Wellness Committee during the COVID19 pandemic and fundamental steps needed, as well as pitfalls to avoid, in order to maximize success.

## Session plan and timeline

### 60 minutes:

- Introduction (5 minutes) of presenters and workshop goals.
- Review of best practices and evidence based guidelines in developing a wellness committee (10 minutes). (Handout provided)
- Share presenters' experience (15 minutes): narrative review of the establishment of their wellness committee, its initiatives, and data collection methods.
- Large group discussion (10 minutes): Reflecting on the presenters' experience and the best practice handouts, the large group will discuss and come to a consensus on the key steps to successfully starting a wellness committee (goal will be to identify approximately 5 critical steps).

- Interactive brainstorm session (15 minutes): small group sessions where participants share their experiences (if relevant) in developing a wellness committee and draft a strategic plan for starting a committee at their institution. (Handout provided)
- Closing and final questions (5 minutes)

## Session description

A carefully developed wellness committee is an essential part of a comprehensive physician wellness program. The goal of this workshop is to review the role of a wellness committee and the many aspects that should be considered when starting such a committee. We will share our experiences with this (both our successes and failures), and distill the fundamental steps for successful implementation of a wellness committee. Special attention will be given for planning during the COVID19 pandemic. With handouts and engaged discussions, we will compare the groups' conclusions with general published guidelines and best practices collated from ACP practice resources, AMA Steps Forward modules, Mayo Clinic organizational strategies and peer-reviewed publications. Participants can expect to leave this workshop with an understanding of the steps needed to start a wellness committee and equipped with a draft strategic plan to start a committee at their home institution.

# The role of the CWO in the COVID-19 pandemic: Lessons learned to promote post-traumatic growth

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## Learning objectives

1. Describe different stages of the pandemic and common challenges faced by health care organizations (HCOs)
2. Describe the five domains of post-traumatic growth
3. Describe how lessons learned from addressing these challenges represent opportunities for post-traumatic growth at participants' own HCOs

## Background

The COVID-19 pandemic has stressed health care organizations (HCOs), added an incredible workload and numerous challenges for physicians and all health care workers, many of whom were experiencing burnout before the crisis. It has highlighted the importance of supporting their well-being. Evolving phases of the pandemic required nimble responses from HCOs to manage crises and support their workforce. Understanding these responses and applying the framework of post-traumatic growth presents an opportunity for organizational growth and support of health professionals post-pandemic.

## Session plan and timeline

- 10 min: Introductions; stages of the pandemic; five domains of organizational post-traumatic growth; challenges, lessons learned and opportunities for growth from the facilitators' experiences.
- 15 min: Each table is assigned a domain of post-traumatic growth. Participants discuss the domain from the perspective of challenges and lessons learned during COVID-19 and opportunities for post-traumatic growth in supporting organizational and physician well-being.
  1. Improved (deeper) relationships: How can leaders and health professionals engage in honest, transparent, and two-way communication to facilitate support and mutual trust post-pandemic?

2. Openness to new possibilities: Consider both adverse consequences and opportunities to assess the pandemic's impact; how can they inspire innovation, improvement, and growth?
  3. Greater sense of strength: How can HCOs emerge stronger from changes and responses that were necessary during the pandemic?
  4. Stronger sense of humanity: What is most important within the organization? How can this experience help develop connections with others, create community, and foster altruistic solutions and values within and outside the organization?
  5. Gratitude: For what is the organization grateful as a result of the pandemic? Does it show authentic appreciation to its workforce? What are reasons to be optimistic?
- 20 min: Report out of each table. Key discussion points are noted. As participants hear the report outs, they are asked to think about a high yield opportunity at their institution.
  - 5 minutes: Participants share at their table one opportunity for growth at their organization that they will pursue/advocate for.
  - 10 minutes: Panel questions and discussion: Presenters' reflections, summarizing and linking key discussion points to opportunities for post-traumatic growth in supporting physician well-being.

### Session description

The presenters, who served as Chief Wellness Officers at various organizations during the pandemic, will share their experiences and lessons learned. Using domains of post-traumatic growth to structure small group discussions, they will engage participants in reflecting about opportunities for post-traumatic growth at their own organization in support of health professional well-being. Participants will identify one growth opportunity they will pursue or advocate for, to promote post-traumatic growth at their own organizations.



# Poster presentations

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Innovation

# A faculty leadership coaching and appreciation workshop to enhance faculty well-being and engagement

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## Learning objectives

1. Learning objective: To improve skills and attitudes of high-level faculty leaders in coaching and appreciation
2. Learning objective: For leaders to imbed coaching and appreciation in their leadership practice
3. Learning objective: For leaders to serve as role models for their direct reports to enhance faculty well-being and engagement.

## Project objective/background

Literature suggests that faculty leaders' behavior relates to burnout and engagement of their team. In particular, faculty whose leaders provide coaching and feedback and recognize them for a job well done are less likely to be burnt out and targeted coaching and appreciation efforts can improve well-being in the workplace.

## Methods/approach

Utilizing existing literature and a local needs assessment (institution-wide faculty survey), we designed two workshops in an innovative virtual setting focused on building participants' skills in coaching and demonstrating recognition and appreciation of their team members. Sessions included blended learning with brief didactics, role play, polling, and group discussion. The objectives of these sessions were for participants to:

- Describe the relationships between burnout, well-being and leadership
- Apply elements of coaching practices (humble inquiry, active listening, GROW model)
- Show recognition and appreciation for team members using preset cues.

We recruited faculty leaders via leadership meetings and personal emails. Our evaluation plan includes pre-, post- and long-term surveys. The pre-workshop survey assessed attitudes towards and the frequency of providing coaching and demonstrating appreciation; the immediate post-workshop survey assessed the content and delivery of the sessions. The delayed post-workshop survey will

assess applied changes in behavior in coaching and appreciation. The former 2 surveys have been completed with descriptive data shared here.

## Results

Of the 88 leaders invited, 62 (70%) attended at least one session and 43 (%) attended all sessions. This included: 23 Chairs, 15 Institute Directors, 6 Hospital CEO's/CMO's. 42/62 (68%) attendees completed the pre-workshop survey. Most felt they were moderately (71%) or extremely skilled (26%) in coaching, with 85% reporting they sometimes or frequently provided coaching to direct reports. Most leaders felt that they show appreciation in various ways "at least some of the time" (91-100%). Barriers to coaching and providing appreciation included: not enough time, too many faculty reports, lack of direct observation and lack of skill. Over 50% of attendees responded to the post-workshop survey. The learners agreed that the workshop increased their knowledge or skills in coaching (92%) and appreciation (96%), and 88% felt that their peers would benefit from these workshops

## Conclusion

We successfully recruited senior leadership to attend innovative workshops focused on coaching and appreciation skills. Although we were limited in participants and a one-time virtual workshop, participants practiced skills and received feedback. Next steps include providing the workshop to other institutional leaders and measuring long-term changes in leadership behavior and faculty well-being.

# Acknowledging physician well-being amidst COVID-19: An analysis of online resource provision by the national medical specialty societies in the AMA House of Delegates

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## Learning objectives

1. Recognize the prevalence of physician well-being resources provided by major medical societies amidst the COVID-19.
2. Understand the timeliness of the provision of these resources.
3. Appreciate the format/content of these resources.

## Project objective/background

Determine the extent and timeliness for which national medical societies addressed physician well-being amidst the early months of the COVID-19 pandemic via provision of online wellness resources.

## Methods/approach

A systematic review of the official websites of national medical societies was performed (May 2020), specifically the specialty societies in the American Medical Association (AMA) House of Delegates (n=123). Each organizational website was screened for COVID-19 content, as well as content specific to physician well-being amidst COVID-19. When available, the release/posted dates for these content/resources were recorded and the earliest identifiable dates were noted. The nature of the well-being content and all unique resources were recorded. Descriptive stats were reported, and statistical analysis was performed to determine pertinent predictors of resource provision behavior.

## Results

Public COVID-19 related content was identified on 85.4% of websites. A dedicated COVID-19 resource/information page was identified on 74.0% of websites. Of those organizations that acknowledged COVID-19, 39% provided content related to physician well-being. Earliest COVID-19 related content was  $56.9 \pm 13.1$  days after confirmation of the index U.S. case, versus  $70.8 \pm 17.2$  days for earliest posted well-being content ( $p < 0.01$ ). Those organizations that included well-being content displayed a significantly shorter time to earliest COVID-19 content ( $p = 0.03$ ). Earlier COVID-19 content was associated with earlier well-being content ( $p = 0.03$ ). Five organizations provided helpline contacts.

## Conclusion

Most organizations provided COVID-19 related content/resources, however, only a minority portion provided physician well-being content/resources. All medical organizations should prioritize physician well-being in the form of readily available online resources, regardless of specialty.

# Addressing clinician resilience through administrative staff

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## Learning objectives

1. Describe the indirect correlation administrative staff resilience has on physician burnout
2. Outline methods to develop a systematic approach to address low resilience among administrative staff
3. Evaluate metrics on implemented approaches

## Project objective/background

Administrative work is one of the most well-known burdens to clinicians. Administrative tasks are less meaningful and finding meaning in work is an important combatant of burnout, therefore, the addition of administrative tasks can be predicted to increase the risk of burnout. The administrative staff provides direct support to clinicians to manage multiple patient care demands and administrative tasks. As an extension to clinicians, administrative staff resilience is indirectly related to clinician resilience. The 2019 engagement survey indicated administrative staff scored below national benchmark in the resilience index. A call to action was created to address and improve those scores.

## Methods/approach

A three-phase strategy was conducted:

**Phase 1** consisted of holding administrative employee focus groups to gain a deeper understanding of staff and leader experiences related to resilience. 12 leader and non-leader focus groups were held with representation from all departments seeing over 30% of staff participating.

**Phase 2** included forming of a cross-functional resilience team who conducted outreach interviews with all 42 administrative departments to harvest best practices on addressing resilience in 2020.

**Phase 3** created staff workshops to learn new strategies and methods to assist with employee resilience. Five workshops were held over seven dates on the topics of balancing remote work with at-home schooling, time management, boosting inbox effectiveness, meditation, and creating healthy habits.

## Results

Feedback and results from all phases were very positive.

**Phase 1** focus group themes were used to create separate resilience management recommendations for the executive team, directors, and individuals.

**Phase 2** department outreach interviews were leveraged to help design topics for Phase 3.

Results from the **Phase 3** workshops were very positive with an average of 84 participants per session who rated the workshops 4.5 out of 5. 98% of participants felt grateful towards the organization for valuing and addressing resilience.

## Conclusion

In addition to the pandemic, outside stressors such as wildfires, social unrest, and political friction all contributed to staff resilience in 2020. Even though the 2020 engagement survey was administered in the middle of phase 2 and before phase 3 workshops began, the results showed an increase in administrative resilience index scores.

While clinician resilience scores stayed flat, much of their scores could easily be attributed to the stress of the pandemic, working longer hours, switching focus to video visits vs in person appointments, etc.

# Addressing resident burnout by normalizing mental health support

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## Learning objectives

1. Identifying barriers to accessing mental health services in residency
2. Providing a model for a novel program developed to support resident access to mental health services
3. Evaluating the effectiveness of our program: increasing utilization of services and combatting burnout

## Project objective/background

The prevalence of burnout in residents is a well-documented problem that has prompted efforts to promote wellness in training programs. There is a demonstrated overlap between burnout and depression; unfortunately, schedule time constraints and stigma surrounding mental health continue to bar trainees from accessing care.

In an effort to circumvent these challenges, we developed an opt-out mental health program for the first-year residents (PGY1s) at our program. We pre-scheduled an appointment with excusal from clinical duties for each PGY1, aiming to normalize mental health support and establish a channel for residents to seek additional mental health care.

To evaluate the impact of an opt-out mental health program on 1) subsequent mental health care utilization, 2) level of burnout (emotional exhaustion/ depersonalization). Our secondary objective was to identify perceived barriers to seeking mental healthcare in residency.

## Methods/approach

We conducted a prospective cohort study starting in 2019, comparing our PGY1 class of 2022 that received the intervention, to our "control" classes of 2020/2021 that did not. Data was collected through an anonymous survey. Residents self-reported mental health service utilizations and completed a 2-question abridged

version of the Maslach Burnout Inventory. Fisher's exact test was used to compare categorical variables. They answered questions about barriers to seeking care and causes of burnout with a multiple choice and free text component.

## Results

The intervention (n=17) and control groups (n=30) are diverse in ages, genders, and ethnic backgrounds. Survey response rate was 71.2% (n=47). We did not find a statistically significant difference in rate of utilization (p value = 0.114). There was a trend towards increased utilization in the intervention group; 53.9% utilized additional services, compared with 26.7% in the control group (Table 1). Difference in the depersonalization component of burnout was approaching significance (p value = 0.061). No difference was found in the emotional exhaustion component (p value = 0.410). Top three reported barriers to seeking services were time constraints, stigma, and concern for privacy.

## Conclusion

While we did not find statistically significant differences between our groups, our evaluation of this novel intervention provides support for opt-out programs as a method to increase utilization of mental health services. The impact of utilization on burnout remains correlational. Limitations include our sample size and duration of study.

# Addressing stress, stigma and isolation in rural healthcare and small medical settings: Multi-institutional peer support

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## Learning objectives

1. Participants will be able to discuss the importance of peer support in supporting physician wellbeing and resilience, and promoting culture change to decrease self-care stigmas
2. Participants will be empowered with tools to create a collaborative peer support system for their work setting
3. Participants will be enabled to incorporate novel approaches to create proactive peer support while normalizing the experience of peer support.

## Project objective/background

In our medical culture of endurance, admitting distress is associated with shame, guilt, and fear of negative perception by others. Clinicians frequently feel isolated in their distress, further increasing vulnerability to more distress and burnout. These stigmas pose substantial barriers to clinician help-seeking. Familiarity among the medical staff in small organizations further increases these barriers. The COVID-19 pandemic increased already high stressors and isolation. Peer support helps decrease stress, sense of inefficacy and isolation and is associated with decreased rates of suicide in high stress professions.

## Methods/approach

In 2020, we created a multi-institutional peer support network to provide easily accessible confidential and essentially anonymous emotional support to clinicians during times of high stress and vulnerability. The structure was designed to enhance anonymity and decrease barriers to help-seeking by connecting clinicians to peers outside of their home institution. We created a novel proactive approach to engage more clinicians in peer support using innovative approaches to identify clinicians experiencing distress and to normalize the peer support experience.

## Results

Participant response to the multi-institutional structure of peer support is overwhelmingly positive thus far. Data acquisition and analysis are in progress for the proactive aspects of the program.

## Conclusion

Peer support helps promote physician well-being and resilience by decreasing clinician isolation during vulnerable high stress circumstances. A sustainable, collaborative multi-institutional structure decreases barriers to help-seeking by enhancing anonymity. Novel proactive approaches are helping to normalize the peer support experience and promote culture change toward self-care and help-seeking during times of distress. The presentation will provide practical actionable tools allowing participants to establish a collaborative peer support system in their home environments.

# Addressing trauma exposure and stress in primary care during COVID-19: A train the trainer Stress First Aid Program

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## Learning objectives

1. Identify causes of occupational distress in primary care settings of the COVID-19 pandemic
2. Identify how the Stress First Aid model can be used to address occupational stress
3. Describe a train the trainer program to implement Stress First Aid in primary care offices

## Project objective/background

Patients' increased needs and distress in the COVID-19 pandemic are placing strains on primary care physicians and their staff, at the same time the primary care workforce is experiencing other pandemic-related demands. Primary care teams may therefore be at risk for excessive stress and vicarious trauma. Stress First Aid (SFA) is a flexible, practical model to address occupational distress. We designed a train the trainer program to efficiently implement SFA in primary care offices throughout our large healthcare system.

## Methods/approach

Volunteer trainers were recruited from primary care offices to receive SFA training, then implement and teach the model for their teams. 28 primary care teams were represented in the initial training; 41 volunteer trainers included physicians, nurses, and other disciplines. Two 2-hour sessions were created for the initial training in late 2020. Volunteers were provided materials to teach brief monthly modules in January 2021 for their teams during usual meetings. Information about resources for accessing higher levels of support was also provided. Pre- and post-test survey items assessed new trainers' ratings of their ability to implement components of SFA independently after the initial training (e.g., understand the stress continuum, cite actions for each of the components of SFA, identify resources for higher levels of support).

Monthly booster sessions are continuing for 19 volunteers to review the material, plan monthly team modules, and receive support for implementation. A program evaluation follow up survey was administered after 3 boosters. Outcome data will continue to be collected from trainers and their teams.

## Results

Pre- and post-test survey items asking volunteers to rate their ability to implement various components of SFA independently after the initial training showed a significant increase in self-ratings ( $p < .05$ ) on 5 of 6 items (rating increased but did not reach significance for ability to recognize stress injuries/secondary trauma). Comments indicated that the training was useful, likely to be helpful to their settings, and user-friendly. After the initial training and 3 boosters, 15/16 (94%) of the continuing volunteers who responded indicated they are implementing what they are learning with their primary care teams.

## Conclusion

An SFA train the trainer program shows promise as an effective and efficient way to address increased stress and trauma exposure for primary care offices during the COVID-19 pandemic. Continued collection of outcome data will be useful in assessing longer-term outcomes for the trainers and their teams, and further refining the program.

# Career Pathway

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## Learning objectives

1. Discuss the natural roles and transitions that occur during a typical physician's career
2. Understand the difference between work/life balance and work/life integration, and how this contributes to career satisfaction for physicians
3. Describe how HPMG uses the Career Pathway philosophy to ensure physician satisfaction with their careers remains high from recruitment through retirement

## Project objective/background

### CAREER PATHWAY



### Acculturation phase:

- New physicians learn Permanente Medicine, values, and culture as part of the HPMG Best Place to Work, Deliver, and Receive Care strategy focused on its people.

### Commitment phase:

- Decide HPMG is where they want to practice and choose Hawaii as their home. They are confident in their practice environment and may explore new responsibilities in areas of professional interest.

### Contribution phase:

- Begin to build their vision around mastery and purpose, and how they will give back to the group. They are trusted in their leadership roles and innovate clinical best practices.

### Legacy phase:

- Refine their vision and establish their legacy by seeing programs and projects to maturity, which become their

gift to the group. They mentor others as they “pass the torch” to the next generation of clinicians.

### Emeritus phase:

- Continue to contribute to the health of the group in a way that aligns with their interests e.g., training, participation in committees (two retirees have continued their work on our Health & Wellness Committee). All continue to be included in social events.

A clinician's career success is not a matter of achieving work/life balance, rather work/life integration. Giving the right amount of attention to the things that matter most leads to personal and professional fulfillment.

## Methods/approach

Every physician brings her or his own dreams and aspirations to a career in medicine – in addition to providing high-quality clinical medicine to patients in a specialty of their choice, there are often additional areas of interest they want to pursue. Teach young clinicians? Research new therapies? Solve administrative dilemmas? When we meet regularly with clinicians and ask these questions, we hear how grateful they are to be seen not only as clinicians providing excellent Permanente Medicine, but as humans pursuing other life goals.

## Results

### Engagement Survey

|  |                   |
|--|-------------------|
| Proud to be part of HPMG   | 2007=79% 2019=98% |
| Satisfied with opportunities for professional growth and development | 2007=71% 2019=96% |
| Workload is reasonable   | 2010=54% 2019=91% |

*Note: survey not done in 2020.*

## Conclusion

Career Pathway is a philosophy that ensures the career journey of our physicians and clinicians is meaningful and fulfilling, culminating in a sense of joy, pride, and accomplishment in making HPMG a “place where you can do great things, while having a great time, with others who want the same.” As physicians and clinicians become more involved in the group, variety and variability in their work is supported through investments in time and resources. This minimizes burnout, leading to real satisfaction about their contributions and the legacy they are building.

# Caring for our physicians-in-training: A needs assessment to guide support of medical students during COVID19

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## Learning objectives

1. Understand the needs of medical students during COVID-19
2. Explore how a needs assessment given directly to students can inform medical school administration
3. Discuss the ways that medical schools can effectively support medical students during COVID-19

## Project objective/background

During pandemics such as COVID19, health care professionals are called upon to help, with vast consequences. Little is known about how medical students, in the unique role of physicians-in-training, view the risks of COVID19. This exploratory study was sent to all students at one large medical school, with the aim to directly ask what they need and how medical schools may support them.

## Methods/approach

Faculty members led informal discussions with students, identified concerns, and developed survey questions, which were piloted and revised before being sent to the entire student group. Ten questions scored on a 1-7 Likert scale focused on medical student self-assessed concerns related to COVID19, safety, knowledge, impact on education, and feeling of preparedness. The survey was open April 18th through July 1st, coinciding with the time of limited knowledge about the pandemic, lack of personal protective equipment, removal of students from clinical activities, and just following a COVID19 surge in the area. Results are based on 1,108 surveys completed by 93.2% (n=276) first-year, 95% (n=286) second-year, 90% (n=290) third-year, and 84% (n=256) fourth-year students.

## Results

Students scored highest on awareness of CDC guidelines (5.94), following CDC guidelines in their personal life (6.12), and wanting the school to provide them with education about COVID19 (5.66). Despite students scoring lowest on feeling prepared to deal with the pandemic (4.20) and

a potential exposure (4.22), a significant number wanted to participate in clinical work (5.38) and were concerned about interruption of their medical education (5.21). Fourth-year medical students scored highest for concern about acquiring COVID19 (4.71). Student responses were analyzed over discreet time-periods and showed increased feeling of preparedness for those in their clinical years, and increased worry about family contracting COVID19 as senior students neared transition to residency.

## Conclusion

This study provides guidance on student concerns during COVID19. To support wellness, it is vital for administration to proactively reach out and find out students' specific needs. Institutional support based on identified student needs included: available personal protective equipment, online COVID19 course, student housing, expansion of remote wellness resources, zoom-based options for social engagement, regular remote town-halls to enhance communication, and curriculum changes that considered risk and educational impact. A follow-up survey occurred in April. This study can guide both continued medical school response to COVID19 and inform preparation for future support in times of crisis.

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# Characterizing physician EHR use with vendor derived data: A feasibility study and cross-sectional analysis

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## Learning objectives

1. Importance of standardized Electronic Health Records (EHR) use measurement: to allow direct and equitable comparison of individual and group EHR use data across vendor products and with a long-term goal to improve EHR usability, the user experience, and reduce burnout and improve patient outcomes.
2. Feasibility of implementation of Sinsky et al's seven core EHR use metrics across two healthcare systems using different EHR vendor product installations (Epic and Cerner), utilizing vendor derived data platforms as the primary data source. Also, learn about challenges faced in the process, related to variability in metric definitions between vendors and lack of transparency and granularity of vendor derived EHR use data.
3. Characteristics of time spent by physicians on EHRs and factors associated with it.

## Project objective/background

Electronic Health Records (EHRs) have transformed everyday work for physicians. However, there is significant concern over the EHR's negative influence on patient safety, physician work-life integration, and professional burnout. The objective of this study was to derive seven proposed core EHR use metrics across two healthcare systems with different EHR vendor product installations to standardize EHR use measurement, address current variability, and examine factors associated with EHR time.

## Methods/approach

A cross-sectional analysis of ambulatory physicians' EHR use for the month of August 2019 was performed across two healthcare systems using different EHR vendor products (Epic and Cerner). Outcome measures included 7 proposed core EHR use metrics normalized to 8 hours of patient scheduled time: (1) EHR-Time8, (2) Work outside of work (WOW8) (3) Note-Time8, (4) Script-Time8, (5) Inbox-Time8, (6) Teamwork on Orders (TWORD), and (7) Undivided Attention (ATTN). All metrics are normalized to 8 hours of patient scheduled time; e.g., EHR-Time8 = Total time spent on EHR, per 8 hours of scheduled patient time, both during and outside of clinic sessions.

## Results

Five (EHR-Time8, WOW8, Note-Time8, IB-Time8) out of seven proposed metrics could be measured in a

population of non-teaching, exclusively ambulatory physicians. ATTN could not be measured, and definition for Script-Time8 had to be modified to Ord-Time8. Among 573 physicians included in final analysis, median EHR-Time8 was 5.23 hours, i.e., for every 8 hours of scheduled patient time, ambulatory physicians spend more than 5 hours on the EHR. Gender, additional clinical hours scheduled, and certain medical specialties were associated with EHR-Time8, after adjusting for age and health system on multivariable analysis; specifically, for every 8 hours of scheduled patient time, female physicians spent 30+ more minutes of EHR time than their male colleagues.

## Conclusion

Standardization of EHR use measurement using the proposed core EHR use metrics across vendor products utilizing vendor derived data as primary data source is feasible but remains challenging. For every 8 hours of scheduled patient time, ambulatory physicians spend more than 5 hours on the EHR. Physician gender, specialty, and number of clinical hours practicing are associated with differences in EHR time. While vendor derived audit logs summaries remain a powerful tool for understanding physician EHR use, additional transparency and granularity related to EHR use data, and standardization of vendor-derived EHR use data definitions are still necessary to allow for standardized EHR use measurement.

# Developing a predictive model to identify provider burnout

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**Learning objectives****Participants will be able to:**

1. Describe connections between types of EHR provider data and physician burnout
2. Identify EHR records that are relevant in the generation of a model that predicts physician burnout
3. Select nuanced and localized metrics to begin tracking in their home institutions to track physician burnout

**Project objective/background**

Provider burnout has been tracked yearly at the University of Utah (UUH) since 2016 with emotional exhaustion rates averaging around 30% pre-COVID, using both a single item question validated to the Maslach Burnout Inventory, as well as a second question designed to fit within an employee engagement tool requiring a positive question with a five-point Likert scale (Waggl). This rate is similar to other institutions across the country and suggests a need for ongoing programs that address professional well-being. To address professional well-being and burnout, the UUH Resiliency Center was established in 2017. The Center directs a collaborative approach through the Office of the Chief Wellness Officer with increasing demand through the COVID pandemic, with burnout rates reaching 100% in some employee groups in 2020. While direct support needs and approaches to a culture of well-being have predominated in 2020, we have continued to address work efficiency, cognitive load, and workplace compression as causes of burnout. To that effort, we have set out to develop a predictive model of provider burnout using electronic health record (EHR) data.

**Methods/approach**

Using experts in data analytics, provider efficiency, EMR measurements, team-based care, and provider well-being, a collaboration was formed to develop a predictive model of provider burnout using EHR

data (EPIC) and burnout data (Waggl). A dashboard was created to share EMR metrics by clinic, including volume of messages and time spent broken down by location in the EMR (i.e. "clinic notes, patient messages, telephone calls) and the number of touches on averages per message.

**Results**

An iterative process led to approximately 12 EHR metrics to include in the first generation of a predictive model. Five had high relevance: 1) proficiency score; 2) capacity and throughput; 3) visits closed within 7 days; 4) days with appointments; and 5) pajama time. We will overlay February 2021 burnout data. This will allow us to verify the metric predictions and identify EMR usage and clinical team patterns that predict burnout. This information will inform ongoing efforts targeting provider efficiency training/support and consider optimal team-based care in Spring 2021.

**Conclusion**

Our research contributes to what is known about using EHR data to predict rates of burnout in providers spanning multiple departments and ambulatory settings. Collaboration between providers and data analysts can use similar processes to develop localized predictive models which may allow us to reach at risk providers before burnout escalates to crisis.

# Effect of extended visit time on physician wellness in a pediatric primary care office: A pilot program

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## Learning objectives

1. Know that over 40% of US pediatricians report experiencing burnout in their daily work
2. Know that extending visit duration is a suggested intervention to reduce burnout in pediatrics
3. Learn the effect of modestly extending visit duration on well-being in our practice

## Project objective/background

Over forty percent of US pediatricians report experiencing “burnout” in their daily practice<sup>1</sup>. The American Academy of Pediatrics Initiative on Physician Health and Wellness recommends lengthening visit time as a strategy to combat physician burnout<sup>2</sup> but few studies have assessed the impact of such a change. We designed a pilot program to improve physician well-being in a primary care pediatric office by extending the duration of well child visits for children with complex medical needs and adolescents with anxiety or depression.

## Methods/approach

The plan for the pilot program was to adjust the schedule of 4 physicians at a Stony Brook Primary Care pediatric office to allow ‘double appointments’ for patients with the conditions described above. However, the COVID pandemic required a more widespread schedule modification in which all well visit appointments were lengthened from 15 to 20 minutes. Participating physicians were given the Maslach Burnout Inventory<sup>3</sup> before and 6 months after the schedule change.

## Results

Baseline Maslach results were similar to the national average in the areas of personal accomplishment (35), and depersonalization (10.8), with higher scores in emotional exhaustion (37.8). Six months following the intervention,

Maslach results showed a trend toward improvement in personal accomplishment (37), depersonalization (7.75), and emotional exhaustion (32.3).

## Conclusion

During a year in which two thirds of US physicians report worsening burnout<sup>4</sup>, a five minute lengthening in well visit duration was associated with a trend toward improved well-being in a cohort of pediatric primary care physicians. We would not necessarily expect a small change in physician schedules to have an appreciable effect on physician wellness. We speculate that simply acknowledging that burnout exists in our institution and taking steps to address the problem may have a positive impact on physicians’ perception of their well-being. We plan to proceed with our original intent to double visit length for the patients described above and continue to assess physician wellness. We also plan to expand the pilot to other sites within our institution and assess the financial impact of these interventions.

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# Evaluating the sociotechnical factors that lead to burnout in surgical residents during the COVID pandemic

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## Learning objectives

1. To recognize the sociotechnical factors of greatest contribution to surgical resident stress.
2. To identify the causes of surgical resident stress that are of the highest priority to address.
3. To understand the impact of COVID-19 on surgical resident stress and burnout.

## Project objective/background

Surgical residents experience disproportionately high levels of burnout, with the compounding effects of the COVID-19 pandemic on well-being not fully understood. Using a systems-analysis-guided survey tool designed to identify the specific sociotechnical factors contributing to workplace stress in the healthcare setting, this study aimed to determine the greatest factors contributing to stress in surgical residents, and the impact of additional factors relating to the COVID-19 pandemic.

## Methods/approach

A survey was administered to surgical residents at a single institution during October 2020. The 35-item survey, based on the validated work from the National Academy of Medicine's systems approach to professional well-being, included an abbreviated Maslach Burnout Inventory, questions relating to general healthcare workplace and COVID-19 stressors. For each stressor, severity was rated on a 5-item Likert scale (from 1=low to 5=high) and priority for improvement of these factors was rated on a 3-item scale (from 1=low to 3=high), with opportunities to provide comments. Only fully completed surveys were included, and simple statistics were performed. Comments were analyzed for thematic content.

## Results

Fifteen (47%) surgical residents completed the entire survey. Respondents were evenly distributed across training levels, with a majority being female (66%). Residents reported working an average of 70 hours per

week, with ~25% of time spent caring for COVID-19 patients. Burnout was present in 87% of respondents, demonstrating both emotional exhaustion and depersonalization. The greatest general workplace stressors identified were work-life integration (mean [SD] score 3.8[1.0]), interruptions and distractions (3.8[0.8]), inadequate staffing (3.6[1.2]), and job control (3.5[1.2]). Of all factors, the ones rated as highest priority for improvement were work-life integration (2.25[0.8]), inadequate staffing (2[1.0]), and job control (2[0.7]). The greatest COVID-19 related stressors included difficulty maintaining a safe physical work environment (3.9[0.8]), workflows (3.7[0.8]), and fear of infecting family members (3.7[1]). Thematic analysis of comments highlighted that residents' stress is mostly driven by nursing staff shortages affecting patient care, lack of autonomy in managing workflows, and imbalances in managing responsibilities outside of work. COVID-19 related comments involved feelings of guilt due to difficulty adhering to physical distancing guidelines within the hospital and concerns for infecting family members at home.

## Conclusion

Surgical residents continue to demonstrate high-levels of burnout during the COVID-19 pandemic. The well-being of surgical residents is being affected by a complex set of interrelated workplace stressors, causing lower quality of care and personal distress. Interventions to help surgical residents deal with burnout are needed.

# Evaluation for the multifaceted transformation of a well-being program in response to COVID-19

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## Learning objectives

1. Discuss the creation and operationalization of resources to address mental and emotional health needs
2. Discuss the rationale and process for creation of new resources and enhancement of existing resources
3. Review the process for quantitative and qualitative evaluation of resources throughout a pandemic

## Project objective/background

Discuss a system-level approach to rapid enhancement of an existing Well-Being Program to address emotional support needs during the Covid-19 pandemic among physicians and health care workers.

## Methods/approach

A multifaceted approach was used to provide resources to health care professionals system-wide, including:

- Healing Heroes Helpline (H3) – emotional support helpline for employees and its transition from being staffed by volunteer mental health professionals to being staffed by two social workers
- Taking Care of Our Own – adaptation of a physician mental health program that addresses burnout syndrome and other mental health concerns in attending and resident physicians to novel needs created by the pandemic
- Stress First Aid Program – Implementation of Stress First Aid throughout a health care system. This model was developed by the National Center of PTSD to provide well-being management strategies to health care providers during ongoing crisis
- Virtual Support Groups – led by Department of Psychiatry faculty addressing a constellation of issues related to workplace stress, self-care and coping for

individuals, evolving stressors for families, and the stressors faced by families with special needs children

- Virtual Educational Webinars – led by Department of Psychiatry faculty focusing on department and work unit specific educational needs and stressors

## Results

Through coordinated multidisciplinary efforts we were able to develop, implement, enhance, and mobilize resources for health care professionals throughout the system suffering elevated levels of distress as Covid-19 impacted our community. From March 16, 2020 to the present - the program experienced high utilization. As of January 31, 2021 the Well-Being Program has led 64 virtual Support Groups with an average of 8 people per session, hosted 17 Wellness Webinars with an average of 15 attendees per session, and provided over 100 hours of Stress First Aid training to over 800 employees. The H3 team made over 200 contacts. Taking Care of Our Own reported new self-referrals averaging 6-10 per week, with over 27 total visits per week.

## Conclusion

We have developed, implemented, evaluated, and adapted a Well-Being initiative that addresses the emotional distress experienced by physicians and health care workers during the ongoing Covid-19 pandemic.

# Healthcare employees' early experience of the COVID-19 pandemic: A qualitative analysis

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## Learning objectives

1. Evaluate the benefits and challenges that healthcare employees face as a result of the COVID-19 pandemic.
2. Utilize results to improve healthcare worker wellness through targeting opportunities and mitigating negative consequences of the COVID-19 pandemic.

## Project objective/background

The COVID-19 pandemic in the United States has caused nearly half a million deaths, exceeded hospital capacity, and left record numbers of workers without jobs. The effects of social distance and quarantine measures on mental health are also of concern. In fact, the Centers for Disease Control (CDC) has released guidelines about how to cope with its novel stressors. The University of Utah's Resiliency Center sought to understand how its community was affected by the pandemic. Participants in mindfulness courses (which were moved to an online format) were asked to describe their experiences in a free-response format.

## Methods/approach

Participants in this study consisted of University of Utah Health employees and community members who attended mindfulness courses and completed pre- and post-course surveys from April 10th until May 20th, 2020. The qualitative question "What benefits and/or challenges have resulted from the Covid-19 pandemic and response?" was added to the pre-course survey. The pre-course survey qualitative question had a 41% response rate with 69 responses. The qualitative responses were coded via Atlas.ti and analyzed using grounded theory methodology (Curry, 2015).

## Results

One-hundred sixty-eight attendees responded to either the pre- or post-course survey, with 84% identifying as

female, 15% identifying as male, and 1% who endorsed "prefer not to say". Pre-course survey response was about 70% with 99 respondents, while the post course survey response was 22% with 37 respondents.

Textual analysis revealed four common themes in attendee's responses: challenges of remote work, benefits of remote work, negative impacts on mental health, and benefits in attendee's personal lives. The challenges included feelings of isolation, and trouble finding childcare. The benefits described included less commuting, more time with family, and schedule flexibility. Common words used to describe the emotional impact of COVID-19 included: stressed, anxious, depressed, exhausted, fearful, panic attacks, and uncertain. The personal benefits described by participants were more time for leisure activities, feeling more creative, and increased quality time spent with family and friends.

## Conclusion

In the free response section of the pre-course survey, participants primarily described the negative emotional impact the COVID-19 pandemic has had on them. Attending to the mental health of healthcare workers and others is vitally important to healthcare provision. Many respondents, however, reported benefits as a result of the pandemic as well. These responses highlighted the opportunity to build systems with long lasting benefits for personal wellbeing, while mitigating negative impacts on mental health.

# Impact of a wellness curriculum on wellbeing and risk of burnout in academic anesthesiologists

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## Learning objectives

1. Becoming self-aware through reflection is crucial to wellbeing.
2. Understanding one's purpose in life energizes performance and wellbeing.
3. Improving the health and wellbeing of providers prevents loss of productivity and profits to the organization

## Project objective/background

Physician burnout is a public health crisis in the US, with between 50-70% of physicians affected. Academic faculty face additional challenges with increased clinical duties resulting in decreased time pursuing educational, administrative, and research interests<sup>1</sup>.

One intervention that could be used to address burnout is the Corporate Athlete (CA) program (Johnson & Johnson Human Performance Institute), developed to maximize energy and improve performance and wellbeing. Rather than focusing on time management, the program focuses on energy management in four areas: physical, emotional, mental and spiritual. Goal setting occurs and a training plan is established to help individuals improve performance and increase wellbeing. Institution of CA in the workplace has demonstrated sustained increases in wellbeing<sup>2</sup>.

Our objective was to determine whether structured exposure to the CA curriculum would improve wellbeing and reduce the risk of burnout amongst academic anesthesiologists at our institution.

## Methods/approach

Anesthesia faculty volunteered to participate in CA, conducted in 3 one-hour sessions and one four-hour session over the course of 13 months. Pre and post-course surveys were completed to assess the presence of burnout symptoms and the usefulness of CA sessions. Post-course surveys were only administered to those completing the four-hour session.

## Results

Of those who participated in CA (n=20), 60% were female and 40% male. Of those who completed the pre-course survey (n=19), 73.7% indicated they have felt burned out from work over the past month versus 61.5% of those completing the post-course survey (n=13). 73.7% have worried that work is hardening them emotionally versus 53.9% post-course. 63.2% were bothered by feeling anxious, depressed, or irritable pre-course vs. 38.5% post-course. 42.1% (pre-course) felt bothered by feeling down, depressed, or hopeless versus 23.1% post-course. Post-course survey indicated that 69.2% of participants found the curriculum to be very useful, while the remaining 30.8% found it somewhat useful. 100% felt that material was presented in a clear and easy-to-understand manner. 84.6% indicated they had made changes in their life since the program's start and that the department should continue to provide it.

## Conclusion

The CA wellness curriculum was well-received among academic anesthesiologists at our institution and may be effective in reducing some burnout symptoms. Workplace wellness curriculums supported by leadership may be an important aspect of reducing physician burnout and increasing wellbeing.

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# Impact of mindfulness on physician burnout

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## Learning objectives

1. Assess present levels of burnout in medicine during COVID-19 pandemic
2. Evaluate medical student/physician insight into burnout
3. Assess the impact of Wellness Modules and reflective writing on burnout and wellness

## Project objective/background

43.9% of U.S. physicians reported one symptom of burnout in 2017<sup>1</sup>. Being aware of burnout and seeking strategies to ameliorate burnout can increase providers' ability to offer improved patient care as well as better individual mental health. Our study aims to examine whether mindfulness, awareness, and self-reflection can impact burnout levels among medical students and other healthcare providers before a preceding event.

We hypothesize that through mental training and reflective learning using a mindful writing practice, physicians, residents, and medical students will reduce burnout by increasing resiliency to their environment and developing a better sense of insight. In addition, this study will help us understand the continuum from no burnout to burnout, thus we will be able to recognize ways in which burnout can be prevented or predicted before a trigger occurs leading to burnout.

## Methods/approach

Medical students, residents, fellows, staff and faculty were recruited through our institution's statewide campus system, a graduate medical education consortium. This is a four-part, longitudinal mixed methods study consisting of:

1. Initial survey and reflective essay
2. Follow-up survey and reflective essay after two months
3. Participation in four Wellness modules that are released every two weeks
4. Final survey and reflective essay after completion of Wellness modules

Participants served as their own control before and

after the wellness modules intervention. Hence, only participants who had fully completed the previous section were contacted to participate in the next step of the study.

Our survey included questions on demographics, the effect of burnout on cost-conscious attitudes and professional behaviors<sup>2</sup>, and the level of burnout<sup>3</sup>. Questions about the level of burnout were also adapted for medical students.

The reflective essays were scored using the Reflective Ability Rubric and User Guide developed by O'Sullivan et. al<sup>4</sup>. Essays were scored on a scale of 0-6, with 0 not answering the question and 6 being a highly reflective essay. To assure rater reliability multiple trainings were completed with the study team. A reliability of 0.8 was required among two ratings, per O'Sullivan et. al.

## Results

Data collection in process

## Conclusion

Our study will help to build resilient systems in times of crisis such as COVID-19 in several ways. For instance, physician and student well-being may be improved by understanding the effectiveness of reflective writing and insightfulness on burnout. The intervention in this study could facilitate the development and implementation of interventions that seek to increase physician and student well-being through mindful training. In addition, the implications of this research will have clinical impact given that burnout is related to an increase in medical errors. Hence, the greater the wellness in physicians and students, the better the patient outcomes, quality of care, productivity, and medical costs.

# Impact of opt-out therapy appointments on resident interns

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## Learning objectives

1. Understand the elements of an opt-out therapy initiative.
2. Summarize the positive impacts of an opt-out therapy initiative.
3. Identify best practices for an opt-out therapy initiative.

## Project background

During pandemics, Health Care Professionals report higher levels of depressive symptoms, pandemic-related stress, concerns about personal health, fatigue, anxiety, and lower levels of proactive coping. For physicians, untreated mood disorders are prevalent and disproportionate rates of suicide permeate the profession. Recent studies raise concern over a worsening mental health baseline due to increased pressures during the current pandemic. Studies reveal that medical residents at epicenters of COVID-19 have rates of suicidal ideation as high as 20%. These rates call for more significant intervention in a population that often delays or avoids care-seeking. Barrier-reducing practices such as opt-out therapy programs can help increase resident engagement, reduce stigma and normalize the use of mental health services.

## Methods

In AY 2020-21, resident physicians within eight departments at a large academic training hospital were provided with an opt-out mental health check-in. Check-ins were scheduled at the end of a clinical shift. The appointment consisted of meeting with a licensed mental health professional to check in on mental health concerns, adjust to residency, review coping strategies, and discuss common wellness issues such as imposter syndrome. Follow-up appointments were scheduled as needed. Within two weeks of their appointment, participants were sent a survey to ascertain satisfaction, value, and attitude towards continued mental health services.

## Results

Our sample consisted of 93 trainees across eight departments; 53 completed the follow-up survey for a total response rate of 56%. Preliminary analysis indicates 96.2% (n=51) of respondents felt the appointment was worth their time, and 96.2% (n=50) were satisfied or very satisfied with their appointment. In addition, 90.5% (n=48) felt that opt-out counseling shows that their training program cares about their well-being. 96.2% (n= 51) recommend this service be offered to future residents. A majority of respondents (79.2%, n=42) indicated that the appointments increased their willingness to engage in mental health services. A qualitative review found that many already possessed a high willingness to engage in services despite recognizing a general bias in medicine against physician mental health.

## Conclusion

Resident physician participants in an opt-out mental health counseling program reported high satisfaction levels and a perception that participation improved their willingness to engage with mental health services. Implications for best practices in professional training and program development will be discussed, along with recommendations for the application of opt-out therapy to mitigate the prevalence of physician distress. Special attention will be devoted to discussing ways in which barriers can be reduced to better attend to physician's mental health needs and physician desires for additional wellness resources.

# Joy in work: A multidisciplinary approach to making primary care the best job

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## Learning objectives

1. To create a systems-based approach to making joy in work a shared responsibility across all levels of the organization.
2. Identify opportunities for local and systemwide initiatives to improve practice efficiency, a leading objective to increase professional fulfillment according to the Stanford WellMD Model.
3. Use improvement science to test approaches to improving joy in work by continual development, implementation, and assessment of initiatives to make Primary Care the Best Job.

## Project objective/background

Physicians choose medicine as a career because of their desire to help and heal humanity. Our Primary Care Best Job initiatives seek to remove obstacles to the physician/patient connection by reducing practice inefficiencies and nonclinical demands, thereby revitalizing physicians and their sense of purpose. Physicians engaged in meaningful work increase their joy, resulting in higher patient satisfaction and improved outcomes.

## Methods/approach

- Semi-annual "Go and See" rounds by Executive Leadership with front-line staff.
- Executive Leadership prioritization of Joy in Medicine initiatives to make Primary Care the Best Job.
- Pairing of physician/nurse work groups with dedicated administrative staff who facilitate implementation of initiatives. Pilot studies are performed and best practices are shared.

## Initiatives:

- Remote In Basket (RIB) Program: Coverage of In Basket (the inbox for our electronic medical record system) for physicians and clinicians on vacation or Educational Leave
- Centralized FMLA form completion process
- MIST (Make It Simple Team): Streamlining of specialty

referrals and order sets in EMR.

- Opioid Steering Committee: Initiatives to optimize care of chronic pain patients.
- Call Center optimization with RN and ER MDs: Goal of one-call resolution
- Same-Day Care staffing with PA-C/NP: Enhance access and decrease overloads to physician schedules
- Ongoing EMR and template optimization
- Standardize RN role
- Fuel gauge (Clinic Staffing) for sharing clinician/nursing resources
- Clinical pharmacists support for pain management and other chronic disease management
- Physician Helping Physicians coaching support for operational efficiency and general guidance
- COVID-19 CARE Optimization (Order sets, macros, COVID-specific workflows)

## Results

- Three-year Primary Care Best Job outcome survey: 81% said better, 19% same or somewhat worse.
- Remote In Basket Coverage: 100% satisfied.
- Centralized FMLA form completion with PCP final revision and signature: 98% of primary care physicians sign the FMLA forms without revision.

- MIST: 100% innovations saved time, feel more supported.
- Opioid Initiative: Since 2013, patients on MME 120 or greater- 74% reduction
- Quality of Work Life survey of physicians feeling that their workload is reasonable:
  - o 2010 = 54% 2012 = 60% 2014 = 69% 2016 = 73%  
2018 = 88% 2019 = 91%
  - o +37% (2010 & 2019)

## Conclusion

With leadership champions, the Primary Care Best Job initiative has added to our culture of wellness by improving practice efficiency, decreasing administrative burden, and increasing physician engagement. The fluidity of this initiative allows continual creation of innovative ways to maximize the physician-patient connection, thereby strengthening purpose and joy in medicine. This is exciting work, with an ongoing need to innovate and measure the effects of these innovations.

# Mini-grants for medical student health and wellness

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## Learning objectives

1. Think critically about barriers to medical student participation in wellness activities in relationship to current funding streams and professional obligations.
2. Reflect on the funding priorities of financial aid and emergency grant money and the impact of strict, exclusionary criteria.
3. Consider the importance of supporting self-identified wellness needs versus employing generic wellness programming.

## Project objective/background

The Student Diversity Council (SDC) is a student-led forum for advancing diversity, equity, inclusion, accessibility, and justice at the University of Michigan Medical School (UMMS). Within the SDC, the outreach committee has developed and implemented mini-grants to address the immediate wellness needs of students that have been exacerbated by the COVID-19 pandemic. Current emergency grants are limited by stringent, inclusionary criteria, with no program in place to assist students in addressing their self-identified needs that are not applicable to these funding sources.

## Methods/approach

The SDC Wellness Mini-Grant involves an online application consisting of four questions. The application is released three times per year to all medical students, including those on a leave of absence. Applicants are eligible for a maximum of \$25. Deidentified applications are scored by three independent reviewers on a six-category, ternary rubric with the top sixteen grant applications chosen for funding. The rubric considers the student's eligibility for other emergency funding options and the request's cost, specificity, sustainability, acuity, and social impact. Students whose applications are not funded are encouraged to reapply during future cycles. Grant awardees are eligible to one year following distribution of funds.

## Results

Ninety grant applications were received in the two-week window of the inaugural funding cycle for January to March 2021, representing approximately 12.5% student-body participation. For the second cycle, 110 applications were received. A total of \$400 was awarded across 16 grantees in each cycle. Awarded grants included light therapy lamps, therapy co-pays, and exercise equipment. Unsuccessful applicants with requests that could be funded via other outlets were directed to these resources, including grants for childcare and additional expenses from the Center for the Education of Women and subsidized meditation or therapy mobile applications for healthcare workers.

## Conclusion

The SDC Wellness Mini-Grant provides medical students with the opportunity to support their wellness through funding of self-defined needs. Next steps include the evaluation of the impact of the mini-grants through post-award surveys to grant recipients. Additionally, application data is being aggregated and analyzed for recurring student needs so that frequently requested items can be bought in bulk and relationships can be formed with local businesses to donate or discount goods and services. Future goals include securing long-term financial support via external and internal grant opportunities and increasing collaboration with University of Michigan organizations, such as the Michigan Medicine Wellness Office, M-Home Peer Support, and the UMMS alumni network.

# Permanente Advocate Resource (PAR): Sustaining physician wellness via confidential mental health support for physicians and their families

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## Learning objectives

To describe a confidential, personalized internal counseling service which cares for physicians and their families within a large integrated medical group

## Project background

Physicians too often deal with symptoms of burnout, depression, and anxiety while striving to navigate life stressors in a demanding profession. Permanente Advocate Resources (PAR) was developed in 1993 at Northwest Permanente (NWP). At the time, existing programs which served struggling physicians were non-voluntary and often punitive in nature. Physicians were often reluctant to disclose mental health concerns due to stigma and perfectionistic expectations as well as the risks unique to our profession: difficulties with licensure, litigation, and feelings of professional incompetence. PAR has been a necessary resource for our medical group for over 25 years and core to our wellness program by being an internal mental health service for physicians and their families.

## Methods/results

PAR has provided mental health support services to over 4233 individuals since its inception in 1993. PAR is staffed by employed psychiatrists, licensed counsellors, and contracts with outside mental health professionals. All records are confidential. During 2020, a total of 206 individuals were treated including (but not limited to) physicians, dentists, administrative staff and staff family members. 8.7 percent of the whole medical group benefited from mental health supportive services. An

additional 192 returning/continuing cases, for a total of 524 active cases in 2019. Feedback from employee patients and family members have been overwhelmingly positive with gratitude for the service provided. There have been numerous unsolicited comments from professionals helped by the service indicating that it has helped salvage their careers, their marriages/relationships, and their children. Employees can utilize sick time to attend counselling appointments.

## Conclusion

At the core of our large medical group, PAR caters to physicians and their families struggling with stress and mental health concerns. PAR embodies two of the three primary dimensions of our NWP wellness model in personal resilience (self-care) and a culture of wellness. As the Wellness program aims to build meaningful programs and resources to support physicians in healthy lifestyles and preventing burnout, we are unique in having PAR as an internal resource, a safe place to reach out for help as we navigate life as human beings and undergo stress in our personal and professional lives. Having a confidential resource within our health care system that is easily accessible builds a supportive culture of sincere caring for one another as human beings.

# Physician mental health during a global pandemic

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## Learning objectives

1. Participants will see the value of pulse surveys in times of organizational stress.
2. Participants will understand how one organization worked locally with senior leadership to operationalize the goal of improving knowledge of mental health benefits
3. Participants will learn how a pilot project was spread throughout a large medical group to improve physician access to mental health benefits during a global pandemic.

## Project objective/background

Our organization has rich in-house and alternative mental health benefits for its almost 10,000 physicians. We have been promoting our benefits with townhall style meetings, electronic communications, and meetings with local leadership. In 2020 we deployed the AMA coping with Covid-19 survey. Fifty-four percent of our pilot respondents felt that “personal access to mental health care would improve their ability to sustain” themselves through the SARS-CoV-2 pandemic.

## Methods/approach

Our pilot site (205 physicians) reached out to local leadership to provide in-service of our mental health benefits. Pre- and post-meeting pulse surveys were performed. Prior to the in-service, 45% of attendees felt comfortable showing a colleague how to access mental health benefits. After the meeting, 100% of attendees felt comfortable doing the same. We provided this same in-service to front-line physicians during a townhall style meeting. Participants of this meeting were asked if they knew how to access our internal and external mental health benefits. Before the townhall, 27% of respondents indicated they knew how to access internal and external mental health benefits. After the townhall, 94% of participants indicated that knew how to access our internal and external health benefits. To sustain these initiatives, we directed our physicians to our regional physician wellness website highlighting and detailing these benefits as well as expanding the in-services to include our new physician on-boarding programs.

## Results

We cannot capture the volume of physicians that utilized our in-house behavioral health teams, our external physician assistance programs, or our alternative mental health services due to privacy/HIPPA concerns. However, we did track the number of physicians who accessed our internal physician assistance and peer support programs.

The number of physicians that accessed the internal physician assistance program increased 312% between 2019 and 2020 (83 versus 259). In addition, the utilization of our peer support program increased 239% (137 versus 327) during this same time period. 2021 data pending.

## Conclusion

Rich mental health benefits are only impactful if people remember how to access these services in times of need. We noticed increased utilization of our internal Physician Assistance and Peer Support programs by fostering an awareness of these benefits with our leaders and front-line physicians. We are sustaining this awareness by highlighting these varied and dynamic benefits on a dedicated page of the Physician Wellness website. In 2021, we will deploy the pilot strategies throughout our organization so that all physicians can have one-on-one training on how to access and locate these resources and will incorporate training in all of the new physician onboarding programs.

# Psychological resilience in frontline healthcare workers during the acute phase of the COVID-19 pandemic in New York City

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## Learning objectives

1. Examine which occupational and personal factors are most associated with psychological resilience in Frontline Healthcare Workers during a time of crisis.
2. Identify the relative level of protection provided from these resilience promoting factors.
3. Underscore the importance of multi-faceted resilience-promoting initiatives and how individual level and organizational strategies can help bolster resilience in FHCWs.

## Project objective/background

While studies have begun documenting the psychological consequences of the COVID-19 pandemic in front-line healthcare workers (FHCWs) we aimed to examine which factors are associated with psychological resilience in FHCWs during the acute stage of the COVID-19 pandemic.

## Methods/approach

Data were collected from a single urban tertiary care hospital in NYC between 4/14/2020 and 5/11/2020, during the peak and initial decline of the acute patient surge. An anonymous incentivized survey was e-mailed to a purposively-selected sample of 6,026 FHCWs. From this sample, 3,360 (55.8%) completed the survey, of whom 2,579 (76.8%) reported directly providing care for patients with COVID-19 and also had complete data. Occupational and personal COVID-19-related stressors, as well as resilience-promoting factors, were assessed. Multiple regression and relative importance analyses were used to identify independent variables associated with psychological resilience scores and the variance in these scores that was attributable to each of these variables.

## Results

Relative importance analyses revealed that positive emotions (interested (relative variance explained [RVE]=14.7%), enthusiastic (RVE=11.2%)), self-efficacy (RVE=13.8%), non-engagement in substance use coping (RVE=9.9%), higher purpose in life (RVE=7.8%), emotional support (RVE=6.9%) and leadership support (RVE=6.8%) were most strongly associated with psychological resilience, collectively explaining >70% of the variance in these scores.

## Conclusion

These results underscore the importance of multi-faceted resilience-promoting approaches focused both on individual-level initiatives, as well as broader organizational strategies aimed at bolstering communal and leadership support to optimize FHCW psychological resilience during times of crisis. Follow-up in this cohort is necessary to determine the sustainability of these resilience promoting factors and interventions are necessary to bolster the coping strategies that were found to be most helpful.

# Rapid and repeated assessment of clinician well-being and burnout: Implications for emergency management

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## Learning objectives

1. Understand the need for burnout prevention
2. Evaluate those on the frontline who are most at risk for burnout
3. Analyze the factors that contribute to and mitigate burnout among physicians and apply that knowledge to emergency operations planning

## Project objective/background

The COVID-19 pandemic has prompted increased attention to the failure of emergency operations planning (EOP) to include a framework supporting clinician health and wellbeing, including initiatives to mitigate stress and burnout.

Frontline clinicians responding to the pandemic face unprecedented challenges associated with stress and burnout including increased work demands, lack of evidence-based guidelines, and threats to maintaining their own health. One critical step to incorporating mental health planning in EOPs involves measurement of an event's mental health impact on clinicians in real-time.

We describe a brief survey which can be used to repeatedly assess clinician well-being and burnout throughout the course of a pandemic or other major crisis that results in local capacity surges. This survey may provide direction for emergency planning efforts to protect clinical workforce and guide resource prioritization.

## Methods/approach

An online 10-item survey was emailed to frontline clinicians ( $n=1,947$ ), including physicians, nurses, and physician assistants using the Qualtrics platform. Follow-up surveys were emailed every 5 days to responders. Primary outcome was burnout, assessed with a single validated item (Dolan et al., 2015). Survey items also assessed personal and professional resources including self-efficacy, meaning of work, professional development and perceptions of hospital support. Predictors included

demographics, professional role and daily hospital COVID-19-related caseloads.

## Results

The survey administration protocol was feasible, with 19.7% ( $n=383$ ) of clinicians responding to the initial survey. There was representation across professional roles (response rates range = 17%-30%), gender (women: 69.2%,  $n=265$ ), and level of experience (42%,  $n=161$  had more than 10 years of practice in their profession), and department. Almost one third (30.8%,  $n=116$ ) were from the Department of Medicine.

Median completion time was 74 seconds. Participants completed an average of 5 surveys over from 4/14/2020 through 6/16/2020, with more than 80% responding more than once. Given high caseloads, 45 reported (12.5%) high burnout, 116 (32.3%) reported moderate burnout and about half the sample ( $n=198$ , 55.2%) reported no burnout. Burnout declined slowly over time as caseloads decreased even when controlling for time, gender, and professional role.

## Conclusion

Brief electronic surveys administered concurrently with the pandemic response are feasible and provide data in real-time on the impact of crises on clinician well-being and burnout. The findings yield evidence of both clinician resilience as well as the presence of burnout among substantial proportions of the clinical staff. The rapid data collection and analysis enabled real-time assessment and timely incorporation into hospital planning.

# Rates of adverse childhood experiences in resident and fellow physicians at our institution

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## Learning objectives

1. To examine rates of adverse childhood experiences [ACE] in physicians
2. To characterize rates of ACE in physicians by age, gender, ethnicity
3. To better understand risk factor(s) for mental illness in physicians
4. To encourage discourse on mental illness in physicians

## Project objective/background

There have been several alarming cases of physician suicide within the New York City area over the past few years. Depression and other mood disorders are often under-recognized and undertreated in physicians, who are known to be less likely to reach out for help. Greater understanding of factors that predispose to mental illness may lead to the creation of more effective therapeutic interventions. One factor is adverse childhood experiences [ACE]. While ACE has been studied in the general population, there is limited data on ACE and physicians. In this study, we examine rates of ACE [subdivisions] in physicians as well as specific variables including age, gender, and ethnicity.

## Methods/approach

An email was sent from the GME office to all currently enrolled residents and fellows with a link to a survey. The survey was composed of demographic questions and an ACE questionnaire adapted from the CDC/BRFSS study. Total number of potential participants was 960. Each link was individualized. The study [and link] was open for 2.5 months. Two follow-up emails were sent: at the end of the first month and the end of the second month. Emails were sent to the same distribution list each time.

## Results

Out of 960 potential participants, 12.3% responded [118]. Respondents were 57.6% [68] women and 42.4% [50] men. The predominant age group was 30-34, followed by 25-29. Ethnic/racial backgrounds were white [37.3%], black [8.5%], Asian [32.3%], other [22%]. ACE scores were 0 [22.9%], 1 [16.1%], 2 [19.5%], 3 [16.9%], 4 [8.5%], 5 [7.6%], 6 [6.8%], 7 [1.7%]. 77.1% of respondents had at least one ACE. There was a significant association between female gender and higher rates of ACE [ $p < .008$ ]. There was no significant association between ACE score and age [ $p < .096$ ] or ethnicity [ $p < .771$ ].

## Conclusion

ACE predisposes to mental health problems, which are under-recognized in physicians. Similarly, ACE has been under-studied in physicians. We find that the large majority of resident and fellow physicians has experienced at least one ACE. Rates were significantly higher among women, particularly rates of sexual abuse. Although the study is limited by a small response rate, to our knowledge it is the first to stratify rates of ACE in physicians and warrants further investigation in order to better identify and treat mental health conditions in physicians.

# Resident physician training-year as predictor of burnout during COVID-19 pandemic

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## Learning objectives

1. Understand the need for burnout prevention
2. Evaluate those within residency physician training who are most at risk for burnout
3. Analyze the factors that contribute to burnout among resident physicians and apply that knowledge to burnout prevention

## Introduction

The COVID-19 pandemic has presented unique demands on post-graduate year (PGY) resident physicians as frontline healthcare workers. As early-career physicians, residents may be vulnerable to burnout due to intense work demands, limited control of time, and work-life interference.

Professional burnout can be understood as psychological strain developed as a result of depleting personal coping resources against persisting or increasing demands. Prior research suggests that residents are more susceptible to burnout compared to attending physicians. Importantly, physician burnout may lead to psychological distress and poorer clinical outcomes.

This longitudinal study assesses differences in burnout and recovery among residents at different levels of training.

## Methods

We distributed an online questionnaire via Qualtrics to all 183 residents at an urban academic community hospital within six weeks of first COVID-19 admission, and every 5 days thereafter. Burnout was assessed using a validated, single-item measure with responses dichotomized to indicate presence of burnout or no burnout. The survey also assessed sociodemographic information, self-efficacy, perceived support from the hospital, meaningful work, and professional development. Analyses reflected survey results from April 14th

to Jun 16th, 2020, when the COVID-19 caseload in the hospital reached as high as 89% of the total hospital census.

## Results

The survey was completed by 54 resident physicians (PGY-1= 13, PGY-2= 19, PGY-3= 18, PGY-4= 1 and PGY-5= 3) for response rate of 30%. There were 26 men and 28 women, and majority (93.5%) were 35 years of age or younger. About half of resident physicians reported working in general medicine (n=25; 54%), followed by emergency medicine (n=7; 15%), and surgery (n=7; 15%).

Across resident physicians, 50% reported burnout. PGY-3 residents reported more burnout compared to PGY-1 and PGY-2 residents ( $p < .005$ ). There was a significant effect of time on burnout, with burnout decreasing over the course of time ( $p < .05$ ). PGY-3 residents recovered the fastest compared to PGY-1 residents but did not differ from PGY-2 residents ( $p < .05$ ).

## Conclusion

Our results support some prior literature suggesting that PGY-3 residents may be most at-risk for developing burnout symptoms. However, as the number of COVID-19 cases decreased, PGY-3 resident physicians appeared to recover faster than their less experienced colleagues. These data suggest that interventions should be tailored for each level of training, much like milestones, and may need modification for different stages of the crisis. Future

research would benefit from examining personal or professional factors that influence resident physicians' trajectory of burnout during major public health crises.

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# Respect us, connect us, and protect us: The voice of our workforce during the pandemic response

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## Learning objectives

1. Understand the role of well-being assessment during real-time challenge
2. Discuss how the COVID-19 pandemic impacted workplace well-being
3. Learn how well-being assessment can further communication and decision-making

## Project objective/background

Provider burnout is well documented and frequently endorsed among healthcare providers. Our organization suspended its annual faculty satisfaction and employee engagement surveys during the pandemic year to focus on COVID-19 patient care. We reasoned that healthcare workers' well-being was critical for patient care during this time, and a brief survey would not detract from other essential activities. Therefore, we secured approval to employ the American Medical Association (AMA) Coping with COVID-19 for Caregivers Survey. Our goals were to inform leadership of the status and needs of the workforce regarding well-being, benchmark with other organizations using the survey, and guide organizational responses to workforce concerns.

## Methods/approach

We added our own questions to customize the AMA survey and disseminated it across the organization for 5 weeks in Spring 2020. The 22-items inquired about burnout, fear of infection, feeling valued by the organization, and utilization of our wellness resources.

## Results

Our response rate was about 10% (n=2,781). Most respondents (42%) were physicians or nurses. Sixty-percent reported having at least one symptom of burnout, with higher rates in females than males; 52% were worried about exposing themselves or their families

to COVID-19; 50% felt job or financial insecurity compared to before the pandemic; 45% experienced work overload; and 42% had symptoms of anxiety or depression. Feeling valued by the organization was lower than expected. When asked what would help to sustain them during the pandemic, 52% endorsed access to healthy food 24/7, 42% personal access to mental health care; and 17% training in resilience or coping skills. Resources used to manage stress were talking with family or friends (95%); practicing self-care or stress management (91%); and virtual, peer support or chat groups with co-workers (55%). Professional help was obtained by 20%.

## Conclusion

Despite a modest response rate, results from our survey were similar to national comparison data. Based on the results, our Chief Wellness Officer shared a leadership message to our workforce acknowledging their need to feel protected, respected and connected. We rearranged and displayed helpful resources on our Wellness Office website and encouraged help-seeking behavior. We also introduced a well-being grant program for interventions to address provider well-being and used the survey results to guide our funding decisions. Overall, the survey provided valuable, actionable, organizational-level and department-specific data on assessing the real-time impact of COVID-19 on workforce well-being and guiding our response.

# Supporting physician wellbeing after an adverse event

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## Learning objectives

1. Name factors that are protective against burnout for physicians who experience an adverse event
2. Promote peer support to physicians and make it more likely that physicians will use peer support
3. Learn from a physician's personal story about peer support.

## Objective/background

Being involved in a distressing adverse patient event is associated with increased burnout for physicians (Shanafelt et al., 2010). Estimates about the incidence of adverse events vary. E.g., in a study of U.S. anesthesiologists, more than 80% of respondents indicated they had an unexpected death or serious injury in their career (Gazoni et al., 2012). The purpose of this presentation is to examine factors that support physicians following an adverse event and to discuss how to address barriers to obtaining support after an adverse event.

## Methods

We administered the Provider Wellbeing Survey for three years to physicians, and the survey included the Professional Fulfillment Index (PFI; Trockel et al., 2018), demographic questions, a question about experiencing a distressing adverse patient event, and questions about seeking support for adverse events. To examine metrics related to providing peer support for physicians we examined data about usage of the Care for the Caregiver Program.

## Results

In our survey, 21.7% of respondents endorsed experiencing an adverse event. Of those physicians, those who reported seeking help from a peer or colleague had lower burnout scores, on average, than physicians who did not seek such support. Physicians who reported seeking no support after an adverse event had a higher

burnout score, on average, than physicians who sought some support. Separately, we found that in 2020, 32.4% of the physicians referred to Care for the Caregiver had self-referred, versus just 9.8% of physicians in 2019. Of the peer support sessions for physicians that occurred in 2020, 60% were 15-30 minutes in length.

Despite the benefits of peer support, physicians can be concerned about confidentiality and the potential impact of receiving support on requirements for licensure. To reduce these barriers, a well-established peer support program has emphasized peer support confidentiality, transparently defined the limits of confidentiality, allowed for colleague and automatic referrals within the event review processes, and built and promoted referral networks for long-term support. Sharing stories of physicians experiencing adverse events and benefiting from peer support can reduce stigma and normalize help seeking.

## Conclusion

By ensuring confidentiality, making referrals easy and automatic, building long-term support networks, and sharing stories of physicians who have benefitted from peer support programs can be designed to remove barriers and increase physician access to and acceptability of peer support programs. Peer support can be an essential part of physician wellbeing services and help an organization grow its culture of wellbeing.

# Taking the pulse on physician appreciation: Informing our strategy to impact perceived gratitude

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## Learning objectives

1. To understand the role of perceived gratitude as a driver of physician burnout and professional fulfillment at an academic medical center.
2. To describe the approach taken to deepen our organization's understanding of perceived gratitude through a targeted pulse survey.
3. To identify themes from the survey results and implications for future programs.

## Project objective/background

In 2019, an adaptation of the Stanford Physician Wellness Survey was administered to all faculty in the Brigham and Women's Physicians Organization (BWPO), which employs the 1800 physicians of Brigham and Women's Hospital (BWH), an academic medical center affiliated with Harvard Medical School. In multivariable models adjusting for age and gender with clustering by department, greater sleep-related impairment, lower perceived gratitude, and lower organizational/personal values alignment significantly predicted higher burnout and lower professional fulfillment scores. Given the pandemic's demands upon our workforce, leadership prioritized further study of perceived gratitude, in order to ensure that our methods of expressing gratitude resonate with our physicians.

## Methods/approach

We sought to deepen our understanding of our physicians' wellbeing provided by the biennial Physician Wellness Survey through a targeted pulse survey that could be administered frequently and easily, and would be anonymous, brief and quick for physicians to complete.

We reviewed available scales validated by the Physician Wellness Academic Consortium (PWAC). First, we adapted and expanded the *Received Gratitude* scale by Mickey Trockel, MD, PhD, to incorporate patients and organizational leadership. Furthermore, the items were recast to assess both the importance of receiving gratitude from them, and the frequency with which

physicians had received gratitude from these stakeholders.

Second, we selected relevant examples of organization support from the *COVID-19 Organizational Support* instrument by Tait Shanafelt, MD, to provide survey respondents with an illustrative list of items to place in rank order. Finally, we designed two open-ended questions to solicit feedback on our own organization's appreciation programs to date, and ideas for future programs.

The survey is being administered through REDCap in six waves throughout 2021, with approximately 300 randomly selected physicians per wave for a total n=1800.

## Results

In waves 1 and 2, 603 physicians were surveyed and 221 (37%) responded, and of those 210 provided answers to the open-ended questions. Respondents found it most important to receive gratitude from patients, department/division leadership, and direct supervisors. The respondents reported receiving thanks frequently from patients, but less frequently from those in the key leadership roles that they had ranked important. When asked to rank order ways in which the organization could best support them, the top three were "listen and understand my needs and concerns," "honor my dedication" and "support my emotional needs". Open text answers were analyzed qualitatively to identify key themes to inform program development.

## Conclusion

Perceived gratitude is an important driver in physician burnout and professional fulfillment. This survey's strong response rates and robust open text answers have provided valuable insights to enable our leadership to design and deliver approaches that align with the local culture and meet the expectations of our physicians. The data show that we have the opportunity to improve physicians' perceived appreciation with a focus on approaches which center on department/division leadership and direct supervisors.

# The effects of medical student mistreatment by patients

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## Learning objectives

1. Patients constitute the greatest source of mistreatment towards medical students.
2. Mistreatment by patients negatively impacts emotional well-being and patient care.
3. Medical students report the desire to receive training on how to handle mistreatment by patients.

## Project objective/background

Medical students experience mistreatment by faculty, residents, and other individuals directly involved in their clinical education<sup>1-9</sup>. These experiences are known to adversely impact students both personally and professionally<sup>1,3-9</sup>. Few studies have investigated the prevalence of medical student mistreatment by patients and even fewer have explored the consequences of these experiences. This study aims to investigate the impact medical student mistreatment by patients has on the mistreated individual and on patient care.

## Methods/approach

The study took place at Wayne State University School of Medicine (WSUSOM), the largest allopathic medical school in the United States, located in Detroit, Michigan. Data was collected using an anonymous Qualtrics survey that was available to medical students enrolled at WSUSOM between April and June of 2020. The survey investigated the prevalence of student mistreatment by patients, and students' emotional reactions to those experiences. The perceived effects of these experiences on patient care were also assessed.

## Results

A total of 582 responses were collected. Results showed medical students experienced mistreatment from patients significantly more than from non-patient individuals (eg, residents and faculty). Mistreatment experience(s) negatively affected students' self-esteem (28.7%), mental health (23.5%), burnout (15.5%), and wellbeing (10.4%).

Students reported that the experience(s) caused them to feel disrespected (45.4%), embarrassed (32.7%), angry (28.7%), belittled (27.9%), anxious (26.3%), discouraged (22.7%), and unconfident (20.7%).

Mistreatment experience(s) negatively affected students' relationship or interactions with patient(s) (33.5%), anxiety when performing clinical responsibilities (25.5%), confidence to perform clinical responsibilities (18.3%), and ability to provide quality care to the patient(s) (15.1%).

The majority of respondents (86%) believe that mistreatment perpetrated by patients should be included in WSUSOM policies and procedures. A total of 89.4% respondents indicated that they would like WSUSOM to offer students educational training on how to handle mistreatment from patients.

## Conclusion

Few studies attempt to identify the prevalence of medical student mistreatment by patients and the consequences that these experiences have on mistreated individuals and their patient care encounters. This study identifies a gap in the literature and provides preliminary data that may guide future interventions to support students and the patients they treat.

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# The impact of positive reinforcement on teamwork climate, resiliency, and burnout during the COVID-19 pandemic: The TEAM-ICU (Transforming Employee Attitudes via Messaging strengthens Interconnection, Communication, and Unity) pilot study

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## Learning objectives

1. To better understand the effects of a global pandemic on the wellness of front-line healthcare providers
2. To describe a wellness initiative utilizing a positive feedback mechanism that can be implemented at the level of an organization
3. To underscore the importance of wellness across multiple provider groups

## Project objective/background

In the face of an acute crisis, it is common to experience a gamut of emotions ranging from fear to rage to hopelessness and helplessness. The 2003 SARS pandemic taught us however that the psychological ramifications of a world-wide health scare are not only immediate but can be long-lasting with sequelae of post-traumatic stress disorder and depressive symptoms. If one couples these reflexive human behaviors with underlying burnout syndrome in the healthcare worker, the previously described mental health morbidity is significantly magnified. Physician and nursing burnout continues to be its own international crisis, affecting up to 50% of this front-line provider taskforce. Without prompt leadership, transparency, trust, and most importantly organizational resiliency during crisis, healthcare workers are bound to suffer, and their personal resiliency too may waver. The current SARS-CoV-19 pandemic has once again placed this vulnerable worker population directly in the eye of the storm, making it vital to immediately and optimally support their wellness in order to mitigate potentially devastating mental health consequences. Positive reinforcement has been shown to enhance resiliency and encourage hope. We aim to study the effects of positivity on wellness at the height of this global pandemic.

## Methods/approach

**Design:** Nonrandomized prospective, behavioral, interventional study of adult healthcare workers in the Medical Intensive Care Unit (MICU) from June 2020 to July 2020. The non-blinded principle investigator assigned random participation identifiers

to subjects who were followed longitudinally throughout the study period. Primary outcomes were qualitative assessments of teamwork climate, resiliency, and burnout utilizing validated questionnaires (SAQ, BRS, 1-item burnout scale inventory).

**Setting:** Single center, acute quaternary care unit

**Subjects:** Volunteer front-line healthcare providers (physicians, nurses and respiratory therapists)

**Interventions:** Anonymous or non-anonymous positive messaging to colleague healthcare providers over a four-week period

## Results

Twenty-four subjects were recruited for the study. Eleven out of the 24 (46%) met requirements for study completion and analysis. Nurses, females, least clinically experienced providers, and night shift workers were found to have baseline lowest resiliency, lowest teamwork attitudes, and highest burnout. There was a trend in improved teamwork climate (82% vs. 88%) and resiliency (3.61 vs. 3.74) for those in the 4-week intervention group. Levels of burnout did not change before and after the study.

## Conclusion

Positive reinforcement improved attitudes surrounding teamwork climate as well as augmented resiliency. The routine use of positivity may represent an easy, low-cost initiative to enhance wellness at the level of a healthcare organization.

# Use of engagement data to raise important questions about equity, diversity, and inclusion (EDI)

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## Learning objective

After attending this session, attendees will be able to assess the success of inclusion and equity efforts with widely used survey data and formulate next steps to identifying social determinants of resilience, burnout and safety in historically underrepresented healthcare workers.

## Project objective/background

With the recent anti-racist movement that swept across the globe, healthcare institutions have reinvigorated focusing on supporting equity, diversity, and inclusion (EDI) efforts. Many institutions have engagement survey data that include measures of resilience, psychological safety, stress, and burnout. Such data can shed light on the varied experiences of historically underrepresented populations and begin a conversation about next steps in increasing equity and inclusion and fostering greater resilience.

## Methods

This cross-sectional study used survey response data collected via Press-Ganey's validated instrument on burnout and resiliency. Responders consisted of healthcare workers from University of Utah Health systems. Data were collected in October 2019.

Seven different binary outcomes (engagement, resilience, activation, decompression, safety, lack of stress, and lack of burnout) were of interest. The predictors of interest were gender and race/ethnicity. Outcomes were stratified and compared between White men, White women, Black indigenous and people of color (BIPOC) men, and BIPOC women. Overall group comparisons were performed with Chi-Square tests as well as individual pairwise comparisons with a Sidak adjustment for multiple comparisons.

## Results

There were 9,023 total respondents. This sample consisted of 4534 (50.3%) White Women, 1958 (21.7%)

BIPOC Women, 809 (8.9%) BIPOC Men, and 1719 (19%) White Men. When looking at comparisons in outcomes, women reported higher percentages of activation than men (White women 54% vs. White men 50%,  $P=0.003$ ; BIPOC women 54% vs. White men 50%,  $P=0.02$ ). However, women reported lower percentages of safety than men (White men 53% vs. White women 49%,  $P=0.01$ ; BIPOC men 56% vs. BIPOC women 49%,  $P=0.01$ ). Additionally, both white women (67% vs. 72%,  $P=0.03$ ) and BIPOC women (67% vs. 72%,  $P=0.08$ ) reported lower percentages of being "stress-free" than BIPOC Men. Women, in general, reported lower percentages of being "burnout-free" than men (White men 76% vs. White women 72%,  $P=0.004$ ; BIPOC men 80% vs. White women 72%,  $P<0.001$ ; BIPOC men 80% vs. BIPOC women 75%,  $P=0.09$ ).

## Conclusion

Engagement data can demonstrate differences in professional well-being among historically underrepresented groups. In this study, in general, women reported feeling less safe, more stressed, and more burnout than men including within the BIPOC community. These findings raise important questions but provide little insight into the social determinants of professional well-being. Nonetheless, they create awareness and foster discussions around next steps in addressing the social determinants of health and wellness among historically underrepresented health care workers (HCWs).



# Poster presentations

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Research

# A COVID-19 silver lining: Creation of a national, interdisciplinary graduate medical education well-being collaborative

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## Learning objectives

1. Describe a unique strategic approach to sharing expertise, improving channels of communication and providing support to individuals
2. Identify the outcomes from convening an interactive, diverse group of well-being experts
3. Extrapolate this model to local and regional GME programs

## Project objective/background

COVID-19 presented unique challenges to well-being for healthcare workers, including trainees. Recognizing the unique challenges and uncertainty confronting the GME community, virtual meeting technology was leveraged to convene a national, interdisciplinary GME well-being learning community. Project objectives were to 1) Share and problem solve; 2) Provide open lines of communication between GME programs and national GME leadership; and 3) Foster community well-being thus supporting well-being within clinical learning environments.

## Methods/approach

Designated Institutional Officials (DIOs) nominated well-being representatives, who were invited to join bi-weekly zoom calls. Call structure included orientation to the purpose of the group, focused small group topical conversations with report outs, and expert presentations on current topics. Each week included a short poll to the group, the results of which were used to inform topics for future calls and identify trends. Additionally, four topic-specific workgroups met separately to explore focused areas of interest. These workgroups presented back to the full group.

Since April 2020, 24 calls have been held, with 80 - 100 participants per call. Eleven invited speakers have presented to the group. Four major themes have been identified which are foundational imperatives for well-being work: psychological well-being, engaging leadership, well-being curriculum development, and diversity, equity, inclusion and social justice.

An online resource library was created and housed on the ACGME website. It includes summaries and themes from each national call, speaker slides, video recordings of the meetings and a repository of well-being articles and toolkits.

## Results

A core group of dedicated well-being professionals participate actively in the calls and workgroups. The group has created a supportive, collaborative environment and group members are now invited to nominate colleagues to join. The monthly calls continue to foster a safe place for well-being professionals to learn from each other and share their own struggles, resources and insights. The information is brought back to the institutions and ultimately supports the call participants themselves, in addition to the clinicians they serve in the clinical learning environment.

## Conclusion

This project describes an effective approach to convening experts in a virtual environment and promoting collaboration. The primary focus has been the pandemic's impact on well-being in the GME community. The themes identified as foundational are not pandemic specific, and this collaborative is a template for well-being work going forward. This model can be replicated both regionally and locally, convening well-being representatives within and across institutions inter-professionally to optimize well-being efforts.

# A simple solution to help combat the deficiency of recognition and gratitude: The Kudos Wall

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## Learning objectives

1. Describe how to create a no cost solution to employee recognition
2. Identify if the Kudo Wall is a valuable form of recognition
3. Support peer-to-peer recognition as an important behavior that builds a positive and social work environment

## Background

Recognition is one of the easiest forms of positive reinforcement but routinely appears on many companies' 'areas for improvement' regarding employee engagement. Typical employee recognition comes in the form of gift cards or 'spot' bonuses, but monetary incentives are rarely the most meaningful. It's innately humanistic to want to be recognized for a job well done yet companies struggle with cost effective ways to conduct even the most basic recognition.

## Approach

An internal website was created as an easy avenue for colleagues to recognize and thank one another for a job well done. The page was named the Kudos Wall with the look of a cement wall and yellow sticky note kudos. This website is accessible to all employees and consists of all historical kudos as well as a simple three question form: who you are (can remain anonymous), who you are recognizing, and reason for recognition. Recognized employees and their direct supervisor/manager are sent the recognition note upon submission. This site is updated on a routine basis with new kudos.

## Results

To test the impact of the Kudo Wall, we sent those who completed a submission form and those who were recognized a short survey.

Of the 510 (33 remained anonymous) employees who submitted to the Kudos Wall, 306 responded to the survey. 96% (n. 293) of recognizers felt the Kudos Wall is a valuable form of recognition and 100% of recognizers felt that the Kudos Wall was easy to use and submit for recognition.

Of the 525 employees who were recognized on the Kudos Wall, 378 responded to the survey. 93% (n. 352) of employees recognized felt the Kudos Wall is a valuable form of recognition and 82% (n. 310) said they have (or are planning on) recognizing a colleague on the Kudos Wall.

## Conclusion

The Kudos Wall was implemented with very minimal effort and oversight and has been found to be an efficient and helpful tool to increase peer to peer recognition. Enabling a simple platform to give and receive gratitude from colleagues in an era of physician burnout is critical to help swing the pendulum to joy in work and build a culture of wellness in the work environment that is supportive of one another.

# Advancing equity, inclusion and diversity within the medical profession by simply listening

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## Learning objectives

1. Learn a process for synthesizing and organizing findings from listening sessions.
2. Understand how bi-directional communication can guide strategy for advancing organizational equity, inclusion, and diversity.
3. See the value of embedding opportunities for ongoing listening and dialogue within the physician and organizational workforce.

## Background

Over the past decade our organization has cultivated a broad infrastructure for addressing issues of equity, inclusion, and diversity (EID) among our physicians, employees, patients, and the communities we serve. However, in May and June of 2020 a series of highly visible and unjust deaths of African American men and women elevated a social consciousness about the effects of racism and injustice in our society and in our organization. This “social pandemic” overlying the COVID-19 pandemic directly impacted the daily lives of all physicians and employees within our organization. Executive leadership implemented a series of “EID Listening Sessions” in order to provide physicians and employees the opportunity to share their thoughts, feelings, and experiences during this turbulent time.

## Approach

Four virtual “EID Listening Sessions” were held during the month of June 2020 and made available to more than 55,000 physicians and employees in our organization. Each listening session prompted attendees to reflect upon three key areas: 1) Their emotional well-being in the midst of several weeks of ongoing social unrest; 2) The challenges they had experienced both before and during the current social climate; and 3) Opportunities for our organization to further advance equity and inclusion. The regional EID departments then partnered with organizational leaders, subject-matter experts,

and external consultants to synthesize and organize findings into a cohesive EID strategy using a variety of organizational improvement tools.

## Results

A total of 1,405 participants joined the four EID listening sessions, providing a total of 424 vocalized and written comments in response to the discussion prompts. Strategy areas that emerged from the listening sessions include Workforce Challenges, Racism in the Workplace, and Racism in Society. The final strategy was embedded within EID portfolios of work for Health Equity, Inclusion, and Workforce Equity.

## Conclusion

The EID Listening Sessions provided our organization with inclusive, diverse and honest perspectives from our physicians and employees. The rich qualitative data highlighted the ways our organization may perpetuate inequities and exclusionary practices, as well as opportunities for improvement. Providing physicians and employees at all levels of the organization the time and space to speak directly to executive leadership reinforced pre-existing organizational priorities for psychological safety and a “speak-up” culture. In the years ahead we will enact the newly approved strategy and introduce opportunities for ongoing listening and dialogue in order to advance our efforts to eliminate systemic inequities within our organization and the communities we serve.

# An “implement now” peer support program

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## Learning objectives

1. Operationalize a formal peer support program in four months
2. Create a virtual training
3. Educate medical group on 2nd victim

## Project objective/background

Medical errors have been well established as major contributors to patient harm. While the health and financial costs of adverse events is great on patient's families, and health care systems, their effect and impact on the clinician is largely forgotten. The term “second victim” has been used to describe those who experience emotional distress when there is a traumatic medical event, or when the care they provide leads to an untoward patient incident.

## Methods/approach

Program development began at the onset of the COVID-19 pandemic, knowing an increase in adverse events could arise, we needed a program in place as soon as possible to assist clinicians in dealing with negative clinical outcomes. Our wellness team partnered with subject matter experts to form a steering committee to drive the work. A communication plan was formulated to normalize and educate the medical group about 2nd victim via leadership forums, town halls, podcasts, and corporate email communications. The steering committee created a pre-requisite training video to cover areas such as peer support tiers, high risk situations and departments, second victim identification, and potential legal ramifications. Upon video completion, the participants are registered for the live virtual training. The two-hour virtual training consists of mock encounter demonstrations as well as hands on 1:1 practice with other participants in individual breakout rooms.

One barrier of traditional peer support programs is having to reach out for support. Asking for help is hard so we developed this program with an opt out approach. Every clinician who is involved in an adverse event is automatically contacted by a peer support staff to triage and ask if they would be open to a peer supporter contacting them.

## Results

In four months, we were able to conduct three training sessions and have trained 33 clinicians as peer supporters. The Peer Support Team has supported 32 employees in six months. Quarterly supporter check-ins are held to debrief successes and challenges and to provide continuing education.

A pre and post training survey is sent to supporters. Post training survey scores showed a 30% increase when participants rated their comfortability in supporting a colleague compared to pre-training survey.

## Conclusion

Due to the immediate demands that arose because of the COVID-19 pandemic we were able to implement an organization wide peer support program in four months. This beneficial program continues to adapt, change, and grow and will live on and support numerous clinicians.

# Art and awe in the time of COVID

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## Learning objectives

1. Characterize the risk factors of burnout exacerbated by the current COVID-19 pandemic.
2. Articulate the importance of adapting wellness initiatives to the more virtual era.
3. Outline a framework to integrate art projects into wellness programming utilizing virtual formats during the pandemic.

## Project background

Burnout has been its own epidemic among physicians even prior to the current COVID-19 crisis. Current social distancing directives may increase the risk of burnout symptoms, as isolation is linked to psychologic stress<sup>1</sup>. Although already an essential part of graduate medical education, wellness programming is especially critical during this distressing time.

Our long-standing Pediatrics Resident Wellness Initiative has sponsored programming to foster wellbeing. Activities include wellness journal clubs, meditation workshops and art therapy. Though educational sessions have continued virtually, wellness activities require a level of social engagement that may not translate well to a virtual format.

Intentional art activities have been a successful component of our wellness initiative. We work with a local artist to develop projects aimed to inspire well practices, such as mindfulness and positive emoting. Gratitude, compassion, and awe are examples of positive emotions, whose practice has been shown to reduce inflammatory cytokines and improve wellbeing<sup>2</sup>.

## Methods

This program wide initiative was created as a feasibility pilot to test a virtual art activity for the pediatrics resident physicians. Aiming to practice positive emoting, art supplies were delivered to the pediatrics residents with the following instructions: "During this current crisis, perhaps you have shifted to spending more time outdoors. Please decorate one of the provided paper

birds to reflect how nature has inspired you or given you awe. Take a picture of your artwork (+/- selfie, please!) and email it with a sentence sharing this sentiment. Then, find a common area in the resident work room to display all your fine handiwork. A slide show will be created to share back for all to enjoy."

## Results

This wellness endeavor was well received, as evidenced by qualitative statements from the resident physicians. It was shared that "the joy found in morning walks made it easier to bring joy to work and patients." Creating art provided a chance to "step away" and "let go," while creating something beautiful." Photographs of the artwork (Figures 1-8) and commentary were compiled into a slideshow and shared with the residency program.

This wellness exercise allowed physicians to decompress and practice awe. It provided community engagement through sharing, while maintaining safe, social distancing.

## Conclusion

We recognize the importance of reworking our wellness programming during this pandemic. Other institutions could similarly adapt wellness curricula to engage trainees both as individuals and as a community.

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# Coaching hospitalists to support individual resilience while empowering system change

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## Learning objectives

1. Individuals may not be able to identify their own drivers of burnout
2. Coaching can help provide clarity for where system change is needed
3. Coaching can empower individuals and wellness advocates to focus on highest areas of impact

## Project objective/background

Physician burnout has been previously recognized a growing problem affecting the medical community and the COVID pandemic has added increased stresses. We surveyed people to better identify major stressors and provided opportunity for ongoing dialogue to help identify individual and system support needed.

## Methods/approach

A survey was disseminated to hospitalists working at two tertiary referral centers in Portland, Oregon. They were given the Maslach Burnout Inventory and asked about job satisfaction, pandemic effects and turnover intent. They were also prompted to comment on the largest drivers of burnout in each of the categories known to contribute to work satisfaction. Multiple concrete system and personal interventions were offered for the individuals and the group, including coaching.

## Results

The overall burnout rate for the 2 hospitalist groups was 37% and 38%. Although multiple potential concrete interventions were identified from the survey, such as increased EPIC support and scribes, very few individuals accessed the increased support. Individual coaching was offered for any hospitalist that was interested to help

provide support and help identify stressors and where extra system support could be helpful. Many hospitalists were dissatisfied, burned out or apathetic about their work but could not identify what interventions would be helpful. Through coaching they were able to get support to connect with the meaning and importance of their work again. They were able to gain perspective and hope that was previously lacking. They connected with empowerment to identify system stressors that were negatively affecting them which created new opportunities for advocacy.

## Conclusion

While surveys are often used to help guide burnout interventions, many physicians may not be able to effectively identify contributors to their own dissatisfaction. This can create a sense of apathy from thinking that it cannot be different which can ultimately become a major barrier to system change. Coaching can help provide individual support for physicians, help them connect with meaning in their work and get clarity about system support needed. This clarity can empower individuals and wellness champions to advocate more effectively for system change.

# COVID groups to improve communication, efficiency and support for hospitalists on the front lines during the pandemic

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## Learning objectives

1. Identify common stressors for a group via a structured survey
2. A structured and focused group with input from specialists can streamline communication
3. Creating a space for sharing common experiences helps to build community

## Project objective/background

Physician burnout has been previously recognized a growing problem affecting the medical community prior to the pandemic. The COVID pandemic has added increased stress with rapidly evolving protocols, lack of PPE and fear of infecting one's self and family. Our objective was to identify active stressors for a hospitalist group on the front lines of caring for COVID patients to better develop and implement real time interventions.

## Methods/approach

A survey was disseminated to hospitalists working at two tertiary referral centers in Portland, Oregon. They were given the Maslach Burnout Inventory and asked about job satisfaction, pandemic effects and turnover intent. They were also prompted to comment on the largest drivers of burnout in each of the categories known to contribute to work satisfaction – workload, control, efficiency, organizational culture, community, work-life integration and meaning in work.

## Results

From free text comments about the major contributors to burnout it was clear that lack of clear communication about COVID status, work-flows, treatments and ongoing studies was a source of significant stress. Our wellness

team formed a COVID group to help address these issues. The groups met weekly to biweekly depending on the need. Each meeting had the same structure – 15 minutes of ID updates and questions provided by the ID doctor on the COVID service; 15 minutes of workflow updates where people could share tips/tricks for efficiency and raise concerns about any issues they were facing (ie inadequate PPE); 30 minutes of debrief and sharing of experiences related to COVID. Meeting minutes with important updates/highlights were also emailed to the group.

## Conclusion

Participation in COVID groups was high with outstanding feedback. The format of including the ID doctor on the COVID service allowed active treatment and research updates to be communicated in a timely fashion and also provided a format for hospitalists to ask questions. Furthermore, people were able to benefit from improved work flows to improve efficiency but also decrease exposure time. Finally, creating a regular space for people to express concerns, ask questions and debrief challenging situations helped to foster community and connectedness.

# “CPR” for your career: Attending to communication, purpose and relationships

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## Learning objectives

1. Augment and create inter-departmental relationships to strengthen collegiality and cohesive teamwork
2. Reconnection with professional purpose and humanity in medicine through personal stories, shared experiences, and growth mindset
3. Review and learn communication techniques that promote connection through compassion

## Objective/background

With the risk of burnout reaching epidemic proportions, the need for effective individual and systems interventions has grown substantially. Other healthcare organizations have published results of internal programs that support teaching communication skills helps reduce burnout. Factors such as reconnecting with one's purpose in healthcare and developing/strengthening relationships at work have also been shown to help mitigate risk. We developed a required class for mid-career clinicians in our large integrated medical group called “Communication/Purpose/Relationships: CPR for Your Career” that incorporates each of these key areas.

## Methods/approach

16 classes have been completed with 242 participants (all physicians/clinicians will be enrolled by 12/2021). Classes are 7 hours in duration and include 20-25 clinicians with a mix of primary/specialty care. Participants are intentionally not scheduled with their direct supervisor to ensure psychological safety. Curriculum focuses on teaching and sharing communication skills to help with difficult interactions involving patients and colleagues. Participants are encouraged to share stories of challenges, victories, and learned skills. We also present specific growth mindset skills that help clinicians learn new techniques to respond to stress and negative emotion. During the COVID-19 pandemic and organization-wide cancellation of ‘in-person’ classes, we deferred further classes as the value of human connection was lost on a virtual platform.

## Results

Out of 229 evaluations returned 162 (71%) were very satisfied with the course and 55 (24%) were somewhat satisfied. When asked if the course enabled reflection on personal purpose 96% respondents (221/229) either strongly agreed (144/229 -63%) or agreed (77/229-31%). Similarly, 61% (139/229) strongly agreed and 34% (78/229) agreed that the course helped identify valuable communication skills. 83% (190/229) of attendees would recommend this course to their colleagues.

Verbatim feedback highlights: “I am grateful for the work you all did and continue to do to help us become healthier, happier people for our patients and our colleagues!” “Learned great communication skills, got to know my colleagues and added tools to help with burnout.” “The experience was healing.”

## Conclusion

The program has been very well received by participants who have expressed sincere appreciation for this system level initiative that promotes professional wellbeing. Having a facilitated day for reflection, sharing, and learning new skills increases compassion for our patients, our colleagues and ourselves. Since the pandemic, there are increasing reports of isolation, disconnection and burnout highlighting the importance of restoring ‘in person’ healing relationships. We look forward to resuming ‘CPR for your career’ classes when it is safe to meet in person.

# Creating connections using synchronous and asynchronous virtual peer discussion groups to support physician well-being during COVID-19

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## Learning objectives

1. Describe the development of virtual synchronous and asynchronous physician peer discussion groups during the COVID-19 pandemic
2. Describe their impact on physician well-being
3. Outline how to develop and implement similar peer discussion groups at their own organizations

## Background

The enduring COVID-19 pandemic has significant emotional impact on health professionals, many of whom experienced burnout before the pandemic. Peer discussion groups have been shown to be helpful to support physician well-being. These can be challenging to hold while maintaining physical distancing and given increased pandemic-related work demands. We piloted peer discussion groups using synchronous and asynchronous virtual methods to support physician well-being during this difficult time. We are evaluating the groups' feasibility, utilization and impact. Based on the findings and experiences we intend to integrate the program into the culture of the institution post-pandemic.

## Methods

Beginning September 2020, we implemented a longitudinal 6 month-long program of peer discussion groups for physicians called CIRCLE groups (Colleague Involved in Reaching Colleagues through Listening and Empathy). Twice a month, self-formed groups of 5-9 participants discussed evidence-informed topics such as meaning in medicine, adverse clinical outcomes, patient encounters, burnout and resilience, presented in context of COVID-19. Physicians selected between meeting synchronously using a virtual platform (talk groups), or communicating asynchronously using an encrypted text messaging platform (text groups). We offered both methods in an open voluntary institution-wide

enrollment. Participation conferred 12 hours of Continuing Medical Education (1 hour per topic).

## Results

Fifty physicians enrolled resulting in 5 text and 3 talk groups. The majority identified as women (80%). Seventy-two percent were junior faculty (Instructor or Assistant). Fifty-eight percent of women and all men selected the text group. All Instructors, 88% of Assistant Professors, 9% of Associate Professors and none of the Professors chose the text group. Prior to the program, the mean score for professional fulfillment was 2.0 out of 4 (4=greatest fulfillment), and 76% reported that it was very or completely true that their work was meaningful. The mean score for interpersonal disengagement was 1 out of 4 (4=extreme disengagement). We will present post-program data and details of program development, including challenges and successes encountered during implementation. We will present qualitative analyses of transcripts of post-program focus groups which includes themes that explore meaningfulness, effect on general well-being and feasibility of the peer discussion groups, in the context of COVID-19 and physical distancing.

## Conclusion

Peer discussion groups can be implemented using virtual synchronous and asynchronous communication technology to provide connection and support to physicians during the COVID-19 pandemic. Their impact will be evaluated and presented.

# Culture of wellness

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## Learning objectives

1. Provide strategy for building a culture of wellness in a multifaceted and deliberate way.
2. Describe the impact on individual and organizational Health and Wellness.
3. Recognize that a culture of wellness is necessary for both individual and organizational success.

## Project objective/background

A Culture of Wellness is critical for individual fulfillment and organizational success as delineated by the Stanford WellMD Model. Our medical group strives to enrich this culture in a multifaceted and deliberate way that is based on a foundation of shared values and guiding vision of being “The Best Place to Work, Deliver, and Receive Care.”

## Methods/approach

### Individual Initiatives:

- Career Pathway: Identification of career development opportunities designed to cultivate physicians’ and clinicians’ talents and passions.
- Physicians Helping Physicians Program: Developed to assimilate new hires into workplace and culture.
- Connection: Semi-annual clinic visits by leadership, annual visits by the board of directors, and clinic chief rounding to increase transparency and exchange information to help physicians and clinicians thrive at work.
- Communication Skills Workshops: Developed to optimize clinician-patient communication skills.
- Primary Care Best Job: 21 initiatives to increase efficiency, decrease administrative tasks, and reduce workload.
- SELF CARE Incentive: Bonus for completing personal goals for SELF CARE (Sleep, Exercise, Love & Laughter, Food, Compassion, Awe, Resilience, Engagement), a model to optimize individual health.
- Health & Wellness messages added to COVID-19 communications (e.g., HPMG COVID-19 Airwaves – a bi-weekly phone meeting to update our medical group on key COVID-19 topics, and HPMG COVID-19 Digest

– a weekly email newsletter with clinical, HR, and other information as it pertains to COVID-19)

### Systemwide Initiatives:

- Professional Development Days: Dedicated to physician and clinician health and wellness. More than 400 participants engaged in a selection of over 40 activities, ranging from surfing to meditation, in June 2019.
- Family Night: In October 2019, nearly 1,200 physicians and clinicians, friends, and family gathered at a water park for fun and relationship-building.
- Annual Day of Service: Community service and camaraderie. In January 2019, nearly 1,100 physicians and clinicians, staff, family, friends, and community members gathered to plant native species, build trails, and clear fishponds, among other hands-on, culturally engaging activities.

## Results

| Quality of Work Life Survey (QWL)                                       | Strongly Agree/Agree % increase |
|---|---------------------------------|
| Medical Group provides an environment that supports health and wellness | +9% (2016 & 2019)               |
| Satisfied with the way I am taking care of my own health                | +11% (2016 & 2019)              |

*Note: QWL survey not performed in 2020.*

## Conclusion

Cultivating a Culture of Wellness in our medical group is intentional, valued, and substantiated by the results of our annual QWL Survey. Health and wellness, a living part of our vision and mission, demonstrates that caring for the caregiver is imperative. As we care for ourselves, we strengthen foundations of joy and meaning in our work.

# Effective web-based training of Kelee<sup>®</sup> meditation to healthcare providers during a pandemic to improve understanding of empathy and compassion in the practice of medicine

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## Learning objectives

1. Describe an effective method to train healthcare workers in Kelee Meditation via web-based training
2. Identify the Anatomy of the Kelee and the Basic Principles of the Kelee
3. Understanding of empathy and compassion in the practice of medicine to reduce burnout and mental strength

## Project objective/background

Healthcare providers, many whom suffer from stress and burnout, have been further stretched during the COVID pandemic. In Buddhism, the root of suffering is related to our attachments. In Kelee meditation (KM), these attachments are called compartments. Both Dr. Daniel Lee and Dr. Amy Sitapati have been teaching the practice of KM in the UC San Diego School of Medicine as an approach to learn mental stillness, detachment, and self-compassion. We have been teaching a course in the UCSD School of Medicine for over 5 years, and this year, commenced webinar training to healthcare providers in order to extend our reach to clinicians. Both practice clinical medicine in inpatient, ambulatory, and administrative roles. They have merged their practical experience in KM with their patient care delivery into a core curriculum that includes the Anatomy of the Kelee and a deeper understanding of how both empathy and compassion affect everyday clinicians.

## Methods/approach

Three web-based conferences, *Kelee Medicine Webinar: How to Find Your "Off" Switch in a Perpetually "On" World*, were conducted using a web-based platform. The curriculum covered the practice of KM, the Anatomy

of the Kelee, and the Basic Principles of the Kelee. The training included a 120-minute lecture commenced by KM training for 15 minutes, a 120-minute faculty panel presentation, and Q&A session. The curriculum is innovative as instruction is web-based and begins with the KM practice. This experiential approach is interwoven with real patient care experiences adding clarity and depth to the presentation.

## Results

The conferences held September 2020, January 2021, and April 2021 resulted in training provided to over 120 healthcare providers. Participants responded in course evaluation that the trainings were innovative, practical, inspirational, and provided a unique way in understanding empathy and compassion.

## Conclusion

Web-based KM training affords clinicians a new opportunity to understand their own mind as it relates to empathy and compassion in the practice of medicine. KM can be taught in a simple half-day training with contextual examples that illustrate healthcare provider suffering related to attachment, and how developing mental stillness can lead to improved well-being.

# Feasibility and acceptability of the 10% Happier app among resident physicians

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## Learning objectives

1. Understand resident physicians' interest in app-based mindfulness meditation
2. Evaluate the use of app-delivered mindfulness meditation among resident physicians

## Project objective/background

Brief mindfulness meditation interventions have been shown to have psychological benefits. Access to these interventions has increased through smartphone applications (apps), which may be more adaptable to residents' schedules. Certain meditation apps, such as 10% Happier, became free to health professionals during the Covid-19 pandemic. There is emerging data that mindfulness meditation delivered through an app can provide similar psychological benefits to in-person meditation experiences for the general population. However, studies on the use of mindfulness meditation apps among health care trainees and professionals are limited. The purpose of this study is to examine the feasibility and acceptability of the 10% Happier app in a resident physician population. Secondly, we aim to identify demographic and lifestyle factors associated with interest in and use of mindfulness meditation.

## Methods/approach

This is a sub-analysis from a randomized control study utilizing a waitlist control. Participants were recruited from general surgery, family medicine, and obstetrics/gynecology residencies at Emory University. Participants completed a short survey including demographic characteristics and their interest in meditation. Baseline interest was characterized with raw frequencies. Association between demographic factors and initial interest in meditation was compared using independent samples t-test for binary categorical variables and Kruskal-Wallis for categories with three or more variables. Initial

interest was correlated with time usage of the app with Spearman's rho coefficient. Statistical significance was set at  $p < 0.05$ .

## Results

A total of 47 residents participated in the study, including 11 from general surgery, 12 from obstetrics/gynecology and 24 from family medicine. Overall, 39 (83.0%) residents agreed that they were interested in meditation. The most commonly endorsed reason for wanting to use the meditation app was to reduce stress, with 40 (85.1%) residents endorsing this interest. Women reported higher interest in every category when compared to men. When compared to all other post-graduate years, PGY-1 residents were more likely to report interest in multiple areas. Prior meditation experience, number of days sick, relationship status, race, number of children, and exercise frequency were not associated with interest in meditation. Among app users, time usage ranged from 1.4 to 68.2 minutes per week, with an average of 9 minutes per week. Residents who endorsed higher interest in the app for the purpose of compensation had significantly lower practice times  $r(23) = -0.49$ ,  $p = 0.012$ .

## Conclusion

Mindfulness meditation apps such as 10% Happier may be feasible and acceptable to medical and surgical residents during their training.

# Fostering a culture of health and wellness through professional development meetings

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## Learning objectives

1. To present an example of a Professional Development program that promotes physician health and well-being across a multispecialty organization.
2. Learn how Professional Development Days can effectively contribute to a professional culture of wellness.
3. To demonstrate the value of investment in SELF CARE practices by medical group leadership.

## Project objective/background

In 2015, national thought-leaders updated the Institute for Healthcare Improvement's "Triple Aim" to a "Quadruple Aim," emphasizing care of the physician. As part of our mission to be "The Best Place to Work, Deliver, and Receive Care," we hosted our first Professional Development Day (PDD) dedicated to clinician health and wellness. The response was so enthusiastic that another PDD was held in June 2017 and is now an annual event with over 400 physicians and clinicians attending. The 2020 PDD was virtual, with over 600 physicians and clinicians attending.

## Methods/approach

### Robust PDD educational program was developed:

- Welcome: Executive Medical Director highlighted the necessity of clinician wellness in meeting the challenges of health care delivery today, affirming a commitment to invest in and support a culture of health and wellness
- Inspirational testimonial of resiliency: Physician colleague facing career, personal, and/or health challenges
- Keynote speaker: Provided context and scientific support for concepts of physician well-ness and well-being
- Breakout sessions: Activities and classes based on recommendations from the medical group, designed to support SELF CARE, with leaders and instructors recruited from the medical group itself. Attendees

selected their sessions and enjoyed time with colleagues in 2020, replaced with dedicated time for self-initiated health and wellness activities.

A SELF CARE photo contest held immediately after the 2020 PDD resulted in 282 entries from our physicians and clinicians, who engaged in various health and wellness activities around the islands.

## Results

- When surveyed, 98% of attendees stated they were Very Satisfied/Satisfied with the PDD program.
- In our 2019 Quality of Work Life Survey (QWL), 98% agreed that we provide an environment that supports health and wellness, trending up from 89% in 2016. Similarly, 88% felt satisfied with the way they were currently taking care of their own health, up from 77% in 2016.
- For the 2020 virtual PDD, 646 clinicians attended (82% of the medical group), and 91% of them rated the Health & Wellness portions of the training as Very Good or Excellent on a CME survey.
- 44% of attendees participated in the SELF CARE photo contest after the PDD, and prizes were awarded to the top 8 entries, one for each SELF CARE category (Sleep, Exercise, Love & Laughter, Food, Compassion, Awe, Resilience, Engagement).

*Note: QWL survey not performed in 2020.*

## Conclusion

Group-wide Professional Development Days dedicated to health, wellness, and well-being are effective engagement tools to promote a culture of wellness and encourage adoption of individual SELF CARE practices within a large, multidisciplinary medical group, even in a virtual setting.

# Fostering connection through tailored communication during the COVID-19 pandemic

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## Learning objectives

1. Share our medical group's new platform for physician communication during the COVID- 19 pandemic.
2. Demonstrate how frequent, timely, systemwide communication with a focus on physician wellness, can foster a culture of connection and provide a lifeline during a time of rapid organizational change.
3. Learn how such coordinated communication can encourage physician wellness and resilience in times of crisis.

## Project objective/background

The American Red Cross Manual on Disaster Services shares a framework of how physicians adapt during a crisis. The COVID-19 pandemic has created uncertainty leading to increased physician anxiety and fear. During times of crisis, physicians need to be able to voice their concerns, receive timely information with direction, and garner resources for themselves and their families. Effective communication during a crisis can reduce stress and improve physician well-being.

Our medical group leadership created a regularly scheduled, live, hour-long audio program called "COVID-19 Airwaves," commencing on March 20, 2020, to inform colleagues on operational changes, provide clinical infectious disease updates on COVID-19, open Q&A opportunities, and offer health and wellness resources to support physicians and clinicians during the pandemic. Following each Airwaves, an email summary digest was shared and included links to earn CME, articles pertinent to the week's program, and a health and wellness topic. Starting in 2021, a segment was added to "Airwaves" entitled "Pandemic Survival Tips," featuring a different physician sharing helpful ways to cope and stay well during the pandemic.

## Methods/approach

Development and delivery of a weekly live audio program "Airwaves" for medical group physicians, clinicians, and administrative specialists. The hour-long program includes operational updates, specialty CME related to COVID- 19,

and a "Pandemic Survival Tip" segment with guest speakers.

Creation of a weekly email digest with important operational updates and a link to a Health and Wellness segment. The segments cover a wide range of wellness topics shared by members of the Health & Wellness Committee and other medical group physicians, and touch on SELF CARE (Sleep, Engagement, Love & Laughter, Food, Compassion, Awe, Resilience, Exercise), and helpful videos highlighting useful COVID-19 clinician-patient communication skills.

## Results

Starting on March 20, 2020, our medical group created a live audio program and invited 821 participants. At the start of our program, 54.6% of the medical group attended and increased two months later to 70% of the medical group. Participation remained high at 59.2% on December 18, 2020. Since the program's inception, the average attendance is 64.9%. A survey found that 98% of listeners agreed that the program made them feel more connected to their colleagues. And 96% believed it helped to build their resilience.

## Conclusion

During the COVID-19 pandemic, delivering a timely, efficient weekly audio program with pertinent information and a health and wellness focus helps clinicians to feel connected to their colleagues, improving their individual resilience.

# In the Zoom where it happens: The process of institutional curriculum wellness change

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## Project objective/background

Medical school can be a time of significant distress for students nationwide<sup>1,2</sup>. Although stress is multifactorial, studies demonstrate institutional changes, including those that target curriculum, can be effective in maximizing learner wellness<sup>3</sup>. Facilitating curriculum changes that reflect the particular needs of a class requires a close working relationship among students and faculty. We aim to describe the process at one urban medical school, using a virtual zoom platform, to identify curriculum elements which negatively impact wellness, recommend solutions, and describe the first year of implemented changes.

## Methods

The Senior Associate Dean for Undergraduate Medical Education created a wellness sub-group of the Pre-Education Committee, led by the Director of Student Health and Wellness. This wellness sub-group was composed of preclinical students, faculty from clinical and basic science departments, and administrative officials. The main areas tasked for recommendations included: 1) recognition of student achievements, 2) curricular events that permit students to demonstrate passions, 3) opportunities to develop relationships with faculty, 4) organizational structure of the curriculum, 5) schedules that account for learner wellness, and 6) grading policies and academic support that allow students to "course correct" ahead of exams. The group met biweekly over zoom during the course of several months. The group utilized open discussion to identify current opportunities for improvement in the curriculum. Within each category, recommendations were presented and refined using an iterative process. Final recommendations were agreed upon by consensus and presented to the preclinical education committee.

## Results

Recommendations made by the taskforce included improved communication between administration and student body, expanding a program to reward professionalism, developing a scholarly concentration program to allow students to explore other areas of interest, increasing autonomous time for wellness, and offering consistent and predictable scheduling of required events each week. These recommendations are currently being incorporated into the curriculum.

## Conclusion

Just like the negotiations led by Alexander Hamilton and numerous others, in academic, political, and community settings, getting the right stakeholders in the room is instrumental to effective change. Additional lessons learned include: 1) importance of student input, 2) necessity for a receptive dean, 3) a virtual platform to facilitate discussion by all parties, and 4) regular meetings after initial recommendations to facilitate quick incorporation of change into the curriculum. This process may be used by other medical schools to identify and track institutional changes with the goal to improve the educational environment, joy in learning, and student wellness.

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# Innovative participatory approach to identify factors contributing to primary care practitioners' (PCPs) burnout and prioritizing targeted improvement efforts to mitigate PCPs' burnout during COVID-19 pandemic

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## Learning objectives

1. Conduct Contextual Inquiry (CI) to identify factors contributing to PCPs' burnout
2. Learn system modeling techniques based on contextual data to capture PCPs' workplace experiences
3. Generate a list of prioritized targeted improvement efforts to mitigate PCPs' burnout during & after COVID-19

## Background

The factors contributing to burnout in primary care practitioners (PCPs) while generally well understood, vary by context and circumstances (e.g., COVID-19) which often makes them difficult to mitigate. We introduce an innovative mixed methods approach, utilize Contextual Inquiry, a user-centered and a participatory research method and combine the following methods to identify and prioritize targeted improvement efforts (TIE) to mitigate PCPs burnout:

**Survey—> Focus groups—> Contextual inquiry—> Modeling—> Validation and Prioritization**

## Methods

We administered a survey that included 2-item abbreviated Maslach Burnout Inventory, 21 general workplace stressors based on the National Academy of Medicine's systems approach to professional wellbeing, and 10 COVID-19 related workplace stressors based on socio-technical systems analysis approach. Six focus group discussions (each including 3-4 PCPs) were conducted to gather additional contextual information on key stressors and prioritize the improvement efforts. Ten contextual inquiries involving shadowing PCPs (5 attending

physicians and 5 nursing practitioners) for 50 hours were conducted varied by experience, level of burnout, and % of full-time equivalent. Using data from the survey, focus groups and contextual inquiries set of models were developed and presented to 27 PCPs to validate and prioritize improvement efforts.

## Results

**Survey:** Overall survey participation rate was 85% (N= 27 PCPs (13 attending physicians, 14 nursing practitioners; 22 [81%] women;) The mean [SD] burnout scores were 4.1[1.35] for emotional exhaustion and 3.0 [1.6] for depersonalization. The five general workplace stressors contributing most to PCPs burnout were inadequate staffing (mean [SD] severity rating of 4.33[0.72]), excessive workload (3.76[0.95]), time pressure (3.48[1.02]), inefficient workflows (3.47[1.09]), and administrative burden (3.21[1.22]).

**Focus groups:** Participants provided the highest priority scores to improvement efforts targeting organizational culture (3.85[0.43]), managing workload (3.42[0.85]), and improving workflows (2.72[0.98]).

**Contextual inquiries:** Key breakdowns were reported in roles and relationships [15], staffing issues [6], work culture [13], technology and digital communication [13], workload [8] and workflow issues [10].

**Models:** Using data from contextual inquiries we generated following models: affinity diagram, roles and responsibilities, sequence, and cultural.

**Validation and prioritization:** The validated and prioritized factors included 'broken' roles and relationships (received 25/27 votes and 4 targeted improvement

efforts (TIE), staffing issues (24/27; 3 TIE), work-culture breakdowns (22/27; 4 TIE), technology and digital communication (18/27; 2 TIE), and workflow issues (26/27; 3TIE).

### Conclusion

Perceptions of factors contributing to burnout vary between different methods. Contextual Inquiry allows to precisely identify factors contributing to PCPs burnout and prioritize key improvements that can transform the practice.

# Is this really me? Imposter phenomenon among osteopathic medical and masters students

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## Learning objectives

1. Describe the prevalence of imposter phenomenon among medical and master's students
2. Recognize the impact of gender on imposter phenomenon
3. Discuss strategies aimed to prevent and/or overcome imposter phenomenon

## Project objective/background

Imposter phenomenon (IP) is a psychological pattern where people doubt their accomplishments and have internalized fear of being exposed as a fraud. IP is associated with anxiety, low self-esteem, and lack of confidence, which have potential implications in medical education. If left unaddressed, IP can limit a person's drive to pursue residencies, fellowships, and promotions because they think they would not be selected. We sought to determine the frequency of IP among our medical (DO) and Master of Science (MS) students at our institution.

## Methods/approach

Participants completed a voluntary, validated, anonymous 20-item Clance IP instrument (5 point scale: "not at all true," "rarely," "sometimes," "often," and "very true") and 10-item demographic/background information. Surveys were distributed to MS, 1st, 2nd, and 3rd year DO students. Score: 0-40 (Few experiences), 41-60 (Moderate), 61-80 (Frequent feelings), and >81 (Intense experience). Descriptive analysis, one-way ANOVA, and t-test were conducted to determine statistical significance.

## Results

Response rate was 41% (196/475): 1st year DO (N=65), 2nd year DO (N=72), 3rd year DO (N=30), MS year (N=27); unknown (N=2). 3% scored 0-40 (Few experiences; N

= 5), 44% scored 41-60 (Moderate; N=84), 52% scored 61-80 (Frequent; N=99), and 2% scored >81 (Intense; N=4). Among those that scored > 61: 35% were males, 65% females. On 15 out of 20 questions, females scored higher than males. Four questions showed statistical significance among females. "I'm afraid people important to me may find out that I'm not as capable as they think I am," (p-value = 0.004). "I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well" (p-value = 0.01). "I feel bad and discouraged if I'm not 'the best' or at least 'very special' in situations that involve achievement" (p-value = 0.016). "I often compare my ability to those around me and think they may be more intelligent than I am," (p-value = 0.041).

## Conclusion

IP has strong implications among our students. Our results raise awareness of this in undergraduate medical education. Awareness can help lessen the isolation and embarrassment of IP, especially if students know others feel similarly. Given these findings, our institution can provide counseling and resources, as well as develop preventative and mitigating interventions to target these feelings early on in medical education.

# JAMM through crisis: Engaging operational leaders in supporting physician well-being during a pandemic and beyond

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## Learning objectives

1. Define the key systemic drivers of JAMM across a large medical group
2. Identify the specific steps that leaders can take to better understand and positively impact the determinants JAMM
3. Apply improvement science to designing data-driven interventions that enhance JAMM during a pandemic and beyond

## Objective/background

Many of the known stressors affecting the well-being of physicians have only been heightened during the COVID-19 pandemic. In response to these challenging times, our medical group has continued to invest in our Joy and Meaning in Medicine (JAMM) strategy. This strategy is designed to 1) Support a culture that actively invests in collaborative leadership, measurement, psychological safety, camaraderie, professional growth, and recognition, 2) Optimize the practice through the use of appropriate technology, systems, tools, and processes that allow each member of a team to work at the highest level of training, and 3) Support our physicians in prioritizing self-care through a diverse array of innovative programs that nurture personal health, mental health, resilience, and well-being.

## Method

Physician leaders, including specialty chiefs, were closely engaged and provided tools to help them communicate about and operationalize the JAMM strategy in their departments.

Our close to 10,000 physicians were sent a 15-item survey, the JAMM Measure, in 2019 and again in October 2020. This survey was designed to capture feedback about the determinants of JAMM, including camaraderie, clerical burden, equity, professional development, psychological safety, recognition, autonomy, workload, etc. Operational leaders used this actionable physician feedback to facilitate conversations in their departments.

An improvement science approach was used to co-design interventions to remove barriers to JAMM and address the priorities agreed upon by physicians in the department.

## Results

The results from the first deployment of the JAMM Measure indicated that the most commonly identified areas of opportunity were clerical burden, autonomy, workload, and professional development. Each of these themes was also a common focus of intervention in individual departments. Additionally, the feedback obtained from physicians and operational leaders was used to guide broader organizational changes including the introduction of new performance measures and other accountabilities aimed at enhancing JAMM.

The October 2020 results of the JAMM Measure showed improvement in 11 of the 15 survey themes, including the 5 lowest scoring items from 2019. The only survey item to show a decline addressed the theme of camaraderie amongst colleagues.

## Conclusion

A comprehensive organizational approach addressing systemic barriers to JAMM lead to continuous improvement, even in the face of an unprecedented healthcare crisis. Equipping operational leaders with strategies, tools, and data to engage their physicians can result in the co-design of interventions that reduce clerical burden, decrease workload, support professional development, and positively impact other determinants of JAMM.

# Keep it simple: Ask what matters

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## Learning objectives

1. Identify contributors and detractors to physician and healthcare providers' joy, motivation and meaning in work.
2. Discuss the Institute for Healthcare Improvement's *What Matters to You* conversation tool.
3. Translate data into actionable steps toward improving healthcare provider joy & meaning in work.

## Project objective/background

Physician well-being and joy in work is enhanced by one's connection to purpose. Therefore, assisting physicians in identifying and addressing sources of joy, motivation, and detractors of such is a strategy for sustaining physician and healthcare provider well-being.

The COVID-19 pandemic in 2020 contributed to increased societal recognition of the value of healthcare providers' knowledge and skills. At the same time, healthcare workers were re-examining what mattered most to them—both personally and professionally. These factors, along with influence of Gittlen's (2019) NEJM Catalyst discussion around the importance of provider voice being heard and valued contributed to optimum timing for use of a qualitative tool assessing what matters to our physicians and advanced practice providers (APPs).

This poster reports on a burnout prevention/physician advocacy project focused on understanding contributors and detractors to joy, meaning and motivation in work within a large healthcare system's physician, APP, and support staff workforce. Support staff were specifically included due to their important contributions to the team, including day-to-day operations, patient interactions, and general support of a physician/APP clinical practice.

Themes around physician, APP and support staff joy and fulfillment as well as detractors to such were extracted. Strategies to address the findings were developed through shared responsibility with management.

## Methods/approach

The Institute for Healthcare Improvement's *What Matters to You* conversation tool was employed to qualitatively collect data. Data collection consisted of two phases during the 2nd surge (fall/winter) of 2020's COVID-19 pandemic.

**Phase 1:** Small group interviews with support staff.

**Phase 2:** One to one interviews with ~ 50% of the health system's outpatient, office-based physicians and APP workforce.

## Results

Physician and APP joy was most pronounced around provision of patient care and collegiality with others, both of which speak to connecting with purpose.

For support staff, the relationship with their physician or APP was a clear contributor to workplace satisfaction and meaning. Similarly, physicians and APPs cited the team, in general, and their nurse/medical assistant specifically, as a contributor to a "good day".

Detractors for physicians, APPs, and support staff centered around heavy workload, sense of value their role and/or voice provided to either the organization or department, degree of communication and management styles.

## Conclusion

Asking providers of healthcare what matters to them in the workday is an important validated strategy in demonstrating value for clinicians delivering care. Equally important is strategic and actionable response to that feedback.

# Learning well: Student well-being initiatives across the University of Michigan health science schools

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## Learning objectives

1. Understand methods used to benchmark learning well-being initiatives across disciplines
2. Describe the types of well-being initiatives offered, how they are administered, and their perceived priorities and challenges
3. Identify potential next steps for learner well-being initiatives

## Project objective/background

Mental health concerns, including depression and anxiety, are well documented in medical, pharmacy and other health science students. The Michigan Medicine Wellness Office benchmarked the well-being initiatives offered to learners of the university's health science schools. The goals were to systematically identify the range of learner well-being programs offered; better understand how they are administered; and, determine the priorities and perceived challenges.

## Methods/approach

We conducted initial outreach and introductory meetings with representatives from the 7 health schools (dentistry, kinesiology, medicine, nursing, pharmacy, public health, social work), the Center for Interprofessional Education, and Wolverine Wellness, a campus-wide student wellness program. We disseminated a 17-item follow up survey to the primary faculty or staff contact for learner well-being in each of the 7 health science schools inquiring about current well-being initiatives, leadership, funding, perceived learner well-being priorities, perceived challenges, and methods of communication. Respondents were also asked how learner well-being priorities shifted as a result of the COVID-19 pandemic.

## Results

Each of the 7 health science schools had at least 1 faculty or staff person appointed for learner well-being initiatives. Six of the schools had an embedded psychological counselor. Six of the schools had allocated

funding to further learner well-being. All of the schools had developed co-curricular programming, such as mindfulness meditation, presentations on mental health, group mentoring, and one-on-one faculty coaching. Pre-pandemic, the most frequently reported priorities for learner well-being were anxiety, depression and stress across each of the schools. During the COVID-19 pandemic, these priorities shifted to also include motivation, isolation, and creating community. The most frequently reported perceived challenges were student attendance and lack of time due to program rigor. Mental health stigma was also identified by two schools as a perceived challenge. The most commonly used methods of communication for well-being activities/programs were email (7/7), school postings (6/7), school website (5/7), and social media (4/7). All 7 health science schools indicated interest in regularly discussing ways to integrate, co-host, or co-develop learner well-being programming across the disciplines.

## Conclusion

Our findings showed there is vested interest in creating infrastructure to support the various learner well-being needs. The current administrative investment is heavily aimed at co-curricular programming across all 7 schools. Only one school had a faculty-led curricular elective on learner well-being offered each year. These findings demonstrate there is opportunity to share best practices and developing coordinated, collaborative learner well-being initiatives across the disciplines.

# Optimizing use of the electronic health record (EHR) in the midst of a global pandemic: Going all-in on virtual modalities to restore time back to our physicians

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## Learning objectives

1. Learn how to give clinicians the skills necessary to enable efficiencies at each and every system interaction.
2. Understand how to virtually break silos of expertise to allow best practices to easily spread across a large enterprise.
3. How to develop a clear message to our physicians that your organization supports their well-being.

## Background

EHR use created an ongoing dilemma of how to optimize physician use of an ever-changing system while neither having enough time nor resources to do so effectively.

In our large, multidisciplinary system of over 9,000 physicians, spread over 22,000 square miles, the dilemma is massive. During a pandemic, with travel and in-person gatherings all but prohibited, the dilemma compounded.

## Objectives

Realizing this challenge, we introduced a revised optimization program called Virtual HealthConnect Essentials (HCE), based on our popular, immersive 3-day course designed around the objective of restoring time to physician practices. The program is designed to achieve the following:

- Continue the original program objectives (above)
- Mimic the “live” feel of an in-person session
- Be scalable, cost-effective, and available to all physicians

## Methods/results

The aims and methods for Virtual HCE adhere to the following:

- Frame all lessons and outcomes around time savings, a universal currency.
- Respect the Tribe. Employ only peer-based training, as physicians are less likely to accept information taught by anyone who doesn’t walk in his/her “shoes”.
- Create a portfolio of offerings from which physicians can choose, depending on availability and interest, with a consistent focus of a return on time investment:

- Virtual HCE is a four-hour, live, CME-accredited event focused on a theme, e.g. Telehealth
- HCE LIVE is a 45-minute live event (CME accredited in 2021) focused on a single, high yield topic, e.g., creating Speed Buttons.
- HCE On-Demand is a transcribed, searchable library of videos and material, on a dedicated website, of topics covered in prior Virtual and LIVE HCE sessions for reference, available 24/7.

Since offered in March 2020, 1800 clinicians voluntarily attended over 40 different sessions with astonishing results. Post-course subjective surveys indicated:

- Over 70% felt the course saves him/her over 4 minutes per hour.
- Objective data review confirmed the subjective opinion.
- 98% expressed gratitude and said YES to recommending the program to their colleagues.

In 2020, the KLAS Arch Collaborative benchmarked our net EHR experience as among the highest in its entire cohort of large health systems, and our ambulatory physicians specifically were at the 100th percentile.

## Conclusion

Virtual HealthConnect Essentials accomplished our need of a scalable, cost-effective approach to the dilemma of EHR optimization during a pandemic. The program also received the best feedback of all: evidence that time was restored, and physicians endorse this effort in making their practice efficient and enjoyable.

# Personal and professional resources and burnout among clinical staff responding to COVID-19 pandemic

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## Learning objectives

1. Evaluate predictors of burnout in frontline clinician burnout at an urban academic affiliated hospital early in the beginning of COVID-19 pandemic
2. Understand how self-efficacy, professional development and hospital support were independently and significantly associated with burnout amongst frontline clinicians working at the height of the COVID-19 pandemic
3. Emergency operations planning should include focusing efforts to support providers' ability to care for their own health and to promote professional development which may mitigate effects of work stress on burnout.

## Project objective/background

Frontline clinicians responding to the pandemic face unprecedented challenges associated with stress and burnout. Potential buffers of the effects of work stress on burnout include personal resources, such as self-efficacy, and professional resources including opportunities for professional development, access to meaningful work, and institutional support. The aim of this study is to determine if personal and professional resources are associated with burnout among clinicians during the COVID-19 pandemic.

## Methods/approach

A 10-item survey was delivered via email to frontline clinicians (n=383, physicians, residents, nurses, physician assistants) using the Qualtrics platform. Follow-up surveys were emailed every 5 days thereafter with 80% of participants having completed more than one survey. Primary outcome was burnout, assessed with a single validated item 1. Four items assessed for self-efficacy and three items assessed for professional resources. We report findings of 13 assessments from 4/14/20 – 6/16/20 from one urban academic affiliated hospital when the COVID-19 caseload was staggering and overwhelming the institution and local resources.

## Results

At the initial survey, 60% or more of the participants agreed that they felt capable, focused and calm; however, less than half (41%) were confident they could take

care of their own health. Overall, only half (49%) of the participants agreed that the hospital was providing enough support and information to help them do their jobs. The majority (79%) strongly believed the work they were doing was meaningful, and 70% agreed or strongly agreed they were learning and growing as professionals as they responded to the COVID-19 pandemic.

Mixed models regression analyses were conducted controlling for assessment time, 5-day rolling average caseload, sex, and professional role. Predictors of burnout included demographics, professional role, and daily hospital COVID-19-related caseloads. Self-efficacy ( $p < .0001$ ), professional development ( $p < 0.021$ ) and hospital support ( $p < .0001$ ) were independently and significantly associated with burnout. These results were utilized by hospital administration and crisis management leaders to enact meaningful changes in actions taken during the second wave and resurgence of COVID-19 patients.

## Conclusion

A brief electronic survey can be repeatedly administered to professional staff, even during the height of a pandemic response, to provide real time evaluations of the effects of the crisis on clinician burnout. The findings suggest that self-efficacy and hospital support are negatively associated with burnout. Efforts to support providers' ability to care for their own health and to promote professional development may mitigate effects of work stress on burnout.

# Physician sentiment on Twitter during COVID-19: A barometer for physician well-being

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## Learning objectives

1. Learn how to use Twitter data to measure physician well-being and sentiment.
2. Understand the differences in physician sentiment before COVID-19 and during COVID-19 based on Twitter data.
3. Learn how social media can serve as a valuable dataset for gauging physician well-being.

## Objective

The well-being of large groups of physicians is difficult to measure and monitor in real-time. We hypothesized that Twitter could be a useful dataset to measure physician well-being, both in terms of overall tweet activity as well as with respect to the sentiment of those tweets. This unconventional approach to measuring physician well-being can be particularly useful during stressful events like the COVID-19 pandemic. It is possible that social media platforms like Twitter can serve as a reliable barometer for gauging physician sentiment.

## Background

Current approaches to measuring physician health and well-being require active, often repeat, data collection with physicians taking multi-question surveys that have only limited reliability and do not give immediate actionable results. Twitter is a social media platform that is increasingly popular with physicians where they can share their experiences and beliefs about a wide range of topics including frontline clinical experiences, scientific information, and their feelings. Importantly, it is possible to passively collect this data and use sentiment analysis to measure its emotional direction, obtaining a high-level measure of physician well-being in real-time.

## Methods

Physicians were identified on Twitter by their username and profile descriptions. Boolean logic was used to

select for accounts that included degrees like "M.D." and mentions of their physician status and/or specialty in their description. False positives like medical student accounts were subsequently filtered out from the dataset. All tweets originating from physician accounts were analyzed between December 31, 2015 to December 31, 2020 including a full year of the COVID-19 pandemic.

## Results

7.8 million tweets were identified by the Boolean search. 6.9 million tweets were confirmed as originating from physician accounts. Physicians have been increasingly active on Twitter between 2016 to 2020 with an average increase of 19.8% year over year in unique accounts tweeting. During COVID-19, there was a 27.6% increase in new accounts tweeting, defined as accounts created within the last 12 months. Tweets during COVID-19 were more negative than tweets in pre-COVID-19 years, confirming reduced physician well-being during COVID-19.

## Conclusion

Passive measures of physician sentiment on Twitter appear to be a reasonable measure of overall physician well-being. Multiple other investigations of this dataset are possible such as analysis by geography, time, physician role, and correlations of physician well-being with COVID-19 infection rates.

# Piloting and scaling resilience training in a large healthcare organization during COVID-19

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## Learning objectives

1. Understand the background driving the need for resilience training.
2. Learn about the process we used to design and pilot a 4-hour resilience training program.
3. Understand how to use qualitative and quantitative data to support scaling resilience training throughout the organization.

## Project objective/background

The unprecedented stress of COVID-19 presents a unique opportunity for healthcare systems to address and improve resilience. Resilience is defined as an individual's capacity to recover from stress or adversity, and a resilient organization can anticipate, cope with, and recover from unexpected events while maintaining normal operations.<sup>1</sup> Hartford HealthCare (HHC), a \$4.3B integrated care delivery system in Connecticut with 33,000 colleagues, identified decreased resilience (as measured by our Press Ganey (PG) Engagement Survey) and significant behavioral health symptoms (as measured by an internal survey) during the first wave of COVID. Our Wellness Department sought to understand whether resilience training could improve participating units' resilience index, while providing leaders with tools to support themselves and staff. We adapted and deployed a resilience training pilot to a group of leaders in our organization, with the goal of understanding the impact of this intervention and its benefits for wider leadership training across HHC.

## Methods/approach

As a member of the Greater New York Hospital Association (GNYHA), HHC was able to pilot an adapted version of their Healing, Education, Resilience & Opportunity (HERO-NY) training, with a goal of equipping our leaders to better identify and respond to distress in themselves and their staff in ways that are aligned with our organization's operating model (H3W – "How Hartford HealthCare Works") and culture.

- Pilot units were selected according to the degree to which they were impacted by COVID-19, as well as leader engagement and support.
- Four out of the five HERO-NY Webinar training modules were utilized. With collaboration from our HR Leadership & Organizational Development colleagues, we developed four introductory videos featuring executive leaders to introduce each module. Comments were framed in H3W language and concepts.
- Leaders from each pilot unit completed the training over one month. We collected pre-and post- training surveys, as well as impact data for three subsequent months.

## Results

104 individuals completed the 4-hour training module and rated it as helpful (Table 1). Pulse survey data showed that despite a slight decrease in motivation to change most were using the skills personally and at work (Table 2) and checking in with staff (Table 3). Post-intervention measures will include PG resilience data to be collected in April 2021, to assess the overall effectiveness of the training, make modifications, and plan further roll-out.

Table 1

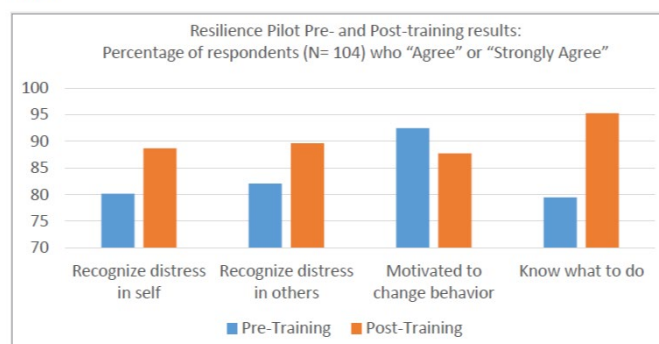
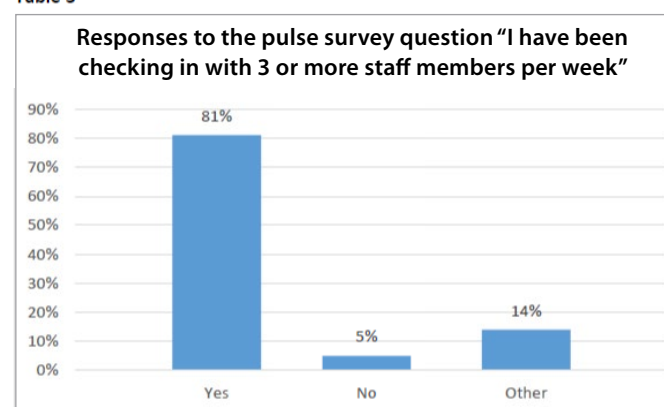


Table 2

| Tools selected in pulse surveys as most helpful in supporting own resilience (top 3 selected) | N  | %    |
|---|----|------|
| Cultivating a positive attitude   | 35 | 51.5 |
| Limiting exposure to distressing media  | 29 | 42.6 |
| Healthy sleep behaviors   | 23 | 33.8 |
| Keeping up physical activity  | 23 | 33.8 |
| Setting priorities  | 22 | 32.4 |
| Healthy eating  | 21 | 30.9 |
| Staying connected to my social support system   | 17 | 25.0 |
| Practicing stress management techniques   | 14 | 20.6 |
| Using the <i>End of Day Checklist</i>   | 13 | 19.1 |
| Asking for help   | 13 | 19.1 |
| Box breathing   | 8  | 11.8 |

Table 3



## Conclusion

Piloting resilience training can determine the effectiveness of the intervention before launching throughout the entire organization.

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# Promotion of self care practices through a group-wide day of volunteerism

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## Learning objectives

1. Learn how volunteerism through an Annual Day of Service (ADOS) can encourage broader connection and understanding between individuals in a health care organization and members of the community with diverse cultural foundations.
2. Identify how community volunteerism can promote a culture of wellness to support physician wellness and resilience.
3. Learn how organizational volunteerism can promote workforce engagement, inclusivity, and connectedness within a health care system.

## Project objective/background

Since 2010, our medical group along with staff, family, and friends have engaged in an extraordinary Annual Day of Service on Martin Luther King Jr Day. This day serves as a means to build partnerships with the indigenous Hawaiian community for the betterment of the land, connect with the native culture and values, and importantly, builds physician and clinician resilience, community, connection, and growth of the human spirit by spending a day together in a setting beyond offices, clinics, and hospitals.

## Methods/approach

The medical group and staff are invited to volunteer at the ADOS, located at 10 sites on four Hawaiian islands. Chiefs and community partners co-lead as site hosts, a Hawaiian expert explains the historical and cultural significance of each site, and our community partners – typically nonprofit organizations – share their expertise on programs preserving Hawaiian culture, environmental/ecological systems. Activities include planting native species; restoring Hawaiian fishponds, native forests and waterways; trail building, and removing invasive plant species.

In 2021, adapting to constraints of the COVID-19 pandemic, our medical group made monetary contributions to all our Annual Day of Service nonprofit partners. On MLK Jr. Day, Kaiser Permanente Hawaii held

its first large-scale COVID-19 vaccination event, served in large part by support from HPMG physicians, clinicians, and staff.

## Results

- In January 2020, over 1,000 volunteers participated in ADOS with >95% of those surveyed rating the experience as “good” or “excellent.”
- Quality of Work Life Survey:

| HPMG provides an environment (in 2019) that supports: | strongly agree/agree |
|---|----------------------|
| Health and wellness 2019                              | 98%                  |
| Caring for self 2019                                  | 88%                  |
| Proud to be part of HPMG 2019                         | 98%                  |

- 2019 Cultural Experiences Survey: 91% of responders had participated in at least one cultural activity, 71% participated in the ADOS. 67% stated that these experiences impacted their own health/wellness.
- January 2021 MLK Jr. Day: Kaiser Permanente Hawaii held its first large-scale COVID- 19 vaccination event, administering the COVID-19 vaccine to more than 1,600 kupuna (senior) members age 75 years and older.
- Over 260 members of the Kaiser Permanente Hawaii workforce supported the event, including 31 HPMG physicians, clinicians, and staff.

## Conclusion

The Annual Day of Service is an enriching and rewarding experience of volunteerism and connection for physicians, fulfilling our mission to improve the health of the communities we serve and concomitantly improving the health and resilience of our physicians, clinicians, and health care community.

# Resiliency in times of crisis: Promoting connectedness during the COVID-19 pandemic

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## Learning objectives

1. Recognize the evidence for connectedness in maintaining resiliency
2. Learn about two system-level initiatives implemented during the pandemic that promote connectedness
3. Explore ideas on promoting connectedness at your own organizations

## Project objective/background

The COVID-19 pandemic has brought unprecedented challenges for physicians, who struggled with high levels of burnout and suicidal ideation even before the pandemic. The adverse psychological impact of COVID-19 predicts worsening burnout and post-traumatic stress disorder in physicians. Based on evidence for connectedness in maintain resiliency, we designed and implemented system-level initiatives that promote connectedness amongst physicians. Promoting connectedness through communities of practice, these initiatives mitigate burnout and promote professional well-being. These initiatives aim to sustain physician well-being during and after the pandemic.

## Methods/approach

We designed and implemented two system-level initiatives during the pandemic that promote connectedness among physicians: peer support and physician group discussions. We trained physicians to support their colleagues during difficult times, acknowledging the emotional strain of our work and challenging the stigma against asking for help. We created an online space for physicians to connect and share their experiences with each other, recognizing we are not alone in the demands of our profession.

## Results

Our pilot session of physician group discussions showed increased connection, less distress, with 92% of physicians reporting they would attend again. Our second phase invited physicians of all specialties; we found family physicians were strongly represented. Six months following initiation of the peer-support program, five formal contacts and multiple (over 40) informal contacts were reported. An anonymous survey conducted at the same time showed that knowing peer support is available supports the well-being of 83% of the hospitalist physicians who responded.

## Conclusion

These initiatives may be adapted and implemented by other organizations to promote joy in medicine. Ideas for promoting connectedness at other organizations may be explored. Connecting with our colleagues in a meaningful and supportive way restores the healing relationship among physicians, which positively influences patient interactions and outcomes.

# Scribes on an inpatient resident team: Creating time for meaningful work

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## Learning objectives

1. Understand the importance of time spent in meaningful work for physician wellbeing
2. Describe the implementation of medical scribes on an inpatient resident team
3. Cite the positive outcomes on PGY1 work activities when a scribe is utilized

## Project objective/background

Time spent in meaningful work has an inverse relationship with physician burnout; time spent in electronic documentation is associated with higher burnout and less satisfaction. Scribes have been shown to decrease time in documentation and increase physician satisfaction, but this has not been well studied in medicine resident inpatient teams. The present study examined which work activities residents identified as meaningful and examined the effect of scribes for an inpatient medicine resident team on time spent in PGY-1 work activities, fulfillment and burnout, and patient satisfaction.

## Methods/approach

The study was conducted over six, month-long inpatient rotations, each with two medicine resident teams. A scribe was assigned to each PGY1 (two per team; n=24) in either the first or second half of the rotation (cross-over design) to complete daily progress notes. Time study observers recorded the observable work activities of the PGY1s throughout the workday. PGY1s' rankings of meaningful work activities and survey data on fulfillment/burnout were collected. Survey data were also collected on patient satisfaction with the time PGY1s spent with them.

## Results

PGY-1s ranked direct patient care as the most meaningful work activity of six categories (mean rank 1.43); electronic

documentation was tied for the least most meaningful along with personal time (mean rank 5.5). When a scribe was present, PGY1s spent less time in documentation (mean percent of total work time without a scribe = 39%, with a scribe = 33.2%,  $p < 0.0001$ ), and a higher percentage of time in direct patient care (without a scribe = 12.03%, with a scribe = 13.32%,  $p < .05$ ). Burnout and professional fulfillment scores were not changed by the presence of a scribe. Patient satisfaction data did not vary sufficiently for useful analysis; 97% (n=259) of patients indicated they were satisfied with the time spent with them by the PGY1.

## Conclusion

The presence of scribes on inpatient medicine resident teams decreased time spent in documentation (an activity ranked as least meaningful by PGY1s), and increased time spent in direct patient care (ranked as most meaningful by PGY1s). Burnout scores did not change with a scribe; this could be due to small sample size in this pilot, short intervention duration, and/or good baseline scores. Patient satisfaction data did not vary sufficiently for meaningful analysis. The use of scribes on inpatient medicine resident teams shows promise as an intervention to increase time spent in meaningful work.

# SELF CARE model

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## Learning objectives

1. Introduction of our evidence-based SELF CARE model.
2. Demonstrate the ways that the SELF CARE model was implemented in our organization.
3. Learn how intentional incorporation of SELF CARE initiatives improves both the wellness culture of an organization and individual wellness.

## Project objective/background

The Stanford WellMD Model identifies three key domains contributing to professional fulfillment, with Personal Resilience and Culture of Wellness being two out of the three. Our medical group recognizes the foundational importance of physician and clinician wellness to personal and organizational success and promotes a wellness culture through widespread incorporation of the SELF CARE Model: **S**leep, **E**xercise, **L**aughter & **L**ove, **F**ood, **C**ompassion, **A**we, **R**esilience, **E**ngagement.

## Methods/approach

- Development of the evidence-based "CARE" acronym, used with the "SELF" model, developed by one of our partnering medical groups.
- SELF CARE model presentation to organizational leadership to promote organizational endorsement.
- SELF CARE promotion through Professional Development Days and other events.
- SELF CARE incorporation into publications, marketing, website, recruitment, grand rounds, mentoring programs, and regional incentive goals.
- During the pandemic, our leadership had weekly medical group-wide calls to update the participants on COVID-19 activity in our hospital, clinics, and community. This call was widely attended and always included a SELF CARE message of clinician wellness.
- Weekly "COVID-19 Digests" were published by our leadership, with a summary of COVID-19-related updates for our medical group; each digest ended with a Health & Wellness section, incorporating aspects of SELF CARE for physicians and clinicians.

- Measure results of SELF CARE initiatives, through analysis of Quality of Work Life Survey (QWL) and participation rates in SELF CARE Regional Incentive Goals.

## Results

Our medical group issues an annual Quality of Work Life Survey (QWL), which includes two questions pertaining to health and wellness:

1. Medical group provides an environment that supports health and wellness
2. Satisfied with the way I am currently taking care of my own health

Survey results between 2016 and 2019 validated the goals of the 2017-2018 SELF CARE initiative, showing a 9% positive response to question #1, from 89% (2016) to 98% (2019) strongly agree/agree, and an 11% increase in question #2, from 77% (2016) to 88% (2019) strongly agree/agree.

*Note: QWL survey not performed in 2020.*

We received 95% participation in our regional SELF CARE goal, in which physicians and clinicians watched a video about SELF CARE and chose two measures to practice for three months. The goal encouraged physicians and clinicians to engage in their own SELF CARE.

## Conclusion

We found by creating a comprehensive SELF CARE model, and prioritizing its intentional incorporation into our organization, we achieved increased personal wellness for our physicians and clinicians and improved wellness for our organization.

# SKY Breath Meditation: Virtual workshops rapidly boost physician resilience during the COVID-19 pandemic in a national sample

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## Learning objectives

1. Examine prior research of the physiologic benefits of SKY Breath Meditation for various populations, including combat veterans.
2. Discuss the systematic implementation of the SKY workshop in a virtual format for healthcare professionals as a rapid response to the COVID-19 pandemic.
3. Assess the impact of SKY Breath workshop participation on well-being outcomes among a national sample of healthcare professionals during the pandemic.

## Project objective/background

The COVID-19 pandemic has underscored the urgency for healthcare systems to provide physicians and other health professionals with structured, accessible and evidence-based resilience tools. Sudarshan Kriya Yoga (SKY) Breath Meditation has been shown in over 100 prior studies to rapidly improve anxiety, stress, sleep and related biomarkers among various populations, including combat veterans. The objective of this study was to evaluate the effect of virtual SKY breath workshop participation on wellbeing outcomes among a national sample of healthcare professionals during the COVID-19 pandemic.

## Methods/approach

Well-being outcomes were evaluated among healthcare professionals who participated in the SKY Breath Meditation workshop during Summer and Fall 2020. Workshops were conducted online via zoom and led by trained instructors from the Art of Living Foundation. The standardized curriculum included one 2.5 hour-long session per day over three consecutive days in which participants learned SKY Breath Meditation, cognitive re-framing tools, and engaged in interactive narrative storytelling in small-group breakout sessions. Outcomes assessed immediately pre- and post-workshop included self-reported burnout (Mini Z burnout survey), professional dedication (Utrecht Work Engagement Scale-9), sleep satisfaction, and anxiety (State-Trait Anxiety Inventory Short Form). Chi-square and t-tests were used to compare pre- and post-intervention aggregate outcomes.

## Results

In this national sample of 99 healthcare professionals from five regions of the United States, self-reported professional burnout was significantly decreased immediately after the three-day workshop (pre=32.6%, post=19.1%,  $p=0.03$ ). Professional dedication scores (which encompass work-related enthusiasm, inspiration, and pride) were significantly increased after workshop participation (pre=5.38, post=5.91,  $p=0.002$ ). Satisfaction with sleep as measured by a dichotomized seven-point Likert scale was significantly increased post-workshop (pre=58.6%, post=81.8%,  $p=0.0006$ ). Regarding anxiety, a cutoff score of 40 is commonly used to define probable clinical levels of anxiety. Anxiety scores were significantly lower after the intervention (pre=46.7, post=35.4,  $p<0.0001$ ). After the workshop, 89.9% of participants felt the program helped reduce burnout and improve resilience for healthcare professionals.

## Conclusion

Participation in the SKY Breath Meditation online workshop was associated with rapid and significant improvements in self-reported burnout, anxiety, sleep, and professional dedication in a national sample of healthcare professionals. This pilot study validates the feasibility of the online, interactive workshop format, which is particularly useful for systemic access to resilience programming during the COVID-19 pandemic. Additional study in a randomized trial is needed to further examine the impact of SKY Breath Meditation on the resilience of physicians and other healthcare professionals during the pandemic.

# SMS texting of MRNs: Public perception and opportunity to mitigate healthcare burnout through improved healthcare communication

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## Learning objectives

1. Recognize the balance of privacy concerns and healthcare efficiency considerations in health privacy laws.
2. Understand public perception towards HIPAA limits on SMS texting.
3. Appreciate that systemic policy changes can improve healthcare burnout.

## Background

Healthcare inefficiencies contribute to burnout of providers. Provider-to-provider communication is important for successful healthcare delivery, but policy barriers on communication methods result in inefficiency. Electronic communication improves coordination of healthcare and can be expected to alleviate burnout if used effectively. In particular, SMS text messaging is advantageous due to its universality and interoperability across mobile devices. However, due to the unsecured nature of SMS, it has been assumed that texts containing any of the 18 HIPAA identifiers are not permissible based on HIPAA Privacy and Security Rules drafted in 1996. Yet, specific and updated guidance on SMS texting has not been issued despite growing popularity of SMS. While protection of health information is important, patient expectations may not be consistent with HIPAA interpretations. We sought to survey the general U.S. population on SMS texting in healthcare, as public opinion, not dogma, should inform policy.

## Methods

A survey was developed and piloted using best practices for psychometric research. Participants rated their agreement using a Likert scale with 1) example SMS text messages containing PHI and 2) opinion statements on reasons to allow SMS text messaging between healthcare providers.

## Results

250 respondents (82.4% return rate) completed the survey. Across several example text scenarios, >67% did not support SMS texting of full patient names. However, up to 69% supported SMS texting of MRNs. Nearly half (49%) of respondents agreed that texts containing certain types of PHI should be permitted for texting using non-secure platforms, and 63% of respondents felt that SMS texting in healthcare could lead to improved efficiency. Respondents commented that texting of MRNs or predetermined IDs were reasonable given their restricted use within secure electronic health record systems.

## Conclusion

Privacy of health information should be balanced with healthcare efficiency and quality. While respondents were concerned about privacy of health information, specifically when identifiable by name, they also recognize the benefits of SMS communication if there is low overall risk of breach. Permitting SMS texting of certain non-specific identifiers, such as MRN, could eliminate the need for cumbersome secure messaging platforms. Policy updates, guided by public opinion, that allow electronic communication advancements can both improve efficiency of interprofessional communication and alleviate healthcare burnout.

## Abbreviations

SMS (short message service), HIPAA (Health Insurance Portability and Accountability Act), PHI (protected health information), MRN (medical record number)

# Stealth messaging for well-being

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## Learning objectives

1. Integrate well-being tips into standard workflows.
2. Use the physicians' interest in helping their team to expose them to well-being practices.
3. Develop their own system of tips that will help their teams.

## Project objective/background

Time, clinical responsibilities, and skepticism often keep physicians from accessing resources that support their wellbeing. During stakeholder meetings held early in the 2020 pandemic, physicians indicated that they were looking for ways to help their team members. They also indicated that they didn't have time to commit to any lengthy programs that could help them with their own well-being. In one on one coaching we found that the majority of physicians were interested in practices that could be "sprinkled" throughout their day once they learned: (1) what those looked like, (2) the neuroscience behind these practices and (3) how they and their teams could benefit by implementing these practices.

Given this interest, we set out to find a way to integrate brief messages into the standard workflow so that physicians could teach their team members about resources, reflections, and practices that could help them with their well-being. Hence, we came upon our stealth method. We developed 8 categories of Wellbeing Tips that could easily be added to the pre-existing huddle used throughout our organization. Tips were posted weekly, and categories were rotated to increase the likelihood that staff had exposure to tips from all categories no matter what day of the week that they worked.

## Methods/approach

We developed 8 categories of Wellbeing Tips that could easily be added to the pre-existing huddle used throughout our organization. Tips were posted weekly, and categories were rotated to increase the likelihood that staff had exposure to tips from all categories. PowerPoint was chosen as the mode of delivery so that leadership would have the flexibility of how they wished to present the material.

## Results

The huddle Tips were accessed 2,520 times between May 2020 and March 2021. Leadership found the best way to present the material for their work unit. Physician involvement was undetermined and thought to be more likely in work units where physicians participated in huddles and were highly engaged.

## Conclusion

### Successes

- This is a solution that can be integrated into workflow and used ongoing in stable times as well as in crises. Creating a repository of WB tips for each category, tracking when the tips were utilized and watching for new material is a way to generate weekly tips fairly easily for distribution.

### Challenges

- Physician involvement varied with the culture in each setting. Where physicians were already involved in huddles and interested in creating a healthy work environment, they appreciated the ready-made material.

### Accessibility

- In a large organization, there is usually more than one way to best deliver messages to staff. Without one universally accepted way to communicate; leadership have each come up with their individual work arounds that the staff has accepted. By providing weekly PP slides to leaders, they could adapt the messages to their own preferred way of presenting them. The brevity of the messages improved utilization.

A culture of, 'ask for what you need and offer what you can' would help to instill self-care habits for all Healthcare workers, including physicians.

# Supporting physicians with a Center for Career Transitions

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## Learning objectives

1. Describe common issues in career evolution and retirement
2. Identify four categories of transitions
3. List techniques for identifying and educating a network of transition mentors

## Project objective

Create a Transition Center to support health care professionals as their careers evolve.

## Background

Personal and professional circumstances lead to constant changes in medical careers. Change creates an opportunity to re-examine personal values, goals and motivations. In the midst of multiple demands the opportunity to reflect may be lost. Practical considerations such as schedules, compensation and support may overwhelm the individual in the midst of change. The Center for Career Transitions was established to provide physicians with confidential support and guidance as they move through multiple phases of their career and lives. It also builds our culture as we connect faculty in need to peers who have gone through similar transitions in the past. It also gives retired faculty an opportunity to reach back, feel valued, and stay connected to the organization that they dedicated a large portion of their lives to.

## Methods/ approach

- Addressing the challenges of transitions was identified as an organizational priority
- A needs analysis was conducted to determine scope and opportunity
- A steering committee was convened to identify common themes and issues
- Transitions were categorized and matched with institutional and community resources
- Twenty members of the professional staff were identified as transition mentors, a new category of mentors within

the institution's Center for Excellence in Coaching and Mentoring. These individuals attended an orientation session and participate in ongoing development

- Administrative support, web-based resources, collaboration with related departments and confidential referral processes were established

## Results

Within 12 months the Center received 45 referrals. Self-referrals are received through word of mouth, email, and by phone. All referrals begin with a call with the program manager who triages based on need and connects the clinicians to resources, mentors, coaches or other services.

Reasons for contacting the Center included retirement, burnout, early career advice, and mid-career change. The most common action after triage was referral to resources, but equal numbers were referred for mentoring and/or coaching. Many used multiple services.

In coming months additional surveys will review the Center's impact on professional fulfillment, engagement, burnout, and retention.

## Conclusion

A Center for Career Transitions can provide a culture of support for clinicians who have chosen to spend their careers caring for others. Through the connection with organized resources and peer mentors the institutional commitment to personal and professional growth can be realized.

# The development of a robust Well-Being Champion Network as an intervention to a systemwide evaluation of physician and advanced practice provider well-being

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## Learning objectives

1. Understand the scope of a Well-Being Champion network
2. Define roles and responsibilities of a Well-Being Champion

## Background

Spectrum Health is an integrated healthcare system in West Michigan comprised of 35,000 team members, including approximately 4,500 independent and affiliated physicians and advanced practice providers (APPs). The Office of Physician and APP fulfillment (OPAF) was created in 2019 to provide centralized coordination, development and implementation of programs and initiatives designed to support wellness within the system. As a key foundational initiative, the Mayo Well-Being Index (WBI) was chosen to obtain baseline data for the overall well-being of physicians and APPs within the system. The assessment window opened on March 16 and lasted until April 10. The data from the assessment included:

(Image 1)

| Type of Practitioner  | Response Rate | High Distress % |
|-----------------------|---------------|-----------------|
| Physicians            | 38.77%        | 31.57 % (41%)   |
| APPs                  | 48.09%        | 21.92% (30%)    |
| Residents and Fellows | 26.35%        | 18.28% (20%)    |

With this data, OPAF developed the Well-Being Champion (WBC) network; a group of committed physicians and APPs across the system whose passion for well-being aligns to creating a culture of wellness.

## Methods

Data from the WBI provided a look at the prevalence of high distress among physicians and APPs across multiple demographics. OPAF created detailed reports for each clinical service line and large independent

physician group, and met with clinical and operational department leaders to review the results and discuss individualized intervention plans. Additionally, each area was encouraged to identify candidates to join a Well-Being Champion (WBC) Network. In September of 2020, the WBC Network launched with a virtual orientation defining roles and responsibilities (Image 2), aligning members to the mission and purpose of OPAF, introducing basic data about burnout, key drivers, and best practices in interventions, and educating individuals on local resources. Quarterly meetings offer continued medical education opportunities to further develop baseline knowledge to prepare WBCs to propel work forward in their departments. Engagement is also encouraged by regular report outs, weekly newsletters, online forum discussions, and weekly office hours.

(Image 2)

## Well-Being Champion Network

### Role/Responsibilities

- Ambassador for the Office of Physician and APP Fulfillment (OPAF)
- Liaison between OPAF and service line leadership and providers
- Encouraged to launch and lead a Physician & APP Fulfillment committee for service line
- Available to offer 1:1 peer support to physicians and APPs in the service line
- Recognize colleagues who may be showing signs of stress and burnout and direct them to appropriate resources
- Promotes participation in the Wellbeing Index and Glint/Listening surveys
- Promotes participation in OPAF events and programs
- Educates providers on resources available to improve wellbeing and decrease burnout
- Works with service line leadership and OPAF to develop and implement action plans based on survey results and other data

## Results

Forty-three individuals have committed to the WBC role. This represents all eleven clinical service lines, graduate medical education, and multiple large independent

groups. Engagement has been high with approximately 75% attendance rates at quarterly meetings. Twenty WBCs are involved in local wellness or engagement committees in their respective spaces.

### **Conclusion**

Now, more than ever, the well-being of our clinicians is a top priority. The WBC network at Spectrum Health is a key program to foster community, improve engagement, and provide resources to clinicians who need it most.

# The effectiveness of protecting time for mental health care in residency: Using a validated tool to measure the effect on stigma

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## Learning objectives

1. Summarize an effective solution to combat the barriers of accessing mental health care by embedding time into the trainee's curriculum
2. Describe the Opening Minds Stigma Scale for Health Care Professionals as a validated tool to assess stigma towards mental health.

## Projective objective/background

Physician rates of depression and suicide remain alarmingly high<sup>1,2</sup>. At the same time, physicians are less likely to seek help for mental health concerns<sup>3</sup>. The barriers to seeking mental health support include time, access, fear of licensure issues, and stigma towards accessing mental health resources. Rates of burnout and depression are particularly high in trainees. Previous examples have shown that psychological counseling sessions are among the most valued components of well-established programs<sup>4</sup>. In this study, trainees have protected time to meet with mental health professionals thereby removing the barriers of time and access and aiming to reduce the stigma towards mental health care.

## Methods/approach

In collaboration with the institution's employee assistance program, 49 PGY2 residents participated in the Well-Being Assessment program for academic year 2019-2020 (pilot) and 64 residents and fellows participated in academic year 2020-2021. Each resident had protected time to meet with a mental health professional, twice in the academic year. A survey evaluation was completed before and after completion of the program. The Opening Minds Stigma Scale for Health Care Professionals (OMS-HC) was used as a validated tool to assess stigma of the participants. Utilization, follow up appointment, no show, and reschedule rates were also assessed.

## Results

Utilization rates for fall 2019, spring 2020, and fall 2020 were 92%, 67%, and 83% respectively. Follow up

appointment rates were 3-7%. In 2019-2020, forty-four residents took the pre intervention survey, while 27 took the post intervention survey. Seventy-seven percent of residents would rate the program as good, very good, or excellent. Sixty six percent of residents were more likely to connect with a counselor or mental health professional in the future after participating in this program. Using the OMS-HC scale the total score was pre 33.8±6.3 vs. post 33.0±5.1 ( $p=0.590$ ). The subscale of attitude towards people with mental illness was pre 13.9±2.7 vs. post 13.1±2.7 ( $p=0.234$ ). The subscale of attitudes towards help seeking and disclosure was pre 11±2.8 vs. post 10.5±2.6 ( $p=0.431$ ). The subscale of attitudes towards social distance was pre 8.9±6.3 vs. post 9.4±2.1 ( $p=0.349$ ).

## Conclusion

Protecting time for residents to meet with a mental health professional is an effective way to reduce the barriers of time and access. More research is needed to determine if this approach could decrease stigma towards mental health.

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# To Act As A Unit: A pathway to professionalism for newly-hired staff physicians and investigators

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## Learning objectives

1. Explore the barriers to acculturation and professionalism for newly hired physicians and investigators
2. Describe a novel onboarding series focused on organizational culture, collegial relationships, and professionalism.
3. Review attendee evaluation findings with regard to program strengths and weaknesses that have enabled its evolution, and opportunities for further investigation of its impact.

## Project objective/background

Healthcare systems are increasingly large and complex, making it difficult to establish and maintain institutional culture and develop meaningful professional relationships among caregivers at multiple sites. In addition, caregiver burnout is now recognized as a significant threat to organizational culture and reputation, quality of patient care and experience, and caregiver wellness and retention. Onboarding in health care has traditionally focused on preparing caregivers to see patients with less attention paid to cultural immersion, organizational resource awareness, and professional skill building as a mechanism for building culture and resilience.

## Methods/approach

To address these challenges, we developed a series of interactive sessions highlighting institutional culture and professionalism called 'To Act As A Unit' (TAU). New members of the professional staff are expected to attend these 2-4 hour sessions within the first 12-18 months of employment. Individual sessions connect the institution's heritage with current patient centered enterprise values, educate staff on professional and wellness resources, detail quality and patient safety goals and expectations, discuss leadership styles and career development, invite physicians and nurses to explore principles of interprofessional teamwork, and discuss institutional education goals and structures. Concepts such as "appreciative inquiry" and "ladder of inference" are discussed in small groups and debriefed in detail to

allow new staff to develop collegial relationships and incorporate civility and humanism into medical practice. Case studies are used to build approaches and detail resources for professionalism challenges such as impaired caregivers and end of life issues.

## Results

From 2013-2019, 1526 professional staff from across the Cleveland Clinic's global enterprise have attended at least 1 course. Participant evaluations report adherence to course objectives, with metrics averaging > 4.5/5.0 for each course each year. Similarly, attendees have found value in attending, with metrics averaging > 4.5/5.0. Verbatim comments routinely cite connection to values and resources, networking across care sites, and opportunities to reflect/build skills as strengths of the series.

## Conclusion

We have successfully established an interactive course series for newly employed professional staff. Attendees find value in opportunities to reflect on professional values, skills, and challenges. Opportunities exist to explore long-term impact on professional culture, retention, and personal wellness. We believe this approach can be successfully adapted in other health care organizations.

# Treating caregivers like family

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## Learning objectives

1. Describe rapid response to expand support and safety net resources during a pandemic
2. Appreciate the role of communication and best practice sharing in a time of crisis
3. Understand how job and personal security impacts caregiver professional fulfillment

## Project objective/background

With an institutional commitment to “treating caregivers like family,” Cleveland Clinic’s portfolio of support services has been robust. Anticipating the impact of the COVID-19 pandemic on all employees, particularly clinicians, we wanted to organize existing resources, expand specific services and provide multiple routes for communication.

## Methods/approach

Executive leadership assured that there would be no layoffs during the crisis and encouraged caregivers to find ways to assist in maintaining operations and support. Members of the Professional Staff Affairs, Caregiver Experience, Employee Wellness, Caring for Caregivers, Occupational Health, Psychiatry and Patient Experience offices created a Caregiver Resources Taskforce to quickly mobilize the resources of each office, enhancing current support services and building new resources in response to COVID-19. We issued a Press Ganey pulse survey in May 2020 and a Physician Wellness Academic Consortium Clinician Well-being survey in October 2020 and compared relevant 2019 results.

## Results

We created (1) the OPSA Navigator Program, which connected trained peers to COVID+ professional staff for 24/7 support and resources; (2) the Caregiver Support

Team, which delivered food and essentials to COVID+ caregivers, and (3) a COVID-19 mental health network with on-demand 30 minute therapy sessions and a 24 hour hotline. Enhanced communication through virtual daily updates, development of a COVID-19 website and establishment of a COVID-19 hotline was key to dissemination of information and provision of feedback. In response, we extended emergency childcare services to all caregivers and expanded existing well-being support programming. Finally, we created a weekly Staff Support Huddle, connecting staff champions and volunteers in every institute for best practice sharing and to gather immediate feedback.

Surveys demonstrated increases in engagement and professional fulfillment, decreases in burnout, and minimal personal financial impact due to COVID.

## Conclusion

In response to the COVID pandemic, Cleveland Clinic expanded its services for caregivers, including enhanced access to childcare, mental health support services, support for COVID-19 positive caregivers and consistent communication for ongoing feedback and needs assessment. Proactively creating a safety network for employees created a stronger caregiver culture and demonstrated how we care for each other like family.

# Virtual support workshops offered as the pandemic unfolded

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## Learning objectives

1. Deliver timely, diverse, supportive offerings in response to the stresses physicians are facing
2. Adapt offerings weekly to maximize timeliness and usefulness
3. Evaluate the effectiveness of workshops.

## Background

As the pandemic hit, we rallied to provide care in hospitals and clinics as well as to move routine visits online. Staff faced an unending barrage of disruptions such as risk of transmission of COVID-19 to themselves and their own families, wildfires, and social turmoil. At the same time, they needed to provide best treatment for critically ill patients within the limits of medical knowledge and resources as they counseled fearful patients. Patients who were isolated from families turned to their caregivers for emotional support. Our medical group was also affected by quarantine requirements which limited their own personal support. Like others, they home schooled children and/or cared for older parents safely.

## Methods

Bi-weekly 50-minute workshops were created to allow a space for participants to emotionally process the continuous constant of change and to help manage stress. Workshops followed a general format of introduction/ground rules for confidentiality, a short breathing exercise or meditation, a brief presentation of the weekly topic, discussion, and a closing. Participants joined these sessions virtually and were invited to turn on their cameras to encourage social connection during times of physical isolation. Supplemental handouts and

reading were provided through online links. Throughout the ten sessions topics included (but were not limited to) grief, stress, self-care, mindfulness, post-traumatic growth, and happiness.

## Results

To test the efficacy of the workshops, participants were sent a post workshop evaluation. Of the 130 employees who attended the workshops, 68% (n. 88) responded to the survey. The workshops received an average of 4.5 (out of 5) star rating with 93% (n.72) of participants stating a feeling of lowered stress and anxiety because of the workshop. Auxiliary feedback from employees were positive but the workshops were eventually put on pause as staff adapted to the pandemic and time demands continued to mount.

## Conclusion

These workshops were instrumental in offering a quick and easy avenue for employees to emotionally process the pandemic as well as other outside factors such as wildfires, social unrest, political unrest, remote work and schooling. Operational procedures are now in place to quickly deploy similar workshops if the need arises.

# Women's Wellness through Equity and Leadership: A cross organizational effort to empower women physicians

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## Learning objectives

1. Explore the relationship between gender inequities and wellness outcomes in the healthcare workforce.
2. Summarize the Women's Wellness through Equity and Leadership cross-specialty consortium to address inequities and gender disparities in leadership and wellness.
3. Identify characteristics of successful programs for advancing women in medicine.

## Project objective/background

Women physicians report less control over their day-to-day work, lower compensation, greater strain in the work-home integration and are more likely to report burnout than their male colleagues. Women in medicine may face additional challenges including discrimination, gender-based harassment, gender bias, gendered expectations, and cultural environments not conducive to success. The challenges faced by women of color are even greater. The Women's Wellness through Equity and Leadership project (WEL) highlighted and sought to address the relationship between inequities in the workplace and burnout and wellness.

WEL was conceived as a collaborative effort between six partner organizations: the American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), American College of Obstetricians and Gynecologists (ACOG), American College of Physicians (ACP), American Hospital Association (AHA), and American Psychiatric Association (APA). Across these groups, there was potential to impact over 400,000 physicians. This consortium sought to make change at both individual and organizational levels, by fostering the development of women leaders and building an enduring infrastructure among the six partner organizations to advance work in these areas. An 18-month curriculum was developed which included 3 educational series focused on wellness, equity, and leadership, and included monthly virtual and 4 in-person meetings. The purpose of this study was to conduct an evaluation of the pilot implementation of

WEL, including delineating program strengths, identifying areas for program improvement, and assessing program impact on participant knowledge and behavior.

## Methods

Participants included a diverse group of eighteen early- to mid-career women physicians from across medical specialties, three from each partner organization. After Institutional Board Review approval, a mixed-methods evaluation design was incorporated which included post-series and post-program surveys and in-depth telephone interviews.

## Results

Participants delineated several drivers of program success, including peer support/networks; interconnectedness between the topics of wellness, equity, and leadership; and diversity of participants and faculty. Areas for improvement included more opportunities to connect with peers and share progress, and more structured mentorship. Regarding program impact, participants reported increased knowledge and behavior change because of their participation.

## Conclusion

This longitudinal, cohort initiative resulted from a successful collaboration between six medical associations. Evaluation findings suggest that providing opportunities for women physicians to connect with and support each other while building knowledge and skills can be an effective way to advance wellness, equity, and leadership for women in medicine.

# Work-life balance: Clinicians maintaining interests outside of medicine

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## Learning objectives

1. To gain an appreciation for the overall percentages of clinicians that are self-reporting interests outside of medicine
2. To develop an awareness of the common interests held by clinicians outside of medicine
3. Explore if there are any links between specialty and interests held

## Project objective/background

Clinicians' interests outside of the medicine are discussed at every stage of training. Current evidence suggests that trainees are negatively impacted by a lack of work life balance during their post-graduate training<sup>1</sup>. Little is known currently on whether this remains a problem when clinicians become consultants. The aim of this study is to assess if specialists are able to maintain interests outside of medicine as a measure of work-life balance across a number of specialties.

## Methods/approach

The Spire private healthcare provider, was approached and permission was obtained to amalgamate data from their website including clinicians' personal interests across the UK. All practicing specialists in the private sector registered on the Spire website were manually reviewed by the authors and anonymized. A database was populated with only specialty and personal interests.

## Results

4410 consultants were registered on the Spire website as providing private care. The most commonly occurring specialty was orthopaedics accounting for 17% followed by radiology and cardiology accounting for 7% and 6% respectively. The number of personal interests per clinical

ranged from 0 – 22. The most popular interest amongst all clinicians was being married (18%), followed by music (8%) then cricket (8%). 46% of clinicians did not have a single interest outside of medicine. A full break down analysis of interests per specialty will be presented in the presentation. One example in the most popular specialty orthopaedics, the most popular interest was cricket (12%) followed by rugby (11%) then golf (10%).

## Conclusion

A range of consultants across a variety of specialties demonstrated a broad selection of interests outside of medicine. Although not all consultants maintained personal interests, the most popular interest was being married. Just under half the analysed consultants did not self-report one interest outside of medicine. Further work is needed to explore the potential barriers held by consultants that are preventing them from holding at least one interest outside of medicine.

## References

1. Rich A, Viney R, Needleman S, et al 'You can't be a person and a doctor': the work-life balance of doctors in training—a qualitative study. *BMJ Open*. 2016; 6:e013897.

