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

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The background features a tropical sunset scene. The top half is white with faint palm tree silhouettes. The middle section is a vibrant gradient from red on the left to blue on the right, depicting a sunset over mountains and palm trees. The bottom half is white with more faint palm tree silhouettes.

# Oral presentations

Electronic health records

# Association of primary care physicians' message volume with patients' likelihood to recommend the physician

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## Learning objectives

- To characterize primary care physicians' (PCPs) electronic inbox time, message volume, and message turnaround time, including gender differences in these measures. Implement individualized efficiency plan with participating provider.
- To describe the association of these measures with patients' likelihood to recommend the PCP.
- To identify how these associations differ for female versus male primary care PCPs.

## Project objective/background

Inbox burden disproportionately affects female PCPs. Given evidence that increased time on the EHR by PCPs is associated with better panel-level ambulatory quality, we sought to characterize the association between PCPs' electronic inbox effort and patient satisfaction, including differences by PCP gender.

## Methods/approach

This was a cross-sectional study of all PCPs at Brigham and Women's Hospital during 2021. We obtained administrative information regarding PCPs' demographic and panel characteristics. From Epic Signal, we obtained information regarding PCPs' total yearly inbox message and completed patient medical advice request (PMAR) volume (which we normalized by panel size), as well as PMAR turnaround time and daily electronic inbox time. Finally, we obtained 2021 PCP-level averages of how likely patients were to "recommend this provider" (0-100 scale).

We descriptively summarized PCPs' demographic and panel characteristics, message and EHR use patterns, and likelihood to recommend (LTR) scores. We compared measures by PCP gender using Wilcoxon rank sum tests. Generalized estimating equation multivariable ordinal logistic (cumulative logit) regression models were used to assess the association between each independent electronic inbox activity variable and LTR score quartile,

adjusting for PCPs' demographic and panel characteristics. We additionally built models with an interaction term between gender and each inbox activity variable.

## Results

The sample consisted of 133 PCPs (56.4% female) with median (IQR) clinical full time equivalent (FTE) of 0.5 (0.25, 0.75). Female PCPs received significantly more PMAR messages per empaneled patient per year (median (IQR) 1.7 (1.2, 2.7) for female vs. 1.2 (1.0, 2.1) for male PCPs;  $p=0.007$ ). There were no significant differences by gender in average PMAR message turnaround time, yearly total messages per empaneled patient, or yearly electronic inbox time per empaneled patient. Across the sample, median (IQR) LTR scores were 88.6 (83.1, 92.0) and did not differ significantly by PCP gender.

In non-interacted models, each additional yearly PMAR per empaneled patient and yearly total message per empaneled patient were associated with 1.7 (95% CI: 1.4, 2.1) and 1.1 (95% CI: 1.0, 1.2) greater odds of a higher LTR score. There were no significant associations between PMAR turnaround time and LTR or yearly electronic inbox time per empaneled patient and LTR.

Models with interactions for physician gender revealed that uniquely for female PCPs, greater yearly PMAR volume, yearly total message volume, and yearly

electronic inbox time per empaneled patient were associated with increased odds of a higher LTR score (OR: 2.3 (95% CI: 1.5, 3.7), OR 1.2 (95% CI: 1.1, 1.3), and OR 1.2 (95% CI: 1.1, 1.3), respectively). Longer turnaround time was associated with decreased odds of a high LTR score (OR: 0.992 (95% CI: 0.988, 0.996)).

### **Conclusion**

There are significant associations between PMAR volume and total inbox message volume with LTR. These associations are concentrated among female PCPs. While most inbox work is uncompensated, our findings suggest that this work is valued by patients, and particularly by patients of female PCPs. These findings emphasize the need to create robust systems to manage an increasing volume of inbox work.

# Characterizing the impact of virtual scribes on physician experience

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## Learning objectives

- Characterize physician perceptions of virtual scribe use
- Describe the perceived benefits and drawbacks of virtual scribe use

## Project objective/background

More than one-half of US physicians experience burnout, and time on the electronic health record (EHR) has been associated with higher levels of burnout. One intervention to help combat burnout resulting from EHR-related tasks is to incorporate the use of scribes, who can assist with charting and physicians' EHR data entry. Virtual scribes either transcribe visits asynchronously or are remotely located and transcribe synchronously while listening in on a visit. In this study, we characterized physician perceptions of and experiences with virtual scribe adoption.

## Methods/approach

An electronic survey created by subject matter experts was administered via REDCap between 11/28/2022 and 01/06/2023 to physicians at Brigham and Women's Hospital (BWH) and Massachusetts General Hospital (MGH) who previously used or currently use virtual scribes. The survey queried physicians about their satisfaction with virtual scribes and their perceptions of the extent to which virtual scribes affect EHR burden, their wellbeing, and the patient relationship. All responses were reported as frequencies.

## Results

The survey was sent to 376 physicians of which 122 (32%) responded. Most respondents (86%; n= 104) were affiliated with MGH, 8% (n=10) with BWH and 6% (n=7) with both institutions. Almost three-quarters (n=90; 74%) worked in general internal medicine, 71% (n=86) of respondents were female, and 48% (n=54) saw patients 3-5 half-day sessions per week.

Among all respondents, 41% (n=48) were satisfied or very satisfied with their most recent scribe service. 60% (n=73) agreed that use of a virtual scribe enhances their relationship with patients and 65% (n=78) felt that using a virtual scribe enhances their wellbeing. Among the 61% (n=74) of respondents still using a scribe, 50% (n=61) reported that using a scribe helps them better focus on patients during the visit and reduces time spent on documentation, while 41% reported scribe use reduces weekend and after-hours EHR work. Reported drawbacks of virtual scribes included that their documentation requires too many edits (44%; n=54) and that there is a steep learning curve for the scribe and providers' work together (27%; n=33).

## Conclusion

Use of virtual scribes is associated with enhanced wellbeing, enhanced patient relationships, and an improved ability to focus on patients during visits. Drawbacks of scribe use include a steep learning curve associated with working with a scribe and time spent on documentation editing. Future efforts should seek to optimize scribes' training and workflows for physician/scribe collaboration to maximize the benefits of virtual scribes.

# Characterizing the impact of virtual scribes on physicians' electronic health record time

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## Learning objectives

- Identify the impact of virtual scribe use on physicians' electronic health record time
- Describe the impact of virtual scribes on physicians' contribution to notes and note length

## Project objective/background

Ambulatory physicians spend much of their days using the electronic health record (EHR) and on EHR-based documentation. Virtual documentation support, such as virtual scribes, has the potential to enhance the physician experience while reducing the barriers associated with in-person documentation assistance. We characterized the impact of virtual scribes on physician EHR use patterns at two large academic medical centers using metrics as recorded by Epic's Signal database.

## Methods/approach

We identified physicians who used a virtual scribe at Brigham and Women's Hospital or Massachusetts General Hospital (MGH) between 01/2020 and 09/2022 for at least 3 months. Paired t-tests were used to compare EHR time metrics pre-and post-virtual scribe use at a physician level. Each physician's total EHR time per appointment, pajama time (5:30PM-7 AM) per appointment, time on notes per appointment, percent of note written by the physician, percent of orders with team contribution, and average note length was compared 3 months pre-and post-use of virtual scribes. We additionally built multivariable models to characterize factors associated with significant changes in each EHR time metric at 3 months pre- versus post-use of virtual scribes.

## Results

Our sample included 144 physicians (85% from MGH; 63.2% female). Scribe users were distributed across specialties, with 59.7% in primary care, 32.0% in medical specialties, and 8.3% in surgical specialties.

On a per-physician basis, virtual scribe use was associated with significant decreases in EHR time per appointment,

note time per appointment, and pajama time per appointment in the three months post versus the three months prior to virtual scribe use. Total average EHR time was 35.1 (30.6) minutes pre-scribe use vs. 29.5 (26.5) minutes post ( $p<0.0001$ ), average note time per appointment was 9.8 (7.0) minutes pre-scribe use and 7.9 (8.1) minutes post ( $p<0.0001$ ), and pajama time per appointment was 9.0 (9.6) minutes pre-scribe use vs. 7.5 (7.9) minutes post ( $p=0.02$ ). The proportion of the note contributed by the physician significantly decreased with scribe use (85% prior to scribe use versus 55% after ( $p<0.0001$ )). Note length significantly increased to 6041 (2842) characters 3 months post-scribe use compared to 6438 (2702) characters pre-scribe use ( $p<0.0001$ ). There was no difference in percent of orders with team contribution pre-versus post scribe use (14% prior to scribe use vs 14% 3 months after scribe use ( $p=0.82$ )).

In multivariable models controlling for scribe type, specialty grouping, hospital, physician sex, and physicians' years since residency, use of an asynchronous versus a synchronous scribe was associated with significantly greater reductions in total EHR time per visit (12.7 minutes (95% CI: 3.0, 22.3;  $p=0.01$ )) and significantly greater increases in the proportion of the note contributed by the provider (0.16 (95% CI: 0.01, 0.31;  $p=0.04$ )).

## Conclusion

In this study across two academic medical centers, we demonstrate that use of virtual scribes is associated with significant decreases in multiple EHR time metrics, and slight increases in note length. Additional work is also needed to qualitatively characterize physician and patient experiences with virtual scribes and assess the quality of scribed notes.

# COVID exacerbated the gender disparity in physician electronic health record inbox burden

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## Learning objectives

- To characterize differences in physicians' volume of messages sent to and received from patients before versus after the COVID pandemic
- To describe how these differences in pre- versus post-pandemic patient message volume varied by physician gender

## Project objective/background

Time spent on the electronic health record (EHR) increased significantly during the coronavirus pandemic, driven by significant increases in electronic messages sent by patients. Pre-pandemic, there were known gender disparities in EHR time and patients' expectation of women physicians. In this study, we explored whether the COVID pandemic differentially impacted the patient-initiated messaging burden of women versus men physicians.

## Methods/approach

We extracted data from the University of California at San Francisco (UCSF)'s Epic clarity database regarding physician inbox messaging for the pre-COVID (08/27/2018-09/30/2019) and post-COVID onset (08/31/2020-09/27/2021) for physicians in the eleven most common ambulatory specialties at UCSF, four primary care (internal medicine, family medicine, pediatrics, OB/GYN) and seven other (neurology, cardiology, dermatology, otolaryngology, hematology-oncology, nephrology, and general surgery) specialties. Data were aggregated weekly by physician.

After descriptively characterizing physicians by role, specialty, and clinical volume, we used a multi-variable ordinary least squares regression model with a difference-in-differences framework to assess whether the COVID pandemic differentially impacted women physicians' volume of patient messages sent and received per week. Both models included physician fixed effects to control for time-invariant confounders (e.g., specialty, years in practice) and week fixed effects to control for seasonality,

as well as controls for volume of ambulatory visits and number of scheduled patient care hours in each week. Robust standard errors were clustered at the physician level.

## Results

Our sample included our sample included 544 physicians, 308 women (56.6%) and 236 men (43.4%). In both the pre- and post-COVID periods, women physicians had more ambulatory appointments per week (mean [SD] 21.6 [14.5] appointments per week pre-COVID, 22.1 [13.9] appointments per week post-COVID) than men (18.6 [14.5] appointments per week pre-COVID, 19.3 [14.0] appointments per week post-COVID).

In adjusted difference-in-differences models controlling for physician characteristics (specialty, role, and time invariant unobserved physician confounders), clinical workload (as measured by appointments and scheduled patient hours per week), and seasonality, we found that while the post-COVID period was associated with a significant increase in messages received ( $\beta = 7.83$ ,  $P < .001$ ) and sent ( $\beta = 14.79$ ,  $P < .001$ ) for all physicians, there was a greater increase for women in messages received ( $\beta = 2.69$ ,  $P = .02$ ) and sent ( $\beta = 4.87$ ,  $P < .01$ ) compared to men.

## Conclusion

In this study of physicians at UCSF Health, we demonstrate that COVID was associated with a dramatic increase in the volume of electronic patient messages, and that increase was significantly greater for women physicians. These findings build upon a growing literature



demonstrating a differential burden of EHR-related work for women physicians. Our findings support evidence regarding different communication expectations for women physicians. Future work should examine policies, technologies, and organizational interventions to alleviate differential messaging burden by gender while maintaining access to care for patients.

# Creating conversion factors from EHR event log data: A comparison of investigator-derived and vendor-derived metrics for primary care physicians

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## Learning objectives

- Understand the data sources used to quantify physician activity in the EHR
- Recognize the differences between vendor-derived and investigator-derived metrics
- Learn an approach for standardizing EHR usage metrics for use in well-being and practice efficiency research

## Project objective/background

Physicians spend up to twice as much time with the electronic health record (EHR) compared to direct clinical face time with patients, and nearly 75% believe time spent on the EHR contributes to burnout. Currently, there are no standardized, reliable, and scalable measures of physician EHR time. Vendor-derived metrics (e.g. Signal from Epic Systems) are standardized and scalable, but may underestimate real-world EHR experience if thresholds defining active EHR use are overly stringent. Investigator-derived metrics (researcher-calculated metrics from raw event logs) may be more reliable if they use more representative thresholds to define active use, but are not standardized.

This study aimed to enable standardized investigator-derived metrics by creating conversion factors between raw event logs and Signal. This will allow researchers and other stakeholders to more consistently and reliably quantify EHR experience for predicting well-being and assessing efficacy of interventions to reduce EHR burden.

## Methods/approach

We performed an observational, retrospective longitudinal study of primary care physicians from 83 academic and community clinics from September 2021-February 2022. We combined providers' EHR raw event logs and clinic scheduling data, using consensus-based categorization to map EHR events to task types. We calculated time-based metrics for each individual physician; using a range of inactivity thresholds (time after an EHR action before a

user is deemed 'inactive'). We then generated conversion factors by regressing our investigator-derived metrics on the vendor-derived Signal metrics, using constrained linear regression with robust standard errors.

## Results

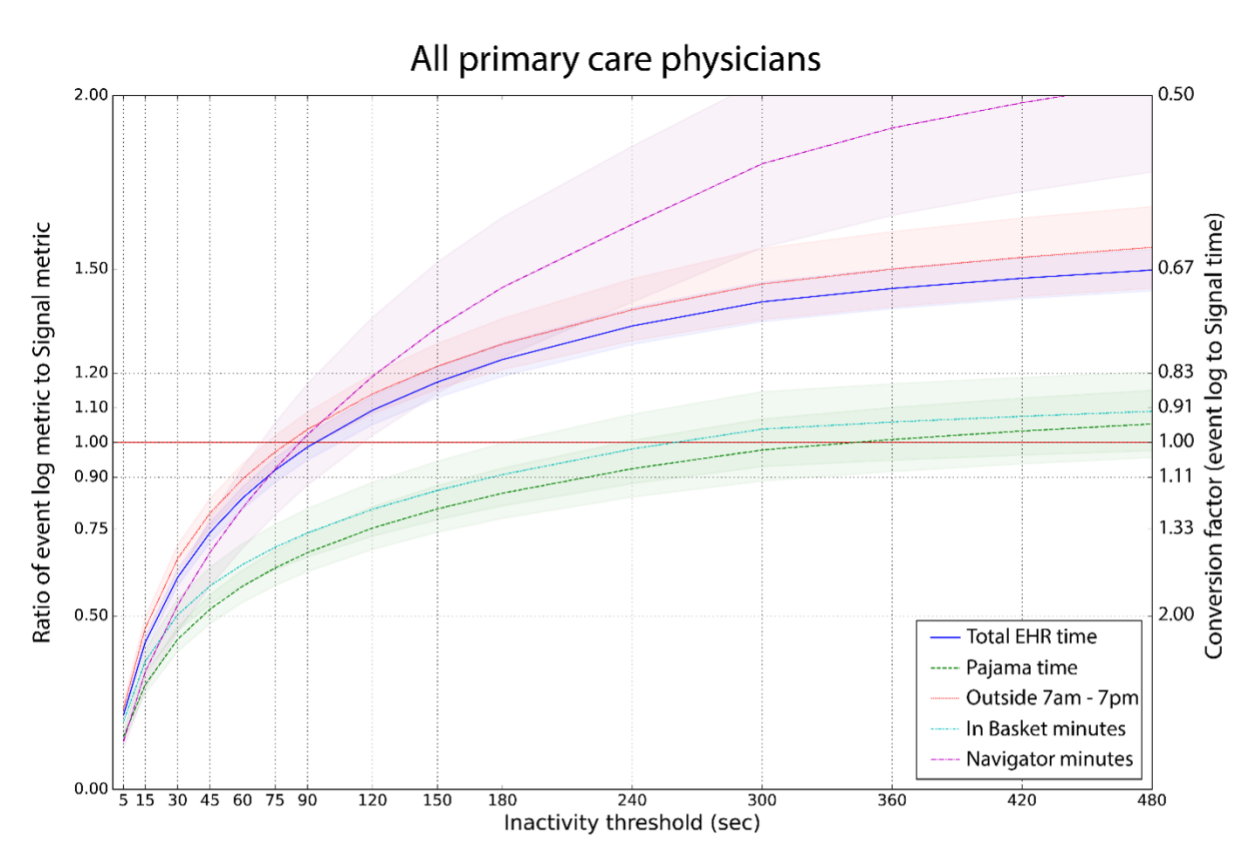
We evaluated 242 physicians over 1370 physician-months, comparing 53.7 million event logs to 6850 Signal metrics. Participants were 67% women, with a median age of 51 years (IQR 41-59).

The event log inactivity thresholds empirically relating event logs to Signal metrics varied by task, ranging from 90 seconds (Visit Navigator) to 360 seconds ("Pajama time"—all weekend time and time outside of 7a-5:30pm on weekdays). For example, to convert audit log-based measures using an inactivity threshold of 120 seconds to equivalent Signal metrics would require conversion factors of 0.83 for Visit Navigator time and 1.33 for "pajama time." Patterns were similar across primary care specialties.

## Conclusion

This study is the first to assess the impact of different audit log inactivity thresholds on EHR measures of clinician work burden and provide conversion factors to translate Signal metrics to audit log-based measures by activity. The results allow researchers to more consistently assess relationships between EHR experience and clinician well-being and assess efficacy of interventions designed to reduce EHR burden.

Figure 1. Ratios of event log-derived and Signal metrics for primary care physicians, for 5 measures of EHR use, with associated conversion factors. N=242 physicians from 83 primary care clinics.



# How many hours of patient scheduled time would result in a 40-hour work week for physicians, and how does that vary by specialty?

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## Learning objectives

- Measure EHR time spent on “work outside of work” (WOW) and compare to patient scheduled hours (PSH) in order to capture a full picture of physician work.
- Understand measurement issues associated with WOW and PSH.
- Assess differences by specialty, gender, and health care system type.

## Project objective/background

It is widely known that physicians spend substantial time doing EHR work, which contributes to burnout. Ideally, targeted levels of patient scheduled hours (PSH) would account for the levels of EHR time outside work (WOW) to achieve a 40-hour work week. To help inform such an approach, the current study leverages a large-scale dataset to measure how much WOW time is spent outside of PSH across ambulatory specialties, health system types, and by physician gender.

## Methods/approach

Our national sample included all Cerner clients with complete ambulatory data for Jan 2021 through Dec 2021. The sample included 189 health systems with 54,371 unique physicians and 1,431,876 physician-weeks across specialties. Using the Cerner Lights On Network data, WOW was operationalized as “active” EHR time (measured by mouse/keyboard activity): (1) before or after patient scheduled hours on days with scheduled time, and (2) any time spent in the EHR on a day without scheduled hours. Variation in WOW was examined by: (1) physician specialty categorized into primary care (42.1%), medical subspecialty (28.5%) or surgical (29.5%), (2) health care system type: regional hospitals (36%), integrated delivery networks (33%), academic (9%), other (23%), and (3) gender for a subset (36%) of the sample. We used multilevel mixed-effects analyses (weeks nested within physicians nested within health care systems).

## Results

Across all specialties, we found an average of approximately 12.5 minutes of WOW per 1 PSH (SD=13.7, Median=8.1), which would suggest 33 PSH to achieve a 40-hour work week. Compared to primary care physicians, surgical physicians had significantly less WOW per PSH ( $b=-8.4$  minutes,  $p<.001$ ), as did medical subspecialties to a smaller extent ( $b=-1.8$  minutes,  $p<.001$ ). Compared to regional hospitals, academic medical centers had more WOW per PSH ( $b=6$  minutes,  $p<.001$ ). A similar model on the sample that included gender found that men had less WOW per PSH compared to women ( $b=-3.6$  minutes,  $p<.001$ ).

## Conclusion

We found that primary care specialties tended to have especially high levels of WOW time, as did physicians at academic medical centers and women physicians. To the extent that vendor-derived measures of WOW underestimate actual time and do not account for non-EHR tasks, the number of PSH that results in a 40-hour work week could be considerably less than 33 hours of patient scheduled time. Given financial pressures to maintain high encounter volumes, it is critical to formally recognize and account for WOW as part of work hours expectations.

# Hybrid care delivery and the impact on physician burnout: How digitally enabled care reduces unnecessary physician EHR inbox time while improving clinical outcomes and patient satisfaction

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## Learning objectives

- Analyze the impact of digital health interventions on patient outcomes and physician workloads.
- Identify evidence-based strategies for reducing physician uncompensated workloads through the use of digital health interventions.
- Apply the learnings of this digital health intervention to other health care settings.

## Project objective/background

Physicians face increasing stress from administrative and clinical burdens, with limited time for patient follow-up and care. The rise of video visits, e-visits, and patient messaging places additional constraints on physician time.

Hybrid collaborative care has been proposed as an opportune solution. By providing supportive digital health services, this model allows for iterative care and faster intervention. Hybrid collaborative care offers a promising solution to reduce physician burnout, while also improving patient outcomes.

This prospective study explored how hybrid collaborative care can reduce physician burnout by examining the messaging habits of patients enrolled in a gastrointestinal (GI) focused digital health program. The hypothesis was that increasing the use of digital health services with integrated clinical and non-clinical providers would reduce the burden of e-visits and messaging on physicians and improve access for complex patients who require high levels of care.

## Methods/approach

The study was conducted using a digital health platform that allowed patients to directly message and conduct e-visits with GI physicians, registered dietitians, psychologists, health coaches, and care coordinators. Data was collected through patient surveys and electronic

medical records to assess the frequency of messaging between the patient and each provider type, as well as number of e-visits.

## Results

N=332 patients were enrolled in the intervention including patients with Irritable Bowel Syndrome, Inflammatory Bowel Disease, and undiagnosed GI symptoms. There were 2,518 visits during the nine-month study period, of which each patient averaged 11 visits across the multidisciplinary care team. All patients were assigned to a GI provider, 91% were assigned to a GI registered dietitian, and 72% to a GI psychologist. Patients averaged four visits with a GI provider, four with a GI registered dietitian and four with a GI psychologist. There were an average of 82 messages sent per patient, of which 53 were to a GI health coach, 50 to a care coordinator, and 1 to a GI provider. 90% of patients achieved symptom improvement. 98% of patients reported satisfaction with care.

## Conclusion

This clinical study provides evidence that hybrid collaborative care can be used to reduce physician burnout by providing a high-touch platform that engages patients more often with their other health care providers, while messaging their physician less often. The results suggest that digitally enabled platforms are a useful tool for clinicians to engage patients in their care, while reducing their own workload and burnout.

# Identifying opportunities for improving information technologies and the purposes they serve

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## Learning objectives

- Learn which EHR/IT functions most predict perceptions of work-life balance, practice promotion, and retention.
- Learn which EHR/IT functions most predict perceptions of patient-centered high-quality care.
- Learn which EHR/IT functions most predict perceptions of professional fulfillment and burnout.

## Project objective/background

Electronic health records [EHR] are ubiquitous since required by health care reform (2010), central to all transactions. While tracking objective EHR data now recommended by Sinsky et al,<sup>1</sup> we also aimed to assess the perception of such metrics and their association with well-being and the mission they serve.

## Methods/approach

In January 2019, we surveyed attending physicians across a system of five hospital-based delivery networks including academic, employed, and private practitioners. We assessed 11 factors related to the EHR and IT technologies serving the mission to deliver high-quality patient-centered care by physicians committed to the practice, promoting the practice, promoting the care, and able to maintain work-life balance and professional fulfillment without burnout. Predictors and outcomes were dichotomized. [Table] Analysis included standard descriptive statistics, chi-square, logistic regression adjusted for delivery network, practice model, specialty, fte, age, race, gender.

## Results

With a 31% response rate, this is a cross-sectional study of 1277 physicians: 47% academic faculty, 61% male, 80% white, and an average age of 46. This was consistent with the larger population. Of those sampled, 58% reported the EHR met expectations. Most felt they did not have sufficient time for documentation and spent too much time documenting at home. Insufficient time to

document was significantly correlated with all outcomes tested, especially the perception of work-life balance, retention, and whether physicians would promote the practice to colleagues. Knowing how to customize the EHR was the least influential on predicting outcomes, except work-life balance and burnout. Spending time on the EHR doing tasks other teammates could do also predicted the perception of work-life balance. Physicians were more likely to promote care at the organization if they had sufficient time to document, less interference with an excessive approval process, and the ability to focus on patients without interruption. The factors that most predicted the perception of quality care, the patient relationship, professional fulfillment, and burnout were those related to the ability to focus on patients without interruption. [Table]

## Conclusion

This institution's EHR performs better than national benchmarks, yet the prevalence rates indicate opportunities for improvement. In building the workplace of the future, the table produced by this study suggests which IT/EHR interventions may be most impactful to achieve desired results in delivering efficient high-quality patient-centered care by professionally fulfilled physicians, committed to the practice, promoting the practice as a place to work and receive care.

1. Sinsky CA, Rule A, Cohen G, Arndt BG, Shanafelt TD, Sharp CD, Baxter SL, Tai-Seale M, Yan S, Chen Y, Adler-Milstein J, Hribar M. Metrics for assessing physician activity using electronic health record log data. *J Am Med Inform Assoc.* 2020;27(4):639-643.



IDENTIFYING HIGH-YIELD OPPORTUNITIES TO IMPROVE INFORMATION TECHNOLOGIES, POLICIES, AND THE PURPOSES THEY SERVE.									
IT Factor:	Prevalence of IT factor (%)	Promote getting care here (nps defined promoter)	Quality Grade A-B (C-D-F--?A-B)	Patient Experience (where F=, ?=)	Professional Fulfillment (PFI cut off by convention)	Work-life balance (>= definitely)	Retention (slightly to no intent to leave)	Practice Promoter (nps defined promoter)	Burnout (PFI cut off by convention)
EHR meets my expectations (neutral to strongly agree)	58.0	1.71	1.68		1.80	2.11	1.70	2.21	0.50
Know how to customize EHR for my needs (neutral to strongly agree)	56.4					1.64			0.75
Sufficient time to document (Mini-2) (neutral to strongly agree)	38.0	1.75	1.96		2.48	4.20	1.90	2.62	0.37
Time on EHR at home (Mini-2) (satisfactory-none)	44.4	1.42			1.72	3.44	1.88	1.83	0.44
Computer Physician Order Entry Policy (reasonable, neither strict or lenient)	62.7	1.30	1.62		1.65	1.74	1.61	2.19	0.66
Time on EHR doing what others could do (sometimes to never)	56.7		1.87		1.76	3.01	1.92	1.86	0.48
HIPPA compliant phone app has features I need (neutral-strongly agree)	56.7	1.50	2.16	1.90	1.45		1.60		0.65
Focus on patients without excess interruption (neutral to strongly agree)	75.4	1.67	2.11	2.16	2.83	2.48	1.83	2.16	0.28
No interference from excessive approval process (neutral-strongly agree)	63.9	1.74	1.71	1.59	2.78	2.10	1.77	2.10	0.31
Inexact information to bypass pop-up alerts (neutral-strongly disagree)	61.8	1.55	1.76		1.64	1.50	1.41	1.51	0.57
Confident billing is correct (neutral-strongly agree)	76.5	1.38	1.84		1.85	1.38	1.66	1.69	0.64

The grid shows the odds ratios for correlations between dichotomous predictor and outcomes variables adjusted for practice model, specialty, fte, age, race, gender if chi square or logistic regression p<0.05, and CI did not cross 1, otherwise correlations that did not reach statistical significant were hidden.

IDENTIFYING HIGH-YIELD OPPORTUNITIES TO IMPROVE INFORMATION TECHNOLOGIES, POLICIES, AND THE PURPOSES THEY SERVE.									
IT Factor:	Prevalence of IT factor (%)	Promote getting care here (nps defined promoter)	Quality Grade A-B (C-D-F--?A-B)	Patient Experience (where F=, ?=)	Professional Fulfillment (PFI cut off by convention)	Work-life balance (>= definitely)	Retention (slightly to no intent to leave)	Practice Promoter (nps defined promoter)	Burnout (PFI cut off by convention)
EHR meets my expectations (neutral to strongly agree)	58.0	1.71	1.68		1.80	2.11	1.70	2.21	0.50
Know how to customize EHR for my needs (neutral to strongly agree)	56.4					1.64			0.75
Sufficient time to document (Mini-2) (neutral to strongly agree)	38.0	1.75	1.96		2.48	4.20	1.90	2.62	0.37
Time on EHR at home (Mini-2) (satisfactory-none)	44.4	1.42			1.72	3.44	1.88	1.83	0.44
Computer Physician Order Entry Policy (reasonable, neither strict or lenient)	62.7	1.30	1.62		1.65	1.74	1.61	2.19	0.66
Time on EHR doing what others could do (sometimes to never)	56.7		1.87		1.76	3.01	1.92	1.86	0.48
HIPPA compliant phone app has features I need (neutral-strongly agree)	56.7	1.50	2.16	1.90	1.45		1.60		0.65
Focus on patients without excess interruption (neutral to strongly agree)	75.4	1.67	2.11	2.16	2.83	2.48	1.83	2.16	0.28
No interference from excessive approval process (neutral-strongly agree)	63.9	1.74	1.71	1.59	2.78	2.10	1.77	2.10	0.31
Inexact information to bypass pop-up alerts (neutral-strongly disagree)	61.8	1.55	1.76		1.64	1.50	1.41	1.51	0.57
Confident billing is correct (neutral-strongly agree)	76.5	1.38	1.84		1.85	1.38	1.66	1.69	0.64

The grid shows the odds ratios for correlations between dichotomous predictor and outcomes variables adjusted for practice model, specialty, fte, age, race, gender if chi square or logistic regression p<0.05, and CI did not cross 1, otherwise correlations that did not reach statistical significant were hidden.

# In-basket scrubbing reduces message burden for primary care geriatricians

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## Learning objectives

At the end of the session, attendees will:

- Recognize that initiatives to reduce burden from the electronic health record are evidence-based approaches to improve physician well-being.
- Discuss a team-based initiative using non-physician staff to reduce in-basket message burden for physicians.
- Identify specific metrics and data sources to evaluate an in-basket management project, and consider using them at their home institutions.

## Background

In-basket messages are linked to physician well-being. Expert guidelines emphasize initiatives that reduce system-factors and inefficiencies, decrease EHR-related burden, and distribute work more equally among team members. This quality improvement project evaluates the impact of an in-basket scrubbing initiative intended to reduce in-basket message burden on geriatrics physicians, using electronic health record (EHR) log data, call center data, and survey data.

## Objectives

- 1.To use a team-based approach to improve in-basket management and reduce message burden on primary care geriatricians.
- 2.To use mixed methods including EHR log data, call center data, and survey data, to measure impact and evaluate the program.

## Methods

Two administrative patient coordinators (PCs) “scrubbed” (reviewed, processed, and re-routed) in-basket messages for 18 primary care geriatricians at 3 practice sites June 2021-May 2022. PCs conducted a needs assessment and systematically trialed process improvements. They

updated and revised the call center’s individualized physician messaging protocols and iteratively retrained practice administrative assistants and call center agents to improve message quality and correctly triage in-basket messages to the appropriate team member (nurse, social worker, or physician.) A mixed methods approach evaluated the impact on message burden via EHR log data, call center data, and staff satisfaction survey.

Epic Signal reports “number of in-basket messages”(defined as total number of messages received per provider per day, divided by total number of days logged in and worked) of message types including “staff messages” and “patient calls.” A metric “call center messages” was created, comprising these two message types, which generally originate from patients/families calling the call centers. Monthly combined averages for the sample were compared for the 12-month period before the intervention (June 2020-May 2021) and the 12-month period after the intervention (June 2021-May 2022.)

To account for possible variation in volume of calls to the call center, and monitor impact on patient experience, call center data regarding number of calls received, average handling time, average time to answer, and abandon

rate, were reviewed. To explore the possibility that call center-derived in-basket messages were decreasing due to greater patient/family adoption instead of MyChart patient portal messaging, these message types were also tabulated. There are two message types pertaining to MyChart messages: "MyChart notification" and "Patient Medical Advice Request." A metric "MyChart Messages" was created, comprising these two message types, and compared pre- and post-intervention. To evaluate impact on well-being, a satisfaction survey of practice physicians and other staff was conducted at the end of the intervention.

## Results

From June 2020-May 2021, combined monthly average was 17.1 "call center messages"/day in physicians' in-baskets, compared with 13.2 messages/day from June 2021-May 2022, a 23% reduction, and an average decrease of 4 call center messages/day. Meanwhile, there was an increase in number of MyChart messages before and after the intervention; the average number of MyChart messages per day was 5.4 before the intervention, compared with 7.4 after, a 38% increase, and an additional 2 MyChart messages/day. Despite the increase in MyChart messages, due to the greater reduction in call center messages, there was still a net decrease of 2 in-basket messages/day.

There was no significant change in call center volume before (4700.5 calls/month) and after (4601.75%; 2% decrease) to account for the reduction in physicians' in-basket messages. There was no indication of worse patient experience based on call handling time (4:40 pre-, 4:35 post-), call answer time (1:23 pre-, 1:26 post-), or call abandonment rate (8.9% pre-, 7.7% post-). The survey and focus groups showed a majority (92.5%, 12/13) of practice physicians and staff noticed a reduction in message burden, and a majority (76%, 10/13) experienced improved well-being.

## Significance

In-basket scrubbing reduced in-basket message burden for geriatricians, demonstrating the potential of team-based care to make an impact on physicians' workload. However, growing utilization of patient portal messaging presents a persistent threat to physician well-being. Hiring dedicated administrative coordinators to revise and improve in-basket message triage workflows through the call center and retrain staff resulted in significant improvement in message burden and seemed to improve practice staff well-being. Practices should consider implementing non-physician message review of a variety of in-basket message types, including call center and patient portal messages. A combination of EHR log data, survey data, and call center data, were able to be used to evaluate and optimize the project. Quantitative data from the EHR and call center are a powerful tool to promote well-being initiatives. Future research should focus on efforts to further explore the use of EHR-reported metrics dashboard to evaluate impact and to automate improved in-basket message flows.

# Longitudinal associations of burnout indicators with clinic factors and electronic health record experience among family physicians

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## Learning objectives

- Describe the association of clinic and electronic health record (EHR) experience-related factors with reported burnout, callousness, and stress among family physicians.
- Describe how the association of clinic and EHR-related factors with burnout, callousness, and stress among family physicians has changed from 2017 to 2022.

## Project objective/background

Multiple factors have contributed to worsening wellness of physicians, including family physicians (FPs) who comprise ~18% of the physician workforce and provide ~25% of all outpatient visits. These pressures have differentially affected physicians by practice setting. Additionally, increases in electronic health record (EHR) activities have changed physicians' daily work. Using a serial, cross-sectional census of FPs from 2017-2022, we examined the association of clinic factors and EHR experiences with wellbeing indicators.

## Methods/approach

The study sample consisted of all FPs seeking recertification from the American Board of Family Medicine from 2017 to 2022. On this mandatory questionnaire (100% response rate), 20% of participants per year were randomized to a module containing the Mini-Z. We assessed stress with a validated Mini-Z measure and assessed burnout and callousness with West's validated single-item measures. Using Mini-Z questions, participants were queried about their EHR proficiency, time spent on the EHR at home, and the efficiency of their team. Finally, they were asked about the characteristics of their clinic site.

After descriptively characterizing the sample, we built multivariable logistic regression models assessing the association of clinic (including team efficiency) and EHR experience factors with each of burnout, callousness, and stress, adjusting for physicians' demographics. Using models with interaction terms, we assessed whether

significant associations between clinic and EHR factors and wellbeing outcomes changed over the study period.

## Results

The study sample included 8,129 physicians across five years. Urban respondents comprised 73.3% of the sample, while 12.1% of respondents worked in solo practices and 23.8% in practices with >20 providers. Majorities reported high EHR proficiency (64.2%) and working on highly efficient teams (66.0%), while 45.5% said that they have (excessive/moderately high) home EHR use.

In multivariable models, high team efficiency was associated with odds ratios of 0.44, 0.45, and 0.42 for burnout, callousness, and stress, respectively. Other clinic characteristics were not associated with these outcomes. High home EHR use was associated with odds ratios of 2.46, 1.73, and 2.51 for burnout, callousness, and stress, respectively. High EHR proficiency was associated with an odds ratio of 0.81 for stress but was not significant for the other outcomes.

High home EHR use was associated with significantly greater odds of burnout, callousness, and stress with each consecutive year.

## Conclusion

In this national, serial, cross-sectional study of FPs, we found that high team efficiency and high EHR use were associated with lower and higher odds of each wellbeing outcome, respectively. These findings highlight the need for interventions that strengthen teams and minimize EHR home use to improve the work experiences of FPs.

# Model-assisted survey estimation to predict burnout among survey non-responders

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## Learning objectives

- Understand the risks of response bias among physician survey distributions.
- Learn a novel method of mitigating response bias using machine learning in combination with propensity scoring.
- Learn how to incorporate model-assisted survey estimates in organization understanding of well-being.

## Project objective/background

Physician surveys often have low response rates, with risk for response bias if physicians with poor well-being have systematically different likelihood of responding. Databases that map the EHR experiences of primary care physicians now allow detailed analysis of differences between responders and non-responders. Many of these data directly relate to known key contributors to burnout.

This study sought to provide a framework for estimating population-level burnout burden, including survey non-responders.

## Methods/approach

We surveyed primary care physicians using the Stanford PFI as part of the routine well-being assessment of a large academic medical center and its community affiliates, in 2019 and 2020, then linked survey responses to demographics, year, clinic characteristics, EHR usage data from Signal (Epic Systems), patient summaries from clinical databases, and sentiment analysis of progress notes. We categorized physicians as always-responders (survey completed with every survey administration), non-responders (no surveys completed), or partial-responders (survey completed 1 of 2 invitations).

We calculated propensity for survey response using logistic regression with variable selection via LASSO, then used this response propensity to generate 3 predictions for burnout among a random 80% of the always-responders (unweighted prediction, weighted by 1/p, and weighted by 1-p). We performed prediction weighting and bias-correction using the remaining 20% of always-responders, then tested the resultant single-stage

and ensemble models on the response years of partial-responders to generate model performance metrics, using LASSO-selected multivariable logistic regression for both.

We repeated the modeling approach using all responses, then predicted burnout likelihood for non-responses to generate population-level burnout estimates, with confidence intervals generated via bootstrap estimation.

## Results

Of 394 physicians receiving 723 survey invitations, 592 (82%) surveys were returned, representing 288 (73%) always-responders, 49 (12%) non-responders, and 57 (14%) partial-responders. Survey completion propensity prediction showed strong performance (AUC 0.84 via 10-fold cross-validation). Burnout prediction showed similar performance in individual models (AUC 0.61 for unweighted model, 0.63 for 1/p weighted, and 0.62 for 1-p weighted) and the ensemble model (AUC 0.63) when tested on responses from the held-out partial-responders.

Predicted burnout prevalence among non-responses was 41.9% (95%CI 33.3-50.4%), higher than the observed prevalence of 28.0% (95%CI 24.5%-31.8%,  $P=.03$ ), resulting in a similar population estimate of 30.5% with burnout.

## Conclusion

Predicted burnout among non-responses was higher than measured burnout among responses, suggesting burnout estimates from surveys may be conservative. High response rates mitigated this effect. Model-assisted survey estimation may enhance understanding population-level well-being and identifying high-risk work units if response bias precludes accurate direct measurement.

# Trends in patient-initiated medical advice request message volume, 2019–2022

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## Learning objectives

- Quantify the increase in patient-initiated medical advice request messages received by physicians between 2019 and 2022.
- Understand how patient-initiated medical advice request inbox burden is distributed across specialties.
- Examine the distribution of patient-initiated medical advice request messages within specialties over time.

## Project objective/background

The volume of asynchronous patient-physician messages grew dramatically at the onset of the COVID-19 pandemic, exacerbating already high levels of EHR-based “desktop medicine.” Little is known regarding messaging after 2020 or the distribution of message volume across and within specialties. We used national EHR metadata to evaluate trends in patient medical advice request (PMAR) messages received by physicians by specialty and across the distribution of message volume.

## Methods/approach

We analyzed PMAR messages received by physicians using de-identified multi-institution data from Epic’s Signal platform from 04/2019–03/2022. Signal collects data on EHR use, including messages received by type. We measured messages designated as patient medical advice requests: patient-initiated portal messages for clinical questions. Our measure included only messages received directly, excluding any sent to a shared inbox pool. Data included all physicians with ambulatory encounters using Epic in the United States. Our sample included 341,154 physicians in an unbalanced panel of 7,682,712 physician-month observations. We normalized measures to the week-level to account for different month lengths.

We used descriptive statistics to assess mean weekly PMAR received, by specialty groups, in each year, with two-sided t-tests to assess differences from the previous year. We measured weekly PMAR received by physicians at the 25th, median, 75th, and 90th percentile in each week by specialty group.

## Results

From 2019–2022, mean weekly PMAR increased from 9.8 to 16.6 for primary care, 3.6 to 5.8 for medical specialties, and 1.0 to 1.8 for surgical specialties ( $p < 0.001$ ). The median primary care specialist (family medicine, pediatrics, and internal medicine) increased from 1.5 PMAR the week beginning 4/28/2019 to 7.0 on 3/27/2022, while the 75th percentile increased from 11.3 to 22.8 and the 90th percentile from 30.5 to 46.2. The median medical specialist increased from 0.25 to 1.0 (75th percentile: 2.8 to 6.4; 90th percentile: 10.5 to 17.2). The median surgical specialist increased from 0 to 0.2 (75th percentile: 0.5 to 1.4; 90th percentile: 2.3 to 5.2).

## Conclusion

PMAR messages increased dramatically in 2020 and persisted at high volumes through early 2022. Primary care specialists saw the largest increase, concentrated at the high end of the distribution.

Our results show most patient messages are received by a sub-set of physicians and highlight the need to target inbox burden relief efforts to those physicians. Future research should identify strategies that allow those physicians to accommodate increased message workload without compromising patient experience or exacerbating EHR-driven burnout.



The background features a vibrant tropical sunset scene. The sky transitions from a bright yellow at the top to a deep red and purple in the middle, and finally to a dark blue at the bottom. Silhouettes of palm trees and rolling mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Oral presentations

External factors

# Association of workplace violence with burnout and moral injury among physicians at an urban academic medical center

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## Learning objectives

- Identify demographic and occupational factors associated with physicians who were more likely to experience WPV by patients and their visitors
- Describe the associations of experiencing WPV on burnout and moral injury among physicians

## Project objective/background

Workplace violence (WPV) has been linked to increased risk of adverse mental health outcomes in physicians. To date, however, few studies have examined the impact of WPV independent of workplace and demographic factors in relation to burnout and moral injury. In this study, we analyzed data from physicians at an urban academic medical center to identify: (1) demographic and occupational factors associated with WPV; and (2) the relation between WPV and burnout and moral injury.

## Methods/approach

Data were collected through an anonymous cross-sectional survey sent to all faculty in our 8-Hospital Health System in New York City between July and September 2022. Participants self-reported demographics and WPV in the past year. Validated outcomes metrics included burnout (assessed by the Maslach Burnout Inventory-2), and moral injury (assessed using a single item from the Health Professional Moral Injury Symptoms Scale), leadership behaviors (assessed using the Mayo Clinic Leadership Index), and psychological safety (assessed using the Fearless Organization Questionnaire).

## Results

Of the 3,686 faculty surveyed, 1,534 responded (RR of 42%) and data were analyzed from 888 physicians involved in clinical care. Results revealed that 42.3% reported experiencing past-year verbal abuse (but not

physical violence) and 11.0% reported experiencing physical violence from patients or their visitors; 17.9% endorsed experience of moral injury; and 37.6% screened positive for burnout. Physical violence was significantly more likely to be experienced by physicians who were age <40, men, non-heterosexual, and spent >60% of their clinical work providing inpatient care and in emergency medicine settings. After adjusting for demographic/occupational factors and perceptions of leadership support and psychological safety, multivariable logistic regressions indicated that experiencing verbal abuse was associated with a 57% increase in odds of burnout (OR[95% CI]=1.57[1.15-2.15], p=.005) and experiencing physical violence was associated with more than double the odds of burnout (OR[95%CI]=2.25[1.28-3.98], p=.005) and moral injury (OR[95% CI]=2.64[1.34-5.20], p=.005).

## Conclusion

WPV is strongly associated with burnout and moral injury independent of demographic and occupational factors, and perceptions of leadership support and psychological safety. Limitations of our study include its cross-sectional design and reliance on self-report as well as our moderate response rate. Results underscore the importance of assessing, monitoring, and addressing WPV as part of occupational wellbeing efforts.

# Mental health and work-related wellbeing among obstetrician-gynecologists in a shifting policy climate: Preliminary findings from the Study of OB-GYNs in Post-Roe America

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## Learning objectives

- To describe work-related stressors among OB-GYNs and their relationship to changing reproductive health policies.
- To identify organizational practices that can protect against poor mental health and work-related wellbeing in OB-GYNs.
- To identify recommendations for improving OB-GYNs' mental health and work-related wellbeing.

## Project objective/background

U.S. physicians are at high risk for depression, substance abuse, suicide, and burnout. On the heels of the COVID-19 pandemic, which intensified preexisting occupational health burdens, obstetrician-gynecologists (OB-GYNs) now face additional threats to their health and wellbeing following the June 2022 *Dobbs v. Jackson Women's Health Organization* decision by the U.S. Supreme Court, which allowed states to severely restrict or ban abortion. OB-GYNs in these states are now experiencing policy-related stressors and new ethical challenges, with implications for their own health. Clinician moral distress resulting from being compelled to provide what one perceives as inadequate care can lead to burnout, poor mental health and job turnover. The purpose of the Study of OB-GYNs in Post-Roe America (SOPRA) is to characterize and describe work-related stressors among OB-GYNs in states with the most restrictive abortion laws following *Dobbs*, and to identify organizational-level protective practices to buffer the impact of these policy changes.

## Methods/approach

SOPRA consists of semi-structured qualitative interviews with 60 OB-GYNs in states with the most restrictive abortion laws. Our interview guide asks about 1) background and current practice environment, 2) knowledge and attitudes towards abortion legislation, 3) clinical practice changes related to abortion restrictions, 4) personal and professional wellbeing, 5) perceived effects of state abortion bans on pregnant individuals.

We will balance our sample by physician demographic characteristics (age, gender, race, ethnicity), practice characteristics (practice setting, proportion of Medicaid patients), and geographic characteristics. Interview transcripts will be analyzed using a descriptive approach and Dedoose coding software.

## Results

Data collection will begin in March 2023 and will be complete in August 2023. Analyses for this research question will begin while data collection is still underway and will be complete by October 2023.

## Conclusion

This study will provide some of the first insights about implications of *Dobbs* for professional wellbeing of OB-GYNs, and will offer recommendations for supporting OB-GYNs moving forward.

# Psychological safety among physician faculty in New York City: Prevalence, correlates, and relationship with burnout and intent to leave practice

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## Learning objectives

- Perceived prevalence of psychological safety among medical teams by physicians.
- Relationship between psychological safety, burnout and intent to leave among physicians.
- Identification of demographic, occupational and organizational factors associated with psychological safety.

## Project objective/background

A sense of psychological safety (PS) has been linked to improved teamwork and reduced burnout among health care providers. However, data on the prevalence, correlates, and potential protective effect of PS on well-being and satisfaction among physicians are lacking. To address this gap, we evaluated: (1) prevalence of PS; (2) relationship between PS, burnout, and intent to leave one's job (ILJ); and (3) demographic, occupational, and organizational factors associated with PS within our physician faculty.

## Methods/approach

An institution-wide survey was sent to all faculty of our 8-Hospital Health System in New York City, between July and September 2022. PS was assessed using the 7-item Fearless Organization Questionnaire and burnout with the Maslach Burnout Inventory-2. Measures of ILJ, leadership support, workplace culture were also assessed. Multivariable logistic regression analyses were conducted to determine associations between PS, burnout, ILJ, and demographic, occupational, and organizational factors associated with PS.

## Results

A total of 1,534 of 3,686 eligible faculty members (41.6%) participated in the survey, including 867 physicians. The majority were 40 and older (67.4%), female (51.9%), white (60.0%), married/partnered (80.4%); worked in ambulatory care (53.7%) and were assistant or associate professors (75.8%). Results revealed that, on average, 57.6% of physicians evaluated their workplace as psychologically safe (range across items=40.9-69.9%), with 35.2% screening positive for burnout and 13.4% reporting ILJ. After adjusting for demographic and occupational characteristics, each standard deviation unit increase in PS scores was associated with 27% lower odds of screening positive for burnout (odds ratio [OR]=0.73, 95% confidence interval [CI]=0.63-0.84) and 38% lower odds of ILJ (OR=0.62, 95%CI=0.52-0.74).

Leadership support emerged as the strongest correlate of PS. A post-hoc analysis of leadership index items revealed that having a leader who treats one with respect and dignity ( $\beta=0.19$ ,  $p<0.001$ ); recognizes one for a job well done ( $\beta=0.15$ ,  $p<0.001$ ); encourages employees to suggest ideas for improvement ( $\beta=0.15$ ,  $p<0.001$ ); and keeps one informed about changes in the organization ( $\beta=0.13$ ,  $p<0.001$ ) were independently associated with psychological safety scores.

## Conclusion

A slight majority of faculty physicians reported working in a psychologically safe environment. Greater PS was associated with lower odds of burnout and ILJ. Greater leadership support was a robust correlate of PS. Interventions promoting leadership support may help bolster PS and in turn mitigate risk of physician attrition while promoting greater well-being among physician faculty.

The background features a tropical sunset scene. The top half is white with faint palm tree silhouettes. The middle section is a vibrant gradient from red on the left to blue on the right, with silhouettes of palm trees and mountains. The bottom half is white with more faint palm tree silhouettes.

# Oral presentations

Interventions for the individual



# Better together physician coaching: An innovative, digital, scalable solution to trainee burnout

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## Learning objectives

- Describe the current wellbeing climate of GME trainees across the nation
- Integrate a coaching model that focuses on emotional agility and metacognition into medical education in a scalable and economic way
- Discuss core tenets of a successful group coaching program.

## Project objective/background

Physician burnout is associated with increased medical errors, higher patient mortality, and physician depression and suicidal ideation. We developed and implemented a 4-month novel, digital group-coaching program to decrease trainee burnout: Better Together Physician Coaching (BT), which improved burnout, self-compassion, and imposter phenomenon in a pilot randomized controlled trial (RCT). BT includes: (1) live, Zoom group-coaching calls, (2) anonymous written coaching on the website, and (3) self-study modules (videos and worksheets). Here, we scaled BT in a multi-site RCT to test efficacy, generalizability, and feasibility.

## Methods/approach

Participants were recruited from 26 US GME sites from 19 states, and randomly assigned to the intervention group or control group (residency as usual) from Sept 2022-Dec 2022. The control group was offered BT coaching after study completion.

Burnout, the primary outcome, was measured by the Maslach Burnout Inventory. Additional outcomes were measured with the Young Imposter Syndrome Scale, Neff's Self Compassion Scale, Secure Flourishing Index, and the Moral Injury Symptom Scale-HP at baseline and 4 months. Descriptive statistics and tests for differences will be computed. Primary outcomes will be analyzed using separate linear mixed models with fixed effects for time (pre/post), intervention (treatment/control), and an arm-

by-time interaction.

## Results

### Baseline Demographic & Outcomes Data:

1018 trainees enrolled and responded to the baseline survey. The mean age was 31, a majority white (59.9%), heterosexual (88%), non-surgical (81.4%), and PGY 3+ (59.5%). 507 were randomized to the intervention group. Trainees had high levels of burnout in the emotional exhaustion (mean score [M]=30.6; >27=high), and depersonalization (M=11.8; >10=high) domains, with moderate personal accomplishment (M=33.3; <33=low/worse). Trainees had average scores that were low in self-compassion (M=2.6/5), moderate in moral injury (M=45.9/100), moderate in flourishing (M=6.2/10), and positive for imposter syndrome (M=5.8/8; >5=positive).

### Program Engagement:

70 hour-long group coaching calls were delivered during which 27 people were coached in 111 unique sessions. 77 people (15%) were present on at least one call. 120 participants (24%) completed >2,000 downloads of 87 podcast episodes (70 recorded coaching calls + 17 content webinars). An additional 33 participants (7%) submitted 65 written coaching requests.

### Outcome results:

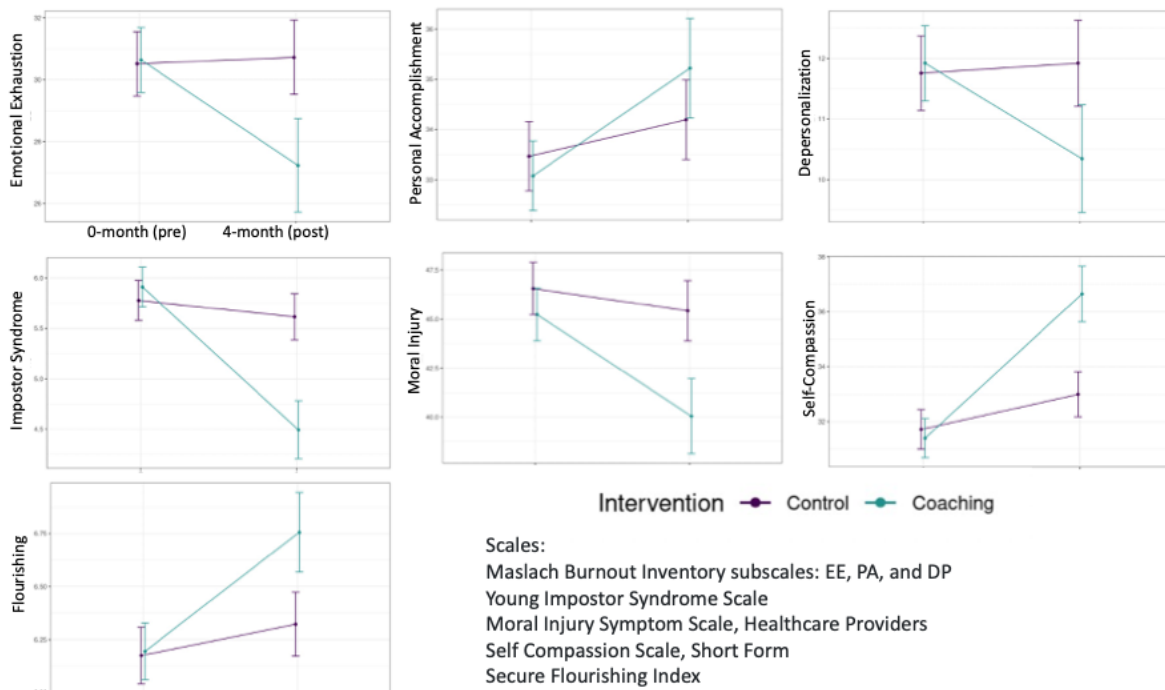
Professional coaching improved burnout domains of emotional exhaustion by -3.81 points in the intervention group [95% CI: -5.24, -2.38] compared to the versus

control EE change of: 0.32 [95% CI: -0.79, 1.43] (delta: -4.13 points, 95% confidence interval (CI): -5.94, -2.32;  $p < 0.001$ ), depersonalization by -1.66 points in the intervention group [95% CI: -2.49, 0.83] compared to the control DP change of 0.20 [95% CI: -0.43, 0.84] (delta: -1.87 (CI: -2.91, -0.82);  $p < 0.001$ ), and personal accomplishment by 2.08 points in the intervention [95% CI: 1.15, 3.00] vs. control PA change of 0.43 [95% CI: -0.28, 1.13] (delta: 1.65 (95% CI: 0.48, 2.81);  $p < 0.006$ ). The intervention also improved participant impostor syndrome in the intervention group by -1.43 points [95% CI: -1.70, -1.15] compared to control change of -0.15 [95% CI: -0.36, 0.07] (delta: 1.28 points, 95% CI: -1.63, -0.93;  $p < 0.001$ ), moral injury in the intervention group by -5.60 points [95% CI: -7.40, -3.81] versus control change of -0.92 [95% CI: -2.31] (delta: -4.68 points, 95% CI: -6.95, -2.41;  $p < 0.001$ ), self-compassion in the intervention group by 5.27 points (95% CI: 4.34, 6.20) versus control change of 1.36 (95% CI: 0.65, 20.8) (delta:

3.91 points, 95% CI: 2.73, 5.78;  $p < 0.001$ ), and flourishing in the intervention by 0.48 points (95% CI: 0.31, 0.65) versus control change of 0.09 (95% CI: -0.04, 0.23) (delta: 0.38 points, 95% CI: 0.17, 0.60;  $p < 0.001$ ). compared to the control. A sensitivity analysis was performed to account for the missing outcomes, with similar findings.

### Conclusion

In this randomized clinical trial of 4 months of professional group-coaching, the intervention over 4 months reduced burnout, moral injury, and impostor syndrome, and improved self-compassion and flourishing in a national sample of female physician trainees. A minority of participants accessed live coaching, suggesting that asynchronous self-work may be an accessible way to improve wellness in many trainees.



# CHEER2 Study: Effects of physician peer coaching intervention on physician burnout and systemic causes of burnout—a pilot randomized clinical trial

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## Learning objectives

- To determine impact of physician peer coaching (PPC) on hospital-based physician burnout assessed by the Maslach Burnout Inventory (MBI).
- To determine impact of PPC on the Areas of Worklife Survey (AWS) to identify systemic causes of burnout.
- To determine impact of PPC on physician satisfaction regarding emotional health (EH), professional support (PS), and career (CR) measured with a single item linear analog scale.

## Project objective/background

Physician burnout is a reaction characterized by emotional exhaustion (EE), depersonalization (DP), and lack of personal accomplishment (PA) that leads to higher rates of depression, anxiety, and substance abuse. Previous studies have demonstrated that professional coaching is effective in reducing burnout in primary care physicians. No studies have evaluated the effectiveness of physician peer coaching (PPC) in reducing burnout. We hypothesize PPC will reduce burnout in hospital-based physicians.

## Methods/approach

The pilot study design is a multi-site randomized controlled trial in a large integrated health system. 45 hospital-based physicians were randomized to PPC (intervention) for 6 sessions/6 months or no coaching (control). Control subjects were offered PPC after completion of the study. A physician coach provided PPC. The primary outcome was burnout reduction as measured by the MBI and subscales (EE, DP, and PA). The secondary outcomes were systemic causes of burnout as measured by the AWS (workload, control, reward, community, fairness, and values) and physician satisfaction.

## Results

Intervention differences (baseline, 6 months) for MBI: EE -5.5,  $p=0.04$ ; DP -2.5,  $p=0.14$ ; PA 5,  $p=0.08$ ; Overall burnout (%) -20.0%,  $p=0.18$ ; High EE (%) -29.1%,  $p=0.05$ ; High

DP (%) -7.7%,  $p=0.56$ . Notable difference-in-difference analyses: EE -6.51,  $p=0.04$ ; PA 2.86,  $p=0.14$ .

Intervention differences (baseline, 6 months) for AWS: Workload 0.0,  $p=0.24$ ; Control 0.3,  $p=0.41$ ; Reward 0.3,  $p=0.03$ ; Community 0.2,  $p=0.07$ ; Fairness 0.3,  $p=0.17$ ; Values 0.0,  $p=0.21$ . Notable difference-in-difference analyses: Workload 0.57,  $p=0.01$ ; Reward 0.22,  $p=0.14$ .

Intervention group satisfaction survey median scores (baseline, 3 months, 6 months): Emotional Health 4, 8, 8; Professional Support 2, 7, 7; Career 2, 7, 7. All  $p<0.01$ .

## Conclusion

Physician peer coaching (PPC) reduced emotional exhaustion in hospital-based physicians. Additionally, PPC trended toward improved personal accomplishment scores, which was not seen in professional coaching of primary care physicians. PPC showed significant improvement in AWS Workload and Reward and trending toward significance in Community and Fairness. It is encouraging that PPC may improve multiple systemic causes of burnout. PPC significantly improved physician satisfaction regarding emotional health, physician support, and career.

# Cobalt—a novel approach to providing mental health care in the hospital workplace

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## Learning objectives

- Introduce the Cobalt stepped-care model with a focus on effectiveness and the ability to adapt to changing employee needs
- Discuss the critical nature of employee anonymity
- Highlight the popularity of group support services and career (CR) measured with a single item linear analog scale.

## Project objective/background

Our presentation will explore the services, benefits, and core principles behind the University of Pennsylvania Health System's digital mental health platform Cobalt, offering targeted content and group support to the Penn Medicine workforce.

## Methods/approach

When employees first log into Cobalt, they are able to either sign in using their Penn ID or browse anonymously. Users are then prompted with an evidence-based intake assessment which includes the WHO-5, PHQ-9, and GAD-7 to provide personalized recommendations and determine the appropriate level of care. Cobalt's core services are broken down into three tiers of support. "On Your Time" is a digital library of podcasts and videos which serves as the most accessible entry point of our stepped-care model. "Group Sessions" are live meetings led by experts focused on providing education surrounding mental health and wellbeing topics. These sessions also help to create a sense of unity across the various entities of Upenn's Health System, such as the Spaces of Color group which offers peer support to those who have experienced racism. Lastly, "Connect with Support" is the highest tier of care which provides 1:1 virtual sessions with therapists and first aid coaches.

## Results

Since its launch in 2020, Cobalt has been accessed by more than 10,000 employees. Of those active users, registered nurses were the most common, followed by physicians. Overall, 74% of users logged in anonymously. Cobalt has identified 375 crisis events to date. On Your Time received 62,150-page views. Its most accessed content tags include "tackling burnout" and "sleep tips." Group Session pages were accessed 92,425 times, with the most attended classes being Monday Mindfulness Moments, Spaces of Color, and Lunchtime Yoga. 1:1 Support gathered 60,245-page views; the most booked appointments were with therapists.

## Conclusion

Based on Cobalt's user statistics – specifically the infrequency of Penn ID logins, popularity of group sessions, and utilization of all three of the platform's core features – our team has identified the crucial aspects of anonymity, community, and tiers of support when tackling mental health in the hospital workplace.

# Death anxiety and psychological symptoms among COVID-19 frontline physicians

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## Learning objectives

- Learn about the role of death-related concerns in physician mental health
- Discuss the importance of integrating awareness of death-related concerns into organizational and individual interventions for improving physician well-being

## Project objective/background

Death anxiety is a transdiagnostic vulnerability factor for mental health, such that death anxiety is associated with a wide range of mental health concerns (e.g., depression, posttraumatic stress disorder [PTSD]). The present study investigated the role of death anxiety in predicting mental health symptoms among frontline physicians responding to the COVID-19 pandemic to inform physical mental health interventions and programs.

## Methods/approach

Resident and fellow physicians were recruited via email through the Accreditation Council for Graduate Medical Education (ACGME) Public Site. The sample comprised 485 physicians. Participants filled out several questionnaires assessing self-reported death anxiety, cognitive accessibility of death-related thoughts, COVID-19 anxiety, workplace exposure to COVID-19, burnout symptoms, PTSD symptoms, and functional impairment related to COVID-19. In return for participating, participants were able to enter a drawing for one of three \$75 Amazon giftcards.

## Results

Death anxiety predicted PTSD symptoms and COVID-related functional impairment (standardized regression betas ranging .10-.21) but not burnout. Furthermore, death anxiety and workplace exposure to COVID-19 interacted to predict PTSD symptoms, such that death

anxiety predicted PTSD symptoms at higher levels of workplace exposure, but not lower levels. COVID-19-related anxiety predicted PTSD symptoms (standardized regression = .11), COVID-related functional impairment, (SRB = .40), and burnout (SRB=.21). Accessibility of death-related thoughts predicted PTSD symptoms (SRB=.08), but not burnout or functional impairment.

## Conclusion

Results suggest that death anxiety and accessibility of death-related thoughts may uniquely contribute to PTSD symptoms among COVID-19 frontline physicians; in contrast, COVID-19-related anxiety predicted functional impairment and burnout. Our findings are in line with other research demonstrating the robust role of death-related concerns in mental health symptoms, yet uniquely extend this existing body of research to physician mental health. Programs focused on improving and maintaining physician mental health should consider strategies for addressing death anxiety, particularly among physicians responding to stressful events such as COVID-19.

# Efficacy of a wellness coaching program to reduce burnout

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## Learning objectives

- To understand what wellness coaching is.
- To recognize aspects of wellness that may be amendable to coaching.
- To appreciate limitations and challenges to implementing wellness coaching.

## Project objective/background

Coaching has promise to prevent or mitigate burnout among health care providers. Wellness coaching is a specific kind of coaching that focuses on engaging people in behaviors that promote well-being. We implemented a free wellness coaching program available to all residents, fellows, advanced practice providers, and faculty in early 2021. The purpose of this study was to assess the efficacy of wellness coaching on burnout measures.

## Methods/approach

Six faculty physicians (4 men and 2 women) were trained as coaches using the Wellcoaches.com platform. Ninety-three study subjects requested the wellness coaching. Subjects received a total of four hours of coaching over the course of 3 months. Four cohorts were enrolled in the first year. Subjects completed a Well-Being Index (WBI #1) before coaching, then again 9 months later (WBI #2 - 9 months after completing WBI #1). Cohort 4 served as a control and received wellness coaching after completing WBI #2. The WBI reports results along a 4-point scale of Distressed/Struggling/Okay/Thriving. Descriptive statistics and paired t-test were used to compare Cohorts 1-3 with Cohort 4.

## Results

Of the 93 subjects who received coaching, 81 (87.1%) identified as female and 12 (12.9%) as male. 38 participants in cohorts 1-3 (out of 72) completed WBI#1 and 23 completed the WBI #2. 58.3% of control cohort

completed WBI #1 and #2. Fewer female providers scored as Distressed or Struggling after the coaching intervention (70.2% versus 64.7%,  $p=NS$ ), and there was no change in the percentage of male providers (50% before and after,  $p=NS$ ). Before coaching 6.38% of female providers scored in the "Thriving" category and after coaching the number was 14.7% ( $p=NS$ ). There was no change in scores for male participants. 100% of participants agreed or strongly agreed with the statement, "The Wellness Coaching Program helped me develop skills to improve my professional and/or personal life."

## Conclusion

Female health care providers were far more likely to request free wellness coaching than males. While no statistically significant difference in burnout as measured by the Well-Being Index was detected after receiving wellness coaching, 100% of participants felt that the coaching program was beneficial. The discrepancy between burnout measure and subjective responses could be due to low response rate, insensitivity of the Well-Being Index to detect change, or (more likely) the complex nature of burnout.



# Evaluating the sustainability of effects from a brief physician coaching intervention by professionally trained peers on burnout and well-being: A randomized controlled trial

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## Learning objectives

- Participants will be able to describe the impact of a novel peer-to-peer coaching program on physician well-being and burnout.
- Participants will be able to describe the short-term sustainability of impact from a novel peer-to-peer coaching intervention on physician well-being and burnout.

## Project objective/background

Physician coaching has been shown to reduce burnout and improve well-being, engagement, and professional fulfillment in prior studies; the sustainability of these findings is unknown. This study explored the sustainability of the impact of coaching on physicians who initially received coaching as part of a randomized controlled trial (RCT). In addition, this study aimed to explore the reproducibility of prior coaching impact in the delayed coaching cohort of this RCT.

## Methods/approach

We conducted a single site, RCT of coaching by professionally trained peers in Mass General Physician Organization physicians. Participants were randomized to receive initial coaching through six coaching sessions over three months or delayed coaching starting at three months. Quantitative assessments were measured at enrollment, 3, 6 and 9 months utilizing a modified Maslach Burnout Inventory (mMBI),<sup>1,2</sup> Professional Fulfillment Index (PFI),<sup>3</sup> Utrecht Work Engagement scale (UWE),<sup>4</sup> and Clinician Self-Valuation scale (CSV)<sup>5</sup> and Quality of Life scale (QoL).<sup>6</sup>

## Results

The study enrolled 138 participants in 2021. At six months, the delayed coaching group had a decrease in work exhaustion ( $p < 0.001$ ) and overall burnout ( $p = 0.006$ ), and an increase in PFI ( $p = 0.014$ ), self-valuation ( $p = 0.012$ ) and QoL ( $p = 0.007$ ) compared to their baseline. At 3 months post-intervention, both groups demonstrated increases in PFI ( $p = 0.006, 0.001$ ) and self-valuation ( $p = 0.019, 0.002$ ). The delayed coaching group also had

a sustained decrease in overall burnout ( $p = 0.014$ ) and work exhaustion ( $p = 0.004$ ) and sustained increase in QoL ( $p = 0.037$ ). At 6 months post-intervention, the initial coaching group had a sustained improvement in PFI ( $p = 0.014$ ), however all other measurements were insignificant from their initial baseline.

## Conclusion

Our findings confirm the positive impact of coaching on physician well-being, burnout, engagement, and professional fulfillment, and reveal that delay in access to coaching does not minimize the impact of coaching once received. The impact of coaching was only sustained for professional fulfillment, suggesting that to sustain the totality of positive benefits of coaching, further exposure to coaching may be necessary.

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# Faculty-wide peer-support program during the COVID-19 pandemic: Patterns of access

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## Learning objectives

- Describe the uptake of the Peer Support Program at Western University
- Distinguish between patterns of uptake for faculty initiated vs. peer-initiated sessions
- Describe initial and emerging differences in program usage

## Project objective/background

The COVID-19 pandemic has caused a significant increase in physician burnout. The Peers for Peers Physician Wellbeing Program provides one-on-one support designed by physicians for physicians. This study examined patterns of program uptake (N=402 interactions). We wanted to determine if there were any unique patterns for faculty accessing the peer support program.

We explored:

1. Who initiated the interaction (Peer Lead vs. Faculty) and type of interaction (First Session vs. Follow-up).
2. Who initiated the interaction (Peer Lead vs. Faculty) and provision of referrals (Referrals vs. No Referrals).
3. Gender of faculty and type of interaction (First Session vs. Follow-up).
4. Gender of faculty and referrals (Referrals vs. No Referrals).

## Methods/approach

Program data using four chi-square analyses examined if there were any differences between the observed and expected cell counts for each of the four 2 by 2 matrices above.

## Results

A chi-square test of independence was performed to examine relationship between:

1. Initiator of Interaction and Type of Interaction. The relation between these variables was significant  $\chi^2(1, N=401) = 6.12, p < .01$ . Faculty Member Initiated sessions (as compared to Wellbeing Leads Initiated sessions) was more likely for First Sessions.
2. Initiator of Interaction and Referrals. The relation between these variables was significant  $\chi^2(1, N=403) = 22.01, p < .001$ . Faculty Member initiated sessions (vs Wellbeing Lead initiated) were more likely to involve Referrals.
3. Faculty Gender and Initiator of Interaction. The relation between these variables was not significant  $\chi^2(1, N=399) = .55, ns$ .
4. Faculty Gender and Type of Interaction. The relation between these variables was significant  $\chi^2(1, N=398) = 4.84, p < .05$ . Men more like then women to have first sessions; and men less likely than women to have follow-up sessions.

## Conclusion

Faculty members are utilizing the peer support program. Wellbeing Leads play a crucial role in providing referrals to resources. The nature of concerns raised by men required one session only. Concerns raised by women were complex requiring additional sessions. There was no significant pattern between initiation of interaction by the wellbeing lead based on faculty gender.

# Health care worker fitness initiative: CHOP Cardiac Center ‘Hearts on the Move’

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## Learning objectives

- To determine the feasibility of organizing a fitness initiative among a large group of health care workers.
- To determine the efficacy of a Cardiac Center wide fitness initiative in encouraging physical activity among health care workers.
- To determine the efficacy of a Cardiac Center wide fitness initiative in improving feelings of stress and burnout among health care workers.

## Project objective/background

According to the National Academy of Medicine, burnout has reached “crisis levels” among U.S. health care workers. There is growing evidence that burnout has harmful consequences for patient care, health workers, and the health care system. Strategies to mitigate burnout are founded on principles including personal resilience and culture of wellness. This project sought to improve culture of wellness and personal resilience among health care workers by developing a fitness initiative within the Cardiac Center (CC) at The Children’s Hospital of Philadelphia (CHOP).

## Methods/approach

All employees of the CHOP CC were offered the opportunity to participate in one of the races included in Philadelphia Marathon Weekend 2022 (8K, half-marathon, or marathon); race registration fees were covered. Participants were offered an opportunity to develop a training plan in conjunction with an exercise physiologist from the CHOP Exercise Physiology Lab. Participants were asked to submit baseline and follow-up data (including height, weight, blood pressure, and the Perceived Stress Scale (PSS-10)) and to complete a post-race survey. Funding came from a CHOP CC Academic Enrichment grant.

## Results

105 health care workers from the CHOP CC signed up for ‘Hearts on the Move’ (HOTM); 62 (59%) sought training

advice from the Exercise Physiology Lab. 84 participants (80%) completed a race (8K = 45, half-marathon = 37, marathon = 2). 70 participants (83.3% of those completing a race) completed the post-race survey and 27 (32.1%) submitted pre- and post- race data. Participants ‘agreed’ or ‘strongly agreed’ (% of responses) to the following statements: ‘I enjoyed the HOTM fitness initiative’ (98.6%); ‘I challenged myself to do something I have not done before by signing up for HOTM’ (71.4%); ‘I felt more connected to my colleagues by signing up for HOTM’ (87.2%); ‘Participating in HOTM helped me feel less stressed/burned out’ (72.8%); ‘Fitness initiatives like HOTM have the potential to improve the culture of the CC if continued’ (98.6%). For the 27 who submitted pre- and post- race data, there was no significant difference in pre- and post-race BMI, systolic or diastolic blood pressure. There was a non-significant decrease in median PSS-10 score from 11.5 (IQR 7-15) to 8.5 (QR 6-12),  $p = 0.3$ .

## Conclusion

Fitness initiatives, like HOTM, are effective in fostering connectivity, improving stress and burnout, and building personal resilience all while supporting local community events which in-turn can increase program visibility. The long-term benefit of fitness initiatives, with regards to improving personal resilience and program culture, requires further study.

# Impact of an online physician group-coaching program to improve burnout and self-compassion in trainees: A longitudinal analysis of Better Together

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## Learning objectives

- Describe the prevalence of female graduate medical education burnout.
- Understand the evidence base for solutions to mitigate burnout in trainees.
- Explore the longer-term impact of a coaching program on trainee burnout.

## Project objective/background

Physician burnout begins in training and is linked to increased errors, patient mortality, physician depression, and job turnover. Many interventions target trainee burnout, but often have no or only small effect on short term burnout. Little is known about their longitudinal outcomes. To evaluate longitudinal outcomes of Better Together Physician Coaching, a digital, life coaching program to improve resident wellbeing.

## Methods/approach

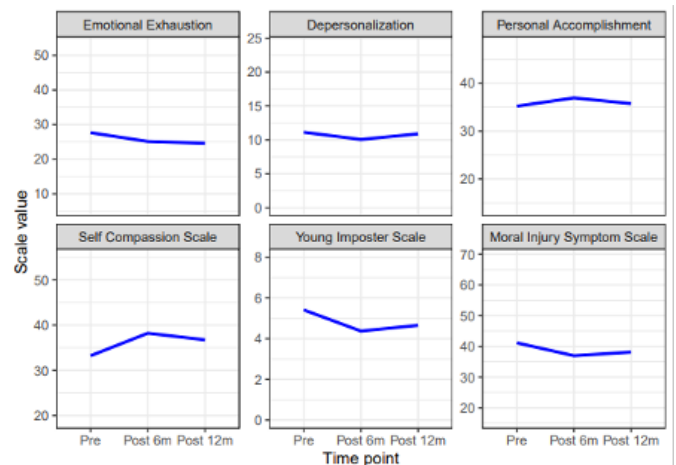
We performed a secondary analysis of survey data from the pilot program implementation between January 2021 and June 2022. An intention-to-treat analysis was completed for baseline vs post-6 months and baseline vs post-12 months for all outcome measures.

## Results

Of 101 participants, 95 completed a baseline survey (94%), 66 completed a 6-month survey (69%) and 36 completed a 12-month survey (38%). There were no significant differences in burnout scale scores between baseline to 6 or 12 months. Self-compassion scores (means) improved after 6 months from 33.2 to 38.2 ( $p < .001$ ) and remained improved after 12 months at 36.7 ( $p = .020$ ). Impostor syndrome score means decreased after 6 months from 5.41 to 4.38 ( $p = .005$ ) but was not sustained after 12 months (4.66,  $p = .081$ ). Moral injury score means decreased from baseline to 6 months from 41.2 to 37.0 ( $p = .018$ ) but reductions were not sustained at 12 months (38.1,  $p = .166$ ).

## Conclusion

This study showed significant, sustained improvement in self-compassion for coaching program participants.



# Individual and workplace culture benefits of a physician coaching program

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## Learning objectives

- Identify benefits realized for individual physicians and workplace culture of a physician coaching program.
- Identify the critical success factors for implementing a physician coaching program as one component of an overarching physician wellness strategy.

## Project objective/background

Prince Edward Island (PEI) is a small island province in Canada served by about 300 active physicians. Physician challenges in practicing on small islands documented in the literature apply to PEI, including professional isolation, balancing the tension between providing on-island vs. off-island care, creating the right generalist/specialist balance, and difficulties in recruiting.<sup>1</sup> All of these challenges contribute to physician burnout on PEI, with pandemic response and introduction of a system-wide single solution EMR adding more layers of stress. Responding to growing levels of burnout, the Medical Society of PEI (MSPEI) launched a new comprehensive Physician Wellness Strategy six months into the pandemic.

As part of the Physician Wellness Strategy, MSPEI implemented a pilot of a physician coaching program. Physician coaching can help physicians build leadership skills to advocate for their patients and the health system, increase resilience in complex environments, implement strategies to increase professional fulfillment, reduce burnout and navigate significant career and life changes.

## Methods/approach

Under the direction of a Credentialed Evaluator, MSPEI designed an evaluation framework to assess the effectiveness of the pilot coaching program, and to explore how the program could be operationalized for future longevity if evaluation results supported the need for sustainability. Qualitative data was collected through semi-structured interviews with participating physicians selected via stratified random sampling strategy. Qualitative data was coded and thematically analyzed.

Quantitative program tracking data was analyzed to provide insights into program utilization and cost.

## Results

Participants accessed the program for a variety of reasons, and all of them found the program useful. Participants reported multiple impacts to their well-being because of the coaching program including better connections with colleagues, family, and patients; improved ability to navigate leadership dynamics; improved conversations with patients; successful change management into a new leadership role; new approaches for assessing personal values and integrating these values into decision making; improved interpersonal relationships at work and a new perspective on a guilt-free approach to spending time away from work. As a result of the evaluation, the coaching program has become a formalized program offering of MSPEI including formal selection processes for coaches, matching process for coaches and physicians, and ongoing evaluation.

## Conclusion

The Physician Coaching Pilot Program had a positive impact on physician well-being, personal and professional life, stress management, and leadership, and is contributing to ongoing efforts to strengthen a positive working culture within the PEI health system. Physician Coaching is a valuable addition to the suite of programs that support MSPEI's comprehensive Physician Wellness Strategy.

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# Lessons learned in a physician health center

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## Learning objectives

- Describe the reasons that physicians sought evaluation at a Physician Health Center
- Discuss indications for practice restrictions or workplace accommodations for physicians with medical conditions.
- List the most common medical conditions causing workplace impairment among PHC patients.

## Project objective/background

The mission of the Mayo Clinic Physician Health Center (PHC) is to provide confidential medical evaluation and occupational assessments for physicians, and to support physicians in continuing or returning to safe medical practice. The objective of this project is to describe the characteristics of physicians referred to this program, the types of medical problems impacting their ability to work, and the practice recommendations made after a comprehensive evaluation.

## Methods/approach

We conducted a retrospective chart review of 153 consecutive new patient evaluations in the PHC and extracted demographics, health conditions, and reason for evaluation, and correlated these with occupational recommendations made during the PHC evaluation with a multivariable regression analysis.

## Results

Patients included physicians from 34 states, with a mean age of 56 (range 29 to 82) with a male predominance (73.2%). The majority presented with an occupational problem related to their health; slightly over a third of these were referred by their employer for a fitness for

duty evaluation. For those needing an occupational assessment, most needed no restrictions or only temporary restrictions, with fewer being unable to practice or needing permanent restrictions (33.3%, 26.4%, 24.1%, and 16.1%, respectively.) Cognitive impairment and mental health conditions (exclusive of substance abuse) were the most common causes of occupational problems, but only cognitive impairment was associated with a recommendation to cease practice.

## Conclusion

The Physician Health Center provides coordinated specialty consultations for a wide array of medical conditions in a concise itinerary, allowing practicing physicians to obtain confidential medical care and objective occupational recommendations. Physicians from across the US utilized this specialized service for a wide range of medical conditions. While a recommendation to discontinue practice was made for some physicians with cognitive impairment, most physicians with a health condition impacting their work were able to return to work with either no restriction or only temporary restrictions.



# Nature and Forest Therapy: Can a guided forest therapy walk improve resident physician well-being?

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## Learning objectives

As a result of this presentation, learners will be able to:

- Describe the value of guided Forest Therapy upon mindfulness metrics
- Describe the value of guided Forest Therapy upon wellbeing metrics
- Explore ways to pilot similar programs within their own institutions.

## Project objective/background

Nature and Forest Therapy is a growing area of research which has demonstrated improvement in physical, mental, and cognitive health in diverse populations. Despite this, there is limited research in how this intervention can improve the wellbeing of medical professionals.

## Methods/approach

As part of a pilot program, 15 primary care track internal medicine residents participated in a two-hour guided forest therapy walk guided by two ANFT-certified (Association of Nature and Forest Therapy) forest therapy guides outdoors in a local botanic garden. The participants were asked to complete a survey immediately prior to and after the session which included the MAAS-5 scale and other wellbeing metrics. Pre/post-intervention surveys were analyzed via non-paired statistical tests as appropriate. Due to multiple comparisons, a Bonferroni correction of  $p < 0.006$  is considered statistically significant.

## Results

Fourteen of the 15 participants completed the pre-intervention survey with all (15/15) participants completing the post-intervention survey. Mindfulness (MAAS-5) scores improved from mean 3.83 (SD 1.16) to 4.71 (SD 0.91),  $p = 0.0327$ . The percentage of participants

who agreed/strongly agreed to feeling calm; vital or creative; or rested all increased after the guided forest therapy session (from 50% to 100%,  $p = 0.0084$ ; 36% to 60%,  $p = 0.0212$ ; and 29% to 60%,  $p = 0.1153$ ; respectively). The percentage of participants who were feeling burned out, irritable, or anxious all decreased after the experience (21% to 0%,  $p = 0.3922$ ; 21% to 7%,  $p = 0.1318$ ; 36% to 0%,  $p < 0.001$ ; respectively). There was no change in level of participants feeling depressed. All of the participants (100%) would recommend this program to their colleagues.

## Conclusion

The results of this pilot project suggests that guided forest therapy walks can improve resident physician wellbeing and mindfulness. Additional sessions will be forthcoming to more deeply explore these findings. Further study is needed into the sustainability of benefits from guided forest therapy walks, as well as the optimal dose and frequency for this population.

# Physician just equity peer support helps physicians navigate workplace injustice

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## Learning objectives

- Understand the impact of workplace injustice on burnout, attrition, and diversity within the medical workforce.
- Recognize the importance of providing individualized support independent of institutions for targets of workplace injustice.
- Learn about a novel approach to peer-support.

## Project objective/background

Physicians experiencing harassment, discrimination, and retaliation frequently feel isolated and lack support. Navigating these workplace injustices is stressful, adding layers of interpersonal, procedural, and structural complexity to an already demanding professional life, leading to increased rates of burnout, attrition, and death by suicide. There has been a paucity of adequate resources to help physicians navigate workplace injustices. Physician Just Equity (PJE) enlists physician volunteers to provide independent and individualized peer support to physicians seeking support navigating workplace injustices. Our pilot study demonstrates how peer support can empower physicians to feel less isolated and better equipped to navigate workplace injustices, ultimately aiming to champion a balanced resolution that retains physicians in the workforce.

## Methods/approach

PJE conducted an IRB-approved study of self-reported, de-identified data collected from physicians experiencing workplace injustices between February and December 2021. Peers completed an electronic intake survey and consented to the use of their data for research before participation. We collected the demographics, career stage, specialty, practice type, geographic location, and the nature of their workplace injustice. PJE assembled an individualized peer support team and held a one-hour virtual peer support meeting to discuss workplace injustice and develop a strategic plan to achieve the peer's

goal(s). After the first session, the peer completed an electronic outtake survey to assess the session's utility, and a "peer navigator" was assigned as the point of contact for follow-up support. Additional meetings were scheduled upon request. Our team compiled a qualitative summary of comments from the peer outtake surveys.

## Results

PJE peer support was universally well received. A qualitative analysis of peers' comments after their first virtual peer support session revealed four themes: strategic support, emotional support, resource provision, and importance of the work.

## Conclusion

We found that independent peer support external to one's workplace provided validation, mentorship, and strategic navigation that empowered physicians experiencing workplace injustices and mitigated some of the negative consequences imposed by these conflicts. Peer support is critical to physician safety and well-being when targeted and treated unjustly; however, it is essential that the medical community engage to recognize and eliminate these behaviors and work towards changing the culture of medicine to be just, equitable, diverse, and inclusive. Peer support for the target of workplace injustice may represent an important intervention strategy to retain talented under-represented physicians.

# Quiet conversation after a storm: A mixed-methods study of a rapid debriefing tool to support clinical teams after stressful events

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## Learning objectives

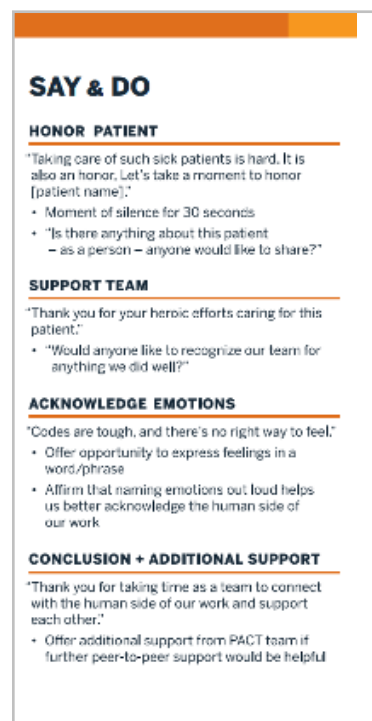
- Differentiate supportive debriefing from operational debriefing.
- Explain three outcomes associated with supportive debriefing after stressful events.
- Describe a supportive debriefing process measure that contributes to its feasibility.

## Project objective

Overtly stressful events in clinical settings are inevitable. Debriefing, if it occurs, is often operational and focuses on decision-making and medical knowledge. Although clinicians may want to support each other following stressful events, barriers include lack of time or training and a hidden curriculum promoting emotional suppression. The objective of this study was to create a rapid, supportive debrief and measure its impact on well-being, connection, and meaning-making after stressful events.

We developed a Rapid, Supportive Debrief (RSD) tool using evidence-based debriefing principles for use immediately following cardiopulmonary resuscitation. Our tool focused on acknowledging emotions, supporting teams, and honoring patients in ten minutes or less. In March 2021, we distributed the tool on badge buddies and trained internal medicine faculty, residents, and clerkship students at our academic medical center to use RSD (Figure 1).

Figure 1. RSD Badge Buddy



### Methods/approach

This mixed-methods study included a survey and semi-structured interview with a non-clinician. Interviews, averaging 39 minutes, were transcribed verbatim. We conducted inductive thematic analysis on transcripts and performed pairwise t-tests of participants' self-reported Likert scores comparing their experience of codes and stressful non-code events with and without supportive debriefing.

### Results

Seventeen participants completed this study: 6 medical students, 6 residents/fellows, 4 attendings, and one registered nurse. RSD was associated with significant increases in connection to patients and clinical teams, meaning in work, and comfort asking team members for help after codes and non-code stressful events (all p-values  $\leq 0.02$ , Figures 2-3).

Most survey participants (76.4%) estimated RSD lasted  $\leq 10$  minutes, and none estimated it lasted  $\geq 15$  minutes.

We identified four themes. First, RSD participants felt acknowledged, valued, and supported. Second, RSD reduced cognitive load. This improved learning and transitions to subsequent patient care. Third, RSD improved team culture by diminishing hierarchy and increasing connection. Fourth, RSD created a safe space to explore sense-making and professional identity.

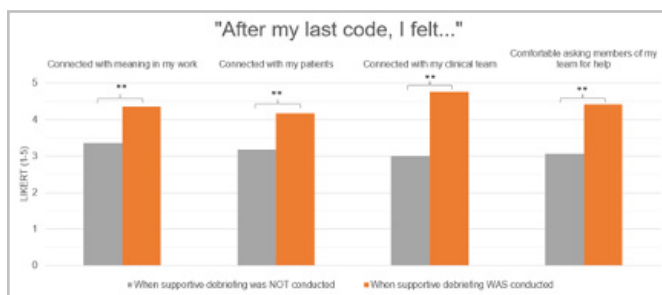
Figure 3. Survey results for stressful non-code events



### Conclusion

RSD is a low-cost tool that clinical teams can utilize in real-time after stressful events. RSD is associated with a positive impact on connection to patients, team members, and clinical work, as well as increased comfort asking for help. The qualitative data suggest RSD improves individual and team performance via expressed support, psychological safety, reduction in hierarchy, and reflection, which facilitate sense-making and professional identity formation. RSD has promise as a tool to improve well-being and resilience.

Figure 2. Survey results for codes



# Self-compassion for health care communities: A program for physician well-being

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## Learning objectives

By the completion of this curriculum, participants should be able to:

- Discuss two barriers to participation of physicians in the Self-Compassion for Health care Communities Program
- List two significant benefits of self-compassion training (SCHC) as shown in the evaluation outcomes.
- Discuss three key components of self-compassion and its relationship with burnout.

## Project objective/background

Physician burnout was already a national crisis in health care and has been exacerbated by the Covid-19 pandemic. Health care organizations are responding by placing an increased emphasis on clinician well-being. In feasibility studies, among pre-dominantly non physician health care professionals, improved well-being and reduced burnout were shown for participants of the Self Compassion for Health care Communities Program

## Methods/approach

Physicians across multiple specialties who worked for a large health care system were invited to participate in a synchronous online CME-accredited self-compassion in health care (SCHC) training program consisting of six one-hour sessions emphasizing mindfulness and self-compassion practice strategies in clinical settings.

Demographic differences between “completers” (i.e., individuals who completed at least one session and the post-survey) and “non-completers” were analyzed as were baseline levels of self-compassion (Self Compassion Scale, SCS), quality of life (ProQOL), and resiliency (Resilience Activation Scale, RAS). Pre-post changes were assessed using the Student’s t test. The number of respondents in the training intervention were calculated using the ProQOL “Burnout” subscale’s severity thresholds. The Benjamini-Hochberg test was applied to correct for multiple tests.

## Results

A total of 131 physicians completed baseline assessments of which 45 (34%) completed post assessments. Among completers, most were females (83%), more than 40 years old (80%), with greater than 5 years of health care experience.

- Compared to non-completers, completers were significantly older ( $p = .04$ ) and presented higher baseline levels of compassion satisfaction ( $p = .03$ ), as measured by the ProQOL subscale.
- Completers showed significant improvement after the SCHC in every subscale of the SCS, the ProQOL, and the RAS (all  $p$  values  $< .04$ ), except for the “resilience activation” subscale. After applying the multiple test correction, most effects remained statistically significant.
- Among those who participated in the SCHC program, 17% reduced the severity of their burnout.
- Additionally, clinicians who registered for a morning session ( $n=40$ ) were no more likely to complete than those who attended the evening session ( $n=91$ ) ( $p=0.36$ )

## Conclusion

We found that it is feasible to offer a Self-Compassion training to busy physicians via a Live online CME program. Significant improvement in burnout, resilience and self-compassion were shown among physicians who completed the program. These findings can guide redesign for a future workplace where health care professionals can thrive.



# Self-compassion in action: A virtual program to improve physician well-being

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## Learning objectives

Participants will be able to:

- Learn how self-compassion is used to manage challenging scenarios encountered in clinical, interpersonal, and professional interactions;
- Evaluate the potential of offering a self-compassion virtual course within your organization;
- Identify aspects of self-compassion that resonates with physicians.

## Project objective/background

Self-compassion programs within health care communities have been found to significantly decrease depression, traumatic stress and burnout, and to increase mindfulness, compassion for others, and job satisfaction.<sup>1</sup>

As one of our strategic priorities for physician well-being, we deployed an organization-wide initiative to help physicians implement self-compassion strategies while navigating systemic and personal stressors. This program was designed to reduce barriers to participating in wellness programming by ensuring that it was:

- **virtual** - to increase accessibility and destigmatize attendance
- **during working hours** – to compensate physicians for their time and earn CME units
- **multi-session** - to promote longitudinal connections to colleagues
- **tailored** – to offer physicians habits that easily fit into their daily practices<sup>2</sup>

## Methods/approach

We offer a 6-week, evidence-based virtual self-compassion course, tailored to the needs of physicians. The faculty are practicing physicians who guide participants through

reflections and small group discussions aimed at managing challenging scenarios encountered in clinical, interpersonal, and professional interactions.

We launched a pilot program in March 2022 with physician peer group leaders in order to build stakeholder buy-in. We incorporated their feedback, and offered 2 additional cohorts

to our medical group throughout the remainder of 2022.

## Results

A total of 94 physicians registered for a 6-week series in 2022. Week-to-week, the average consistent attendance of the six sessions ranged from 67-82%, depending on the cohort.

The 2 cohorts completed post-program evaluations. Perceived value was rated 4.7 and 5.0 (out of 5.0) for each cohort, respectively. When asked whether they would recommend this program to colleagues, participants from each cohort responded 4.9 and 5.0 respectively, with 5.0 = "strongly agree."

Qualitative feedback echoed these sentiments and included comments that spoke to the usefulness of the content, appreciation for the investment, and the value of community-building.

## Conclusion

The consistency of the attendance across the six sessions was higher than expected, given that these were practicing physicians committing to six sequential weeks during clinic hours and amidst the ongoing operational challenges of the COVID-19 pandemic.

Based on attendance and quantitative/qualitative findings we have learned that our physicians find high value in this virtual, multi-session self-compassion course. We are offering three additional cohorts in 2023 and are looking at ways to expand the reach of the content (e.g., for residents and chiefs of departments).

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# The impact of volunteering in SeriousFun summer camps on health care professionals' well-being, professional quality of life, workplace satisfaction, and retention: A concurrent mixed methods study

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## Learning objectives

- Describe the experiences of health care volunteers at SeriousFun summer camps
- Identify the impact of volunteering on professional quality of life and wellbeing
- Understand the next steps necessary to utilize summer camps as a tool to decrease compassion fatigue and increase the delivery of family-centered care

## Project objective/background

Health care volunteers and seasonal staff with the SeriousFun Children's Network provide 24-hour on-site health care services for overnight summer camps to children with serious illnesses and have reported positive experiences and anecdotal increases in wellbeing. The objective of this study is to determine the impact of volunteering at a SeriousFun camp on health care workers' professional quality of life, wellbeing, work satisfaction, and retention after returning to their professional environments.

## Methods/approach

Using a mixed methods study, we conducted a survey and semi-structured interviews to gain in-depth insight into volunteers' experiences. Survey participants received a survey during the week before camp, at 1-week, 1-month, and 3-months after camp. Measures included two psychometrically validated instruments (Professional Quality of Life (ProQoL) and Sexton's Resilience), and workplace satisfaction and retention questions. Other closed- and open-ended questions after camp assessed the volunteers' experience during camp and its perceived impact on their professional job. Semi-structured interviews were completed within the month after camp. Random-effects logistic and ordered logistic models assessed differences in measurement scales before and

after camp. Using an inductive content analysis approach, semi-structured interview and open-ended responses were coded into themes.

## Results

Of the 107 volunteers interested, 88.8% (n=95) completed at least one survey. Thematic saturation was reached after 10 semi-structured interviews. Secondary traumatic stress scores (ProQoL) were sustained statistically significantly lower after volunteering at camp [Odds-ratios: 0.29 post-camp, 0.19 at 1-month, and 0.13 at 3-months;  $p < 0.05$ ]. Volunteering at camp did not statistically change levels of compassion satisfaction and burnout. None of the Sexton scales (Burnout, Emotional Thriving, and Emotionally Ability to Recover) showed statistically significant changes after camp. Most camp volunteers reported positive camp experiences: 99% (n=75) felt included and reported a sense of purpose. Personal (92%, n=78) and professional connections (88%, n=75) were forged and ~60% were still intact 3-months after camp. Themes from qualitative analyses focused on camp experiences, and the impact camp had on participants through finding respite and reconnecting with their purpose of practicing medicine. Camp also influenced how participants dealt with their work as health care professionals by providing a coping strategy and increasing resilience. Lastly, camp could also function as catalyst for change. Participants reported

positive influences on relationships with patients and/or parents and the way they practice medicine. A few participants indicated that volunteering caused them to question their current professional position.

### **Conclusion**

While participating in SeriousFun camps did not alleviate burnout, it showed significant and sustained decreases in secondary traumatic stress.

# The Practice: A leadership-endorsed, workplace intervention to improve well-being in health care professionals

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## Learning objectives

- Outline the need for wellness interventions in health care staff.
- Introduce “The Practice” and its components: 5 daily exercises and group check-in and biweekly facilitated group meetings.
- Evaluate a recent application of “The Practice” and its impact on wellbeing of participating staff.

## Project objective/background

Highly prevalent and worsened by the pandemic, burnout is associated with more frequent medical errors, suboptimal patient care, increased attrition, and lower professional fulfillment.<sup>1-4</sup> Initial interventions targeting burnout focused on individual-level solutions, such as mental health treatment and interventions to increase resiliency but failed to address underlying problems in the practice environment, sparking resentment of staff.<sup>5-9</sup> There is a growing call for “wellness centered leaders” who model, integrate, and prioritize wellbeing within the practice environment.<sup>2</sup> Having piloted a novel intervention called “The Practice” in one work unit at our institution with promising outcomes, we set out to implement and study the intervention more broadly at our institution.

## Methods/approach

From May 2021 through January 2022, 191 physicians and Allied Health staff from 14 clinical departments were enrolled. Within each departmental group, participants were trained in the core components of The Practice: five short daily well-being exercises taking less than 15 minutes, a daily group virtual check-in, and biweekly facilitated group meetings to share barriers and successes of doing The Practice. After the initial training, participants continued The Practice as long as they desired either individually or as departmental groups.

Participants completed demographic items, the WHO-5 Well-being Index (WHO-5), the Wong & Law Emotional Intelligence Scale (WLEIS), the Professional Fulfillment Index (PFI) at baseline and months 3, 6, 9 and 12 after enrollment.<sup>10-12</sup> Demographic data were analyzed using descriptive statistics. Changes in well-being over time were analyzed using mixed models. Supplemental open-ended experience data were collected from a convenience sample of 12 participants, and data was analyzed using the Framework approach.

## Results

Participants were majority female (84%, n = 161) and Caucasian (83.2%, n = 159). We observed statistically significant improvements from baseline to month 3 in WHO-5, WLEIS, and all four PFI subscale scores. Improvements were sustained and remained significant at 6, 9, and 12 month follow up for WHO-5, WLEIS, and two of four PFI subscale scores.

Experience data reflected feelings of gratitude that the institution was invested in their wellbeing, “humanization” of leaders, and increased awareness of coworker’s feelings.

## Conclusion

Health care organizations can support the well-being of their staff by integrating wellness programs, such as The Practice, within departmental meetings.

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# The Stress Management and Resiliency Training (SMART) Program results in sustained improvement in physician well-being

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## Learning objectives

- Understand the impact of the SMART Program on physician well-being
- Describe the program components that participants found the most helpful

## Project objective/background

We previously demonstrated that the 8-week multimodal Stress Management and Resiliency Training (SMART) Program decreases perceived stress and improves physical and mental health and job satisfaction in a cohort of physicians. The durability of the effects of this program, and its impact on other domains of well-being, are unknown. To address these questions, we studied participants at a different academic medical center across the country using well-being measures at six-month follow-up to better understand the impact of this program on physician well-being.

## Methods/approach

Physicians at an academic medical center participating in the SMART Program were asked to complete questionnaires prior to the program, immediately after program completion, and six months following program completion. Measures assessed included perceived stress (PSS-10), well-being (Well-Being Index, WBI), burnout (from the WBI), global job satisfaction (Physician Worklife Survey), stress coping (MOCS-A, single item), resilience (Current Experiences Scale, CES, single item), and self-compassion (Self Compassion Scale, single item). We used paired t-tests or McNemar's test (burnout only) to compare changes in scores over time. We also asked participants how the program affected them personally and/or professionally (free text response) and what tools they were still using six months following program completion (check boxes).

## Results

A total of 48 physicians (79% female, mean age 45 [range 30-67], mean number of hours worked per week 49 [range 20-90]) completed baseline questionnaires; 36 physicians (75%) completed post program follow-up questionnaires and 29 physicians (60%) completed six-month follow-up questionnaires. Of those who registered, 36% attended 2 sessions or less. Among those who completed post-program questionnaires, the average number of sessions attended was 5.8. Participants reported significant or near-significant improvements in perceived stress ( $p < 0.001$ ;  $p = 0.08$ ), well-being ( $p < 0.001$ ;  $p = 0.009$ ), burnout ( $p < 0.001$ ;  $p = 0.03$ ), stress coping ( $p = 0.008$ ;  $p = 0.04$ ), resiliency ( $p = 0.006$ ;  $p = 0.004$ ), and self-compassion ( $p = 0.0004$ ;  $p = 0.002$ ) at 2 and 6 months, respectively. No improvement was noted in job satisfaction ( $p = 0.47$ , two months). The most frequently used wellness tools six months following program completion were breathing techniques (69%), meditation (62%), physical activity (55%), and sleep hygiene (52%). In qualitative feedback, participants appreciated the variety of different tools that were taught.

## Conclusion

Participation in the SMART Program is associated with improved well-being six months following program completion and can be a valuable component of institutional wellness offerings for physicians.

# Use of an engagement survey to identify the drivers of burnout and the role of psychological safety in building a health care workforce of the future

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## Learning objectives

- Demonstrate the use of an engagement survey to uncover drivers of burnout
- Describe the relationship between psychological safety and a lack of burnout
- Identify strategies to improve psychological safety

## Project objective/background

Work environments in which health care teams feel psychologically safe are those in which they are invited to share, contribute, and learn without fear of retribution. Among health care workers (HCW), psychological safety is positively correlated with less burnout, and improved process adaptation, while a lack of psychological safety is linked to lower patient safety competency and staff turnover intentions. By utilizing engagement surveys, physicians may be able to understand important drivers of burnout and develop team-based interventions to improve HCW well-being. A primary focus of this study was to define the domains of a standard engagement survey used in an academic health center, WellCheck, and explore their associations with workplace well-being.

## Methods/approach

Participants in this study consisted of 7,176 university hospital employees who completed the 10-item WellCheck survey, which is distributed quarterly. All items are on a numerical scale with 1 being “strongly disagree” and 6 being “strongly agree.” A factor analysis with a varimax rotation method was performed on the 10 WellCheck survey items to identify domains that summarized employee engagement. To assess the association of these domains with workplace well-being (“Burnout is not a problem for me”), a mixed-effects linear regression model was fit and adjusted for demographics

and work-related variables. The model also involved supervisor and department IDs as crossed-random effects.

## Results

We identified three domains from the factor analysis and characterized one of interest as “psychological safety.” Items in this domain included: My manager sets clear expectations, manages performance, and provides useful feedback [0.62], and I feel comfortable bring up problems and issues that I see [0.82]. While the three factors accounted for 54.9% of the variability in the WellCheck engagement items, the “psychological safety” factor alone accounted for 16.0%. “Psychological safety” was positively associated with workplace well-being ( $\beta$  Adj = 0.29; 95% CI = 0.26, 0.32;  $p < 0.001$ ). The statistical model accounted for 18% of the variability in workplace well-being.

## Conclusion

Psychological safety was significantly associated with diminished symptoms of burnout. These results demonstrate cultural factors associated with workplace environment safety that may be important areas for physician leaders to target for improvement to facilitate team well-being. Fostering a culture where leaders set clear expectations, manage performance, and provide useful feedback as well as where staff feel safe to raise concerns could lead to improved HCW well-being.

# Using a breath-based intervention to improve burnout and mental health outcomes for health care providers

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## Learning objectives

- Understand the connection between breath & mental health. How breath based interventions work?
- Understand novel ways to reduce burnout & improve mental health for Health care Providers
- Recognize a high impact, low cost intervention that can be implemented at organizational level to reduce burnout

## Project objective/background

Background. The COVID-19 pandemic has produced increased demands on a health care workforce already suffering from “crisis levels” of burnout. Burnout & associated mental health challenges like insomnia, anxiety & depression are implicated in numerous issues for both health care professionals (HCPs) & patient safety. In response, organizations are seeking measures that prevent & reduce HCP burnout in order to build a brighter post-COVID-19 future. For this future to be sustainable, low-cost, high-impact, evidence-based behavioral interventions that address burnout & associated symptoms are desired. Here, we present findings that highlight the positive impact of SKY - a breath based intervention, on burnout & associated mental health challenges in HCPs.

## Methods/approach

SKY was taught to 224 HCPs across various organizations between May 2022 and Jan 2023. Surveys were administered immediately before (pre) and immediately after (post) the program. Data of 165 participants was eligible for analysis.

A meta-analysis of aggregate survey data was executed using paired t-test to obtain significance between the pre- and post-intervention scores. A value of  $p < 0.05$  was considered significant.

## Results

Resilience at work increased from 25.99 (pre-intervention) to 28.18 (post-intervention) - 8.43% increase.

Anxiety decreased from 19.2 (pre-intervention) to 15.7 (post-intervention) - 18.23% decrease.

Sleep Quality increased from 3.98 (pre-intervention) to 4.99 (post-intervention) - 25.38% increase.

During analysis, the current perception of burnout was scored with lower perception of burnout receiving higher scores. A shift from pre-intervention scores of 1.59 to post-intervention scores of 2.83 was noted - 77.99% improvement in the perception of burnout.

All stated measures yielded p values of  $p < 0.001$ , and were thus considered statistically significant.

## Conclusion

The results indicate that SKY positively impacts burnout in health care providers. Participants reported significant improvements in resilience at work, anxiety, sleep and current perception of burnout with astounding statistical significance. The impact was noted immediately post intervention. The outcomes measured are direct symptoms of burnout & related mental health concerns, indicating high specificity of SKY in mitigating this salient challenge.

# Utilizing feedback from Stress First Aid champions to drive innovation for program improvement and advanced implementation in a large health care organization

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## Learning objectives

- Describe the core features of a Stress First Aid program
- Describe how Stress First Aid Train the Trainer was implemented in a large health care organization
- Identify opportunities to improve Stress First Aid's efficacy as a well-being resource in health care

## Project objective/background

Stress First Aid (SFA) is a promising framework to support wellbeing and mental health for physicians and health care professionals. SFA identifies stress reactions along a continuum to encourage prevention and early intervention for distress and to connect people with support to prevent more serious consequences. Starting in 2020, SFA was implemented within our large organization to a diverse group of health care professionals. One component is “train the trainer” modules (SFA-TTT) for SFA champions. The objectives of our study were to understand the program's perceived effectiveness and improve implementation of SFA by learning from our “super users.”

## Methods/approach

A convenience sample of 6 leaders who completed SFA-TTT participated in semi-structured interviews. We focused on “super users” (individuals who were actively implementing and/or teaching SFA) for their insight into the key strengths and challenges of program implementation. Two researchers conducted/transcribed interviews and conducted a thematic analysis. Major themes and recommendations were identified.

## Results

Three key themes emerged: content of the SFA program, dissemination and implementation of the program across roles and departments, and dependence of the program on volunteer participation. Subjects unanimously agreed

that SFA and use of the “stress continuum” tool provided safe, effective, and neutral language for assessing oneself and communicating with others. They noted the need for more actionable guidance and training on how to respond to immediate high stress situations. Subjects also highlighted groups within the health care system that had not adopted SFA, emphasizing that a multi-pronged and role-specific dissemination approach is required to reach all associates. Finally, subjects expressed that dedicated personnel such as full-time wellness champions could better facilitate the SFA program system-wide and ensure that all associates have access to the program.

## Conclusion

In interviews with SFA super users who completed SFA-TTT, this qualitative study identified strengths, areas for improvement, and potential solutions for rolling out the SFA program in a large health care system. Ongoing development of our organization's SFA program has incorporated this feedback to develop content, optimize implementation, and improve and effectively use training resources. Additional resources including an SFA app, a brief SFA module for all associates, ongoing booster training sessions for champions, video vignettes, the growth of a resilience coaching program, and a training facilitator guide have been developed to address identified needs. Identifying successes and gaps in wellbeing interventions will allow health care systems to share lessons learned and prioritize strategies to improve HCW wellbeing.

The background features a vibrant tropical sunset scene. The sky transitions from a bright yellow at the top to a deep red and purple in the middle, and finally to a dark blue at the bottom. Silhouettes of palm trees and rolling mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Oral presentations

Local work unit



# Commensality or affinity? Interventions for physician well-being

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## Learning objectives

- Learn best practices for implementation of commensality groups
- Learn about changes in wellbeing measures associated with implementation of commensality programs
- Learn about differential outcomes associated with a commensality intervention for a marginalized identity

## Project objective/background

We sought to facilitate implementation of commensality groups in an effort to improve professional wellbeing and connection during and after the COVID pandemic.

## Methods/approach

One group was formed among our community practice group (CPG); a group of primary care physicians in community clinics. Another group was developed for women surgeons. Both groups were supported by a wellness seed grant program and had administrative support. One group met onsite over lunch while the other group met offsite at restaurants. Both were initially facilitated by Resiliency Center staff and used question prompts to steer conversation towards meaning in work.

A survey using validated professional wellbeing domains was employed before and after the interventions. Domains (consisting of emotional exhaustion, depersonalization, reliance on others, social isolation, job satisfaction, meaningful work, quality of life, peer support) were constructed from individual items at both time points. Domains were compared internally within each commensality group (baseline vs. follow-up) as well as externally between commensality groups (baseline and overall) with significance tests and effect sizes (ES).

## Results

There were 28 respondents of CPG available for analysis (88% response rate). Analyses for effect size showed moderate improvement in the domains of emotional

exhaustion, depersonalization, job satisfaction and quality of life for the CPG group, although these did not achieve statistical significance (see table).

There were 10 attendees of the women surgeon group, with a survey response rate of 80%.

Respondents from the surgeons group indicated significantly higher average scores for peer support in follow-up compared to baseline (2.97 vs. 2.53,  $P=0.03$ ) which also demonstrated a large effect size (0.83). Average baseline scores for emotional exhaustion and depersonalization were lower than that of CPG (emotional exhaustion: 2.25 vs. 3.00,  $P=0.058$ ,  $ES=0.41$ ; depersonalization: 2.88 vs. 4.00,  $P=0.08$ ,  $ES=0.38$ ).

Qualitative feedback included: "Thanks for making us have dinner. It was an actual meal for me yesterday which was a very long day and it was nice to vent/chat/meet new folks. I needed that more than I realized." And "It was WONDERFUL! I basically skipped into work today!"

## Conclusion

Statistically significant improvement in peer support was achieved in a commensality group designed for women surgeons. Although further study is needed, it is possible that combining affinity and commensality interventions is more effective than commensality alone. Given the success of both groups, we are planning dissemination across our institution with a standardized toolkit.



Table: CPG Commensality Group Survey Domains (Means)

Domains <sup>a</sup>	Pre (Jan 2022-April 2022)	Post (July 2022-Oct 2022)	p-value <sup>c</sup>	Effect size <sup>d</sup>
	Mean (SD <sup>b</sup> )	Mean (SD <sup>b</sup> )		
Emotional exhaustion	3.00 (0.96)	2.64 (1.01)	0.346	<b>0.36</b>
Depersonalization	4.00 (1.62)	3.43 (1.55)	0.349	<b>0.36</b>
Reliance on others <sup>e</sup>	2.43 (0.53)	2.49 (0.47)	0.742	0.13
Social isolation	1.14 (0.73)	1.00 (0.67)	0.595	0.20
Job satisfaction <sup>e</sup>	2.66 (0.81)	2.94 (0.79)	0.352	<b>0.36</b>
Meaningful work	4.83 (1.33)	5.26 (1.31)	0.397	0.33
Quality of life	6.64 (1.60)	7.57 (1.74)	0.154	<b>0.56</b>
Peer Support	3.16 (0.68)	3.04 (0.84)	0.67	0.16

<sup>a</sup> When domain involved multiple items, items were averaged among each [participant](#);

<sup>b</sup> [standard deviation](#);

<sup>c</sup> two sample independent t-test (assuming equal variances);

<sup>d</sup> Cohen's d (0.2=small, 0.5=medium, 0.8=[large](#));

<sup>e</sup> Items rescaled to represent positive statements

# Correlation of organizational factor and risk for burnout in physicians during the COVID-19 pandemic

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## Learning objectives

- Understand the trend in risk for burnout over time in physicians at an academic medical center
- Understand the association of risk for burnout and affective organizational commitment, supervisor and coworker support

## Project objective/background

Physician burnout has long been recognized as simmering crisis even prior to the COVID-19 pandemic. Although there are many factors contributing to burnout, the majority are related to organization and systems contributors rather than individual. In this study based on six repeated cross-sectional surveys conducted at large health care system in the Pacific Northwest during the most intense phases of the pandemic (May 2020 through May 2022), we sought to assess if organizational factors had an association with physician well-being.

## Methods/approach

From May of 2020 to May of 2022, we distributed 6 surveys to all employees and students at an academic medical center to assess the “pulse” of the community. In that survey we measured risk for burnout using the Mayo Wellbeing Index (WBI). We also measured Affective Organization Commitment, supervisor support and coworker support. These variables were scored with a 1-5 scale and had Cronbach’s alphas  $>.8$ . Multiple variable regressions estimated the association between the WBI and these organizational predictors.

## Results

A total of 589 physicians completed at least one of the six surveys with a range of 43 to 161 per survey. In May 2020, the WBI average was 2.46 increasing to 3.24 in May 2022. There was a 0.15-point increment per wave (95% CI 0.03, 0.27,  $p < 0.05$ ). Physician’s AOC declined during this period from 3.34 to 2.92. Supervisor support did not change over time (from 3.26 to 2.34), but each wave reduced coworker

support by 0.05 points (95% CI -0.09, -0.01,  $p < 0.05$ ) (from 4.16 to 3.86). Unadjusted correlations showed an inverse association between lower WBI higher AOC, supervisor and coworker support. However, after controlling for wave, and physicians’ age, gender, race/ethnicity, presence of school-age children at home, and managerial status, higher supervisor ( $b = -0.78$ , 95% CI -1.21, -0.35,  $p < 0.05$ ) and coworker support ( $b = -0.48$ , 95% CI -0.78, -0.18,  $p < 0.05$ ) remained significantly associated with lower WBI. AOC did not remain statistically significant. Separate models showed that these associations did not change over time.

## Conclusion

Physicians with more supportive supervisors or coworkers had lower scores on the WBI demonstrating a reduced risk of burnout during the first two years of the COVID-19 pandemic. This suggests that work relationships continue to have an impact on risk for burnout even in the setting of high chronic stress such as seen in the COVID-19 pandemic, and remain a fruitful area for future research and exploration.

# Domains of professional fulfillment for pediatric hospital medicine: A concept mapping study

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## Learning objectives

- Demonstrate Group Concept Mapping as a method to leverage qualitative and quantitative data from stakeholders to develop a conceptual framework for well-being.
- Discuss the nine pediatric hospital medicine professional fulfillment domains identified in this study.
- Explore how these findings relate to current conceptualizations and measures of professional fulfillment.

## Project objective/background

We know little about how pediatric hospital medicine physicians (PHM) conceptualize their professional fulfillment (PF). Current PF models focus on practice efficiency, a culture of wellness and personal resilience; however, these areas have not been specifically tested in academic PHM. The objective of this study was to describe how academic PHM physicians at our institution conceptualize PF.

## Methods/approach

We performed a single-site group concept mapping study to create a stakeholder informed model of PHM PF. In 2022, we used the four-step concept mapping approach (brainstorming, sorting and rating, representation, and interpretation) with PHM physicians at our institution. We first developed a prompt that PHM physicians used to brainstorm ideas describing the concept of PHM PF. Physicians then sorted the brainstormed list of ideas based on conceptual relatedness and rated them on importance (scale 0-4). For representation, we applied multidimensional scaling (MDS) to analyze sorting data to create a point map where each idea represented one point, and point proximity illustrated how often ideas were sorted together. Then, hierarchical clustering was applied to create borders around ideas likely to be conceptually related. This resulted in cluster maps, where each cluster represented a domain. During interpretation, the PHM division reviewed the possible maps and selected the map that best represented the ideas.

We iteratively labeled the clusters to represent the ideas in the cluster. Mean rating scores for the items in each cluster were calculated.

## Results

Sixteen PHM physicians identified 90 unique ideas related to PHM PF. The final cluster map depicted 9 domains for PHM PF: 1) Work personal-fit, 2) People-centered climate, 3) Divisional cohesion and collaboration, 4) Supportive and growth-oriented environment, 5) Feeling valued and respected, 6) Confidence, contribution, and credibility, 7) Meaningful teaching and mentoring, 8) Meaningful clinical work, and 9) Structures to facilitate effective patient care (Figure 1). Divisional cohesion and collaboration had the highest mean rank score (3.44); Meaningful teaching and mentoring was lowest (mean 3.00) (Table 1).

## Conclusion

We identified 9 domains of PHM PF. While some elements of this concept map reflect previously described models of physician PF, differences emerged. Our model included meaningful teaching and mentoring, which is absent from other known models. Our model did not include resilience as an explicit domain, but reframed resilience topics within the domain of work-personal fit. Future work could refine our understanding for how physician conceptualizations compare to current PF models.

Figure 1. Concept Map

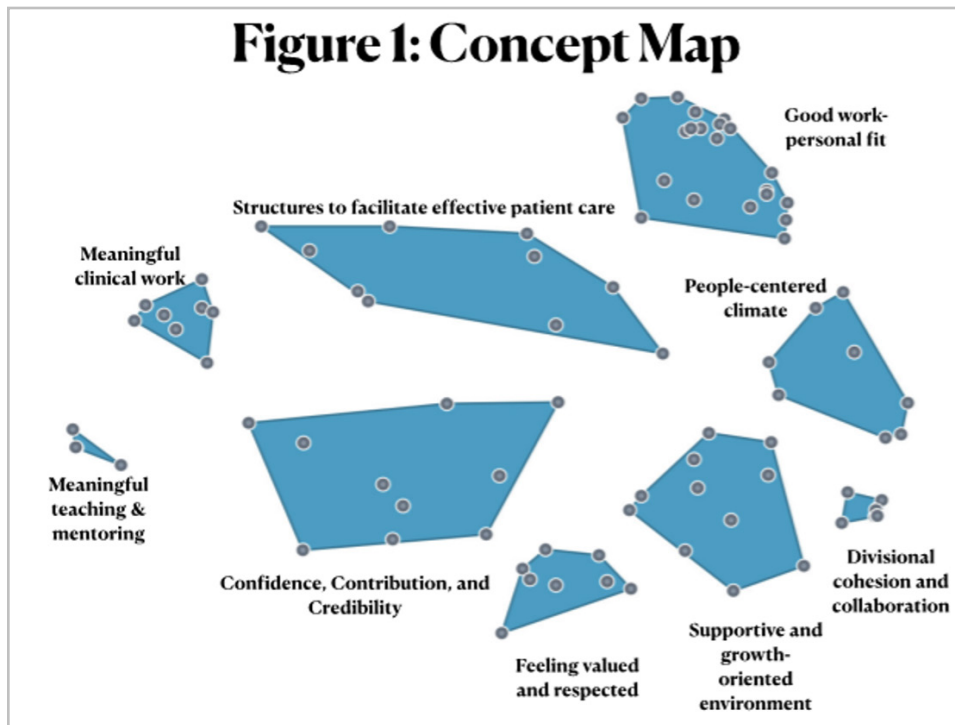


Table 1. Domains of professional fulfillment ranked by mean importance

**Table 1: Domains of professional fulfillment ranked by mean importance**

Domain name	Mean importance rating (range 0-4) (SD)
Divisional cohesion and collaboration	3.44 (0.31)
Supportive and growth-oriented environment	3.35 (0.22)
Meaningful clinical work	3.27 (0.36)
People-centered climate	3.26 (0.38)
Confidence, contribution, and credibility	3.21 (0.28)
Work-personal fit	3.20 (0.41)
Feeling respected and valued	3.18 (0.23)
Structures to facilitate efficient patient care	3.10 (0.41)
Meaningful teaching and mentoring	3.00 (0.16)

# Drivers of physician burnout in a large children's hospital: More than just excessive workload

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## Learning objectives

- Understand the six components of the Areas of Worklife Survey (AWS).
- Learn more about the importance of addressing all of the six components of the AWS.
- See how addressing physician burnout requires a broad approach.

## Project objective/background

Excessive workload has been identified as a major driver of physician burnout. However, other drivers can contribute to burnout and may warrant their own complimentary interventions. The Areas of Worklife Survey (AWS) examines six possible drivers: workload, control, fairness, reward, community and values. Per the AWS, a mismatch between the individual and their organization in any of these six areas may drive burnout. We sought to examine the relative importance of these drivers in promulgating physician burnout in a large children's hospital.

## Methods/approach

AWS surveys as well as the Human Services Maslach Burnout Inventory (MBI) were distributed to physicians in a rolling manner over a three-year period. Physicians received a personal link to complete the survey, which was analyzed by a third-party company, ensuring complete anonymity. Scores were entered into a REDCap database for analysis. AWS scores were derived from a 5-item Likert scale, where a score of 2 or less indicated an unfavorable mismatch between survey participants and their organization. MBI scores were utilized to calculate the presence of burnout defined as a score of  $\geq 27$  in emotional exhaustion or  $\geq 10$  in depersonalization. Wilcoxon rank sum tests were utilized to compare the

distribution of AWS scores between burned out and non-burned out physicians. Logistic regression was conducted to assess the association between burnout and AWS mismatch categories.

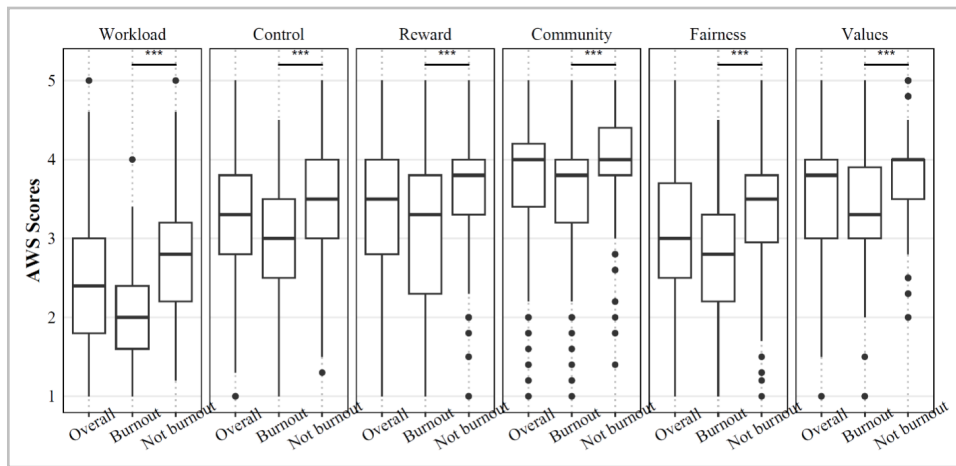
## Results

Among 495 physicians approached, 375 completed the AWS and MBI (76% participation). In those physicians classified as burned out, distribution of their AWS scores compared to non-burned out physicians was significant (Fig. 1). Forest plots show the odds ratio of burnout presence by AWS category (Fig. 2). Workload was the strongest driver of burnout (OR 5.36 [3.36, 8.55]), with control, reward, and fairness mismatch also being significant. Community and values mismatch did not reach statistical significance.

## Conclusion

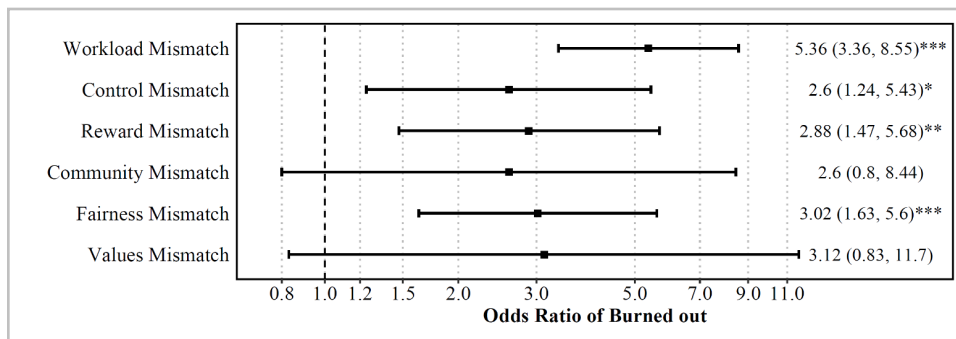
Workload remains a strong driver of physician burnout. However, other drivers such as control, reward, community, fairness and values also play a role. Use of holistic approaches that address all drivers of burnout may yield more robust intervention effects.

Figure 1. AWS Scores Distribution



\*\*\*p-value <0.001

Figure 2. Odds ratio of Burned out across 6 AWS Scores



**Note: \*\*\* p-value <0.001; \*\* p-value <0.01; \* p-value <0.05.**

Odds ratio (OR) and 95% CI are depicted. When the confidence interval crosses 1, it indicates that the effect is not significant, which is the case for “Community Mismatch” and “Values Mismatch”.



# Exploring burnout among emergency department health care professionals: Using an analysis systems approach—survey results

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## Learning objectives

- To evaluate burnout levels among emergency department (ED) health care professionals (HCPs).
- To identify work-system stressors contributing to burnout among ED HCPs.
- To acquire knowledge on implementing a survey study focused on work-system stressors contributing to burnout.

## Project objective/background

Approximately 49% of ED HCPs globally face epidemic levels of burnout, further amplified by COVID-19. Despite previous studies on burnout and well-being in various health care occupations, we have limited research on stressors contributing to burnout among ED HCPs. Thus, we aim to identify burnout-related stressors among ED HCPs and prioritize improvement efforts utilizing a mixed-methods, systems-analysis approach.

## Methods/approach

A 23-item Qualtrics survey was administered between July 1-25, 2022 to 181 US academic medical institution ED HCPs. The survey included a 2-item abbreviated Maslach Burnout Inventory (MBI) assessing emotional exhaustion (EE) and depersonalization (DP), and a 21-item assessment of general workplace stressors based on the National Academy of Medicine's (NAMs) framework for clinician burnout. Participants rated stressor severity and improvement priorities using 5-item (1[not at all] to 5[extremely high]) and 4-item Likert scales (1[not an issue] to 4[high priority]), respectively. Burnout was identified with a total score >3 for EE and DP from the 2-question summative score.

## Results

62 participants (34.2%) responded to the survey, and 82.5% indicated burnout. The mean score for EE was 3.46 (SD = 1.44) and DP was 2.91 (1.67).

The survey revealed the top five workplace stressors contributing to burnout, as well as their mean [SD] ratings and unstructured responses:

- Inadequate staffing (4.41 [1.02]): ED is unable to care for patients due to staff being busy with inpatient care.
- Inefficient workflows (3.92 [1.22]): Inadequate inpatient beds; delayed imaging and lab results.
- Excessive workload (3.71 [1.01]): Higher patient acuity requires 1:1 or 1:2 care, but staffing shortages prevent it. No float or code nurse available.
- Patient factors (3.5 [1.17]): Triage staff face daily complaints from patients asked to wait in the lobby due to overcrowding.
- Time pressure (3.47 [1.02]): One 30-minute break during a 12-hour shift is insufficient for eating, digesting, and decompressing.

Participants prioritized inadequate staffing (2.74 [0.48]), inefficient workflows (2.58 [0.69]), patient factors (2.34 [0.67]), excessive workload (2.15 [0.78]), and physical work environment (2.20 [0.80]) as top areas for improvement.

### **Conclusion**

ED HCPs report high burnout rates due to inadequate staffing and inefficient workflows. These are top priorities for improvement efforts, as recommended by health care organizations. Burnout levels are high at 82.5%, surpassing comparable ED studies. Further research is required to identify burnout stressors and develop evidence-based interventions.

# Exploring drivers of workplace motivation and personal accomplishment in general surgery residents

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## Learning objectives

- 1. Characterize drivers of motivation among general surgery residents.
- 2. Propose potential ways drivers of motivation can be operationalized in surgical training.
- 3. Investigate the association between personal accomplishment and factors of psychological wellbeing at various organizational levels.

## Project objective/background

Personal accomplishment (PA) is a distinct construct among burnout domains, negatively associated with attrition and positively associated with job engagement, motivation, and fulfillment in national studies of General Surgery residents. However, little is known about how to operationalize PA in the surgical training environment. Occupational science and self-determination theory posit that high workplace motivation results from influences that create an environment where basic psychological needs of competence, autonomy, and relatedness are met. HRO's demonstrate the importance of psych safety, feeling valued and trust for job satisfaction. Therefore, we aimed to characterize drivers of motivation in surgery residents to understand how they influence job satisfaction and relate to personal accomplishment and to uncover the relationship PA has to feeling valued, psych safety, and trust.

## Methods/approach

This mixed-methods study of GS residents from 16 ACGME-accredited academic residency programs, representing Northeast, Southern, Central, and Western U.S. regions included focus groups (conducted between 2021 and 2022) and an anonymous online survey (May 2022), both involving junior, senior, and research residents. Focus group responses were compiled and analyzed using inductive and deductive thematic analysis techniques and a published 6-step approach. Codes, concepts, and

themes were iteratively reviewed, refined, discussed, and described in the context of Job Demand-Resource and Self-Determination theories as well as our past work. Psychological safety was assessed using t-testing. A linear regression model assessed the association between personal accomplishment and residents' perception of being valued at various organizational levels as well as trust in program leadership.

## Results

251 residents (31% response rate) responded to the survey. Focus group responses revealed intrinsic and extrinsic drivers of motivation in surgery residents. Intrinsic motivations included positive patient interactions/outcomes, progressive independence/mastery (regarding patient care), and delayed gratification. Extrinsic motivations included feeling trapped, dependability, the temporality of residency training, and the reward of receiving recognition. In the cross-sectional survey, PA was significantly associated with residents feeling valued at the level of their peers, residency program and department leadership

## Conclusion

Our findings highlight intrinsic and extrinsic motivations among surgery residents offering targets for operationalization such as maximizing clinical exposure, independence, and recognition. Steps to increase personal accomplishment should focus on expressions of value recognition from peers and local leadership.

# Exploring the relationship between mindfulness and psychological safety in general surgery training

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## Learning objectives

- Identify the relationship between mindfulness and resident psychological safety
- Recognize the various social strata of the General Surgery training environment.

## Project objective/background

Mindfulness represents a discrete cognitive skillset, inherent or trained, that has been shown to mitigate stress and burnout in graduate medical trainees, including surgeons. Psychological safety, described as an environment in which individuals can express concerns, opinions, and mistakes without fear of retribution, has shown to increase quality and safety across multiple high-reliability organizations. We hypothesized that psychological safety may vary across different organizational levels of the general surgery training environment. In this study, we explored the relationship between resident mindfulness and psychological safety at different organizational levels.

## Methods/approach

In May 2022, an anonymous cross-sectional survey was distributed to 16 ACGME-accredited General Surgery residency programs nationally. Resident mindfulness was measured using a published scale and perceived psychological safety were evaluated at four levels: residency program, departmental, and institutional leadership, and peers. Responses were analyzed using two-sided t-tests with the significance threshold set to 0.05. Descriptive statistics were analyzed using SAS Institute.

## Results

251 residents completed the online survey (response rate, 31%). Higher mindfulness was significantly associated with psychological safety at all levels: residency program ( $p<0.001$ ), departmental ( $p<0.001$ ), and institutional ( $p=0.045$ ) leadership, and peers ( $p=0.01$ ).

## Conclusion

Higher mindfulness residents were associated with higher psychological safety at all four organizational levels in the training environment, suggesting a role for mindfulness training as a means to improve individual sense of place, and to promote culture that increases quality and safety outcomes. This study supports benefits of mindfulness training as a supplement to other interventions that improve the culture of surgery.

# Guiding department-level dialogue and tests of change to improve physician well-being

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## Learning objectives

- Support operational leaders, such as department chiefs, in facilitating department-level conversations about physician well-being and related survey data.
- Learn strategies to guide tests of change based on these conversations.
- Apply close-loop feedback in efforts to improve physician well-being.

## Project objective/background

Health care organizations are recognizing the importance of addressing system-level drivers of burnout and professional fulfillment in their quest to improve physician well-being. While cross-organizational strategy, infrastructure and resources are valuable components in this effort, meaningful progress also requires attention to the department-level factors that detract from the physician professional experience.<sup>1</sup>

Our medical group of close to 10,000 physicians has deployed a strategy to provide operational leaders with the data, skill-building, and tools to guide conversations regarding factors that impact their physicians' day-to-day professional experience. We hypothesized that actively supporting this dialogue would result in unit-level tests of change that improve well-being in ways most relevant for physicians in each department and specialty.

## Methods/approach

Data from our annual survey that assesses the drivers of burnout and professional fulfillment is shared with all operational leaders, including each department chief. Every 6 to 12 months, each leader is expected to take the following steps to facilitate open dialogue about ideas for improvement:

- Discuss measure data with their department and identify areas of strength and opportunity

- Prioritize ideas and implement a test of change
- Ensure that department members other than the chief are responsible for nurturing the test of change and providing follow up
- Close the feedback loop: communicate back outcomes, learnings, and next steps to all members of the department

We collaborate with specialty chiefs' groups across the organization to provide tools in support of their department-level conversations. These include a discussion guide and an online toolkit, with a robust array of practical tips, engagement strategies and interactive resources tailored for each of the themes measures on the physician survey.

## Results

The number of department chiefs leading conversations and facilitating tests of change in their departments has been tracked since the inception of our strategy. Each of our 19 medical centers has reached a required target threshold of 85%, with many being closer to 100%.

From 2021 to 2022, the most common department-level tests of change addressed the following survey themes: clerical burden, workload, and community and camaraderie. Data obtained from our 2022 survey showed improvements in each of these areas (see attached).

## Conclusion

Supporting chiefs to engage in conversation with their departments about physician well-being can result in relevant tests of change that improve physician well-being. Our experience further demonstrates that while department chiefs are not solely responsible for finding solutions to improve their physicians' professional experience, they are essential in providing a forum for constructive dialogue.

1. Shanafelt, Tait D., et al. "Organization-Wide Approaches to Foster Effective Unit-Level Efforts to Improve Clinician Well-Being." *Mayo Clinic Proceedings*. Vol. 98. No. 1. Elsevier, 2023.



# IGNITE: Operationalizing the Surgeon General's Framework for Workplace Mental Health and Well-Being

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## Learning objectives

- Recognize the 5 Essentials in the Surgeon General's Framework to Support Workplace Well-Being
- Identify a program that delivers the Framework to a total (clinical and non-clinical) health care workforce and improves well-being metrics

## Project objective/background

Building a healthier workplace of the future will require both recovery from the recent past and redesign of work in the future. The Surgeon General's Framework for Workplace Mental Health & Well-Being released in 2022 provides information on five essential elements along with 10 human needs that must be met for workers across all industries to achieve workplace well-being.

We created a program to raise awareness of these elements in our total workforce (both clinical and non-clinical). The program allows for local work-unit dialogues that could best operationalize these elements in each local environment. Our program is available for both our clinical and nonclinical workforce because we believe the health care workplace of the future must be organized in teams to reach our workforce's full potential.

## Methods/approach

We adapted evidence informed initiatives such as the Mayo Compass Program to create a novel program for our total workforce called IGNITE (Inspiring Growth, Networking, Improvement, Togetherness, and Engagement) that operationalized the Surgeon General's Framework. We created a facilitator training and discussion curriculum to form IGNITE groups comprised of 8-10 colleagues from different job families. The facilitated groups met for 6 total sessions over the course of up to six months. Each session is supported with a meal provided by the Office of Well-Being and lasts approximately one hour.

Pre and post surveys were collected for each group to measure burnout, professional isolation, intention to leave the organization, satisfaction with the program, and number of colleagues they felt close to in their local work-unit.

## Results

At the time of submission, we have 61 IGNITE groups and adding new groups weekly- 23 active groups and 37 trained facilitators beginning new groups across various job families. Preliminary data from the initial 10 groups launched includes a doubling of the number of people that group members feel close to and could reach out to for work support, 100% likelihood to recommend participation in an IGNITE group, and reduced professional isolation.

## Conclusion

IGNITE is a novel initiative that operationalizes the Surgeon General Framework to improve workplace well-being.

# Novel use of proactive risk assessment to identify causes of burnout and solutions among physicians

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## Learning objectives

- Describe the issue of standard burnout surveys for understanding individual drivers of burnout.
- Pilot a proactive risk assessment for burnout (PRA-B) for identifying individual stressors that lead to burnout, z
- causes, and solutions in physicians.

## Project objective/background

Burnout can impact physician job attrition, work satisfaction, and mental health. It can also have clinical implications, as burned-out physicians are more likely to make medical errors and exhibit more biases. However, despite significant individual variability among the drivers of burnout, academic physician wellness programs are rarely individualized. There is growing need for tools that can rapidly identify individual and institutional risk factors for burnout as well as identify local mitigation strategies. We piloted a proactive risk assessment for burnout (PRA-B) in physicians to assess both its utility in characterizing participants' perceptions of stressors that increase the risk of burnout and propose potential interventions to prevent burnout.

## Methods/approach

Faculty physicians in a large academic medical center volunteered to complete the PRA-B exercise as part of a faculty retreat. Participants were asked to predict stressors they expected to experience during the next academic year across four domains (clinical practice, career development, home life, and personal health). In each domain, they identified stressors with the most potent negative consequences and likelihood of occurrence. They then listed potential causes of this stressor and potential prevention strategies. Analysis included compiling all participants' stressors within each of 4 domains, ranking by frequency, and thematic analysis. Prevention strategies for highly rated stressors were categorized by level of intervention (individual, departmental, institutional).

## Results

Thirty-eight faculty physicians participated. Within clinical practice, participants described concern for poor performance and patient outcomes, high clinical and administrative workload, and lack of support staff. Participants described stress in career advancement from not completing research deliverables due to lack of time and grant funding. Within personal health, many experience inadequate time for exercise and sleep. Participants described personal life stressors such as lack of time with family and hobbies, lack of childcare, marital stress, and financial instability. Participants proposed several individual prevention strategies such as setting boundaries with work, greater communication with colleagues and mentors, limiting additional research and administrative roles, and scheduling exercise and family time. Institutional level strategies included improved staffing, protected research time and support, mentorship, and limiting requests for meetings and non-clinical duties.

## Conclusion

The PRA-B is an adaptation of a human factors engineering method that can be utilized to assess individual risk factors for burnout and provide more granular information on stressors compared to typical employee surveys. PRA-B provides a personalized roadmap to prevent burnout and can guide institutions in the development of structural interventions.

# Optimizing clinician staffing models with evidence-based practices for improved patient, clinician and institutional outcomes

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## Learning objectives

- Analyze the effects of work design on clinician, patient, and institutional outcomes.
- Establish standardized methods for measuring total work in health care settings
- Develop innovative approaches to integrate clinician perception of work, electronic health record data, and outcomes measurement in health care.

## Project objective/background

High workloads in the inpatient setting can lead to clinician and patient harm as well as negatively impact organizational outcomes; however, there is currently no standardized way to measure total hospitalist work, or determine what an optimal workload is. We aimed to identify and establish methods to measure total work and develop a mobile application and safety management platform to inform staffing strategies.

## Methods/approach

We are taking a multiple methods approach to (1) identify and establish methods to measure total work and (2) develop an intuitive, accessible mobile application and platform with decision support to capture, in real-time, measures of hospitalist workload and pair this with electronic clinical data. We conducted a Delphi panel (three rounds) consisting of 17 experts from around the country including frontline hospitalists, hospital leaders, administrators, and experts from fields such as human factors engineering. We are conducting a scoping review to identify how workload has historically been defined and measured to better understand its impact on the workforce, patients, and institutional outcomes. Utilizing these findings, we have developed the GrittyWork mobile application (GW app) to measure total hospitalist work. The GW app collects hospitalist perception of work through targeted surveys as well as physical activity data. To guide the design of the tool, we applied the Chokshi

and Mann Process Model for User-Centered Digital Development, iteratively modifying the GW app. We are currently collecting user experience data, specifically using the System Usability Scale (a scale that is industry standard to evaluate satisfaction with a given tool) and usage data (usability and adoption).

## Results

The Delphi panel was conducted from April 2022 to June 2022 with 17 individuals (74% of those approached). Participants represented 14 unique organizations, with most participants representing academic institutions (88%). One-hundred and ninety-two unique measures were identified. Consensus was reached on 31 highly relevant measures and on 120 moderately relevant measures leaving 41 measures without consensus (Table). Our scoping review identified 6,434 articles potentially related to our research question. After screening, we narrowed our focus to articles primarily focused on workloads. We have developed the GW app which is undergoing user testing now (Figure).

## Conclusion

This research represents a novel approach to pairing work design with outcomes that matter to the workforce, patients, and institutions. Overall, our findings have important implications for improving patient care and promoting the well-being of health care workers.

# Pilot of multi-specialty surgical house staff collegiality curriculum: A focus on consultation and collaboration

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## Learning objectives

- How to positively influence surgical residents' attitudes toward consultation and collaboration.
- Assess feasibility of introducing a novel curriculum in collegiality

## Project objective/background

Collegiality in medicine involves the pursuit and sharing of knowledge and is critical to patient outcomes and experience.<sup>1</sup> Lapses in collegiality have implications on both well-being, clinical performance, and teamwork, with house staff being particularly sensitive.<sup>2, 3</sup> Within our organization, successful initiatives have been undertaken to foster improved collegiality amongst attending physicians.<sup>4</sup> This pilot study addressed the feasibility and effectiveness of a collegiality program for core surgical residencies at our tertiary care center.

## Methods/approach

Urology, OB/GYN, and general surgery residents received surveys exploring relationships within and between departments, the quality of working relationship, responsiveness to calls/pages, follow up of patients, teaching and providing assistance, and mutual respect. Responses were rated on a Likert scale of 1-5, with 5 being most favorable (e.g., "Excellent" or "Strongly Agree"). Free responses were also obtained. Following the survey, we launched a year-long curriculum consisting of interactive lectures, social events, and a narrative medicine small group. Content covered psychological safety, collegiality and collaboration, the structure and nuance of consultation, and effective teamwork. Residents were re-surveyed at year's end.

## Results

All urology (n=12), OB/GYN(n=20), and general surgery (n=26) residents were invited to participate with response rates from 42-65%. Data are summarized in Table 1.

Programs reported very positive relationships in their own programs, before and after interventions. Inter-departmental varied: Urology residents reported positive relationships with both OB/GYN and general surgery, with no significant differences pre- and post-intervention. OB/GYN rated urology more positively than general surgery (p=0.0047). Post-intervention, OB/GYN reported equivalent relationships between the two departments (p=0.34). General surgery showed a similar trend: in the pre-intervention survey, they more positively rated urology (p=0.0026); post-intervention results were similar (p=0.72). Free response data were concordant with quantitative results, and there were very few (10-15%) comments coded as "negative" within and among specialties.

## Conclusion

Our collegiality curriculum was feasible and well-received. Relationships within residency programs were uniformly positive. Following implementation of this curriculum, differences in collegiality across specialties were no longer observed (Table 1); although there are many factors to consider, our curriculum may have provided the relationship-building framework necessary for positive consultative resident experiences. Future directions underway include a real-time consultation feedback tool, interdepartmental journal clubs, and Team STEPPS-based learning modules to build a structural framework for collaboration and collegiality.

Table 1. Composite relationships within and between programs

<b>Department</b>	<b>OB/GYN</b>		<b>Urology</b>		<b>General Surgery</b>	
<b>Relationship with...</b>	<b>Pre-survey</b>	<b>Post-survey</b>	<b>Pre-survey</b>	<b>Post-survey</b>	<b>Pre-survey</b>	<b>Post-survey</b>
<b>OB/GYN</b>	<b>4.3</b>	<b>4.4</b>	<b>4.2</b>	<b>4.2</b>	<b>4.1</b>	<b>4.1</b>
<b>Urology</b>	<b>4.6</b>	<b>4.2</b>	<b>5.0</b>	<b>4.5</b>	<b>4.7</b>	<b>4.2</b>
<b>General Surgery</b>	<b>4.1</b>	<b>4.1</b>	<b>4.5</b>	<b>4.1</b>	<b>5.0</b>	<b>4.5</b>

Survey responses on Likert scale of 1-5, with 5 being most favorable.

1. Sinsky et al. "Radical Reorientation of the US Health Care System Around Relationships: Rebalancing the Transactional Model." *Mayo Clin Proc.* 2022;97(12): 2194-2205.
2. Avesar et al, "1412: The effect of rudeness on challenging diagnostic error: a randomized controlled simulation trial."
3. Rosenbaum, L. "Divided We Fall." *N Engl J Med* 2019; 380:684-688.
4. Mistry et al, "I will never consult that doctor again ... they always yell at me!: The efficacy of system wide collegiality programs on physician well-being." *American Conference on Physician Health*, 2019. Oral Presentation.

# Practice optimization to promote well-being: System level improvements with productive outcomes

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## Learning objectives

- Review best practices to optimize advanced practice provider roles in the ambulatory setting.
- Define and track clinical work expectations, utilizing performance improvement and project management to identify and act on opportunities to elevate scope and remove inefficient practices, and collaborate with hospital partners on growth and staffing model needs.
- Describe lessons learned from successes and failures of a process implementation project.

## Project objective/background

It is well known that addressing system factors is a priority to reduce clinician burnout. The Department of Pediatrics Clinical Affairs Team addressed system improvement opportunities in 3 sections with markedly high rates of burnout.

## Methods/approach

A standardized approach was used to solicit information, implement interventions and measure outcomes among three different sections in the department of pediatrics. Implementation projects included re-defining clinical FTE (reduction in clinical time)

The Department of Pediatrics rolled out a standard clinical work expectation for advanced practice providers (APPs) equal to 40 hours of face-to-face and non-face-to-face clinical time for 46 weeks a year. To better understand the program-specific contributions of APPs to our clinical practice, the Department of Pediatrics focused on capturing all clinic-equivalent activity (inpatient, outpatient, procedures, non-face-to-face) across 250+ clinical APPs spanning 40+ clinical programs utilizing EPIC and Qgenda scheduling systems. From this effort, it was identified that non-face-to-face clinical time that is below scope and inefficient was contributing to the burnout/dissatisfaction of this group and increasing clinical deficits per clinical FTE requiring hospital support. The Department started a multi-year initiative focused on utilizing practice optimization methodologies to identify scope and inefficient opportunities with the goals to 1) improve the working environment for APPs while simultaneously 2) develop a sustainable model of care.

## Results

**Neurology:** maintenance of clinical presence while decreasing overall hours of work of the group

- Self-reported hours on clinical activity decreased from 60-44 hours/week
- Productivity defined by units billed and visits/cFTE maintained YOY
- Clinical presence as defined by sessions or slots per cFTE maintained YOY
- Clinical productivity remained the same with overall fewer hours of work due to reduction in 'out of scope' work.

**Gastroenterology:** clinical productivity and presence increased; yet we need to remove additional below scope work to improve satisfaction

- Productivity per cFTE has improved 20% between FY23 Proj and FY21
- Clinical presence per cFTE as defined by slots/cFTE and sessions/cFTE have increased by 38% from FY23 Proj and FY21
- Satisfaction has not improved/turnover occurred

## Conclusion

Investment in system-level improvements has shown outcomes of improved productivity and provider satisfaction. Not all efforts lead to desired outcomes, learning from mistakes informs future approach to the work.



# The effects of physician documentation support

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## Learning objectives

- After attending this session, the learner will understand the myriad effects of implementing collaborative documentation approaches in ambulatory care, specifically the trade-offs between visit volume and after-hours EHR use.
- The learner will also understand the longer-term impact of collaborative documentation in ambulatory care, specifically the increasing returns as team-based collaboration matures.

## Project objective/background

Documentation support approaches, including collaborative team-based notes and the use of scribes, have gained popularity as ways to reduce physician EHR documentation burden and curb burnout. However, most studies of these interventions take place at a single site and involve few physicians, leaving little generalizable evidence speaking to their effects. Moreover, most studies have relied upon self-reported survey measures rather than now widely available EHR log data that captures objective usage. The purpose of our study was to analyze the first- and second-order effects of documentation support at a national scale.

## Methods/approach

We use national physician-week level EHR use metadata capturing details of note composition – including shared authorship of notes – from Epic Systems, a large EHR vendor. Our data include all US-based ambulatory physicians using Epic between Sept. '20 & Apr. '21. We exploit variation in timing of physician adoption of collaborative documentation support, operationalized as a change from no shared note authorship to consistent shared note authorship. We measure the effects of this support on physician documentation time, EHR time in evenings and on off days, visit volume, & physician efficiency (measured as the share of visits closed within two days). We use a difference-in-differences approach to analyze changes in our outcomes among physicians who adopted documentation support (n=1,024) compared to physicians with no documentation support (n=66,972).

## Results

Physicians that adopted documentation support realized a 9.9% decrease in weekly EHR documentation time (-24.5 min per week; 95% CI: [-31.5,-17.5]). Documentation support did not lead to decreases in after-hours EHR use or time spent in the EHR on off days. Visit volume increased by 5.7% (2.4 visits/week [1.8,2.9]), while two-day visit closure rates did not change.

## Conclusion

We find substantial and durable decreases in documentation time for physicians that adopt documentation support. We also find increases in visit volume, which may help to explain the null effect that documentation support has on after-hours and off-day EHR use. This highlights an important trade-off between visit volume and after-hours EHR use, a measure correlated with physician burnout. While documentation support may facilitate increased visit volume to “cover costs,” that same increase may prevent reductions in burdensome aspects of EHR use.

# Using improvement processes to mitigate sleep related impairment in pediatric hospital medicine

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## Learning objectives

- Demonstrate how quality improvement methodology can be used to identify well-being improvement initiatives.
- Discuss the impact of a single workflow change on overnight call sleep.

## Project objective/background

Sleep deprivation and its sequelae impact physician burnout, well-being, and professional fulfillment. A 2020 wellness survey of University of Wisconsin Division of Pediatric Hospital Medicine (PHM) faculty showed higher sleep-related impairment scores compared to system-wide benchmarks.

## Objectives

Over 12 months, improve sleep-related impairment scores by 10%, decrease calls and pages sent and received, and increase total sleep while on call among UW Pediatric Hospitalists.

## Methods

Using quality improvement methodology, 16 PHM faculty developed a driver diagram of factors contributing to call-related sleep deprivation. A small stakeholder group identified modifiable factors within the division's sphere of influence. Two interventions were identified, piloted, and subsequently adopted 1) transitioning emergency department direct admission calls from "ED resident-to-PHM faculty" to "ED resident-to-PHM resident" and 2) providing sleep education. Intervention 1 occurred in two phases, 1a and 1b. Intervention 1a piloted ED resident-to-PHM resident direct handoff from 6pm-2am. After this pilot, the process was fully adopted and transitioned to intervention 1b, ED resident-to-PHM resident direct handoff all night. Outcome measures included mean total sleep time on call and mean sleep-related impairment score for the division. Process measures included number

of total phone calls and pages sent and received during call shifts, reported as interruptions. Faculty wore Fitbit trackers and reported sleep and call data each morning. Pages were manually pulled from records. Sleep impairment scores were collected via Sleep-Related Impairment Short Form survey administered through the UW Health Wellbeing Provider survey from October-November 2022. Run charts tracked mean weekly admits, total sleep, and night time interruptions. Weekly means were charted against blended patient days per month on run and X bar charts.

## Results

After intervention 1a, median of total hours of sleep increased from 5.4 to 5.9 hours (Figure 1). Median total sleep worsened during respiratory viral season (October-November) to 4.8 hours, then improved to baseline of 5.4 after Dec 12. Mean sleep interruptions measured improved from 12.0 to 9.3 after intervention 1a, worsened to 14.5 when blended patient days rose (Sept 12 – Dec 12), and improved after Dec 12 to 8.5. Sleep impairment scores worsened slightly from 3.59 in 2020 to 3.38 in 2022.

## Conclusion

Changing the overnight call workflow was associated with an improvement in total sleep and nighttime interruptions during typical census volumes. Overall sleep interruptions and total sleep worsened with higher seasonal census. Sleep impairment scores worsened over the two-year period; however, the second measurement was during a respiratory viral surge.

Figure 1. Run chart for mean total sleep while on call by week

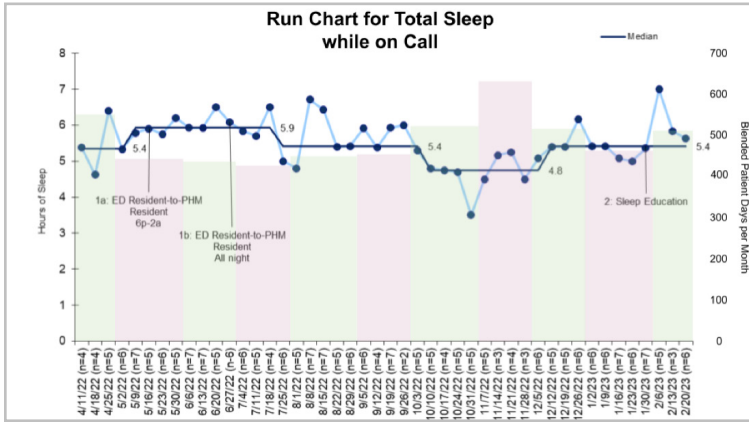
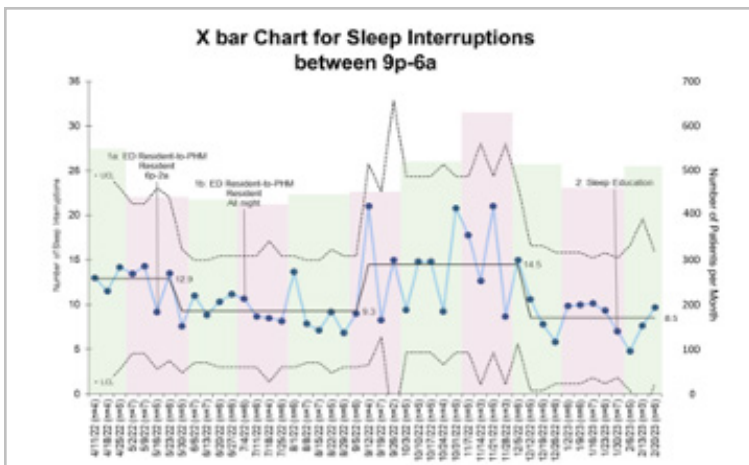


Figure 2. X bar chart for mean sleep interruptions (pages and calls) on call by week



# Maximizing vacation utilization: A department-wide root cause analysis approach

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## Learning objectives

- Understand the volume of under-utilized vacation within an academic department.
- Learn how a root cause analysis can be applied to vacation utilization.
- Explore novel department-wide policies and incentives to improve vacation utilization.

## Project objective/background

Meaningful time away from work is essential for self-care, emotional and physical well-being. Despite this, faculty and staff in the Department of Internal Medicine (DOIM) do not fully utilize restorative time away from work, frequently performing work-related activities during vacation. Lack of time away contributes to burnout, poorer well-being, and low morale with additional negative impacts on patient care quality. We sought to understand the reasons for incomplete vacation utilization and to develop policies to support meaningful time away.

## Methods/approach

A root cause analysis (RCA) utilizing an A3 approach was performed with faculty and staff representing the 13 divisions within our DOIM to understand barriers to taking vacation. In addition, department-wide survey data collected through an annual institutional employee engagement survey was reviewed.

## Results

We identified that no mechanisms existed for department-wide measurement of vacation utilization. Based on the RCA, between 60% (faculty) to 100% (staff) used less than half their vacation time during the prior year, citing increased workload, lack of coverage, and inconsistent scheduling practices as contributing factors. DOIM employee engagement survey data (2020-21) had response rates of 76% (faculty) and 62% (staff). DOIM faculty (F) and staff (S) reported unfavorable responses across the following domains: 1) inability to disconnect

from work during free time [F - 59%, S - 24%]; 2) inability to free mind from work when away [F - 49%, S - 25%]; 3) inability to enjoy personal time without focusing on work [F - 46%, S - 23%]; and 4) losing sleep over work issues [F - 43%, S - 22%]. Communications. Findings are summarized in table below.

## Conclusion

In response to our findings, the DOIM developed Vacation Coverage Guiding Principles (VCGP) to provide consistent, equitable expectations that individuals should not need to complete clinical or administrative work while on vacation. Each division now uses a shared scheduling program which allows for analysis of vacation utilization rates. As a pilot, the DOIM provides two hours of "catch up time" following a full week of vacation for faculty engaged in six or more clinic sessions per week. In addition, each division was required to develop and implement division-specific vacation coverage plans based on VCGP tied to financial incentives for each division chief.

# Workplace determinants of burnout in orthopaedic surgeons before and after the COVID-19 pandemic

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## Learning objectives

- Assess prevalence of burnout and identify workplace determinants of burnout in orthopaedic attending surgeons
- Assess changes in burnout and workplace determinants of burnout since the peak of the COVID-19 pandemic

## Project objective/background

Burnout has been recognized as an occupational health crisis by the World Health Organization since 2019. Burnout encompasses three core elements: emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment. The COVID-19 pandemic profoundly impacted health care practices in the United States. This study assesses the association between burnout and established work life domains in orthopaedic attending surgeons before and after the COVID-19 pandemic.<sup>1</sup>

## Methods/approach

This was a cross-sectional mixed-methods study on burnout and worklife domains in orthopaedic attending surgeons in a single academic institution between November 2022 – February 2023. These responses were compared to a study performed in the same population in 2019<sup>1</sup>.

The 22-item Maslach Burnout Inventory was used to assess physician burnout. “High-severity” was defined by a total score  $\geq 27$  for emotional exhaustion and  $\geq 13$  for depersonalization. The 28-item Areas of Worklife Survey was used to identify problematic areas of worklife. Lower scores represented poor congruency between the individual and their work environment. Open-text responses were manually coded.

## Results

Of 144 eligible surgeons, 63 (44%) responded. The proportion of orthopaedic surgeons experiencing symptoms of burnout increased after the COVID-19 pandemic. Depersonalization scores were “high” in 21% of surgeons in 2023 compared to 9% in 2019 ( $p=.048$ ). Emotional exhaustion scores were “high” in 33% of surgeons in 2023 compared to 17% in 2019 ( $p=.021$ ) (Figure 1).

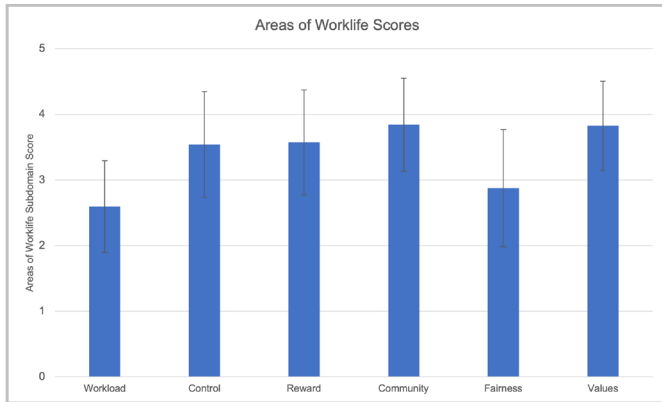
Regarding problematic areas of work-life, surgeons continued to score lowest in workload ( $2.6 \pm .7$ ) followed by fairness ( $2.9 \pm .9$ ). Excessive workload and limited job control continue to be the two domains most strongly correlated with burnout. Decreased concordance between workload and control were strongly correlated with both worsening emotional exhaustion ( $r=-.768$ ,  $p<.001$ ;  $r=-.533$ ,  $p<.001$ , respectively) and depersonalization ( $r=-.402$ ,  $p=.001$ ;  $r=-.381$ ,  $p=.002$ , respectively).

Qualitative analysis of open-text responses identified four problematic themes in the workplace: resources, workload, interactions, and expectations and demands. Resources emerged as the most concerning area (25 participants) followed by workload (22 participants). Compared to 2019, where excessive administrative load and issues with electronic medical platforms emerged as significant themes in workload, respondents in 2023 emphasized the need for improved resources in the form of increased clinical support, and operating room access and efficiency.

## Conclusion

Burnout has increased among orthopaedic surgeons at a single institution following the COVID-19 pandemic and continues to be primarily driven by excessive workload and poor control. In this population, burnout has roughly doubled in magnitude between 2019 and 2023.

Figure 1. Areas of Worklife subdomain scores for attending orthopaedic surgeons in 2023



1. Verret CI, Nguyen J, Verret C, Albert TJ, Fufa DT. How Do Areas of Work Life Drive Burnout in Orthopaedic Attending Surgeons, Fellows, and Residents? *Clin Orthop*. 2021;479(2):251-262. doi:10.1097/CORR.0000000000001457



The background features a vibrant tropical sunset scene. The sky transitions from a bright yellow at the top to a deep red and purple in the middle, and finally to a dark blue at the bottom. Silhouettes of palm trees and rolling mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Oral presentations

Organizational level

# A large health system's approach to assessing GME well-being: Initial resident and fellow findings

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## Learning objectives

- Identify two key actions taken in the development of a well-being survey targeting medical residents and fellows.
- Describe three respondent characteristics associated with adverse mental health outcomes.
- List the three most frequently cited barriers to utilization of well-being resources among trainees reporting burnout.

## Project objective/background

There is increasing focus on supporting physician trainee well-being among the graduate medication education (GME) community. Our objective was to understand our GME trainees' perceptions of their well-being and associated factors, assess wellness resource awareness and utilization barriers, and identify organizational opportunities to better support our trainees.

## Methods

A 40-item well-being survey was developed by key stakeholders through an iterative process informed by multiple literature reviews. Survey content included respondent characteristics and additional measures (i.e., Stress First Aid Stress Continuum, 2-item Adapted Maslach Burnout Inventory, 1-item Mini Z Burnout Scale, Patient Health Questionnaire-4 (PHQ-4; depression/anxiety), and CAGE-AID; substance misuse). The survey was administered in June 2022 to all GME trainees across Northwell Health System. Participation was voluntary and anonymous. Descriptive statistics are presented.

## Results

Response rate was 40% (n=788), with 28% (n=558 trainees: n=371 residents, n=187 fellows) completing all survey items. Mean completion time was 10 minutes 14 seconds. Most respondents identified as female (58.2%), White (38.0%) or Asian (26.3%), and PGY2s (15.3%) or PGY3s (14.4%). Good personal and workplace support was reported by 85% and 62% of respondents, respectively. Burnout rates were 40% in residents and 23% in fellows. Among residents, higher percentages of PGY1s (57% and 54%, respectively) and PGY3s (57% and 52%, respectively) reported burnout and elevated stress. PHQ-4 positive screens were present in 25.4% of residents and 16.6% of fellows for anxiety, 16.7% of residents and 8.0% of fellows for depression, and 12.4% of residents and 5.7% of fellows for both anxiety and depression. CAGE-AID scores were elevated in 5.8% of residents and 2.6% of fellows. Occasional to frequent workplace discrimination was reported by 24% of respondents, mostly involving interactions with patients/families (34%), clinical faculty (18%), and nursing (17%). Most trainees (95.5%) reported awareness of at least 1 wellness resource. Among

the high burnout group (n=191), greatest resource utilization barriers were time (49.7%) and discomfort using Northwell-sponsored programs (25.7%), and top requested well-being resources were financial (20.5%) and emotional (19.9%).

### **Conclusion**

Our survey provided valuable insight into trainees' perceptions of their well-being and actionable items for augmenting trainee well-being. Findings have been translated into organization-wide initiatives, such as disseminating survey findings and related recommendations to GME leadership. Site- and program-specific efforts are also being made, such as GME Diversity and Inclusion leadership collaborating with the residents and fellows of one training program to better understand and address their experiences with workplace discrimination.

# A systems perspective on physician burnout and well-being during the COVID-19 pandemic

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## Learning objectives

- To describe stressors and protective factors contributing to frontline physicians' work-related wellbeing during the COVID-19 pandemic.
- To apply a conceptual model for understanding how multi-level workplace factors interact with social, political, and economic environments to shape physician wellbeing.
- To identify recommendations for improving physician wellbeing in the aftermath of the pandemic.

## Project objective/background

US physicians are at high risk for depression, substance abuse, suicide, overwork, exhaustion, and burnout. New stressors imposed by the COVID-19 pandemic have exacerbated these occupational health risks at a time when baseline levels of burnout and poor mental health were already overwhelmingly high, presenting an occupational health crisis for physicians. While research on physician burnout has expanded, the focus is still on individual-level causes and solutions that do little to identify and respond to the broader systems factors shaping physicians' wellbeing.

## Methods

With funding from the National Institute for Occupational Safety and Health and the Greenwall Foundation, we conducted qualitative, semi-structured interviews with 145 hospital-based attending physicians or fellows practicing in emergency medicine, hospital medicine, pulmonary/critical care, and palliative care from 44 diverse hospitals across four US cities who cared for hospitalized COVID-19 patients. We analyzed interview transcripts using a qualitative descriptive approach and Dedoose coding software.

## Results

Participants reported stressors at every level of our conceptual model that affected their work-related wellbeing. Stressors in the social, political, and economic

environment included anti-doctor sentiment and medical mistrust exacerbated by the politics of COVID-19 and perceived inadequacies in federal and local government responses. At the organizational level, stressors included policies, programs, and practices (e.g., visitor restrictions, failure to collect input from frontline workers, declining compensation, lack of transparent communication from administrative leaders) and conditions of work (e.g., staffing constraints, unvaccinated patients, decreased family presence). These stressors affected individual physicians and patient outcomes in multiple ways. Participants also identified protective factors at every level that buffered the impact of these work-related stressors.

## Conclusion

Understanding the systems factors beyond the immediate work environment that shape physicians' stress and burnout is essential to improving physicians' work-related wellbeing. Recommended changes for improving physician wellbeing will be discussed.

# Bending the curve on patient messaging

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## Learning objectives

- Method for addressing patient messaging overload for physicians
- Results & successful interventions
- Contribution this effort had on physician well-being

## Project objective/background

Patient-provider communication is of highest importance in health care and patient health maintenance. Patient electronic health portals were released in health systems to address this need and the use of patient portals had slow, but steady growth over time.

Slow and steady, that is, until the Covid-19 pandemic increased consumer demand for electronic communication and drove patient messaging to high and sometimes unsustainable levels, contributing to provider overwhelm and burn-out.

This is true at the University of Utah Health system where efforts have been under way to address the provider burden of patient messaging in ways that support provider resilience, but that also keep the patient-provider communication lines clear and open.

## Methods/approach

The “process” of messaging from the first moment the patient decides to send a message to the end of the message process (i.e. message is resolved) was broken in to 6 key steps. Organizational leaders and staff from across the system were engaged to work on taskforces dedicated to each of the 6 steps and make recommendations that would improve the messaging process for patients, providers, staff or others.

System interventions were completed and measured for 6 months. In 6 months time, the following were observed:

- Reduction in message growth (from +17% to -.025%)
- Message to visit ratio reduced in many clinical areas
- Message to message encounter reduced in many clinical areas
- Subtle system changes such as the order of menus and accessibility of patient DIY have contributed to this impact

- While system changes have slowed the growth and “bent the curve”, we have more iterations to come which have been informed by messaging data.

- Provider locus of control
- Clinic/team locus of control

## Results

- No single intervention exists to address the growing volumes of patient messaging, however multiple small interventions can add up to incremental changes making positive overall impact.

Example: Provider/Team locus of control: One provider group has been piloting the use of MA and Nurse Protocols to manage messages at “top-of-license” and to address provider burden. Overall results are that EVERYONE at every step of this process report being “more satisfied” with the work of messaging.

Key Results:

- Reduced % of messages reaching providers
- Improved message turn-around time for patients
- Response consistency in shared protocols
- Contributed significantly to reduced message-to-messaging encounter ratios

## Conclusion

Early indicators demonstrate the interventions proposed by our taskforces for incremental improvements are reducing the number of messages resulting in thousands of “saved” or “avoided” messages. Additional efforts reduce the overall physician burden in answering the messages that are received.

# Burnout during surgical residency in a Hispanic population

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## Learning objectives

- Shed light upon the crucial need for burnout awareness and prevention, particularly among health care workers.
- Assess burnout levels among Hispanic surgical residents; evaluate those who are most at risk for burnout and those already suffering.
- Assess which factors are contributing to burnout among Hispanic surgical residents.

## Project objective/background

Medical trainees are subject to significant stressors that adversely affect their work performance, quality of life, and patient care, increasing the risk of resident burnout. Despite extensive research efforts regarding medical resident burnout, literature regarding the prevalence of burnout in Hispanic surgical residents has not been evaluated. This study aims to assess burnout in the medical field by exploring burnout rates and psychiatric comorbidity among Hispanic surgical residents.

## Methods

A three-part cross-sectional survey was distributed to Hispanic surgical residents at the University of Puerto Rico Medical Science Campus. Residency programs included Orthopaedic surgery, urology, otolaryngology, general surgery, ophthalmology, obstetrics-gynecology, and maxillofacial surgery. The survey consisted of demographic information, the General Health Questionnaire-12 (GHQ-12), and the Maslach Burnout Inventory (MBI) questionnaire. Descriptive statistics and pairwise correlations were performed to compare groups and responses.

## Results

A total of 95/112 (85%) residents completed all three sections of the questionnaire, with 64.2% (61/95) meeting the criteria for burnout. The average age of residents was 30 years, and 37% were female. Residents reported working an average of 67.6 hours a week. The GHQ-12

indicated that 29.5% of residents reported significant psychiatric morbidity. Earlier stages of residency are associated with higher rates of burnout. In addition, increased work hours and sleep deprivation were associated with higher rates of burnout. However, no correlation was found between marital status, debt level, age, sex, and burnout rates. In addition, psychiatric morbidity (GHQ-12 scale) was associated with higher burnout rates.

## Conclusion

Burnout rates in Hispanic surgical residents were found to be higher compared to burnout rates in non-Hispanic physicians. These are alarming results that suggest current surgical curriculums should address resident well-being by promoting a supportive working culture, and enacting policy that provides resources to lower rising burnout rates.



# Calculating organization specific ROI of investing in provider well-being

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## Learning objectives

- To explain an economics methodology published at the National Bureau of Economic Research that leverages standard organizational data to quantify the comprehensive costs of clinician burnout, setting the foundation of making the business case in investing in clinician wellbeing
- To learn how the economics methodology is applied at SSM Health to calculate the comprehensive cost of clinician burnout and embed well-being across function areas
- To learn about three interventions launched at SSM and quantify the ROI of one of their past interventions to reduce documentation burden, through a retrospective analysis

## Project objective/background

Health care worker burnout costs the US economy billions a year. At the organizational level however, making the business case for investing in worker wellbeing has been challenging as there is not an evidence-based methodology for calculating the Returns on Investments in wellbeing investments. The objective of this paper is three-fold. Firstly, we develop a methodology that quantifies and predicts the comprehensive cost of clinician burnout at health systems that goes beyond turnover using standard organizational data. This sets the foundation for making the business case of investing in clinician wellbeing. Secondly, we will show how the methodology is being applied at SSM Health to embed wellbeing across different function areas. Thirdly, we will walk through three interventions launched at SSM Health (“Care for caregiver professional conversations”, “alleviating documentation burden through technology”, “champion network training with EPIC”) and present a case study where we quantify the ROI of one of their past interventions to reduce documentation burden, which is a known driver of burnout.

## Methods/approach

To make the business case of investing in clinician wellbeing, one must better assess the comprehensive economic impact of burnout at health care organizations. We develop a framework that examines the cost of burnout along two separate channels. The first channel is the effect of burnout on clinicians still working at the organization. To quantify this effect, we analyze the loss in productivity and reduced patient satisfaction among those clinicians experiencing burnout. The second channel is the financial impact of a clinician leaving due to burnout. For each individual clinician, historical data allow us to estimate the replacement cost of their leaving the organization. Replacement cost here is defined as the sum of lost revenue from the number of months a position remains unfilled, recruitment costs, and the lower productivity during the onboarding/training of the new clinician. Combining the two channels gives a better estimate of the cost of the burnout a health system is facing.

We then present three interventions at SSM Health and provide a case study where we estimate the ROI of implementing a specific intervention to reduce documentation burden and improve well-being within an identified clinician population at SSM Health. To do this, we build a machine learning model that assign a turnover/burnout risk score for each individual at SSM Health. For every individual, we also gather data on their productivity, whether they received the intervention or not and document the length of the intervention. We then use statistical methods to calculate the before and after effect of interventions, in terms of changes in the estimated turnover risk and productivity outcomes.

### Results

Our research published at the National Bureau of Economic Research found that clinician burnout costs at a single specialty organization with 500 clinicians was \$20 Million for a one-year period (2021-22). These costs included hard-to-measure and potentially long-term costs that arise from reduced patient satisfaction and lower efficiency. On average, burnout clinicians have 14% lower patient satisfaction.

The preliminary results for estimating the comprehensive cost of clinician burnout and ROI of intervention at SSM Health will be ready in Oct 2023. SSM Health is a health system with 11,000+ providers and a multi-specialty setting across four states, 23 hospitals and 300 ambulatory locations.

### Conclusion

Burnout in the medical field is widely studied, but its economic consequences have been only crudely estimated. This paper seeks to quantify these consequences through a novel conceptual and computational framework, which provide better estimates. Furthermore, we show how the research methodology is actively being applied in a real-life setting, at SSM Health.

# Changing culture in medicine: Addressing mental health and addiction stigma

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## Learning objectives

- Describe stigma pertaining to mental health and addiction within their workplace.
- Apply a multi-modal approach to addressing mental health/addiction stigma in a physician population.

## Project objective/background

In the medical profession, there continues to be stigma regarding mental health and addiction towards patients, colleagues, and self.<sup>1</sup> A priority of the National Plan for Health Workforce Well-Being is to provide support to health care clinicians by eliminating barriers and reducing stigma associated with helpseeking for mental health and addiction. In 2022 through the present, we embarked on an anti-stigma campaign to decrease stigma around mental health/addiction in our physician population.

## Methods

This study used survey research methods. As part of our wellness survey, we asked our physicians to complete the Opening Minds Survey, which measures three subscales of stigma: General Attitude, Preference for Social Distance, and Disclosure and Help-Seeking.<sup>2</sup> The survey data, along with recommended interventions from the National Alliance on Mental Illness (NAMI), the Mental Health Commission of Canada, and local mental health experts, enabled us to focus on the following strategies:

- Create and disseminate advertisements to normalize utilization of psychologicalPPE resources
- Share locally resourced stories regarding struggles with mental illness and addiction
- Broadcast a locally created suicide prevention talk during National Suicide Prevention Awareness Month
- Raise awareness about licensure and credentialing as it applies to mental illness/addiction in our state and in our medical group

- Design, produce and distribute “The Me You May Not See” anti-stigma video featuring our own physicians. Design, produce and distribut three additional vignettes from the raw footage obtained in creating this first video

## Results

We had a sample size of N=504 from the total N=3,713 physicians who completed the Opening Minds Survey. (Figure 1) The subscale, Disclosure and Help-Seeking, showed the most bias. (Figure 2) 156 advertisements were distributed to help normalize the use of mental health/addiction resource. (Figure 3). 35 local testimonials were shared. The suicide prevention talk and licensure and credentialing information was viewed close to 100 times, the later was also mailed directly to 10,000 physician’s homes. Finally, approximately 8,000 physicians viewed “The Me You May Not See” video featuring our own physicians sharing their personal stories of mental health/addiction struggles and hundreds more the additional vignettes released in 2023.

## Conclusion

Preliminary results from our campaign are all subjective and include verbal and written gratitude from our physician leaders and colleagues. (Table 1). Objective follow-up data will be collected in September/October of 2023 to help determine if strategies were successful in changing opinions about disclosure and help seeking for mental health/addiction. Our study is the first to be implemented in a large cohort of physicians. Sustainability of anti-stigma efforts warrants further investigation. Future research should look at additional interventions and should include efforts that focus teachings on those entering the medical profession.

Figure 1

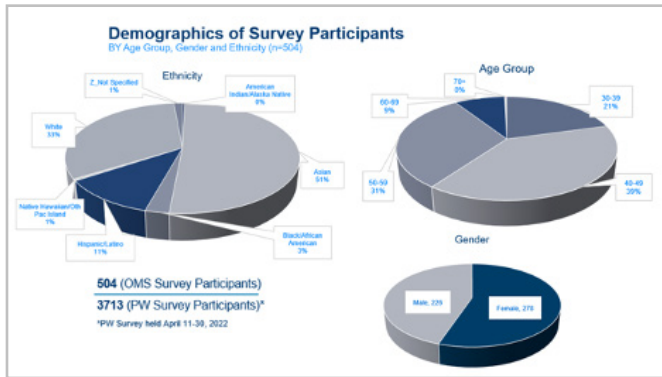
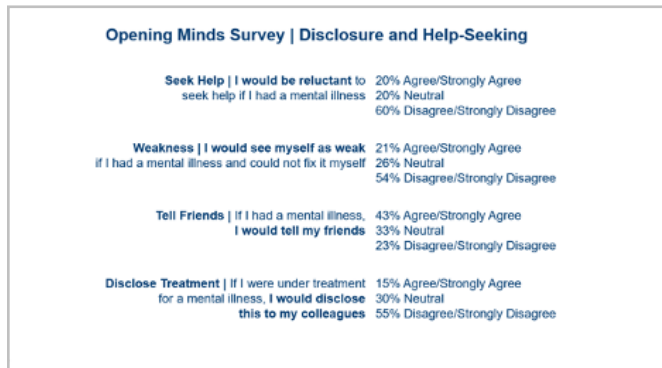


Table 1

I can't express how grateful I am to these courageous physicians for sharing their stories, incredibly moving. Thank you, so much.
Thank you for this.
Thank you for sharing the feelings you want to express but are afraid of possible consequences... Thank you, partners!
I truly believed this video helped reduce the stigma around mental health and it definitely helped us all feel a little less alone while going through it.
Incredible video - thank you to all who shared their story.
Thank you for making these stories visible!
Beautiful. Thank you. Grateful beyond words for these physicians in being vulnerable and sharing their stories.
Thank you, the shared stories are incredible – grateful.
I'm incredibly humbled and inspired by everyone's courage and vulnerability.
Thank you for your courage, that was very impactful. It hit home
Thank you for all you shared and for your tremendous honesty and courage. You have already helped me.

Figure 2



1. Mental illness-related stigma in health care: Barriers to access and care and evidence-based solutions; Knaack et al. Health Manage Forum. 2017 Mar; 30(2); 111-116
2. Opening Minds Stigma Scale for Health Care Providers (OMS-HC): Examination of psychometric properties and responsiveness; Modgill et al. BMC Psychiatry 2014, 14:120

Figure 3



# Clinician well-being assessment and interventions in Joint Commission accredited hospitals and Federally Qualified Health Centers

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## Learning objectives

- Identify the proportion of Joint Commission accredited hospitals and Federally Qualified Health Centers (FQHCs) that evaluated the prevalence of clinician burnout in the last three years.
- Determine the proportion of Joint Commission accredited hospitals and FQHCs that have taken actions to address clinician burnout and identify the nature of those interventions.
- Identify differences in actions taken to address clinician well-being among organizations that have (or have not) appointed a chief wellness officer.

## Project objective/background

Clinician burnout is a longstanding national problem threatening clinician health, patient outcomes, and the health care system. The aim of this study is to determine the proportion of hospitals and FQHCs that are measuring and taking system actions to promote clinician well-being.

## Methods/approach

An electronic questionnaire was sent to a national sample of 1,982 Joint Commission accredited hospitals and 256 accredited FQHCs from April 21 to June 27, 2022. The questionnaire assessed the current state of organizational efforts to assess and address clinician well-being. Outcomes of interest included: The proportion of hospitals and FQHCs that had assessed the prevalence of clinician burnout, established a chief wellness officer position, established a wellness committee, made clinician well-being an organizational performance metric, and implemented other activities/interventions that target clinician burnout.

## Results

A total of 481 (21.5%) organizations responded to the survey (hospital n=396 [20%], FQHC n=85 [33%]). Response rates did not differ by organization size, type, teaching status or urban versus rural location. Approximately one third (34%) of the organizations in the sample had conducted an organizational well-being

assessment among clinicians at least once in the last three years. While nearly half of responding organizations reported implementing some kind of intervention to address clinician burnout, only 28% of organizations had adopted a comprehensive approach to address clinician well-being/burnout. Only 10.1% of hospitals (n=31 of 306) and 5.4% (n=4 of 74) of FQHCs reported having an established senior leadership position responsible for assessing and promoting clinician well-being at the organization level, and less than half (29.3% FQHC, 37.6% hospitals) of organizations reported having an established wellness committee. Among 500+ bed hospitals, 61% had conducted an organizational well-being assessment, 76% had established a well-being committee, 78% had implemented interventions to promote clinician well-being and 27% had established a chief wellness officer role.

## Significance

Although half of Joint-Commission accredited hospitals and FQHCs reported taking steps to improve clinician well-being, only one third are measuring clinician well-being, and few have established a chief wellness officer position or taken a comprehensive approach to advance clinician well-being as an organizational priority. Organizational efforts to improve clinician well-being improvement are unlikely to be successful without measurement and leadership in place to drive change.

# Cultural transformation of a multispecialty safety net physician group

## Author

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## Learning objectives

- Review lessons from the first two years of a newly formed physician group representing over 300 physicians across 27 specialties serving a large safety net health system in Oakland, California.
- Understand how to design cost-effective, well-received programs to address physician well-being including family caregiving leaves, family building, mental health, and non-clinical professional development.
- Learn how to transform physician culture to address the holistic needs of a demoralized, high turnover physician workforce towards building, growing, and motivating this workforce.

## Project objective/background

This session offers a behind-the-scenes look at the maturation of a newly formed subsidiary physician group featuring over 300 physicians from a diverse array of specialties, within a large safety net health system. In 2020, at the time the group was formed, it lacked a clear leadership structure, was plagued by a survivalist culture impacted by COVID and a fragmented relationship with administration, and observed unprecedented turnover.

Taking an innovative approach to recruitment, benefits programs, and building our physician culture, we have seen unprecedented stability, improved morale, and a steep reduction in attrition.

## Methods/approach

Our approach to transforming the culture and morale of our physician group consisted of three main activities:

- Creating narratives of resilience and optimism: We used multiple venues to develop a shared story to acknowledge the real concerns, fears, and challenging work environment for our physicians, particularly through COVID.
- Implementing holistic support programs: We swiftly began programs to address the most vulnerable aspects of our workforce, including fully paid parental leave, a fertility and adoption reimbursement, and a mental health benefit. Upcoming programs include caregiver leave (for eldercare) and a sabbatical program for senior physicians.

- Laying the foundations for a mission-oriented, high performance culture: To promote engagement, we established well-functioning physician run committees; training and empowering physician leaders to generate operational solutions; and recruitment and retention programs that promote a diverse and inclusive group.

## Results

As a result of our transformative efforts, we have seen the following results:

- Stabilized attrition with a 65% reduction in turnover in the last 2 years;
- Successful recruitment with a 30% headcount growth in just 18 months;
- Broad utilization of parental leave, professional development, and mental health programs;
- Physician Net Promotor Score improvement from -14 to 24 in 12 months.

## Conclusion

The media cites that one in five physicians will leave the workforce in the next five years. Despite the increasing challenges of American medicine, we show that a key set of strategic, culture-enforcing decisions can in fact turnaround morale, motivation, growth, and retention of a large multispecialty physician group.



# Development of a Clinician-Reported Experience Measure of Organizational Compassion (CREM-C) for use in health care

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## Learning objectives

- Describe sources of clinician suffering in the workplace
- Define organizational and team compassion in health care
- Describe methodology used to create CREM-C
- Articulate domains of organizational/team compassion and provide examples of potential CREM-C items

## Project objective/background

Organizational compassion in health care is the proactive, systematic, and continuous identification, alleviation, and prevention of workplace suffering for clinicians. The overarching purpose of this project is to create a clinician-reported experience measure of compassion (CREM-C) that measures the extent to which clinicians experience compassion within teams and from organizations.

## Methods/approach

To identify and define domains of organizational compassion, we undertook qualitative interviews with pediatric palliative care clinicians of various roles (N=22). A moderator's guide was developed to explore experiences of suffering and compassion in the workplace. Transcriptions were coded and a combination of inductive and deductive qualitative analysis utilized to create the initial codebook, followed by focused coding and iterative codebook revision to identify and define domains of organizational compassion. Potential CREM-C items were generated for each domain based on direct quotes and iteratively refined, binned, and winnowed by the research team. Four hundred and thirty-seven potential items were generated in the first round and winnowed to 52 potential items over 5 iterative rounds. A modified Delphi survey of clinicians (N=80) was utilized to rank potential items importance in inclusion in CREM-C and provide qualitative data to improve each item. Cognitive interviews were undertaken to refine candidate items.

## Results

Domains of organizational and team compassion in health care were feeling cared about; feeling valued; being resourced do one's job well; relational compassion (proximal environment or team); structural compassion (distal environment or organization); and compassionate leadership. Delphi results were that positive worded items ("I feel cared about in my team") were felt to be more important for inclusion than negatively worded items ("I feel that my organization's responses to employee suffering are meaningless"). Preliminary cognitive interview results reveal the need for more clarity in the valence of each item, i.e., who is the compassion actor the item is querying (e.g., organizational leader versus team leader vs team member).

## Conclusion

Clinicians deserve to be cared for as compassionately as they care for patients. New language and tools are needed to describe and measure clinician experiences in the workplace. We have begun the development of a clinician-reported experience measure of compassion (CREM-C) which will provide organizational and team leaders with a novel tool to quantify clinician experiences in health care. Our next steps will be to conduct cognitive interviews with clinicians to refine item wording, comprehension, and scaling before moving on to preliminary measure testing. Ultimately, this tool can be used to understand how clinician experiences of suffering and compassion predict and relate to constructs such as turnover, resilience and burnout, as well as predicting patient experiences and outcomes.

# Emotional exhaustion and intentions to leave among health care workers

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## Learning objectives

- Understand the prevalence of emotional exhaustion among a large diverse population of health care workers.
- Learn the relationship between emotional exhaustion symptoms and intentions to leave among health care workers.
- Compare the relationship between emotional exhaustion symptoms and intentions to leave, both for physicians and the larger health care workforce.

## Project objective/background

Emotional exhaustion (EE) is common among health care workers, with widespread personal and professional consequences. EE also threatens workforce stability, with known associations between dichotomized EE and physician intentions to leave (ITL). However, less is known about the relationship between the spectrum of EE symptom severity and ITL, nor of EE and ITL among the larger health care workforce.

This study sought to quantify the relationship between EE symptoms and ITL among a large, diverse population of health care workers, and compare EE-associated physician ITL with that of the larger health care workforce.

## Methods/approach

This cross-sectional observational study is a secondary analysis of the SCORE survey distributed through the Michigan Health and Hospital Association Keystone Center as part of routine patient safety and quality measurement. The EE subscale of SCORE consists of 5 items adapted from the 9-item EE subscale of the Maslach Burnout Inventory. The ITL scale consists of 3 items related to the desire and plans to leave one's current position.

We excluded responses missing data for the EE and/or ITL scales and regressed ITL on continuous EE score for the full workforce and for physicians separately, with work setting as random intercept, and job position, number of years in specialty, and work setting classifiers as fixed effects. Box-Tidwell modeling was used to evaluate for linearity between EE symptoms and ITL.

## Results

Of 23,853 distributed surveys, 14,682 (62%) were returned with full EE and ITL responses. Respondents provided medical (6203, 42%), surgical (1466, 10%), or indirect patient care (7013, 48%), with 2976 (21%) reporting >20 years of experience and 3520 (34%) reporting 11-20 years. Most common roles were nurse (4042, 28%), admin support (1723, 12%), and technologist (984, 7%). Physicians were 371 (2.5%) of the respondents.

Median EE score was 40 (IQR 15-65) on a 0-100 scale. Median ITL score was 33 (IQR 0-58) on a 0-100 scale, with 2156 (15%) concerning for ITL (score  $\geq 75$ ). Each 10-point increase in EE score associated with ITL (OR 1.60, 95%CI 1.56-1.64), after adjustment for personal and professional factors. Results were similar when limited to physicians only (OR 1.59, 95%CI 1.35-1.88). Relationships were linear across the spectrum of EE symptom severity, including those with low EE symptoms.

## Conclusion

EE symptoms are common among health care workers and linearly associate with ITL independent of other factors, for physicians and non-physicians alike. Efforts to improve well-being along the full spectrum of EE symptoms may enhance workforce stability.

# Evaluating the impact of a system wide peer support program on pediatric critical care provider emotional distress and Second Victim Syndrome

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## Learning objectives

- The importance of peer support programs in health care systems
- Understanding the prevalence of Emotional distress and Second Victim Syndrome in ICU providers
- Desired types of peer support are consistent among ICU providers

## Project objective/background

Pediatric critical care providers are at risk of emotional distress and Second Victim Syndrome (SVS) after a poor patient outcome, unanticipated adverse event, medical error, or patient related injury. Peer support programs are crucial to mitigate this risk. We sought to determine the effectiveness of our health care system's peer support programs in reducing critical care providers' emotional distress.

## Methods/approach

A validated survey tool, the Second Victim Experience and Support Tool (SVEST), was sent to all intensive care providers (n=900) in our pediatric health care system. The current (May 2022) survey results were compared to the same survey that was distributed in January 2020. The period between the two surveys included a significant increase in the number of peer supporters, increased awareness of the peer support programs, and the SARS-CoV-2 pandemic.

## Results

The response rate in 2022 increased to 40% (n=367) from 28% (n=304) in 2020. Respondents did not differ significantly in age, gender, home unit, role, or years of experience. Significant decreases occurred in the number of providers that experienced psychological distress (41% to 29%;  $p<0.001$ ), physical distress (24% to 15%;  $p<0.001$ ), questions of self-efficacy (30% to 24%;  $p<0.001$ ), and absenteeism (21% to 17%;  $p<0.001$ ) secondary to a difficult patient event or experience. Consideration of turnover after an event increased from 23% to 26% ( $p<0.001$ ). These results were consistent in cardiac intensive care unit (ICU) providers. Pediatric ICU providers had significant decreases in all domains other than physical distress. Neonatal ICU providers had significant agreement only in questioning self-efficacy (42% to 20%;  $p=0.02$ ). Desired support did not change significantly between survey periods with "the ability to take time away" (74% and 73%), "a peaceful location to recover" (64% and 70%), and "a respected peer to discuss the details of what happened" (83% and 78%) being most desired.

## Conclusion

Increased numbers of peer supporters, awareness of peer support programs, and unit-based peer support protocols had a positive impact on staff and provider emotional distress and SVS in our pediatric health care system. Developing and deploying peer supporters is crucial to staff well-being and resilience in high stress ICU and inpatient environments.

Figure 1. Dimensions and outcomes from SVS event (\*All p<0.001)

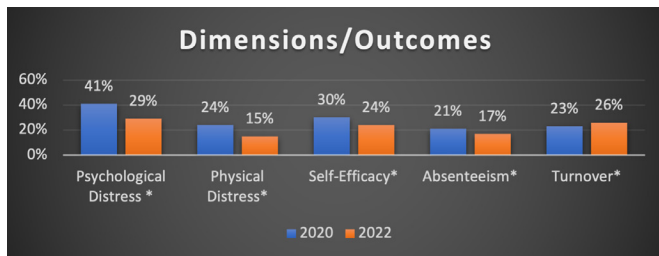
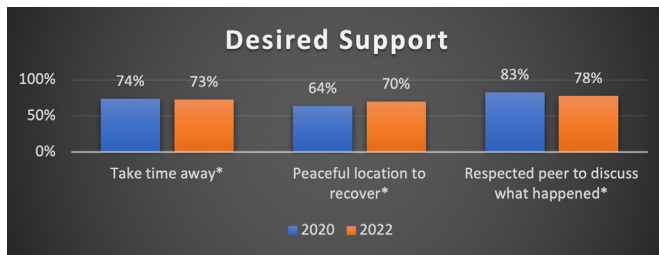


Figure 2. Desired support following an SVS event (\*All p=NS)



# Identifying novel inhibitors of workplace support and the importance of value congruence in general surgery residency training

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## Learning objectives

- Express the importance of workplace support for resident well-being as informed by Job Demand Resource Theory and Implementation science.
- Characterization of novel inhibitors of workplace support among General Surgery residents.
- Describe targets for operationalization of workplace support. Propose interventions targeting value congruence as means of minimizing resident languishing and increasing workplace support.

## Project objective/background

Workplace support is critical to resident wellbeing but how to implement and operationalize it in general surgery (GS) residency training remains unclear. We sought to explore resident perceptions on workplace support to identify factors that inhibit support, and to assess the relationship between measures of workplace support and individual global wellbeing.

## Methods/approach

This mixed-methods study of GS residents included a national survey of 16 ACGME-accredited academic residency programs representing Northeast, Southern, Central, and Western U.S. regions. Part one included focus groups from 3 programs (conducted between 2021 and 2022), followed by the anonymous national survey (May 2022), both involving junior, senior, and research residents. Focus group responses were compiled and analyzed using inductive and deductive thematic analysis techniques and a published 6-step approach. Codes, concepts, and themes were iteratively reviewed, refined, discussed, and described in the context of Job Demand-Resource theory,

past work, and current aims. Association between value congruence and languishing, and feeling valued and languishing, was assessed using logistic regression.

## Results

28 residents participated the focus groups which revealed three major themes as perceived inhibitors of workplace support: lack of trust in residency program, poor communication from leadership, and unfair systems in residency training. 251 residents (response rate 31%) responded to the survey which revealed a low perceived value congruence with leadership and a low sense of feeling valued at the levels of residency, departmental, and institutional leadership, were significantly associated with low global wellbeing and languishing.

## Conclusion

Our findings highlight novel inhibitors of support among GS residents. Results offer targets for operationalization and emphasize the importance of value congruence, which requires further characterization amongst residency programs and institutional leadership to identify more actionable steps.

# If you build it, will they come ... And will it work: Outcomes and key metrics from a psychological first aid training program for health care leaders

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## Learning objectives

- Understand one strategy to evaluate Psychological First Aid Training effectiveness.
- Identify areas that saw the most growth and least growth after Psychological First Aid training.
- Recognize barriers to creating and measuring meaningful metrics to assess Psychological First Aid and how to overcome them.
- Summarize future directions for assessing Psychological First Aid training.

## Project objective/background

Health care professionals face a wide range of stressful events that may harm their mental health. One-way to help individuals navigate these events is through Psychological First Aid (PFA)- an evidence-based approach developed to support the wellbeing of individuals and teams in high-risk occupations. Although PFA training is endorsed by a wide range of professional organizations, literature on strategies to evaluate PFA remains sparse. This project contributes to the health care professional wellbeing field by showcasing a PFA program's evaluation strategy.

## Methods/approach

Quantitative and qualitative outcome metrics were captured via surveys at three times: pre-training, post-training, and six-month follow-up.

Data was analyzed in four-ways. First, descriptive statistics of pre-training results established baseline measures. Next, pre-training and post-training results were compared to measure changes in responses; significance testing conducted using Wilcoxon Sign-Rank Tests. A fourth analysis combined responses across all three surveys to measure within individual change across time; significance testing utilizes Friedman Tests. Lastly, qualitative data was continually examined for re-occurring themes.

## Results

Since October 2022, there have been 18 PFA training sessions with a total attendance of 583 leaders (53% of all leaders eligible for training). Among participants 79% completed the pre-training survey and 39% completed the post-training survey.

Compared to pre-training responses, participants at post-survey had a 14% increase in self-reported ability to communicate compassionately with individuals affected by a stress injury ( $p < .01$ ), an 17% increase in their self-reported ability to calm individuals who are experiencing stress after an event ( $p < .01$ ), and a 36% increase in their self-reported ability to provide realistic information about assistance services for team members affected by stressful events ( $p < .01$ ). Participants at post-training reported a 43% increase in their confidence to recognize a stress injury ( $p < .01$ ) and a 30% increase in their confidence to check-in with a team member after a stress injury ( $p < .01$ ). Six-month follow-up survey data indicates that trained participants both retained PFA skills and employed PFA when colleagues demonstrated a stress injury. Lastly, qualitative data showed that information about resources and how to identify stress injuries were listed as the most useful aspects of the training.



## Conclusion

This project provides a much-needed evaluation strategy for understanding the effectiveness of PFA training.

Although this approach found promising results, it relied solely on self-reported survey data and acts only as a first step in evaluating PFA training. Future studies may want to investigate if colleagues recover quicker from stress injuries with a PFA-trained leader.

# Job demands resources, conservation of resources, and professional well-being

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## Learning objectives

- Understand the Job-Demands Resources and Conservation of Resources theories.
- Discover how professional agency, workload, flow, and pace effect work-life balance, burnout, and intent to leave.
- Explore remedies to improve professional wellbeing, work-life balance, and retention.

## Project objective/background

Health care has been described as “strangling in red tape”, “hassle factors”, and “GROSS = getting rid of stupid stuff”. The Job-Demands Resource (JD-R) theory by Bakker and Demerouti describes when demands out-weigh resources, stress and burnout can ensue. The Conservation of Resources (COR) theory by Hobfall describes withdraw to prevent depletion (e.g. burnout), to conserve resources. Professional agency is often considered a resource to manage demands. We aim to assess the mechanisms, and the potential effects on burnout, retention, and ability to maintain work-life balance.

## Methods/approach

The January 2019 wellness survey of attending physicians across a large health care system included academic, employed, and private practitioners. We assessed professional agency (working top of license, autonomy, authority, and the prior approval process), hassle factor (time spent documenting ML, time documenting at home ML, and time completing EHR tasks others could do), hustle factor (short staffed, working in crisis mode, sacrificing quality for productivity, and hectic chaotic atmosphere ML), and control over demands (control over volume MT, hours, MT days), resource power (access to resources to do job optimally, power to improve things), team building (ability to select teammates, set expectations, celebrate). Outcomes included presence or absence of burnout (PFI), intent to leave ( $\geq$  moderate), and ability to maintain work-life balance ( $\geq$  mostly no).

Analysis included descriptive statistics, t-test, Cohen-D effect size (ES) in terms of differences in outcomes in relation to potential predictors (0.2 small, 0.5 moderate, and  $\geq$  0.8 large).

## Results

With 31% response rate, this cross-sectional study of 1277 physicians is 47% academic faculty, 61% male, 80% white, and average age 46, consistent with the larger population. The constructs with a largest effect predicting burnout, intent to leave and inability to maintain work-life balance were lack of professional agency, hustle factor, and resource power. (Table)

## Conclusion

Consistent with JD-R, lacking professional agency and control over the work load, flow, and pace of work were associated with lack of work-life balance, burnout, and intent to leave, many with particularly large ESs. Per COR, withdrawal from practice may be necessary to protect from being depleted. To build the workplace of the future, organizations can consider giving physicians more professional agency and resources to control workload, reduce rapid work pace and thus more efficiently manage their work. Longitudinal studies should test the impact of these work conditions on reducing burnout and intent to leave the organization.

Table

Independent Predictors:	Cohen's D Effect Size of Differences in Outcomes		
	Burnout (CI)	Intent to Leave	Lack Balance
Professional Agency	-1.00 <del>-(1.12-0.88)</del>	-0.47 <del>-(0.47-0.59)</del>	-0.70 <del>-(0.83-0.58)</del>
Hustle Factor (pace)	-0.96 <del>-(1.09-0.85)</del>	-0.42 <del>-(0.55-0.30)</del>	-0.66 <del>-(0.78-0.53)</del>
Resource Power	-0.86 <del>-(0.98-0.74)</del>	-0.68 <del>-(0.81-0.56)</del>	-0.58 <del>-(0.70-0.45)</del>
Control over Demands (load)	-0.70 <del>-(0.81-0.58)</del>	-0.26 <del>-(0.38-0.14)</del>	-0.67 <del>-(0.79-0.54)</del>
Hassle Factor (flow)	-0.55 <del>-(0.67-0.43)</del>	-0.28 <del>-(0.40-0.16)</del>	-0.74 <del>-(0.87-0.62)</del>
Team building	-0.42 <del>-(0.53-0.29)</del>	-0.21 <del>-(0.33-0.09)</del>	-0.36 <del>-(0.48-0.24)</del>

Factors oriented from positive -> negative. All t-tests demonstrated statistical difference between groups (p<0.001).

<sup>ML</sup>=factor authored by Dr. Mark Linzer (Mini-Z)

<sup>MT</sup>=factor authored by Dr. Mickey Trockel (PFI, Control over Demands with PWAC)

# Large public university funding model for physician wellness

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## Learning objectives

- To describe how a large, public academic medical center accesses multiple levels of high-level leadership to fund its physician wellness program.

## Project objective/background

Prior to the pandemic, growing awareness of physician experience challenges were brought to the UCSD leadership through grassroots efforts and enthusiasm that had organically and independently developed throughout the 10,000 employee, 2,700 physician health system. The additional stresses of the COVID-19 pandemic elevated these pre-existing concerns and highlighted the dangers of physician burnout, including the risk of physician suicide. In 2009, UCSD had already established the Healer Education, Assessment, and Referral (HEAR) Program, a physician suicide prevention program. However, this program was not linked with a larger physician wellness strategy. The need for an overarching physician wellness program became acute and securing adequate funding became a priority.

## Methods/approach

In Spring 2021, UCSD established the Wellness Oversight Committee whose members reached consensus on creation of the Physician Wellness Fund, a pooled funding model, to address resource requests from the Physicians Wellness Steering Committee that build a robust administrative structure and address systemic causes of burnout. All levels of UCSD higher leadership contributed to, including the Chancellor, the Vice-Chancellor for Health Sciences, the Health System Chief Executive Officer and the Dean of the School of Medicine. Consistent with their mission, philanthropic partnership from the the T. Denny Sanford Institute of Empathy and Compassion augmented these resources.

## Results

The Physician Wellness Fund (\$2 million) is utilized for the following components:

- Physician Wellness Office, with physician wellness director (0.3 FTE), Program Manager (1.0 FTE) and Executive Assistant (1.0 FTE),
- Department Wellness Directors Program (0.1 FTE for > 1 physician in each clinical department to lead local wellness programming; also 0.5 FTE funding for Department Wellness Director Committee Chair),
- Development/launch of Physician Wellness website, and
- HEAR Program, led by a psychiatrist supervising mental health counselors.
- Additional plans include funds for a behavioral health coaching & mental health app for all physicians and a formal peer support program.

The philanthropic partnership also funds competitively reviewed physician wellness research proposals and the GME Wellness Director.

## Conclusion

Top leadership support and funding are essential to the success of the UCSD Physician Wellness Program. The transparency of “income and expenses” clearly demonstrates institutional commitment. The institution will track and analysis this investment data in order to facilitate continuous improvements in the future.

# Mind the performance gap: Using gender-based data to retain and engage women physicians

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## Learning objectives

- Review findings from national physician survey data to reveal differences for female and male physicians.
- Understand drivers of intent to stay across male and female physicians.
- Propose 2 strategic areas for organizational focus to engage and retain female physicians.

## Project objective/background

Though women physicians make up more than one-third of practicing physicians in the United States, and over 50% of medical school graduates, COVID-19 illuminated the increased demands on women both at work and at home. Female physicians continue to report lower intent to stay, and this metric has not improved. Health care organizations cannot afford to lose their female physicians and must focus on specific areas that drive retention and engagement.

## Methods/approach

This research analyzed over 82,048 physician responses on engagement surveys for the calendar year 2022. Items use a 5-point Likert type scale, (1) strongly disagree to (5) strongly agree.

## Results

Data gathered from engagement surveys yielded scores on both composite outcome metrics and individual items.

- Resilience overall: women scored .07 lower than men
- Activation (connection to meaning and purpose): both groups scored the same
- Decompression (ability to disconnect and recharge): women scored .12 lower than men

Compounding lower scores on decompression items, females scored notably lower than males on items related to their experience in professional settings:

- Appropriate staffing levels (F: 2.72; M: 2.99)
- Involvement in decision-making (F: 3.39; M: 3.55)
- Reasonable job stress (F: 3.17; M: 3.41)

For intent to stay – likelihood to remain with the organization 3 years from now – seven of the top-ten drivers (based on linear regression analysis) overlap. Unique drivers include recognition, patient safety, and satisfaction with the nursing staff for males; while female intent to stay is driven by organizational respect for physicians, collegiality among physicians, and ability to raise workplace safety concerns.

## Conclusion

Based upon these findings, organizations should prioritize a continuous listening approach (through crowdsourcing, digital focus groups and other listening strategies) to identify and prioritize solutions. Two major areas of opportunity include flexibility and respect.

Flexibility of clinical schedules, telehealth, job-sharing, working remotely part-time, parental leave, and childcare support, are critical to help close the decompression gap and retain female physicians.

Respect can be increased by including women in decision making and increasing diversity in management and care teams. Authentically listening to female physicians, especially around care concerns, elevates both the physician and patient experience.

# Mountains of modules: Mandatory training redesign to improve physician wellness

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## Learning objectives

- To quantify the time requirements for mandatory online training modules on physicians at a large university health system,
- To describe variations in mandatory online training module completion across specialties, and
- To identify redesign targets to reduce burden for physician required to complete mandatory online training modules.

## Project objective/background

Mandatory online training modules are commonly used in health care organizations to meet regulatory compliance. In addition, despite limited evidence, required training modules are used in an effort to improve patient safety and quality of care. These well-intentioned efforts have led to growing burden for physicians and detracted from physician wellness. This project aimed to explore aspects of the burden of mandatory online training modules, an uncompensated activity, by examining data from an online training library at a large, public academic medical center. In this systematic evaluation of module completion data, we characterize the physician burden and identify opportunities for module redesign that maintain regulatory compliance and reduce burden.

## Methods/approach

We analyzed module completion data for all physicians from 18 clinical departments who completed at least one (of multiple assigned) mandatory online training module between 01/01/2022-02/14/2023. Our analysis involved the six mandatory training modules with the highest completion counts. Cohort demographics included department and years at institution. Module completion variables included the number of completed modules, time expended, and time of day for module initiation, and proportion of effort within traditional business hours

(6am-6pm) and on weekends (used as an imperfect proxy for personal time). Potential areas for improvement were identified through qualitative assessment with module owners.

## Results

Over 1,100 academic physicians completed at least one mandatory training module; not all physicians completed all assigned modules. Table 1 displays the data for the six modules with the highest completion counts. Off hour and/or weekend module initiation occurred for 32% of modules; there was significant specialty variation (Pathology [11%] – Urology [41%]). The inter-quartile range for completion of a single module was 20-74 min (median=35 min). Physicians who completed all six modules would have spent an estimated median time of 296 min (4.9h). There was significant variation in median completion time of a single module by department: Neurosciences (29 min; IQR 18, 58) – Urology (44 min; IQR 24, 75).

## Conclusion

“Off-hours” completion of mandatory training modules was common in our study population, suggesting that there is substantial burden of this uncompensated effort. Although the 24-7 responsibilities of many physicians make it difficult to precisely measure “off-hours”, the



high proportion of “off-hours” module starts suggest that this may be a modifiable factor that could mitigate physician burnout. The significant variability in module completion times and variation across specialties suggests that the physician focus on the training activity may vary. The principles of adult learning and relevance of content are redesign opportunities to reduce the burden associated with mandatory online training. In response to these findings, health care organizations prioritize physician wellness, alongside regulatory compliance and educational needs, in any mandatory online training modules.

Table 1.

Required Training Module Topic	Completion Count 2022-2023	Median Time Elapsed min (IQR)	Weekend Start (%)	Off-Hours Start (%)	WE or OH Start (%)
Cyber Security Awareness Fundamentals	1114	47 (37,73)	19%	16%	29%
Fraud, Waste, and Abuse Health Sciences	1161	31 (24,54)	20%	15%	31%
Preventing Harassment & Discrimination (*required 2h minimum duration/2 years)	723	136 (114,237)	17%	15%	28%
Privacy Awareness (HIPAA)	1190	24 (19,40)	22%	17%	33%
Professional Standards	1178	7 (2,17)	22%	16%	34%
Workplace Safety/Environment of Care	1150	51 (32,85)	22%	17%	34%

# Operational leaders employ improvement science to design data-driven interventions that enhance physician well-being

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## Learning objectives

- Understand the key drivers of burnout and professional fulfillment across a large medical group
- Learn about tools that operational leaders can use to better understand and address factors impacting physician well-being
- Apply improvement science to designing data-driven interventions that enhance physician well-being

## Project objective/background

The Permanente Medical Group (TPMG) consists of 10,000 physicians practicing throughout northern California. TPMG is committed to a comprehensive strategy aimed at mitigating burnout and supporting the professional fulfillment of our physicians. We recognize that we cannot be successful if our strategy is siloed in a regional CWO office or solely with a group of wellness leaders. Therefore, a foundational tactic in our strategy is empowering operational leaders, such as department chiefs, with physician feedback data that can be used to drive continuous improvements at the department-level.

## Methods

After extensive review of the literature and relevant measurement instruments, we developed a 15-item survey that measures the determinants of physician burnout and professional fulfillment including camaraderie, clerical burden, equity, professional development, psychological safety, recognition, autonomy, workload, etc. This survey has been deployed annually across our 10,000 physicians (beginning in 2019, with the last survey completed in December of 2022)

The results from this survey are provided to operational leaders, including chiefs, with an expectation that they will use this data to facilitate conversations about the state of physician well-being in each of their departments or specialties. These leaders are equipped with tools to employ an improvement science approach towards co-designing department-level interventions that improve well-being.

## Results

In each of the past four years, the response rate for this survey has been at least 60%. Over this time, TPMG's strengths (highest scoring items) have remained consistent: ability to connect with patients, community and camaraderie, and feeling engaged with the work. These items ranged from 3.8 to 4.2 on a 5-point Likert scale.

The 4-year survey trends have also indicated that our most significant areas of opportunity were clerical burden, autonomy, workload, and professional development. These themes have consistently been the lowest scoring items on the measure, with an average of 2.6, 3.2, 3.1, and 3.3, respectively.

After the survey closes each year, results are shared with the chiefs who, through discussion with their physicians, identify tests of change. The most prioritized areas for department-level tests of change have included clerical burden, workload, and community and camaraderie.

From 2021 to 2022, survey results showed improvement in 12 out of the 15 items (see attached).

## Conclusion

Physician feedback data about the determinants of burnout and professional fulfillment can be used by operational leaders to drive measurable improvement in physician well-being through department-level tests of change.

# Pebbles in your shoe: Creating a culture of continuous conversation

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## Learning objectives

- Demonstrate how an inspired workforce creates a culture of continuous communication.
- Demonstrate how effective crowdsourcing strengthens strategic goal alignment.
- Highlight how an engaged workforce can solve operational inefficiencies that negatively impact their wellness.

## Project objective/background

Burnout among clinicians and health care workers is at a record high. The Institute of Health care Improvement's (IHI) "Joy @ Work" philosophies state people will be happier at work if they can simply do their assigned responsibilities without hassle.

The Wellness Committee of TSPMG, a multi-specialty medical group with more than 1,200 employees and clinicians, created the Pebbles iChallenge so our workforce could escalate operational inefficiencies within the organization. Using innovative technology, employees were able to submit "pebbles in their shoes."

## Methods/approach

We developed an interactive, fun "people campaign" in which employees would submit issues, but then collaborate with each other and agree on the top issues to solve.

## Results

After receiving more than 2,300 comments/votes, employees and executives agreed on 163 "pebbles" to fix. The "pebble" below led to an organizational change that reduced clinician anxieties about follow-up appointments:

**Submitted Idea:** "We need a better way to track waitlisted patients!"

**Description:** An automated waitlist system would help fill near term cancellations without handwritten notes.

**Value:** Improved care experience for patients who were thrilled to get a same-day appointment. Reduced stress for clinicians by eliminating manual efforts to track patients who wanted sooner care.

**Solution:** "Fast Pass" was launched and provides an electronic way to schedule patients in available appointment slots. On average, patients wanting earlier appointments got one 12 days earlier and this functionality enables clinicians to work at top scope.

## Conclusion

Innovative, social media like, technology allowed our workforce to build connections across departments. It also allowed for real-time leader engagement and feedback that both validated and helped direct organizational goals.

Traditional surveying left our workforce asking, "why speak up if nothing gets done about it?". The Pebbles iChallenge changed the faith structure within our organization because our workforce truly felt heard, and they saw a tangible commitment to solving pebbles! The term 'pebble' has become common vernacular and we have engaged staff that is committed to improving their Joy at Work.

# Prevalence and predictors of intention to leave current institution in academic physicians

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## Learning objectives

- To describe the proportion of academic physicians intending to leave their current institution within the next 2 years
- To describe the relationships amongst burnout, professional fulfillment, and intention to leave
- To evaluate other factors associated with intent to leave after adjusting for burnout and professional fulfillment

## Project objective/background

Physician turnover interrupts care delivery and places a financial burden on health care systems. Burnout is associated with intention to leave (ITL), but less is known about other contributing factors.

## Methods/approach

Academic medical institutions participating in the Health care Professional Well-being Academic Consortium (PWAC) administered a validated survey of ITL, professional fulfillment (PF), burnout, and other well-being variables. Descriptive statistics were used to describe characteristics of the study cohort. ITL was defined as indicating at least a moderate intention (a score of 2 on a 0-4 scale) to leave one's institution within the next 2 years. Burnout and PF were defined using published cutpoints on the Professional Fulfillment Index. Multivariable logistic regression models (adjusting for demographic variables, burnout, and PF) were conducted to assess associations of each one-point increase (scale 0-10) in well-being variables with ITL.

## Results

Fifteen academic medical institutions conducted the PWAC survey between 10/2019 and 7/2021. Of 18,719 (50.7% response rate) respondents, 37.9% met criteria for burnout and 39.3% for PF. Overall, 32.6% of respondents reported moderate or greater ITL. In a model adjusted for demographics, each one-point increase (range 0-10)

in burnout (odds ratio [OR] 1.24 [95% CI 1.21-1.27]) and PF (OR 0.72 [95% CI 0.71-0.740]) were associated with ITL. After adjusting for demographics, burnout and PF, each one-point increase (range 0-10) in supportive leadership behaviors (OR 0.83 [95% CI 0.82-0.84]), peer support (OR 0.93 [95% CI 0.91-0.95]), personal-organizational values alignment (OR 0.81 [95% CI 0.80-0.83]), perceived gratitude (OR 0.95 [95% CI 0.92-0.97]), COVID organizational support (OR 0.88 [95% CI 0.85-0.91]) and electronic health record (EHR) helpfulness (OR 0.95 [95% CI 0.93-0.97]) were inversely related to ITL, while each one-point increase (range 0-10) in depression (OR 1.08 [95% CI 1.05-1.10]), negative impact of work on personal relationships (OR 1.09 [1.07-1.11]), meaningfulness of clinical work (OR 1.06 [95% CI 1.03-1.10]), and EHR hassles (OR 1.04 [95% CI 1.02-1.06]) were directly associated with ITL.

## Conclusion

In a national cohort of academic physicians, 32.6% of survey respondents indicated moderate or higher ITL within 2 years. Burnout, lack of PF, and other well-being factors were associated with ITL. Initiatives to reduce physician turnover may benefit from a comprehensive approach that considers burnout, professional fulfillment, and other organizational and individual level well-being factors.

# Preventing physician suicide: The Healer Education, Assessment and Referral Program

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## Learning objectives

At the end of this presentation, participants should be better able to:

- Implement an anonymous suicide screening program to physicians and other health care workers
- Assess and refer physicians and other health care workers who are highly distressed or “at risk” for suicide to mental health treatment
- Decrease suicide risk among physician and other health care workers at their home institutions

## Project objective/background

Suicide is the second leading cause of death among medical residents and is more common among female physicians than females in the general population. In the aftermath of a series of physician suicides at one academic institution's medical school and health service, the Healer Education Assessment and Referral (HEAR) program was created. HEAR's primary goal was to prevent the next physician suicide.

## Methods/approach

HEAR initially adopted a 2-pronged approach: 1) a program of ongoing education and outreach, and 2) encouragement of all medical students, house staff and faculty physicians to annually engage in an online, anonymous, interactive screening program (ISP) created by the American Foundation for Suicide Prevention (AFSP). After a small series of nurse suicides were identified, the target group was expanded to include all health care workers at the institution and additional support and mental health interventions were added: 1) group support to clinical services after critical incidents, 2) individual, short term counseling for residents and fellows, 3) scheduled “opt-out” sessions with HEAR counselors for all new house staff at selected programs and all faculty physicians from requesting clinical services, and 4) Schwartz Center Rounds.

## Results

Since 2018, 1161 faculty physicians and 1978 residents and fellows have dialogued with a counselor via ISP either in person, by phone, email or text, and 274 faculty physicians and 689 residents and fellows have accepted “warm” referrals to mental health providers. All told, since the program's inception in 2009, over 1831 referrals have been made. While tracking death by suicide remains challenging, we have reason to believe that the multi-pronged approach to suicide prevention provided by HEAR has diminished the prevalence of suicide during this time. We are not aware of any physician suicides since 2009, although there has been one medical student death since HEAR began.

## Conclusion

The HEAR Program is one cost-effective model for addressing the crisis of physician suicide. Components of the HEAR model have been adopted by other health institutions and is readily transportable for use with health care trainees and clinicians of all disciplines.

# Professional fulfillment as a driver of burnout and intention to reduce clinical work hours: Implications for strategies to improve wellness outcomes and promote sustainability

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## Learning objectives

- Discuss key findings from the Canadian Medical Association (CMA) National Physician Health Survey (NPHS)
- Examine the link between professional fulfillment, burnout, and intention to reduce work hours
- Identify key drivers of professional fulfillment in medicine

## Project objective/background

What keeps physicians going, through the pandemic and beyond, despite the long hours and challenging work environments? Does professional fulfillment (PF) – which encompasses happiness, meaningfulness, contribution, self-worth, satisfaction, and joy in medicine – provide the necessary drive? Can PF mitigate against burnout or the intention to reduce clinical hours? The Canadian Medical Association conducted the National Physician Health Survey (NPHS) to provide some insight into these, among other, questions. The overall objective of this presentation is to examine the relationship between professional fulfillment (PF), burnout, and intention to reduce clinical work hours.

## Methods/approach

In total, 3,864 physicians and residents from across Canada completed an online survey assessing behavioural, occupational and psychological factors. Descriptive statistics were generated, and binomial logistic regression analyses were conducted to identify the drivers of three primary outcomes.

## Results

Overall, 79% of respondents score low on PF (using the Stanford Professional Fulfillment Index), 53% are burned out (using the 2-item Maslach Burnout Inventory), and 49% are likely to reduce their work hours. Regression analyses identified PF as one of the strongest drivers of burnout ( $\beta = 2.58$ ,  $p < 0.001$ ) and of intention to reduce

work hours ( $\beta = 1.53$ ,  $p = 0.004$ ). That is, physicians who score low on PF are 2.6 times more likely to be burned out, and 1.5 times more likely to say they intend to reduce their work hours. Further regression analyses, using PF as the outcome variable, offer insight into ways that PF can be enhanced, including: increasing opportunities to accomplish worthwhile tasks, ensuring physicians feel that they are positively influencing other people's lives, optimizing time spent working closely with patients, aligning professional values with those of the department, promoting a collegial workplace, increasing job satisfaction, among others.

## Conclusion

CMA's NPHS revealed that PF is a strong driver of burnout and intention to reduce clinical hours. This is concerning given Canada's health care crisis and physician shortages. Our findings offer ways that PF can be enhanced; however, this is a starting point and future research is recommended. For example, examining the link between low PF and other outcomes such as quality care, patient experience, productivity, as well as recruitment and retention are warranted. To conclude, professional fulfillment is an outcome that researchers, health care organizations, and other stakeholders could focus on as a potential strategy to address wellness challenges experienced by Canadian physicians and to the broader health workforce crisis we are facing today.



# Reducing clinician burnout in 15 minutes a day: Deploying daily huddles across a large medical group

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## Learning objectives

- Describe process for launching effective daily huddles as a foundation for a daily management system that demonstrably and measurably reduces clinician burnout
- Explain how the huddle process address the six drivers of burnout identified by Maslach and Leiter
- Review leadership development process that is key to huddle effectiveness at reducing burnout

## Project objective/background

In 2021, Nuvance Health (NH) leaders were concerned about rising levels of physician burnout and a recent physician suicide. Nuvance Health Medical Practices (NHMP), the health system's medical group, began a pilot project in October 2021 to spread daily huddles across six primary care offices over 3 months. Based upon significant improvement and high levels of engagement, NHMP implemented huddles across 85 outpatient offices and implemented a Daily Management System (DMS) for all clinical departments reporting up to the NHMP president.

## Methods/approach

In the summer of 2021 NH leaders committed to address the causes of physician burnout.

1. The evaluation included the American Medical Group Association Provider Satisfaction Survey (AMGA PSS), which showed very low levels of satisfaction and wellbeing.
2. NH also launched daily huddles in outpatient offices.
3. The huddle process, designed by a team of primary care leaders, physicians, and support staff, launched the first huddle at the end of that week, followed by five more sites shortly thereafter. Ultimately 85 sites launched huddles across all of the outpatient sites by Q1 2023.
4. These huddles were enhanced with a DMS process of tiered huddles, including regular regional, service line, and senior leader level huddles.
5. The AMGA PSS was repeated in November 2022.

## Results

### Process:

1. 85 huddles launched across outpatient sites over 15-months
2. DMS was established to coordinate the process and drive alignment Outcomes:
3. The percent of providers experiencing burnout on the "Mini-Z 5-point question" decreased from 51% in 9/21 to 45% in 10/22.
4. The percent "top box" responses to the AMGA PSS wellbeing dimension questions increased from 24% to 32%, a percentile increase from p6 to p62.
5. All eight domains of the AMGA ProSat Survey improved in average score and top box percent.
6. NHMP leaders found great value in the process and are requesting to spread this to hospital departments.

## Conclusion

Daily huddles are an effective way to reduce physician and staff burnout while enhancing leadership engagement with front line clinicians.

# Research as a catalyst for change: The impact of EHR in-basket spring cleaning and compassion team practice on reducing burnout

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## Learning objectives

- Describe the EHR interventions aimed at enhancing physician well-being by reducing EHR workload.
- Review a brief 30-second compassion team practice for daily huddles.
- Review signals of effectiveness of the interventions from a pilot modified stepped wedge clustered randomized trial.

## Project objective/background

EHR work, particularly inbasket work, and suboptimal teamwork are some contributors to physician burnout. Attempts at eliminating low-value messages had stalled repeatedly due to some physicians' resistance. Unabated growth in inbasket messages and spikes in physician burnout during the pandemic reignited attention to improve management of electronic communication with patients, other clinicians, and strengthen care teams. We designed and implemented a dual-focused intervention (reducing EHR workload and enhancing care team cohesion) that implemented quick action shortcuts in EHR for physicians to prompt staff to schedule an appointment if a patient's MyChart message requires extensive communication and suppression of algorithm-generated CC Charts and other rarely read messages. We also designed a 30-second compassion team practice (CTP) that verbalizes kindness towards each other at the beginning of daily physician-nurse dyad huddles.

## Methods/approach

A modified stepped wedge clustered randomized trial used survey and EHR data to evaluate the intervention's effectiveness among specialties with heavy inbasket workloads. Forty-five physicians (20% participation rate), including 16 family physicians, 11 general internists, and 18 subspecialists (endocrinologists, neurologists, OBGYN, infectious disease specialists, and urologists), in 12 clinics were randomized by their clinic to intervention (first EHR-only, then EHR+CTP) versus standard work, followed by EHR-only, then EHR+CTP, over four 4-week periods. Intent-to-treat analyses used mixed effects models. Random effects were included to account for the clustering of clinic and physician. Dependent variables are the dichotomized 1-item burnout level, a perceived ease of EHR work scale, the Mini Z subscale for supportive workplace, and the number of inbasket messages. Participant's characteristics at baseline (demographics, sleep quality, and mindfulness practice) and time were included as covariates.

## Results

Burnout was reported among 24 (58.5%) in baseline and 21 (50.0%) at the end. Regression analyses showed no evidence of an effect in proportion of burnout after the EHR or EHR+CTP interventions. Both the EHR intervention (coefficient=0.76,  $p=0.01$ ) and EHR+CTP intervention (coefficient=0.80,  $p<0.01$ ) were associated with higher perceived ease of EHR work. The Mini Z supportive work environment subscale marginally significantly increased with EHR+CTP (Coefficient=0.61,  $p=0.07$ ), signaling an increase in perceived supportiveness in the workplace. Total inbasket messages/week declined (coefficient=-48.3,  $p=0.03$ ) after EHR intervention.

## Conclusion

Researchers and informatics leaders collaborated to catalyze changes in inbasket management and team relationship. While no significant impact on burnout was observed in adjusted analyses, encouraging findings were obtained on perception of ease of EHR work, a more supportive workplace, while number of messages declined.

# The critical role of relationships in building and sustaining physician and health care professional resilience

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## Learning objectives

- Describe the influence of relationships on professional fulfillment and development
- Explain how and why working in health care creates meaningful opportunities for developing relationships characterized by connectedness and belonging
- Develop strategies to leverage mentoring and role modeling relationships to improve and sustain resilience-promoting self-care routines

## Project objective/background

Much development of physicians and health care professionals (HCP) is experiential, working alongside and learning from key mentors and influential coworkers/supervisors. As part of a larger in-depth, multi-method study of resilient HCP, we examined the influence and impact of relationships on one's sense of connectedness and belonging, motivation, and engagement. Our study focused on the role of social relationships on resilience compared to personal intrinsic factors.

## Methods/approach

The data for this analysis were gathered from 57 HCP responses to a baseline survey and an in-depth interview from the larger study noted earlier. The present analyses focused on responses to questions pertaining to the role of relationships in the professional development and ongoing work resilience and functioning:

1. **How have interpersonal connections or relationships been important to you in your career to-date? Please explain.**
2. **How do connections with others (coworkers, patients, etc.) influence how you approach your work?**

Additional insights were gleaned from analyzing open-ended responses to the following prompt from the baseline survey: **What resources (e.g., people, tools/technology, spaces) in your work environment help you maintain your motivation even when work is difficult?**

## Results

Multiple trained researchers analyzed responses through an iterative content and thematic process summarizing within-person and across respondents. The resources that help protect motivation to work even when conditions are difficult are largely relationship-based – 60% of responses pertained to presence of social support among coworkers and/or from supervisors. Responses clearly identified the essential role of mentors/supervisors in the formation of self-care perspectives and strategies and general approaches to teamwork. Relationships with patients and their families were also important. Being present in their times of greatest need was a common sentiment linked to building meaningful relationships that sustained professional efforts, functioning as a protective resource even when working in very difficult conditions (COVID-19 pandemic). Efficacy and resilience was enhanced by connectedness, belonging, and healthy relationships with coworkers/supervisors characterized by good communication, the “knowing” that promoted meaningful social support and contributing to wellbeing.

## Conclusion

Implications of these findings include the need to ensure that training of HCP at all levels addresses the need for identifying mentors, to develop and train mentors and role models to be more aware of the critical role they play in shaping and supporting the next generation of resilient HCP. Relationships with mentors, coworkers, and patients are essential elements to the resilience equation for HCP.

# Trends in burnout and professional fulfillment in primary care pediatrics during the COVID-19 pandemic

## Author

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## Learning objectives

- Understand the level of burnout and professional fulfillment of pediatric primary care clinicians during the COVID-19 pandemic.
- Identify risk factors for developing burnout.
- Identify potential protective interventions.

## Project objective/background

The Pediatric Physicians' Organization at Boston Children's Hospital (PPOC) is a large pediatric independent practice association that consists of more than 400 pediatric primary care clinicians. Increased provider burnout is associated with decreased professional fulfillment, poorer patient experience, increased medical errors, and leaving or reducing clinical care. We sought to understand burnout and professional fulfillment to identify potentially protective interventions.

## Methods/approach

A confidential electronic survey containing the Maslach Burnout Inventory (MBI), Professional Fulfillment Index (PFI) and demographic questions was distributed to all PPOC clinicians in late spring of 2020, 2021, and 2022. Response rates varied from 24 to 44%.

Demographic data included respondent profession, gender, years in practice, practice size, and presence of children at home. A combined profession/gender categorical variable was created to account for the strong correlation between the two demographics in modeling.

The distribution of reported Burnout (BO) versus Professional Fulfillment (PF) over the survey years was visualized by quadrant chart analysis. The impact of demographic factors on likelihood of reporting BO and PF was analyzed using logistic regression. Bivariate models

were used to calculate unadjusted relative risks (RR) with 95% confidence intervals (CI). Adjusted relative risks were calculated with a model accounting for demographics.

## Results

A statistically significant increase in BO was seen in respondents overall from 2020 to 2022 (24% to 47%,  $p=0.007$ ). The proportion of respondents reporting PF decreased but was not statistically significant (37% to 30%,  $p=0.1$ ). Respondents reporting both BO and decreased PF increased from 27.7% (2020) to 43.7% (2022).

A striking difference was found over time between the responses of female compared to male clinicians. In 2020, they had similar rates of BO (33% versus 36%, unadjusted RR [95% CI] = 0.9 [0.5, 1.4]) and PF (38% versus 36%, unadjusted RR = 1.0 [0.7, 1.6]). By 2022, female clinicians reported increased BO compared to male clinicians (50% versus 40%, unadjusted RR = 1.2 [0.9, 1.18]) and decreased PF (26% versus 43%, unadjusted RR = 0.6 [0.4, 0.9]).

Greater years in practice was associated with decreased levels of BO and increased PF. In 2022, female physicians were at greatest risk for decreased PF.

## Conclusion

In a large sample of pediatric primary care clinicians, burnout increased, and professional fulfillment decreased from 2020 to 2022, particularly in female and early to mid-

career clinicians. Protective interventions include offering peer support sessions for affinity groups, researching ways to increase professional fulfillment, and implementing organizational interventions to decrease administrative burdens.

Figure. Quadrant charts –2022 Individual survey results, Burnout vs. Professional fulfillment

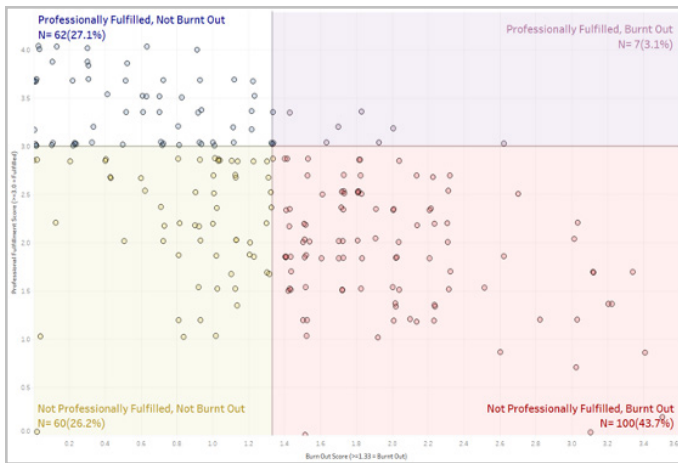


Table 1. Proportion of respondents reporting burn out 2020-2022 with bivariate (unadjusted) and multivariate (adjusted) relative risk. 2022 Survey (N=229 Respondents)

	2020						2021						2022						
	% Respondents		Average Score		% Burnt Out		% Respondents		Average Score		% Burnt Out		% Respondents		Average Score		% Burnt Out		
<b>All Respondents</b>	229	1.1	37%		132	1.1	30%		229	1.1	47%		229	1.1	30%		229	1.1	37%
<b>Demographic</b>																			
Gender	131	1.1	40%	0.9 (95% CI)	not included	130	1.1	40%	0.9 (95% CI)	not included	131	1.1	33%	1.0 (95% CI)	not included	131	1.1	33%	1.0 (95% CI)
Age	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
<b>Workload</b>																			
Hours per week	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Patient care	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Administrative	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
<b>Professional Fulfillment</b>																			
Patient care	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Administrative	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
<b>Outcomes</b>																			
Patient care	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Administrative	131	1.1	37%	0.9 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)

Table 2. Proportion of respondents reporting professional fulfillment 2020-2022 with bivariate (unadjusted) and multivariate (adjusted) relative risk.

	2020						2021						2022						
	% Respondents		Average Score		% Fulfillment		% Respondents		Average Score		% Fulfillment		% Respondents		Average Score		% Fulfillment		
<b>All Respondents</b>	229	1.1	37%		132	1.1	37%		229	1.1	30%		229	1.1	37%		229	1.1	37%
<b>Demographic</b>																			
Gender	131	1.1	40%	1.1 (95% CI)	not included	130	1.1	37%	0.9 (95% CI)	not included	131	1.1	33%	0.9 (95% CI)	not included	131	1.1	33%	0.9 (95% CI)
Age	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
<b>Workload</b>																			
Hours per week	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Patient care	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Administrative	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
<b>Professional Fulfillment</b>																			
Patient care	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Administrative	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
<b>Outcomes</b>																			
Patient care	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)
Administrative	131	1.1	37%	1.0 (95% CI)	not included	130	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)	not included	131	1.1	37%	1.0 (95% CI)



# Vacation utilization barriers and opportunities at a large academic medical center: A qualitative analysis across departments

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## Learning objectives

- To evaluate current state of vacation utilization across departments
- To identify barriers to vacation utilization and potential needs for changes to policies, practices, or protocols.
- To develop solutions and strategies to improve quantity and quality of vacation usage.

## Project objective/background

Burnout rates among physicians, nurses, and staff have spiked since advent of the COVID-19 pandemic, and reduced vacation has been associated with increased risk of emotional exhaustion and impaired wellness. Prior work has often focused on vacation available but not how vacation was utilized. This study investigated barriers and opportunities to vacation utilization by engaging representatives of departments at a large academic medical center.

## Methods

Using a purposive sampling method, 24 semi-structured interviews 30-60 minutes in duration across 14 departments were conducted with chief departmental administrators and wellness faculty associates. Abductive exploratory analysis was used to code and interpret interview transcripts to create themes centered on barriers and opportunities, with interviews completed to saturation.

## Results

Barriers to vacation utilization were centered around the following four themes:

1. Incentives aligned against use of vacation
2. Cross-coverage challenges
3. Rigidity in clinical procedures
4. Lack of consistent tracking of vacation.

Only eight out of the fourteen departments interviewed tracked vacation. Many faculty and staff reported work while on vacation, covering in-baskets, emails, and professional communications. Findings are summarized in table below.

Category	Subthemes	Example
Incentives aligned against use of vacation.	<ul style="list-style-type: none"> <li>• Productivity Incentives aligned against time away.</li> <li>• Academic/promotion metrics discourage breaks</li> </ul>	<p><i>"It comes down to incentives...aligned against utilization of vacation."</i></p> <p><i>"[Faculty] who are insensitive to incentives...are a bit more successful using vacation."</i></p>
Cross-coverage challenges	<ul style="list-style-type: none"> <li>• No system to assist providers in identifying cross-coverage.</li> <li>• Absence of provisions to reduce workload for those covering.</li> <li>• Lack of catch-up time when away.</li> <li>• Minimal APPs, nursing staff support for <u>inbasket coverage</u></li> </ul>	<p><i>"I cannot find help to cross-cover my patients, and as a junior faculty member I feel disempowered."</i></p>
Rigidity in clinical procedures.	<ul style="list-style-type: none"> <li>• 8-week requirement of advance notice to cancel/move patients</li> <li>• Backlogged surgical schedules do not accommodate cancellations.</li> <li>• Lack of rollover of vacation time.</li> </ul>	<p><i>"When I was in private practice, I could adapt my work schedule... I really miss that flexibility."</i></p>
Lack of consistent tracking of vacation.	<ul style="list-style-type: none"> <li>• Vacation time often unused.</li> <li>• Vacation tracked consistently across the institution.</li> </ul>	<p><i>"If we value something, we measure it. Vacation isn't valued by senior leadership."</i></p>

## Conclusion

Identifying, understanding, and reducing barriers to vacation utilization are key steps to improve vacation utilization. Facilitators for vacation utilization include department leadership advocating for vacation usage, cross-coverage systems while away, and systematic tracking of vacation leveraging technology, such as QGenda, recently adopted by our center.

The background features a tropical sunset scene. The sky transitions from a bright yellow at the top to a deep red and purple on the left, and a clear blue on the right. Silhouettes of palm trees and rolling mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Workshops

Electronic health records

# A system-level approach to reducing EHR inbox burden

## Author

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## Co-authors

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Christine Sinsky, MD

## Learning objectives

- Identify the major sources of EHR inbox burden for clinicians in the ambulatory setting
- Describe a strategic framework as well as specific strategies for organizations to use for reducing EHR inbox burden
- Provide potential barriers to implementing these strategies, and solutions to overcome them

## Project objective/background

The electronic health record (EHR), while indispensable for physicians, is also a major contributor to physician burnout. Of all the EHR-related tasks and burdens, the EHR inbox is perhaps the single most frustrating time sink for physicians, particularly for those in the ambulatory setting. With the widespread adoption of telehealth and increased patient awareness of the EHR patient portal, the physicians' inbox volume has grown tremendously, and has become a problem that individual physicians cannot fix on their own. As Dr CT Lin, CMIO of UCHHealth in Colorado, once said, "Physicians are not quitting their jobs, their patients, or their bosses; they are quitting their inboxes."

**Therefore, it is imperative that senior organizational leaders prioritize and adopt a system-level approach to EHR inbox reduction.** This session will provide a framework for organizations to use for this endeavor, and specific steps and strategies to succeed at it.

## Session description, plan, and timeline

**(25 mins)** Didactic presentation on the sources of EHR inbox burden and the main tactics to reduce it. We will present the newly published [EHR Inbox Reduction Checklist](#) and go over each of the tactics described in it.

**(15 mins)** Break out sessions in small groups of 5-10 individuals to discuss potential local barriers to implementing these changes for inbox reduction, and potential solutions to these barriers. This is best suited for a smaller group because barriers will vary significantly by practice setting and organization, and it will be an excellent opportunity for attendees to share innovative solutions with each other.

**(10 mins)** Opportunity for small groups to report out to the larger group the barriers and solutions they discussed.

**(10 mins)** Q&A and wrap-up

The background features a vibrant tropical sunset scene. The sky transitions from a bright yellow-orange at the top to a deep blue at the bottom. Silhouettes of palm trees and rolling mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Workshops

Interventions for the individual

# Coaching in medicine: Understanding and engaging with stakeholders for program success

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## Additional facilitator

Laura Kirk, MSPAS

## Learning objectives

- Identify key stakeholders who are affected by coaching program development, have influence or power over it, and have interest in its success or failure.
- Prioritize the level of interaction with key stakeholders by understanding the level of power and interest the stakeholders have in the development of the coaching program.
- Engage key stakeholders to understand how they feel about the coaching program in order to communicate, engage, and collaborate with them.

## Project objective/background

Coaching can support performance improvement and professional satisfaction in health care. However, developing a coaching culture within a health system can be difficult. By identifying key stakeholders, understanding their interest and power in the success or failure of a coaching culture, and engaging with them, teams can increase their likelihood of project success. In this session, participants will use stakeholder analysis and management techniques to identify key stakeholders and learn to appropriately engage with them to successfully manage the development and launch of a coaching program.

## Session description, plan, and timeline

The University of Texas (UT) Southwestern has successfully launched a coach certificate program. Attention to intentional stakeholder engagement and management was key to securing support, funding, and acceptance by the institution. By identifying key stakeholders early, the team was able to get definition and acceptance of the program from their most powerful stakeholders to improve the quality and scope of programming, win resources to support the launch and continuation of the program, and communicate the importance of coaching in creating an institutional culture of wellness. During

the session, participants will use UT Southwestern's coach certificate program as a case study to identify key stakeholders, understand the power and interest of those individuals, and learn how to gauge stakeholder support to create a stakeholder management plan.

## Session plan

**10 minutes:** UT Southwestern's Coach Certificate program conception, development, and implementation

**5 minutes:** Introduction of the concepts of Stakeholder Analysis Matrix (figure 1)

**20 minutes:** Case study: Goal: Develop an internal coach training program. Small groups with circulating facilitators will:

- Identify key stakeholders.
- Classify stakeholder interest versus power.
- Sort stakeholder type: Advocates/supporters, detractors/critics, neutral

**15 minutes:** Group discussion to discuss how they would approach engaging different stakeholders in each quadrant of the matrix.

**10 minutes:** Summary of key points of stakeholder analysis and question and answers

Figure 1. Power vs. Interest Stakeholder Matrix





# How to build and evaluate a graduate medical education wellness course

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 Rob Davies, PhD

## Learning objectives

- Define psychological safety and practice generating group norms
- Identify barriers and key elements to creating a successful wellness elective and learn strategies for overcoming barriers
- Evaluate methods for assessing the impact of a wellness course

## Project objective/background

The University of Utah Office of Graduate Medical Education (GME) has offered a two-week Wellness Elective to cohorts of 12-17 trainees across 16 specialties (60 total trainees) over the past four years. We used anonymous paired Professional Quality of Life (PROQOL) surveys to evaluate burnout, compassion, and secondary trauma in the 2022 cohort. We evaluated trainee satisfaction with the course in all four cohorts (2019-2022). Mean scores for secondary trauma, compassion, and burnout improved one month after the 2022 elective, but did not meet statistical significance thresholds. Over four years, 100% of trainees (n = 60) strongly agreed that the course was worth their time and that they would recommend it to a peer.

## Session description

This session will provide participants with a framework for building and evaluating a wellness course through large and small group discussion.

## Session plan and timeline

Topic	Time allotted (minutes)
<b>Introductions and Psychological Safety</b> - Presenter introductions (participants will also be encouraged to introduce themselves to people seated near them) Model how to create psychological safety norms as a <u>group</u> <ul style="list-style-type: none"> <li>o Small Group Prompt:                             <ul style="list-style-type: none"> <li>▪ <i>Talk about a time that a time that you felt psychologically safe at work. What helped create that environment?</i></li> </ul> </li> <li>o Large Group Prompt:                             <ul style="list-style-type: none"> <li>▪ <i>What came up in your small groups? What norms for psychological safety feel important to you? [We will write them down in real time and work to respect and model them during this session].</i></li> </ul> </li> </ul>	10
<b>Overview of Utah Course</b> <ul style="list-style-type: none"> <li>o key elements for success</li> <li>o structure/content</li> <li>o funding</li> <li>o impact on professional well-being and burnout</li> </ul>	6
<b>Small Group Discussion: Barriers and Solutions</b> - Prompt: <ul style="list-style-type: none"> <li>o <i>What barriers to creating a GME Wellness Course exist at your institution?</i></li> <li>o <i>How could these barriers be overcome?</i></li> </ul>	7
<b>Large Group Synthesis Discussion: Barriers and Solutions</b>	7
<b>Review of Evaluation Methods and Feedback from the Utah Course</b>	6
<b>Small Group Discussion: Evaluation</b> - Prompt: <ul style="list-style-type: none"> <li>o <i>What is important to measure in a wellness course?</i></li> <li>o <i>How would you evaluate the impact of your course?</i></li> <li>o <i>What are the strengths and weaknesses of those methods?</i></li> </ul>	7
<b>Large Group Synthesis Discussion: Evaluation</b>	7
<b>Questions</b>	10
<b>Total</b>	60

# Vital talk and action: Tips to becoming an upstander and better ally

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## Learning objectives

- Identify opportunities to upstand and ally with a target to foster solidarity and well-being.
- Explore language that can be used when opportunities to ally and upstand present.
- Practice how to intervene as an upstander and ally during clinical case scenarios.

## Project objective/background

Under-represented physicians experience workplace injustices. Upstanding when you see a colleague mistreated is a skill. This workshop will present common everyday workplace scenarios in which we can intervene as upstanders, allying with our colleagues and fostering an ethical “no-tolerance” work environment. The harms imposed by mistreatment and incivility negatively impact the target, the workplace culture, and ultimately our ability to provide optimal equitable patient care as a profession.

## Session description

The session will begin with setting the stage for workplace injustices based on the experience of Physician Just Equity peer support cases and associated quantitative and qualitative data compiled by our research. Following presenting background about the nature of workplace injustices, facilitators will present common workplace injustice scenarios experienced by learners and clinicians. Presenters will demonstrate how these situations can be managed through upstanding and allyship. Workshop participants will be encouraged to participate in role plays to practice intervening when observing a workplace injustice and employing scripted language in preparation for future events. Learning how to intervene is a skill that requires practice. This workshop will provide participants an opportunity to practice recognizing when a workplace injustice is occurring and employ the necessary skills to intervene in allyship as an upstander with confidence.

Workshop facilitators will provide support and guidance through role play vignettes. Participants will also have an opportunity to present and debrief about their own experiences gaining expert feedback and enriching the Q & A discussion.

## Session plan

- Background (5 minutes)
- Presentations of Case Scenarios (10 minutes)
- Role Play (25 minutes)
- Debrief (10 minutes)
- Q & A | Discussion (10 minutes)

# When patients hurt us—patient mistreatment of physicians, medical students, and residents. A silent epidemic?

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## Learning objectives

- Describe the prevalence and impact of mistreatment by patients on physicians and medical trainees.
- Explain why patient mistreatment of physicians, residents and medical students often goes unreported.
- Apply the ERASE framework to address patient mistreatment and organizational change.

## Project objective/background

While mistreatment in the clinical workplace has most commonly focused on the experience of medical trainees by their supervisors, patient mistreatment of physicians, medical trainees, and other health care workers is often unrecognized and under reported in the workplace. Our workshop summarizes the literature on patient mistreatment and describes our efforts to raise awareness of this important source of mistreatment and its impact on medical trainees and physicians at our university-based GME (Graduate Medical Education) training institution and affiliated hospitals with over 700 residents and fellows. We demonstrate how patient mistreatment is associated with increase burnout and lower resiliency, psychological safety, wellness, as well as overall lower satisfaction in the GME training environment. We describe our intervention - using the ERASE framework - to combat the effects of patient mistreatment on individuals and promote an organizational response to improve the overall clinical learning environment. It is critical for academic medical centers and their leadership to recognize and address the critical impact patient mistreatment can have on all health care workers in order to build a better workplace for the future.

## Session description

This interactive workshop is designed to highlight the importance of patient mistreatment as an important and common source of mistreatment of physicians, medical trainees and health care workers. We share results of our

own internal survey of the impact of patient mistreatment at our university-based GME training institutions with over 700 medical residents and fellows. We then introduce the ERASE framework to address and mitigate the impact of patient mistreatment. Finally, we discuss 4 real world cases from the authors experience to practice applying the ERASE framework in small breakout groups, followed by large group discussions, highlighting key aspects and practical approaches to mitigate the impact of all health care workers experiencing patient mistreatment.

## Session plan and timeline

**2 minutes** – Introductions, learning objectives, and distribution of handout with practical take-aways

**13 minutes** – Overview of the impact of patient mistreatment on physicians, health care workers and medical trainees, including results of our internal GME survey.

**10 minutes** – Introduction and practical applications of the ERASE framework

**25 minutes** – Small group breakout sessions each addressing 1 of 4 real world cases of patient mistreatment based on the authors' experiences. Application of the ERASE framework to help mitigate the negative effects of patient mistreatment in the clinical learning environment

**10 minutes** – Closing, Commitment to Change Exercise, and Q&A.

The background features a vibrant tropical sunset scene. The sky transitions from a bright yellow at the top to a deep red and purple in the middle, and finally to a dark blue at the bottom. Silhouettes of palm trees and rolling mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Workshops

Local work unit

# FLOWing towards the future: Creating a wellness mini-grant program

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## Learning objectives

- Identify at least 3 best practices of a wellness mini-grant program.
- Address common challenges of implementing a wellness mini-grant program.
- Describe four criteria to use to assess grant submission.
- Identify three important strategies to use to pitch the program to faculty/stakeholders.

## Project objective/background

Each work unit (department, division, clinic) of a health care organization can benefit from institutional-wide efforts that support practice efficiency and enhance a culture of wellness. Each work unit of a health care organization, however, also has its own unique workflows and unit culture. Members of a local work unit are best suited to identify and address the well-being needs of their own units. In addition to institutional-wide support for well-being, a wellness mini-grant program (or, FLOW – Funding for Local Level Opportunities for Wellness) can motivate and support local work unit leaders to make meaningful changes to impact the future well-being of that unit.

In this session, participants will hear from well-being leaders about FLOW initiatives at their four home institutions. The facilitators will discuss best practices and challenges in launching a FLOW program, advertising such a program, reviewing submissions, making the case for funding, and highlighting successful projects. Participants will leave the session with enough information to plan a FLOW program at their home institution.

## Session description, plan, and timeline

**Introductory panel:** Each panelist introduces self and provides a brief background on their FLOW initiative. (10 minutes)

**Small group work:** Participants will be divided into three groups, each of which will work through a series of questions to achieve the goal of their group. (20 minutes)

- Group #1 will develop a pitch to leadership to have a FLOW initiative at their home institution.
- Group #2 will work on how to announce the available grants to faculty, and
- Group #3 will develop criteria to review grant applications.

**Large group debrief:** A spokesperson from each small group will share their group's ideas on pitching or announcing the grant opportunities or on reviewing the grant submissions. (10 minutes)

**Review of best practices and challenges:** Panelists will then share lessons learned from their own experiences. (10 minutes)

Q and A: (10 minutes)

# Human centered design thinking as a tool for engaging employees in change

## Author

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## Learning objectives

- Understand Human-Centered Design Thinking (HCDT) to engage clinicians in improving well-being
- Apply HCDT skills to a challenge encountered in the health care setting
- Explain how design thinking can be used to generate local action plans to improve physician well-being

## Project objective/background

Organizational efforts to improve working environments for health care workers can reduce burnout. Engaging health care workers in the process of creating solutions to problems is crucial to developing effective solutions. Human Centered Design Thinking (HCDT) offers a powerful pathway to rapidly create co-designed well-being interventions that meet the emotional needs of the workforce, while attending to complex systems factors and achievable goals. In this innovative workshop, modeled after the Stanford Design School Curriculum, participants will practice human-centered interviewing, prototype a solution, and receive end-user feedback. At the end participants discuss how HCDT can be implemented in their institutions and receive a HCDT implementation tool kit. Similar workshops have been presented at multiple academic institutions, with positive participant feedback.

## Description

Concepts of HCDT will be introduced and practiced in an interactive, fast-paced workshop followed by a discussion on how to utilize this process to help teams create solutions.

## Session plan

**2 m: Introduction**—Introduction/ objectives

**4 m: Interactive Icebreaker** (“Yes, and” improvisation exercise)

**2 m: Introduction of HCDT and Activity**—Description of HCDT /Design Sprint.

**30 minutes: Well-being Design Sprint**—Using facilitated paired brainstorms and individual reflection, participants complete a design challenge

**Design Challenge:** How might we redesign {a physical or digital object that produces ire at work, named by each person}, to reduce irritation and generate joy?

- **1 m:** Orientation to the process
- **2 m:** Large Group rapid-fire artifact identification – “What digital or physical objects in daily work provoke a strong emotional reaction?”
- **6 m:** Focused ethnography—“Dig deeper”- partners share stories about artifact
- **4 m:** “Reflection”- Individual reflection, develop a design hypothesis
- **8 m:** “Hunch”- With new partner, brainstorm potential solutions that would improve/change reaction to artifact based on each person’s hypothesis
- **5 m:** “Bring solution to life”-Sketch/ build a rough prototype of solution using arts/crafts
- **4 m:** Back in first partner pair, each partner presents prototype and solicits feedback



**4 min: Small Group Debrief and Discussion**—How was that different from our usual approach to “solving for well-being” at work?

**5 min: Large Group Presentation:** Keys to Implementation—Facilitators will share tips, examples, and a link to a toolkit for implementing HCDT with teams at work.

**10 min: Questions and Answers, Wrap Up**

### Timeline

6 m: Introduction/ icebreaker

5 m: Introduction of HCDT

30 m: HCDT Activity

4 m: Debrief small groups

5 m: Large group/how to bring back

10 m: Questions/Answers

# Well-being centered leadership: Developing leaders to support a culture of well-being

## Author

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## Learning objectives

- To appreciate the impact of leaders on team well-being and burnout
- To learn about effective leadership skills that promote a culture of well-being and behaviors that counter such a culture
- To consider existing models and applicability to one's home institution

## Project objective/background

Many physician and clinician leaders do not receive standard assessment of their leadership or development of skills that promote relationships and a culture of well-being. Validated tools have shown significant correlation between the behaviors of leaders and the likelihood of burnout among health care workers. The studies also found that the behavior of an individual's direct supervisor was the single largest driver of professional satisfaction. Recent literature such as Dr. Shanafelt's Wellness Centered Leadership article emphasize the key competencies that could be included in such leadership development programs and emphasize that organizations take on this important work as a key strategy for improving workplace well-being for clinicians.

## Session description, plan, and timeline

In this interactive workshop, the facilitators will lead the group through didactic, small, and large group discussions.

After introductions and an opening discussion, the presenters will facilitate a large group exercise to brainstorm organizational challenges facing physician and clinician leaders as it relates to a culture of well-being. The audience will then break into small groups to generate what leadership skills might help address these challenges and then report them out to the large group.

The facilitators will then share the evidence basis for leadership behaviors as these relate to well-being of teams, including assessment considerations, such as the Mayo leadership index. They will also describe experience with implementing a well-being centered leadership

assessment and program in two separate health care organizations, including a sample toolkit of resources curated by these programs.

The group will again break into small groups to reflect on these examples and discuss strategies for starting and scaling well-being centered leadership development at their institution. The groups will report out for the group's learning and discussion.

The audience will be provided with a summary of the ideas generated in the session as well as a toolkit of resources from the facilitators' existing curricula which can serve as a starting point for implementation of such development programs at participants' home institutions.

## Session timeline

**Welcome & Introductions (5 minutes)**

**Opening Discussion: Challenges for Leaders (5 minutes)**

**Small Groups: Leadership Skills that Address Challenges (5 minutes)**

**Large Group Debrief (5 minutes)**

**The basis of Well-Being Centered Leadership & Brief Overview of 2 Existing Models at UCSF and UNMC (15 minutes)**

**Small Group Reflection: Bringing It Home (10 minutes)**

**Large Group Debrief (5 minutes)**

**Q&A, Resource Sharing, Wrap Up (10 minutes)**

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# Workshops

Organizational level

# How to care for caregivers: Solutions to help physicians thrive

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## Learning objectives

- Understand the current state of physician well-being, challenges they face and the solutions needed.
- Galvanize your hospitals, health systems and medical groups to implement the Caring for Caregivers framework to better support your health care workforce, including physicians.

Physicians are facing mounting challenges – with staffing shortages (84% report shortages of physicians), record-high levels of burnout (62% in 2022) and low professional morale (nearly 50% report not having high morale) leading to an unhealthy and unsustainable environment. Physicians are overworked and overextended, and more than half do not have positive feelings about the current state or future of the medical profession. Physicians also face barriers to receiving mental health care due to stigma and invasive licensing and credentialing application questions. In light of these challenges, it is urgent that physicians receive the support they need and deserve.

We can all take key steps to improve physicians' mental health and well-being. During this workshop, participants will learn about five critical strategies to support, protect and promote the health care workforce's well-being.

We will highlight how to implement these strategies through the Caring for Caregivers program. Participants will learn about the program's purpose to provide for support in the workplace and promote well-being, and the program's curriculum, which takes a comprehensive approach to address burnout and mental health by equipping leaders with the tools they need to support their workforce and creating a culture of well-being. The curriculum focuses on the state of physician well-being, effective and high-yield approaches, reducing administrative burdens, developing training programs for employees to ensure adequate mental health care is available, identifying a well-being leadership team and eliminating mental health barriers.

Participants will take a deep dive into how this program works in practice by analyzing its implementation in Virginia, where 100% of the state's hospitals committed to the program, and the progress the state has made so far. This exploration will provide a tangible example of how the program operates and the impact it has, demonstrating how participants can take similar steps in their hospitals, health systems and medical groups.

Through group discussions, participants will explore how their institutions can implement the Caring for Caregiver's framework, so that we can all become WellBeing First Champions and create environments in which every health worker can thrive.

Specifically:

- Co-authors present data on the state of the health care workforce (Note: We will have updated data prior to the workshop) and overview of implementing solutions. – 20 minutes
- Breakout groups explore how participants can implement solutions, specifically Caring for Caregivers program, in their institutions. – 30 minutes
- Report out from breakout groups and discussion with co-authors. – 10 minutes

# More than data: Professional well-being surveys as an empowerment tool to build your workplace future

## Author

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## Learning objectives

- Identify meaningful survey measures within well-being surveys to reflect a broad view of professional well-being
- Describe using survey data to promote shared ownership of professional fulfillment
- Discuss ways to present positive and challenging results to foster change

## Project objective/background

Surveys on professional well-being are recommended “best practices” for health care organizations to evaluate workforce well-being. Yet such surveys are relatively new in many organizations. Wellness leaders such as Chief Wellness Officers are often tasked with disseminating these data to leadership and health care professionals who may not be familiar with interpretation of these data or what actions to take in response. Sharing survey results becomes an important opportunity to educate leadership and health care professionals about measurable elements of professional well-being and use data to promote change. Concurrently, it may be challenging to deliver “bad survey news” to a strained workforce and leadership. Four well-being leaders will share their experiences in presenting survey results and how they use survey data as a tool to motivate leadership and empower health professionals to improve their workplace and build its future.

## Session description, plan, and timeline

**10 minutes:** Introductions; information on meaningful survey measures (e.g., leadership behaviors, practice efficiency, appreciation); broad view and shared ownership of professional fulfillment; timeline of presentation of survey results.

**20 minutes:** Groups of 5-8 participants will discuss one of 3 real-life vignettes each using a different validated survey and “wellness report”, representing common issues that arise during presentation of survey results to different stakeholders.

**Group 1:** Morale at your organization is low and people express discontent with decisions made by executive leaders that seem to prioritize efficiency and financial margin over clinicians. A recent annual engagement survey with well-being questions revealed several results below national averages. You are asked to present results to executive leadership. How do you approach them?

**Group 2:** After a new Division Chief is appointed, a wellness survey reveals that supportive leadership behaviors and gratitude are below benchmarks. How do you prepare for and conduct a meeting with the Division Chief about these results?

**Group 3:** You have just presented the work-life well-being report to faculty and staff at their monthly work meeting. It is not all good news. People are complaining about everything that is wrong with their section, the organization, and health care. How do you engage and unite them in the work-life well-being movement to help improve their work-life?

**15 minutes:** Facilitated discussion of group reports on participants’ responses to the vignette questions.

**15 minutes:** Panel and questions. Facilitators candidly share challenges and successes with presenting survey results, building on their experiences over years and reasonable expectations.

# #StopTheStigmaEM Awareness Month: A nationwide campaign to promote help-seeking behaviors towards mental health care for emergency physicians

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## Learning objectives

- Discuss #StopTheStigmaEM as a model for implementing improved mental health-seeking behaviors.
- Appraise the lessons learned about barriers to mental health-seeking behaviors for emergency physicians.
- Formulate the next steps for addressing existing barriers to mental health-seeking behaviors.

## Project objective/background

Emergency Medicine (EM) physicians continue to have the highest rates of burnout in medicine, with more than half of EM physicians affected. The problem is multifactorial: the nature of the specialty and repeated exposure to vicarious trauma and moral injury. Mental health is equally important to address and sustain as physical health in achieving professional fulfillment and minimizing burnout. However, multiple barriers exist to seeking mental health support. There is a critical need for sustainable change to protect and promote the well-being of the EM workforce. While burnout and mental health challenges do not always go together, EM physicians continue to be hesitant to seek mental health support, with over a quarter avoiding mental health support for fear of the repercussions and stigma.

In response, the SAEM Wellness Committee successfully launched SAEM's largest campaign in history with the #StopTheStigmaEM Awareness Month in October 2022 with the help of 13 national and international EM organizations. This effort served as the first-ever month-long awareness campaign in EM to advocate for better mental health for physicians.

The success of the #StopTheStigmaEM campaign serves as a blueprint for annual awareness efforts across EM and other medical organizations. The campaign

highlighted individual and systems-level barriers EM physicians face when accessing mental health care. The campaign aimed to 1. Collaborate across EM societies to promote EM physicians achieving better mental health care, 2. Raise awareness and acknowledge the barriers emergency physicians face when seeking mental health care, 3. Normalize accessing mental health care, 4. Initiate conversations about what we as a specialty must do better to promote EM physician mental health.

## Session description, plan, and timeline

Using appreciative inquiry, this interactive workshop will include background work on the critical need for sustainable change to protect and promote physicians' mental health and well-being. Using facilitated discussions, we will delve into the creation of the #StopTheStigmaEM national campaign, lessons learned, and the next steps.

1. Introduction- What is #StopTheStigmaEM, and Why. (5 Mins)
2. Sharing stories (participants to read out loud narratives shared for SAEM23) + reflections (15 minutes)
3. Facilitated small group discussion: What barriers do physicians face when seeking mental health support in medicine? (10 Mins)



4. Consolidation/Lessons learned (5 minutes)
5. Facilitated small group discussion: How can you be part of the change... as an individual, as an institution, and as a specialty? (10 Mins)
6. Consolidation/Lessons learned (5 minutes)
7. Takeaways/Conclusion (5 minutes)
8. Call to Action: commit to one solution per attendee (add to their calendar to check in 2 weeks later)
9. Q&A (5 minutes)

# The role of the chief wellness officer in building the optimal health care workplace of the future

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## Learning objectives

- Assess institutional level of commitment to health care workforce well-being.
- Identify a number of tools that CWOs can leverage to effectuate change.
- Consider high-yield opportunities and potential barriers for further development to advocate for in one's own institution.

## Project objective/background

A decade ago, few C-suites had members dedicated to measuring and optimizing the well-being of the health care workforce. In the last 5 years, however, chief wellness officers (CWOs) have become increasingly common across the country, with upwards of 75-100 having been named thus far. Though considerable variability exists in terms of how CWOs are supported, situated within organizations, charged and evaluated, a call for clarity and consistency has emerged around these characteristics in recent years. Arguably, to "build the workplace of the future" it will be necessary to have an expert, such as a CWO, at the highest levels of health care leadership to create an environment that fosters a well and professionally fulfilled health care workforce. Indeed, several national organizations (e.g. American Medical Association, National Academy of Medicine) have made this argument and advocated for the growth of CWO positions.

## Session description/plan

This session is intended for current, rising or aspiring CWOs. Participants will learn about the current state of what the CWO role is and is not, as well as how CWOs are enabled to drive change. After a brief introduction, participants will discuss their current and future goals if they are already a CWO, or consider what steps they can take if their institution does not already have one. Participants will leave the workshop empowered with the knowledge of how CWOs can effect change and the skills to consider how to move their own organizations to more advanced states of commitment to health care workforce

well-being. All presenters will be current CWOs who have extensive experience presenting this content nationally and/or internationally.

## Session timeline

**0-10 Introduction and Background Didactic** – Current CWO Roles and Responsibilities

**10-25 Initial Breakout Session:** Participants will discuss in a large group how to evaluate institutional well-being commitment and discuss with a partner their current or aspirational role of the optimal state of well-being commitment at their home organization.

**25-35 Interactive Large Group Exercise:** "Tools for Success": How CWOs leverage their positions to effectuate change and overcome barriers to change.

**35-50 Small Group Work:** Participants will discuss in small groups the current strengths and barriers to enhanced well-being commitment at their home institution and be asked to identify 1-2 priority areas and associated action items to effect change based on content learned and discussed.

**50-60 Concluding Discussion and Q+A**

# Well-being 2.0: Your roadmap for restoring the joy in medicine

## Author

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## Preamble

This workshop is based on a presentation I've given at several national conferences reviewing evidence-based system level best practices for improving well-being in health care. It also draws from my work as Medical Director of Well-Being at Ridgecrest Regional Hospital, and as faculty at the American Academy of Family Physicians in the Leading Physician Well-being Certification Program, Well-Being Educators Certification program, and the Physician Health First educational portal. For this offering the presentation was modified into a workshop format, with reflection exercises and action planning embedded into each learning objective.

## Learning objectives

- Define the Well-Being 2.0 framework.
- Prioritizing well-Being at an organizational level.
- Optimizing the practice environment.
- Establishing caring spaces and resources.
- Form a preliminary reflective action plan for your scope and organization.

## Project objective/background

There is ample evidence demonstrating the efficacy of system level interventions in reducing burnout and improving well-being, job satisfaction and retention for health care workers. This workshop introduces the philosophy and structure underlying the Well-Being 2.0. Participants will be empowered to methodically review the current state of well-being at their organization, and identify actionable steps within their professional scope and health care system that can be taken towards aligning with national best practices for organizational well-being.

## Session description, session plan, session timeline

### First 10 mins:

#### Introduction:

*5 mins*

- Briefly review background of Well-Being 2.0 framework expanding on history, philosophy and evidence.

*5 mins*

- Complete reflection worksheet; "Current State of My Organization" - participants will assess whether their organizations are in the era of distress, well-being 1.0 or well-being 2.0 phases.

### Second 15 mins:

#### Prioritizing Well-Being at an Organizational Level:

*10 mins*

- Describe how to incorporate well-being into the organization's mission/vision/strategy, how to engage C-Suite with evidence-based and leader specific language.

*5 mins*

- Complete reflection worksheet; "Making the Leadership Case for Well-Being" - participants will orient themselves to useful calculators (burnout cost, ROI), identify leaders and potential partners to lead the charge in their organization, maximize leader specific language, explore foundational needs; leaders, time, funding, training, and other resources.

**Third 20 mins:****Optimizing the Practice Environment:***10 mins*

- Describe leadership culture and behaviors that align with Well-Being 2.0.
- Review team based strategies to enhance optimal interpersonal dynamics and efficiency.
- Review EHR related strategies to optimize efficiency.

*10 mins*

- Complete reflection worksheet; "Where Do We Start?" - participants will evaluate areas of improvement within their practices related to unit leadership style, team culture, and EHR use metrics.

**Final 15 mins:**

Establishing Caring Spaces and Resources:

*5 mins*

- Describe optimizing space design to improve camaraderie and efficiency.
- Establishing supportive peer structures including the evolving role of the well-being committee and camaraderie groups.
- Establishing a Well-Being program for resilience and optimal health.

*10 mins*

- Complete reflection worksheet; "Caring Spaces and Structures" - participants will explore clinical care team proximity and potential for redesign to incorporate communal spaces, reflect on their awareness and functioning of their well-being committee, and availability of resilience resources at their organization.

# Wellness consult service for leaders and teams: A model for providing well-being support

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## Learning objectives

After participating in the proposed workshop, participants will be able to:

- Describe a model for Wellness Consult Service for Leaders & Teams within an organizational well-being framework.
- Articulate 3 questions to ask a health care leader to determine support needs.
- Identify 3 components of a supportive listening session for health care workers.

## Project objective/background

Pre-pandemic, the health care workforce was already at risk for higher burnout than the general population, as well as at higher risk for clinical distress and suicide. Research during and after past pandemics indicate that health care worker distress can persist after a pandemic subsides, if structured support within the workplace is not intentionally addressed. However, in times of crisis, health care leaders and teams may not consistently have the combined knowledge, time, capacity, and resources to carry out these best practices.

A Wellness Consult Service was launched at Oregon Health & Science University (OHSU) in March 2020 to support health care leaders across missions (i.e., health care, education, research) in addressing both their own well-being and that of their teams. Our focus on leaders was based on the evidence (e.g., Dyrbye et al., 2019; Shanafelt et al., 2015) that increased burnout among leaders not only affects their well-being, but also the extent of burnout and work satisfaction among those they lead. The consult service provided timely, brief psychological support that was tailored to a team's needs and availability. Thirty months later this service is institutionally funded, with expanded modes of delivery, and expanded scope to address additional stressors affecting health care workers. From March 2020-November 2022, 185 leaders and teams participated in 342 supportive listening sessions and workshops. On an anonymous post-session survey (N = 700), 89% of respondents rated the intervention as good to excellent and 84% were likely or very likely to recommend this service to a colleague or team.

An objective of this workshop is to share the components of this model for participants to apply related knowledge to their home settings.

## Workshop description

This workshop will share the development of a Wellness Consult Service. This will include details related to logistical operation, as well as utilization and participant satisfaction data. Facilitated discussion and small group exercises will allow for practicing elements of the consult service model and we will discuss feasibility of applying this model for application to participants' home institutions.

## Session description, plan, timeline

- 10 minutes – Establish Context – Development of OHSU Well-Being Team
- 10 minutes – Introducing the Wellness Consult Service for Leaders and Teams model
- 10 minutes – Assessing leaders' requests for support (small groups with debriefs)
- 10 minutes – Facilitating components of a supportive listening session – tips and strategies (small groups with debriefs)
- 10 minutes – Reporting utilization and participant satisfaction, conclusion
- 10-15 minutes – Questions and Discussion

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# Posters

Electronic health records



# Accelerate: A provider efficiency program

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## Learning objectives

- Demonstrate increased efficiency and confidence with ambulatory and inpatient provider Epic usage.
- Implement individualized efficiency plan with participating provider.
- Increase provider vitality and satisfaction related to Epic usage through improved workflows.

## Project objective/background

Accelerate is a 5-step provider efficiency program created and facilitated by the Ambulatory and Inpatient Provider Training and Support Teams at EEH. The program was created in response to our Epic data analysis and to assist in alleviating physician burnout. The Accelerate program structure was designed to assess workflows and provide recommendations tailored to the provider, utilizing customization, efficiency tools, and build optimization requests.

Providers at EEH enroll voluntarily, working 1:1 with a support team member to increase their confidence and efficiency in using Epic. Additional objectives for our participating providers include more patient interaction, reduced time spent in specific workflows, and earning five AMA PRA Category 1 CME credits.

## Methods/approach

The Accelerate Program can be defined by 5 steps:

1. Pre-Program Survey: An initial survey is taken to help identify self-perceived knowledge gaps.
2. Observation Session: A support team member takes notes regarding the provider's typical workflows completing Epic documentation.
3. Customized Efficiency Plan: A personalized report is written, including provider proficiency data, current and recommended workflows, and training materials to support the recommendations.
4. Implementation Session: The support team member and provider review the report and work to implement

the optimizations and recommendations. A post program survey is completed.

5. Program Follow-up: An email is sent approximately 60 days later, including changes in scores and post-implementation data trends, showing the program impact.

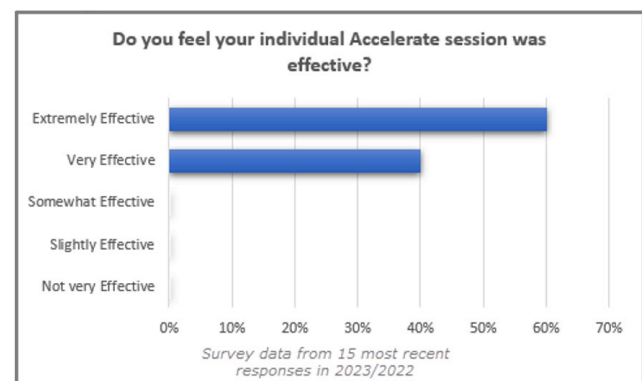
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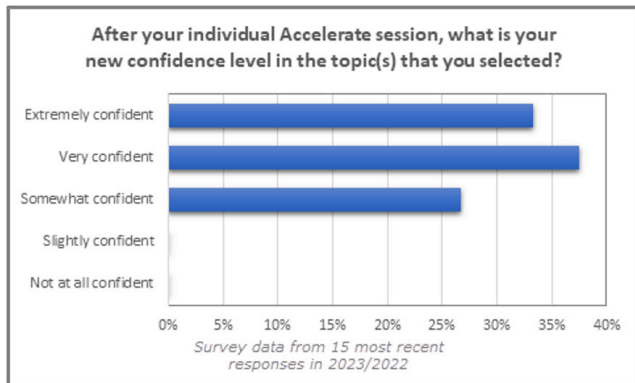
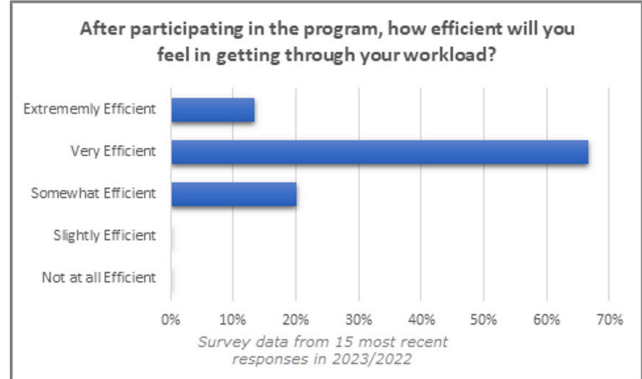
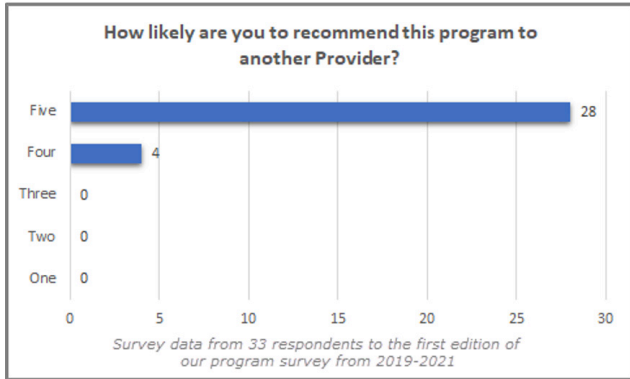
Program results are measured analyzing Epic usage data for the participant and using responses to the pre/post surveys. Ambulatory and Inpatient teams differ in data collection processes due to differing data systems. Very positive feedback has been received from participating providers.

Most providers show improvement on specific activities that were a focus during the program and find additional time to work on alternative activities.

Since 2019 over 93 providers participated in the program. We have awarded 85+ CME credits.

Survey Data:





**Conclusion**

Analyzing data trends per participant indicates providers are implementing recommendations and benefiting. Between increased scores, time saved, and survey results, the Accelerate Program proves to help providers with satisfaction, confidence, and efficiency within Epic.

Marketing Video Link:  
<https://youtu.be/ZfcH4S-s9-l>

# An interactive video training strategy to increase adoption of voice navigation of the EHR

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## Learning objectives

- Increase adoption and efficient usage of voice-activated navigation of the EHR
- Understand if an interactive virtual training session increases and optimizes sustained usage of voice-activated software

## Project objective/background

The electronic health record (EHR) has greatly enhanced the quality of medical care. However, the clerical burdens of lengthy documentation, managing in-baskets and various other tasks take away time from meaningful patient care, lengthen the physician workday and can lead to physician burnout. Integrated usage of voice-activated dictation and command navigation software poses opportunities to decrease time in the EHR and to improve ergonomics. Teaching physicians how to use voice-activated software in their daily practice requires an intentional training and optimization strategy. We hypothesized that providing physicians with an interactive video training would both increase adoption by previously inactive users of voice activated software and assist current users to increase their efficiencies.

## Methods/approach

The Permanente Medical Group (TPMG) is a physician group of 9,580 physicians who work within Kaiser Permanente Northern California. In 2022, TPMG enabled all physicians with a Nuance Dragon Medical One (DMO) account and included a training module in our annual incentive-driven physician learning program. The virtual module included background information on the speed of dictation compared to typing and the ergonomic benefits of voice activated charting, personal accounts by peers who are regular DMO users and interactive activities within the training platform of the EHR to allow for real-time DMO practice. The activities were designed for varied levels of learners with practice on dictation basics and more advanced navigation commands.

## Results

Prior to the program, in July 2022, TPMG had 4,248 active DMO users. After the program, we noted a 30% increase of active users to 5,337 in February 2023. New users from the training program quickly became efficient users, with on average 510 lines per hour and a high level of voice commands. DMO defines “highly adopted users” as those who dictate more than 300 lines/hour and use between 10-199 total commands, whereas “adopted users” are those who dictate less than 300 lines/hour and use between 1-9 commands. In February 2023, TPMG had 422 new highly adopted users, an increase from 18.9% to 20.6% of total users and 425 new adopted users, an increase from 14.3% to 16.4%.

## Conclusion

Providing a virtual, interactive video to teach the new skill of voice EMR navigation was an effective strategy to increase adoption and efficient usage of this time-saving software. We plan to optimize our approach with increased video tutorials that target varied skill levels and practice sessions with frontline high-using peers.

# Association of physician burnout with perceived EHR work stress and potentially actionable factors

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## Learning objectives

- Delineate factors associated with physician burnout encompassing self-reported and EHR work stress and other potentially actionable factors.
- Evaluate the magnitudes of associations across personal, professional, and organizational dimensions that significantly influence physician burnout.
- Compare vendor-generated and investigator-generated EHR work data regarding their representation of physicians across multiple specialties.

## Project objective/background

Physicians of all specialties experienced unprecedented stressors during the COVID-19 pandemic, exacerbating pre-existing burnout. We examine burnout's association with perceived and actionable EHR workload factors and personal, professional, and organizational characteristics with the goal of identifying levers that can be targeted to address burnout.

## Methods/approach

Survey of physicians of all specialties in an academic health center, using a standard measure of burnout, self-reported EHR work stress, and EHR-based work assessed by the number of messages regarding prescription reauthorization and use of a staff pool to triage messages. Descriptive and multivariable regression analyses examined the relationship among burnout, perceived EHR work stress, and actionable EHR work factors.

## Results

Of 1,038 eligible physicians, 627 responded (60% response rate), 49.8% reported burnout symptoms. Logistic regression analysis suggests that higher odds of burnout are associated with physicians feeling higher level of EHR stress (OR 1.15,

95%CI 1.07, 1.25), having more prescription reauthorization messages (OR 1.23, 95%CI 1.04, 1.47), not feeling valued (OR 3.38, 95%CI 1.69, 7.22) or aligned in values with clinic leaders (OR 2.81, 95%CI 1.87, 4.27), in medical practice for  $\leq 15$  years (OR 2.57, 95%CI 1.63, 4.12), and sleeping for  $< 6$  hours/night (OR 1.73, 95%CI 1.12, 2.67).

## Conclusion

Perceived EHR stress and prescription reauthorization messages are significantly associated with burnout. The magnitudes of their associations are dwarfed by the associations with not feeling valued. Younger physicians need more support. A multi-pronged approach targeting actionable levers and supporting young physicians is needed to implement sustainable improvements in physician well-being.

# Healing the healers: A comprehensive and multifactorial approach to the reduction of in-basket burden

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## Learning objectives

- Understand the importance in investing time and resources in optimizing the clinical in-basket
- Identify key tactics to reduce in-basket burden based on physician and advanced practice provider feedback
- Study the outcomes of pilot interventions on efficiency of practice and clinician well-being

## Project objective/background

Excessive administrative burden is a driver of burnout for clinicians. At our organization, this has presented as a key concern for clinicians as reported in engagement surveys and the annual Well-Being Index assessment. Notably, in the 2022 Well-Being Index assessment, high distress rates for physicians rose to 52% (as compared to 40% in 2021 and 32% in 2020) and high distress rates for Advanced Practice Providers (APPs) rose to 35% (as compared to 25% in 2021 and 22% in 2020). Over the same time, the number of in-basket messages has increased by 260%. It is recognized that this dramatic increase is multifactorial, including the pressure towards remote care during the COVID19 pandemic.

Administrative burden on clinicians is recognized as an urgent risk to our organization. There is leadership support at the highest level to institute major initiatives to reduce in-basket burden. Over the last few years, various singular efforts were put forward that did not result in meaningful improvement. Thus, dedicated infrastructure, budget and resources have now been dedicated to this work leading to multiple discrete and high impact tactics.

## Methods/approach

In fall 2022, an expert improvement team was established to focus on in-basket optimization which includes clinicians, clinical and operational leaders, informatics and information system experts. Multiple workgroups were created to sustain the work which report biweekly on milestones, metrics, barriers, and successes.

## Results

The key tactics identified include: Inboxologist pilot, centralized nursing support, provider-initiated e-visits, billable MyChart messages, clutter reduction, EPIC In-Basket Enhancement, artificial intelligence scribe technology, and workflow enhancements. Before implementing this approach, our organization was trending higher than other comparable organizations in messages per provider per day and time in in-basket per day. Three months into this work, one example of success includes 4,000 fewer messages per week sent to Primary Care from specialties due to workflow changes. Ongoing success will be defined by the following key performance indicators: Time on Inbox, Total EHR time, and Work outside of work. Other metrics will include number of in-basket messages, data from the Well-being Index, and pilot specific qualitative feedback.

## Conclusion

Successfully mitigating excessive administrative burden will require genuine commitment of organizations and a robust, multifactorial approach. Preliminary data suggests that this work is starting to impact the burden on the front line. Moreover, there is great impact on the morale of physicians and APPs upon seeing tangible improvements based on their feedback.

# Home for dinner gives back time to physicians

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## Learning objectives

- Learner will be able to recognize EHR deficiencies impacting provider workflow
- Learner will understand how to apply targeted interventions to improve clinical burnout due to EHR use
- Learner will be able to explain the importance of creating personalized learning and support experience to enhance the overall clinician experience

## Project objective/background

High volumes of data entry and poor usability associated with EHRs lead to increased clinician burnout and lower engagement. Northwell Health Physician Partners (NHPP) physician feedback revealed ongoing dissatisfaction with ease and efficiency within the AEHR. Capturing and sharing patient information is often complicated and physicians spend much more time than they would like in the Ambulatory Electronic Health Record (AEHR). From seeing patients to performing surgeries and consulting with colleagues, a typical day for a physician is full – and using the Electronic Health Record (EHR) adds more hours to their workday.

## Methods/approach

We engaged a third-party consultant, EHR Concepts, to perform an AEHR learning needs assessment. They engaged over 600 end-users to provide us with recommendations on creating an action plan to improve training, optimization, and stakeholder engagement. Additionally, Physician Partners conducted a mini-Z survey in 2021 that revealed physicians are an unfavorable amount of time after work hours in the EHR. To help physicians best navigate the AEHR, a campaign Home for Dinner launched offering new training and proficiency services. This goal of Home for Dinner is to offer a personalized learning and support experience designed to help physicians best navigate the Ambulatory Electronic Health Record (AEHR) by delivering personalized services, tools, and training to get more time back for their patients, their families and themselves.

## Program Components

- Renamed Proficiency Services with Observation 30, 60, 90 Day check-in

- Specialty-specific learning plans
- SharePoint Online Micro-Learning Center
- Communication Management Plan
- SuperUser Network
- EHR-use Metrics & Reporting Plan
- Physician Action Network (physician advisory groups by specialty)

## Results

EHR-use data from the Medicine Service Line informed the initial Proficiency Services cohort, representing 41 physicians. The cohort's 90-day intervention window is in progress ending December 2022, monthly results:

- 63% of providers engaged (N=26) in proficiency services in first 90 days – completed observation visit and delivery of learning plan
- Provider attrition equal to 6 (15% of cohort)
- Cohort 1 measured Burden Rating equal to 3.57
- 2:48 reduction in EHR-use WOW over baseline period ending September 2022 for participating physicians.

## Newly Established EHR-use Metrics

- Burden Rating: On a scale of 1-5 (5 being greatest burden, 1 the least) what is the level of burden you experience while using AEHR
- AEHR Work After Work Hours: Aggregate weekly median time (hours) a provider is logged into the AEHR outside of business hours (between 8:00am-6:00pm Monday-Friday)



## **AEHR Learning Center**

Since launching in October 2022, the new Ambulatory EHR Learning Center has received more than 5,000 views. This comprehensive online learning center is comprised of videos, job aids, and FAQs designed to enhance users' understanding of various AEHR features. The site has received over 14,000+ site views since launch.

## **Conclusion**

### **Benefits for providers:**

- Workflow-based specialty-specific learning content is highly desired to learn the AEHR
- Peer to peer support created by the Physician Action Network optimizes engagement
- High touch proficiency services require engagement of service line executives

### **Benefits for operations:**

- Evidence-based approach to service redesign
- EHR-use metric data is a directional measure
- Power of collaboration convening ambulatory operations, clinical informatics, AEHR Solutions Group, end-users, Physician Partners project management and physicians

Home for Dinner will offer ongoing support and opportunities for physicians to regularly share ideas to make things easier for everyone. It will also help inform how we approach learning for future programs and platforms across Northwell Health Physician Partners.

# Leveraging artificial intelligence to improve human experience

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## Learning objectives

- Describe collaborative approach to engage physicians in using an Artificial Intelligence Documentation Tool (AIDT)
- Measure impact of AIDT on clinician experience
- Measure the impact of AIDT on patient experience

## Project objective/background

Clerical burden and inefficiencies are major drivers of clinician burnout, with electronic health record (EHR) documentation serving as a major contributor. Leveraging technology to ease work burden and improve efficiency may positively impact both the clinician and patient experience. Clinicians needs and preferences vary in relation to documentation support. Maintaining clinician autonomy and involvement in documentation workflows is essential to integrating new technology. For this reason, the Well-being (WB) and Medical Informatics (MI) teams are collaborating to optimally engage clinicians in using an Artificial Intelligence Documentation Tool (AIDT) that incorporates natural language processing to positively impact clinician and patient experience.

## Methods/approach

WB and MI cohosted webinars to introduce clinicians to the AIDT. Clinicians were then offered the opportunity to participate in the program. Once enrolled, clinicians participated in a 1-hour training session. They received on-going support from a dedicated MI team member, whose goal was to maximize AIDT usage, and provide supportive outreach to those who were not optimally using the technology.

## Results

Initial results are currently available for eight physicians. Most providers (75%) were satisfied or very satisfied with their experience, would recommend the technology and encouraged offering the technology to other clinicians. Improvements in their experience were related to improved efficiency and reduced stress/work burden.

Patient experience survey questions relevant to AIDT for the first group of clinicians demonstrated improvement from baseline.

Given promising initial results, participation continued on a rolling basis, resulting in a total of 46 enrolled and active physicians, with maximum capacity of 75. Outcomes will be reassessed in July 2023, including clinician burnout, job satisfaction, practice efficiency and work environment. We will reassess impact on clinician experience through electronic health record analytics reporting of time in notes and chart completion. Patient experience data will also be used to assess impact of AIDT utilization on items measuring the degree to which care providers listened, explained, and the degree to which patient received clear information, had input in their care, and felt the visit was helpful.

## Conclusion

Initial results from a small pilot study of AIDT for documentation assistance are promising, with results indicating that this technology positively impacts both the clinician and patient experience. As this program grows in scale, additional outcomes will be reassessed in July 2023.

# Passwords? You don't need no stinking passwords!

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## Learning objectives

- Once authenticated into a secure network, passwords add little to no value
- Get rid of stupid stuff\* wherever possible

## Project objective/background

### Situation:

At the start of 2022, our health care organization required S3 Badge/Password authentication for all orders in the Inpatient areas and for medication orders in the Ambulatory areas, an average of 125,000 per day. These password settings had been in place since the original go-live for our EHR in 2006.

A recent reevaluation of the organization's overall risk of cyberattack led to a requirement that our entire workforce would need to change from 8-character passwords to a stronger, 12-character password requirement to make our system less vulnerable.

This additional password complexity burden, especially on our physicians, led to exploration about password requirements in general. We were surprised to learn that, in 2022, there was no longer any requirement for authentication beyond initial login to the secure EMR and for electronic prescribing of controlled substance (EPCS) to outpatient pharmacies. In effect, our legacy password policies might now meet the definition of "Stupid Stuff"\*.

### Methods/approach

Initial agreement with our Compliance and Legal Teams on the minimal recommendation password/authentication requirements, which include:

- Login to the EMR
- Daily initiation of S3 badge taps (in lieu of passwords) where S3 is available
- EPCS workflow for controlled substances as outpatient prescriptions

A survey of the medical group in was then conducted February 2022, as many, including multiple leaders, had voiced concerns about password removal. The vast majority favored removal of password authentication except where required. As a result, the project moved forward.

After technical validation, on April 27, 2022, password authentication was removed for the following:

### Ambulatory

- Medication orders, discontinuations, and cancels (including on mobile devices)
- Authorizing medication refills
- Discontinue/Cancel CAM orders

### Inpatient and ED

- Medication Orders, discontinuations, and cancels (including mobile)
- Procedure Orders (e.g., Lab and Radiology)
- Discontinue/Cancel Orders

Password Authentication remained for the areas detailed by Compliance and Legal as above.

### Results

There were approximately 125,166 fewer password authentication procedures each day. Assuming authentication requires 5 seconds per password, that equates to 174 saved hours a day with no reports of harm, or even irritation.

### Conclusion

Lose the passwords wherever possible and gain a LOT of time back.

Appendix/Poster

Month	Beacon treatment plan in the encounter per month	Controlled substance in the encounter per month	Normal	Total encounters with orders per month	What is signed?	Days in the month	Fraction of orders requiring passwords	Passwords required per day	Reduction in passwords required per day	Hours saved per day*
Jan-22	4317	197364	3612670	3814351	Everything	31	100.0%	123044		
Feb-22	4062	175470	3230512	3410044	Everything	28	100.0%	121787		
Mar-22	4663	199076	3526528	3730267	Everything	31	100.0%	120331		
Apr-22	4237	183562	3375815	3563614	Everything	30	100.0%	118787		
May-22	4289	194120	3394912	3593321	Controlled and Beacon	31	5.5%	6400	109513	152
Jun-22	4785	193796	3597955	3796536	Controlled and Beacon	30	5.2%	6619	119932	167
Jul-22	4289	182754	3433736	3620779	Controlled and Beacon	31	5.2%	6034	110766	154
Aug-22	4927	199746	3981492	4186165	Controlled and Beacon	31	4.9%	6602	128435	178
Sep-22	4708	188922	4293477	4487107	Controlled and Beacon	30	4.3%	6454	143116	199
Oct-22	4602	192985	4113011	4310598	Controlled and Beacon	31	4.6%	6374	132678	184
Nov-22	4749	201449	4012857	4219055	Controlled and Beacon	30	4.9%	6873	133762	186
Dec-22	4902	206589	3812045	4023536	Controlled only	31	5.1%	6664	123127	171
<b>TOTALS</b>			<b>44385010</b>	<b>46755373</b>				<b>AVERAGE</b>	<b>125166</b>	<b>174</b>
Jan-23	1553	67830	1147220	1216603	Controlled only	10	5.6%	6783	114877	
<b>TOTAL</b>										
Notes:										
No Clarity data field for "password entered"										
* presumes 5 seconds per password (either badge swine mechanics vs password entry on keyboard)										

\* Reference: <https://edhub.ama-assn.org/steps-forward/module/2757858>

# SmartTriage, a win-win solution: Saving physician time while enhancing patient engagement

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## Learning objectives

- Understand the potential benefits of using an AI-powered pre-visit patient assessment tool to evolve the primary care physician workday.
- Ascertain how engagement in pre-visit activities may enhance patient care experience and engagement.

## Project objective/background

SmartTriage is an AI-powered, dynamic, pre-visit assessment that collects a complete HPI (including associated signs and symptoms) and medication/allergy review from patients. A link to SmartTriage is sent to patients via email/text 24 hours and 3 hours before a visit. SmartTriage differs from a traditional pre-visit questionnaire. The most relevant questions are presented in real time utilizing information from patient responses, medical history, and over a decade of data from the electronic medical record (EMR). The unique set of responses from the pre-visit assessment are integrated into the EMR, populating the progress note. Procedural and diagnostic recommendations are shown to the physician to support clinical decision making. SmartTriage enhances patient engagement, provides clinical efficiencies, and reduces clerical load for clinicians by easing the burden of documentation.

## Methods/approach

In 2020, SmartTriage launched as a pilot at one large medical center affiliated with a health care organization serving nearly 5 million members. Physician champions hosted training sessions, promoted adoption, and provided support for users. Participating physician feedback was collected via surveys, individual calls, and on a designated virtual channel. Patient feedback on ease of use, readability, and features was gathered through surveys and an internal patient advisory council. This feedback was reviewed and utilized to enhance SmartTriage. Following a successful pilot, in 2022, all Adult

Primary Care (APC) physicians were given the ability to opt-in for SmartTriage.

## Results

1315 of 1895 APC physicians (69%) are active SmartTriage users. A survey of 200+ physician users resulted in a 4/5 satisfaction score and self-reported average time savings of 2.5 minutes/encounter. 83% would recommend SmartTriage to others and 95% reported it helped with medication reconciliation.

Half of patients offered SmartTriage start the assessment. Of the 1,000,000 SmartTriage pre-visit assessments started, 90% were completed. Patients noted high satisfaction with SmartTriage via post-visit surveys and free-text input (n=1429). In an internal patient advisory council session, members reported a strengthened bond with their physician and a better ability to communicate their concerns with their physicians.

## Conclusion

Through SmartTriage's bi-directional, customizable, and iterative interface, patients stay engaged in their care while clinicians benefit from decreased clerical burden and increased efficiency. As the workday of the future incorporates more pre-visit activities, the use of AI-powered symptom checkers and assessments will become increasingly important. SmartTriage represents a step towards a more engaged, efficient, and effective practice.

# The bot will answer you now: What to expect when using generative AI to assist patient-physician communication and implications for physician inbox workload

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## Learning objectives

- Compare and contrast responses to inbox messages from patients created by ChatGPT and actual physicians.
- Appraise the promises and challenges of leveraging generative AI to reduce physician inbox workload.
- Propose promising use cases where AI language models can be valuable for clinical workforce and garners patient trust.

## Project objective/background

Artificial intelligence (AI)'s potential applications have broadened with the emergence of increasingly sophisticated generative AI language models. For example, ChatGPT, the large language model developed by OpenAI (San Francisco, CA), can generate realistic, human-like prose. One potential application is to facilitate communication in the EHR where electronic messaging has become a major source of clinician burnout. AI could suggest text that would require approval and/or editing by clinicians, representing a sophisticated version of the "auto complete." This may reduce the time and cognitive burden imposed by EHR messaging on clinicians, and subsequently mitigate burnout risk, if AI-generated text is useful and requires minimal editing.

## Methods/approach

We leveraged previously extracted real EHR patient messages from a study of physician burnout, generated responses using ChatGPT, and then qualitatively compared them to actual physician responses. Three categories of patient messages were used as test case prompts: expressing gratitude, venting, and requesting medications while expressing negative emotions. We assessed responses with respect to relational connection, informational content, and recommendation for next steps. We also compared the lengths of responses. Lastly, we estimated the extent of editing that may be needed before an AI-suggested response can be used.

## Results

Regarding relational connection, AI-generated responses appeared to be mechanical ("I'm sorry you feel this way." "As an AI, I don't have personal feelings or beliefs, and I don't have the ability to experience emotions or go to heaven or hell."), whereas physicians' responses varied widely, ranging from personal, heartfelt, empathic, instrumental, prescriptive, to mechanical. The informational content of AI-generated responses appeared general ("It's important to communicate with your health care provider ...") whereas physicians' responses were more specific ("I have placed a referral to gastroenterology for you.") Recommendations from AI included encouragement for more electronic communication and requesting a meeting with their physician's supervisor or filing a complaint with the state medical board. One physician recommended one patient to go to the ER if symptoms recur and were severe. Another patient was admitted for inpatient service and had subsequent video and office visits. AI-generated responses averaged 119 (SD 45) words versus physicians' 42 (23) words. Substantial editing is required.

## Conclusion

While the current generative AI language models are not designed to answer patient messages to physicians, some eager users have already started using them in health care communication. Our analysis demonstrated challenges to make them useful to clinicians. We will propose potential useful use cases.





# Posters

Interventions for the individual

# A brief communication skills workshop can improve physician confidence and skill in vaccine conversations

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## Learning objectives

- Review barriers to vaccine uptake, misconceptions, and misinformation about vaccinations for COVID-19.
- Share and practice evidence-based communication strategies, including motivational interviewing, to promote vaccinations.
- Learn about culturally competent methods to address vaccine hesitancy in special populations.

## Project objective/background

The COVID-19 pandemic has brought many challenges to the health care system. Among such challenges is vaccine hesitancy, which has emerged despite the widespread availability of the COVID-19 vaccine. According to the Kaiser Family Foundation Vaccine Monitor, more than 50% of people believe misinformation or are unsure about COVID-19 vaccines.<sup>1</sup> This sentiment has exacerbated health disparities in many of our underserved communities. Given that we as health care providers are the most trusted source for information about COVID-19,<sup>2</sup> we are in a unique position to support our patients and family members and correct misinformation. To offer support to our primary care providers as they engage in these conversations, the Clinician-Patient Communication (CPC) faculty of our medical group collaborated to develop an annual 1-hour interactive, virtual workshop on vaccine hesitancy. The program shared useful evidence-based strategies, including motivational interviewing, and employed an interactive approach, incorporating adult learning methodology and behavioral skills practice.

## Methods/approach

From September through November 2021, the CPC faculty of our medical group collaborated on and developed an evidence-based, interactive virtual workshop to support front-line physicians and clinicians in their vaccine conversations. The workshop was presented to primary care providers on Friday, November 19, 2021, from 8 to 9 a.m. via Microsoft Teams.

This program was updated from September through December 2022 and represented on Friday December 2, 2022 from 7:30 to 8:30 a.m. The programs incorporated a variety of adult learning methodologies and CME was offered.

## Results

119 primary care invitees attended the 2021 program and 96 attended the 2022 program. The post-program CME survey found that 80% of 2021 and 69% of 2022 participants who completed a survey intended to make a practice change. Utilizing more motivational interviewing skills for vaccine conversations was the most specified goal. All attendees reported an increased knowledge level following the program.

## Conclusion

A brief, interactive, virtual communication skills workshop can improve physician confidence, knowledge, and skill with vaccine conversations.

# A group coaching pilot to study the feasibility and impact of cognitive-emotional skills in pediatric cardiology fellows

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## Learning objectives

- Assess the feasibility of a group coaching cognitive-emotional curriculum.
- Study the preliminary impacts.

## Project objective/background

Physician trainees experience unique stressors of burnout including increasing responsibility, mastery of knowledge and skills in a short time, financial stress, comparison, and the perception of powerlessness. Various wellness initiatives have mixed results, however, there is no standardized curriculum or intervention. Coaching has been reported to positively impact trainee wellness by shifting perspective and meaning making through examining values, beliefs, and attitudes in the face of challenges. We piloted a group coaching program to study the feasibility and preliminary impact on pediatric cardiology fellow wellness.

## Methods/approach

A prospective observational study of 15 one-hour workshops during curricular time was facilitated by a physician-coach from August to December 2023 for 15 pediatric cardiology fellows to voluntarily participant. Each workshop comprised of one central theme (ex: purpose, processing emotion, etc) and used facilitated discussion, self-reflection prompts and live coaching. Workshops were recorded when appropriate and self-study modules available. Pre and post surveys included: Neff’s Self-compassion short scale, Perceived Stress Scale, non-proprietary single-item substitute for Maslach Burnout Index Emotional Exhaustion (MBI:EE) subscale and Clance Imposter scale. An unpaired t-test compared the difference in mean scores using a 95% confidence interval.

## Results

12 of 15 pediatric cardiology fellows completed a post survey. Live participation was better received than recorded or self-study participation (Fig 1). Perceived stress and emotional exhaustion trended down while self-compassion trended up, although not statistically significant (Table 1). Although imposter syndrome

significantly increased mid-year (Table 1), feedback about the emotional impact was largely positive (Fig 3).

## Conclusion

Pediatric cardiology fellows self-reported community and normalization of their training experience and learned self-reflection, self-compassion and processing emotion through a group cognitive-emotional coaching pilot. Next steps include increasing numbers and a control group.

Figure 1. Modality of Program Engagement.

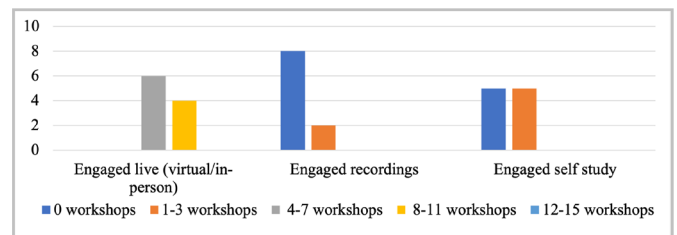
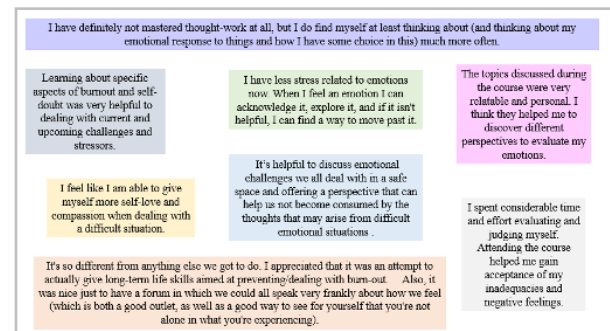


Table 1. Survey measures.

Outcome	Pre Survey Mean (SD)	Post Survey Mean (SD)	Mean difference (95% CI) unpaired t-test	p-value
Self-Compassion	3.1 (0.5)	3.2 (0.5)	-0.1 (-0.5, 0.3)	0.6
Perceived Stress Scale	18.1 (7.5)	14.5 (4.8)	3.6 (-2.3, 9.5)	0.22
MBI:EE	2.3 (0.5)	2.00 (0.00)	0.3 (-0.0, 0.6)	0.07
Imposter Scale	66 (9.4)	98.4 (10.4)	-32.4 (-41.5, -23.3)	0.0001

Figure 2. Sample of participant feedback.



# A pilot study of physicians seeking peer support to navigate workplace injustice

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## Learning objectives

- Identify characteristics of physicians at risk of experiencing workplace injustice.
- Recognize the role of peer support in navigating workplace injustice.
- Characterize the nature of workplace injustice experienced by physicians seeking peer support.

## Project background

Despite existing laws, policies, and professional codes of conduct against harassment, discrimination, and retaliation, these injustices remain pervasive in the medical workplace. With increasing evidence that women and physicians underrepresented in medicine are disproportionately subjected to these behaviors, action must be taken to support and retain these talented clinicians to increase diversity in the workforce and reduce health care disparities. Physician Just Equity (PJE) enlists physician volunteers to provide independent and individualized peer support to physicians navigating workplace injustices. Pilot data from the PJE peer support initiative provides insight into the nature of workplace injustices, characteristics of physicians seeking peer support and desired conflict outcomes.

## Methods

PJE conducted an IRB-approved study of self-reported, de-identified data collected from physicians experiencing workplace injustices between February and December 2021. Peers completed an electronic intake survey with demographics, career stage, specialty, practice type, geographic location, and the nature of their workplace injustice and consented to the use of their data for research. PJE assembled an individualized peer support team and held a one-hour virtual meeting to discuss the workplace injustice and develop a strategic plan to achieve their goal(s). After the first session, the peer completed an electronic outcome survey to assess the session's utility, and a "peer navigator" was assigned for follow up support. Quantitative analysis of self-reported characteristics of peers seeking support was performed and reported as frequency (%).

## Results

The data show most peers were women and identified as non-white. Peers resided in 17 states and represented 19 specialties or subspecialties. The most common injustices reported were discrimination, retaliation, and harassment. Of those reporting discrimination, gender and race were the top two reasons cited. 22% of respondents changed their specialty due to workplace injustice. The most common goals articulated by peers for workplace injustice resolution were career progression and reinstatement, followed by systemic change, restoration of reputation, support/guidance, and feeling safe at work.

## Conclusion

This pilot study demonstrates that under-represented physicians experience workplace injustices such as discrimination and retaliation. While this information corroborates current literature about the disproportionate experience of injustices by those underrepresented in medicine, our data also demonstrates that these injustices can occur within various specialties/subspecialties, geographic locations, and throughout all stages of career progression. These experiences are undermining individual clinician well-being and the health, diversity and viability of our clinical workforce compelling the need to treat this problem as an epidemic within the medical community.

# Application of a one-year, longitudinal coaching program to improve well-being during general surgery internship

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## Learning objectives

- Understand the structure of a one-year, longitudinal coaching program for surgical interns.
- Incorporate validated self-assessments to help interns develop individualized learning plans (ILPs).
- Identify the impact of coaching on intern well-being, burnout, and self-assessments.

## Project objective/background

Burnout among general surgery interns is associated with adverse educational, personal, and clinical outcomes. Utilizing mindfulness and self-compassion skills has been shown to protect against burnout and improve well-being. We created a one-year, longitudinal coaching program for surgical interns and evaluated the impact on intern well-being. Our objective was to help interns set and achieve professional goals while promoting well-being skills and practices. We hypothesized that participants would have lower burnout and improved well-being scores.

## Methods/approach

A coaching program was incorporated into the curriculum for a class of 32 general surgery interns. Prior to the start of residency, interns completed pre-intervention self-assessments which included the Values in Action Character Strengths Survey, Dweck's Growth Mindset Scale, Grit Scale, Self-Compassion Scale, Well-Being Index, a single-item burnout question, and open reflections. Interns participated in an in-person, 4-hour workshop to learn about and reflect on well-being skills before crafting Individualized Learning Plans (ILPs). ILPs consisted of short-term goals, plans of action, reflection on support systems, and anticipated challenges. Faculty coaches used a standardized coaching model with quarterly meetings and an emphasis on positive psychology elements. At the end of the year, interns engaged in a gratitude exercise, developed commitment-to-act statements for the next

year, and completed post-intervention self-assessments. A paired t-test compared pre- and post-intervention survey instrument scores.

## Results

Interns had a statistically significant increase in Physician Well-Being Index scores from pre-coaching ( $2.10 \pm 1.18$ ) to post-coaching ( $3.37 \pm 1.64$ ) ( $p=0.001$ ). Interns also experienced a significant increase in burnout upon completion of their intern year ( $p=0.001$ ). There were no significant differences in the remaining measured skills. When comparing pre-coaching and post-coaching means, respectively, Dweck's Mindset Intelligence Scores were 4.04 vs 4.24 ( $p=0.93$ ), Dweck's Mindset Talent Scores were 3.93 vs 4.11 ( $p=0.38$ ), Self-Compassion Scores were 3.30 vs 3.39 ( $p=0.82$ ), and Grit Scores were 3.87 vs 3.74 ( $p=0.26$ ).

## Conclusion

Upon completion of a longitudinal coaching program, general surgery intern Well-Being Index scores remained below the critical value of 5, indicating that interns did not experience low mental quality of life, high fatigue, or recent suicidal ideation; however, coaching may not fully ameliorate burnout. Further study will examine the impact of coaching on in-training exam scores, preliminary intern or fellowship match success, and qualitative analysis of written reflections.



# Assessing and addressing pediatric resident moral distress: Impact of peer debriefing training

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## Learning objectives

- Identify top factors contributing to pediatric resident moral distress
- Describe a strategy to expand access to a useful method of addressing resident moral distress

## Project objective/background

Resident burnout is widely prevalent and multifactorial, with moral distress increasingly recognized as a contributing factor. Limited support systems exist to help residents address and alleviate moral distress. This project evaluated factors contributing to moral distress in pediatric residents as well as efficacy of training residents to lead in-the-moment “hot” debriefs to alleviate moral distress.

## Methods/approach

An interactive one-hour training on the role and implementation of debriefs in clinical settings was embedded into an existing education session for pediatric residents at a single academic freestanding children's hospital in October 2022. The session focused on building participant skills in leading peer and team debriefs through role play and group discussion with guidance from facilitators including social workers, chaplains, psychologists, and attending physicians. Pre- and post-session surveys evaluated prior experiences with debriefs and efficacy of the session. Factors contributing to moral distress were additionally evaluated using the Measure for Moral Distress for Health care Professionals (MMD-HP).

## Results

12 residents participated in the session; 75% completed both pre- and post-session surveys. 100% of respondents reported experiencing moral distress in residency, most often around providing futile care, patient codes and deaths, and difficult interactions with families and staff. Other impactful sources of moral distress included “being required to care for more patients than I can safely care for” and “experiencing compromised patient care due to lack of resources/equipment/bed capacity”. In the

3 months prior to the session, residents experienced an average of 4.7 distressing events and attended on average 2.1 debriefs. Of the prior debriefs held, the majority were led by social workers and counselors (37%) or attending physicians (33%). Seventy-eight percent of respondents agreed that debriefing after distressing events is important. Two participants had led debriefs previously, although only one had received formal training in debriefing. After the session, the percentage of participants who felt comfortable requesting a debrief after a distressing event increased from 57% to 100%, and those who felt competent leading a debrief increased from 21% to 89%.

## Conclusion

Pediatric residents widely experience moral distress, due to a variety of factors at both individual and systems levels. Understanding these factors can guide targeted future interventions to alleviate moral distress. Concurrently, building resident resilience in facing distress benefits both health care teams and patients being served. In this small pilot study, resident participants showed an increase in confidence and skills in debriefing. Training senior residents to lead debriefs may help increase access to this tool.



# Comradery and compassion in the workplace of the future: Spreading the mission of the Sanford Compassionate Communication Fellowship

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## Learning objectives

- Identify best practices to support and amplify skills and lessons learned in compassionate communication from UCSD's Sanford Compassionate Communication Faculty Fellowship (SCCFF)
- Understand ways to foster physician community connectedness
- Describe and assess the ripple effect of formal training in compassionate communication on physician wellness and resilience

## Project objective/background

The SCCFF Leadership program was created to support the dissemination and ongoing research to maintain and magnify skills learned in the SCCFF, a year-long fellowship on compassionate communication during 2022. The fellowship taught participants that practicing self-compassion energizes a cycle of compassionate communication and synergistic relationships, creating resilience and increased satisfaction for all involved.<sup>1</sup> The pilot cohort gained increased skills and comradery to advance a culture of wellness within their personal and professional lives. Best practices to continue this mission, create meetings with meaningful interactions and address barriers to integrating compassionate communication into daily work are assessed during this pilot post graduate year. In addition, the ripple effect of practicing compassionate communication on the graduates' extended networks and communities is explored. A literature review on self-compassion among health care providers showed, "the way forward may not be to turn inward, but to turn outward." Health care providers need to feel empowered to address the suffering of others.<sup>2</sup> This year-long program includes follow-up and community support on outward facing projects enacted by the participants within their workplace systems, such as the application of compassionate communication in their teaching, mentoring, and leadership positions.

## Methods/approach

This pilot year program includes in-person and virtual meetings, based upon lessons learned during the fellowship. Participants take the validated Ryff Scale of Psychological Well-being pre- and post-program.<sup>3</sup>

Participants complete open-ended questionnaires on feelings of community connectedness and belonging, as well as on participant's outward work. Questions include, "How are you carrying forward your fellowship knowledge into your current teaching, mentoring, or patient care projects?" Mixed methods survey is used to assess participants' experience with post fellowship activities. Qualitative thematic analysis methods identify themes and subthemes on participants needs as they engage in outward facing post-fellowship work.

## Results

Through the Sanford Compassionate Communication Affiliate Faculty Program, graduates continue and increase their practice of compassionate communication, self-compassion, and resilience. Surrounding networks benefit through a ripple effect of compassionate communication and improved physician wellness.

## Conclusion

A structured program which facilitates interaction and support for graduates of the SCCFF enhances continued physician engagement and promotes leadership skills that can spread compassionate communication into larger communities and the workplace of the future.

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2. Sinclair S, Kondejewski J, Raffin-Bouchal S, King-Shier KM, Singh P. Can Self-Compassion Promote Health care Provider Well-Being and Compassionate Care to Others? Results of a Systematic Review. *Appl Psychol Health Well Being*. 2017 Jul;9(2):168-206. doi: 10.1111/aphw.12086. Epub 2017 Apr 10. PMID: 28393485.
3. Ryff, C.D.(1989) Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081.

# Connection through comradery

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## Learning objectives

- Demonstrate value of virtual comradery groups in creating connection amongst Primary Care colleagues.
- Leverage virtual platform for comradery groups.
- Measure value of virtual comradery groups in reducing physician burnout and enhancing meaning in work.

## Project objective/background

During the COVID-19 pandemic, between 2020 and 2021, the U.S. physician workforce experienced increased burnout and work-related stress. Mayo Clinic's work-life integration survey showed rates for physicians who experienced at least one manifestation of burnout (Mayo Clin Proc. 2022;97(12):2248-2258):

- 2021: 62.8%
- 2020: 38.2%

Evidence suggests that comradery groups can improve meaning and engagement in work and reduce burnout (JAMA Intern Med.2014;174(4):526-533). Our virtual comradery group demonstrates an innovative effort to mitigate burnout through collegiality and connection, sharing experiences, and supporting personal and professional challenges amongst our Primary Care providers.

## Methods/approach

1. Health and Wellness Committee collaborates on proposal for virtual Primary Care Comradery Group
  - i. Microsoft Teams Meeting Invite to Primary Care (IM, FP, Peds)
    1. 6 sessions
    2. 45 minutes per session (12:30-1:15 p.m.)
    3. 10-minute icebreaker/intro
    4. 30-minute 5-6pax breakouts
    5. 5-minute reflection/close
  - ii. Lunch via Uber Eats (\$30 voucher/person)
  - iii. Stanford WellMD survey pre-, mid-, post- to measure effects on provider well-being, solicit qualitative comments, and gauge continued participation

## 2. Executive Leadership proposal

- i. Evidence to support comradery groups (JAMA IM article)
- ii. Requests:
  1. Meal provision
  2. Two 10-minute phone appointment blocks per session
  3. Value of "Bio-break 12-12:30" prior to starting session

## 3. Roll-out:

### i. First Fridays with Friendship, Food & Fun!

- ii. 11/4/22 – 5/5/23
- iii. Microsoft Teams Chat to foster ongoing engagement
  1. Photos
  2. Great reads
  3. Happy songs and group playlist

## Results

Qualitative comments obtained in our survey support the notion that participants found the groups engaging and helpful in creating meaningful connections through shared experience and common humanity. Of completed end-of-program surveys, 100% would attend a future a comradery group.

## Conclusion

Preliminary survey data – based on qualitative comments and favorable intent to attend future sessions – suggests participants find value in comradery groups. Need more data and time to ascertain full benefits for mitigating burnout and promoting meaning in work. We recognize the Stanford WellMD survey as a validated measuring tool for well-being, but there may be a better modality to measure specific comradery group success, given the potential for confounding factors affecting results.

# Creating, viewing, and discussing art are beneficial in mitigating feelings of loneliness and isolation among health care workers

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## Learning objectives

- To determine if creating art is beneficial in mitigating feelings of loneliness and isolation in health care workers
- To determine if viewing and discussing art are beneficial in increasing feelings of openness and connection among health care workers

## Project objective/background

The COVID pandemic created a unique set of challenges for health care workers. Many cared for COVID patients while facing uncertainties. Since the COVID 19 pandemic, feelings of loneliness and isolation have increased among health care workers.<sup>1,2</sup>

## Methods/approach

In 2021 and 2022, our physicians and staff were invited to create and interpret art based on specific themes. For 2021 the theme was "The COVID 19 pandemic", in 2022 the theme was "Together". Staff participation included physicians, nurses, therapists, and administrative staff. Artworks included painting, photography, collage, and poetry. Art pieces were displayed in the medical center on a wall dedicated to physicians and staff. A subset of artists was invited to Schwartz Center Rounds where they used their artwork to express their emotions, experiences, and perspectives through a panel discussion. All artists were asked to complete an anonymous survey, (figure 1) regarding benefits of creating art. Schwartz Rounds participants completed an anonymous survey, (figure 2) regarding benefits of discussing their feelings after viewing the artwork created by staff.

## Results

Anonymous surveys were sent to 18 health care workers who submitted artwork. 12 participants responded (66 % response rate). 88% indicated that creating art allowed them to express their unspoken feelings, 88% felt it allowed them to reflect on their own challenges, 75%

felt that engagement in the program helped them open up to their colleagues, and 88% felt less lonely as a result of participating in this activity. 100% of the participants would recommend other colleagues to use art to express their emotions.

Anonymous surveys were also sent to the 161 people who participated in the Schwartz Rounds dedicated to art. 57 participants responded (35 % response rate): 42% physicians, 18% department administrators, 16% nursing staff, 10% social workers, 7% therapists, and 7% other health-care professionals. After viewing and discussing the artwork, 98% expressed this activity helped them process their feelings when faced with challenging social and emotional aspects of patient care; 100% expressed that they gained a new insight into the perspectives and experiences of their coworkers; 92% felt less isolated at work, 89% felt more open to express feelings to colleagues about patient care; finally, 98% said that they would participate in similar activities again.

## Conclusion

For health care workers, creating, viewing, and discussing art can be powerful ways to help mitigate feelings of loneliness and isolation at work and can increase openness and connection to self and colleagues.

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2. Song YK, Mantri S, Lawson J. Morally Injurious Experiences and Emotions of Health Care Professionals During the COVID-19 Pandemic Before Vaccine Availability. *Jama Netw Open*. 2021 Nov 24; 4(11)

# Critical incident stress management: Aligning Support Across Providers (ASAP)

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## Introduction/Background

Critical incidents are significant events which threaten a health care worker's (HCW) ability to cope. Stress-induced burnout has long been associated with HCW, yet there is a paucity of research which provide mitigating strategies. As reports of workplace violence increase, identifying and implementing supportive measures is imperative.

## Objectives

Creating confidential space for teams to share emotional experiences associated with critical incidents. Assess the composition of teams participating in interdisciplinary support programming, Aligning Support Across Providers (ASAP) Reflections and amplify the reach to additional disciplines.

## Methods

ASAP Reflections were held at a private, non-profit, 386-bed, mid-western tertiary pediatric hospital. Teams are supported by two facilitators who are chaplains, nurses, psychologists, or social workers. From 2017 to 2022, descriptive data was collected regarding the total number of Reflections requested, participants, and disciplines supported.

## Results

Participation in Reflections increased from 256 in 2017 to 417 in 2022. The mean number of Reflections has consistently been two per month, indicating increased participation per session. Nurses represent the primary discipline supported (79/140, 56%). Intensive Care and the Emergency Department requested 65/140 (44%) of Reflections, followed by general in-patient units (n=36, 25%), outpatient clinics (n=23, 16%), Hem/Onc (n=23, 7%), Allied Health (n=9, 6%), and non-clinical teams (n=3, 2%).

Events activating Reflections include patient deaths (n=66/144, 46%), general stress (n=38, 26%), patient trauma (n=15, 10%), staff death (n=9, 6%), staff assault (n=6, 4%), family concerns (n=6, 4%), and patient aggression (n=4, 3%).

## Significance

HCW are experiencing unprecedented stress from patient deaths to assault, and patient aggression. ASAP Reflections provide a safe environment for dialogue with peers to normalize and name emotions and reactions to critical incidents. Participation in Reflections dramatically increased beyond the acute care environment, suggesting this method of support is meaningful across the continuum of care. Our next step includes analyzing REDCap® survey data to explore how individuals perceived Reflections, using a QR Code. Data will be used to improve expand Reflections to support underrepresented disciplines (e.g. Security, Unit Secretaries, and Environmental Services) across the institution.

Nurse leaders request most ASAP Reflections (79/140, 56%). Nurses represent over 50% of the institution's employees. Nationally, women represent 86.7% of registered nurses in health care and men represent 13.3% (U.S. Bureau of Labor Statistics, 2022). A recent systematic review identified that 41% of studies report women to be a greater risk than men for burnout (Meredith LS, 2022).

# Development and implementation of a novel personal and professional development coaching program for first-year medical students

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## Learning objectives

- Explain the differences between advising, mentoring, and personal and professional development coaching.
- Describe the novel personal and professional development coaching program that has been embedded into the MS1 curriculum at the UCLA David Geffen School of Medicine.
- Demonstrate that faculty development coupled with a detailed facilitator guide provides faculty with the necessary skills to coach medical students along specific curricular themes.

## Project objective/background

Personal and professional development coaching is a method for helping individuals achieve a higher level of performance in work and life, and has been underutilized in undergraduate medical education. We created a novel coaching program for first year medical students (MS1) during which expert education faculty mentors meet one-on-one with students on a regular basis to review their individual progress and set and review personal and professional goals.

## Methods/approach

We developed a year-long coaching program based on positive psychology coaching principles. The program for MS1s consisted of seven sessions, each designed to encourage student self-reflection around specific personal development themes, to review student progress on their self-determined goals, and establish new goals. The self-development topics included: 1. Transition to medical school, 2. Time and stress management, 3. Communication and social connectedness, 4. Specialty exploration, 5. Self-care and compassion, 6. Discovery year exploration, 7. End of year reflection. Prior to each session, students completed a self-reflection form designed to enhance the effectiveness of coaching sessions, including prompting the students to set SMART goals and reflect on previous SMART goal progress. Faculty reviewed student self-reflections and detailed facilitator guides prior to the 30 minute one-on-one sessions. Students and faculty

evaluated the program after initial implementation using rating scales and free response items. We report descriptive statistics and important themes.

## Results

The coaching program was successfully implemented during the 2021-2022 academic year. 186 MS1s and 47 faculty participated. 147 (79%) students and 15 (32%) faculty completed the evaluative questionnaire. Students viewed the program positively and rated the quality of pre-session materials, session content, and facilitation as excellent with mean ratings of 5.3, 5.5, and 5.6 respectively on a 6-point scale. Student comments were positive regarding the value of self-reflection. 87% of responding faculty favorably reviewed the program, felt the facilitator guide was excellent, and expressed an interest in additional faculty development around coaching.

## Conclusion

We successfully developed and implemented a novel coaching program for MS1s. Early evaluation data suggest that the program is of high quality and viewed positively by student and faculty stakeholders. These results can inform the development and expansion of other coaching programs in undergraduate medical education.



# Discrimination-based trauma as a risk factor for burnout among women trainees in medicine

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## Learning objectives

- Describe the current state of burnout in women physician trainees
- Understand the relationship between prior trauma from discriminatory events and burnout
- Consider ways to mitigate burnout in those that have suffered prior trauma from discrimination

## Project objective/background

Physician burnout starts early in training and disproportionately impacts women. Recent data shows mistreatment/discrimination by patients, families, and visitors at work increases the odds of burnout in physicians. Single specialty studies in residents suggest a similar relationship, but an understanding of the relationship between past experiences of discrimination and burnout is lacking. The purpose of this study is to describe the current prevalence of and risk factors for burnout amongst female physician trainees across multiple institutions and specialties.

## Methods/approach

In September 2022, a baseline survey was administered to 1,017 female trainees, who volunteered to participate in a professional coaching program<sup>2</sup>, across 26 GME programs. The survey included demographics, the Trauma Symptoms of Discrimination Scale (TSDS), and the Maslach Burnout Inventory (MBI). The TSDS is a 21-item self-report screen for trauma symptoms due to past discriminatory events and includes questions about current symptoms including avoidance, negative cognitions, social fears, and future worries. Burnout was defined as scoring >27 for emotional exhaustion (EE) and/or >10 for depersonalization (DP) on the MBI.

## Results

All 1,017 trainees responded to the survey. The mean age was 31 years, 88% (843) identified as heterosexual, 59.9% (573) identified as White. Most (81%) were non-surgical trainees, and 20.7% (207), 19.8% (198) and 59.5% (596) were PGY-1, PGY-2, and PGY-3 or beyond, respectively. Overall, 66.0% (672) had high EE, and 61.3% (623) had high DP. Mean EE and DP scores were 30.58 and 11.83. Higher scores on the TSDS was associated with higher odds of burnout (OR, 1.30 for 10 units of change, 95% CI 1.11-1.53,  $p=0.001$ ), high EE (OR 1.26 for 10 units of change, 95% CI 1.11-1.43,  $p<0.001$ ), and high DP (OR 1.12 for 10 units of change, 95% CI 1.00-1.26,  $p=0.058$ ).

## Conclusion

Data from this large, multi-institutional, multi-specialty cohort show a higher level of burnout than reported in pre-pandemic large studies of US residents. This study suggests that trauma from previous outside-of-work discrimination experiences increase burnout risk in female residents. In addition to a GME-wide national wellbeing effort focused on system-level drivers, initiatives to help those who have suffered trauma from discrimination may be useful. Future studies should explore how best to help trainees recover from previous experiences of trauma.



# Does peer support impact the relationship between self-valuation and well-being outcomes for faculty physicians?

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## Learning objectives

- To understand the relationship between changes in peer support and well-being outcomes (burnout and professional fulfillment (PF)) among faculty physicians.
- To understand the relationship between peer support and self-valuation, and whether peer support is a mediator of the impact of self-valuation on well-being.

## Project objective/background

Peer support (PS) helps physicians cope with stress that can arise in the context of clinical work, including medical errors and adverse patient outcomes.<sup>1</sup> It reduces the likelihood of burnout after involvement in an adverse event.<sup>2</sup> PS operates in part by validating and normalizing the humanity of the peer. Self-valuation (SV) is the degree to which individuals prioritize well-being for themselves and approach their work with a growth mindset. Lower SV increases burnout.<sup>3</sup> While SV involves attitudes held by an individual as well as self-care behaviors, we sought to understand whether PS as a cultural asset impacts the relationship between SV and well-being by supporting and normalizing self-care.

The goals of this study were to:

1. Measure the impact of an organization-wide peer support program on physician burnout and professional fulfillment (PF).
2. Examine whether peer support is a mediator in the relationship between self-valuation, burnout and PF.

## Methods/approach

During the COVID-19 Pandemic, our organization launched a Peer Support Program. We measured burnout, PF, PS, and SV in 2019, 2020, and 2022. Baseline mean values were summarized using aggregate data combined with standard deviations and total samples for each department and year. Univariate analyses of the relationship between PS and PF and burnout were conducted using a mixed model with fixed effects with predicted margins and marginsplot graphs. We assessed

the relationship between PS as a mediator between SV and well-being outcomes using a structural equation model (SEM) by the Baron and Kenny approach and Sobel tests with step 1 and step 2 mediation testing. To determine significance and direction of the mediation, STEP 1, STEP 2, and STEP3 must all be significant as well as the Sobel test to convey partial or completed mediation. We included the type of effect using the indirect effect divided by the total effect (RIT). Additionally, we reported indirect effects of the mediation using effect sizes percentages. All significance testing were reported using a level of 0.05. All analyses were conducted using Stata version 17.

## Results

Among the 1086, 934, and 1081 faculty physicians responding to the surveys over three survey cycles in 2019, 2022, and 2022, mean PS increased from 6.07 and 6.05 in 2019 and 2020 to 6.31 in 2022 ( $p < 0.001$  for both comparisons). In mixed modelling, increased in PS were associated with improved burnout (beta=-0.38 in 2019, -0.33 in 2020, and -0.33 in 2022,  $p < 0.05$  except in 2020, when it lost significance for reducing burnout). Similarly, PS was associated with improved professional fulfillment (beta=0.50 in 2019, 0.53 in 2020, and 0.45 in 2022,  $p$  all  $< 0.05$ ). Interestingly, in mixed modeling peer support was only significantly associated with self-valuation in 2020. Of note, the 2020 wellbeing survey occurred during a large COVID-19 surge and concordant with large shifts away from in-person interactions. Mediation analysis found that PS does not appear to significantly mediate the relationship of SV with Burnout and Professional Fulfillment (Sobel  $P$  all  $> 0.05$ ).

## Conclusion

With implementation of a Peer Support program, PS scores increased, with associated improvements in burnout and PF. PS did not mediate the relationship between SV and burnout or PF. PS is an important organizational intervention. Other approaches will be needed to modify SV, a critical individual factor driving well-being.

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# Does studying have to hurt? Preventing musculoskeletal pain in medical students

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## Learning objectives

- Understand prevalence of musculoskeletal pain (MSP) in medical students and ways to prevent studying-related injury.
- Determine impact of an intervention to educate first-year students on MSP and strategies for prevention.
- Explore ways to integrate preventative strategies into medical education.

## Project objective/background

Medical students commonly experience musculoskeletal pain (MSP) thought to be associated with the intensity and duration of study required to become physicians. This global health problem affects 49-65% of medical students attending medical schools in Ethiopia, India, and Malaysia and 35-47% attending LCME accredited schools. We could not identify any literature describing education to prevent MSP in medical students.

The aim of this project was to determine the baseline frequency of MSP and study the impact of a brief intervention to educate first year students on common musculoskeletal problems that can develop with studying and strategies for prevention.

## Methods/approach

A group of medical school and physical therapy faculty and a medical student developed an interactive session on ways to prevent MSP during medical training. Objectives were developed after literature review and consultation with physical therapy faculty experts. The session was delivered to 306 first-year students during orientation. Surveys assessing objectives were sent before, directly after, and four months following the session. Surveys were optional, anonymous, and IRB reviewed. 252 (82%) completed the pre-survey; 232 (76%) the initial post-survey, and 190 (62%) the 4-month post-survey.

## Results

On the pre-survey 25% experienced current back pain, 28% within the month; 18% experienced current neck pain and 25% within the month. On the 4-month post-

survey 13% experienced current back pain, 16% within the month; 18% experienced current neck pain and 18% within the month.

On the immediate post-survey, 98.3% planned to implement at least one session recommendation. Most common: increased stretching (29%), study breaks (25%), and modify workstations (20%). 100% found the session was useful. After 4 months, 95% reported implementing at least one recommendation, with most implementing more than one. Most common: creation of workstations (35%), modification of workstation (35%), increased study breaks (54%), exercise (42%), and stretching (27%).

## Conclusion

MSP is common in medical students. A one-hour session to educate students on strategies to prevent MSP was well received and impacted behavior months following the session, and potential to improve student well-being. Next steps include longer-term follow-up, inclusion of similar sessions for clinical students, and inclusion of ergonomic study spaces at the medical school.

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# Empowered: Using improv to promote medical student success in unpredictable clinical learning environments

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## Learning objectives

- To determine the impact of teaching improv skills to second-year medical students ahead of their primary care and surgical clerkships
- To examine how medical students implement improv skills during clerkships

## Project objective/background

Medical students are routinely expected to adapt to new learning environments, teams, and expectations during their clinical rotations. This requires flexibility and improvisation, skills not explicitly taught in medical training. To promote medical students' success in the transition to clerkships, we developed an intervention utilizing medical improv, an interdisciplinary field that applies improvisation principles to enhance clinical skills training.

## Methods/approach

In partnership with the Sacramento Comedy Spot, we developed a four-part medical improv workshop for second-year medical students at UC Davis in January and February of 2022. We tailored the workshop for students to practice improv skills that promote flexibility and adaptability such as active listening, eye contact, quick thinking, and collaboration. Enrollment was limited by the spread of the Omicron variant in Winter of 2022. After initially assessing the workshop impact through pre- and post-workshop surveys, we conducted one year of follow up by distributing digital surveys after 4 of the 7 clerkships. Surveys were comprised of sliding scale and open-response questions. Data was analyzed using mixed methods.

## Results

Of the 10 enrolled students, 8 (80%) completed the workshop, and 3-7 respondents submitted each follow-up survey. On a sliding scale, participants reported implementing an improv skill(s) an average of 3 times on

their most recent rotation day. Analysis of the narrative responses revealed that students most commonly implemented their improv learning when 1) actively listening to patients, colleagues, and attendings, 2) being "put on the spot" by attendings or patients' family members while presenting during rounds, and 3) having difficult health conversations with patients. Students also noted that improv helped them better navigate team dynamics and professional hierarchy. One student remarked, "improv helped me become more comfortable making mistakes and appearing imperfect, which has helped tremendously in the context of a rotation where it's impossible to please everyone or meet everyone's expectations."

## Conclusion

This pilot study offers insight into how students benefit from and utilize medical improv during clinical clerkships. The narrative responses collected over the past year demonstrate that improv can be a powerful tool for medical student empowerment during the stressful transition to clerkships. By teaching medical students improv skills that foster their adaptability, confidence, and success, we equip them with the tools to co-create constructive health care workplaces of the future.

# Engaging all members of the team as strategy: Empowering and valuing academic medicine staff through a facilitated peer mentorship pilot program

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## Learning objectives

- Discuss the need and value of staff mentorship in an academic medical department.
- Describe the logistics of creating a staff mentorship program.
- Explore ways to pilot a staff mentorship program within their own institution.

## Project objective/background

In a survey of departmental administrative and research staff during the COVID-19 pandemic highlighted, many felt untrained and undervalued for their increasing workload and disconnected from the department's mission with many expressing burnout, anxiety, and job uncertainty. At that time, no mentorship programs existed for staff in this department, and staff often changed jobs or left our department to gain new skills. In response, a facilitated peer mentorship program for staff was created to build relationships, develop professional skills, and increase engagement with the additional goal of decreasing attrition of talented staff.

## Methods/approach

In this 12-month pilot program, 23 staff mentees were paired with 12 mentors (faculty & experienced staff). Mentor-mentee small-groups met monthly in addition to 14 large-group educational sessions. Representative topics included foundations of mentorship, psychological safety, cultural sensitivity, public speaking, appreciation, and providing feedback. Mentors additionally participated in quarterly sessions designed to increase their mentorship skills and create community. All participants were surveyed prior to the start of and at the close of this program. Post-participation data collection is ongoing at the time of abstract submission; results to date are reported below. Results are presented along a scale of 1 (low) - 5 (high) as mean (95% confidence interval).

Statistics comparing pre-/post-survey data will be performed after the post-participation survey is closed.

## Results

Pre-Participation survey revealed higher levels of agreement with participants feeling valued in their workplace (4.23 (3.87-4.59)) and supported by their peers (4.24 (3.92-4.56)). Lower levels of agreement were expressed regarding feeling comfortable setting boundaries at work (3.64 (3.17-4.1)) or having difficult conversations (3.59 (3.17-4.02)). The most notable improvements in the post-participation survey to date include clarity on mentor/mentee responsibilities (pre: 3.82 (3.47-4.17), post: 4.57 (4.2-4.94)); the ability to identify career goals (pre: 3.86 (3.55-4.18), post: 4.29 (3.92-4.63)); and feeling supported by leadership (pre: 4.27 (3.84-4.71), post: 4.50 (4.06-4.94)). Representative comments include: "Mentorship is not a transaction, it's a relationship." and "I learned that comfort and growth do no co-exist."

## Conclusion

This novel pilot staff mentorship program was very well-received. Post-participation data collection is ongoing at the time of this abstract submission. However, the data collected to date reflects growth in participants' ability to identify career goals and understand mentorship dynamics, as well as an increased feeling of support from their leadership. Departmental leadership has now extended funding to make this program a permanent offering in staff development.

# Expanding access to coaching for physicians: Group coaching model on burnout and perfectionism

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## Learning objectives

- Describe the structure of group coaching interventions on burnout and perfectionism for physicians at a large, multi-specialty medical group
- Understand the benefits of group coaching in improving access to coaching for practicing physicians and employees
- Understand the impact of group coaching on resilience, professional fulfillment and self-compassion using nationally recognized scales

## Project objective/background

Kaiser Permanente Colorado is committed to improving organizational systems to address burnout for their employees. To improve culture of wellness, coaching has been offered as a development tool for leaders since 2016, now contracted through an external company specializing in physician leadership coaching (Footlamp Consulting). This was expanded to include front-line physicians and employees in 2021. These engagements highlighted common areas of challenge for physicians and their leaders: facilitative leadership, conflict, burnout, and perfectionism. Group coaching on these topics was developed to scale coaching offerings, promote collegiality, and facilitate peer support.

## Methods/approach

Group coaching sessions were facilitated by a professionally certified physician coach from Footlamp Consulting. Enrollment was voluntary. Coaching sessions were conducted in one-hour live virtual sessions once per week over the course of six weeks, covering topics related to root causes of burnout for physicians with interactive discussion. Participants practiced new techniques between sessions. A total of four cohorts were offered in 2022: two focused on burnout, and two on "When B+ is Good Enough" (perfectionism), each with 6-11 participants.

## Results

26 participants total participated in the group coaching interventions on burnout and perfectionism. Resilience scores improved from 5.53 to 6.18 using the Conner-Davison Resilience Scale (CD-RISC2), professional fulfillment improved in all areas of the Stanford Professional Fulfillment Index including decrease in burnout scores from 1.47 to 1.12, and all aspects of self-compassion improved using the Self-Compassion Scale (short form) with overall score improving from 2.66 to 2.98. 100% of the participants scored the program as very or extremely helpful and rated their overall coaching experience 4.85/5. 64% of the participants would consider using their education funds to pay for a similar program in the future. Subjective feedback was overwhelmingly positive, both around the coaching facilitation and opportunity to connect with colleagues.

## Conclusion

Group coaching interventions proved to increase personal resilience, professional fulfillment, and self-compassion and reduced burnout among physicians at Kaiser Permanente Colorado. Voluntary physician enrollment and feedback was positive, and offerings will continue in 2023.



# From reactive to proactive: Ergonomics to care for physicians and support career longevity

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## Learning objectives

- Learn about the unspoken need for ergonomics in the medical community
- Review the injury prevention focus of the usual ergonomic intervention
- Learn strategies that can be implemented to shift the ergonomic culture from reactivity to proactivity

## Project objective/background

Health care workplaces are built to reach a goal: providing care. While humans are the driving force behind the results obtained, the unspoken assumption is that humans will adapt to the environment while executing the tasks. The cost of this adaptation to suboptimal work configuration can be fatigue, discomfort, pain, injury, errors, reduced productivity and satisfaction with the work and the work support, other inefficiencies of time and resources,<sup>1</sup> and even a shortened worklife expectancy.<sup>2</sup> The literature shows that physicians are not normally trained in ergonomics.<sup>3,4</sup> A well-designed ergonomic program can reduce these negative outcomes.

## Methods/approach

The ergonomic program development started in 2020 and now includes:

- Infusing ergonomics into onboarding to create a culture of prevention and care from day 1.
- Presenting Lunch and Learns for prevention and awareness and to expose physicians to the ergonomic services.
- Providing individual assessments, both onsite at the medical buildings and virtually for work at home to reduce exposure to ergonomic risk factors.
- Focusing on a different department each year for customized trainings (e.g., GI procedures, Surgery, Ophthalmology, Anesthesiology).
- Partnering with the right people so that the work configuration fully incorporates human factors, i.e., architects and construction program managers for new building and remodels, facilities team, capital planners, purchase team etc.

## Results

- Requests for ergonomic individual assessments more than doubled between 2020 and 2022. (80 to 191)
- 424 physicians were trained between 2020 and 2022 in ergonomics in gastroenterology, surgery, anesthesiology, ophthalmology, and office.
- Out of 352 physicians who requested individual ergonomic services between 2020 and 2022, fewer than 10 requested the service because of a diagnosed injury; the remainder requested the service either as a proactive measure or based on their new awareness of possible solutions for current discomfort.
- From qualitative reports, ergonomic services extended the worklife expectancy of several physicians.

## Conclusion

Ergonomics services are a necessary part of physician well-being, contributing to career longevity, physician satisfaction, and quality patient care outcomes.

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# Get after it: A longitudinal demand-driven, workshop-based coaching curriculum for surgeons

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## Learning objectives

- Identify performance demands of surgeons
- Identify performance gaps in the key performance pillars of nutrition, sleep, movement and mobility, and mental training
- Discuss the tools and strategies of a habit-based curriculum to bridge performance gaps

## Project objective/background

High performance endurance athletes have key performance pillars such as nutrition, sleep, movement efficiency, and mental training woven into their overall training program. Despite the stakes being much higher, surgeons are provided with little training and time investment into these pillars in favor of the standard “eat when you can, we can sleep when we’re dead” thinking.

## Methods/approach

During the pandemic, two of the authors obtained certifications in the performance pillars of nutrition, sleep, movement, and mindfulness training. Next, the demands of general surgery were analyzed based on personal and collective experience, as well as literature review, and performance gaps were identified in each area. Examples of demand include long operations with difficult ergonomics, call with interrupted sleep, extended call shifts and circadian misalignment, and prolonged high-stakes decision making. Examples of gaps include limited nutrition and sleep education, lack of access to high quality food on call, minimal ergonomic support and nominal mental training for high stakes intra-operative situations.

A workshop-based curriculum was then developed to provide education and training for these gaps. The curriculum was initiated as part of the Grand Rounds series at an academic surgery department in the beginning of the 2022 academic year and provides continuing medical education credit for each workshop.

The curriculum is designed such that surgeons at all stages of their careers will benefit. We use a diverse set of references, from traditional, peer-reviewed literature to podcasts and mainstream books. Education and training are centered around simple habits and environmental changes that have low barriers to implementation. Themes of diversity and equity are woven throughout the workshops, as well as the core principle that both surgeons and administration are responsible for creating an environment that supports health, performance and sustainable change.

## Results

This first year has been a proof-of-concept endeavor. Feedback is very positive with the audience engaged during and after the workshops. We are currently writing a manuscript describing the program, incorporating feedback, discussion and questions into the manuscript.

## Conclusion

A habit-based health and performance coaching curriculum can be designed to fit the needs of surgical specialties based on the key sports principles of performance demands and gaps.

# “Having support at work ‘is different’ and important”: A qualitative study of peer discussion groups conducted via virtual and text-based platforms

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## Learning objectives

By the end of the presentation participants will be able to:

- Describe the process and results of a qualitative analysis of focus groups examining participants’ group experience.
- Identify essential beneficial elements of these groups.
- Understand participants’ views of the communication platforms and continuing medical education (CME).

## Project objective/background

Peer discussion groups are a recognized approach to build collegiality and community in health care organizations and have been linked to reduction of burnout and enhanced well-being in physicians. We developed CIRCLE (Colleagues Involved in Reaching Colleagues through Listening and Empathy) virtual and text-based peer discussion groups for physicians that conferred continuing medical education (CME). Participants “met” twice monthly for 12 sessions to discuss evidence-informed topics (e.g., meaning in medicine, mindfulness, adverse outcomes, burnout). Post-participation surveys showed reduction in interpersonal disengagement. While survey-based research supports the value of peer discussion groups, there is limited qualitative data describing their beneficial elements. Exploring these elements can provide important information to health care organizations to justify and plan peer programs. We present a formal qualitative analysis of our CIRCLE groups grounded in social theory.

## Methods/approach

All 51 physician participants who participated between October 2020 to April 2021 were invited to join focus groups. Ten focus groups including a total of 19 participants were conducted until saturation and transcribed via zoom in April and May 2021. A discussion

guide with standardized questions was used to enquire about the meaning and convenience of this experience, impact of COVID-19, reasons for joining the groups and helpfulness to well-being. De-identified transcripts were reviewed using a coding guide and themes emerged in an iterative process. Themes were grouped in 4 categories using a conceptual framework based on social support theory in context of work-related stress (Cobb, House).

## Results and conclusion

The nine themes that emerged demonstrated the emotional, appraisal, informational and instrumental support that participants perceived. Essential elements of peer discussion groups include deeper connections at work, reduced isolation and safe sharing, and exchange of information on self-care. Connection and a balance of structure and freedom were important to engagement. The CME incentive was found helpful. Virtual modalities were viewed as feasible, convenient and conducive to connection.

# Heal thyself—leveraging CME education to improve provider wellness behavior

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## Learning objectives

- Educate non-lifestyle medicine certified providers in the science and the practical implementation of lifestyle medicine in our large multi-specialty group

## Project objective/background

Better physician adherence to lifestyle medicine pillars has been associated with more frequent and more effective lifestyle counseling. The pandemic opened an opportunity to develop an online series to educate non-lifestyle medicine certified providers in the science and the practical implementation of lifestyle medicine in our large multi-specialty group

## Methods/approach

We developed 10.5 hours of customized CME: Food is Medicine, Lifestyle is Medicine, a 6 part series in Implementation strategies, a culinary medicine cooking demo, and a 1.5 hour stress resiliency workshop. We primarily used in house experts and included a lifestyle medicine text, online access to CHIP videos, and had multiple cooking demonstrations with many ingredients distributed in advance to the participants. Health Risk Assessment questionnaires were completed by participants before the CMEs, after the 1st eight sessions, and again after one year.

## Results

Abstract Results: Self reported health risk assessment data showed sustained improvement in personal behavior choices regarding nutrition for the subset who completed

the questionnaires. 31.6% of respondents consumed 5+ servings of produce per day at baseline, 47.3 % immediately after the CME, and 55.5% one year later. Gains were also achieved in the physical activity scores with smaller increases in the remaining pillars. Development costs were minimal due to the online nature of most of the program and were subsidized by the providers themselves, Sharp Health care CME department, and an ACLM food grant. Results are limited by low questionnaire completion rates. Multiple providers commented that their families' health habits have also improved. One participant's husband lost 20 pounds in the year after our program. Most providers report they have been able to counsel their patients regarding lifestyle choices in >80% of their patient encounters one year after the CME series

## Conclusion

Institution based lifestyle medicine CME is an effective way to enhance lifestyle medicine practices in a large multi-specialty group and is associated with improved self care strategies for the providers and some of their family members. Future research could include cost savings, clinical outcomes, and provider and patient satisfaction.

# How do you feel right now? A pilot study of a text message alternative to wellness surveys

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## Learning objectives

- Evaluate the usability and burden of the text-based assessment system innovation.
- Evaluate participant engagement with the system through response rates.
- Understand if there is a relationship between traumatic work experiences and responses during study period.

## Project objective/background

In order for stress management initiatives to be effective, institutions must evaluate the extent of the problem using validated measures. Currently such measures are administered irregularly, which can result in recall bias. Compliance with current survey models is generally poor, likely secondary to survey fatigue. Text-based surveys have been shown to be invaluable in health care with response rates of 90-98%. Ecological Momentary Assessments (EMAs), which involve repeated sampling of experiences in real-time, minimizes recall bias. The project goal was to conduct a longitudinal pilot study delivering text-based EMAs to evaluate the real-time mental health of UCSD physicians-trainees.

## Methods/approach

Three text questions per week for five weeks were sent to participants who were asked to reply with a single number between 1 and 5 based on how they felt at the moment. The questions were validated single-item measures of the following:

- Job Satisfaction
- Empathy
- Stress
- Burnout
- Work Engagement

Weekdays and times of the texts were randomly assigned. The texts were sent and the data collected through MEMOTEXT, a digital health communication platform. Each participant had a de-identified personal webpage to

follow their scores and the anonymized aggregated scores of all participants. A 13-question optional survey was sent at the conclusion of the study to evaluate usability of the platform. In addition, we sent a text question asking if the participant experienced a traumatic event during the trial period.

## Results

82 participants were recruited. The average response rate was 93% (14/15 questions) with 1113 total responses. Seventeen percent (10/59) responded "Yes" to having experienced a traumatic experience during the study period. No significant correlations were noted between responses and having experienced a traumatic experience. Twelve (14.6%) participants responded to the optional feedback survey following the program. Respondents "Agreed" (n=3) or "Strongly Agreed" (n=9) that the text assessment system was easy to use. Respondents "Agreed" (n=6) or "Strongly Agreed" (n=6) that the number of texts received was reasonable. Respondents "Strongly Disagreed" (n=3), "Disagreed" (n=8), or "Somewhat Disagreed" (n=1) that using the text stress assessment system causes stress.

## Conclusion

Responses demonstrated that text-based assessments have high usability and low burden for recording physician-trainee mental-health levels in real-time. System engagement was high with response rates >90%. There was no correlation between responses and having had a traumatic event. Negative Future research is needed utilizing the tool on a larger scale.

# Humans before heroes: Narrative stories on the journey from burnout to well-being in a large academic medical center

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## Learning objectives

- Describe the role of a personal narrative speaker panel as an intervention strategy to foster a community of well-being
- Describe the inclusive design used to engage varying roles across the organization
- Describe the feedback, impact and considerations for future personal narrative panels

## Project objective/background

To destigmatize the experience of burnout arising from the pandemic, we designed a personal narrative speaker panel representative of the different roles at our organization. Similar to national trends, our reported rates of burnout were about 50% during the pandemic and continue to persist. A priority is to encourage a culture where it is safe to speak openly about burnout and well-being at work. Personal narrative was used as a powerful tool to foster a community of well-being. This narrative panel was created to share panelist's experiences navigating the challenges of the pandemic alongside their well-being journeys, including burnout and their efforts to move beyond it.

## Methods/approach

The narrative speaker panel was designed as an interdisciplinary panel aligned with the scope of our wellness office, and therefore included a representative faculty, staff, and learner. Panelists were selected by word of mouth, primarily through our Wellness Advocate Network. In telling their stories, panelists were prompted ahead of time to speak about their personal efforts to mitigate burnout as well as what support from others was most helpful or they would have liked to receive. The panel was marketed through system-wide e-newsletters, Wellness Advocates, and key partners. Each panelist shared their story for ten minutes followed by 25 minutes of audience questions moderated by our Chief Wellness Officer.

## Results

The panelists included a physician, a staff physical therapist, and a third-year medical student. Each panelist described their well-being challenges in their work or learning environments which included physical and emotional struggles, isolation, and other impacts on their well-being. The panelists reported medical intervention, professional therapy services, shifting professional focus, finding joy in their life, and reflective journaling as coping strategies. They reported feeling alone negatively impacted their emotional health. The first session had 64 registrants followed by an encore session with 153 registrants. In post-session survey feedback, 100% of respondents reported the panels as helpful or very helpful. Numerous positive comments expressed gratitude for the inclusivity of the various roles and reinforced the value of this format to reduce stigma and help others not feel alone. Suggestions for improvement included providing some time to pause and reflect after the stories and to include those in leadership positions.

## Conclusion

The feedback received emphasizes the power and enthusiasm for sharing personal experiences to help create community for well-being. We will continue to do more panels in the future with inclusion of organizational leaders.



# If you build it, they will come: Proactive mental health outreach to faculty and trainee physicians

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## Learning objectives

- Describe the implementation of an opt-out emotional support and mental health assessment program for physicians
- Describe mental health resource utilization for attending and trainee physicians from various specialties

## Project objective/background

Burnout in physicians is associated with depression, alcohol and substance abuse, and suicidal ideation. Overwork and time-constraints for physicians may not only worsen burnout and mental health disorders, but also prevent physicians from setting aside time for mental health care. The Healer Education Assessment and Referral Program (HEAR) at UCSD was created in 2009 to help address the mental health needs of physicians. A confidential, online screening questionnaire on stress and depression is offered to physicians and trainees, which is followed by an assessment from a trained counselor. To lessen the barriers to engaging with this program, in 2022 the HEAR program increased its offering of one-on-one assessments for faculty and trainees using an opt-out approach with the goal being to emotionally support physicians, connect them with relevant mental health resources, and refer them for further mental health care if warranted. This study assesses physician engagement in such a program and needs for further mental health care.

## Methods/approach

18 divisions and GME training programs at UCSD Health were invited to have their faculty and trainees participate in one-on-one in person or televideo assessments with a HEAR counselor. An opt-out approach was used for all 18 programs. All visits were conducted between 2022-2023.

## Results

11 GME training programs and 7 divisions within the department of medicine participated in this program. A total of 475 providers were scheduled with a HEAR counselor: 331 faculty and 144 trainees. 224 total providers (47.2%) kept their appointment. Trainees were more likely to keep their appointment as compared to faculty (61.1% trainees vs 41.1% faculty,  $p < 0.001$ ). 60 total providers were referred for further mental health care. Of providers that were seen, trainees were more likely than faculty to be referred for further mental health care (trainees 40.9% vs 17.6% faculty,  $p < 0.001$ )

## Conclusion

Implementing a proactive opt-out mental health screening program for faculty and trainee physicians is a cost-effective way to provide emotional support and facilitate mental health for busy physicians. Trainees may have higher mental health needs or be more willing to seek treatment, as compared to faculty. Future directions for the HEAR program should include collecting physician demographics and subspecialty data to better clarify where emotional support and mental health assessments are most needed.

# If you build wellness into the system, they will stay

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## Learning objectives

- How to empower employees to engage in systems-level improvement is shown to improve the organization.
- How to motivate employees to do this work.
- How improved systems lead to improved employee well-being.

## Project objective/background

The American Academy of Family Physicians (AAFP), in partnership with the United Health Foundation, launched a Physician Well-Being Certificate as part of the Leading Physician Well-Being program (LPW) in 2021. The program was created to address individual and organizational wellness and improve burnout through webinars, activities, and a quality improvement (QI) project. The AAFP's Research, Science, and Health of the Public Segment was tasked to evaluate the program and determine sustainability. The evaluation team assessed scholar outcomes for changing organizational culture by improving scholar's quality improvement skills and well-being.

## Methods/approach

Scholars completed surveys for the quantitative evaluation component of the grant at three time points – baseline (January), midpoint (May/June), and endpoint (October). The survey consisted of multiple instruments including the Physician Wellness Inventory, Everyday Discrimination Scale, portions of the Beliefs, Attitudes, Skills and Confidence in Quality Improvement Scale (BASiC-QI), and portions of the Nine Pillars of Quality Improvement (organizational level). The focus of this presentation is the Nine Pillars, which examines the scholar's organizational quality improvement efforts and the BASiC-QI for scholar's individual quality improvement efforts, and, in turn, burnout/wellness of the physician scholar. Analyses include descriptive and non-parametric statistics.

## Results

Two cohorts of scholars (n=220) have completed the program. Most scholars were female (77.7%) with 19.5% of scholars being male; the rest listed other genders. Most scholars were in their early career (58.2%), not Hispanic or Latinx (89.1%) and white (62.2%). Almost one-fifth of the scholars were Asian (16.1%) and 12.0% were Black/African American. BASiC-QI item analysis showed changes in individual QI practices. These items include: "QI plays an important role in strengthening systems, such as health care"; "I want to participate in QI initiatives as a health professional"; and "Applications of QI theory and methodologies can help make change to a system". Nine Pillars item analysis showed changes in organizational QI practices. These items include: "The organization has a process to capture and analyze patient and staff feedback in order to address the expectations of various stakeholders"; "Employees are acknowledged and/or rewarded for their contributions and successes"; and "All leaders display QI support by actively participating in improvement activities".

## Conclusion

The LPW program had its third cohort in 2023 and continues to show that the program curriculum helps organizational QI and individual leadership and self-efficacy. Improvements in QI scores reflect scholars' understanding of QI and ability to implement QI as a tool for improving physician well-being.

# Impact of a coaching program on the well-being of residents and faculty

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## Learning objectives

- Describe the structure of a coaching program to improve resident well-being.
- Discuss the impact of teaching coaching techniques as a form of faculty development on faculty coaches.
- Describe the impact of coaching on resident well-being and their training experience.

## Project objective/background

Burnout is defined as “a state of vital exhaustion”<sup>1</sup>. Resident burnout exceeds 50%, with risk factors like long working hours coupled with physical and mental demands. We present a resident coaching program that demonstrates benefits for both resident and faculty well-being.

## Methods/approach

116 faculty and residents participated in a randomized controlled trial of a structured coaching program. Faculty were taught coaching skills over 4 months via interactive virtual training. Faculty and residents were matched to avoid any clinical, evaluative, or mentoring overlaps and encouraged to meet at least 3 times using a semi-structured curriculum incorporating coaching and positive psychology. The residents were randomized into intervention vs control and sent surveys at baseline and end of intervention. Primary outcomes were burnout (Professional Fulfillment Index (PFI)), engagement (Utrecht Work Engagement Scale (UWES)), the Clance Imposter Syndrome score, self-valuation, and resilience (Connor Davidson). Faculty also underwent semi structured qualitative interviews.

## Results

Interpersonal disengagement ( $p < 0.0014$ ) decreased and UWES ( $p < 0.0151$ ) and PFI increased ( $p < 0.0274$ ) for the coached groups. There was no difference seen in the other measures. There was a improvement in UWES ( $p < 0.00378$ ) and decrease in interpersonal disengagement ( $p < 0.0003$ ) when comparing coached vs control for any of the measures. There were no differences seen in faculty outcomes. Qualitative interviews found themes of connection with other faculty members and longitudinal development of skills.

## Conclusion

A resident coaching program improved interpersonal disengagement, professional fulfillment and work engagement for residents involved in coaching and provided connectivity and professional development for faculty despite no change in burnout or engagement.

# Impact of caring for children with life limiting illness on the wellness of pediatric providers

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## Learning objectives

- Describe the impact of caring for children with life-limiting illness on providers' self-perceived wellness.
- Explore the use of a novel survey tool based on a holistic conceptualization of wellness.
- Use the findings of this survey to drive investigation of factors that promote social and integrated wellness.

## Project objective/background

The literature on physician wellness in pediatric palliative care (PPC) focuses mainly on negative impacts such as compassion fatigue, burnout, and emotional distress. However, qualitative studies suggest that providers often derive personal and occupational meaning from caring for children with life limiting illness (CLLI). We aimed to characterize the perceived impact of caring for CLLI on the mental, physician, social, and integrated wellness of pediatric providers at a mid-sized academic institution.

## Methods/approach

We developed a 4-item survey to evaluate provider wellness based on the holistic conceptualization proposed by a 2018 systemic review by Brady et al which includes mental, physical, social, and integrated dimensions of wellness (Table 1). Respondents to this survey are asked to rank the perceived impact of their work on each dimension using a Likert Scale from 1 (Strongly Negative Impact) to 5 (Strongly Positive Impact). The survey was distributed to pediatric providers at an academic institution as part of a needs assessment for PPC services.

## Results

Of the 112 providers invited, 56 (50%) responded, including resident physicians (n=20), attending physicians (n=30), and advanced practice providers (APPs) (n=6) from sub-specialties including primary care (n=7), hospital medicine (n=4), critical care (n=6), neonatology (n=9), pulmonology (n=3), genetics (n=1), and other (n=4). Most providers reported a positive perceived impact on social

(41/56) and integrated (41/56) wellness (Figure 1). An equal number (20/56) reported that caring for CLLI had a positive and a negative impact on their mental wellness with 16/56 providers reporting a neutral impact. Most providers (45/56) reported a neutral perceived impact on their physical wellness.

## Conclusion

Most pediatric providers at our institution self-reported that caring for CLLI positively impacted their social and integrated wellness and over one-third reported a positive impact on mental wellness. Although our study is limited as we used a non-validated survey tool at a single center, the findings challenge the pervading narrative that caring for CLLI has a wholly negative impact on providers' wellness. Rather, characterizing wellness in multiple domains reveals that there are likely aspects of the PPC provider experience that can be leveraged to mitigate burn-out. Further work should be done to identify these factors to inform wellness promotion strategies and to develop a validated holistic model of provider wellness using this conceptualization.

# Implementation of a professional development retreat for women in medicine and science (WIMS) to improve professional fulfillment

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## Learning objectives

- Describe the structure of an innovative professional development retreat for women faculty in a medical school.
- List 3 highly-rated components of the retreat.
- Explain 3 positive outcomes of retreat participation related to wellbeing and professional fulfillment.

## Project objective/background

Feelings of belonging, satisfaction with mentoring, and access to meaningful professional development are positively associated with engagement and negatively associated with burnout and intent to leave. Women in medicine and science (WIMS) are at increased risk for feeling excluded and lacking adequate mentoring and development opportunities. We implemented an innovative professional development retreat for female faculty to address these challenges.

## Methods/approach

We developed a program for a 2-night (6pm Wednesday to 11am Friday) retreat for women faculty hosted at a nearby bed-and-breakfast. The retreat was subsidized by the Dean's Office, with participants contributing \$300 for registration, accommodations, meals, and CME credit. Topics included leadership, work-life integration, women's health, professional fulfillment, and mentoring. Optional activities included yoga, meditation, wine-tasting, art projects, and chair massages. Attendees completed assessments before and after the retreat.

## Results

Over the course of 2 retreats, a total of 34 WIMS attended. Of these, 30 (88.2%) completed post-retreat surveys. Results demonstrated that 97% of attendees rated the retreat as "excellent" (77%) or "very good" (20%). Indeed, 100% would recommend participating in future retreats. On a 1-7 scale, the highest rated components included:

meeting new people (M=6.70, S =0.60), feeling connection with colleagues (M=6.70, SD=0.60), taking advantage of an opportunity to get away (M=6.67, SD=0.61), increasing opportunities for [peer] mentorship (M=6.63, SD=0.67), having fun (M=6.60, SD=0.68), and improving wellbeing (M=6.53, SD=0.73). When asked about the impact of retreat attendance, 89.7% reported improved personal wellbeing, 86.2% reported improved feeling of connection to the College of Medicine, 86.2% reported improved sense of community at work, 79.3% reported improvements in identifying/setting career goals, 72.4% reported improved job satisfaction, and 65.5% reported improved meaning in work. More than half reported improvements in mentoring and collaboration, and almost half reported improved leadership opportunities and scholarly activity. Representative comments include: "This has been the most helpful activity so far at [this institution] to support faculty," "Very helpful personally and professionally," and "It was a great time of encouragement and wisdom infusion from WIMS of all ages and stages of life dispensing much needed counsel."

## Conclusion

Participants overwhelmingly agreed that the WIMS retreat was a positive and valuable experience. Organizers felt that keys to success included building networking time into the schedule and using a private venue for the group to talk, dress, and act without judgement or scrutiny. Future offerings should address barriers that preclude participation from more women faculty.

# Implementation of a small group session on professional identity and fulfillment for medical students

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## Learning objectives

- Identify 5 components of a small-group workshop for medical students on professional identity and fulfillment.
- Describe medical student perspectives on the activities comprising the workshop.
- List 2 recommendations to improve student satisfaction with the workshop on professional identity and fulfillment.

## Background

The UFCOM Collaborative Learning Groups (CLGs) meet regularly to practice patient care skills, discuss medical ethics, and complete well-being modules. This project describes an extension of the well-being curriculum to the third year.

## Methods

Based on student feedback, observations from course faculty, and input from the CLG Director, a new module was designed to address “professional identity development” and “work-life balance.” The 90-minute module contained 5 activities: 1) creating a “6-Word Story,” 2) Professional Identity Quiz, 3) “Clear Your Plate” exercise, 4) “Failing Well” discussion, and 5) “3 Good Things” video. Upon completing the module, students completed an anonymous evaluation via Qualtrics. Most items were rated on a 5-point scale (e.g., “Terrible” to “Excellent” or “Not at all helpful” to “Extremely helpful”). Descriptive statistics were computed and qualitative responses were reviewed to find common themes.

## Results

Overall, 78 3rd-year medical students (58%) completed the Qualtrics survey. Results revealed variability in ratings. The top three activities were the “Failing Well” reflection/discussion ( $M=3.50$ ,  $SD=0.93$ ), the Professional Identity Quiz ( $M=3.49$ ,  $SD=0.98$ ), and the “6 Word Stories,” activity

( $M=3.47$ ,  $SD=1.06$ ). The 6 Word Stories, Professional Identity Quiz, “Clear your Plate” exercise, Failing Well reflection, and Gratitude video were rated as either, “Good,” or “Excellent” by 56%, 59%, 49%, 54%, and 42% of participants, respectively. The “6 Word Stories” activity received the most “Excellent” scores ( $n=13$ , 17%), while the “Clear your Plate” exercise received the most “Terrible” ( $n=7$ , 9%) and “Poor” ( $n=14$ , 18%) scores. Qualitative comments revealed that many students believed activities could be shorter, and some should be replaced with “social” time for students to reconnect with classmates. Informal faculty feedback suggested variable levels of comfort facilitating the activities, with some straying from the Faculty Guide. Many reported time pressure, especially because they also facilitated a 90-minute ethics module (either immediately before or after this workshop).

## Conclusion

Incorporating wellness- and mindfulness-related activities into their lives can prove challenging for many students, increasing the need for content within the required medical school curriculum. This study revealed that the majority of students found value in a 90-minute small-group workshop on Professional Identity and Fulfillment. However, not all activities were rated equally, and students valued unstructured time for “checking in” and extended discussions. The workshop is being revised according to student and faculty feedback for the next student cohort.



# Implementation of Schwartz Rounds® at Mayo Clinic: Impact on employee well-being

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## Learning objectives

- Provide an overview of Schwartz Rounds® as a mechanism for fostering the Mayo Clinic Well-Being strategy.
- Characterize Schwartz Rounds® attendees.
- Describe post-session survey results on the impact on well-being and support for Mayo Clinic Well-Being Strategy.

## Project objective/background

The negative implications of physician burnout and the need for effective solutions focused on shared responsibility between health care organizations and individual physicians has been [well-documented](#).

Therefore, Mayo Clinic implemented Schwartz Rounds, as one strategy to mitigate burnout, create a forum for peer support and meaning in work, and foster the Mayo Clinic Well-Being Strategy (see Fig. 1).

[Virtual Schwartz Rounds](#) is a multidisciplinary forum where health care staff foster compassion for self and others through open and honest discussions on issues impacting them. A virtual format was selected to enable all staff (remote and on-campus) to attend. Previous [research](#) on Schwartz Rounds demonstrates it is an effective resource to decrease perceived stress and isolation, improve teamwork, and provide support.

## Methods/approach

Virtual Schwartz Rounds (N=8) were offered on a variety of different topics between June 2022 and December 2022. All Mayo Clinic and Mayo Clinic Health System staff were invited to attend Virtual Schwartz Rounds. Data was collected for all sessions. Measurements (via post-session surveys) included Perceived Organizational Support of Well-Being and impact of Schwartz Rounds on personal well-being, healthy work environment, community at work, meaningful work, professional enrichment, and being valued.

## Results

Of the unique participants (N=992), the majority were: Registered Nurses (32%), Health care Professionals (17%), Business Professionals (19%) and Physicians (12%) (see Fig. 2).

Of the unique participants (N=992), approximately 362 (36%) responded to the survey. Of the survey responders, 94% (N=338) endorsed that offering Schwartz Rounds demonstrates Mayo Clinic cares about employee well-being, 96% (N=346) agreed that Schwartz Rounds was an opportunity to reflect on personal well-being and 93% (N=337) experienced psychological safety (see Fig. 3). Of the survey responders, 87% or higher agree that Schwartz Rounds supports the 5 focus areas of the Mayo Clinic's Well-Being Strategy: Meaningful Work, Personal Enrichment, Community at Work, Being Valued and Health Work Environment (see Fig 4).

## Conclusion

Employee burnout has garnered national attention not only for physicians, but all health care employees. Mayo Clinic's implementation of the Schwartz Rounds demonstrates a positive impact on well-being and supports the Mayo Clinic Well-Being Strategy to foster a healthy work environment, community at work, meaningful work, professional enrichment, and being valued.

Figure 1. Mayo Clinic Well-Being Strategy



West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. J Intern Med. 2018 Jun;283(6):516-529. doi: 10.1111/joim.12752. Epub 2018 Mar 24. PMID: 29505159.

Lown, BA; Manning, CF. The Schwartz Center Rounds: Evaluation of an Interdisciplinary Approach to Enhancing Patient-Centered Communication, Teamwork, and Provider Support. Academic Medicine 85(6):p 1073-1081, June 2010. | DOI: 10.1097/ACM.0b013e3181dbf741

Figure 2. Schwartz Rounds Participants by Job Type

Job Type	Unique Participants	% of Participants by Job Type
	<b>992</b>	<b>992</b>
RN	<b>317</b>	<b>32%</b>
Business Professionals	<b>185</b>	<b>19%</b>
Healthcare Professional	<b>171</b>	<b>17%</b>
Physician	<b>117</b>	<b>12%</b>
Advanced Practice	<b>56</b>	<b>6%</b>
Residents/Students	<b>30</b>	<b>3%</b>
Admin Office Support	<b>44</b>	<b>4%</b>
Technician/Technologist	<b>28</b>	<b>3%</b>
Clinical Office Support	<b>22</b>	<b>2%</b>
Service/Support Personnel	<b>14</b>	<b>1%</b>
LPN	<b>6</b>	<b>1%</b>
Other	<b>1</b>	<b>0%</b>
Skilled Craft Worker	<b>1</b>	<b>0%</b>

Figure 3. Impact on Well-Being

Impact on Well-Being	Statement	% Agreement Out of Total Responders	Total Responders
Perceived Organizational Support of Well-Being	Being able to attend Schwartz Rounds makes me feel like my organization cares about my well-being. (Perceived Org. Support)	94% (N=338)	N=360
Personal Well-Being	Schwartz Rounds gives me an opportunity to reflect on my well-being.	96% (N=346)	N=362
Psychological Safety	Diverse perspectives are welcomed during Schwartz Rounds.	93% (N=337)	N=362

Figure 4. Impact on Supporting Mayo Clinic Well-Being Strategy

Impact on Supporting Well-Being Strategy 5 Focus Areas (Fig. 1)	Statement	% Agreement Out of Total Responders	Total Responders
Meaningful Work & Professional Enrichment	Schwartz Rounds gives me an opportunity to reflect on and/or reconnect on my sense of purpose.	97% (N=351)	N=362
Community at Work	Attending Schwartz Rounds gives me a deeper understanding of my colleagues' experiences.	97% (N=350)	N=361
Community at Work	Attending Schwartz Rounds helps me feel more connected to my colleagues.	89% (N=324)	N=361
Being Valued	Attending Schwartz Rounds helps me feel supported in the challenges I face.	88% (N=315)	N=358
Healthy Work Environment	I feel as though I can honestly voice my opinion at Schwartz Rounds.	87% (N= 309)	N=355

# Improving new clinician experience through a versatile onboarding/coaching program

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## Learning objectives

- Describe the resources and support provided by an onboarding/coaching program.
- Discussion of the quantitative assessment and feedback

## Project objective/background

Onboarding clinicians face multiple challenges and stressors during their integration into an organization which may lead to burnout and loss of physician workforce. From October 2020 thru November 2021, new clinicians at UC Davis Health were enrolled into a 12-month onboarding/coaching program. The UC Davis Health onboarding program provided multiple supportive resources to improve the new clinician experience as well as to facilitate longitudinal professional development while emphasizing clinician wellness and quality patient care.

## Methods/approach

Onboarding program components:

- New clinicians received a relationship centered communication resource.
- A coach provided real-time feedback on relationship centered communication skills and clinical encounter efficiency.
- Clinicians participated in a half-day communications and efficiency workshop.
- Physician-lead monthly virtual wellness meeting to foster community with new physicians in the setting of a pandemic.
- Longitudinal electronic health record training.

Office visit length time were measured for enrolled clinicians. After program completion, clinicians completed a program assessment and provided qualitative feedback.

## Results

23 clinicians enrolled in the program. 15 clinicians completed the 12-month program. 8 clinicians disenrolled due to attrition. Clinicians participated in varied number of 4-hour one-on-one coaching with debrief [#1-7 coaching session]. Office-visit length time demonstrated a visit time decrease of 6.7 minutes from initial engagement to program completion. 92% of participants would recommend the onboarding program to colleagues. "Coach identifies issues and works on ways to improve", was voluntary feedback provided by a clinician. "Peer mentoring would have been helpful", was a frequent comment from physicians.

Onboarding Program Component	Very Helpful	Percent
Real-time Coaching with Debrief	13	92%
Post-coaching Report with Action Goal	10	67%
Good to Great Workshop	5	33%
Longitudinal electronic health record training	4	27%
Relationship Center Communication Resources	3	23%
Monthly Virtual Wellness Meeting	2	13%

## Conclusion

An onboarding program can create and foster a culture of support for new clinicians. Clinician feedback was overwhelmingly positive for one-on-one coaching. Assessment of monthly virtual wellness meeting maybe limited by delayed implementation; further long-term follow-up maybe needed. Physician feedback included additional support from a physician mentor. Additional system-level changes are necessary to support clinicians in their career to prevent loss of FTE (full-time equivalent).

# Improving the wellness of emergency medicine physicians through implementation of an exercise competition

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## Learning objectives

- Define burnout and its impact on Emergency Medicine Physicians.
- Explain the approach to developing an exercise competition within a residency program.
- Discuss the impact of implementing an exercise competition into a residency program's wellness curriculum on specific areas of wellness.

## Project objective/background

Emergency Medicine has a high rate of physician burnout. Studies have shown that exercise and social activities have positive impacts on physician wellness. Many residency programs have implemented initiatives aimed to positively impact the emotional, physical, intellectual, and social aspects of wellness. The purpose was to improve EM physician wellness by implementing a voluntary team exercise competition into an EM residency program wellness curriculum. Our aim was to improve overall wellness and individual aspects of wellness by 25% over 3 months.

## Methods/approach

This study utilized a voluntary survey to compare wellness pre- and post-competition. The population studied included 33 EM residents and 28 EM attending participants. Residents were grouped based on pre-established residency "Houses" and attendings assigned to one of these Houses at random. Participants earned 1 point for every 30 minutes of exercise with the winning team earning a residency funded "House Party" at the end of the 3 month period. Data from the survey was analyzed using a 2 Sample T-Test to assess for significance. The mean values of the pre/post data were compared to determine if an aim of 25% improvement in wellness was met.

## Results

Resident survey results showed that 100% exercised more during this competition and 100% would participate again. There was improvement in wellbeing ( $p = 0.026$ ), energy ( $p = 0.014$ ), and sleep ( $p = 0.025$ ); these areas all also met the aim of improving by more than 25% after this 3 month competition (25%, 36%, 33% respectively). 80% of residents felt that their increased exercise positively impacted their wellness at work.

## Conclusion

EM residents had improvement in wellbeing, energy, and sleep after implementing a team exercise competition. A majority of participants felt this competition encouraged an increase in their exercise and stated they would participate again. Limitations include confounding variables impacting wellness such as changing weather or rotations, a low survey response rate, and non-validated survey.

# Knowledge is power: The launch of the UT (University of Texas) Southwestern Coach Certificate Program and its impact on spreading coaching locally

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## Learning objectives

- Understand how to engage faculty learners with already existent leadership roles in academic medicine.
- Learn to network clients with peer coaches.
- Measure the impact of internal coach development program on coaching within the institution.

## Methods/approach

The University of Texas Southwestern Offices of Faculty Wellness and Development created an internally funded coach certificate program. Faculty participants coached other faculty as part of their training. The number of faculty clients, number of coaching hours provided to the UT Southwestern community, learner satisfaction with the course, and number of new coaching initiatives launched were tracked.

## Results

Twenty-four mid-career to senior faculty and administrative leaders were recruited. During the 10-month program, 52 faculty clients were networked to participant coaches, 302 coaching sessions were logged, and 5 new coaching initiatives were launched (Table 1). Self-assessed understanding of the definition and practice of coaching and confidence in their coaching skills improved pre versus post course on 5-point Likert score with higher score being greater satisfaction (understanding mean score: pre-course 2.1 vs. post-course 4.7; confidence mean score: pre-course 1.7 vs. post-course 3.94).

## Conclusion

By developing an internal coach training program, recruiting mid-career to senior leaders who already had leadership positions into which they could incorporate coaching, and creating a networking platform to connect faculty coaches with faculty clients, this development

program was able to not only educate its participants but also provide coaching institutionally. Future evaluation will assess continued hours of coaching provided by participants in the program and development and success of future programs.

Table 1. Outcomes of UT Southwestern Coach Certificate Program

Measure	Outcome
Faculty Clients Networked to Faculty Participant Coaches	52 faculty <ul style="list-style-type: none"> <li>- 14 School of Health Professions</li> <li>- 9 Anesthesia</li> <li>- 8 Internal Medicine</li> <li>- 3 Surgery</li> <li>- 3 Pediatrics</li> <li>- 3 Physical Medicine &amp; Rehabilitation</li> <li>- 2 Radiology</li> <li>- 2 Office of Advanced Practice Provider Providers</li> <li>- 2 OB/GYN</li> <li>- 2 Nonclinical Departments</li> <li>- 1 Neurology</li> <li>- 1 Dermatology</li> <li>- 1 Psychiatry</li> <li>- 1 Emergency Medicine</li> </ul>
Coaching Sessions	302 client sessions <ul style="list-style-type: none"> <li>- Faculty: 158</li> <li>- <del>Housestaff</del> 15</li> <li>- Medical Students: 87</li> <li>- Clinical Staff: 32</li> <li>- Non-clinical Staff: 4</li> </ul>
New Programs Launched by Program Graduates	<ul style="list-style-type: none"> <li>- Underrepresented in Medicine Faculty Group Coaching</li> <li>- Anesthesia Faculty Peer Coaching Program</li> <li>- Provider Experience Coaching Program</li> <li>- Clinical Research Academy coaching program</li> <li>- Coaching skills in the medical school college system workshops</li> </ul>

# Life support: Mentorship matching

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## Learning objectives

- Define the importance of mentorship during residency.
- Describe characteristics that correlate with a successful mentorship relationship.
- Explain the approach to establishing a mentorship matching program at a residency.
- Discuss the impact of a mentorship matching program on EM residents.

## Project objective/background

Mentorship is important for resident wellness, academic success, professional growth, and personal development; yet, there is wide variability in the prevalence of mentorship among residents in a variety of medical fields. Studies show that the existence of a mentorship program influences the prevalence of mentorship relationships. Though there is no universal matching method, the most important aspect of a mentorship is a good relationship with common interests and goals shared between the mentor and mentee. The purpose is to define the current state of interest in an Emergency Medicine residency mentorship program and assess the perceived success of a newly implemented mentorship matching program.

## Methods/approach

This study utilized a voluntary survey to gather information on academic and personal interests of EM residents and EM attendings who requested to participate in a matching program. Residents and attendings were matched based on similarities between survey answers. Four months after being matched, participants were sent a voluntary, de-identified survey to assess the demographics of participants and their perceived success of the mentorship matching program using Likert Scale survey questions.

## Results

Initial survey results revealed that 27/35 (77%) of MCW EM residents and 28 attendings were interested in participating in a mentorship program. The post-match survey revealed that 83.3% of participants agreed that they were matched well. 73.3% of participants agree that they benefitted from this mentorship matching and 86.7% stated they are likely to recommend this program to another resident or attending.

## Conclusion

EM residents and physicians were successfully matched based on a survey based matching system and would recommend this mentorship program to other residents and physicians. Limitations include short time frame for relationship development and low survey response rate. Further adaptations to this program should include more formal structure and guidelines to the mentorship program.



# Lifestyle medicine training may enhance resident well-being: A single-program qualitative study

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## Learning objectives

- Describe the components of the Lifestyle Medicine Residency Curriculum
- Explain one program's resident-reported impact of lifestyle medicine training on wellbeing and resilience
- Discuss the opportunities for LM training to create a culture of wellness within an institution

## Project objective/background

Lifestyle Medicine (LM) can increase physician wellbeing and reduce burnout. The Loma Linda University Health Education Consortium Public Health and General Preventive Medicine (GPM) Residency Program is one of 175 residencies nationwide which have implemented the Lifestyle Medicine Residency Curriculum (LMRC). Besides completing the LMRC's 100 hours of didactic and application activities, our GPM Trainees receive additional LM training in scheduled LM lectures and group activities. Acknowledging that the LMRC increases trainee academic burden, our team examined whether or not residents believed that LM training enhanced their wellbeing and resilience.

## Methods/approach

We inventoried all LM activities required by the residency over the 10-month period from July 2022-March 2023. We then asked residents via email if "lifestyle medicine teaching or activities helped enhance [their] wellbeing or resilience"?

## Results

Between July 2022 and March 2023, the residency scheduled sixteen mandatory lifestyle orientation/application activities in physician wellbeing, nutrition, physical activity, and positive social connections. Eight hours during grand rounds was also used for group presentations of LMRC didactics.

All residents (n=15) responded to our survey. Thirteen residents (87%) reported that LM helped them personally, with 73% indicating it helped their wellbeing, and 38% saying it helped their resilience.

Individuals not specifically mentioning resilience in their responses did indicate that LM training improved their quality of life, ability to manage stress, prevention of burnout, and reduction of guilt for selfcare. Residents appreciated LM's ability to enhance the culture of wellbeing in the residency, and most frequently cited group exercise and culinary medicine as personally beneficial.

Two respondents did not report that LM training enhanced their personal wellbeing. Both of these residents had been in the program 6 months or less, and listed the benefit of LM training for their patients instead of themselves. These individuals reported being busy with other obligations and not completing LM curriculum beyond the required group sessions.

## Conclusion

A majority of residents in our program self-reported increased wellbeing and resilience which they personally attributed to LM training, in spite of the increased academic burden. A minority of residents early in residency did not report enhanced personal wellbeing, but indicated that the training improved their patient care. Although this study is limited by cross-sectional, subjective responses, it nevertheless indicates a potential for institutional LM training to help optimize physician health. This also suggests promising future directions in objective, longitudinal wellbeing research among lifestyle medicine trained physicians.

# Meeting the unique needs of physicians in mental health treatment: Identifying emerging best practices

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## Learning objectives

- Describe current state of mental health treatment for physicians
- List identified barriers and facilitators to mental health treatment
- Explain how to utilize results to better tailor practice and referral methods

## Project objective/background

Recent reports indicate an increase in burnout, anxiety, depression and trauma among physicians as a consequence of the chronic stressors and sequelae of the coronavirus pandemic. Simultaneously, health care systems, professional organizations and government entities have made significant strides in implementing policies and establishing cultural norms that decrease the stigma of help-seeking and facilitate physician participation in mental health treatment. With these changes, it is imperative that mental health clinicians are well-equipped to meet the unique needs of physicians; however, there is currently a limited understanding of how to this is accomplished. The purpose of this study was to identify emerging best practices in treating physicians in mental health settings.

## Methods/approach

Psychologists and other licensed mental health professionals who work in a hospital setting or academic medical center were invited to complete a survey about specific aspects of their role. Semi-structured interviews were conducted with respondents who reported that at least 20% of their time on activities related to supporting the well-being of health care professionals. Interviews were audio-recorded and transcribed. A naturalistic inquiry approach, which emphasizes developing an understanding of how participants make sense of their world, was utilized to analyze the interviews.

## Results

Of the 13 participants interviewed, the majority had a doctorate in psychology, worked at academic or affiliated medical centers, had a mean FTE of .85 dedicated to physician well-being, and either provided mental health treatment to physicians or referred them to community resources. Three categorical themes and nine subthemes were identified, including 1) general treatment considerations (understanding the medical culture, common presenting problems), 2) enhancers of treatment alliance (establishing credibility, creating a holding environment, appropriate pacing, awareness of personal biases), and 3) barriers to treatment alliance (time and scheduling, stigma toward help-seeking, confidentiality concerns).

## Conclusion

Mental health professionals who work with physicians adapt their practices to better meet the unique needs of physicians. These emerging best practices need to be further researched and shared widely in order for physicians to engage in effective mental health care.

# Mitigation of burnout in frontline providers via an online meditation course

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## Learning objectives

- Understand the role of meditation as a means to mitigate physician burnout.
- Explore whether an online meditation training course is an effective way to teach physicians how to meditate.
- Identify opportunities and barriers to implementing online meditation training in health care settings.

## Project objective/background

Recent research suggests that burnout is on the rise among health care professionals.<sup>1</sup> Given the associations between burnout and quality of care, turnover, and reduction in work effort, this has significant implications for the health care system.<sup>2</sup>

Behavioral strategies such as meditation have been shown to help reduce stress and burnout,<sup>3-5</sup> yet they are not commonly taught in medical training or practiced by medical doctors. We propose that meditation is a core competency that, if practiced by health care providers, will be protective against burnout.

## Methods/approach

This exploratory study was conducted to understand whether a CME-accredited online meditation course reduces burnout and is a feasible and effective means of teaching meditation techniques to clinicians.

Participants completed baseline surveys assessing burnout and meditation experience, following which they were given access to the self-paced, online course (15 modules completed in 6 hours over 4 weeks). Additional surveys were administered upon course completion and 3 months later. Physicians and nurses were eligible to receive 6 CME hours, and the cost of training was fully subsidized.

## Results

We recruited 92 of 200 desired participants (see Table 1). Most participants indicated being motivated to learn and use meditation to reduce stress and improve mental

health (see Fig 1), and identified specific benefits they were hoping to obtain from meditation practice (see Fig 2). Prior to completing the training course, average burnout scores were in the moderate range (see Fig 3). Due to a high degree of attrition only 8 participants completed the post-intervention questionnaires, and 15 completed the burnout measure at time 3. In addition, participants were largely noncompliant with requests to track their time spent meditating. Despite positive reviews of the online training, we did not see a significant change in burnout scores as a function of meditation training or practice.

## Conclusion

Meditation is a complex skill with benefits that are likely experienced after the devotion of significant time and effort. In our health care system we struggled to recruit health care providers to engage in a free meditation training course, and most participants failed to complete the course or engage in routine meditation practice. Qualitative feedback from course completers suggests that future meditation training efforts may be more successful when:

- Skills are taught during the work day in smaller chunks
- Providers are given opportunities to practice during paid time
- Leaders and peers model and support meditation practices
- Training and education in meditation practices is ongoing

Tables

Table 1. Demographics (N = 92)

Characteristics	Percentage
<b>Gender</b>	
Female	81.5%
Male	18.5%
<b>Race</b>	
White	79.3%
Black/African American	2.2%
Hispanic/Latinx	5.4%
Asian	8.7%
Biracial	2.2%
Prefer not to answer	1.1%
<b>History of Psychiatric Diagnosis</b>	
No	77.2%
Yes	22.8%
<b>Years of Professional Experience in Healthcare</b>	
<5	31.5%
6-15	37.0%
>15	31.5%
<b>Role</b>	
Nurse	35.9%
Provider (Physician or APP)	41.3%
Resident	10.9%
<b>Primary department</b>	
Anesthesiology	1.1%
Emergency Department	8.7%
General Medicine	22.8%
Intensive Care	31.5%
Other	30.4%
Rotating through multiple departments	5.4%

Figures

Figure 1. Participants’ responses to the question “What motivated you to complete this course?” (N = 37)

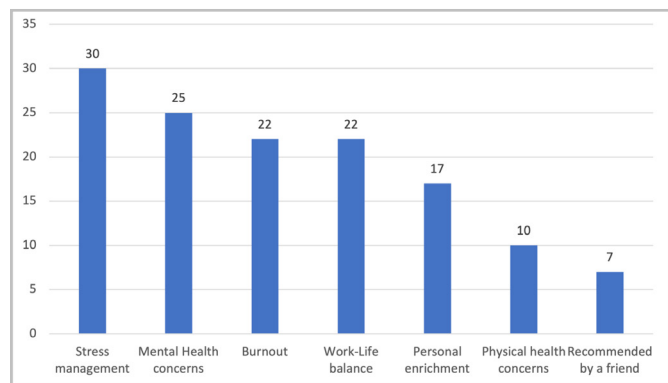


Figure 2. Participants’ responses to the question “What benefits are you hoping to gain from taking this course?” (N = 37)

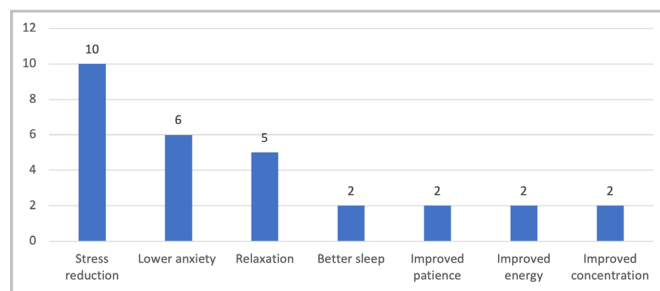
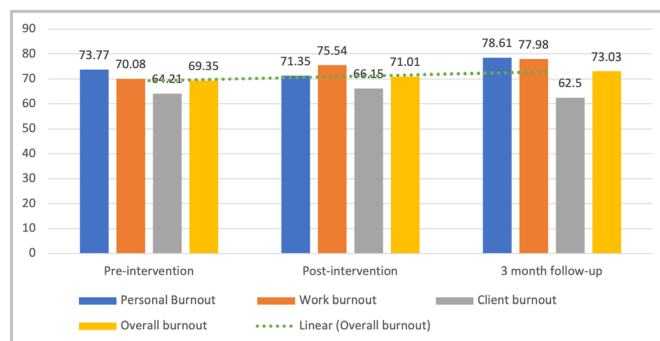


Figure 3. Mean Copenhagen Burnout Inventory scores at 3 time points



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# Opt-out versus opt-in therapy sessions for residents increases resident use of ongoing therapy by 400%

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## Learning objectives

- Approaches that minimize stigma for mental health care, such as an opt-out system where all residents are scheduled for therapy and individuals can cancel if they choose, result in more use of therapy than standard opt-in approaches.

## Project objective/background

Resident physicians have high rates of depression. Unfortunately, significant barriers to help-seeking prevent residents from making first contact with a mental health provider. Research demonstrates that the more severe the depression, the less likely residents are to ask for help. This inverse relationship calls into question the usual approach of “opt-in” therapy, in which a resident is told, “if you need help, ask for help.” Our study sought to determine if an “opt-out” approach to therapy, in which all residents were booked into sessions that they could elect to cancel would increase help-seeking compared to a standard opt-in approach.

## Methods/approach

All residents in three programs at a single institution were offered therapy through a standard opt-in approach for 11 months. Then, residents were switched to an opt-out approach and followed for three months. The opt-in condition consisted of residents being encouraged to call a phone number for therapy should they opt-in. The opt-out condition consisted of programs scheduling a single therapy session for all residents, which residents could then cancel. Following this session, residents could choose to schedule additional sessions at their discretion. Resident choices regarding their participation in therapy were confidential. This study was approved by the institutional IRB.

## Results

A total of 114 residents were eligible, representing all members of each program: 35 in emergency medicine, 55 in internal medicine, and 24 in family medicine. Over the course of the 11-month opt-in strategy a total of 7 residents (6.1%) self-initiated a call to the clinic and participated in therapy. Over the following 3 months using the opt-out strategy 59 of the remaining 107 (55%) kept their initial individual pre-scheduled appointment. Of these, 23 scheduled additional sessions after the initial opt-out session (17% of 107 residents). Including the 7 residents who initiated therapy during the opt-in period, the overall rate of help-seeking, as defined by at least 2 therapy sessions, increased significantly from 6.1% to 26.3% (McNemar’s Test,  $p < 0.001$ ).

## Conclusion

Our study comparing standard opt-in approaches with an opt-out approach demonstrated a fourfold increase in the use of psychotherapy. The barriers to help-seeking in the graduate medical education community are numerous. Our opt-out approach likely reduced stigma and lowered other barriers to initiating therapy. Our study suggests that more residents would participate in psychotherapy if institutions would lower barriers to help-seeking to the point that residents obtain initial contact with a therapist.

# Overcome moral injury by aligning agency with purpose

## Author

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## Learning objectives

- Learn concepts of moral injury and agency.
- Practice grounding agency to purpose.

## Project objective/background

Health care workers experience moral injury related to external constraints leaving a sense of powerlessness and anger. We lack simple everyday tools to address it.

## Session description, session plan, session timeline

This interactive workshop is designed to give participants tools to nurture mindsets and behaviors that have been studied in multidisciplinary fields to yield optimal cognitive-emotional psychological function. This includes self-awareness, an internal locus of control and self-compassion through courage, curiosity, and common humanity.

Table 1. Workshop plan and outline.

Time (mins)	Content	Modality
1	Introduction and overview	
2	Ground rules: 1. We hold space for ourselves and others. 2. You are your authority	
3-7	Step 1: Define your purpose. 1. Who are you outside of medicine? 2. Outside of your "roles"? 3. Why do you exist?	Facilitated group discussion. Self-reflection exercise.
8-12	Moral injury 1. What is it to you? 2. Definition	Facilitated group discussion. Teaching.
13-15	Step 2: Identify a real example. What is something that feels or felt out of alignment for you?	Self-reflection exercise.
16-19	Step 3: List related tasks Write down all the tasks that you had/have to do related to the situation	Self-reflection exercise.
20-25	What is agency? 1. Feeling control over your actions and consequences. 2. Do you ever HAVE to do something? 3. What would happen if I didn't?	Facilitated group discussion.
25-30	Finding agency at work. 1. What if the goal was not to control the outcome or person? 2. What if it was to live out your purpose?	Facilitated discussion
31-36	Step 4: Align agency with purpose 1. How can you use your agency to align with your purpose in the example? 2. How does it look? 3. What exactly are you doing? 4. With whom? 5. Anything you are not doing?	Facilitated group discussion. Self-reflection exercise.
37-40	Walk through a real example	
41-47	Internal check-in: Does it change anything for you? Why or why not?	Facilitated group discussion. Self-reflection exercise.
48-53	Self-reflection exercise: Internal Wisdom What is the most important thing that you from then needed to hear?	Pair off and use question prompts to guide self-reflection
54-57	Pairs can share with group	Facilitated discussion
58-60	Any closing thoughts?	Facilitated discussion



# Overcoming barriers to mental health care for physicians with a free, anonymous online resource utilizing the AFSP's interactive screening program

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## Learning objectives

- Learn the risk and prevalence of mental health disorders among physicians and the barriers to obtaining care
- Learn about the American Foundation for Suicide Prevention's Interactive Screening Program (ISP) branded as the Tennessee Professional Screening Questionnaire (TN-PSQ)
- Learn about one PHP's experience and remarkable results in implementing the ISP for struggling physicians

## Project objective/background

The increased incidence of Physician Burnout Syndrome as a result of the pandemic, coupled with fear, stigma, and other barriers associated with seeking care, have created a problem across all of physician health. Early intervention prior to impairment can prevent more serious symptoms, reduce the impact on the physician's health and wellbeing as well as patient care, and lessen the chance of suicide and substance use as sequelae. Our search for a more proactive approach led to the use of a proven best practice: the American Foundation for Suicide Prevention's Interactive Screening Program.

## Methods/approach

A customized version of the ISP, branded as the Tennessee Professional Screening Questionnaire (TN-PSQ) and targeted for physicians, including students and trainees, was launched in February 2020. The 10-minute self-screen, which incorporates the PHQ-9, is anonymous, confidential, voluntary, and free, with an option to dialogue with a mental health professional for further assistance and referrals. State health regulatory boards, professional organizations, medical schools, training programs, health care workplaces, and other appropriate groups were enlisted to share the online link. Presentations, articles, and printed material also helped raise awareness about this resource.

## Results

First-year utilization was triple the extrapolated target, the pandemic both hindering the ability to publicize the tool and likely fueling its use. Subsequent annual use remained steady; surges coincided with blast emails by the DOH sharing the link. By January 2023 there were 560+ users; 83% were not already getting help for the stated problem; 55% had high/severe distress

(21% reporting suicidal thoughts); 40% had moderate distress; 5% had low-to-no distress; 32% dialogued with a site MHP, with 66% asking for referrals to treatment or therapy. User comments conveyed fears about asking for help with mental health problems, and gratitude for anonymity and the chance to receive help.

## Conclusion

Providing proactive care to physicians can make a difference in the treatment of mental health conditions. The ISP (TN-PSQ) is a proven resource that eliminates many of the barriers and stigma and helps struggling physicians connect to the help they need in a safe and secure manner.

# Peer coaching for enhancing virtual physician-patient communication

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## Learning objectives

- Examine peer coaching as an avenue for enhancing physician-patient communication.
- Adopt new skill sets to manage challenging conversations in the virtual care environment.
- Identify new professional development opportunities for physicians within the organization.

## Project objective/background

In the wake of the pandemic, health care delivery has been transformed by a widespread increase in virtual communication between physicians and their patients. While providing virtual care was not a novel modality to our medical group, some physicians felt navigating some of the more challenging conversations virtually was negatively impacting their well-being. Our goal was to help physicians communicate effectively in the virtual world through peer coaching by physician communication consultants (CCs).

More than three decades ago, our leadership committed to investing in a cohort of physicians who could serve as peer coaches in clinician-patient communication. Now totaling 225, these CCs receive specialized training to provide individualized coaching, teach educational programs, and serve as consultants to operational leaders. CCs' support of their colleagues' communication skill-building helps improve health outcomes, patient satisfaction and the physician experience.

## Methods/approach

The first program created to help physicians improve their virtual communication skills provided tips and tools around how to start building rapport in a virtual encounter, elicit the patient's perspective, demonstrate empathy, and engage in collaborative treatment planning.

Over the past few years, the CC group has created and delivered new curricula that offers skill building

and language tips to use in a variety of challenging virtual encounters, including interactions with angry patients, managing unreasonable requests, and setting expectations. Content was developed regionally and disseminated to the CCs to use locally at their discretion.

In addition, there were multiple regionally sponsored virtual communication courses that included intensive coaching on challenging situations using small groups to practice role playing scenarios with actors.

## Results

Attendance across the broader virtual communication programs was over 200 physicians. On post-program evaluations, 94% stated they would use a new empathetic skill when providing care to patients, 75% stated they would apply the concepts taught during patient encounters, and 100% of participants stated they would use a new communication technique when caring for challenging patients.

## Conclusion

When offered peer coaching, education and tools that help enhance virtual clinician-patient communication skills, physicians readily apply these learnings to navigate challenging virtual encounters. We plan to further study the impact of peer communication coaching on measures of physician well-being.

# Peer supporter well-being during the pandemic: A mixed-methods study

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## Learning objectives

- Evaluate the well-being of peer supporters from 5 well-established peer support programs.
- Compare the well-being outcomes across demographic factors to determine which peer supporters are most at risk.
- Consider adopting the multi-level recommendations for sustaining effective peer support programs.

## Project objective/background

Physicians and other health care professionals have turned to peer support programs for assistance through stress, work challenges, and general reductions in well-being. With the onset of the COVID-19 pandemic, peer supporters themselves could be at risk for emotional exhaustion and secondary traumatic stress due to their primary roles and their work providing support to other health care professionals.

## Methods/approach

Emotional exhaustion, secondary traumatic stress, and compassion satisfaction were assessed in peer supporters from 5 well-established peer support programs. Open-response questions about challenges, needs, and successful well-being strategies were also obtained. Quantitative analyses included analysis of variance models examining differences in these well-being outcomes by age, role, years in health care, and work in high-risk areas. Braun and Clarke's six-stage thematic analysis was performed for qualitative analyses.

## Results

375 peer supporters completed the survey, including physicians, nurses, and other professionals. Overall, they had high compassion satisfaction, low secondary traumatic stress, and high emotional exhaustion. The youngest cohort had significantly lower compassion satisfaction ( $p = 0.003$ ) and higher emotional exhaustion ( $p < 0.001$ ). Compassion satisfaction ( $p = 0.003$ ) and emotional exhaustion ( $p = 0.04$ ) also varied by career stage. Working in a COVID unit was associated with higher emotional exhaustion ( $p = 0.021$ ). There were several risk and protective factors associated with being a peer supporter.

## Conclusion

Peer supporters had high levels of burnout and various challenges and needs to support their well-being, despite having moderate or high compassion satisfaction. Adopting some of the multi-level recommendations for sustaining the well-being of peer supporters can help other health care organizations with peer support programs.

# Physician and researcher health perceptions of a workplace virtual fitness class

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## Learning objectives

- Examine the perceived mental and physical health benefits of attending an online, synchronous, physical fitness class for physicians and researchers in an academic health center.
- Assess the feasibility and functionality of related technologies necessary for both delivering and attending live-streamed fitness classes.

## Project objective/background

During COVID-19, physicians and researchers lacked access to fitness classes due to high risk of infection and access to health facilities. An online, synchronous, physical fitness class was delivered via the Zoom platform to help create a sense of community and encourage physical activity beyond what was experienced at work since most health care workers continued to work in-person. Online platforms may be potential platforms for delivering group-based, online physical activity interventions for physicians and researchers in academic health centers.

## Methods/approach

A mixed-methods descriptive design was used. Data were collected using an online survey that included both quantitative and qualitative values. We designed an online post-assessment survey to evaluate an ongoing, live-streamed, Zumba class that was delivered via the Zoom platform. Zoom was selected as the delivery platform as all health care workers were provided with a free Zoom account from the academic health center.

## Results

In total, out of 51 total participants (N=51), 18 participants reported having doctoral degrees (n=18) and 100% of all participants who accessed the study link completed the post-assessment questionnaire. Physician and researcher participants (n=18) reported high motivation for class attendance as: a safe way to exercise during flu/high risk times (89%); a way to remain social (89%); and a way to stay accountable to personal fitness goals (66%). Additional exploratory analyses revealed significant perceived benefits to cardiovascular health (100%); mental health (89%); and musculoskeletal health (89%) from participating in the live-streamed physical fitness class.

## Conclusion

The results provide preliminary support for the use of online platforms to facilitate synchronous fitness classes and deliver mental and physical activity interventions for employees and community members during high-risk times. Future studies will continue to explore perceived benefits and pre-clinical data collection.

# Physicians recognizing physicians: The Commitment to Excellence Award

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## Learning objectives

- The attendees will be able describe the benefits of a physician peer recognition award.
- The attendees will be able to explain how recognition is linked to their physician satisfaction, motivation and well-being.
- The attendees will be able to summarize how celebrating physicians via their peers leads to a happier and positive work atmosphere.

## Project objective/background



“The physician culture at Edward-Elmhurst Health is comprised of extremely smart, talented and compassionate individuals who deliver outstanding patient care daily. With the Commitment to Excellence award, we are showing appreciation for our physicians who foster a safe and supportive environment in an extraordinary manner, display model behavior selflessly, and demonstrate acts of kindness — going above and beyond to help patients, families, colleagues or the organization. Each month we honor and celebrate these exceptional physicians with the Commitment to Excellence award. Colleagues celebrating and recognizing each other fosters a culture that inspires and allows all to grow and thrive. Recognition makes a difference.”<sup>1</sup>

## Methods/approach

All physicians are eligible to nominate their peers for the Commitment to Excellence award. The physician nominee attends the Medical Executive Committee meeting where their story is read aloud among their peers. As a small token of gratitude, the awardees are presented with a crystal star award and recognition lapel pin by the Medical

Staff President and the Hospital Chief Medical Officer. Winners are also highlighted in the Monthly Physician Newsletters, Physician lounge, and lobby monitors, and a yearly Physician Recognition Dinner.

## Results

This program provides collegiality and brings positivity to the workplace. We can measure the success of this program by the testimonials that we have received by the recipients, here are a few examples:

**“I felt immense pride and gratitude for the appreciation extended to me by my peers, and as a result renewed enthusiasm and commitment to serving patients to the best of my ability.”**

**“I felt very honored and humbled. Very appreciative. Proud to be a member of this medical staff.”**

## Conclusion

Recognition is a crucial part in finding fulfillment in a physician’s work, especially when it comes from peers. “...Studies have shown that people in all professions — including doctors — are motivated by simple acts of recognition. Doctors, like all other people, deserve and want to be recognized and rewarded for their contribution.”<sup>2</sup>

1. Edward-Elmhurst Health Employee Intranet Physician Portal
2. HealthMart. (2019, February 8). Show Appreciation for Doctors in Your Community. <https://join.healthmart.com/pharmacy-marketing-and-promotions/show-appreciation-for-doctors/>.

# Pilot intervention including wearable smart device to improve sleep and well-being for female clinicians

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## Learning objectives

- To understand that female clinicians are experiencing a higher rate of burnout
- To measure self-perceptions of sleep and wellbeing and how the pilot intervention impacted these
- To understand whether pilot intervention to support clinicians may have improved clinician sleep and perceived well-being

## Project objective/background

Given that many female primary care clinicians are experiencing burnout at Sutter Health, we piloted an intervention to improve female clinician well-being by improving their sleep habits and sleep quality. The intervention consisted of several components: an Oura ring (a wearable smart ring device that tracks activity, sleep, and heart rate); health coaches who sent text messages to participants and advised those participants with additional questions; and three online group education sessions with the health coaches and a physician sleep expert to support sleep hygiene and sleep behavioral change.

## Methods/approach

We included female physicians and advanced practice clinicians (APCs) practicing in the Primary Care Departments (Internal Medicine, Family Medicine, and Pediatrics) at the Palo Alto Medical Foundation (PAMF), a large medical group of Sutter Health located in the San Francisco Bay area. Participants used the Oura ring for approximately 8-12 weeks. Baseline and post-intervention surveys and Oura ring data were collected upon participants' agreement. The descriptive statistics were summarized for survey outcomes. Linear mixed-effect models were conducted to capture the weekly change of Oura ring sleep outcomes. The daily activity score was also added to the linear models to examine any association between the daily activity and sleep outcomes.

## Results

Twenty-six clinicians completed the baseline survey and 19 completed the post-intervention survey. In addition, 18 participants agreed to provide their Oura ring data. When asked if they believed they improved their sleep during the pilot experience, 78.9% reported yes/maybe and 82.2% reported improvements on their well-being. Self-reported barriers of getting good quality of sleep decreased from baseline as compared to after the intervention (88.5% vs. 63.2%). In response to the write-in question, "Did the Joy of Work pilot provide any new learnings or understandings for you?", nine clinicians (47.4%) felt well-informed of their sleep quality including learning the factors impacting it. Nearly half of these clinicians (4/9=44.4%) reported improved management of their sleep routine. Regarding Oura ring sleep outcomes, the average awake and light sleep times were significantly reduced by 1 ( $p=0.002$ ) minute and 3 minutes ( $p<.0001$ ) per week. In comparison, the deep sleep time was significantly increased by 1 minute per week ( $p=0.012$ ). The time to fall asleep was also reduced by 11 seconds per week ( $p=0.08$ ). The activity score was not associated with any sleep outcomes in the models.

## Conclusion

We found that understanding sleep patterns and health education on improving sleep quality increased self-reported perceptions of sleep and wellbeing despite statistically significant but not clinically meaningful improvements in objective sleep measures for the pilot participants.



# Positive impact of peer support—building a community to support well-being

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## Learning objectives

- Review the experience of peer support network on peer supporters
- Identify the key motivations for participation in a peer support network
- Describe the barriers to participation in a peer support network
- Understand the next steps to program growth

## Project objective/background

Pediatric health care workers (HCW) are exposed to adverse events in the clinical setting. Negative downstream effects are common for those who experience these events. Prior studies show peer support is valued by HCW. Many institutions have implemented peer support programs, including the University of Colorado's School of Medicine - Department of Pediatrics. In 2018, a Peer Support Network (PSN) program was launched at Children's Hospital Colorado. Over 4 years, 167 clinical faculty and staff have become trained peer supporters (PS). The PSN spreads across Colorado from Fort Collins in the North to Southern Colorado and supports more than 1200 pediatric faculty working in both inpatient and ambulatory settings. Literature on peer support has primarily focused on implementation. The few studies evaluating program impact on peer supporters (PS) found increased levels of burnout. Our study utilized a survey of peer supporters to describe the peer supporters' experience, motivations, and barriers to engagement.

## Methods/approach

A web-based survey of PS was developed with input from program leaders, peer support champions, and a survey methodologist. Content was reviewed by a group of PS

and via cognitive interviews. Survey questions included demographic information, reasons for becoming PS, perceived barriers for offering peer support, and the positive and negative impacts of participation for the PS. The survey was administered via REDCap to all 167 trained PS during the spring of 2022. Descriptive statistics were used to analyze results.

## Results

Survey response rate was 73.7%. Respondents were primarily female (83%) physicians (73%) who had been in practice post-training for more than ten years (64%). Top motivators to become PS included interest in getting involved with well-being efforts, desire to contribute, and desire to help after observing struggling colleagues. The largest barrier to offering peer support was current workload, followed by discomfort reaching out to a more senior colleague. The most highly rated positive impacts of PSN by PS were the beliefs that PSN serves a greater purpose, makes a positive difference for someone else, and adds value to the organization. The most identified concerns were time constraints and a feeling that peer supporter skills were not being utilized frequently enough.

## Conclusion

The overall experience of PS was positive, suggesting the benefits of peer support programs extend beyond the value to HCW experiencing adverse events. As such, we aim to improve accessibility and utilization of PSN for the greater good of our hospital community. Results underline altruistic tendencies among PS who are focused on a greater purpose over personal gains associated with their role. To recruit, empower, and retain these individuals, it is important for programs to develop strategies to manage limited bandwidth and the perceived seniority hierarchy. Further study is needed on burnout in those who receive support.

# Prospective study identifying health care workers (HCWs) protective factors for resilience and flourishing state during COVID-19

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## Objectives

- Identify protective factors for resilience and flourishing state in HCWs
- Assess whether participation in organizational interventions impacted HCW well-being and life satisfaction

## Background

HCWs showed courage and resilience in near-impossible conditions during the pandemic at a cost (Busch, 2021), and made critical moral decisions that weighed heavily on emotional wellness. Organizations introduced strategies to minimize mental health issues and promote wellbeing (Chambers, 2017) as patient outcomes depend on the ability of HCW to be at their best (Søvold, 2021). We highlight an organizational approach to mitigate burnout and consider the implications of interventions in promoting flourishing states.

## Methods/approach

Active employees voluntarily completed an anonymous questionnaire using Qualtrics®, 2020; distributed five times through July 2020-August 2021, in random order to ensure a counterbalanced design; publicized using flyers, roadshows, WhatsApp.

## Results

Participation N=1315 responded, participation rate 34.39%; Response >1 time point n = 173 (13.15%).

N= 462 participated in interventions (35.13%); 70 responded at more than one-time point; 65% of the participants were female.

Participants were active employees over the age of eighteen. Demographics described in Table 1; wellness interventions described further in Table 2.

Table 1

<i>Participant demographics</i>	
Variable	%, n
Gender	100, 1315
Male	34.52, 454
Female	65.48, 861
Age m±sd, range	36.59±8.06 (18, 68)
Marital Status	100, 1315
Married	55.67, 732
Single	35.06, 461
Other	9.28, 122
Children	100, 1315
Yes	53.31, 701
No	46.69, 614
Living status	100, 1315
Living alone	20.38, 268
Living with family	61.14, 804
Other	18.48, 243
Role	100, 1315
IT/admin	20.08, 264
nursing/allied health/pharmacy	55.74, 733
Physician	8.74, 115
other/prefer not to say	15.44, 203
Nationalities	100, 1315
UAE	17.11, 225
Non-western expat	49.05, 645
Western expat	31.25, 411
Missing	2.59, 34
Direct pt care ever	100, 1315
Yes	68.59, 902
No	31.41, 413
Smoking ever	100, 1315
Yes	8.90, 117
No	78.02, 1026
Missing	13.08, 172
Alcohol use ever	100, 1315
Yes	32.62, 429
No	54.30, 714
Missing	13.08, 172
Redeployed ever	100, 1315
Yes	28.21, 371
No	57.49, 756
Missing	14.30, 188
COVID+ ever	100, 1315
Yes	13.84, 182
No	71.86, 945

Table 2

<i>Number and percentage of combined participation in each intervention</i>		
<b>Intervention</b>	<i>N</i>	<i>%</i>
CCAD Coaching Services (MindSpace)	96	5.32
CCAD Wellbeing Webinars	193	10.70
Employee Assistance Program (EAP)	100	5.54
Layaaq Online Fitness	203	11.25
Lift-up Online Wellness Platform	73	4.05
Psychological Support through Caregiver Wellbeing	49	2.72
Other	48	2.66
Did not participate	1042	57.76

*Note.* CCAD = Cleveland Clinic Abu Dhabi. 15 different webinars were offered.

Descriptive statistics for repeated-measures-level data were obtained.

### Conclusions

COVID-19 illness and being older was associated with better wellbeing state and lower mental health concerns. Younger age, female, “other” marital status, quarantine, direct patient care was associated with poorer outcomes: resilience, flourishing and life satisfaction.

Published studies showed improvements to mental health over time, we demonstrated resilience and flourishing declined in the face of an unrelenting pandemic. Positive psychology intervention programs offer skills aimed at developing positive emotional experiences that organizations may consider for HCWs to thrive at work.

### Scales

- **Connor-Davidson Resilience** mean 29.28 (sd=7.58, n = 1319 responses); median (1,3 Q) 30.00 (25, 35)
- **Flourishing** mean 46.43 (sd = 7.44, n = 1332 responses); median (1,3 Q) 48.00 (43, 52), high
- **Life Satisfaction** mean 25.43 (sd = 6.23. n = 1344 responses), indicating slightly satisfied/satisfied with life; median score 26, (56.01%) reported being satisfied (n = 461) or extremely satisfied with life (n = 274)

Resilience and flourishing decreased over time:

- Resilience ( $\beta = 0.06$ ),  $p < 0.05$
- Flourishing ( $\beta = 0.02$ ),  $p = 0.01$ ; no other time trends were noted

Older age was strongly associated with higher levels of wellbeing:

- Resilience ( $\beta = -0.09$ ,  $d = -0.10$ )
- Flourishing ( $\beta = -0.10$ ,  $d = -0.12$ )
- Life Satisfaction ( $\beta = -0.06$ ,  $d = -0.08$ ), all  $p \leq 0.01$ .

Female gender was associated with lower levels of resilience ( $\beta = -0.15$ ,  $d = -0.18$ ),  $p = 0.05$ .

# Reflecting together: Impact of an interdisciplinary narrative medicine workshop

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## Learning objectives

- Know that narrative medicine has been shown to positively impact wellbeing in health care professionals
- Learn that participation in a four session interprofessional narrative medicine workshop is associated with self-reported increase in close reading and writing skills as well as improved self-reflection skills among participants
- Understand that the interdisciplinary nature of the workshop allowed sharing of unique perspectives among participants

## Project objective/background

Burnout is common among medical professionals and can begin quite early in medical training.<sup>1</sup> Narrative medicine has been shown to improve wellbeing among students in the health care professions,<sup>2</sup> however, most interventions for trainees have been siloed by discipline and fail to reflect the interdisciplinary realities of clinical practice. While evidence supports the use of interdisciplinary narrative workshops for professional teams in the outpatient setting,<sup>3</sup> little is known about the impact of interdisciplinary narrative medicine participation during health care professional training.

## Methods/approach

We conducted two, four session interdisciplinary workshops in narrative medicine consisting of a brief didactic on narrative medicine, group readings selected by preceptor and students, reflective writing based on the readings, and group discussion of participant writings. Six second-year medical students and four first-year nursing students completed the first workshop; eight first-year medical students and three nurse practitioner students completed the second workshop.

## Results

85% of participants reported a significant improvement in close reading and reflecting skills and 81% reported a significant improvement in writing skills as a result of the workshop. 95% reported a significant improvement in the ability to interpret patient stories. The novel

interdisciplinary nature of the workshop was well received, with 81% of participants reporting a significant improvement in their ability to understand the perspective of other members of the health care team after participation. Qualitative themes emerging from the workshop included centering a holistic view of patients, valuing interprofessional perspectives, appreciating interlinkage between clinician and patient wellbeing, and using narrative tools to foster interdependent practice.

## Conclusion

An interdisciplinary workshop for nursing students, nurse practitioner students, and medical students is a feasible and acceptable means of promoting self-reflection, impacting wellbeing, and fostering interdisciplinary appreciation among participants. The impact of interdisciplinary narrative medicine has yet to be explored fully. Future directions include offering the workshop to other disciplines in medicine, continued assessing of the workshop experience, and assessing ongoing impact on participant wellbeing.

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# Resident well-being and burnout: An evaluation of a Project ECHO series

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## Learning objectives

- Describe how the ECHO's peer-to-peer learning model is effective for addressing Resident well-being and burnout.
- Utilize strategies to address Resident well-being and burnout.
- Utilize lessons learned to address Resident well-being and burnout.

## Project objective/background

The Physician Health First: Building Resiliency Intersectionally During Graduate Education (BRIDGE) program from the American Academy of Family Physicians (AAFP), funded by the Health Resources and Services Administration (HRSA), is a 3-year grant focused on reducing burnout and promoting well-being and resiliency amongst medical students and residents through well-being program offerings. As part of the BRIDGE program, the AAFP became a Project ECHO® Hub (ECHO: Extension for Community Health care Outcomes) and set up a Resident Well-Being and Burnout Prevention ECHO offered in Fall 2022 and Spring 2023. The ECHO series covered various topics, including residents' experiences of burnout and strategies to improve wellness in their everyday lives.

## Methods/approach

Family Medicine Residency Programs were asked to apply to participate in the Project ECHO series. Selected residency programs were asked to have three residents attend each ECHO session. At the end of each ECHO session, a QR code was provided to all attendees to complete a 9-question post-session evaluation questionnaire. Descriptive statistics and non-parametric statistics were used for analysis.

## Results

For the first series of the Resident Well-Being and Burnout Prevention ECHO, between 8 and 20 residents completed the evaluation survey for the 8 sessions (Fall 2022; Spring 2023 sessions are ongoing at time of submission). The 8 session topics were as follows: Leading Your Path to Well-Being; Joy in Medicine; Your Role as a Leader; Micro & Macro Aggressions in Medicine; Resident Well-Being and Burnout; Ourselves the Walking Wounded; Humanism, Creativity, & Self-Reflection; Cultivating Relationships & Creating Boundaries. In general, residents indicated (good, very good, excellent) that the sessions provided them with practical knowledge or strategies that they could immediately apply to their personal and work life, were relevant to their current life and work situation, and addressed challenges they face in maintaining their well-being. The level of difficulty of all topics was rated "just right" and, with the exception of the first session, the majority of residents indicated the faculty were knowledgeable.

## Conclusion

The BRIDGE program will continue to offer the Resident Well-Being and Burnout Prevention ECHO series to different resident cohorts throughout the grant. The intervention will continually be evaluated to determine its impact on resident burnout and well-being.



# Supporting health care workers through mental health literacy training: Mental health first aiders

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## Objectives

- Train employees with an evidence-based national program as certified MHFAiders.
- Employees certified in MHFA® will be confident to apply skills to support co-workers with empathy and reduced stigma.
- MHFAiders will be equipped to share organizational/community resources with peers.

## Project objective/background

Individuals trained with MHFA® skills have greater confidence in helping others in mental distress (Baker, 2019). Peer support has been found to be an invaluable mental health resource during an ongoing pandemic (Suresh, 2021). Health care workers at a global level were identified to be at high risk of mental health disorders during a pandemic (Shanafelt, 2022). Cleveland Clinic Florida Region embarked on the mission-driven project to educate/train employees as Mental Health First Aiders.

## Methods/approach

MHFA® Training was offered free of cost to employees through voluntary enrollment between February 2022 - October 2022. Attendees completed two hours of pre-work material, followed by a virtual instructor-led interactive learning session with their cohort. The course was offered with options outside of the organization platform and/or devices at monthly intervals. The course was promoted through CEO, HR newsletters, Physician Wellbeing Councils and huddles. A three-year certification was issued by the National Council For Mental Wellbeing.

## Results

- Eight classes offered; N = 77/10,000 certified; participation rate < 1% employees
- 52% Survey respondents (N=33/77; Response rate 0.428%) are likely to recommend (NPS)–Figure 1.
- 81.9% of Survey respondents (N=33/77) responded Strongly Agree/Agree that training was relevant and practical to their current work situation - Figure 2.
- Anonymous testimonials were favorable - Figure 3.

Figure 1. Net Promoter Score (NPS)

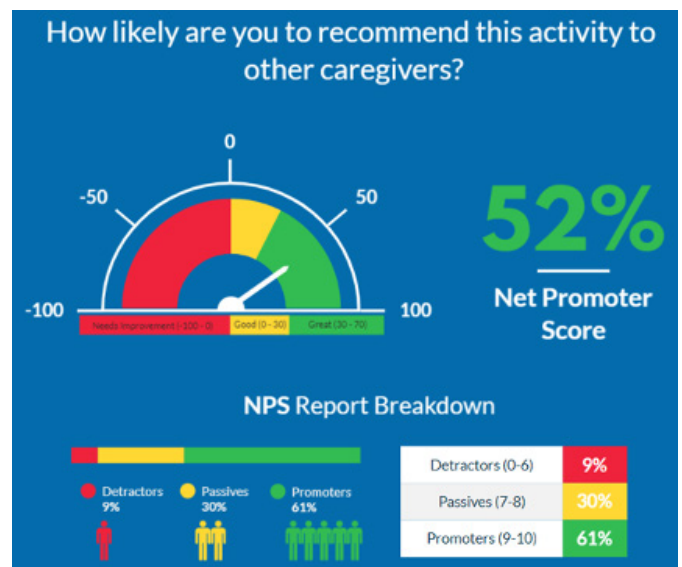


Figure 2. Survey

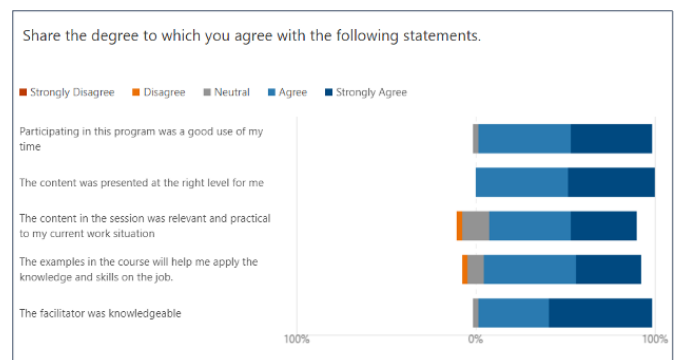


Figure 3. Testimonials

Responses
I supported a colleague be being more mindful of his needs and listened without judgement.
I had the opportunity to witness a colleague "drowning" in stress that affected her personal focus and home relationships. This training help[ed me to approach the doctor with empathy and compassion. In addition encourage the individual to use our wellness resources at work.
Caregiver had a severe decline in his work. Pulled him into the office with supervisor for a supportive conversation. He was in total crisis at home. We were able to help him get the resources he needed.
N/A
I noticed a co-worker that didn't seem herself. I took the time to listen and found out that she was having issues at home. I suggested that she call EAP and stayed with her while she made the first contact.
On many occasions, I have been able to recognize when something was amiss with a coworker and/or patient and able to offer assistance as needed.
I was able to use the skills within 2 months when talking by phone with one of my direct reports who was very distraught. I was able to ascertain she was not feeling suicidal and to get her immediate EAP assistance and subsequent LOA. Felt much more confident in having the right words to say to talk her through this "mental health emergency" having just participated in the program. Thank you!
By identifying when a peer seems different and reaching out to them.

### Conclusions

MHFA® training in a health care workplace was positively received during ongoing systemic challenges and while health care worker stress, emotional exhaustion, fatigue remains with a high risk of attrition, disengagement and burnout. The majority of survey responders indicated they would recommend the course. Recognizing the potential risk factors and warning signs for a range of mental health problems to support peers at work is critical to sustain a healthy and well workplace. Organizations may consider adding this training, with protected time, for enhanced participation and wellness at work.

# The impact of identity management on physician and health care professional resilience

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## Learning objectives

- Describe the relationship between work and identity, especially for physicians and other health care professionals
- Differentiate between professional/work and personal/nonwork identities and their importance for self and others
- Identify benefits and consequences associated with stringent identity management or work-nonwork segmentation efforts

## Project objective/background

Identity development occurring through an innate and imitative journey provides essential resilience characteristics of self-esteem, meaning and purpose. Professional identity closely connected to sense of professional self is influenced by personal and external factors. Physicians and health care professionals (HCP) are among the most highly educated and regarded individuals. We explored the important complex role played by HCP's sense of professional and personal identity.

## Methods/approach

Qualitative data were gathered from HCP working in a tertiary health system, as part of a larger, multi-method study of HCP identified by peers and supervisors as consistently demonstrating resilience and general excellence. The analyses presented here focus on final interviews with 33 participants who had previously responded to 6 or more monthly surveys in the broader study; the present focus is on responses to the following identity-related questions:

1. **What does it mean to you when you tell others your profession?**
2. **How do you stay authentic (true to who you are and what you value or care about)? Or do you?**

## Results

Responses were analyzed through iterative content and thematic analysis by multiple trained researchers and summarized within-person and across respondents.

A complex relationship was observed with respect to professional and personal identity management. Responses commonly indicated experiences of moral/other conflicts around sharing professional identities outside of work settings. Common responses indicated, "it takes too much effort to correct misinterpretations" and reflected HCP decisions to anticipatorily avoid sharing their professional identities outside of work.

Some respondents also expressed challenges being true to their authentic selves in work settings. Challenges related to training/practice rigor, burgeoning technology, information demands, staffing shortages, market forces, precarious reimbursements, EHR, administrative tasks, pressure to meet metrics. Findings regarding authenticity are particularly surprising, given that authenticity is generally seen in a positive light, linked to better wellbeing, engagement, and social relationships. In this presentation, we will reconcile the benefits of authenticity and the need to create strong boundaries and clear segmentation between professional and personal role domains for HCP.

## Conclusion

A strong professional identity is an element to resilience but can present a challenge and demand that may inhibit or hinder one's detachment and recovery outside work settings. There is need to reconcile the importance of a strong professional identity and evidence-based practices for boundary setting between work and nonwork life aspects, while also helping HCP maintain an authentic and coherent sense of self across their life domains.

# The impact of Schwartz Rounds on social isolation and speak up culture at work

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## Learning objectives

- Discover how Schwartz Rounds can help to build a speak up culture in your organization.
- Identify how Schwartz rounds can help to address clinician feelings of isolation at work.
- Learn how attendance at Schwartz Rounds can help reconnect clinicians to joy in work.

## Project objective/background

In 2022, to enhance provider and staff well-being and recovery following the COVID-19 pandemic, our medical center contracted with the Schwartz Center for Compassionate Health care to commence Schwartz Rounds (SR). SR are a multidisciplinary forum where caregivers share and discuss difficult emotional and social issues that arise in caring for patients.

## Methods/approach

The idea was presented and accepted by our leadership in 4/2022. We had a kickoff meeting 5/2022 with Schwartz Center Advisor Support. The second half of 2022 involved virtual training of core faculty in facilitation and conduct of SR through offerings on the Schwartz Center's website, planning committee selection and meetings, program planning and promotion, as well as enlisting and preparation of panelists. Our first SR was held in person on 1/23/23 from 12-1pm, in our medical center auditorium with 3 hospital staff/medical group panelists sharing their personal stories related to the theme "My Most Memorable Patient". Our second SR was on 2/13, at the same time and place, with 3 new hospital staff panelists sharing their personal experiences related to "The Colleague That Made the Difference". We plan to continue monthly SR with next month's theme "When the Colleague is the Patient".

## Results

There were 36 and 41 attendees at the first and second SR respectively. After attending SR, 73% of attendees that completed surveys felt less isolated in their work with patients. 80% of attendees that completed surveys felt more open to expressing their thoughts, asking questions, and sharing feelings about patient care with colleagues. Attendee comments included "connection is as valuable as medicine" and that SR are "a great way to reconnect to my purpose." All participants that completed their evaluations plan to attend again.

## Conclusion

Initiating a Schwartz Rounds program at your medical center can help decrease feelings of isolation, encourage more of a speak up culture and reconnect staff to their joy in work.

# The impact of Sudarshan Kriya Yoga (SKY) breathing on mental health and well-being of physicians: A Canadian experience

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## Objective

- The aim of this study was to assess the effect of SKY breathing on the well-being of a cohort of practicing physicians in British Columbia, Canada.

## Background

Physician burnout is an epidemic in the U.S. and the Canadian health care systems, particularly in the wake of the COVID pandemic. Sudarshan Kriya Yoga (SKY) breathing is a unique mind-body intervention for balancing the autonomic nervous system and positively impacting psychologic and stress-related conditions.

## Method

A pilot feasibility study was conducted with a single arm pre-post design. SKY breathing was taught to participants in a 3-day online breath and meditation workshop. Pertinent outcome measures were assessed using a standardized questionnaire, related to depression, anxiety, resilience, life satisfaction, and quality of sleep.

## Results

Eleven practicing physicians from various disciplines, age 35-70 years (7 males, 4 females) participated and completed the study survey before and after the intervention. A significant reduction was observed in the levels of stress, anxiety and depression immediately after the program. In addition, the participants reported significant improvement in life satisfaction, resilience, and the quality of their sleep.

## Conclusion

SKY breathing had a positive impact on the well-being of practicing physicians. Participants experienced improved quality of sleep, enhanced satisfaction with life, and increased resilience after SKY. This pilot study provides important data for future randomized controlled trials to examine the impact of breathing practices on well-being health care professionals.

# The intentional well-being retreat: A summative program evaluation project of a wellness retreat for physicians and advanced practice providers

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## Learning objectives

- Explore innovative strategies of wellness programming to help reduce physician/APP burnout and enhance well-being and professional fulfillment.
- Examine the impact of participation in a wellness retreat on improving well-being of health care professionals.
- Discuss benefits of multifaceted components of a wellness retreat on increasing participation in wellness programming and reducing stigma of mental health for physicians and APPs.

## Project objective/background

As physicians and advanced practice providers (APPs) continue to confront numerous work-related stressors burnout levels and moral distress have been on the rise while professional satisfaction and fulfillment and the ability to maintain a work/life balance has decreased. In addition, this has been shown to have a detrimental impact on the mental health and overall well-being of these health care professionals. Although addressing burnout and these stressors requires systemic changes at the organizational and national level, individual-level interventions can buffer against acute and chronic stress and even prevent escalation to more severe stress injuries. Targeted interventions that focus on self-awareness and intentional self-care may help reduce stress, prevent burnout, and positively impact well-being and professional fulfillment.

The goal of this pilot study was to evaluate the efficacy and impact of a well-being retreat on participants' self-reflection and insight, mindful self-care, anxiety, perceived stress, and professional fulfillment.

## Methods/approach

The retreat was designed and facilitated by experienced licensed mental health professionals to engage physicians & advanced practice providers in experiential psychoeducational workshops, self-reflective activities, and meaningful peer conversations and connections. A QI/QA project was conducted as a summative program evaluation with pre-post within-subjects design to assess the quality and efficacy of our programming. The assessment includes a pre-retreat survey, a post-retreat survey and a follow-up survey sent one month after the retreat.

Participants were surveyed using Self-Reflection and Insight Scale Short Form; Mindful Self-Care Scale Short Brief (physical care subscale, supportive relationships subscale, mindful awareness subscale, self-compassion and purpose subscale, mindful relaxation subscale, and supportive structure subscale); Generalized Anxiety Disorder; Perceived Stress Scale; and Stanford Professional Fulfillment Index (professional fulfillment subscale). Participants also completed retreat feedback forms that included two skills that they learned and plan to



apply in their lives, five-point Likert scales measuring the satisfaction with each component, and open-ended prompts about what components were most impactful.

## Results

Twenty-one physicians and APPs attended the retreat. Sixteen attendees completed the baseline questionnaires, fifteen completed the post-intervention questionnaires, and three completed the one-month follow-up. Of the twelve participants (57.1%) who completed both the pre- and post-surveys: 75% of respondents were female, 75% were physicians, and race/ethnic breakdown consisted of 50% who identified as Asian and 42% who identified as white.

Wilcoxon Signed Ranks Tests were conducted to examine differences in outcomes on the pre- and post-questionnaires. Perceived stress significantly decreased (19.00 vs. 15.92;  $p=.01$ ), and professional fulfillment significantly improved (15.50 vs. 17.50;  $p=.04$ ) following the retreat. Post-program feedback was synthesized. Participants reported the following benefits of the retreat: a reminder to focus on self-care, motivation for healthy behavior change, an opportunity to self-reflect, and a chance to connect with colleagues.

## Conclusion

While significant changes in the practice environment are necessary to address the causes and consequences of work stress, individual-level programs remain important and relevant to the protection of well-being. This pilot study built upon the literature about interventions with diverse modalities to improve well-being and demonstrated statistically significant decrease in perceived stress as well as improvement of professional fulfillment. The results suggest that a brief immersive intervention such as a retreat may be a feasible approach to address stress and improve well-being for health care professionals.

# The Wellness Debrief Program: A support group for medical students transitioning to the clinical learning environment

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## Learning objectives

- Describe three sources of medical student distress.
- Describe two lessons learned from Wellness Debrief Program development, implementation, or evaluation that can be applied to an innovative program at your institution.

## Project objective/background

Data suggest the prevalence of burnout in physicians is higher than in the general population.<sup>1</sup> This phenomenon may begin in medical school. Students begin medical education with mental health profiles equal to or better than age matched peers.<sup>2</sup> However, as their education progresses, students report higher rates of burnout, anxiety, depression, stress, and suicidal ideation than similarly aged professional students.<sup>2</sup> Student burnout, anxiety, stress, and depression are associated with personal and professional consequences, including lack of self-care, suicide, negative impact on relationships, decreased empathy, and dishonesty in academics and patient care.<sup>3</sup>

Data exploring the impact of interventions targeted to the clinical learning environment on medical student mental health and emotional well-being are limited. Peer and group support models, such as Balint groups, have been demonstrated to have a positive effect on medical student empathy.<sup>4</sup> While Balint groups started to help support the doctor-patient relationship for physicians in practice, data suggest applicability to medical education.<sup>5</sup>

The intervention is a group support program for third year students in clerkships at one clinical campus of an academic medical school. The Wellness Debrief Program was developed using a quality improvement framework and offers a supportive environment for students to

process the impact of their clinical experiences based on their individual identities, experiences in the clinical learning environment, and stage of professional development, with guidance from a faculty facilitator.

## Methods/approach

Quantitative and qualitative program evaluation are planned. The primary aim is to determine effectiveness of the WDP in decreasing perceived stress and enhancing mental health. A secondary aim is to evaluate effectiveness of the WDP to address stigma in discussing the impact of clinical experiences on mental health. Qualitative data will be obtained through semi-structured interviews with WDP participants. Thematic analysis will be completed using a social constructivist approach with an inductive coding process. Quantitative data include pre- and post-WDP results of perceived stress and imposter phenomenon scales. Hypothesis testing will not be performed due to the low number of students in the pilot program. Quantitative data will be described using frequencies and percentages for categorical variables.

## Results

Development, implementation, and quantitative and qualitative evaluation of the WDP program will be described. Evaluation will be completed after WDP conclusion in June 2023, with results anticipated in September 2023.

## Conclusion

Outcomes from innovative programs may drive change needed to improve medical student mental health and well-being and develop the workforce of the future.

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# Training in the arts to foster compassionate communication: A mixed methods pilot study of the Sanford Compassionate Communication Academy Fellowship

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## Learning objectives

- Participants will describe three ways that the arts can inform training on compassionate communication in the medical field.
- Participants will review the mechanisms that led to transformative changes among physician participants.
- Participants will apply the findings to their own workplaces via a self-reflective activity.

## Project objective/background

Although evidence suggests that effective communication enhances patient experience and physician engagement (Fong Ha & Longnecker, 2010), the field is lacking in evidence-based compassionate communication training. Therefore, there is a need to develop, implement, and evaluate compassionate communication train-the-trainer programs that can be scaled up with the ultimate goal of improving patient outcomes and reducing physician burnout. This mixed methods study explores the impact of a 60-hour experiential program, The Sanford Compassionate Communication Academy Fellowship (SCCAF), offered through the Center for Compassionate Communication at UC San Diego, on 7 physician fellows and 2 theater fellows (N=9). The fellowship uses interdisciplinary tools to teach skills in listening, awareness, and connection to improve compassionate interpersonal communication among health care providers, teams and patients.

## Methods/approach

Data collected included 30-minute interviews and validated surveys on empathy and well-being. Interviews were transcribed and coded using Transformative Learning Theory as a guiding framework (Mezirow, 1991), and surveys were analyzed using SPSS.

## Results

Fellows scored highly on empathy surveys throughout the program. Autonomy in the workplace, a driver of burnout, was identified in the Ryff Scales of Psychological

Well-being as an area of concern. Fellows described an increase in self-awareness, self-compassion, listening skills, mindfulness, and overall well-being, including decreased feelings of burnout. Fellows also raised examples of improvements in interpersonal relationships with colleagues, patients, students, and family. Fellows noticed themselves taking more time to listen and being more present during their time with patients. One said, **“I’ve just been in a much happier place seeing all these patients in such a short amount of time, and just really trying to find joy in the interactions.”** The benefits of the fellowship are attributed to a variety of fellowship experiences, including peer-to-peer learning, arts integration, and an open, supportive community. Some of the primary mechanisms of transformation include sufficient time and resources, opportunities to practice new skills, a culture of care, and a sense that the process was “bigger than me” as they reflected on the importance of the arts for holistic integration.

## Conclusion

These results show evidence of the positive impact of the SCCAF on fellows’ interpersonal and intrapersonal well-being, both professionally and personally. According to one participant, **“The biggest thing that the program has given me really is more insight and an ability to do more self-compassion, and that has really been critical in terms of some elements of compassion fatigue and feelings of burnout or stagnation.”**

# WellDOM Popup Cart: A quality improvement project to improve connection and show appreciation

## Author

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## Learning objectives

As a result of this presentation, learners will:

- Understand the impact and importance of wellbeing rounds with a Popup cart on employees' sense of value and connection to their peers on a large medical campus.
- Learn the logistics of wellbeing rounds with a Popup Cart.
- Pilot similar programs within their own institutions.

## Project objective/background

Employees of our Department of Medicine consistently report feeling undervalued through surveys and focus groups in recent years. Respondents also express feeling disconnected from their co-workers. As one of many initiatives to improve connection and increase expression of appreciation for members of our department, WellDOM (Wellness in the Department of Medicine) developed the WellDOM Popup cart program.

## Methods/approach

The WellDOM Popup Cart is a physical tool cart. Contents typically include snacks, beverages, wellbeing education and themed wellbeing items of the month (e.g. blue blocker glasses, gratitude journals, or safety whistles). Groups of 2-5 WellDOM champions volunteer to take the cart out for 1-2hr shifts several times per month, visiting members of our department in their clinical, research, and administration work settings.

## Results

Since the summer of 2021, volunteers have rounded with the WellDOM Popup cart approximately 20 times, with approximately 1250 person-encounters. To date, 61 recipients and 24 volunteers have completed the optional feedback surveys. Volunteers include administrators (38%), direct patient care providers (54%), educators (21%), researchers (29%), and staff (17%). Rounding locations include inpatient settings (58% ICU, 71% non-ICU),

outpatient clinics (54%), research offices (21%) and administrative offices (33%). Over 90% of recipients report feeling cared for and appreciated when interacting with the WellDOM Popup cart. One hundred percent of volunteers report Popup Cart rounds are meaningful to them, with 96% reporting their personal sense of wellbeing improved because of their volunteer shift compared to the start of their day. Volunteers also describe deeper connections with other volunteers and with the units visited because of this program.

## Conclusion

The WellDOM Popup Cart program has been well-received in our department and has resulted in an improved sense of appreciation and wellbeing amongst recipients and volunteers. WellDOM Popup Cart rounds additionally deepen connections between volunteers and recipients. The WellDOM Popup Cart is a highly requested program within our department and has received strong support from departmental leadership. Based on these experiences, we encourage other institutions to explore similar pilot programs.

# WellDOM at the table: Peer-support groups to improve well-being and resilience

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## Learning objectives

As a result of this presentation, learners will:

- Understand the value of peer-support groups to address wellbeing and resilience while combating burnout.
- Learn the logistics of the WellDOM at the Table program.
- Be able to think creatively about ways to pilot similar programs within their own institutions.

## Project objective/background

Employees of our Department of Medicine consistently report high levels of burnout and disconnection from their co-workers, worsened by the COVID-19 pandemic. Inspired by Mayo Clinic's COMPASS groups, the WellDOM at the Table pilot program was launched to provide peer support around wellbeing and resilience.

## Methods/approach

The WellDOM at the Table program is open to all roles and all divisions within our department. Self-created groups of 6-10 participants agree to meet for at least 1 hour for 6 meetings over the academic year to discuss wellness & resilience topics from a pre-populated curriculum. These groups typically meet over meals, which are reimbursed up to a certain amount by WellDOM. Survey results for groups at the close of the 2021-2022 academic year are described below.

## Results

During the 2021-2022 academic year, there were 15 WellDOM at the Table groups involving 95 participants. Forty participants responded to the end-of-year-survey. Thirty-eight percent of the groups were able to meet  $\geq 5$  times, with 40% meeting 3-4 times during the year. As a result of WellDOM at the Table Groups, participants expressed increase in connection with their colleagues

(98%) and feeling less isolated (95%). Eighty-five percent felt this program helped address burnout, and 100% felt this program should continue. Select quotes from respondents illustrate the value of this program: "I enjoy the validation of stressors and the comradery. I enjoy hearing my colleagues' creative solutions to the similar problems that we face." Another wrote: "PLEASE CONTINUE TO OFFER THIS PROGRAM...I have found that our team communication is much more effective and we are more understanding as a result of the conversations that have stemmed from these lunch events. We are also more compassionate with each other."

## Conclusion

The WellDOM at the Table program has been well-accepted by participants, resulting in increased connection, decreased isolation, and has been helpful in combating burnout. We encourage other institutions to explore similar pilot programs.





# Posters

Local work unit



# Amplifying physician voice and perspectives through physician-only discussion (POD) framework

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## Learning objectives

- Describe a novel framework for engaging physicians and soliciting input to create a culture of wellness
- Identify systemic drivers of burnout occurring across departments in an academic medical center
- Consider models of adapting described framework to utilize in one's own institution

## Project objective/background

UC San Diego leverages a systems-based approach to promoting a culture of wellness. Though widely accepted that direct physician input is essential for identifying and addressing organizational factors contributing to burnout, best practice evidence for eliciting physician input is lacking. To investigate a framework for more rapid bidirectional communication, our institution conducted an innovative pilot assessing utility and impact of department-based, small group, physician-facilitated, physician-only discussions (PODs). PODs objectives were: 1) provide opportunity for physician input on actionable, real-time wellness issues 2) build professional community.

## Methods/approach

Four clinical departments with pre-existing departmental wellness programs participated in the POD pilot. Recommended PODs structure was groups of <20 physicians meeting for >15 minutes at a time, preferably during pre-established meetings. Departments had flexibility to tailor proposed PODs structure to department culture and to minimize burden on physicians. Identified POD facilitators were trained prior to implementation. Following each POD, each department's wellness leader(s) and chair reviewed POD findings, developed timely physician wellness action plans, and implemented corresponding initiatives. In follow-up, action plans were communicated to physicians and feedback solicited.

## Results

Two-hundred-eighty physicians participated in PODs across 4 pilot departments, all of which plan to continue PODs. Departments employed different strategies for POD structure, implementation, and action plans arising from POD recommendations. Common themes among multiple departments include, improving clinical workload/workflow (in 4), desire for community (in 3), balancing academic and clinical missions (in 3), work-life integration (in 2), and IT efficiency (in 2). Qualitative feedback indicates physicians and Chairs found PODs helpful in facilitating meaningful engagement and bidirectional communication. Participants commented that PODs "send the message that individual voices are important to the department" and "allow cross talk amongst members of different rank/divisions/goals...".

## Conclusion

PODs were feasible in all departments, and feedback suggests they met both aims of the POD pilot. The PODs framework is a grassroots, lean, practical, mechanism for engaging physicians in identifying and influencing ongoing systems issues impacting physician wellness. Next steps include scaling to all departments and adjusting for those with less well-established wellness program than the pilot departments.

# An innovative, medical staff run approach to the drivers of burnout and joy in work: Denver Health's Burnout Innovations project

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## Learning objectives

- To understand the unique struggles of a safety-net health care system, which has higher-than-average rates of burnout and intent to leave clinical practice.
- To describe an innovative, staff-led approach to address the drivers of burnout via small-dollar grants.
- To utilize Improvement Science methods to evaluate Denver Health's Burnout Innovations and design and implement future interventions.

## Project objective/background

Internal studies of burnout at Denver Health (DH), a safety-net integrated health care system in Denver, Colorado, have found levels of burnout significantly higher than national average (67%), with higher intent to leave practice in the next two years (50%).

## Methods/approach

In 2020, DH's medical staff formalized a volunteer, multidisciplinary Provider Engagement and Wellbeing Committee (PEWC) to help measure burnout and advocate for organizational changes. In 2021 the PEWC was approved a small amount of funding from medical staff dues to pilot "Burnout Innovations". A simple application was established, funding for projects ranged from \$100-\$5,000, and applicants had to select which element of IHI's Joy in Work framework their innovation would address. Fifty-four applications were received, and 23 were funded.

## Results

Of the 23 funded Burnout Innovations proposals, 18 were implemented. An estimated 310 medical staff were reached. Funded proposals included but were not limited to: professional coaching, lunchtime meditation, Balint group training, group lunches facilitated by peer support teams, purchase of a massage chair and an exercise bike, virtual cooking classes, young surgeon groups, meetings to review EMR pain points, etc. Most interventions

focused on the domains of 1. wellness and resilience, and 2. camaraderie and teamwork, likely due to the small dollar

amount of funding. Qualitative evaluation showed high satisfaction with the interventions. All funded applicants stated that the financial support was "essential" to their ability to implement the project, and 100% stated that they would like to see future opportunities to fund innovations. Lessons learned from this experience have led to plans to expand and improve the opportunity at DH, via "Burnout Innovations 2.0."

## Conclusion

Provider burnout is a complex phenomenon with no one-size-fits-all solution to address. This innovative process — led by medical staff and for medical staff — allowed an opportunity to test small-scale creative solutions to the issue.

# Appreciative inquiry uncovers best practices used by a high performing clinical unit

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## Learning objectives

- Describe how a high-performing clinical unit was identified at an academic medical center
- Understand how Appreciative Inquiry was applied to learn from a high-performing clinical unit
- Learn about the best practices and resources derived from this case study

## Project objective/background

The Wellness Office at a large academic medical center sought to understand the contributing factors that enabled one of the highest performing clinical units at our organization to thrive despite the continuing adversity of our current health care environment.

## Methods/approach

The external survey vendor (Press Ganey, LLC) created a “Critical Metrics Map” using results from the 2021 annual engagement survey. This tool incorporates psychometrically validated indices comprising the following categories: overall engagement, team index, leader index, likelihood of recommending the unit as a good place to work, perception of high-quality care, teamwork, communication, resilience, and culture of safety.

Results were sorted by work unit. High performers were filtered based on which units scored greater than or equal to one standard deviation above the mean on every index. Six units with more than 5 respondents and direct patient care were determined. The highest performing unit was selected based on the engagement index score, which was a pediatric general care unit. Respondents from the unit included clinicians, administrators, clerical staff, and support staff (n = 77).

A group interview was conducted with a subset of managers and staff (n = 16) using the Appreciative Inquiry approach, modified from the American Medical Association’s STEPS Forward module. This approach uses questions that focus on times when things went well, and probes deeper into what contributed to success.

## Results

Interview feedback yielded numerous factors that contributed to the unit’s strong survey scores.

Best practices from the unit included:

1. PEST (Positive Environment Support Team): this team was implemented to foster community, purpose, and joy in the workplace.
2. Structures for Success: a best practice that outlines specific ways the unit ensures a culture of continuous improvement, inclusion, and accountability.
3. Code of Conduct: a dynamic document that the unit revamps every year with buy-in from all team members to instill accountability and ownership.

The Wellness Office developed additional resources gleaned from the Appreciative Inquiry interview:

1. Customized Appreciative Inquiry interview guide that can be used by other teams.
2. Taking Care of Teams Checklist (TC2) to help mid-level managers navigate effective communication between frontline teams and their upper-level leaders.

## Conclusion

Using an adapted Appreciative Inquiry approach to interview a high-performing clinical unit uncovered best practices and valuable resources that other teams can use to improve team function and culture.

# Climate change: Using faculty climate survey data to drive improvements in climate and wellness culture in pediatrics

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## Learning objectives

- Describe a physician well-being strategy rooted in departmental response to faculty affairs Climate Survey
- Identify examples of physician-organization collaboration through the Listen-Act-Develop model
- Consider how this model can be implement in one’s home institution

## Project objective/background

UC San Diego’s Department of Pediatrics is committed to systems-change for improving faculty well-being. We leveraged results of the Health Sciences Faculty Climate Survey (not specifically measuring well-being) to direct and target our efforts.

We describe an approach employing physician-organization collaboration in a Listen-Act-Develop model, from dissection of survey results to implementation of initiatives across domains with the impact of improving wellness. Objectives are: 1) foster healthy physician-organization relationships 2) empower faculty to create and implement solutions to improve well-being 3) address issues highlighted in Climate Survey.

## Methods/approach

The faculty Climate Survey was a call to action, strongly identifying a need for faculty input on the direction of the department. We developed a phased process from Town Halls to Academies/Centers/Workgroups (ACWG), tying to key principles:

Facilitated Town Halls resulted in 4 Task Forces (Clinical, Education, Research, Equity/Diversity/Inclusion) who, after 6 months, presented recommendations. Recommendations sparked creation of departmental Academies (Clinical, Research, Education), Centers (Leadership Development, EDI) and Workgroups. To improve organizational alignment and partnership, through ACWG faculty develop and propose solutions which leadership assess and prioritize for implementation. The process and initiatives constantly evolve while enacted, through iterative, ongoing faculty feedback. Regular communication of implemented actions and targeted solutions occurs through electronic means and faculty retreats, town halls, and rounds.

## Results

The 2019 HS Faculty Climate Survey Pediatrics response rate was 45%, with 61% rating current morale as positive. One-hundred-twenty faculty with representation from all 17 divisions participated in Task Forces. Each ACWG has 20-25 faculty, representing diverse divisions. Sample initiatives implemented by ACWG proposals include hiring a central Pediatrics fellowship coordinator, formalizing peer mentorship, division chiefs’ leadership development, internal mentored research awards, and establishing scheduling flexibility. Climate survey 2023 is currently underway. Pediatrics response rate was >60%.

## Conclusion

Faculty Climate Survey findings, can drive a grassroots approach to improve physician-organization alignment and create targeted actions to improve wellness. Academies and Centers provide a lasting framework to effectively promote faculty input and engagement in advancing the needs and vision of our faculty and our department.

Principle/Need	Initial Town Halls with Facilitated Small Groups	Task Forces	Academies/Centers/Workgroups (ACWG)
Require deeper understanding of necessary improvements from Climate Survey results	✘		
Planning process providing clarity, direction, and focus	✘	✘	✘
Faculty input on the direction of the Department	✘	✘	✘
Open and creative exchange of ideas in a collegial approach to planning with Faculty	✘	✘	✘
Empower faculty to lead in developing solutions for the faculty, by the faculty		✘	✘



# Cultivating a culture of wellness: A resident-led initiative

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## Learning objectives

- Determine wellness activities residents would be interested in attending.
- Integrate resident-led initiatives into residency wellness programming.
- Assess effectiveness of monthly resident-led Wellness Morning Reports during a protected time in the work-day to improve resident camaraderie.

## Project objective/background

Resident wellness programming is challenged by poor attendance due to lack of interest and/or limited resident free time outside of the work-day. Monthly resident-led Wellness Morning Reports (WMRs) were developed to schedule wellness activities during a protected time within the work-day to build camaraderie amongst residents.

## Methods/approach

A needs assessment elicited what health and wellness activities residents would be interested in. Using these findings, monthly WMRs were designed and led by residents on the Pediatric Residency Wellness Committee. The average cost of supplies was \$50-100 per WMR. WMR sessions replaced traditional case-based morning report to utilize a protected time within the work-day. A survey eliciting feedback on WMRs was sent to residents using a 5-point Likert scale response system. Quantitative data analysis was performed using general descriptive statistics, One-Way ANOVA, and an unpaired t-Test. Free-text responses were analyzed using thematic analysis.

## Results

24/39 (61.5%) residents responded to the needs assessment with preferred activities being arts and crafts and fitness or wellness challenges. The average attendance at a WMR was 12 people compared to 10 at a traditional case-based morning report.

12/39 (30.7%) residents responded to the follow-up survey eliciting feedback for WMRs. Residents were satisfied/very satisfied with WMRs (average score 4.6) and felt that WMRs improved/significantly improved camaraderie (average

score 4.25). There was no difference in likelihood to attend a WMR based on if it was led by a resident, chief resident, or faculty (p-value = 0.61). Residents responded they were more likely to attend a WMR during the current protected timeslot from 07:30 – 08:00 AM vs after work-day hours (4 vs 2.25; p-value < 0.001).

Qualitative analysis found that challenges included limited funding, funding restrictions on food items, and resident leaders having insufficient time to plan activities. Strengths included that WMRs were designed by residents with an overall understanding of resident needs and wants, and that the sessions replaced traditional morning report allowing for protected time during the work-day so that residents did not need to spend any of their free time for a program wellness activity.

## Conclusion

Resident-led Wellness Morning Reports were well-attended, well-liked by residents, and felt to improve resident camaraderie. Residents preferred wellness activities integrated into the existing work-day rather than after-hours wellness activities. WMRs may be an effective way to integrate wellness into the residency experience.



# Cultivating well-being through interprofessional teams and education

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## Learning objective

- Describe one interdisciplinary teams' approach for developing, modifying, assessing, and evaluating a values and ethics themed microaggression/unintended bias interprofessional education activity.

## Project objective/background

Health care professionals and trainees are regularly exposed to implicit bias through microaggressions as recipients, bystanders, and/or sources. Microaggressions threaten psychological safety and are associated with the development of anxiety and depression in clinicians and an exposure-response association has been demonstrated between health care professional mistreatment and burnout. At the same time, health care is increasingly interprofessional (IP) and research indicates highly functioning IP teams and psychological safety enhance wellbeing, reduce clinician exhaustion, enhance job satisfaction, and decrease workplace stress. While attention has been paid to health care professional and trainee wellbeing and mistreatment, little attention has been paid to ways IP teams and IP education (IPE) can support wellbeing. This poster describes one team's experience designing, implementing, and assessing a novel IPE curriculum aimed to educate multidisciplinary health care professional trainees on microaggressions, their impacts, and how to appropriately respond in the role of recipient, bystander, and source.

## Methods/approach

Following a literature search and using Wiggins' and McTighe's backwards design framework, a microaggressions themed IPE curriculum was developed by multidisciplinary faculty at Washington State University Health Sciences. The curriculum was disseminated to IP students in Fall 2022. Each student participated in an asynchronous and synchronous session. The synchronous session included IP student teams responding to three

microaggression simulations utilizing standardized patients. Descriptive statistics summarized survey data with inferential analysis of paired data.

## Results

Three hundred seventy-four health professions students participated in the microaggressions IPE activity in Fall 2022. Pre- and post-activity surveys were matched for 274 students.

Statistically significant improvements between pre- and post-activity confidence and knowledge were observed. Significant improvements in IP collaboration-competencies were demonstrated through analysis of the Interprofessional Collaborative Competencies Attainment Scale (ICCAS).

## Conclusion

Health care trainees participating in an IP implicit bias learning activity demonstrated improvements in knowledge and confidence regarding microaggressions. IP collaboration-competencies also improved through the same curriculum. Replication of such activities can be used to provide consistent content across health science disciplines to educate multidisciplinary health care trainees on microaggressions, their impacts, and how to appropriately respond in the role of recipient, bystander, and source. Further research will more directly assess the learning activity's impact on health care trainee wellbeing.

# Dedicated time for reflecting and relating: A museum-based reflection curriculum for palliative care physicians and their teams

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## Learning objectives

- To foster community, purpose, and connection in a physician group with high risk for emotional exhaustion
- To share diverse interpretations of artwork to expand participants' thinking about common challenges
- To enrich participants' empathy by engagement with nonmedical human experiences

## Project objective/background

Museum-based education is an established strategy for supporting skills in communication, observation, and tolerance for ambiguity among medical students. The Visual Thinking Strategies teaching technique has recently been applied to palliative care training with positive results. Local needs assessment data demonstrated that emotional exhaustion drives burnout in our group, so we focused on emotional wellbeing and connection during regular working hours to foster a culture of wellness. Interventions included a museum-based education series initiated in early 2020, adapted to the virtual setting with pandemic challenges.

## Methods/approach

Before each art-based reflection session, the organizer (LP) meets with a museum educator to discuss clinicians' needs and feedback from prior sessions. Sessions employ elements of the Visual Thinking Strategies approach to facilitate rich, reflective conversations around artwork. The session takes place biannually during a standing weekly faculty development timeslot.

## Results

We have hosted 5 1-hour sessions from July 2020 through March 2023, with 7-22 participants per session. Participants have included physicians, advance practice providers, and social workers who collaborate in interprofessional teams, typically >50% physicians. We have had 36 responses to our evaluation survey so far. All respondents were satisfied with the curriculum

and 92% were likely to attend similar sessions in the future. Participants valued having it during existing faculty development time during business hours, with the majority preferring to continue in virtual format to maximize accessibility. Narrative comments have noted that holding the session at the museum might offer an even richer experience for those who attend, but would decrease the number of clinicians who can realistically attend. Participant responses on session impact mapped to several themes, including 1) appreciating variation in perspectives viewing the same artwork, 2) connecting to colleagues in a different way, 3) noticing one's own feelings and reactions, and 4) enjoying time to pause and reflect.

## Conclusion

A museum-based reflection curriculum for palliative care physicians was feasible, well-attended, and highly valued. Participants shared meaningful improvements in well-being and meaning at work and appreciated incorporation of the activity into regular work hours. Other clinical leaders may find this intervention useful for fostering a culture of well-being at their institutions.

# Development of change initiatives for professional fulfillment: Harnessing the power of crowdsourcing

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## Learning objectives

- Describe how to use nominal group technique to crowd source data
- Show analysis of the data and its use in development of change initiatives

## Project objective/background

One challenge organizations face to address burnout mitigation and professional fulfillment work is the complexity of the drivers and practice parameters that impact physician experience. The opportunities for change initiatives are great, yet given the large number of possible intervention points, there is a need for prioritization of projects based on expected impact for physician specialty and practice type, particularly at the work unit level. Using crowd sourcing to generate data to assist in this endeavor achieves the following goals: leaders model behaviors that are associated with reduced burnout in physicians, engage a majority of group members in a short time and generate data that will reflect the individual needs and therefore potential impact of projects.

## Methods/approach

A nominal group technique was used by placing poster boards labeled with a driver of burnout category around the room. Participants wrote ideas on any of the poster boards, then were asked to review each board. Each participant voted for their top five priorities with sticker dots using a maximum of three votes per any one item per person. A descriptive and qualitative analysis was completed. Data was organized based on locus of control factors and impact as determined by the analysis. Feedback was elicited after a summary presentation of data.

## Results

92% of physician group (n=23) and 100% of advanced practice providers participated (n=5). One hundred twelve unique ideas were generated. Workload and ob demands category (21.4%) had the largest number of ideas. Three ideas had more than five votes: multidisciplinary rounds, relationship with specialties and social events. Qualitative data analysis showed notable themes of office improvements (14.8% of ideas), electronic medical record (8.2%), social events (13.1%) and interruptions/distractions (9.8%).

## Conclusion

Use of this technique with follow up communication engaged the majority of the members of this group. Additionally, prioritization of project development was aided through descriptive statistics and qualitative analysis to determine impact level of potential initiatives. This method can be used across a health care system to create a network of change initiatives that uniquely address the needs of individual physician practices or groups to promote professional fulfillment.

# Efficacy of a CME course to improve confidence to lead physician professional fulfillment improvement work at the unit level

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## Learning objectives

- Equip leaders with a process to improve physician professional fulfillment at the work-unit level.
- Empower leaders with a high degree of personal efficacy for leading professional well-being efforts in diverse occupational settings.

## Project objective/background

Most physicians are aware of professional burnout. The volume and complexity of extant research can, however, be overwhelming to interpret—let alone apply to individual work units with varied needs. Physicians who lead well-being interventions need a framework and process for iterative improvement, as the unique needs of each unit preclude any “one size fits all” solution. Stanford WellMD developed a CME course to equip unit-level leaders across a broad spectrum of diverse organizations. As self-efficacy is a strong predictor of work performance, this analysis uses self-efficacy as a short-term proxy for future impact on unit-level professional well-being.

## Methods/approach

In this educational intervention, a 15-hour, multi-modal CME course was conducted virtually over six weeks with live and asynchronous content. The curriculum included didactic lectures, curated reading, group exercises, and personal reflection. Self-efficacy was assessed through a 26-item Likert scale-based pre- and post-course evaluation survey. The 26 questions asked participants to rate their confidence in leading physician well-being work within the topic domains covered in the six weekly segments of the course: Foundational Knowledge and DEI, Working with Leaders/Culture of Wellness, Assessment, Improvement Science, Personal Resilience, and Putting it All Together. For categorical variables, chi-squared test was used to examine the difference between cohort groups.

For continuous survey session scores, 2 independent sample t-test was used, and for ordinal survey responses, Wilcoxon rank sum test was used.

## Results

Over two cohort groups (n=257), 70.6% of participants responded to both the pre- and post-course survey. Cohort A had a statistically significant improvement in moving participants into the moderately, very, and completely confident in half the survey categories, and in Cohort B this movement occurred in every survey category. Mean scores for each grouping of questions improved in every category for both cohorts with effect sizes (Cohen's d) larger than 0.8.

## Conclusion

A multi-modal course focusing on framework and process can improve the self-efficacy of unit-level well-being leaders. Equipping people with skills to navigate this space improves their confidence in a relatively short amount of time and prepares them to lead local improvement efforts.

# Encouraging cultural change with structured sharing of personal stories and meetings to facilitate honest communication with leadership

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## Learning objectives

- Understand how structured sharing of personal stories within a professional setting can promote collegiality, connectedness, and a positive organizational culture.
- Learn how the implementation of leaderless forums can provide a platform for physicians to provide constructive feedback anonymously, leading to improved communication, well-being and physician-leadership interaction.
- Grasp the concept of closed-loop communication in the context of addressing concerns raised by physicians, leading to increased transparency, trust, and effectiveness in leadership communication.

## Project objective/background

In response to survey results showing high rates of burnout in a specialty division at an academic children's hospital, an open-ended survey was administered to division members asking them to identify opportunities for improvement. The top concern expressed was about the divisional culture, including a lack of collegiality, transparency, and clear communication.

## Methods/approach

Two interventions were introduced: a storytelling initiative promoting collegiality, and a leaderless forum enabling anonymous discussion of concerns. Baseline and follow-up data were collected through surveys, evaluating aspects like self-valuation, leadership support, and work impact on relationships.

## Results

All physicians participated in interventions, with follow-up data indicating improvements in 5 of 7 measures.

## Conclusion

Results emphasize the potential of structured personal sharing for fostering connectedness, leaderless forums for effective feedback, and direct communication loops for transparency enhancement. Though sample size limits statistical assessment, positive cultural trend implications are evident.

# Evaluation of an introductory course on empathy and compassion for clinical learners

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## Learning objectives

- Learn how a course on the neurobiological and behavioral basis of empathy and compassion and its cultivation in professional life was evaluated by health professions students
- Learn how standardized measures of empathy and compassion changed from before to after the course
- Learn how post-session ratings of momentary feelings were influenced by the course and changed over time

## Project objective/background

Increasing empathy and self-/compassion in clinical learners enhances patient care and decreases provider burnout. Early incorporation of compassion cultivation training promotes medical student wellness and improves clinical care. Therefore, the objective of this project was to evaluate the impact of a course that combines a theoretical and experiential (e.g., mindfulness and perspective-taking exercises) approach to empathy and compassion in first and second year health care students.

## Methods/approach

First and second medical and pharmacy students at UC San Diego (n=11) experienced the quarter-long elective "Putting the CARE in Health care: Introduction to Empathy and Compassion for Clinical Learners". Pre- and post-program-related standardized questionnaires on empathy, self-compassion and behavioral control in the realm of social justice, as well ratings of knowledge about empathy and compassion were administered. After each session, students rated how much their feelings of being at ease/burnt out/socially connected changed. Linear mixed models and one-sample t-tests were used.

## Results

Participants displayed a significant increase of Neff Self Compassion Scale total score after (Mean [SD]: 3.03 [0.65]) compared to before (2.64 [0.57]) the program ( $F[1,8]=13.8$ ,  $p=0.005$ ) and a significant increase of self-rated knowledge on empathy and compassion and their application to a clinical medical environment after

(4.3 [0.7]) compared to before (3.2 [0.8]) the program ( $F[1,12]=15$ ,  $p=0.002$ ). On average, participants reported reduced burnout (2.34 [0.52]:  $t[16]=2.7$ ,  $p=0.015$ ), feeling more at ease (1.36 [0.33]:  $t[16]=-7.9$ ,  $p<0.001$ ) and more socially connected (1.27 [0.38]:  $t[16]=-7.7$ ,  $p<0.001$ ) after the session. There were significant differences between the sessions that reported impact on student's burnouts ( $F[7,38]=2.5$ ,  $p=0.033$ ).

Qualitative feedback emphasized several desirable qualities for such offerings.

## Conclusion

These findings can inspire future curriculum design with the goal of giving health care students tools and knowledge to grow into compassionate providers while maintaining their own wellbeing. Research in a future cohort will yield the potential to evaluate which aspects specifically contributed to the observed outcomes and how objective and subjective assessments relate to each other.



# Front Line Providers Organizing Wellness (FLOW)

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**Learning objectives**

- Show the value of a grass roots program that empowers clinical teams to improve their well-being.
- Describe 3 initiatives that had a positive impact on wellbeing/burnout of clinical teams.
- Describe the impacts that the three initiatives had beyond wellbeing: patient care, carbon footprint.

**Project objective/background**

In order to address data from a system wide burnout survey, the purpose of this program was to determine if local-led well-being efforts and interventions would have an impact on clinical team burnout.

**Methods/approach**

Individuals submitted proposals to design and implement evidence-based interventions with their teams in order to improve well-being. Selected interventions used well-being pre and post surveys to evaluate program success.

**Results**

- Elevate care with better communication: 17 percentage point decrease in moral injury; 16 percentage point decrease in burnout
- Alternative transportation: 29 percentage point reduction in burnout; 23 percentage point reduction in feelings of callousness at work; 940 lb. Co2 reduction; 37,000 calories burned; 1,347 miles of alternative transportation logged
- Building community and wellness: 15 percentage point decrease in experiencing work-related stress; 8 percentage point decrease in being affected by traumatic stress from those I help; 8 percentage point increase in having opportunities at work to re-charge or re-focus on my own wellness; 100% of participants agreed or strongly agreed that participating in wellness activities increased connection with the team, improved job satisfaction, and gave me new tools for wellness.

**Conclusion**

Providing the opportunity for front line providers to lead their own well-being initiatives had positive impacts on burnout and wellbeing as well other multiple other impacts for our health care system, including improved patient care, increased provider activity levels, and improved carbon footprint.

# How are we doing? Assessing pediatric faculty well-being at an academic medical center

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## Learning objectives

- Define the rate of burnout nationally and its impact on health care
- Understand why assessing wellbeing is essential prior to implementing changes
- Understand and apply our experience in surveying faculty to other health care institutions

## Project objective/background

Physician wellbeing is essential to the provision of high quality patient care, yet the prevalence of burnout among pediatricians continues to increase, reaching nearly 50% in a recent report.<sup>1</sup> Contributors to burnout among physicians have been well documented and include issues with excessive and/or inefficient workload, poor organizational structure, and leadership culture.<sup>2</sup> The causes and impact of these issues vary from institution to institution, therefore, assessing local wellbeing is important in order to better understand individual drivers of burnout before implementing changes.<sup>3</sup> To this end, we created and administered a wellbeing survey for pediatric faculty designed to assess current level of burnout as well as to elicit recommendations for improving faculty wellbeing.

## Methods/approach

143 faculty were surveyed. Questions were designed to measure professional fulfillment,<sup>4</sup> to assess self-compassion,<sup>5</sup> to encourage reflection on the positive impact of work as well as the challenges of patient care, and to elicit suggestions for improving department wellbeing. The survey was conducted between November and December 2022. A mixed methods approach was utilized to analyze the results.

## Results

Fifty-nine faculty members responded to the survey (41% response rate). 43% of respondents reported experiencing at least one symptom of burnout. Contributors to joy at work included patient care, interactions with colleagues, and teaching. Issues negatively impacting wellbeing included limited time with patients, burden of administrative work, and insufficient staffing.

Recommendations for improving wellbeing included increasing faculty autonomy and creating more opportunities for faculty to meet together. There were no statistically significant differences among burnout indices based on location of practice (inpatient, outpatient, or both). There was a trend toward more empathy/connection with colleagues in the outpatient setting when compared with other locations, and a trend toward being happier/feeling more worthwhile at work in the inpatient setting when compared with other locations.

## Conclusions

This study indicates that the rate of burnout at our institution is similar to that among pediatricians nationally. Strengths among our faculty include their joy in patient care and valuable relationships with colleagues. Challenges facing our faculty include staffing shortages, administrative burden, and time constraints to providing patient care as well as maintaining relationships with colleagues. Our next steps will include disseminating these results to faculty and creating an action plan to address the identified issues.

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# Identifying the needs of physician-scientists in academic medicine: Strategies for well-being and retention

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## Learning objectives

- To identify the unique well-being needs of physician-scientists
- To gather data on department- and institution-level infrastructure needed for improved mentoring
- To identify actionable well-being interventions to better support and retain physician-scientists

## Project objective/background

Despite their unique and valuable contributions to biomedical research and clinical practice, there is a dearth of physician-scientists. Physician-scientists comprise only 1.5% of the physician workforce. The COVID-19 pandemic has further exacerbated existing challenges for physician-scientists due to higher stress levels and impaired productivity. In this study, we sought to identify facilitators and barriers to the well-being and retention of anesthesiologist-scientists at our academic medical center.

## Methods/approach

As part of a T32 training grant program, we provided workshops for physician-scientists targeting trainee well-being topics (imposter phenomenon, mentorship and sponsorship) and expanded career development mentorship support. We collected data on the perceived value of the workshops, and conducted qualitative interviews with 15 early career anesthesiologist-scientists and 7 established physician-scientists who serve as mentors to early career anesthesiologist-scientists. Qualitative data were analyzed using an inductive thematic analysis approach.

## Results

Trainees reported that the workshops were beneficial and they appreciated the opportunity to explore issues that are not commonly discussed with fellow physician-scientists. Qualitative interviews revealed that physician-scientists face unique career challenges as a result of their dual research and clinical responsibilities. These include balancing multiple tensions: between protecting research

time and being a clinical “team player”, learning how to maintain clinical competency with less clinical time than non-research colleagues, and navigating productivity challenges while competing against pure-research and pure-clinical colleagues for promotional milestones. The small number of physician-scientist mentors contributes to challenges with sourcing appropriate mentorship. Mentors and mentees spoke to the need for additional community-building and opportunities to share best practices amongst physician-scientist colleagues. An additional finding was the unique value that physician-scientists bring as a result of holding this dual vantage point. Participants spoke to the ways in which their clinical care beneficially impacted their research, and vice versa, allowing for more rapid honing of experiments and meaningful cross-pollination across research and clinical practice domains.

## Conclusion

Additional community-building and mentoring resource-sharing strategies are needed to support the retention and well-being of physician-scientists. Participants highlighted the need for normalizing struggle through having successful senior physician-scientists share their early-career challenges and techniques for overcoming them. Re-examining promotional pathways and clinical scheduling practices that are synergistic with research experiment schedules may allow for better retention and well-being of physician-scientists. Finally, identifying the unique contributions physician-scientists bring to both research and clinical practice highlights the need for additional research and resources for retaining this highly specialized population.

# Infusing joy into an organizational culture

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## Learning objectives

- Implement and study an organizational process to increase the joy and well-being of staff.
- Empower staff to implement projects for their unique team cultures that will enhance the joy and well-being of their teams.

## Project objective/background

There is sufficient evidence that a joyful and engaged workforce is associated with fewer medical errors, enhanced patient experience, less waste, higher employee productivity, more discretionary effort, reduced turnover, and better financial performance.<sup>1,2,3,4</sup> Backed by this body of research, a large academic medical center created a strategy to infuse joy into work units to foster joy and well-being.

In 2021, an academic medical center in the SE region facilitated the Joy Grant Program. The objective was to implement and study an organizational process to increase joy and well-being of staff. The Joy Grant program empowers employees and funds innovative projects to drive joy, remove barriers and create sustainable joy practices to meet the individualized needs of their teams.

## Methods/approach

The Joy Grant program was open to all staff and funds were awarded through a competitive application process. Complex guidelines were developed with support from the legal, regulatory, finance, supply chain, and compliance teams. There were project scoring criteria developed, and a review team formed from the Employee Well-Being Committee. The applications were blinded and then ranked by the review team. In 2021, 21 joy projects were funded, and 35 projects in 2022. In 2021, staff were encouraged to develop unique measurements for their projects. In 2022, a standardized assessment was created and sent to all project participants across the Florida campus.

## Results

In 2022, there were several significant results showing that these projects not only increased feelings of joy in staff but also how they viewed their work as a whole.

## Campus impact reports showed that units that participated in a joy grant program reported...

- **15% decrease** in feelings of burnout.
- **17% increase** in feelings of joy.
- **17% increase** of staff reporting feeling recognized and thanked for what they do.
- **11% increase** of staff reporting satisfaction with involvement in the decisions made that affect their work.

The above represents the summarized impact report highlights, and more information can be provided upon request, including job type, work environment (remote/hybrid), etc.

## Conclusion

Empowering and funding staff-driven projects allows for an individualized approach to employee well-being and joy at work. These investments influence how work units view their work and experience connection to their colleagues and the organization. Opportunities to enhance work unit joy and well-being include replicating and scaling low and no-cost projects with successful outcomes.

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# Instituting quarterly provider experience and well-being rounds to capture issues important to clinical hospitalist faculty at a large academic hospital

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## Learning objectives

- Understand the factors associated with stress for hospitalist faculty at a large and growing hospital.
- Understand the protective factors for hospitalist wellbeing in a large and growing hospital.
- Understand that the process of checking in with faculty about their wellbeing can itself promote wellbeing.

## Project objective/background

Our hospitalist group has been under numerous stressors over the past several years including from the Covid 19 pandemic as well as from a growing hospital system and a growing group (we grew from 58 faculty in 2017 to 162 in 2023). In an effort to ensure that wellness was being addressed robustly and visibly for the whole group which is made up of physicians and advance practice providers an MD and APP were appointed as joint Provider Experience and Wellbeing (PEW) Directors in 2021. In hopes to understand issues affecting burnout and thriving important to hospitalists Quarterly PEW Rounds were initiated by the PEW directors.

## Methods/approach

Between January of 2022 and January of 2023 four PEW rounds were conducted. The PEW directors made rounds to all the common workplaces that hospitalist faculty normally could be found. PEW rounds were conducted both during early afternoon hours and evening hours to capture daytime as well as evening and night providers. During rounds structured questions were posed to each faculty soliciting comments on “what has been hard this week and this month” as well as “what has been going well this week and this month.” Follow up questions probing for further details were asked. Responses were recorded by the PEW directors and then analyzed for common themes after each quarters rounds and then again at the end of the full year.

## Results

Themes among stressors faced by hospitalist faculty at our institution included: difficult patient interactions with hostile patients, high turn-over in support staff, large swings in patient volumes. Themes among positive factors identified by hospitalist faculty included: a sense of good leadership and communication from our Division leaders, a focus by our leadership on work structure in order to address wellness (such as geographic grouping of patients, reasonable team caps, good back up call coverage), having clear back up plans in place ahead of time, having supportive and collaborative co-workers and feeling like faculty are being listened to. Quarterly PEW rounds were well received and reported to themselves contribute to faculty feeling heard.

## Conclusion

In person structured wellbeing rounds during the workday can be an effective method for engaging physicians and advance practice providers in discussions of work factors impacting wellbeing. The very act of this sort of check in can help create a culture of listening to clinician concerns.

# Leadership matters: How leadership interacts with physician burnout in private and employed practice physicians

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## Learning objectives

- Understand the role of leadership in physician well-being
- Examine differences in well-being in employed compared to private practice physicians
- Examine the role of leadership in these well-being differences

## Project objective/background

Physician burnout is an occupational hazard that is multifactorial. Prior research has found that health care leadership qualities impact physician well-being and role satisfaction. However, this research was conducted in a fully employed physician model health system. The current study seeks to further understand the associations of physician satisfaction with their direct leaders and physician burnout and wellbeing in a mixed employed and private practice physician sample.

## Methods/approach

Cross-sectional sample of 1300 physicians in both employed and private practice models received email invitations to take an anonymous survey in mid-2019. The physicians represented specialties providing care at inpatient and outpatient services at a large tertiary care hospital in SE Michigan. Physicians completed the Mini-Z Burnout Survey and the Mayo Clinic Leader Index.

## Results

270 (21% response rate) physicians completed the surveys. 62% of respondents identified as male, 58% were employed physicians, and 53% practiced a majority of their clinical time in the outpatient clinic. 78% indicated that they agreed or strongly agreed that they were satisfied with their current position, 46% indicated that they felt a great deal of stress related to their current position, 29% indicated that they were experiencing at least one persistent symptom of burnout, with 2% indicating they were completely burned out. The mean Leadership Index score was 45.2 (SD=14.6) and Mini-Z was 33.7 (SD=5.0). Leadership Index scores were correlated with Mini-Z scores ( $r=.47$ ,  $p<.001$ ) and the

burnout question of the Mini-Z ( $r=.19$ ,  $p=.003$ ). Scores on Leadership Index, Mini-Z, report of burnout or satisfaction with current position were not significantly associated with gender ( $p=.5-.06$ ). Private practice physicians reported lower burnout ( $p<.001$ ) and higher position satisfaction ( $p=.001$ ) compared to employed physicians, though there was no significant difference between these groups on the Leadership Index ( $p=.20$ ). Primarily outpatient physicians were more satisfied with their position ( $p=.01$ ).

## Conclusion

Overall, Leadership Index scores were associated with burnout and satisfaction with position in physicians surveyed. Private practice physicians report lower burnout and greater position satisfaction compared to their employed colleagues, though there was no difference in ratings of their leadership. Outpatient physicians were more satisfied with their position compared to their inpatient colleagues, however there was no difference in ratings of their leaders or burnout levels.



# Leveraging dyad leadership to improve high-rate burnout in five outpatient practices

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## Learning objectives

- Analyze medical practices at high risk for burnout using a Single Item Burnout measure.
- Describe how to use a dyad leadership model to understand drivers of burnout and apply specific mitigating strategies.
- Characterize key elements employed by dyad leaders to support the practice’s burnout improvement strategy.

## Project objective/background

Burnout in health care employees tends to occur in clusters. We can identify practices with high relative rates of burnout amongst their physicians/APPs and staff. Once identified, leaders often struggle with best ways to address burnout in a particular care area.

## Methods/approach

WellSpan Health uses the Single Item Burnout (SIB) measure, which has been identified as a valid and reliable survey instrument to measure burnout (<https://nam.edu/valid-reliable-survey-instruments-measure-burnout-well-work-related-dimensions/>). Data from this SIB measure was used to identify outpatient practices showing high relative measures of burnout in our Primary Care Service Line (PCSL) and Women’s and Children’s Service Line (WCSL).

A medical director and operational director from each service line provided the dyad leadership for intervention at each practice. The main interventions were:

1. Day of listening (dyad leaders spent 3-4 hours in individual interviews of all staff, physicians/APPs in psychologically safe environment).
2. Identifying main drivers of burnout.
3. Selecting mitigating strategy, i.e, Ambulatory Flow Workshop, DISC personality profile for physicians/APPs.
4. Communicating with practice leadership.
5. Follow up day of listening.

## Results

SIB Measure improved in 5/5 practices from pre- to post-intervention. An additional metric “I feel free to speak my mind” showed improvement in 3/5 practices while the other two had good scores of 70 or above.

	April 2022	April 2023	April 2022	April 2023	April 2022	April 2023
<b>When you think of work-related burnout, which statement best describes you?</b>	FM-Adams-Herrs Ridge 12 of 13 – 92% responded 8 of 12 - 67% responded		IM-York-Red Lion 20 of 21 – 95% responded 14 of 20 – 70% responded		FM Sports-Lan-Cocalico 14 of 18 – 78% responded 14 of 15 – 93% responded	
I enjoy my work...	0%	13%	25%	43%	0%	21%
I am under stress, but...	42%	63%	15%	36%	36%	43%
I am definitely burning out...	42%	25%	55%	21%	43%	29%
Burnout won't go away...	8%	0%	5%	0%	21%	7%
I feel completely burnout...	8%	0%	0%	0%	0%	0%
<b>Total – Bottom 3 Statements</b>	<b>58%</b>	<b>25%</b>	<b>60%</b>	<b>21%</b>	<b>64%</b>	<b>36%</b>
<b>Speak My Mind</b>	<b>44</b>	<b>59</b>	<b>76</b>	<b>70</b>	<b>63</b>	<b>73</b>

	April 2022	April 2023	April 2022	April 2023
<b>When you think of work-related burnout, which statement best describes you?</b>	OB/GYN Chambersburg 50 of 54 – 93% responded 45 of 54 - 83% responded		Peds-Lebanon-Cornwall 13 of 14 – 93% responded 15 of 16 – 94% responded	
I enjoy my work...	24%	18%	8%	13%
I am under stress, but...	44%	51%	46%	60%
I am definitely burning out...	18%	20%	46%	20%
Burnout won't go away...	10%	11%	0%	7%
I feel completely burnout...	4%	0%	0%	0%
<b>Total – Bottom 3 Statements</b>	<b>32%</b>	<b>31%</b>	<b>46%</b>	<b>27%</b>
<b>Speak My Mind</b>	<b>57</b>	<b>64</b>	<b>87</b>	<b>75</b>

Comments from the practice participants interim survey:

**“I think this meeting brought to light concerns that had been on the rise in the office but had been trouble being voiced. It was helpful to have had a new fresh set of eyes and ears in the office to hear concerns that were troubling the office causing the burnout.”**

**“Effort was made to find out the root cause of burn out.”**

### **Conclusion**

Using a deep dive approach to PCSL and WCSL practices with high levels of burnout, our operational director and medical director dyads were able to identify the top drivers of burnout specific to a practice and apply specific mitigating interventions. Final results showed an improvement in all five practices in the SIB measure. There was also improvement in the “Speak My Mind” question in three of five practices with the other two still showing strong scores of 70 or above. We feel the primary driver of success was the psychologically safe environment set by dyad leaders who had the knowledge and authority to enact change. Staff comments positively reflected this. Success from this study has resulted in spread throughout the Medical Group with the assignment of leader dyads (ideally, an operational and medical director) in each Service Line to perform the standard work with their highest risk burnout practices.

# Locking up wellness: A methodology for increasing support for anesthesiologists at work

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## Learning objectives

- Describe a simple wellness intervention that aims to meet the unique challenges of perioperative physicians
- Describe the importance of meeting physician's most basic physiologic needs
- Understand barriers to implementation and costs associated with this reproducible intervention

## Project objective/background

In the United States 59.2% of anesthesiologists are at a high risk of burnout with lack of support at work being the single most predictive risk factor.<sup>1</sup> Anesthesiologists often suppress their most basic needs because of inability to leave the perioperative environment. We aimed to develop an easy to implement, low-cost intervention that increased anesthesiologists feeling of support at work by increasing their ability to meet their physiologic needs.

## Methods/approach

We present a simple and affordable initiative designed to improve the sense of support felt by faculty and trainees in the Division of Anesthesiology. Our intervention was the establishment and maintenance of multiple "Wellness Lockers" placed within common work areas. These lockers were stocked with snacks, coffee pods, over-the-counter medications, hair ties, and feminine hygiene items. Six lockers were stocked weekly by administrative staff with a total cost of \$850 per month. A survey was distributed by email to 58 anesthesiology faculty members and 12 anesthesiology fellows. The survey was designed to determine the frequency of use, impact, reason for use, and suggested improvements.

## Results

12/12 pediatric anesthesiology fellows and 23/46 faculty members completed the survey, for a combined 60% response rate. 74% of respondents access the Wellness Lockers at least once a week with 86% agreeing or

strongly agreeing that the Wellness Locker makes them feel supported at work. 74% of respondents accessed the lockers because they were physically unable to leave the OR environment. Two thirds of respondents accessed the lockers because items such as over the counter medications and feminine hygiene products were hard to get in the perioperative environment.

## Conclusion

Our simple, inexpensive, and reproducible intervention of providing items that met anesthesia providers basic needs within their workspace allowed members of our division to better take care of themselves and feel supported. The development of programs to improve support at work are vital to ameliorating burnout. Since its inception, the program has expanded from one locker to six and now includes off-site anesthetizing locations and call rooms due to positive reception and increased demand. Physician well-being is a complex problem that requires a multifaceted approach including policy overhaul and cultural transformation. However, we can't underestimate the power of providing for physician's basic needs at work. Our simple intervention demonstrates that you can improve the quality of the work environment and this program can be easily reproduced and implemented at any institution.

1. Afonso AM, Cadwell JB, Staffa SJ, Zurakowski D, Vinson AE. Burnout Rate and Risk Factors among Anesthesiologists in the United States. *Anesthesiology*. 2021;134(5):683-696. doi:10.1097/ALN.0000000000003722

# Making comprehensive primary care sustainable for the digital age

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## Learning objectives

- Define asynchronous work.
- Demonstrate a clinician-centered approach to addressing burnout drivers.
- Describe possible impact of template modifications on clinician burnout.

## Project objective/background

The demands on primary care clinicians have changed, but the model of care clinicians work within has not. Clinicians are asked to do increasing amounts of work asynchronous to the clinic visit, driven by the EMR tasks and patient portal communications, while maintaining historic levels of face-to-face visits. This misalignment of workload supply and demand increases risk for burnout. Our goal is to develop a clinic schedule that acknowledges and accommodates this shift in workload while being financially sustainable and professionally rewarding.

## Methods/approach

We assembled a workgroup of clinicians to evaluate the current state, establish goals, and develop new template designs.

We then conducted a 3-month feasibility trial of 5 pilot interventions with 19 (35%) participants across four primary care practices. This feasibility trial informed decisions about which pilots were operationally feasible and were likely to have an impact on burnout.

All pilots included dedicated time within each 4-hour clinical session to do asynchronous work.

The initial feasibility trial informed the selection of two pilots we continued to evaluate in a 6-month trial with expanded participation and focused clinic schedule changes.

## Results

**Cost** – Preliminary data demonstrate a 3% drop in participants' visit volume year over year and a 1% increase in non-participant visit volume. This was lower than a potential 12.5% drop which could have resulted from blocking 12.5% of schedulable time for asynchronous work. We hypothesized a potential 12.5% drop in wRVUs for participants, but realized a 2.5% increase in wRVUs, greater than the non-participant increase year over year.

**Clinician satisfaction** – We saw a small improvement in burnout for participants, 3.6 to 3.4. This was similar to non-participants, 3.6 to 3.5. We saw a greater change in clinicians' career plans. There was a 48% decrease in plans to reduce clinical hours and a 54% increase in plans to continue in their role as is amongst participants compared to a 24% decrease in plans to reduce clinical hours and 14% increase in plans to continue their role as is in non-participants.

We also evaluated several balancing measures including continuity of care, patient satisfaction, and performance on quality measures.

## Conclusion

Engaging a group of clinicians to assess the challenge of asynchronous work and develop solutions is a meaningful exercise. Modifying clinical templates to better align the workday with modern expectations of primary care can be successfully implemented and evaluated. Early results indicate this may be a viable approach to improving clinician satisfaction and could address the significant cost of clinician attrition.

# “Midday Moment”: Peer-led small-group sessions to enhance workday well-being and connectedness for hospitalists

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## Learning objectives

- Assess the feasibility and effectiveness of small group sessions to enhance well-being during the workday.
- Foster mindfulness, compassion, self-reflection, and presence in the workplace.
- Cultivate genuine connections and community among team members.

## Project objective/background

Resilient, compassionate, mindful providers are pivotal in building the workplace of the future. Previous studies on provider-lead discussion groups for outpatient clinicians have been associated with reduced burnout, improved staff retention, increased self-compassion, and engagement. The inpatient practice setting, however, presents unique challenges for implementation of this intervention. Thus, we developed short meaningful peer-led sessions for providers during the workday.

## Methods/approach

Voluntary, peer-led “Midday Moments” (MDM) small group sessions were piloted in our Internal Medicine hospitalist group (physicians and advanced practice providers) at a large academic medical center. Virtual and in-person sessions were held once or twice per month for thirty minutes over the lunch hour to encourage staff participation during their work shift. The sessions followed a semi-structured format designed to encourage self-reflection and vulnerability. The session structure is as follows:

- Introduction (5 min) – Review guidelines of the group: confidential, intended to validate others and offer relatedness, holding space without judgement, and advice only if asked.
- Emotions Check-in (10 min) – Allow time to reflect on current emotions using the emotion wheel tool and share if desired.

- Reflection/Conversation (10 min) – Pick a theme, question, or a quote, and reflect as a group.
- Close (5 min) – Summarize the session.

## Results

A total of 66 survey responses were collected after MDM sessions from participating providers. Nearly all respondents (99%, n=65) agreed that MDM sessions increased connection with colleagues, helped them assess their emotional health, and cultivated mindfulness. Most respondents (93%, n=61) agreed it was easy to fit the session into their workday. Participants also shared that the sessions were a safe space to be vulnerable (95%, n=63) and would recommend the session to a colleague (94%, n=62).

## Conclusion

MDM sessions are an effective way to promote mindfulness, compassion, and self-reflection within our hospitalist practice. Providers felt these short, directed sessions were feasible to incorporate even within a busy workday. Each session was designed to improve providers abilities to understand themselves as humans and as providers, ultimately leading to better care for patients.

# Minding the gap in primary care

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## Learning objectives

- Develop and implement quality improvement projects to address gaps in care delivery and enhance team performance in a health care setting.
- Define, form and assess effective team-based Primary Care.
- Identify best practices for managing patient MyHealth Message communications in a primary care setting, including assigning messages to appropriate care team members and prioritizing message response times.

## Project objective/background

Primary care involves rapid triage, access, preventative care, chronic disease continuity care, and care coordination. Providing these simultaneously can be challenging for clinicians and lead to poor patient and provider outcomes. To improve patient satisfaction and outcomes alongside provider wellbeing, it is essential to create a team where individuals work to the top of their licensure. In some academic systems team members are hired and funded by different parts of the organization such that the process of team building might be challenging.

We report on a series of quality improvement (QI) projects that identified a gap in our primary care practice workflow requiring cooperation between faculty and operations colleagues, ultimately leading to meaningfully successful and sustainable outcomes.

## Methods/approach

In 2020, in response to a surge in patient MyHealth Message communications, a QI project was initiated to evaluate all incoming messages over a three-day period at three of our academic primary care practices. We evaluated message content, assigning each message to a care-provider whose top-of-license skills should allow them to successfully manage it. We identified a significant gap between existing team members (medical assistants and physicians/APPs) recognizing the need for a registered nurse coordinator (RNC) to fill this gap. In collaboration with nursing administration, we piloted an intervention that provided two RNCs for two 2-week periods, to assess the feasibility of inclusion on the

care team. In 2021 our operations team funded a pilot incorporating an RNC in one clinic for several months. In 2022, three permanent RNCs were hired for four of our clinics.

## Results

Incorporating an RNC into the team (2020), through two 2-week stretches, resulted in an 18.4% decrease in test cohort "time in inbasket per appointment", 38 to 31 minutes. In 2021 a 5-month pilot incorporating RNCs into a test cohort decreased "time in inbasket per appointment" by 14%. The addition of two full-time RNCs (2022) into two clinics resulted in a 10% decrease and was associated with 79% perceiving inbasket work decreasing, 55% noting an increase in the number of messages deemed appropriate in the MD/APP inbasket, and an 84% increase in overall team satisfaction.

## Conclusion

With the guidance of a QI scientist a care gap was identified in our academic primary care practice. Through the collaborative efforts of faculty and health system operations, progressive interventions resulting in a care team that improved patient access, response times, clinician "time in inbasket per appointment" and overall team satisfaction.



# No sleepless nights

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## Learning objectives

- Demonstrate the value of using associate providers at top scope to reduce overall provider burnout
- Demonstrate the value of using associate providers at top scope to improve patient outcomes
- Demonstrate the value of using associate providers at top scope to improve effectiveness of hand-off to specialty care

## Project objective/background

### Background:

No consistent processes existed for providers who discovered abnormal masses and lesions on radiologic scans, resulting in care delays and potentially poorer patient outcomes.

The causes were multifold:

- Unclear next steps led to inconsistent practices among providers who were already overwhelmed due to full clinic schedules, limited chart review time, and high inbasket volume.
- High inbasket volumes often meant delayed provider communication with patients.
- Complex next steps resulted in patient confusion regarding ordered tests and referrals.
- Providers were unable to monitor and manage their patients' care journeys due to other clinical demands.

### Project Objectives:

1. Reduce provider burnout
2. Improve patient outcomes
3. Improve hand-off to specialty care

## Methods/approach

The No Sleepless Nights program initially started as a pilot for managing thyroid nodules and subsequently spread to 25 other disease processes. Leaders from all relevant specialties developed evidence-based practice algorithms (e.g., ACR TI-RADS) to define which patients needed biopsy or monitoring and which could be discharged

from care. Clear next steps were established based on biopsy results or guideline recommendations.

Nurse practitioners (NSNPs) were hired to relieve the burden of care management from the ordering providers. Now the NSNPs work directly with patients explaining results, ordering tests and referrals, scheduling follow-up appointments, providing a warm hand-off to the appropriate specialist, and pro-actively following the patient until no longer required by the guidelines.

## Results

- Reduced provider fatigue and overwhelm – more than 4500 front-line provider hours saved per year
- Improved patient care:
  - More appropriate specialty referrals with more effective first visits because necessary labs and scans are completed prior to first visit
  - Patients are guided through their journey to the right care, at the right place, at the right time
- Happy internal and external providers, giving the NSNPs standing ovations at multiple large meetings

## Conclusion

Physician wellness and patient outcomes can be improved simultaneously by establishing consistent, evidence-based processes that capitalize on associate practitioners working at top scope to guide patients through their care journey.

# Physician burnout profile analysis in a large children's hospital helps inform targeted well-being interventions

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## Learning objectives

- Learn about the value of the Maslach Burnout Inventory.
- Understand the five profiles created by latent profile analysis.
- Explore the breakdown of the five profiles by gender and time in practice.

## Project objective/background

Evaluating physician burnout as a binary variable of "burned/not burned out" is helpful for identifying the broad impact of the problem but does not help inform targeted interventions. Rather, identification of distinct burnout profiles may provide greater nuance for intervention development. Latent profile analysis utilizing data from the gold standard Maslach Burnout Inventory (MBI) creates five distinct profiles: engaged, ineffective, overextended, disengaged and burned out. We utilized this approach to describe the profile distribution among physicians in a large children's hospital to help guide interventions.

## Methods/approach

We approached hospital divisions using rolling enrollment to participate in the full MBI. Pre-survey presentations were done to increase awareness and encourage participation. Physicians received a personal link to complete the survey. Survey data were analyzed by a third-party company to ensure complete anonymity. Latent profile analysis was performed as per Leiter and Maslach (2016). Results were then entered into a REDCap database. Descriptive analyses were performed to

calculate frequency and percentage, and Fisher's exact tests were utilized to evaluate MBI profile differences in year, gender, employment status, inpatient/outpatient, and time in organization. A  $p$ -value  $< 0.05$  was considered statistically significant. All analyses were conducted in R software (version 4.2.2).

## Results

Among 495 physicians approached, 375 completed the MBI (76% participation). Physicians from 4 surgical divisions and 11 medical divisions completed the survey between 2020 and 2022; 54% identified as female, 90% were fulltime, 50% were exclusively inpatient, and 63% had been in the organization for less than 10 years. Latent profile analysis revealed 5 groups: engaged 44%, ineffective 13%, overextended 32%, disengaged 2%, and burned out 9%. Significant differences in profile distribution were found by gender ( $p < 0.001$ ) [Fig. 1] and time in organization ( $p = 0.006$ ) [Fig. 2].

## Conclusion

Latent profile analysis offers a more nuanced interpretation of the work experience of physicians than dichotomous categorization. In our sample, the overextended profile was more prevalent in women

physicians and those with longer time in the organization. These findings support targeted interventions such as executive coaching and preventative measures for women and physicians as they approach longer tenure. Similar patterns emerge in the ineffective profile which may benefit from more intentional and holistic faculty development. Further study of the impact of these targeted interventions is warranted.

Figure 1. Bar Graph of MBI Profile by Gender Organization

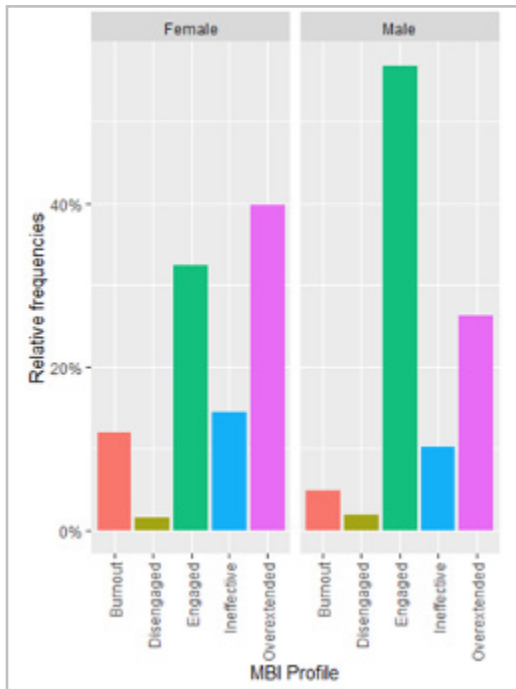
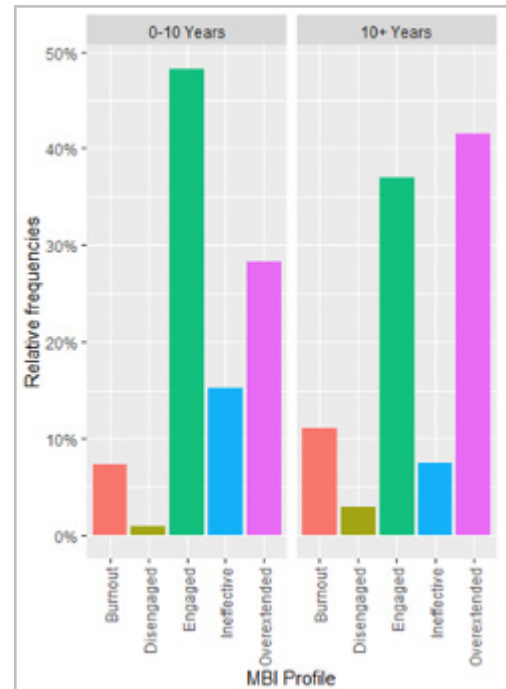


Figure 2. Bar Graph of MBI Profile by Time in Organization



# Pilot test for success: Grant program to improve well-being at an academic medical center

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## Learning objectives

- Describe an organization-wide grant program used to support innovative approaches for improving the quality of experience and well-being at work and in the learning environment.
- Learn about the grant programs that were funded for faculty, staff and learners.
- Describe how this organizational approach makes well-being gains at the unit and departmental levels.

## Project objective/background

In 2020, the Michigan Medicine Wellness Office launched an annual organizational-level grant program to fund local pilot well-being interventions for faculty, staff and learners. The purpose of this program is to identify sustainable and scalable workforce well-being interventions and best practices across the organization. Since its inception, the Wellness Office has funded 27 pilot interventions.

## Methods/approach

Two grant programs were established. The first is a Workforce Well-Being Grant Program open to faculty and staff. Awards are granted up to \$5,000 each for projects spanning 12 months. These grants are open to a broad spectrum of activities and interventions that impact six domains of well-being: burnout prevention, feeling valued, leadership connection, professional fulfillment, psychological safety; and work-home flexibility. Proposals are evaluated based on their potential to be scalable at a systems-level. Six months later, we added a second, parallel grant program specific to learner well-being. Grant program participants are expected to provide pre- and post-survey data on their well-being intervention and report out in a mid-cycle and end-of cycle report. The findings and impact of the interventions are then communicated through various channels including a visual abstract format on our website, learner social media, organization-wide newsletters, and presentations to the Wellness Advocate Network to share as best practices.

## Results

Over a three-year period, the Wellness Office has received 96 grant applications and funded 27 pilot interventions. The funded interventions had positive well-being impact on an estimated 3,000+ faculty, staff and learners at the unit, team or department levels (not individual). Application submissions increased 70% over a two-year period indicating need and interest in increasing faculty, staff and learner well-being. A diverse range of funded workforce well-being topics included: providing nutritional snacks to hospital medicine, resident professional development, peer support, mentorship for women, narrative parenting stories, improving EHR workflows, moral injury, gratitude texting, positive leadership, and creating inclusive imagery. Learner well-being funded projects included: coping with grief, art therapy for emotional and mental health, narrative storytelling, and sexual assault survivorship. Most grants showed an improvement in well-being within the unit as a result of the intervention. Several grants were selected to advance as a scalable application.

## Conclusion

The grant program's research and interventions help advance best practices, our understanding of the drivers that positively impact well-being, and the local solutions that work within our organization to improve the quality of experience and well-being at work and in the learning environment.

# Piloting telemedicine lab follow-up visits in pediatric endocrinology

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## Learning objectives

- Understand how telemedicine visits can be beneficial to explain clinical test results to patients and families.
- Identify barriers to implementing telemedicine visits and design strategies to mitigate these barriers
- Explore how adding telemedicine visits can be an asset for financial stewardship in quality improvement work

## Project objective

Communicating the results of clinical tests to patients/families via electronic health record messaging and phone calls is inefficient for pediatric endocrine physicians and patients. This work often occurs after-hours and the time expended is non-billable. This project to investigate the utility of telemedicine lab follow-up visits was developed in response to the 2021 Clinician Wellbeing survey which identified that control of schedule and efficiency of practice metrics for pediatric endocrinologists lagged hospital averages.

## Methods

A telemedicine visit type and specific EHR note template were created. Participation in the pilot study was offered to all pediatric endocrine attending physicians. Physicians were encouraged to add telemedicine slots to their clinic templates for scheduling ease. Outcomes include the number of EHR messages generated per patient visit, the number of billable vs non-billable EHR encounters, and the number of billable encounters generated per clinic sessions. Process measures include a monthly physician satisfaction survey, Press Ganey and project specific patient/family satisfaction surveys. Outcome and process measure data were summarized and compared to 2019-2022 data. We hypothesized that EHR message volume will decrease and billable encounters per clinic session will increase by 5%, that participating physicians and patients/families will be satisfied with the workflow, and that the 2023 Clinician Wellbeing control of schedule and efficiency of practice scores will improve from baseline values of 5.17 and 4.38.

## Results

15 of the 32 pediatric endocrine attending physicians participated in a pilot study, that spanned from 1/3/23-6/30/23. Clinicians completed an average of 2 telehealth visits per week. 129 telemedicine visits were scheduled, 104 visits completed, 25 visits cancelled, and 12 cancelled due to insurance. Patient/family satisfaction data showed that telemedicine visits promoted understanding of test results and that visits were convenient. 100% of physician participants reported that telemedicine visits improved workflow by a small (29%) or large (71%) degree. Monthly non-billable encounters decreased during the months of April and May but did not consistently trend lower during the six-month data collection phase of this pilot.

## Conclusion

This pilot project investigated the utility of telemedicine visits to improve physician wellbeing, increase clinical productivity, and enhance communication of test results to patients/families. While our results have yet to show consistent trends in lower non-billable work, we have spread the incorporation of telemedicine visits into clinical practice for the division of pediatric endocrinology and four other specialties that order after-visit tests. We plan to continue collecting data and investigate other metrics to measure physicians work outside of work hours. We also will explore backfilling 48-hour cancellation slots as a means to increase productivity and boost divisional financial stewardship.

# Promoting faculty professional fulfillment and belonging through joint leadership training

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## Learning objectives

- Discuss established relationship between leadership practices and team well-being
- Describe a pilot program developed to facilitate joint leadership training for department faculty
- Evaluate effects of program on faculty self-reported leadership practices and professional fulfillment

## Project objective/background

Leadership behaviors (e.g., holding career development conversations, encouraging suggestions for improvement, providing feedback and coaching, communication skills) are considered key drivers of physician well-being and departmental culture of wellness (Shanafelt & Noseworthy, 2017). Results from available Physician Wellness Surveys in our department indicated professional fulfillment below benchmark and higher rates of burnout than for similar institutions. Additionally, qualitative data and focus groups suggested a strong need for leadership training to prepare faculty for future leadership roles. This presentation describes our experience launching a departmental Leadership Academy for cultivating key leadership behaviors and enhancing professional fulfillment among faculty participants.

## Methods/approach

The Leadership Academy was open to MD/DO and PhD/PsyD faculty in a large academic department within the University's School of Medicine. Faculty were invited to submit an application describing their leadership goals and three cohorts of 10 faculty (N=30) have been enrolled in the program to date. Participants viewed pre-recorded lectures (20 min) from department leaders and met online monthly for 9 months. During the virtual discussion sessions (60 min), participants engaged in Q&A with the speaker, discussed personal leadership goals and challenges in small groups, and shared knowledge gained from virtual leadership sessions. Impact of the program was measured through surveys before and

after participation using measures assessing program satisfaction, leadership practices of participants as well as professional fulfillment and team cohesion.

## Results

Data collection is ongoing. Available results to date (N=16) indicate a large majority (93%) of participants agreed that the sessions were useful to enhance their leadership skills and 96% of participant's reported that they were likely to implement skills learned in the sessions. After the training, participants were also more likely to report using targeted leadership practices known to be associated with lower levels of burnout in team members (i.e., 25-63% improvement in identified leadership behaviors). Qualitative feedback was overwhelmingly positive with participants commenting specifically on their appreciation of the program for fostering a sense of belonging and professional fulfillment.

## Conclusion

Preliminary data from program participants support the feasibility of joint leadership training for encouraging specific leadership behaviors. The project provides a model for how departments can leverage internal leadership expertise and support leadership development through a low-cost, scalable format. Considerations related to long-term program sustainability and efficacy will be discussed.



# Providing education in safe settings: A framework for postgraduate programs to promote resident clinical care safety and wellness

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## Learning objectives

- Describe a framework to support clinical care safety and wellness in residency training
- Review the literature on resident clinical care safety in postgraduate training

## Project objective/background

There is a lack of formal guidance for postgraduate education to address trainee clinical care safety and risk management. We identified this fundamental need in psychiatry residency and are committed to ensure resident training and learning to occur in safe clinical settings.

## Approach/Results

The RSS developed and disseminated safety guidelines and safety checklists to residents and supervisors at each training site. If a safety incident was reported, the RSS would conduct an incident review and provide suggestions to the site for safety improvements. In 2016-2020, four reviews were performed. Recommended safety improvements included having monthly testing/audit of panic/safety alarms for residents; developing a system to flag high-risk inpatients on patient charts; and modifying physical layout of inpatient units to ensure safety. The RSS also conducted site safety assessments regularly. The RSS created a site safety review template with pre-determined safety criteria. A training site is deemed to be adherent (green-coded), mostly adherent (yellow-coded), or not adherent (red-coded) to the safety guidelines. In 2016-2020, the RSS conducted 26 site safety assessments, with 17 green, 9 yellow, and none being red. The RSS offered site recommendations, such as, extending safety procedures to outpatient and day-hospital service; re-locating weighted furniture to dedicated patient interview rooms; and including wellness resources/offerings available in resident/site orientation.

## Conclusion

The RSS and Safety Training Framework provide a novel approach that proactively and retrospectively addresses resident safety training. Involving residents in the RSS can provide a forum for residents to address attitudinal and institutional barriers to reporting safety incidents and promote social and emotional wellness.

## Take-home Messages

Engaging residents in developing a Safety Training Framework can promote resident clinical care safety and wellness. Safety guidelines and safety checklists in addition to a transparent process for retrospective incident reviews and proactive site safety assessments should be considered.

# Resident well-being: What matters most to pediatric residents who identify as caregivers outside of work?

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## Learning objectives

- Although professional fulfillment and mindset are highly valued among residents as an aggregate, schedule protection and downtime needs may supersede other well-being needs for ciswomen residents with caregiving roles outside of work.
- Ciswomen without caregiving roles outside of work may view work systems and benefits with lower importance.

## Project objective/background

Ciswomen pediatric residents are at greater risk of professional well-being challenges than ciswomen. This may be especially true when ciswomen residents have substantial caregiving roles outside of work, as residency well-being initiatives may not sufficiently support their workplace needs. However, whether resident well-being priorities differ by gender and caregiver identities remains under-explored. The study aimed to compare well-being priorities by pediatric resident gender and caregiver identities.

## Methods/approach

This was a subgroup analysis of a prior concept mapping study. The prior study used mixed methods to conceptualize pediatric resident well-being needs within 8 well-being domains. Pediatric residency stakeholders generated 97 ideas about the well-being experience, sorted ideas conceptually, then rated relative idea importance (1= not at all important, 5= extremely important). For this subgroup analysis, we used mixed methods pattern match analysis to compare well-being priorities of resident subgroups by gender and caregiver identity. Caregivers included parents to child(ren) < 18 years or those who identified as having substantial caregiving responsibilities for persons outside of work. Subgroups included ciswomen-no caregiving; ciswomen-caregiving; ciswomen-caregiving; ciswomen-caregiving.

Mean importance ratings for ideas within each well-being domain were plotted on ladder graphs and qualitative rank comparison analysis was performed.

## Results

Thirty-five residents (ciswomen-no caregiving, n=6; ciswomen-caregiving, n=19; ciswomen-caregiving, n=0; ciswomen-caregiving, n=9; non-binary-no caregiving, n=1) rated relative importance of the 97 well-being ideas. The aggregate resident sample rated "Professional fulfillment and mindset" with highest importance. Subgroup analysis revealed that non-caregivers rated "Professional fulfillment and mindset" with highest importance, while ciswomen caregivers rated "Schedule protections and downtime" with highest importance. Ciswomen (caregivers and non-caregivers) rated "work systems and benefits" with relative high importance in contrast to ciswomen non-caregivers who rated this with lowest importance.

## Conclusion

Schedule protection and downtime needs may supersede other well-being needs for ciswomen residents with caregiving roles outside of work. Ciswomen without caregiving roles outside of work may view work systems and benefits with lower importance. Future studies should explore ciswomen caregiver priorities as our sample did not allow investigation of this population.

# Sharing resident-produced videos among peers to promote routine exercise

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## Learning objectives

- To educate residents regarding national exercise guidelines and local resources available to help residents meet them
- To generate routine, resident-produced videos submitted to fellow residents designed to encourage and improve exercise habits, attitudes, and knowledge over a 3-month period.
- To assess if resident-videos have the potential to change habits and attitudes by administering self-reported pre/post surveys.

## Project objective/background

Regular exercise is a core component of health maintenance that residents routinely suggest to their patients yet may have difficulty following themselves. The objective of our study is to evaluate the efficacy of regular resident-produced videos in promoting the value of exercise and healthy habits.

## Methods/approach

We surveyed a prospective cohort of consenting residents of a community-based internal medicine residency program in Georgia before and after receiving regular videos of fellow residents over the course of 3 months intended to both educate and encourage regular exercise. 1–2-minute resident-produced videos were made and distributed via the residents' unofficial WhatsApp® group chat. The videos remind the residents of exercise guidelines and the health benefits of staying active and advertise local opportunities to meet their exercise goals. The videos often include fellow residents utilizing local resources (gyms, trails, studios) so that the residents know what is available to them. The videos were posted approximately weekly for a total of three months when the survey was administered a second time. After exporting the survey data to Excel, Excel was used to calculate the proportions and differences in proportions (95% CI) of the primary and secondary outcomes mentioned above.

## Results

All 15 (100%) of the residents responded to the pre-survey while 14 (93%) responded to the post-survey. For the primary outcome, 2 residents (13%) reported exercising 5 or more times a week for 30 minutes when initially surveyed. This number increased to 5 (36%) for a positive change of proportions of 25% [-1.3%, 52%]. For the secondary outcome, 11 (73%) of residents correlated regular exercise with job performance as a resident physician initially which increased to 14 (100%) on the post-survey for a positive change of proportions of 27% [7.9%, 45%].

## Conclusion

Routine videos produced by residents, designed to educate and inform, shared in a group forum for fellow residents may have the potential to reduce indifference of busy residents by as much as 27% [7.9%, 45%] by correlating regular exercise with job performance, as well as to increase the proportion of residents getting the recommended 150 min/week of moderate activity by 25% [-1.3%, 52%]. Given the prevalence of smartphones and the ease of video sharing via the numerous chat apps, these videos may serve as an inexpensive way to promote the value of exercise and healthy habits that will serve them during residency and beyond.

# Significant higher rates of burnout at a tertiary eye care center found after the start of COVID-19

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## Learning objectives

- Identify the rates of burnout in faculty, trainees and staff members after the start of COVID-19.
- Understand the single item burnout measure with the dichotomized outcomes.
- Be able to compare the rates of burnout in the faculty, trainees and staff after a list of wellness resources were given and their rates of engagement with any resource.

## Project objective/background

Ophthalmology has been a specialty where physician burnout has been lower than compared to other specialties in medicine. To determine the percentage of faculty members, trainees, and staff that experience burnout symptoms at a large tertiary eye center after the start of the COVID-19 pandemic.

## Methods/approach

The study was judged and given an exemption by the University of Michigan IRB committee. We employed a well-validated single-item burnout measure consisting of a five ordinal scale response anonymized on Qualtrics and sent it to the following groups: 1. Faculty members, 2. Trainees (residents and fellows), 3. Staff members. A list of resources available to the respondent were then listed at the end of the survey. Results were dichotomized as no symptoms of burnout (1 or 2 on the scale) and at least one symptom of burnout (3 to 5 on the scale). Three months later, the survey was sent again to the three groups with the additional question asked of which, if any, resource was used. Statistical analysis was performed on Graphpad Prism and Stata.

## Results

This single item burnout measure had response rates of about around 40% in the initial and subsequent surveys. Of the 224 initial responses, the majority of faculty (55%), trainees (57%), and staff (66%) exhibited at least 1 symptom of burnout without a statistical difference between these groups ( $X^2 = 2.11$ ,  $p=0.35$ ). These burnout

levels were almost twice those previously reported in ophthalmology. When surveyed a second time, 187 responses were gathered with the majority of faculty (60%), trainees (71%), and staff (66%) exhibiting at least 1 symptoms of burnout without a statistical difference between these groups ( $X^2 = 0.78$ ,  $p=0.68$ ). 46% of faculty members, 12% of trainees, and 40% of staff engaged in a resource. However, there was no statistical difference in burnout responses between the initial and subsequent surveyed groups ( $p=0.61$  for faculty,  $p=0.39$  for trainees, and  $p=0.95$  for staff) nor between the sub-groups that used and did not use a resource ( $p=0.51$  for faculty,  $p=0.87$  for trainees, and  $p=0.51$  for staff).

## Conclusion

These findings demonstrate an increased participation rate with a single-item survey and is the first to assess ophthalmology staff burnout levels. Furthermore, this study shows increased rates of burnout in ophthalmology compared to levels previously reported before COVID-19. However, burnout rates were comparable on survey follow-up three months later despite a significant proportion of individuals engaging in a resource aimed at addressing burnout.

# The lifesaver program: A methodology for increasing physician recognition and fostering a culture of appreciation

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## Learning objectives

- Discuss the impact of recognition in the workplace on job satisfaction and engagement
- Describe an initiative to increase health care provider recognition
- Discuss successes and challenges in fostering a culture of appreciation in medicine

## Project objective/background

It is well established that physician burnout is a widespread and complex issue with few clear-cut solutions. Burnout is a symptom of an unhealthy culture and is highly associated with a perceived lack of support at work.<sup>1</sup> Culture change is imperative to sustaining the health care system. Social recognition in the workplace is associated with increased employee job satisfaction, alignment, and engagement.<sup>2</sup> In our hospital, programs existed for care teams and nurses to be recognized but none were targeted for physicians. We aimed to develop an easy to implement and low-cost intervention that increased social recognition.

## Methods/approach

We created simple physical and electronic submission cards with collection boxes located in clinical work areas. An email was sent explaining the "Lifesaver Program" to all members (clinical and administrative) of the Department of Anesthesiology Critical Care Medicine. We conveyed that any person in the hospital could be acknowledged, and submissions would be given the person's direct supervisor for distribution. Open submissions were collected by support staff and saved to the employee's file as support for possible promotion. Division chiefs and other leaders received weekly card deliveries (with attached Lifesavers™ to be given back to the recipient) and were encouraged to share them during staff meetings.

## Results

During the first ten months of the program 257 submissions were received with diverse recipients: anesthesiology (55%), nursing (13%), critical care (10%), clinical staff (12%), inpatient teams (9%) and administrative staff (2%). We have received inquiries from managers across the hospital (after receiving a card for their employee) about implementing the program in their work area.

## Conclusion

Culture change requires new systems that reward individuals and teams for the desired behavior. We believe the Lifesaver Program has enabled physicians, nurses, and staff to easily recognize colleagues. This program promotes a culture of respect, appreciation, and connection. The development of programs to promote physician recognition and satisfaction are vital to ameliorating burnout. Since its inception, the program has diversified and become a self-sustaining method of improving recognition of excellence within the hospital.

## References

These findings demonstrate that our program can be easily reproduced and implemented at any institution.

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# The value of internal dashboards to monitor ongoing physician well-being efforts

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## Learning objectives

- Create a rich repository of useful data for wellness teams to utilize.
- Utilize analytical dashboards to effectively track responses to interventions and identify trends.
- Utilize Physician Wellness dashboards to communicate priorities to executive teams.

## Project objective/background

In large hospital systems it can be complicated to assess physician burnout, measure the success of mitigation strategies and provide accurate data to executive teams. We describe a method of rolling deep-dive divisional burnout surveys where data flow into detailed physician wellbeing dashboards for precise analysis and illustrative presentations.

## Methods/approach

Detailed physician burnout surveys comprised of the Maslach Burnout Inventory (MBI) and the Areas of Worklife Survey (AWS) were implemented in a rolling fashion. Pre-survey presentations were given to divisions prior to being surveyed to ensure high participation. Physicians received a personal link to complete the survey which was analyzed by a third-party company to ensure complete anonymity. Deidentified data were entered into a REDCap database and then flowed into an internally developed QlikSense physician burnout dashboard developed by our analytics team.

## Results

Twenty divisional surveys were completed over a 3-year period (2020-2022). Among 495 physicians approached, 378 completed the survey (76% participation). Some representative dashboards are shown below including a high-level executive summary where one can analyze the data by location or demographics such as tenure or gender (Fig. 1), AWS scores compared to national averages (Fig 2) and, engagement and burnout levels by division compared to national averages (Fig. 3).

## Conclusion

Deep-dive divisional rolling burnout surveys using the MBI and AWS instruments provide the wellness team with a thorough snapshot of physician wellbeing. Dashboards allow for precise detection of key burnout drivers and generate easily interpretable charts for executive leaders. This method may permit efficient identification of burnout and delivery of resources to offset negative consequences of burnout within hospitals.



Figure 1. High level executive summary with the ability to filter burnout data by department, site, year, inpatient/outpatient, time in organization, time in position, MBI profile and gender.

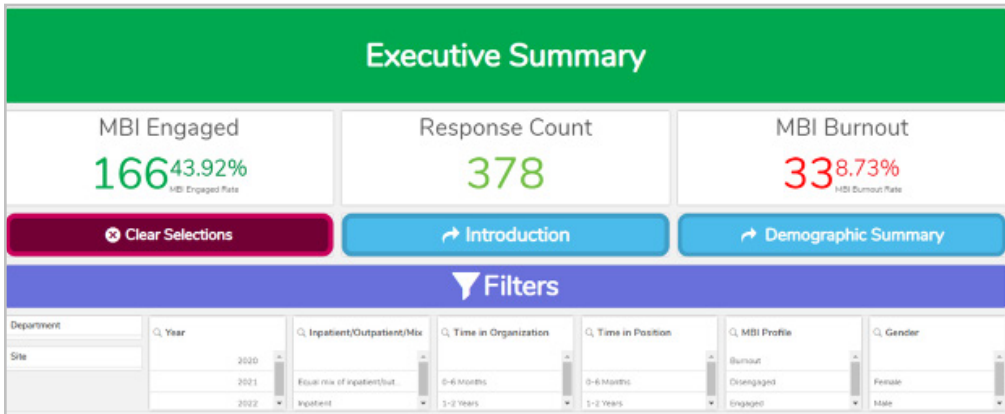


Figure 2. AWS scores compared to national averages

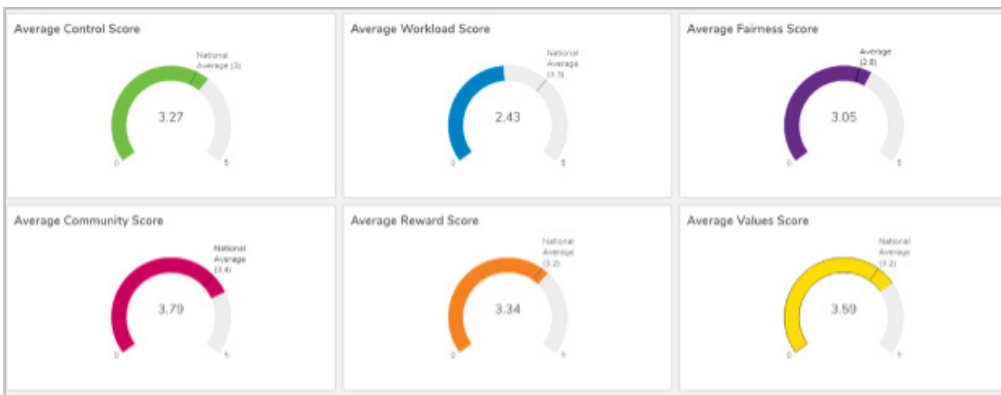
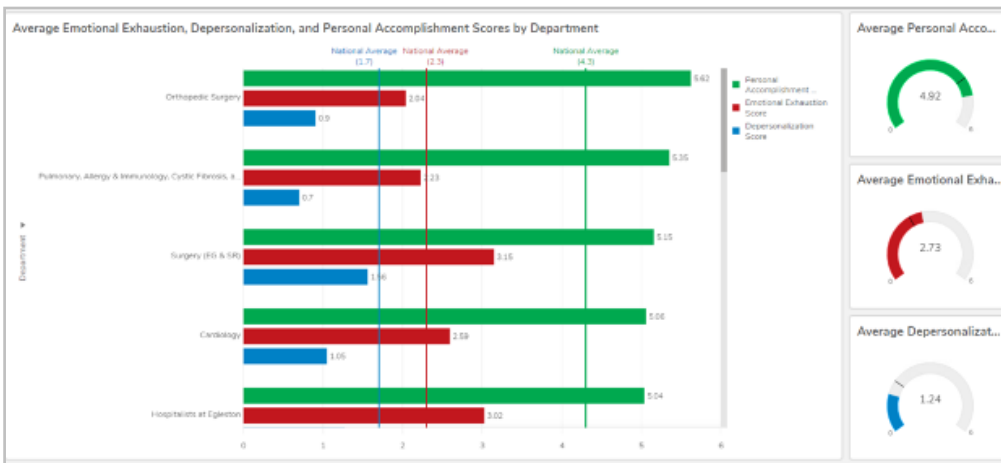


Figure 3. MBI scores by department



# You can't step into the same river twice: Updates on the impact of the physical clinic environment on physician well-being

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## Learning objectives

- Review the ongoing use of a novel instrument for measuring physician satisfaction with their physical clinical environment
- Assess the impact of an open-concept clinic layout on physician burnout and physicians' ability to perform their clinical and academic roles

## Project objective/background

Chaotic work environments are correlated with higher physician burnout. Half of primary care physicians report such environments. Literature in managerial fields show that an open-office design is associated with poorer job satisfaction. Our previous study showed that there was no significant change in burnout in physicians moving from a closed-office design to an open office design at 11 weeks post-move but did show a decrease in the proportion of physicians who described their work environment as free of distractions and adequately private for patient communications. It also showed a trend toward improved perception of care team efficiency. We re-surveyed physicians 76 weeks post-move to determine if such trends persisted.

## Methods/approach

A survey was designed that combined validated wellness (AMA Mini-Z) and built environment survey instruments with additional questions relevant to an academic primary care practice. This instrument was disseminated to primary care physicians at a large academic health system before and after the transition from a closed-office workspace to an open-concept clinic. A second follow up survey was completed 76 weeks after the move.

## Results

Twenty-two physicians were surveyed 7 weeks before the move; nineteen physicians were surveyed 11 weeks after the move; and twenty-one physicians were surveyed 19 months after the move (68% response rate). Comparing 11 weeks post-move to 76 weeks post-move for the physicians that transitioned to an open-office

design showed a significant reduction in physicians who perceived their care team efficiency as good/optimal ( $p = 0.03$ ) at 76 weeks post-move. There was no significant change in burnout; perceptions of work environment that is free of distractions; sense of improved physician collaboration; or perceived facilitation of teaching or telemedicine use.

## Conclusion

Initial transition to an open-office design did not substantially alter burnout but did reveal a trend toward physicians perceiving care team efficiency as good/optimal. Further time for physicians to acclimatize to such an environment again did not lead to a substantial change in burnout but interestingly showed a significant reduction in physicians perceiving care team efficiency as good/optimal. Further studies are needed to better understand other contributors to care team efficiency that can negatively impact physician experience.

The background features a tropical sunset scene. The sky transitions from a bright yellow at the top to a deep red and purple on the left, and a dark blue on the right. Silhouettes of palm trees and mountains are visible against the colorful sky. The text is centered in the middle of the image.

# Posters

Organizational level

# An analysis of clinician-reported barriers to seeking mental health support

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## Learning objectives

- Analyze the AMA 2022 Organizational Biopsy™ Comparison Report for frequency of specific barriers to mental health resources.
- Assess the risk of barriers on clinician burnout, retention, and feeling valued.
- Discuss ongoing efforts to reduce the stigma of mental health support among clinicians.

## Project objective/background

Despite the increase in mental health concerns across populations and increase in burnout among physicians, mental health help-seeking among medical doctors is typically low (Stanton and Randal 2011). The goal of this study was to analyze the AMA 2022 Organizational Biopsy™ Comparison Report for frequency of specific barriers to mental health support, assess the risk of barriers on clinician burnout, intention to leave, and feeling valued, and discuss the importance of systemic and organizational efforts in reducing these barriers to improve clinician health access and decrease clinician burnout.

## Methods/approach

In 2022, the American Medical Association (AMA) surveyed over 70 health systems nationwide to identify system drivers of clinician burnout. A subset of 8,115 respondents from 33 health systems was created based on those who responded to the multi-select question regarding barriers to seeking mental health services or support. Authors utilized descriptive statistics to characterize the population and bivariate comparisons to assess demographic differences in populations. The relative risk ratio (RR) was calculated based on the specified barriers and its relation to burnout, feeling valued by your organization, and intention to leave the organization in the next two years, while controlling for demographic variables.

### What may prevent you from seeking mental health services or support? (select all that apply)

- I am concerned about what others would think if they knew I sought help
- I am concerned about confidentiality
- Such services are not accessible or convenient
- I am concerned this would impact my professional licensure
- I am concerned this would impact my employment (e.g. loss of hospital privileges)
- I cannot afford it
- I refer other sources of help (family, friends, etc.)
- I prefer to handle my problem by myself
- None of the above

## Results

Overall, 41% of clinicians sampled faced at least one barrier to seeking mental health support. This analysis focused on the following self-reported barriers: “such services are not accessible or convenient” (22%), “I am concerned about confidentiality” (21%), “I am concerned about what others would think if they knew I sought help” (13%), “I am concerned this would impact my professional licensure” (13%), and “I am concerned this would impact my employment (e.g. loss of hospital privileges)” (10%). Authors limited further analysis of frequently selected answers: “none of the above,” “prefer to handle problems by myself” and “I prefer other sources of help,” because of the interpretation challenges these broader responses present.

The table below shows these barriers and their impact on the risk of burnout, retention, and reduction of feeling valued.

Table 1. Relative risk ratios of burnout, intention to leave, and feeling valued with barriers preventing clinicians from seeking mental health services or support

	I am concerned about what others would think if they knew I sought help	I am concerned about confidentiality	Such services are not accessible or convenient	I am concerned this would impact on my professional licensure	I am concerned this would impact my employment (e.g. loss of hospital privileges)
Experiencing at least 1 symptom of burnout	1.4458 (95% CI: 1.3228,1.5803)*	1.5968 (95% CI: 1.4816,1.7209)*	1.6104 (95% CI: 1.4968,1.7327)*	1.5329 (95% CI: 1.3958,1.6835)*	1.6888 (95% CI: 1.5064,1.8933)*
Intention to leave organization in the next 2 years	1.0349 (95% CI: 0.9799,1.0929)*	1.1431 (95% CI: 1.0891,1.1997)*	1.1428 (95% CI: 1.0897,1.1986)*	1.1485 (95% CI: 1.0807,1.2205)*	1.263 (95% CI: 1.1709,1.3624)*
Feeling valued by organization	0.9233 (95% CI: 0.8718,0.9777)*	0.8155 (95% CI: 0.78,0.8527)*	0.8039 (95% CI: 0.7695,0.8398)*	0.836 (95% CI: 0.7928,0.8816)*	0.7721 (95% CI: 0.7206,0.8273)*
	* $p < 0.001$				

### Conclusion

This study highlights several barriers that need to be addressed in order to improve clinicians’ access to mental health support. Most notably, clinicians who are concerned with how seeking mental health services or support may impact their employment indicated the strongest risk of experiencing burnout, intention to leave, and a reduction of feeling valued. This work further highlights systemic and long-standing issues of mental health stigma within the field of medicine. For medicine to fulfill its mission for patients and public health, all stakeholders in health care must prioritize and address identified barriers, physician burnout and mental health stigma by investigating, developing, and implementing effective solutions.

# Another STEP in the right direction: Should exercise be implemented as part of medical education to improve physician health?

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## Learning objectives

- Measure the beliefs and attitudes of medical students with exercise.
- Identify motivating factors and barriers to exercise in medical school.
- Determine if physician health can be improved by adding exercise into the curriculum.

## Project objective/background

Due to external factors such as burnout in medical school, physicians may enter their practice feeling dissatisfied or unwell. An explanation for this can be due to the rigorous nature of medical school, which doesn't allow medical students to prioritize exercise in their own lives. This may then translate into having a poor work-life balance when medical students become physicians and are unable to prioritize their health in the workplace.

## Methods/approach

A prospective needs assessment study was employed using three validated surveys to determine if exercise should be implemented as part of medical education to improve physician health. The first validated survey determined the knowledge of medical students regarding the recommendation for exercise (AAKERS- Adult Knowledge of Exercise Recommendations Survey). The second validated survey discovered the amount of time and exercise level that medical students devoted to their schedule (IPAC- International Physical Activity Questionnaire). The third validated survey measured the beliefs and attitudes of medical students towards exercise (SEES- Self-Efficacy for Exercise Scale). An open-ended survey was also used to support the SEES survey by identifying the motivating factors and barriers towards exercise.

## Results

Descriptive statistical tests were used to analyze the responses. Results from the AAKERS survey displayed a mean total score of 16.13/20 (n = 52). Results from the IPAQ survey found that medical students engaged in 21.82%, 9.09%, and 69.09% of high, moderate, and low levels of exercise, respectively (n = 55). Results from the SEES survey displayed a mean total score of 51/90 (n = 55). Quantitatively, the results from the open-ended survey found that the main motivating factor involved improvements to mental health, while the main barrier involved having difficulty balancing exercise with academic load.

## Conclusion

Responses from the AAKERS survey were similar to the national average score of 16/20 (n = 2002), suggesting that medical students have similar knowledge as the average population when defining correct recommendations for exercise. Responses from the IPAQ survey suggested that medical students preferred engaging in lower intensity exercise during the academic year. Responses from the SEES survey and open-ended survey suggested that medical students were unable to balance exercise with their academic courses, even though they experienced an increase in their mental health when participating in exercise. Through additional studies using the same surveys and a larger sample size, a discussion can be warranted for incorporating exercise into medical school curriculums to improve physician health.



# Barriers in accessing paid time-off for primary care clinicians

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## Learning objectives

- Understand barriers to taking PTO
- Identify potentially impactful solutions
- Identify ways make in-basket coverage easier

## Project objective/background

Taking a vacation is important for recovery from stress people experience in the workplace. Not taking time off from work has been associated with higher levels of burnout in ICU physicians in China. (Hu). Taking vacation may be an important intervention to mediate the increased burnout seen in health care. To alleviate the stress associated with the COVID 19 pandemic, our academic institution provided additional paid time off (PTO) to all clinicians, however many did not use the extra PTO nor the routinely accumulated PTO. This study sought to identify if there are barriers to taking PTO, what they are and what potential solutions were perceived as most helpful.

## Methods/approach

This was a single center, cross-sectional survey. It was distributed through Qualtrics to faculty in 8 primary practices of an academic hospital. Analysis was conducted via descriptive statistics.

## Results

Out of approximately 160 eligible subjects, 82 completed the survey (50% response rate). 86% (n=71) of respondents reported barriers to taking PTO. The top barriers included: access for patients (58%, n=48), session requirements (49%, n=40), and coworker stress (47%,

n=39). When asked how to make taking PTO easier, top 3 answers were: float/locums (57%, n=46), assign coverage (43%, n=35), change how far in advance PTO requests must be made (37%, n=31). 90% respondents (n=76) felt that inbasket coverage increased their workload. The most cited answers to make inbasket coverage easier included increasing delegation protocols to reduce involvement in inbasket (79%, n= 60), blocking appointment slots for coverage (71%, n=54), increased staffing to manage the work (67%, n=51).

## Conclusion

The study provided insight into barriers to taking PTO for the primary care clinicians at an academic center. Patient care was the top barrier to taking PTO. The survey explored the ways to improve taking PTO and many cited ways to maintain access to care while they are away such as float/locum coverage and in-basket coverage assignment. Additionally, there was an acknowledgment of the burden of inbasket work. The holistic approach to reduce primary care clinicians' in-basket workload and structured coverage for access to the care and in-basket will likely improve the likelihood of taking PTO.

# Beyond the numbers: Faculty comments analysis from a 2022 academic medical center survey

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## Learning objectives

- Describe the reason and process for analyzing a large sample of qualitative responses from an annual faculty survey.
- Understand the key areas of concern among faculty at a large academic medical center.
- Consider solutions to address the key areas of concern.

## Project objective/background

The Wellness Office at a large academic medical center sought to analyze the qualitative comments submitted by 662 faculty members from its 2022 annual engagement survey through the lens of well-being. This thematic analysis aimed to fill the gap by going beyond the expected quantitative results to create the organization's first comprehensive analysis of faculty comments to better understand the reasons behind the data and identify the solutions suggested within.

## Methods/approach

Using the survey vendor's proprietary comment analytics software as a starting point, the top 3 negative and positive "themes" were identified from the faculty comments. We aggregated the themes with particular focus on the areas of concern and summarized the proposed solutions frequently embedded within the faculty feedback for leadership with representative quotes included.

## Results

Of the positive comments, the most reported themes cited by faculty were supportive colleagues (34%), strong local leadership (17%), and high-quality resources (15%).

The three top areas of concern were workload burden (41%), leadership connection (31%), and loss of autonomy (28%). The concerns specifically focused on downstream

impact of staffing shortages, transparency of leadership decision-making, and centralization of services.

The faculty suggested the following solutions in their comments, which were aggregated and summarized by the Wellness Office:

1. Workload burden:
  - a. Incorporate regular micro-breaks into clinical schedules to allow for catch-up on administrative tasks.
  - b. Clearly document and communicate the responsibilities and tasks for each clinical role.
  - c. Identify specific tasks that can be paused during periods of acute staffing shortages to prioritize the most critical work and reduce overall burden.
  - d. Establish local norms for response times (e.g., emails, patient portal) that consider provider workloads and personal/family life.
2. Leadership connection:
  - a. Focus organizational communications on leadership-driven systems improvements.
  - b. Increase executive leadership rounding to prioritize proximity and communication between executive leaders and frontline staff; ensure leaders close the loop after rounding to address feedback.

### 3. Loss of autonomy:

- a. Prioritize local autonomy in decision-making.
- b. Minimize centralization of services (e.g., patient scheduling, employee hiring) to prioritize local expertise and input.
- c. Reduce “one-size-fits-all” organizational metrics to ensure local factors are considered.

### **Conclusion**

Conducting an in-depth analysis of faculty survey comments enabled the Wellness Office to identify key areas of concern and suggestions for improvement that came directly from the individuals involved in day-to-day operations. Combining their insights with recommendations from the literature led to proposed solutions tailored to the most pressing needs of our workforce.

# Clinician well-being trends across career stages and gender

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## Learning objectives

- Analyze the AMA 2022 Organizational Biopsy™ Comparison Report Mini-Z key performance indicators (KPIs) to identify variations between clinician’s years post-training.
- Explore and summarize how gender may be influencing differences in well-being among clinicians 6-10 years post training.

## Project objective/background

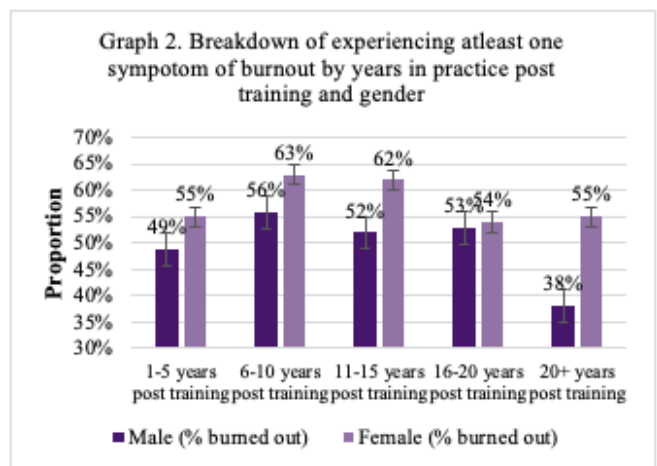
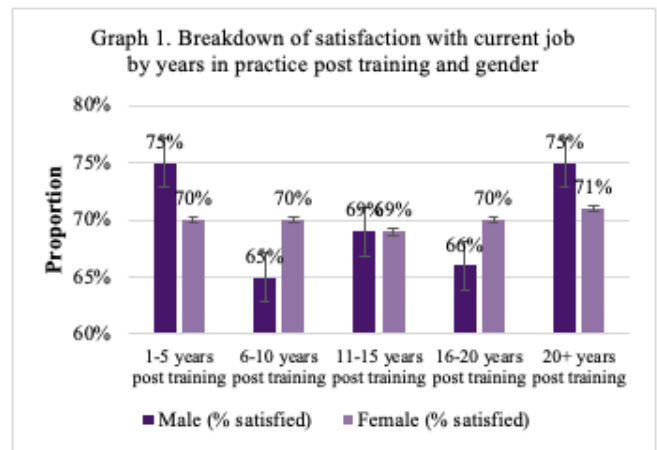
In a time of unprecedented levels of clinician burnout, it is crucial for health systems to invest in targeted clinician wellbeing initiatives. This research sought to expand on the 2022 JAMA *Health Forum* publication, “Trends in Clinician Burnout with Associated Mitigating and Aggravating Factors During the COVID-19 Pandemic,” which identified six “key performance indicators” (KPIs) for clinician well-being. Four of these KPIs (job satisfaction, stress, burnout, and retention) were analyzed to identify aggravators and mitigators of burnout impacting clinicians across various career stages. Authors further investigated gender differences among clinicians 6-10 years post-training.

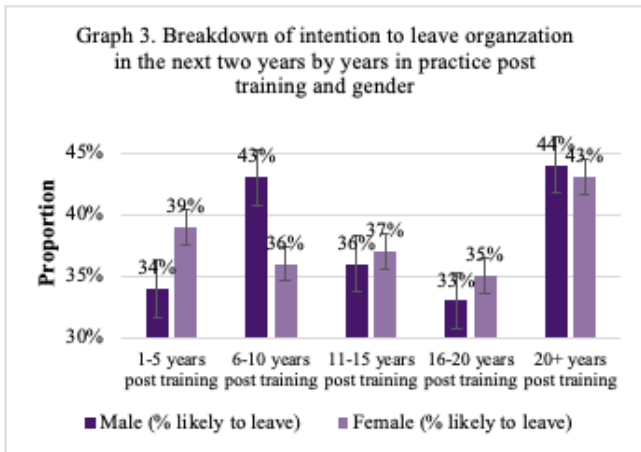
## Methods/approach

In 2022, the American Medical Association (AMA) surveyed over 70 health systems nationwide to identify and respond to system drivers of clinician burnout. A total of 13,776 responses were collected. Clinician career stages were organized into five-year increments post-training for analysis: 1-5, 6-10, 11-15, 16-20, and 20+. Authors utilized descriptive statistics to characterize the population and bivariate comparisons to assess demographic differences in populations. While gender is not binary, the number of clinicians that identified as a third gender or “prefer not to answer” was not large enough for a confident comparison. A thematic analysis of qualitative responses further illuminated potential impacting factors.

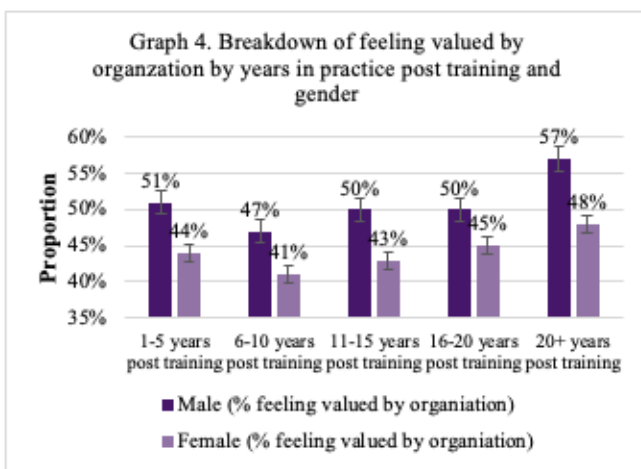
## Results

Clinicians 6-10 years post training indicated the highest rates of burnout (61%, p-value < 0.001) and the highest intention to leave the organization within two years





Male clinicians indicated a lack of autonomy and loss in job satisfaction which may be influencing their lower retention rate. Health systems should consider marketing more meaning and purpose-based initiatives toward male clinicians if they are intent on retaining them 6-10 years post training and beyond. Additional research is necessary to further investigate the potential drivers of wellbeing variations, but health systems have an opportunity to provide more targeted care of clinician's wellbeing across career stages and gender.



**Conclusion**

This study highlights key well-being variations between career stages and gender. The effects of the COVID-19 pandemic on the clinician work force is still being studied, but is likely negatively impacting clinician retention, especially those 6-10 years post training. Female clinicians 6-10 years post training report the highest rates of burnout despite lower intentions to leave their organization. Recent research (Harry, Carlisare, & Sinsky, 2022) supports high childcare stress as a potential driving factor of burnout. Further review of the qualitative themes suggests different aggravating and protective factors on retention between male and female clinicians. Female clinicians indicated relying on a feeling of purpose in their career, which may be positively influencing their retention rate despite their higher rate of burnout. Organizations should consider curating workload control initiatives to female clinicians and provide more targeted work-life balance support.

# Contingency theory in leadership and professional fulfillment

## Author

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## Learning objectives

- Be able to describe contingent theory in leadership.
- Be able to describe how decision-making contingent on input and buy-in improves well-being.
- Consider how these findings can be operationalized and implemented.

## Project objective/background

Well-being informed leadership is known to mitigate burnout, improve professional fulfillment, and retain talent. The recommendations to transition from hierarchical bureaucratic command-and-control styles to distributive collaborative transformation-servant styles, have at its core contingency theory. The loss of private practices and rapid vertical integration of physicians into large organizational models, the sharp rise in burnout and loss of professional agency and voice,<sup>1</sup> calls for an evolution of leadership style. It's argued that when leading professional high-stakes complex decision-makers, decisions that affect their work be contingent on their input and buy-in. The aim of this study assess this theory.

## Methods/approach

In January 2019, we surveyed attending physicians across a system of five hospital-based delivery networks including academic, employed, and private practitioners. Per contingency theory, we tested the construct "aligned-communication" (leaders seek buy-in for clinical initiatives, are responsive to input, care about MDs, no fear of reprisal for speaking up) to predict "cultural fit" (strong sense of belonging, MT value-alignment with the organization, MT and felt appreciated for clinical work MT and work done for the team MT). Both constructs were assessed to predict professional fulfillment, practice promotion, and retention. Analysis included descriptive statistics, bivariate linear regression for continuous variables, t-testing and Cohen's D effect sizes (ES) calculated for dichotomous outcomes.

## Results

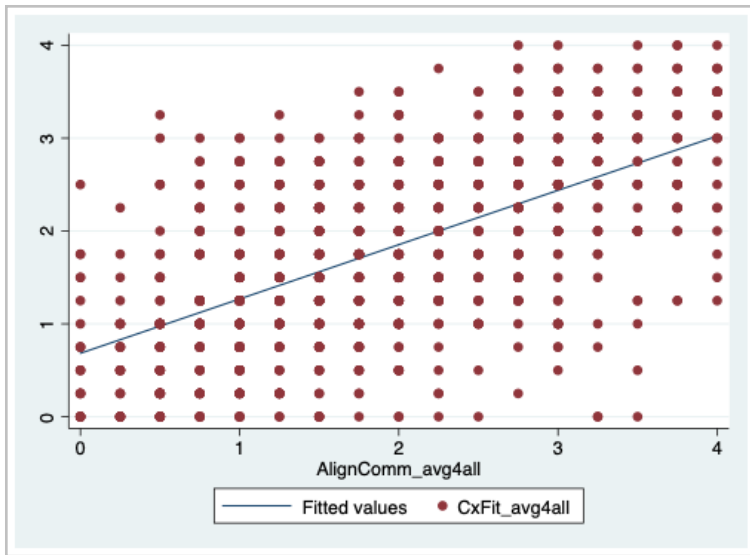
With a 31% response rate, this is a cross-sectional study of 1277 physicians: 47% academic faculty, 61% male, 80% white, and an average age of 46. This was consistent with the larger population. "Aligned communication" (the marker for leadership contingent on input and buy-in) predicted 37% of the variability around "cultural fit" ( $p < 0.001$ ). [Graph] Both constructs strongly predicting professional fulfillment. Value-aligned communication more strongly determined practice promotion. [Table]

## Conclusion

Attending physicians who felt their leaders sought their buy-in for clinical initiatives, were responsive to their input, cared about them, and did not strike fear of reprisal for speaking up (aligned communication) were more likely to feel value-aligned with the organization, a strong sense of belonging, appreciated for their clinical work and what they did for the team (cultural fit). They were also significantly more likely to feel professionally fulfilled, promote the practice to other colleagues and friends as a place to work, with the slightest intent of leaving the organization within two years. These insights will help leaders build the workplace of the future.

Engage and empower, belong and believe.





Cultural Fit = 0.68 + 0.59 (Aligned Communication).

	Cohen's D Effect Size of Differences in Outcomes		
	Professional Fulfillment	Practice Promotion	Retention
<b>Aligned Communication</b>	0.84 (0.71-0.96)	0.87 (0.75-0.99)	0.62 (0.49-0.74)
<b>Cultural Fit</b>	1.09 (0.97-1.22)	0.69 (0.58-0.81)	0.55 (0.42-0.67)

<sup>1</sup> Olson K. Health Care Harmonics: Fine Tuning the Tension Between Stakeholders. *Mayo Clin Proc.* 2019;94(9):1662-1664.

# Creating a culture of psychological safety to improve communication and physician well-being

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## Learning objectives

- Delineate the relationship between psychological safety, communication and well-being
- Describe the core principles of psychological safety and its utility in communicating errors, de-escalating conflict and allowing learning and change in interpersonally challenging work environments.
- Create a plan for enhancing psychological safety in workplace teams.

## Project objective/background

Inclusive leadership and psychological safety (PS) have been shown to be inversely related to psychological distress and burnout in health care workers. In our recent study of faculty at an academic center, we found that low rates of team PS was associated with higher rates of burnout and likelihood to leave current position. In light of this data and the elevated rates of burnout and physician turnover, we created a workshop centered on team PS improvement as part of our Physician and Scientist Leadership Training Program.

## Methods/approach

We delivered this 60-minute training in March and October of 2022 to 55 physician-scientist leaders. This interactive workshop aimed to describe the relationship between psychological safety, leadership, patient outcomes, and well-being, review the core principles of PS, share the latest literature on PS and provide a practical approach to enhancing PS in teams including an interactive small group discussion to practice creating PS. In order to evaluate this session, we conducted pre/post surveys on knowledge and attitudes of PS. We conducted paired t-tests on the knowledge items for participants who completed both surveys.

## Results

49 of the participants completed the pre-survey, while 19 completed both the pre and post surveys, for response rates of 89% and 35%, respectively. Post-survey scores on all knowledge items improved significantly: framing the work as a learning problem (2.6 to 4.5,  $p < 0.001$ ), modelling fallibility (3 to 4.5,  $p < 0.001$ ), including all (3.2 to 4.6,  $p < 0.001$ ), and embracing the messenger (2.8 to 4.5,  $p < 0.001$ ). 100% felt that the material was relevant to them, 84% believe that it increased their knowledge and skills in PS and 94% felt that it was delivered clearly. 94% of participants agreed that the session was engaging and 100% reported that their colleagues would benefit from this session. On average participants said they would use about 75% of the material from the session in their work.

## Conclusion

An interactive psychological safety workshop for faculty leaders can be an engaging way to improve faculty self-reported knowledge and skills on this topic. Limitations include the self-reported nature of the assessment and the moderate response rate. Future work will evaluate the lasting impact of this session on attendees and whether it changed their behaviors as leaders.

# Development and implementation of a well-being model, strategic plan and key performance indicators for a pediatric organization

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## Learning objectives

- Examine a process for creation of an organizational wellbeing model
- Assess prioritization of Center for Wellbeing objectives and key performance indicators
- Create a tracking system to quantify team member reach

## Project objective/background

The Center for Wellbeing (CWB) at CM has been in existence for a decade but had limited reach across the organization. We sought to build an interdisciplinary team interwoven with a wellbeing model to guide development and implementation of a strategic plan with objectives and key performance indicators (KPIs) to address burnout, organizational culture, and efficiency in work and expand CWB reach.

## Methods/approach

The CWB team worked with the organizational strategy team to create a needs assessment sent to 50 executive and frontline leaders across CM. Needs assessment response themes, stakeholder interviews, burnout survey results, and example models were also used to perform a strengths, weaknesses, opportunities, and threats (SWOT) analysis to inform initial model and strategic plan development. A draft model, objectives, and key performance indicators (KPIs) were developed during a facilitated retreat. The model was socialized with nursing, pharmacy, physicians, equity and diversity office, administrative, and executive leadership to further iterate and finalize. A tracking system was developed and initiated in response to the survey to quantify the reach of each program across the organization.

## Results

13/50 (26%) completed the survey. SWOT themes included: executive buy-in, interdisciplinary team, knowledge breadth, and program vision as strengths,

weaknesses were awareness and accessibility of services and small team to fill a large need, opportunities were collaboration with partners across organization and development of new programming, and threats were resources, organizational culture and competing priorities, and accessibility of services. The final model included 3 domains (culture of wellbeing and belonging, workplace improvement, and personalized resilience) with outer overlying themes (community, inclusion, and autonomy), and a central guiding core (flourishing). (Figure 1) Two objectives were written for each model domain and 2-3 KPIs were developed for each objective. (Table) FY 2023 team member participation was recorded for all current CWB offerings. The new staff respite room was most utilized followed by team support events and adoption of teams during high stress times. (Figure 2)

## Conclusion

Obtaining broad input was instrumental in performing a SWOT analysis which informed development of our model and helped prioritize our objectives and KPIs. Further socialization allowed for model buy-in across the organization and served to raise awareness of program offerings which was identified as a threat. Tracking team member engagement is our first step of program evaluation. Future steps will include analysis of survey responses regarding engagement, perception of being valued, and leader behaviors from participants.

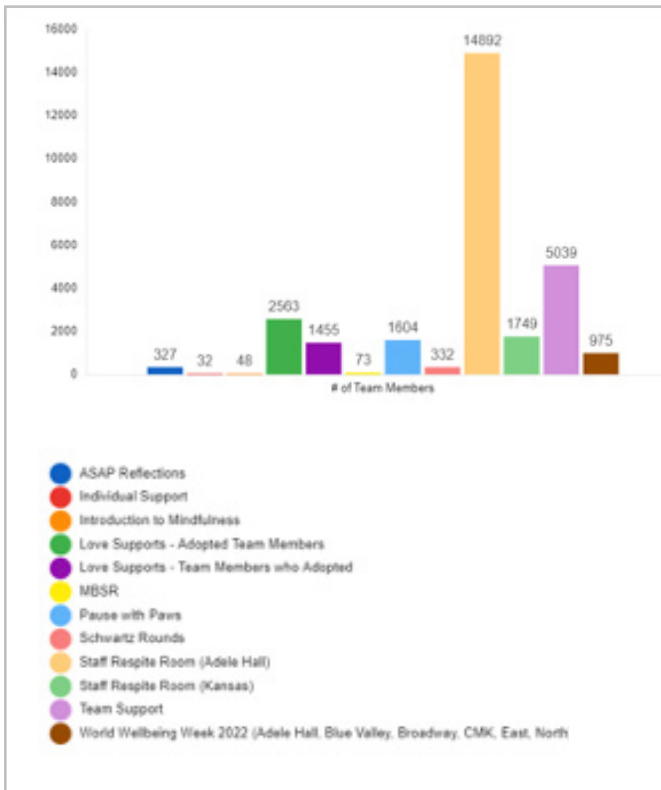
Figure 1. Center for Wellbeing Model



Table. Domains, Objectives and Key Performance Indicators of the Strategic Plan

Culture of Wellbeing and Belonging		Personalized Resilience		Workplace Improvement	
Objective 1	Objective 2	Objective 1	Objective 2	Objective 1	Objective 2
Partner with organizational leaders to promote integration of wellbeing into organizational planning and strategy	Foster collaborative team environments that promote joy and pride in work	Empower personal wellbeing	CM team members feel empowered to utilize wellbeing resources	Influence existing infrastructure to identify and reduce waste in work	Recognition of workplace challenges and effects on personal wellbeing
KPIs					
Add CWB representation to at least 2 decision-making bodies	Recruit 20 people who complete initial peer support training with intention of 10 team members becoming per supporters	Increase CWB support requests by 10%	Track utilization of respite rooms and lounges at locations with badge access	Launch a wellbeing improvement specialist program in 4 areas	Track EHR 8, WOW8, Doctime8 & provide data to 4 divisions/departments
Establish process for leaders/physicians to incorporate wellbeing in annual evaluations	All CWB team members will complete IHI Joy in Work Course	At least 75% of reported team member safety events receive standard support response from CWB	Increase traffic to the updated CM well website by 10% from prior year	Increase wellbeing improvement projects by 10% year over year	Provide a standard support response to 75% of team members involved in an investigated patient safety event
Award one individual and one team for outstanding wellbeing work/role modeling each year			Increase utilization of intro to mindfulness courses (Intro, MBSR, daily meditation) by 10% from prior year		

Figure 2. Utilization of CWB Programming Across the Organization FY 23



# Drowning in email: The cost of email burden on physician burnout

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## Learning objectives

- To quantify how many emails are sent within our institution
- Estimate the average yearly cost of managing irrelevant emails
- To examine the impact of email burden on overall burnout

## Project objective/background

Physician burnout is a well-known epidemic, exacerbated by the COVID-19 pandemic. Many factors contribute to physician burnout including administrative burdens, systemic inefficiencies, and barriers to providing patient care. For busy clinicians, particularly those within academic medical centers, email represents another administrative burden which contributes to overall burnout.

## Methods/approach

To examine the email utilization within a large Midwestern academic medical center, the time-cost of triaging irrelevant emails and how email contributes to feelings of burnout among the faculty.

## Results

According to our institutions' health system information technology services, 2.5 million emails are sent each day. Of those, only 1 million are opened, while 60% remain unopened. Given the vast number of emails sent within our institution per day, the primary author cataloged emails received over a 2-week span in February 2022. Of emails received, 62% came from the medical center, 29% from the authors medical division/department, 5.8% from the university, and 3.2% were sent to the recipient individually about patient cases or projects.

Using data from office-based jobs it's estimated that people spend at least 8 minutes/ day dealing with irrelevant emails. When applied to our academic medical center this translates to a time-cost of \$9.64 million/year for the

3,855 faculty members, using an average yearly salary of \$150,000/year. For the 28,000 staff, the estimated time cost is \$23.3 million/year, for a total of \$32.9 million/year across the medical center.

Every spring our institution administers employee engagement surveys administered by Press Ganey Associates®. The following statement appears on the survey: "Email contributes to my feelings of burnout". In 2021, 68% of clinical sciences faculty (N = 2200) and 58% of basic sciences faculty (N = 235) agreed that email contributed to their burnout. In 2022, 66% of clinical sciences faculty (N = 1778) and 48% of basic sciences faculty (N = 214) agreed that email contributed to their feelings of burnout.

## Conclusion

Email burden within health care contributes to physician burnout. The problem of email burden is complex and requires multi-level solutions. In addition to individual and local workplace level strategies, perhaps the most important ways to mitigate email burden needs to occur on the institutional level. Given that greater than 60% of an academic physician's email comes from the medical center, if institutions can work to decrease mass emails, inboxes could become more manageable. Overall, a strong investment to change the culture of sending emails is needed to reduce email burden.

# Improving well-being in the perioperative work environment: Anesthesiologist and surgeon strategies for effecting system-level and cultural change

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## Learning objectives

- To identify specialty-specific drivers of burnout in the perioperative environment
- To explore clinician-identified opportunities for improving anesthesiologist and surgeon well-being
- To develop evidence-based opportunities for intervening on threats to anesthesiologist and surgeon well-being

## Project objective/background

In May of 2022, the US Surgeon General declared health care worker burnout and well-being a national crisis, and called for action towards building a culture that supports well-being and workforce morale.<sup>1</sup> In addition to system-level threats to well-being, collegial incivility is a major source of physician distress, with certain specialties experiencing it at higher rates than others.<sup>2,3</sup> Attending to specialty-specific threats to well-being, as well as identifying what challenges are shared across clinical roles, is important for developing tailored solutions. This study investigated anesthesiologist- and surgeon-identified challenges and opportunities for increasing well-being and professional fulfillment in the perioperative environment.

## Methods/approach

Thirty-five anesthesiologists and sixty-nine surgeons (16.7% response rate) completed an open-ended survey about what factors detract from, and contribute to, their well-being and professional fulfillment. Using a template analysis approach, a cross-disciplinary team (2 surgeons, 1 anesthesiologist, 1 health services researcher) coded each specialty's responses separately, starting with the six areas of worklife framework and combining it with an inductive approach to identify new themes.

## Results

There were specialty-specific differences in what each group prioritized, with anesthesiologists desiring scheduling predictability, respect, and safe, high-quality patient care while surgeons prioritized high-quality care,

timely and efficient operating rooms (OR), and rewarding patient interactions. Both groups highlighted the need for support in the form of effective OR teamwork and a more relational culture of respect, though respect took different forms according to specialty. Both groups identified operational barriers that impeded efficiency, and proposed actionable solutions for addressing these challenges. Solutions for improved well-being included interventions targeting work culture, interprofessional communication, the physical environment, and work/life integration. Some examples include: "more consistent OR teams", "better communication between the physical OR and the anesthesia team about when the patient can be brought back", "morning huddles with the whole team before surgical start", and "recognition of work".

## Conclusion

While there were some specialty-specific differences in priority areas, anesthesiologists and surgeons share many needs and pain points. The well-being interventions proposed were actionable, concrete, and complementary. Attending to the operational barriers and focusing on strategies for fostering a more relational culture in the perioperative environment may improve well-being and professional fulfillment across specialties.

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2. Bradley V, Liddle S, Shaw R, et al. Sticks and stones: Investigating rude, dismissive and aggressive communication between doctors. *Clin Med J R Coll Physicians London*. 2015;15(6):541-545. doi:10.7861/clinmedicine.15-6-541
3. Schrepel C, Amick AE, Bann M, et al. Who's on your team? Specialty identity and inter-physician conflict during admissions. *Med Educ*. 2022;56(6):625-633. doi:10.1111/medu.14715



# Is medicine a calling, career or a job? Why meaning in work matters

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## Learning objectives

- Understand the difference between a calling, career, and job.
- Recognize how value-aligned meaning in work improves well-being.
- Recognize how value-aligned meaning in work benefits organizational objectives.

## Project objective/background

Medicine is often considered a “calling” to align one’s values and abilities to serve the moral or social good. To be called, one may self-sacrifice for the that good. Callings are often intrinsically motivated, central to one’s identity. Given the escalating rates of professional burnout, our aim was to know if physicians still considered their work a calling, whether their professional life was as they had expected it to be, and whether these factors were associated with greater likelihood to be professionally fulfilled, less burned out, committed to their organizations, likely to promote the practice to others, and work more hours.

## Methods/approach

In spring 2022, we surveyed attending physicians across a system of five hospital-based delivery networks including academic, employed, and private practitioners. The authors created a single item assessment for “callings, careers, jobs” from the work by Wrzesniewski et al. (1997). To assess outcomes, we use a single item assessments for “professional life as expected”, the “intent to leave”, the net promotor score for “practice promotion”, and the Professional Fulfillment Index (Trockel et. al, 2017) for professional fulfillment and burnout. Outcomes were dichotomized outcomes using published cut-offs if available. Standard descriptive statistics, chi-square, and logistic regression before adjustments were performed.

## Results

With a 33.4% response rate, this cross-sectional analysis includes 1727 academic, employed, and private practice physicians affiliated with five hospital-based delivery across an academic health care system. The sample was representative of the larger group as compared by delivery network, clinical services, age, race-ethnicity, gender. The majority of the physicians were academic (55.0%), white (68.7%), and male (54.6%), with an average age of 46.8 years old. Of physicians, 70.5% considered their work “a calling”. Compared to those who considered work a “job”, those with a calling were more likely to feel professional life was as expected (OR 2.5, CI 2.0-3.2), to feel professionally fulfilled (OR 5.5, CI 3.9-7.7), to promote the practice as a place to work (OR 3.1, CI 2.1-4.5), to be less burned out (OR 0.22, CI 0.17-0.29), and less likely to intent to leave the organization (0.44, CI 0.34-0.56), and to work more hours on average.

## Conclusion

When building the workplace of the future, both organizational objectives and physician well-being would benefit from a deeper understanding of physician’s intrinsic meaning in work and what it means for organizations and physicians to be value-aligned. In follow-up, we will further explore several hypotheses.

Wrzesniewski, A., McCauley, C., Rozin, B., Schwartz, B., Jobs, Careers, and Callings: People’s Relations to Their Work, *Journal of Research in Personality*, 31, 21–33 (1997)

# Leveraging lessons from COVID-19's impact on the health care workforce: Moving from wellness to vitality

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## Learning objectives

- Apply The Foundation of Medical Excellence's (TFME) Charter on Professionalism for Health care Organizations (CPHO) towards proactive vitality management of the workforce.
- Develop a practical definition of "universal vitality" within health care settings.
- Incorporate lessons learned from the COVID-19 pandemic to illustrate how moving from a wellness to vitality model can lead to improved quality of care.

## Project objective/background

Vitality is a mission-focused state, beyond well-being, that allows people to achieve immersive fulfillment and optimization, particularly within complex health systems. Although the concept of organizational-level vitality is not new, it is rarely communicated in the context of health care organizations. We propose a novel application of TFME CHPO that describes a systems-level approach towards proactive universal vitality management for interprofessional multi-level collaborative care teams.

## Methods/approach

We conducted expert interviews and reviewed leading marketing, policy, psychological, and neurobehavioral journals. To transform the concept of vitality into practically achievable components, we focus our approach on TFME CHPO's four main domains: 1) patient partnerships, 2) organizational culture, 3) community partnerships, and 4) organizations and business practices.

## Results

For our first domain, we highlight value-based care and relationship-building between the health care workforce and the patients we serve. For our second domain, we promote an organizational culture that rewards inclusivity and professionalism over internal competition. Thirdly, we address how community partnerships can benefit both patients and health care professionals via a deeper understanding of social determinants of health and an integration of service-learning as a core component of one's professional duty. Finally, we describe

neurobehavioral evidence-based methods on how organizations can capitalize on areas such as interior design, scheduling, and providing diverse stakeholders seats at the decision-making table.

## Conclusions

The domains outlined by the TFME CHPO can be practically expanded to include increased autonomy, purposefulness, and mastery, which are three core components of vitality. The COVID-19 pandemic illustrated that a sense of well-being alone is insufficient to sustain health care organizations during turbulent times; rather, mission-based vitality must be intentionally achieved and sustained. We recognize the cost of implementing system-wide changes towards vitality will be large; however, based on the current cost of burnout, turnover, and inefficiencies in the health care system, the positive outcome of this paradigm shift will be enormous. While we laud the resiliency and altruism that health care employees have shown during the turbulent times of this pandemic, despite already previously high burnout rates, we caution health systems to not take their sacrifice and dedication for granted and urgently focus on the vitality of a workforce that is willing to lay its life on the line for a mission shared between health care workers and health systems — before a subsequent crisis occurs and the well of vitality runs dry.

# Optimizing physician recognition and appreciation through initiation of value awards

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## Learning objectives

- Aligning organization value compact with physician recognition and appreciation
- Enhancing physician camaraderie by leveraging peer recognition

## Project objective/background

Values alignment creates an individual and organization bond that helps develop purpose in work and have been shown to be imperative to personal wellbeing, mitigating burnout, and promotes spirit de corps. Dayton Children's professional staff has had a value compact with providers for several years, tied to our organizational values of safety, compassion, ownership, collaboration, innovation, and equity.

Research has shown a sense of appreciation is one of the strongest drivers of professional fulfillment. With this knowledge, the Dayton Children's Hospital Physician Wellness Committee decided to optimize recognition of fellow attending physicians for living the organizational value alignment compact. The goal was to enhance public awareness of the outstanding work of physicians within the organization on national Doctor's Day 2022.

## Methods/approach

The physician wellness committee solicited nominations from all staff members for attending physicians who demonstrate our organizational values. All nominations were then scored by the committee to determine a value award winner. Each value winner was announced in person, on their primary working unit, by the CEO, CMO, and CWO. All nominated physicians and respective divisional chief received their individual detailed nomination responses. Additionally, the winners were celebrated with the value comments on the hospital internal network for all employees to view and externally on social media for the public.

## Results

In the inaugural year, 110 distinct physicians were nominated, for a total of approximately 200 nominations, in all value categories combined. Traditionally, existing organizational awards are reserved for those with significant service (over 15 years). With the new awards, more than 50% of nominations and half of the awards went to newer physicians, with less than 5 years of organizational service. From the organizational annual employee engagement survey, there was an increase from a baseline of 64.3% in 2021 to 70.6% in 2022 regarding the question "when I do an excellent job, my accomplishments are recognized". From social media marketing data, the Doctor's Day Value Awards received over 38,000 impressions – with organizational baseline at 10,000 impressions for a typical post.

## Conclusion

The inaugural Doctor's Day Value Awards was extremely well received and showed an increase in personal feelings regarding individual recognition. It is an effective way to enhance recognition of physicians, specifically new physicians, who do not qualify for professional staff service awards where you qualify based on years of service.

# Pebble in my shoe: A program to address micro-annoyances encountered by physicians in the workplace

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## Learning objectives

- Understand the impact of micro-annoyances on the wellbeing of physicians.
- Explore common themes across micro-annoyances reported by physicians.
- Learn an approach to address these micro-annoyances and make sure physicians feel heard.

## Project objective/background

Work inefficiencies and frequent micro-annoyances impact physician wellbeing and lead to burnout. We created a program in a large children's hospital to systematically capture these occurrences and address them.

## Methods/approach

We created a trackable email account - pebbleinmyshoe@choa.org and actively socialized it among physician groups at our hospital beginning in July of 2022. Submitted emails were captured by the physician wellness team and carefully recorded in a large database tracking date, source, hospital location, specialty, primary issue, physician wellness first response, issue category, identified administrative leader responsible, response date, and final communication/resolution. The physician wellness team had ultimate responsibility for closing the communication loop with the submitting physician.

## Results

Over the first 8-months of the program 152 pebbles were submitted (Fig. 1). Feedback regarding the program has been largely positive (Fig. 2). Common themes included supply chain issues, physician dining, computer IT issues, ER operations, facilities, and pharmacy. Leadership buy-in has been key and insured the success of the program. The program has helped to pinpoint weak or underachieving physician-administrator dyad partnerships and areas of operational inefficiency.

## Conclusion

An intentional program to address micro-annoyances facing physicians can help to narrow the perceived gap between administrators and physicians and help make physicians feel heard. Next steps include formalizing operational improvements linked to pebbles and continuing to promote the value of the program to both physician wellness and operational efficiency.

Figure 1. Depiction of pebble status over 8-month period.

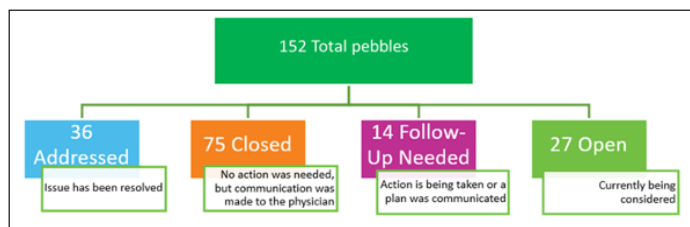
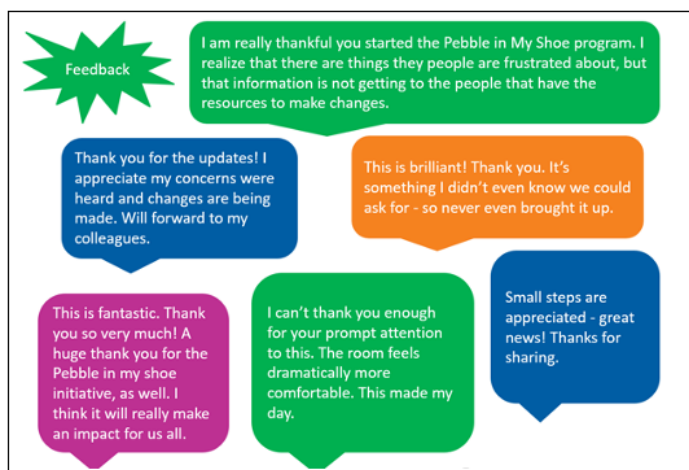


Figure 2. Samples of feedback from physicians who had submitted pebbles



# Predictive and protective factors of burnout in residency: A review of the validated Mini-ReZ instrument's "Work Interruptions and Support" sub-scale within the first three years of residency

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## Learning objectives

- Analyze association between burnout and the Mini-ReZ "Work Interruptions & Support" sub-scale.
- Summarize differences in resident burnout, satisfaction, and feeling valued by gender and program year.
- Highlight improvement areas in the learning and work environment.

## Project objective/background

Resident well-being and system-level improvements in residency have been largely under researched. In 2022, the American Medical Association (AMA) collaborated with 17 residency programs to identify system drivers of resident burnout. The validated Mini-ReZ instrument assesses resident burnout and well-being utilizing 15 questions that comprise three scored subscales. The third subscale, Work Interruption and Support, specifically measures aspects of the residency experience such as: sleep deprivation, peer support, department recognition, work interruptions, and positive relationships. The study aimed to explore the relationship between the subscale three items, their effect on burnout, and how residency programs can better support residents to reduce burnout and improve the workplace for future clinicians.

## Methods/approach

1,613 deidentified responses from 17 residency programs surveyed across 2022 were collected through electronic surveys and housed within the existing AMA Data Lab platform. Burnout was analyzed for potential association to program satisfaction, stress, and feeling valued, department recognition, sleep deprivation, and peer support. Authors utilized descriptive statistics, bivariate comparisons, and logistic regression to analyze the data and determine predictive factors of burnout while controlling for demographic variables.

## Results

Of the sample, 47% were male, 46% females, and 6% preferred not to answer for gender. There were 26% PGY-1s, 24% PGY-2s, and 31% PGY-3s. PGY-4s and Fellows were excluded from the analysis to focus on residents within the first three years of training.

Overall burnout was 41% among residents in 2022. Burnout rates were higher in females (49%) vs. males (29%),  $p < 0.001$ , and higher in PGY-2s (47%) vs. PGY-1s (37%) and PGY-3s (43%),  $p < 0.001$ . 50% of respondents reported that they experienced sleep impairment with a higher frequency in PGY-1s (56%) than PGY-3s (45%),  $p < 0.001$  and in females (56%) over males (43%),  $p < 0.001$ . 47% of all residents indicated they felt recognized by their department, with the lowest frequency in PGY2s (39%).

## Conclusion

This research identified a correlation between burnout and three factors from the "Workplace Interruptions and Support" subscale of the Mini-ReZ: Peer support, Department recognition, and Sleep impairment. A lack of department recognition may contribute to higher rates of burnout despite a potential protective factor of strong peer support. Residency programs should consider initiatives and communications from program leaders that acknowledge and emphasize resident efforts as a potential strategy to mitigate resident burnout. Strong cultures of peer support should be a continued focus for residency programs



to protect against burnout. Half the residents sampled were experiencing significant sleep impairment which was significantly correlated to increased rates of burnout. Female residents were more likely to experience burnout than male residents. While this survey cannot statistically identify reasons for this variation, the discrepancy in burnout rates between men and women should be studied further to identify distinct impacting factors among genders. Targeting risk factors and decreasing resident stress and sleep impairment while improving satisfaction and recognition at work can help reduce burnout rates among residents.

Stress (OR 6.27, CI 4.17,9.44) and sleep impairment (OR 3.6, CI 2.38,5.46) were significant aggravators of burnout, while program satisfaction (OR 0.238, CI 0.124,0.459), department recognition (OR 0.593, CI 0.382,0.919), and feeling valued (OR 0.443, CI 0.285,0.687) were significant mitigators of burnout when controlled for program year and gender.

# Professional well-being and perceived needs of health care workers at rural hospitals in the Intermountain West

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## Learning objectives

- Learn about professional wellbeing of rural health care workers in 2022
- Learn about available resources in this setting
- Learn about perceived needs among rural health care teams

## Project objective/background

The University of Utah Resiliency Center was awarded a HRSA grant to improve professional well-being among health care workers in the Intermountain West. One aim is to collaborate with affiliated rural hospitals to implement employee wellbeing programming. We administered surveys in order to understand baseline availability of employee well-being resources, and individual well-being and perceived needs.

## Methods/approach

The first survey was completed by hospital leaders in February 2022 where they reported the availability of internal or external well-being services. Another survey was sent to all employees at each of the rural hospitals between May and September 2022. This survey included scales from the Stanford Professional Well-being tool (professional fulfillment, self-compassion, values alignment, psychological safety, leadership, peer support, and control), Mini-Z burnout, engagement items, and rank-list needs assessment.

## Results

Most rural hospitals in the Intermountain West have access to external mental health services, but do not have access internally. Most do report some internal programs to improve wellbeing; however, access to addiction services is limited.

There were a total of 460 respondents across the four rural hospitals on the individual employee survey. Respondents were majority female (77%) and non-Hispanic white (87%);

response rates ranged from 30% to 49% across the sites. Due to small Ns at each site, we were only able to analyze for differences between clinical and non-clinical staff. Well-being domain results are shown in the table (overall and stratified.) Non-clinical respondents had significantly better results in the domains of psychological safety, organizational leadership, and work area control.

The most commonly selected needs among employees included clinic flow and efficiency, work flexibility, and staff resources. Open-response themes included leadership communication/involvement, compensation, workload/staffing, workplace culture, equity, flexibility, recognition and trust.

## Conclusions

Differences exist between clinical and non-clinical employees of rural hospitals; with psychological safety, satisfaction with organization leadership and perceived control being more common among non-clinical employees. Opportunities for intervention include facilitating access to services, improved bidirectional communication with leadership, and local interventions to address control. Improving self-compassion could also be helpful.

### Well-being domains, overall and by clinical role

Domains	Overall	Clinical	Non-Clinical		
Binary	n (%)	n (%)	n (%)	p-value <sup>2</sup>	Effect size <sup>3</sup>
Organization and personal values alignment	215 (46.9)	93 (42.1)	122 (51.5)	0.055	0.19
Psychological safety	203 (44.2)	85 (38.5)	118 (49.6)	<b>0.021</b>	<b>0.22</b>
Organizational leadership	232 (50.7)	98 (44.5)	134 (56.3)	<b>0.015</b>	<b>0.24</b>
Peer Support	268 (58.8)	133 (60.5)	135 (57.2)	0.542	0.07
Control in work area	153 (33.4)	57 (25.8)	96 (40.5)	<b>0.001</b>	<b>0.31</b>
Professional fulfillment	203 (44.2)	99 (44.8)	104 (43.7)	0.886	0.02
No Burnout	277 (60.6)	139 (62.9)	138 (58.5)	0.384	0.09
Self-compassion	83 (18.1)	42 (19.0)	41 (17.2)	0.709	0.05
Communication	224 (48.8)	101 (45.7)	123 (51.7)	0.235	0.12
Well-being	174 (38.0)	86 (39.1)	88 (37.0)	0.712	0.04

<sup>1</sup> column %

<sup>2</sup> Chi-squared test

<sup>3</sup> Cohen's h (0.2=small, 0.5=medium, 0.8=large)

# Shifting from a vicious to virtuous cycle: Reconnecting to mission to improve physician well-being and organizational outcomes

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## Learning objectives

- Review national physician (and all employee) engagement survey data to reveal engagement, retention, and resilience trends.
- Understand key drivers (high-quality care and service, safety, respect, business practices) for improvement.
- Leverage organizational framework to improve physician engagement, retention and resilience.

## Project objective/background

A vicious cycle is driving turnover throughout health care. Stresses resulting from the effects of the pandemic are increasing burnout and decreasing the ability to “decompress” among physicians, APPs, nurses and other caregivers. Also impacted are perception of safety culture (including resources, teamwork, pride/reputation), engagement (connection to the organization and pride and loyalty to their organization), and alignment (connection to organization leaders). All of these downward trending areas compromise the effectiveness of physicians and other caregivers, which increases the stress. Health care organizations must work to improve physician engagement, retention, alignment and safety culture.

## Methods/approach

2022. Items use a 5-point Likert type scale, (1) strongly disagree to (5) strongly agree. Each database includes a two- year lookback i.e., 2022 database contains responses for 2020-2021.

## Results

Nationally, data indicate that steep declines across physician engagement, alignment, and decompression are slowing down post-Pandemic. Comparing the 2023 database to the 2022 database,

- Physician engagement declined by .03 (vs prior period decline .08)
- Alignment, caregivers’ perceptions of their relationship with organizational leadership, declined by .04 (vs prior period decline .07)

- Resilience overall only declined by .02 (vs prior period decline .08), with subdomains falling by .01 (activation) (vs prior period .02) and .02 (decompression) (vs prior period .13)

Health care leaders should be encouraged by activation levels that held steady, and the slowdowns of declines across other metrics.

As organizations work to engage and retain physicians, data from linear regressions illuminates specific key drivers (“mission-driven”) to prioritize:

- High-quality care and service
- Organizational commitment to safety
- Respect for caregivers
- Business practices and future success

## Conclusions

Though news about physician burnout is rampant, national data show that the steep decline is beginning to slow. Organizations must continue to authentically listen to their physicians, nurses, APPs, and all employees, to identify and prioritize opportunities to improve physician and employee engagement, retention and resilience.

Tactics should be applied at the individual, team, and operational levels to allow physicians time and space to reconnect to the mission-driven nature of health care. Finally, organizations must commit to continuous evaluation of efforts to continue or improve them.

# #StopTheStigmaEM Month: Breaking down barriers around emergency medicine physicians seeking mental health care

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## Learning objectives

- Explain the barriers to emergency physicians seeking mental health care.
- Measure the impact of the #StopTheStigmaEM Awareness Month.
- Formulate next steps to achieve higher engagement in emergency physicians seeking mental-health seeking behaviors.

## Project objective/background

Emergency Medicine (EM) physicians have the highest rates of burnout in medicine, with more than half affected. The problem is multifactorial: the nature of our work, exposure to vicarious trauma, and moral injury. Addressing physical and mental health is key to minimizing burnout and achieving professional fulfillment. However, barriers prevent EM physicians from seeking mental health support. We aimed to promote help-seeking behavior in EM via the #StopTheStigmaEM campaign.

The Society for Academic Emergency Medicine (SAEM) Wellness Committee designed the first-ever #StopTheStigmaEM month for October 2022 with the following objectives: 1. Collaborate across national and international organizations to organize a united effort addressing EM physicians' mental health, 2. Normalize discussions and acknowledge the importance of receiving mental health care, 3. Raise awareness of EM physicians' barriers when seeking mental health care, and 4. Advocate for local and national policies that protect physicians from sanctions due to seeking mental health care.

## Methods/approach

The SAEM Wellness Committee developed a coordinated month-long #StopTheStigmaEM Awareness campaign and was co-sponsored by 13 EM organizations, national and international. Efforts leveraged social media to amplify the scope and impact of the campaign, including a #StopTheStigmaEM website and collaborating with the Art of Emergency Medicine (ArtofEM). Online resources

and in-person and virtual events addressed different themes about mental health barriers and practical solutions.

## Results

The hashtag #StopTheStigmaEM promoted resources, events, and 3 webinars. The webinars had 142 registrants, with 87 attendees. Social media metrics from September 27 to November 4, 2022 showed: Twitter: 52,000+ Impressions, 350 Likes, 106 Link Clicks, 50 Tweets, 230 Retweets; LinkedIn: 6,000+ Impressions, 127 Likes, 65 Link Clicks, 55 Posts, 28 Shares; #StopTheStigmaEM website: 1,000+ Views, 888 Unique visits, average 3:27 minutes viewing time; ArtofEM: 979 Views, 376 Unique visits, 13,000 Twitter impressions.

## Conclusion

EM physicians are hesitant to seek mental health support, with over a quarter of EM physicians avoiding mental health support for fear of the repercussions and stigma. The #StopTheStigmaEM awareness month successfully launched in October 2022, serving as the first-ever month-long campaign in the specialty to advocate for better mental health for physicians. The campaign highlighted high interest in learning about individual and systems-level barriers faced and solutions to accessing mental health care, garnering higher social media engagements, despite lower participation in real-time events. The success of the #StopTheStigmaEM campaign serves as a blueprint for annual awareness efforts across EM organizations.

# The paradox of the depressed resident: Higher depression and reduced help-seeking

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## Learning objectives

- Recognize that approaches to mental health support that require the most depressed residents to self-initiate care will likely fail due to changes in thinking associated with depression itself.

## Project objective/background

Resident physicians are at risk for depression, yet most residents do not seek help. One important barrier may be changes in thinking caused by the depression itself. Those with depression may not appraise treatment options as likely to be helpful. If true, the typical institutional approach consisting of telling residents “if you need help, call this number” may be ineffective for the most depressed residents. The current study sought to determine the association between levels of depressive symptoms, help-seeking outcome expectations, and help-seeking intentions.

## Methods/approach

Between November 2017 and August of 2020, three studies (9 waves) were conducted using surveys completed by residents in multiple institutions and specialties. Surveys included measures of depression (CES-D and PHQ-9), help-seeking intentions, and help-seeking outcome expectations. To increase the confidence in the associations, the depression survey was changed after year 1, and the help-seeking intention measure changed after year 2. A multilevel linear regression model tested the mediating effect of help-seeking outcome expectations on the relationship between depression and intentions to seek help.

## Results

2189 resident responses from 19 different specialties were obtained. Across all nine waves of data, there was a large inverse association between level of depression and

help-seeking intentions ( $\beta = -0.31, -0.27, -0.32$ , all  $p < 0.01$ ). This association persisted regardless of the depression survey or help-seeking intentions scale used. There was also a moderately large indirect effect, showing that the association between depression and help-seeking intentions is moderated through help-seeking outcome expectations (proportion mediated = 48%, 46%, 51% by study, all  $p < 0.01$ ).

## Conclusion

The greater the level of depression among residents the less likely they are to seek help. This association is partially due to depression related changes that undermine the idea that seeking help will result in help. Those residents with the greatest depression, and therefore the most need for help, may not ask for help, because they do not believe asking for help will actually result in changes for the better. This suggests that interventions that simply provide access to resources (“if you need help, call this number”) will potentially fail for those residents most in need. Interventions that schedule all residents for therapy and then allow cancellation if not needed (“opt-out”) may be particularly beneficial in this setting, as they bypass the impacted thinking pattern that creates the paradox of the depressed resident.



# The UnWRaP Study: Understanding the well-being of residents and partners

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## Learning objectives

- Summarize evidence on physician/resident social support, relationships, and burnout during training.
- Present study results examining associations between resident-partner relationships and burnout during residency.
- Discuss potential burnout interventions arising from this research.

## Project background/objective

Residency training has been shown to have a negative impact on trainees' well-being, mental health, and personal relationships.<sup>1</sup> Burnout is common and negatively affects trainees' well-being, performance, and patient care.<sup>2</sup> Studies suggest that trainees' social support and healthy personal relationships may protect against burnout and mental health concerns.<sup>1</sup> However, little is known about the potential protective effects of relationships and social support on trainees and their partners, and interventions to bolster relationships.<sup>3</sup>

*The UnWRaP Study: Understanding the Well-being of Residents and Partners*, aims to explore associations between trainee-partner relationships and well-being during postgraduate medical training.

## Methods

An online cross-sectional survey was conducted at McMaster University in Hamilton, Ontario, Canada, between January and March 2023. The survey was sent to all McMaster postgraduate medical trainees (i.e., residents and fellows) and their partners, if applicable. Data was collected through self-reported online surveys; trainee and partner responses are linked through a unique study ID. The primary and secondary outcomes are occupational burnout (using the Maslach Burnout Inventory) and mental health status (using the Mental Health Continuum Short Form), respectively. We will examine associations between these outcomes and predictor variables including individual coping, dyadic coping, social support, relationship support, relationship conflict, work-life conflict, and work-life balance satisfaction,

measured in trainees and participating partners using psychometrically validated scales. The survey will also assess socio-demographic factors, relationship and family factors, occupational demands, and stressors (personal, interpersonal, and work-related). Further, participants will rank key stressors, potential interventions, and resources. Data analyses will include descriptive statistics and multiple linear regression, accounting for dyads and adjusting for socio-demographic factors.

## Results

Results will be available in April 2023. We hypothesize that high dyadic coping, relationship support, and work-life balance satisfaction will be negatively associated with residents' occupational burnout. In contrast, high relationship conflict and work-life conflict will contribute to residents' occupational burnout.

## Conclusion

This study will inform educational leaders of the potential protective effects of social support and positive partner relations on trainees' burnout and mental health. It will identify modifiable factors and priority interventions from the perspective of trainees and their partners. Such findings could enable future research to develop effective programming to prevent burnout and foster a culture of well-being during training.

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# Thinking of quitting? Predictors of hospital system staff likelihood to leave health care

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## Learning objectives

- Describe hospital system staff prevalence of thinking about leaving health care.
- Identify sociodemographic factors that are associated with staff leaving the health care field.
- Determine if workplace factors such as culture and workplace violence are associated with staff leaving health care.

## Project objective/background

Hospital system staff (e.g., nurses, administrative staff) are essential to the overall health and efficient functioning of health systems and are a necessary support to physicians. Staff may face many stressors while at work, including an unsupportive workplace culture and abuse from patients or visitors. These exposures may contribute to increased burnout and mental health outcomes such as depression and anxiety. This study examines potential predictors that may affect staff likelihood to leave the health care profession, as limited research has examined types of workplace-related stressors and socio-demographic characteristics contributing to this decision.

## Methods/approach

Study participants were recruited from a random sample of 4999 hospital system staff representing all professions (excluding physicians) at a large urban health system between September-November 2022. Participants were invited to complete a survey assessing demographics and professional characteristics, burnout, well-being, mental health symptoms (e.g., depression, suicidality), workplace culture, and the likeliness of leaving the health care field. Binary logistic regression was used to examine factors associated with thinking about leaving health care.

## Results

A total of 1398 employees responded to the survey (28% response rate) and 1083 with sufficient data were included in the analysis. Of the final sample, 34.8% reported thinking about leaving health care altogether.

Logistic regression indicated that greater odds of thinking about leaving health care were significantly associated with male gender, registered nurse profession, screening positive for burnout, self-perceived mental health service need, and exposure to verbal abuse from patients or their visitors. In contrast, lower odds were associated with greater emotional well-being and better perceived workplace culture. Relative importance analysis indicated that the largest proportion of the variance in outcome was explained by burnout (22.5%), emotional well-being (17.0%), being a registered nurse (12.4%), workplace culture (9.5%), and mental health service need (8.1%).

## Conclusion

The results of this study may inform multi-level, relatively inexpensive interventions, which can reduce turnover and lead to significant institutional cost savings and improved patient care. Limitations of this study are the cross-sectional design, moderate response rate, lack of demographics for the full sample and recall bias. Interventions such as initiatives to decrease the stigma surrounding mental health care may alleviate personal and workplace-related stressors and improve hospital system staff well-being. Leadership trainings may help cultivate a psychologically safe workplace environment.

# Training well: A guide for residency program directors to improve resident well-being

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## Learning objectives

- Identify initiatives that support residents' psychological, emotional, and physical well-being.
- Connect ACGME Common Program Requirements to resident well-being needs.
- Develop curated well-being resources specifically for residency program directors.

## Project objective/background

There has been increasing commitment in addressing physician trainee well-being and the learning and working environment. The ACGME recently added Wellbeing as category within the Common Program Requirements. These requirements encompass five main subcategories including enhancing meaning in the experience of becoming a physician, attention to work scheduling and intensity, resident workplace safety, policies encouraging wellbeing, and increasing attention to burnout and depression through education and, access to self-screening and mental health assessment and treatment. However, individual programs and program leadership often lack access to resources that aid them in meeting these requirements.

## Methods/approach

The Michigan Medicine Graduate Medical Education (GME) office annually surveys program directors to collect information on House Officer Wellness curricula. The findings of the 2021 survey were then compared to the Accreditation Council for Graduate Medical Education (ACGME) Common Program Requirements on well-being to identify where the gaps in programming needed to be strengthened. Findings indicated an inconsistency among resident programs in offering well-being resources and programs at our institution.

During a review of websites of medical programs nationally, we were unable to find resources for residency program directors that provided resources and best practices for ACGME requirements and supported well-being curricula for residents. Therefore, we took a singularly unique approach to curate resources, policies,

and best practices, that meet ACGME's well-being Common Program Requirements, specifically for program directors of residency programs.

## Results

Recognizing the need to align ACGME reporting processes with well-being initiatives for residents, we curated a website of well-being resources for trainees and program directors. Resources focus on individual, programmatic, institutional, and broader social structures and are organized so they highlight services and provide accessible mechanisms for integration into curricula. This approach ensures that directors are able to:

1. Easily meet the needs of ACGME Common Requirements for well-being.
2. Streamline ACGME reporting among residency programs by program directors to ensure consistency, and common language and facilitate smoother reporting procedures.
3. Centralize relevant well-being resources, policies, and best practices for ease of use among program directors.

Within the first month, the resources were accessed 150 times indicating strong interest.

## Conclusion

Residents are an essential part of our Academic Medical Center and may experience different levels of well-being throughout their training. This composite of resources specific to residents allows the health system community to access them in ways tailored to various well-being needs.

# Understanding actionable areas of distress: A national study of pediatric cardiology fellow burnout

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## Learning objectives

- Measure current level of distress of Pediatric Cardiology fellows nationally
- Identify the stressors Pediatric Cardiology fellows face and how they vary
- Discover structural interventions that may tangibly improve well-being

## Project objective/background

Physician burnout has been linked to increased medical errors, mental illness, and suicidality. Pediatric subspecialty fellows are especially susceptible to burnout, with rates as high as 52%. Pediatric cardiology fellows have high clinical burden and exposure to patients with high mortality/morbidity, but little is known regarding their well-being. Current data focus largely on individual non-modifiable risk factors for burnout including gender, minority status, and family responsibilities. Drivers of burnout for pediatric cardiology trainees are poorly understood, leading to a lack of evidence-based interventions to mitigate burnout. The goal of this project was to quantify burnout and identify specific stressors among a national sample of Pediatric Cardiology fellows.

## Methods/approach

Cross-sectional observational survey study. The survey included the Stanford Professional Fulfillment Index and questions regarding potential stressors identified from existing literature, expert consensus from attending physicians, and focus groups of recent cardiology fellowship graduates. We disseminated the survey by inviting program directors at all 61 ACGME-accredited Pediatric Cardiology programs to send the survey to their categorical fellows from February-April 2023. Data were analyzed using SAS 9.4.

## Results

230 (59%) fellows completed the survey, representing 50% of all categorical fellows in the US. 42% reported symptoms of burnout, while 23% met criteria for very

good professional fulfillment. 80% were satisfied with their decision to pursue pediatric cardiology fellowship. 40% believed potential employers would pass over their application if they knew they had sought help for mental health, while 34% felt their supervisors would see them less favorably if they believed they had a mental health issue. Leading stressors were "challenges to prioritizing self-care," "excessive number of work hours," and "concern about job prospects." Cardiac Intensive Care Unit and Inpatient Consult Service were considered the most stressful rotations. Difficulty finding time for mental health appointments was considered the largest barrier to seeking help for mental distress.

## Conclusion

This large national study of pediatric cardiology fellows shows high rates of burnout and low professional fulfillment. The modifiable stressors identified in this study may serve as targets for future wellbeing interventions.

# Using lifestyle medicine to treat patients can reduce provider burnout: A proposed model derived from health care staff interviews

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## Learning objectives

- Relate three ways in which lifestyle medicine (LM) practice by physicians differs from typical medical practice.
- Identify five reasons why physicians enjoy practicing LM.
- Describe a model illustrating how organizational implementation of LM for patients might reduce physician burnout.

## Project objective/background

Physician burnout is a significant problem affecting provider and patient health. LM is a burgeoning field using therapeutic lifestyle interventions to treat or prevent chronic diseases including obesity, type 2 diabetes, and cardiovascular disease. LM treatments focus on a patient's lifestyle behaviors including consuming a whole-food predominantly plant-based diet, regular physical activity, optimizing sleep and social connections, managing stress, and avoiding risky substances.

By using in-depth interviews this study explores the impact that organizational implementation of LM for patients has on physician burnout. It fills a research gap by providing an explanatory model regarding how this organizational intervention might buffer against physician burnout.

## Methods/approach

In-depth interviews were conducted in 2022 with over 41 staff members from five health systems in the United States that are implementing LM. Fifteen of the staff members were MD's who were clinicians, medical directors, or CEO's, or who combined these roles. Additional health care staff included nurse practitioners,

nurses, psychologists, health coaches, and others. All 41 interview transcripts were examined to identify themes including physician satisfaction and burnout.

## Results

Staff describe a positive reaction to LM implementation in their health care systems. Identified factors that might reduce physician burnout include significant patient improvement, increased patient empowerment, enhanced patient satisfaction, providers' heightened joy/job satisfaction, providers' belief that LM is how medicine should be practiced, and their pride and gratitude due to their organization's support of LM. These factors are examined in relation to the three elements of burnout — exhaustion, detachment, reduced feelings of professional efficacy — to construct an explanatory model.

## Conclusion

The organizational implementation of LM can potentially reduce physician and other provider burnout by creating work circumstances and patient outcomes causing providers to experience positive consequences including greater professional joy, an improved sense of professional meaningfulness, and a strengthened conviction of being an effective physician.

# Well-being mini awards: Promoting interdepartmental connections among trainees

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## Learning objectives

- To increase social connectedness, cultivate professional relationships, and improve well-being of GME trainees.

## Project objective/background

- Graduate medical education (GME) is siloed with educational and social events occurring within individual departments
- Yet clinical work requires interdepartmental collaboration for optimal patient care

## Methods/approach

- We developed mini-awards (\$500) to fund trainee interdepartmental well-being events
- Proposals had to include
  1. A trainee organizer
  2. Involve at least 2 different GME programs
  3. Address well-being and connectedness

## Results

- Post session assessments with Likert-type questions and free-text comments to assess impact of the program
- The program was well received
  - 100% of event organizers reported a “very positive” impact of the event
  - 80% of event organizers reported a “very positive” impact on workplace culture
  - 77% of attendees reported that the event helped build community
  - 88% of attendees reported a “very positive” impact on personal well-being

## Conclusion

- A small investment resulted in creative events and impactful interactions across programs
- The mini-awards met the program’s goals of promoting interdepartmental connectedness and trainee well-being
- The impact of the program on promoting connection to the wider local community and empathy for patients was an unexpected and welcomed finding in free text responses
- Given that the literature suggest strong personal relationships can improve workplace collaboration and patient care it is critical to continue to promote events such as these



# When crisis hits home: Creating a unified response for crises in the workplace

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## Learning objectives

- Define crisis within the workplace, as informed by the last several years of collective workforce trauma
- Discover strategies to create best utilization of existing system resources
- Explore opportunities for creating a unified response to each crisis within a scalable framework

## Project objective/background

The Personnel Crisis Response Team (PCRT) creates a unified, coordinated response to minimize redundancy by support services in the organization. This provides a mechanism to effectively, efficiently, and swiftly respond to crisis that impacts a team or multiple teams, such as the colleague suicide or a traumatic patient loss.

## Methods/approach

A committee with representation from wellbeing, spiritual care, ethics, human resources, and behavioral health collaborated on a robust activation protocol. When this team is activated to respond, an operational liaison from the group is assigned to coordinate efforts with the impacted leadership team and develop a response unique to the needs of the team and situation. This allows each team within the PCRT to share the workload of response among a group, all who have been trained in Critical Incident Stress Management (CISM) debriefing methods and/or Mental Health First Aid.

## Results

Based on historic experiences, initial expectation for utilization was 6-8 times per calendar year. This process went live on June 1, 2022. As of the date of publication, there have been 28 unique activations this team has responded to, representing over 69 teams and roughly 950 employees supported. Most notably, this team scaled a system-wide response to an Active Shooter event in December 2022, providing debriefings, 24-hour on-demand mental health support, pet therapy, 1:1 counseling, and a variety of memorial support activities.

This has also created a streamlined mechanism to identify those that need ongoing resources and assist them with connection to those resources expeditiously.

## Conclusion

The conception and early utilization of the PCRT surpassed the initial expectations by 500%, and leader awareness and uptake was significantly greater than initially anticipated. Creating a response team has been a critical tactic in providing additional access, support, and follow-up to individuals, leaders, and teams as they work to effectively manage the emotional impact of working in health care.