

SCORE: Assessment of your work setting Safety, Communication, Operational Reliability, and Engagement

**Questionnaire containing items from the original SAQ, MBI, CBAQ, and JDRS.
The current SCORE survey is attached.**

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A Brief History of SCORE

It has been two decades since we first tested the Safety Attitudes Questionnaire (SAQ) on healthcare workers in 1996. We have developed and refined the SAQ over time, publishing our results in peer-reviewed literature, and our findings have been replicated in numerous independent studies in dozens of languages. We have collected, analyzed and debriefed thousands of safety culture datasets from around the world, generating some of the highest response rates and advancing the methodological rigor of safety culture assessment and improvement. In hundreds of safety culture projects, we have had the opportunity to track changes over time, debrief senior leaders, managers, directors, and front line healthcare workers, and examine the efficacy of safety culture improvement efforts.

Safety culture administrations in the same work settings over time have taught us that much has changed in healthcare over the past 20 years, even though the items in our most commonly used safety culture surveys have not. In our case, having used both the SAQ and the AHRQ surveys extensively, we found that the topics of healthcare worker burnout and work-life balance were critical to quality improvement and sustainability of efforts, but missing from all the widely used safety culture assessments. Related literature has even shown burnout and work-life balance to be related to a growing list of clinical outcomes. In addition, the original conceptions of teamwork climate and safety climate were valid at the time, and though still acceptable, they are not as reflective of contemporary healthcare. They needed a thoughtful analysis and potentially an upgrade. The concept of psychological safety was indirectly touched upon by individual items, but not directly measured by a scale, and it was not clear what leaders should do to create environments in which staff would comfortable finding their voice, admitting to confusion, and filling gaps through continuous learning.

Taken together, these were the issues we sought to address with an updated safety culture instrument. We also sought to incorporate evidence-based employee engagement domains to build upon the themes of burnout and work-life balance, while allowing for one instrument to be used for HR as well as quality and safety purposes. The goal was one instrument that would result in one administration, one debriefing, and one goal/action plan per work setting.

The Job Demands-Resources Model

One relatively uncontroversial description of the story of healthcare industry changes over the past 10 years is that at the front lines of care, healthcare workers are being asked to do more with less. Patients are sicker, staffing is leaner, and the technological and legal environment has become much more complex. The model that best reflects these changes, from our experience, is the Job Demands-Resources Model. In the organizational behavior literature, this model has been used extensively to predict and explain workplace performance, engagement, and burnout. Generally speaking, more demands can decrease performance, and more resources can increase performance,

but the interactions between the two are what allow for useful prediction and intervention strategies. For example, high demands with low resources in a given work setting are a prescription for strain that leads to burnout (and low engagement), and summarizes much of what is going on in contemporary healthcare. Moreover, high demands with high resources do not necessarily lead to burnout, and sheds light on strategies for keeping performance up while preventing burnout (see Bakker & Demerouti, 2007 below). In this case, additional resources are not limited to staffing levels, but rather can include things like participation in decision making, predictability, growth opportunities, advancement opportunities, job security, workload and autonomy. The references we used in our analyses, interpretations and selection of scales for employee engagement were the following:

- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43, 83–104.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99, 274–284.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499–512.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293–315.
- Rothmann, S., Mostert, K, and Strydom, M. (2006). A Psychometric Evaluation of the Job Demands-Resources Scale in South Africa. *SA Journal of Industrial Psychology*, 32 (4), 76-86

In short, we used the JD-R scales: growth opportunities, workload, participation in decision making, job uncertainty, and advancement. Existing psychometrics are shown in the first two columns, and the third column shows the psychometrics for a large sample of healthcare workers from the state of Michigan.

	Bakker et al. 2007 J of Personnel Psychology	Rothmann et al. 2006 SA J of Industrial Psychology	Michigan 2015 Psychometrics of SCORE domains for Engagement
Growth Opportunities		.86	.92
Workload (Overload)	.88	.76	.84
Participation in Decision Making	.88		.88
Advancement (career opportunities)	.79	.83	.89

Well-Being Metrics Background

Burnout

The JD-R model has been very helpful to us for understanding predictors of performance and the antecedents of job strain that lead to burnout. Burnout has been associated with absenteeism, poor staff retention, low staff morale, poor performance, disturbed sleep, poor health outcomes and all-cause mortality for the respondent, but also the clinical outcomes of their patients.

- Cimiotti JP, Aiken LH, Sloane DM, Wu ES. Nurse staffing, burnout, and health care–associated infection. *American journal of infection control* 2012;40(6):486-490.
- Maslach C, Jackson S. The measurement of experienced burnout. *Journal of Occupational Behaviour* 1981;2:99-113.
- Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons. *Ann Surg* 2010;251:995-1000.
- Fahrenkopf AM, Sectish TC, Barger LK, et al. Rates of medication errors among depressed and burnt out residents: prospective cohort study. *BMJ* 2008;336:488-91.
- Peterson U, Demerouti E, Bergstrom G, Samuelsson M, Asberg M, Nygren A. Burnout and physical and mental health among Swedish healthcare workers. *J Adv Nurs* 2008;62:84-95.
- Ahola K, Vaananen A, Koskinen A, Kouvonen A, Shirom A. Burnout as a predictor of all-cause mortality among industrial employees: a 10-year prospective register-linkage study. *J Psychosom Res* 2010;69:51-7.
- Block M, Ehrenworth JF, Cuce VM, Ng'ang'a N, Weinbach J, Saber S, Milic M, Urgo JA, Sokoli D, Schlesinger MD, Sexton JB. Measuring handoff quality in labor and delivery: development, validation, and application of the Coordination of Handoff Effectiveness Questionnaire (CHEQ). *Jt Comm J Qual Patient Saf.* 2013 May;39(5):213-20.
- Profit J, Sharek PJ, Amspoker AB, Kowalkowski MA, Nisbet CC, Thomas EJ, Chadwick WA, Sexton JB. Burnout in the NICU setting and its relation to safety culture. *BMJ Qual Saf.* 2014 Oct;23(10):806-13.
- Sexton JB, Sharek PJ, Thomas EJ, Gould JB, Nisbet CC, Amspoker AB, Kowalkowski MA, Schwendimann R, Profit J. Exposure to Leadership WalkRounds in neonatal intensive care units is associated with a better patient safety culture and less caregiver burnout. *BMJ Qual Saf.* 2014 Oct;23(10):814-22.

Using the emotional exhaustion subscale of the Maslach Burnout Inventory (Maslach et al. 1981), we have refined a brief burnout scale with good psychometrics that can be used to assess, understand and inform the pace and intensity of change that is viable in a given work setting (see Profit et al. 2014; and Block et al. 2013).

Block et al. found burnout to be responsive to interventions (e.g., a checklist) and had good psychometrics pre and post (Cronbach's Alpha = .86 / .93). Similarly, Sexton et al. (2014) in *BMJ Quality and Safety* found that burnout appears to be associated with QI interventions like Senior Leader WalkRounds, and here too had a good Cronbach Alpha of .85. Based on the Profit et al. (2014) findings, we generated a second version of the burnout scale that assesses the *climate of burnout* in a work setting, in addition to the assessment of *personal burnout* by the respondent. The items are the same, but rather than phrasing it as "I am burned out from my work" the climate version is phrased as "The people in this work setting are burned out from their work." The discrepancies between these two domains have made for some of the richest debriefing and intervention strategy discussions, particularly in units where physician engagement is lacking. Taken together, they present a more robust diagnostic about burnout within a work setting by including self-report of "I am burned out," alongside assessments of "my colleagues are burned out."

The Maslach Burnout Inventory, which is the gold standard tool in the field of burnout, has been used extensively with healthcare workers. A meta-analysis has revealed that of the three sub-scales (emotional exhaustion, depersonalization, and personal accomplishment), emotional exhaustion consistently produces the largest and most consistent coefficient alpha estimates, while depersonalization and personal accomplishment were both lower and less consistent than emotional exhaustion.¹ In addition to being more psychometrically robust, emotional exhaustion can be used to discriminate between burned out and non-burned out outpatients suffering from work-related neurasthenia (according to ICD-10 criteria).² We used a 5-item derivative³ of the original 9-item emotional exhaustion scale.² Having used and published this short version of the **Emotional Exhaustion** scale^{3, 4, 5}, we know from numerous large samples that it holds up psychometrically and is responsive to interventions.

Resilience

The two resilience domains were created as part of our NIH funded research into measuring and reducing burnout in healthcare workers. These new scales each provide different insights into well-being within individuals and work settings. The first is **Emotional Thriving**, which elicits assessments about the level of flourishing of a respondent. These 4 items ask if one is thriving at their job, making a meaningful difference, using their strengths and looking very forward to something. Emotional Thriving is akin to the opposite of Emotional Exhaustion, using positively valenced items. The second is **Emotional Recovery**, which elicits assessments of the extent to which one is ready to “bounce back,” from adversity or emotional upheavals. The four items ask about recovery after difficulties, adapting to events, mood recovery after setbacks and regaining a positive outlook. Emotional Recovery and Emotional Thriving only share about 15% of their variance at the work setting level, and 10% at the individual level, so being good at recovery does not ensure thriving, and vice versa.

We have completed the psychometric validity testing of these scales on 5,000 healthcare workers enrolled in our interventions, and also have pre-post data from Randomized Clinical Trials that show the scales are responsive to interventions. The NHS in the UK has used Emotional Exhaustion, Emotional Thriving, and Emotional Recovery, with results from over 16,000 healthcare workers across 75 trusts. Here too, we reran our psychometric tests and found the thriving and recovery domains to be as robust as the exhaustion domain, which is very good. The NHS report is due in September, and the manuscript of psychometric results and benchmarking data is in preparation and has been encouraged by the editor of BMJ Quality and Safety for submission. There are 600 work settings and over 20,000 respondents to these scales.

Choose your responses using the scale below:

A	B	C	D	E	X
Disagree Strongly	Disagree Slightly	Neutral	Agree Slightly	Agree Strongly	Not Applicable

EMOTIONAL THRIVING					
I have a chance to use my strengths every day at work.					
				A	B C D E X
I feel like I am thriving at my job.					
				A	B C D E X
I feel like I am making a meaningful difference at my job.					
				A	B C D E X
I often have something that I am looking very forward to at my job.					
				A	B C D E X
EMOTIONAL RECOVERY					
I always bounce back quickly after difficulties.					
				A	B C D E X
I can adapt to events in my life that I cannot influence.					
				A	B C D E X
My mood reliably recovers after frustrations and setbacks.					
				A	B C D E X
I can always regain a positive outlook despite what happens.					
				A	B C D E X

- Loera B, Converso D, Viotti S. Evaluating the Psychometric Properties of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) among Italian Nurses: How Many Factors Must a Researcher Consider? *PLOS ONE*. 2014;9(12):e114987.
- Schaufeli WB, Bakker AB, Hoogduin K, Schaap C, Kladler A. On the clinical validity of the maslach burnout inventory and the burnout measure. *Psychol Health*. 2001;16(5):565-582.
- Sexton JB, Adair KC, Leonard MW, et al. Providing feedback following Leadership WalkRounds is associated with better patient safety culture, higher employee engagement and lower burnout. *BMJ Qual Saf*. October 2017:bmjqs-2016-006399.
- Profit J, Sharek PJ, Amspoker AB, et al. Burnout in the NICU setting and its relation to safety culture. *BMJ Qual Saf*. 2014;23(10):806-813.
- Schwartz, S. P. Adair, K. C., Bae, J. B., Rehder, K. J., Shanafelt, T., Profit, J., & Sexton, J. B. (in press). Work-life balance behaviors cluster in work-settings and relate to burnout and safety culture: A cross-sectional survey analysis. *BMJ Quality and Safety*.

Work-Life Balance

The work-life balance items were adapted from the College Activities and Behavior Questionnaire (Pennebaker et al (1990)). The original stand-alone items did not form a composite scale but rather were designed to be interpreted at face-value. For our purposes however, we modified the items of relevance to healthcare workers and examined their internal consistency as a scale. The final version of the scale contains 8 phrases: During the past week, how often did this occur?

- Skipped a meal
- Ate a poorly balanced meal
- Worked through a day/shift without any breaks
- Arrived home late from work
- Had difficulty sleeping
- Slept less than 5 hours in a night

- Changed personal/family plans because of work
- Felt frustrated by technology

The response scale for the work-life climate items ranges from: Rarely or none of the time (less than 1 day); Some or a little of the time (1-2 days); Occasionally or a moderate amount of time (3-4 days); All of the time (5-7 days); and Not Applicable. Together these items reflect self-care and work-life norms at the individual, and when aggregated, at the group level.

- Pennebaker JW, Colder M, Sharp LK. Accelerating the coping process. *Journal of personality and social psychology* 1990;58:528-37.

	Block et al. 2013 Joint Commission J of Quality and Patient Safety	Sexton et al. 2014; Profit et al. 2014	Michigan 2015 Psychometrics of SCORE domains for Burnout and Work-Life Balance	Survey of healthcare workers interested in well-being tools (N = 4,075) 2017-2018	National Health Service survey of 797 UK maternity centers 2018 (N = 16,265)
Burnout Climate			.902		.885
Personal Burnout	.86 & .93	.85	.924	.846	.901
Work-Life Balance			.820	.794	.829
Emotional Thriving				.815	.864
Emotional Recovery				.819	.888

Teamwork Climate and Safety Climate

Teamwork and safety climate scales have been the most translated and widely used scales on the original SAQ. The items that were included for teamwork climate from the original scale were:

- Disagreements in this work setting are appropriately resolved (i.e., not who is right but what is best for the patient).
- In this work setting, it is difficult to speak up if I perceive a problem with patient care.
- It is easy for personnel here to ask questions when there is something that they do not understand.

One item was edited from “the physicians and nurses here” to read “the people here:”

- The people here from different disciplines/backgrounds work together as a well-coordinated team.

And three items were added to the scale which load well but are much harder to disagree with than the items which they replaced:

- Dealing with difficult colleagues is consistently a challenging part of my job.
- Communication breakdowns are common in this work setting.
- Communication breakdowns are common when this work setting interacts with other work settings.

Here is how the old teamwork and safety climate scales compared to the new versions:

	Johns Hopkins Hospital Paine et al. 2010, Qual & Safety in Healthcare (3 years)	Sexton et al. 2006, Anesthesiology Makary et al. 2006, Ann Surg	Michigan 2015 Psychometrics of SCORE domains for NEW Teamwork Climate and Safety Climate
Teamwork Climate	.79 / .77 / .79	.79	.82
Safety Climate	.79 / .78 / .78	.76	.87

Here are the “scale if item deleted” **teamwork climate** results from the same Michigan sample:

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
resolve	20.6726	28.375	.601	.791
easyask	20.2354	30.635	.492	.809
peopleteam	20.4082	29.741	.559	.799
rspkupcult	20.6134	30.136	.451	.816
rdifcoll	21.2420	27.955	.555	.800
rcomdelay	21.3287	26.639	.690	.774
rcomdelayothset	21.3348	28.265	.598	.791

The items that were included for safety climate from the original scale were:

- Errors are handled appropriately in this work setting.
- I receive appropriate feedback about my performance.
- The culture in this work setting makes it easy to learn from the errors of others.
- I would feel safe being treated here as a patient.

- In this work setting, it is difficult to discuss errors.

The two items that were added to the safety climate scale were designed to reflect the role of leadership in setting the stage for patient safety:

- The values of facility leadership are the same values that people in this work setting think are important.
- My suggestions about quality would be acted upon if I expressed them to management.

Here are the “scale if item deleted” **safety climate** results from the same Michigan sample:

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
safeacted	22.3746	28.233	.708	.841
erhndlapp	22.0930	28.437	.744	.837
feedback	22.2398	28.355	.700	.842
cultlearn	22.2421	29.385	.700	.843
feelsafe	21.8220	30.769	.586	.858
valueshared	22.5301	28.640	.651	.849
rdiffdiscuss	22.3708	31.558	.436	.878

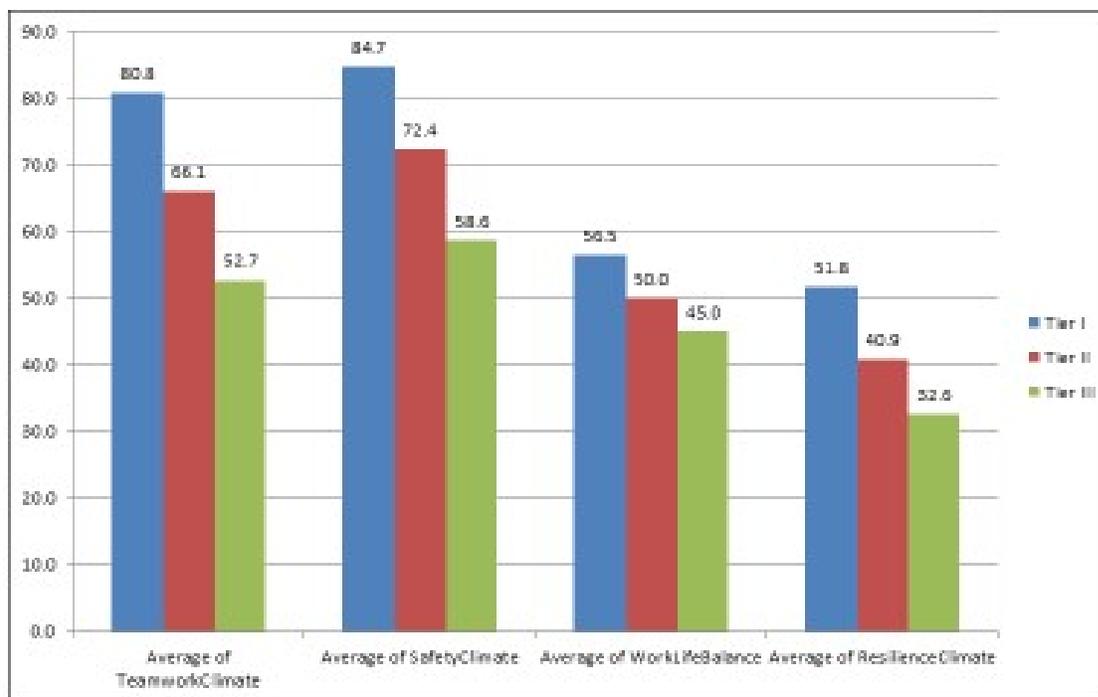
The references for teamwork climate and safety climate are as follows:

- Sexton J.B., Helmreich RL, Neilands TB, Rowan K, Vella K, Boyden J, Roberts PR, Thomas EJ. The Safety Attitudes Questionnaire: Psychometric properties, benchmarking data, and emerging research. BMC Health Services Research. 2006; Apr 3;6(1):44.
- Sexton JB, Holzmueller CG, Pronovost PJ, et al. Variation in caregiver perceptions of teamwork climate in labor and delivery units. J Perinatol 2006;26:463-70.
- Sexton JB, Berenholtz SM, Goeschel CA, et al. Assessing and improving safety climate in a large cohort of intensive care units. Crit Care Med 2011;39:934-9.
- Sexton J.B., Makary MA, Tersigni AR, Pryor D, Hendrich A, Thomas EJ, Holzmueller CG, Knight AP, Wu Y, and Pronovost PJ. Teamwork in the operating room: frontline perspectives among hospitals and operating room personnel. Anesthesiology. 2006 Nov;105(5):877-84.
- Sexton JB, Thomas EJ, & Helmreich RL. Error, stress, and teamwork in medicine and aviation: cross sectional surveys. BMJ. 2000; Mar 18;320(7237):745-9.
- Makary MA, Pronovost PJ, Sexton J.B., Millman EA, Freischlag JA. Patient safety in surgery. Ann Surg. 2006; May;243(5):628-635.
- Norden-Hagg A, Sexton JB, Kalvemark-Sporrong S, Ring L, Kettis-Lindblad A. Assessing Safety Culture in Pharmacies: The psychometric validation of the Safety Attitudes Questionnaire (SAQ) in a national sample of community pharmacies in Sweden. BMC Clin Pharmacol. 2010Apr 11;10(1):8.
- Paine LA, Rosenstein BJ, Sexton JB, Kent P, Holzmueller CG, Pronovost PJ. Assessing and improving safety culture throughout an academic medical centre: a prospective cohort study. Qual Saf Health Care. 2010 Dec;19(6):547-54.

Convergent Validity between Safety Culture and Employee Engagement

The relationships between teamwork climate, safety climate, work-life balance and burnout (also called resilience climate) were also associated with employee engagement results from Duke University Health System in May 2014 (over 75% response rate for both survey administrations across 350 work settings). We found that the Press Ganey tier system, when applied to these four domains, produced convergent validity showing that work settings with the highest levels of engagement also had the highest levels of safety culture. Please note that these Press Ganey engagement results were collected by a separate vendor, not associated with Safe & Reliable Healthcare.

Work Culture Tier Level



New Domains of SCORE

As noted in the background section, we attempted to fill a gap in the safety culture assessment arsenal by including two domains that made psychological safety more practical for leaders. The first of these domains is called local leadership, and is essentially a set of items that describe what a manager can do to create an environment that would feel psychologically safe for a healthcare worker.

Local Leadership Items:

- PSYposFB: In this work setting local management regularly makes time to provide positive feedback to me about how I am doing.
- PSYfreqFB: In this work setting local management provides frequent feedback about my performance.

- PSYusefIFB: In this work setting local management provides useful feedback about my performance.
- PSYexpect: In this work setting local management communicates their expectations to me about my performance.

The second new domain is about the extent to which a climate of continuous learning is established and maintained for healthcare workers in a given work setting. These are the preconditions for continuous quality improvement within a work setting, so responses to these items indicate the extent to which the work setting is has a learning infrastructure that would support QI efforts.

Improvement Readiness (Learning Environment) Items:

- LEinput: The learning environment in this work setting utilizes input/suggestions from the people who work here.
- LEeslearn: The learning environment in this work setting integrates lessons learned from other work settings.
- LEfixdefct: The learning environment in this work setting effectively fixes defects to improve the quality of what we do.
- LEinsights: The learning environment in this work setting allows us to gain important insights into what we do well.
- LEprotected: The learning environment in this work setting is protected by our local management.

Given that Local Leadership and Improvement Readiness (Learning Environment; together with Work-Life Balance reported earlier) were new domains, we include a summary of the Exploratory Factor Analysis from May 2016 results across 453 work settings at Duke (78% response rate 10151/13040 respondents).

19 safety culture items were subjected to principal axis factoring to assess the dimensionality of the data. The Kaiser-Meyer-Olkin was .935, which is well above the recommended threshold of .6 (Kaiser, 1974) and the Bartlett's Test of Sphericity reached statistical significance indicating the correlations were sufficiently large for exploratory factor analysis.

Three factors were extracted explaining 60.45% of the variance. This was decided based on eigenvalues, cumulative variance and inspection of the scree plot. Factors were obliquely rotated using Promax rotation and interpretation of two of the three factors was in keeping with Amy Edmondson's conceptualization of psychological safety as something that leaders do (local leadership domain) as well as a set of norms and expectations that influence behavior (improvement readiness/learning environment domain). The third factor consisted entirely of the work-life balance items reflecting the construct that Pennebaker et al. (1990) introduced as frequency of self-care compromising behaviors.

Pattern Matrix^a

	Factor		
	Local Leadership	Learning Environment	Work-Life Balance
psyfreqfb	.972	-.041	.008
psypausreflect	.945	-.003	.001
psyuseflfb	.944	-.003	-.001
psyposfb	.932	.001	.003
psyexpect	.872	.006	-.005
psypredict	.535	.205	-.015
leinput	-.010	.870	.017
lefixdefct	-.022	.863	-.026
leleslearn	-.013	.861	.020
leinsights	.047	.816	-.022
leprotected	.227	.664	-.008
skipmeal	.027	.036	.715
poormeal	.007	.029	.688
nobreaks	.002	.014	.665
late4home	-.024	.056	.661
changplan	-.009	-.028	.645
sleptlt5hours	.008	-.030	.575
difsleeping	-.010	-.068	.539
techfrust	-.012	-.051	.418
% of variance explained	40.42%	13.32%	6.71%

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Cronbach's Alphas

	Duke University Health System 2016 Score Domains	Michigan 2015 Psychometrics of SCORE domains
Learning Environment	.93	.92
Local Leadership	.96	.96
Work-Life Balance	.83	.82

Below is a table of item labels, sources, verbatim content, and SPSS syntax for calculating scores.

Item Label	Item Source	Improvement Readiness (Learning Environment) COMPUTE SCORLE = ((MEAN(LEinput, LEleslearn, LEfixdefct, LEinsights, LEprotected))-1)*25. VARIABLE LABELS SCORLE 'Improvement Readiness Scale Score'.
LEinput	new	The learning environment in this work setting utilizes input/suggestions from the people who work here.
LEleslearn	new	The learning environment in this work setting integrates lessons learned from other work settings.
LEfixdefct	new	The learning environment in this work setting effectively fixes defects to improve the quality of what we do.
LEinsights	new	The learning environment in this work setting allows us to gain important insights into what we do well.
LEprotected	new	The learning environment in this work setting is protected by our local management.
		Local Leadership COMPUTE SCORLOCLEAD = ((MEAN(PSYpredict, PSYposFB, PSYfreqFB, PSYuseflFB, PSYexpect))-1)*25. VARIABLE LABELS SCORLOCLEAD 'Local Leadership (Psych Safe Climate) Scale Score'.
PSYpredict	new	In this work setting local management is available at predictable times.
PSYposFB	new	In this work setting local management regularly makes time to provide positive feedback to me about how I am doing.
PSYfreqFB	new	In this work setting local management provides frequent feedback about my performance.
PSYuseflFB	new	In this work setting local management provides useful feedback about my performance.
PSYexpect	new	In this work setting local management communicates their expectations to me about my performance.
		Burnout Climate COMPUTE SCOREECIm = ((MEAN(EECImevents, EECImburn, EECImexhausted, EECImfrust, EECImwork2hd))-1)*25. VARIABLE LABELS SCOREECIm 'Burnout Climate Scale Score'.
EECImevents	eeClim	Events in this work setting affect the lives of people here in an emotionally unhealthy way.
EECImburn	eeClim	People in this work setting are burned out from their work.
EECImexhausted	eeClim	People in this work setting are fatigued from their work.
EECImfrust	eeClim	People in this work setting are frustrated by their jobs.
EECImwork2hd	eeClim	People in this work setting are working too hard on their jobs.
		Burnout Me (Personal Burnout) COMPUTE SCOREEME= ((MEAN(EEMEevents, EEMEburn, EEMEexhausted, EEMEfrust, EEMEwork2hd))-1)*25. VARIABLE LABELS SCOREEME 'My Burnout Scale Score'.
EEMEevents	eeME	Events in this work setting affect my life in an emotionally unhealthy way.
EEMEburn	eeME	I feel burned out from my work.
EEMEexhausted	eeME	I feel fatigued when I get up in the morning and have to face another day on the job.
EEMEfrust	eeME	I feel frustrated by my job.
EEMEwork2hd	eeME	I feel I am working too hard on my job.
		Teamwork Climate COMPUTE SCORtmclim = ((MEAN(resolve, (6-spkupclt), easyask, peopleteam,

		(6-difcoll), (6-comdelay), (6-comdelayotherset)))-1)*25. VARIABLE LABELS SCORtmclim 'SCORTeamwork Climate Scale Score'.
resolve	SAQ	Disagreements in this work setting are appropriately resolved (i.e., not who is right but what is best for the patient).
spkupclt	SAQ	In this work setting, it is difficult to speak up if I perceive a problem with patient care.
easyask	SAQ	It is easy for personnel here to ask questions when there is something that they do not understand.
peopleteam	SAQ	The people here from different disciplines/backgrounds work together as a well-coordinated team.
difcoll	new	Dealing with difficult colleagues is consistently a challenging part of my job.
comdelay	new	Communication breakdowns are common in this work setting.
comdelayotherset	new	Communication breakdowns are common when this work setting interacts with other work settings.
		Safety Climate COMPUTE SCORSafclim = ((MEAN (safeacted, erhndlapp, feedback, cultlearn, feelsafe, (6-difdiscuss), valueshared))-1)*25. VARIABLE LABELS SCORSafclim 'SCORSafety Climate Scale Score'.
safeacted	New	My suggestions about quality would be acted upon if I expressed them to management.
erhndlapp	SAQ	Errors are handled appropriately in this work setting.
feedback	SAQ	I receive appropriate feedback about my performance.
cultlearn	SAQ	The culture in this work setting makes it easy to learn from the errors of others.
feelsafe	SAQ	I would feel safe being treated here as a patient.
difdiscuss	SAQ	In this work setting, it is difficult to discuss errors.
valueshared	new	The values of facility leadership are the same values that people in this work setting think are important.

DURING THE PAST WEEK, HOW OFTEN DID THIS OCCUR?

A	B	C	D	X
Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)	Not Applicable

		Work Life Balance with new technology item COMPUTE SCORWLB = ((MEAN(skipmeal, nobreaks, changplan, sleptlt5hours, late4home, poormeal, difsleeping, techfrust)))). VARIABLE LABELS SCORWLB 'Worklife Balance Scale Score'.
skipmeal	CABQ	Skipped a meal
poormeal	CABQ	Ate a poorly balanced meal
nobreaks	CABQ	Worked through a day/shift without any breaks
late4home	CABQ	Arrived home late from work
difsleeping	CABQ	Had difficulty sleeping
sleptlt5hours	CABQ	Slept less than 5 hours in a night
changplan	CABQ	Changed personal/family plans because of work
techfrust	CABQ	Felt frustrated by technology

End of Safety Culture and Well-being Assessment Tool

Start of the Engagement Tool using the Job Demands-Resources Model (JDR)

		<p>With respect to the <u>growth opportunities</u> in this work setting I have COMPUTE SCORGO = ((MEAN(GOgrowth, GOachieve, GOindepdt, GOfreedom, GOplanactivty, GODEcactivty))). VARIABLE LABELS SCORGO 'Growth Opportunities Scale Score'.</p>
GOgrowth	JDRS	opportunities for personal growth/development
GOachieve	JDRS	the feeling that I can achieve something
GOindepdt	JDRS	opportunities for independent thought and action
GOfreedom	JDRS	freedom in carrying out work activities
GOplanactivty	JDRS	influence in the planning of work activities
GODEcactivty	JDRS	influence in decisions about work activity timelines

		<p>With respect to the <u>participation in decision making</u> that I experience here COMPUTE SCORPtDM = ((MEAN(PtDMproccler, PtDMtowhom, PtDMdiscsupvsr, PtDMmywork, PtDMinfldec, PtDMtech))). VARIABLE LABELS SCORPtDM 'Participation in Decision Making Scale Score'.</p>
PtDMproccler	JDRS	the decision making process is clear to me
PtDMtowhom	JDRS	it is clear to whom I should address specific problems
PtDMdiscsupvsr	JDRS	I can discuss work problems with my direct supervisor
PtDMmywork	JDRS	I can participate in decisions about the nature of my work
PtDMinfldec	JDRS	I have a direct influence on my organization's decisions
PtDMtech	JDRS	this organization utilizes input from staff about technology initiatives

		<p>With respect to the <u>workload</u> in this work setting I have COMPUTE SCORWL = ((MEAN(WL2much, WLpressure, WL2many, WLattention, WLremember))). VARIABLE LABELS SCORWL 'Workload Scale Score'.</p>
WL2much	JDRS	too much work to do
WLpressure	JDRS	to work under time pressure
WL2many	JDRS	to attend to many things at the same time
WLattention	JDRS	to give continuous attention to work
WLremember	JDRS	to remember many things

		<p>With respect to <u>advancement</u> in this organization COMPUTE SCORADV = ((MEAN(ADVpaycomfy, ADVgoodsal, ADVpdenough, ADVfinprog, ADVtraining, ADVpromoted, ADVbenefits))). VARIABLE LABELS SCORADV 'Advancement Scale Score'.</p>
ADVpaycomfy	JDRS	I can live comfortably on my pay
ADVgoodsal	JDRS	this organization pays good salaries
ADVpdenough	JDRS	I am paid enough for the work I do
ADVfinprog	JDRS	I have opportunities to progress financially
ADVtraining	JDRS	I have opportunities to advance through training courses

ADVpromoted	JDRS	I have opportunities to be promoted
ADVbenefits	JDRS	I am satisfied with my total benefits package

		With respect to my <i>intentions to leave</i> this organization,
Jobuncstill1yr	JDRS	I would like to find a better job.
jobunckeeper	JDRS	I often think about leaving this job.
jobuncfxlvl	JDRS	I have plans to leave this job within 1 yr.

		With respect to <i>job-related uncertainty</i> about the future in this work setting,
Jobuncstill1yr	JDRS	I feel certain that I will still be working here in one years time.
jobunckeeper	JDRS	I feel certain that I will keep my current job in the next year.
jobuncfxlvl	JDRS	I feel certain that I will keep the same function level as currently.

End of the Engagement Assessment Tool

Full copy of SCORE Below

SCORE: Assessment of your work setting Safety, Communication, Operational Reliability, and Engagement

Please answer the following items with respect to your specific unit or clinical area. Choose your responses using the scale below:

A	B	C	D	E	X
Disagree Strongly	Disagree Slightly	Neutral	Agree Slightly	Agree Strongly	Not Applicable
Improvement Readiness (Learning Environment)					
The learning environment in this work setting utilizes input/suggestions from the people who work here.					
A	B	C	D	E	X
The learning environment in this work setting integrates lessons learned from other work settings.					
A	B	C	D	E	X
The learning environment in this work setting effectively fixes defects to improve the quality of what we do.					
A	B	C	D	E	X
The learning environment in this work setting allows us to gain important insights into what we do well.					
A	B	C	D	E	X
The learning environment in this work setting is protected by our local management.					
Local Leadership					
In this work setting local management is available at predictable times.					
A	B	C	D	E	X
In this work setting local management regularly makes time to provide positive feedback to me about how I am doing.					
A	B	C	D	E	X
In this work setting local management provides frequent feedback about my performance.					
A	B	C	D	E	X
In this work setting local management provides useful feedback about my performance.					
A	B	C	D	E	X
In this work setting local management communicates their expectations to me about my performance.					
Burnout Climate and Personal Burnout					
Events in this work setting affect the lives of people here in an emotionally unhealthy way.					
A	B	C	D	E	X
People in this work setting are burned out from their work.					
A	B	C	D	E	X
People in this work setting are fatigued from their work.					
A	B	C	D	E	X
People in this work setting are frustrated by their jobs.					
A	B	C	D	E	X
People in this work setting are working too hard on their jobs.					
A	B	C	D	E	X
Events in this work setting affect my life in an emotionally unhealthy way.					
A	B	C	D	E	X
I feel burned out from my work.					
A	B	C	D	E	X
I feel fatigued when I get up in the morning and have to face another day on the job.					
A	B	C	D	E	X
I feel frustrated by my job.					

I feel I am working too hard on my job.	A	B	C	D	E	X
In the past month, my activities have been restricted due to illness.	A	B	C	D	E	X
In the past month, I have missed work (for any reason).	A	B	C	D	E	X

Teamwork Climate

Disagreements in this work setting are appropriately resolved (i.e., not <i>who</i> is right but <i>what</i> is best for the patient).	A	B	C	D	E	X
In this work setting, it is difficult to speak up if I perceive a problem with patient care.	A	B	C	D	E	X
It is easy for personnel here to ask questions when there is something that they do not understand.	A	B	C	D	E	X
The people here from different disciplines/backgrounds work together as a well-coordinated team.	A	B	C	D	E	X
Dealing with difficult colleagues is consistently a challenging part of my job.	A	B	C	D	E	X
Communication breakdowns are common in this work setting.	A	B	C	D	E	X
Communication breakdowns are common when this work setting interacts with other work settings.	A	B	C	D	E	X

Safety Climate

My suggestions about quality would be acted upon if I expressed them to management.	A	B	C	D	E	X
Errors are handled appropriately in this work setting.	A	B	C	D	E	X
I receive appropriate feedback about my performance.	A	B	C	D	E	X
The culture in this work setting makes it easy to learn from the errors of others.	A	B	C	D	E	X
I would feel safe being treated here as a patient.	A	B	C	D	E	X
In this work setting, it is difficult to discuss errors.	A	B	C	D	E	X
The values of facility leadership are the same values that people in this work setting think are important.	A	B	C	D	E	X

A	B	C	D	E	X
Disagree Strongly	Disagree Slightly	Neutral	Agree Slightly	Agree Strongly	Not Applicable

With respect to the growth opportunities in this work setting I have

opportunities for personal growth/development
the feeling that I can achieve something
opportunities for independent thought and action
freedom in carrying out work activities
influence in the planning work activities
influence in decisions about work activity timelines

With respect to the workload in this work setting I have

too much work to do
to work under time pressure
to attend to many things at the same time
to give continuous attention to work
to remember many things

With respect to the <u>participation in decision making</u> that I experience here	With respect to <u>job-related uncertainty</u> about the future in this work setting
the decision making process is clear to me	I feel certain that I will still be working here in one years time.
it is clear to whom I should address specific problems	I feel certain that I will keep my current job in the next year.
I can discuss work problems with my direct supervisor/ physician leadership	I feel certain that I will keep the same function level as currently.
I can participate in decisions about the nature of my work	
I have a direct influence on my organization's decisions	
this organization utilizes input from staff about technology initiatives	
With respect to <u>advancement</u> in this organization	With respect to my <u>intentions to leave</u> this organization
I can live comfortably on my pay	I would like to find a better job.
this organization pays good salaries	I often think about leaving this job.
I am paid enough for the work I do	I have plans to leave this job within 1 yr.
I have opportunities to progress financially	
I have opportunities to advance through training courses	
I have opportunities to be promoted	
I am satisfied with my total benefits package	

DURING THE PAST WEEK, HOW OFTEN DID THIS OCCUR?

A	B	C	D	X
Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)	Not Applicable
Skipped a meal	A B C D X	Had difficulty sleeping	A B C D X	
Ate a poorly balanced meal	A B C D X	Slept less than 5 hours in a night	A B C D X	
Worked through a day/shift without any breaks	A B C D X	Changed personal/family plans because of work	A B C D X	
Arrived home late from work	A B C D X	Felt frustrated by technology	A B C D X	

Does your work setting use Patient Safety Leadership WalkRounds to discuss with senior leaders any issues that could harm patients or undermine the safe delivery of care? Yes No Not Sure | How often did you participate? 0 1 2 3-4 5-7 8 or more Not Sure

Did you receive feedback about patient safety risks that were reduced as a result of WalkRounds? Yes No Not Sure

Background Information

Have you completed this survey before (circle one)? Yes / No / Don't Know

Gender: Male Female

Primarily: Adult Peds Both

Shift Length: 8hrs 10hrs 12hrs Other

Position: (mark only one)

- | | | |
|--|---|---|
| <input type="radio"/> Attending/Staff Physician | <input type="radio"/> Therapist (RT, PT, OT, Speech) | <input type="radio"/> Admin Support
(Clerk/Secretary/Receptionist) |
| <input type="radio"/> Fellow Physician | <input type="radio"/> Clinical Social Worker | <input type="radio"/> Environmental Support (Housekeeper) |
| <input type="radio"/> Resident Physician | <input type="radio"/> Dietician/Nutritionist | <input type="radio"/> Other Manager (e.g., Clinic Manager) |
| <input type="radio"/> Physician Assistant/Nurse Practitioner | <input type="radio"/> Clinical Support (CMA, EMT, Nurses Aide,
etc.) | <input type="radio"/> Other: _____ |
| <input type="radio"/> Nurse Manager/Charge Nurse | <input type="radio"/> Technologist | |
| <input type="radio"/> Registered Nurse | <input type="radio"/> Technician (e.g., Surg., Lab, Rad.) | |
| <input type="radio"/> Pharmacist | | |

Years in Specialty:

- Less than 6 months
- 6 to 11 mos.
- 1 to 2 years
- 3 to 4 years
- 5 to 10 year
- 11 to 20 years
- 21 years or more

Thank you for completing the survey – your time and participation are greatly appreciated!

SCORE Survey CFA

Accounting for clustering at the unit-level

	SCORE Model SC & WE together
RMSEA	.04
<i>RMSEA Threshold</i>	<i>< .06 is acceptable</i>
CFI	.916
<i>CFI Threshold</i>	<i>> .90 is acceptable</i>
TLI	.911
<i>TLI Threshold</i>	<i>> .90 is acceptable</i>

