A Systematic Approach to Safe and Highly Reliable Care

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July 24, 2018

Institute for Healthcare Improvement

SAFE & RELIABLE Healthcare

WHITE PAPER

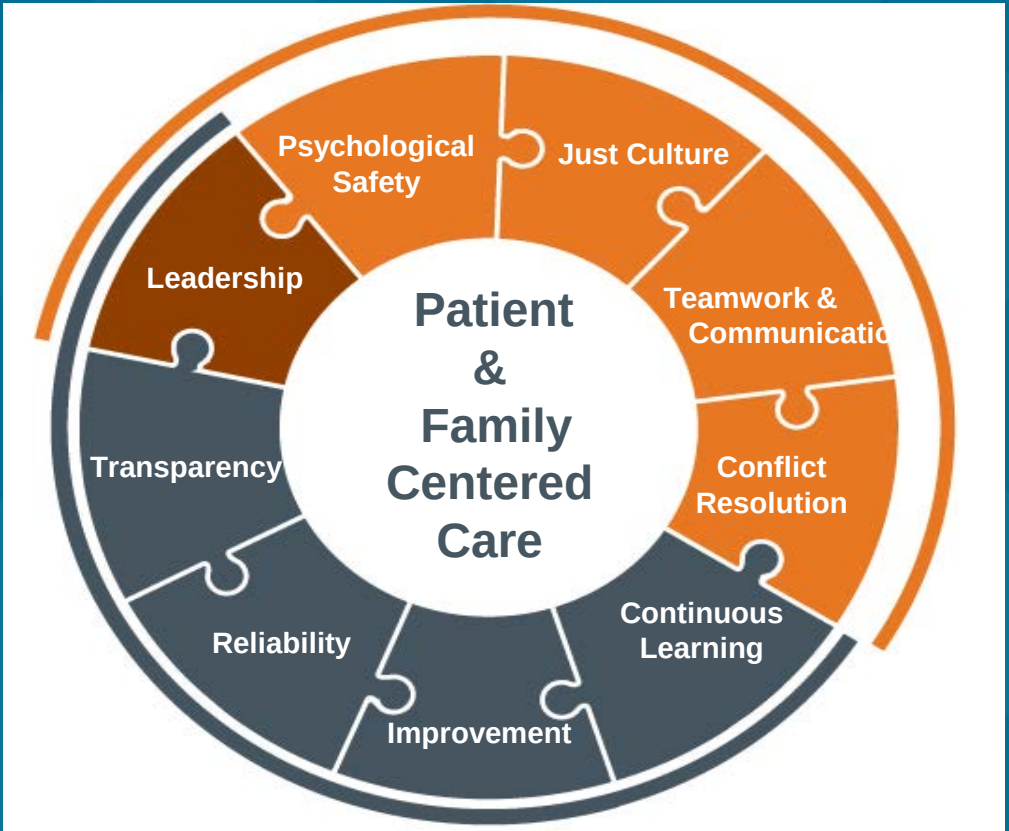
A Framework for Safe, Reliable, and Effective Care

How to Cite This Paper: Frankel A, Haraden C, Federico F, Lenoci-Edwards J. *A Framework for Safe, Reliable, and Effective Care.* White Paper. Cambridge, MA: Institute for Healthcare Improvement and Safe & Reliable Healthcare; 2017.

Learning Points

- Patient care is a profound social experience - we know how to measure, manage and deliver the components of optimal patient care
- If we can't care for the caregivers, we will not provide the care patients need and deserve.
- Psychological safety is essential for clinical excellence
- A sociotechnical framework allows for the analysis, action and delivery of sustainable value
- People get out of bed in the morning to do the right thing – we need to create the conditions for success

Unmindful • Reactive • Systematic • Proactive • Generative



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Courtesy IHI & SRH

Cultural Maturity Model

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GENERATIVE
Safety is how we do business around here
Constantly Vigilant and Transparent

TIPPING POINT

PROACTIVE
Anticipating and preventing problems before they occur; Comfort speaking up

SYSTEMATIC
We have systems in place to manage all hazards

REACTIVE
Safety is important. We do a lot every time we have an accident

UNMINDFUL
Who cares as long as we're not caught
Chronically Complacent

Value

*Adapted from Safeskies 2001, "Aviation Safety Culture," Patrick Hudson, Centre for Safety Science, Leiden University

Why is Culture Important?

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Culture reflects the behaviors and beliefs within an organization.

There are behaviors that create value; behaviors that create unacceptable risk.

Culture is the social glue

Work as Imagined v. Work as Done

What do we know about your culture?

How well do you measure culture?

What do you do with the data? How reliable is your debriefing, feedback and action loop?

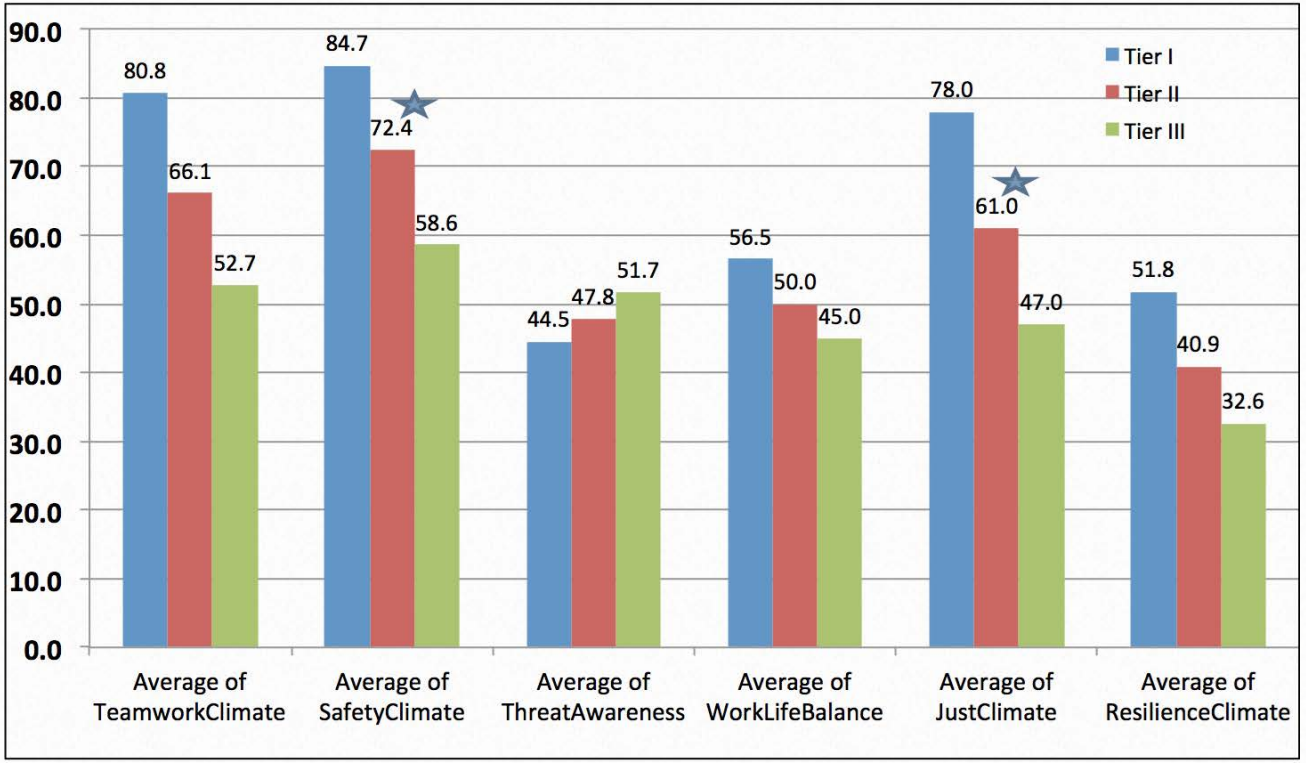
Strengths? Opportunities? How do use culture data to drive sustainable, measurable improvement?

The Value of an Integrated Survey

- The SCOR survey measures important dimensions of organizational culture. The core instrument integrates safety and teamwork culture, local leadership, learning systems, resilience/burnout and work-life balance. The full survey (SCORE) integrates employee engagement as well.
- The insights are critical for organizational improvement and the ability to drive habitual excellence.
- Specific actions can be taken to leverage organizational strengths and address areas of fundamental opportunity.
- Valuable for Magnet, Leapfrog, etc.

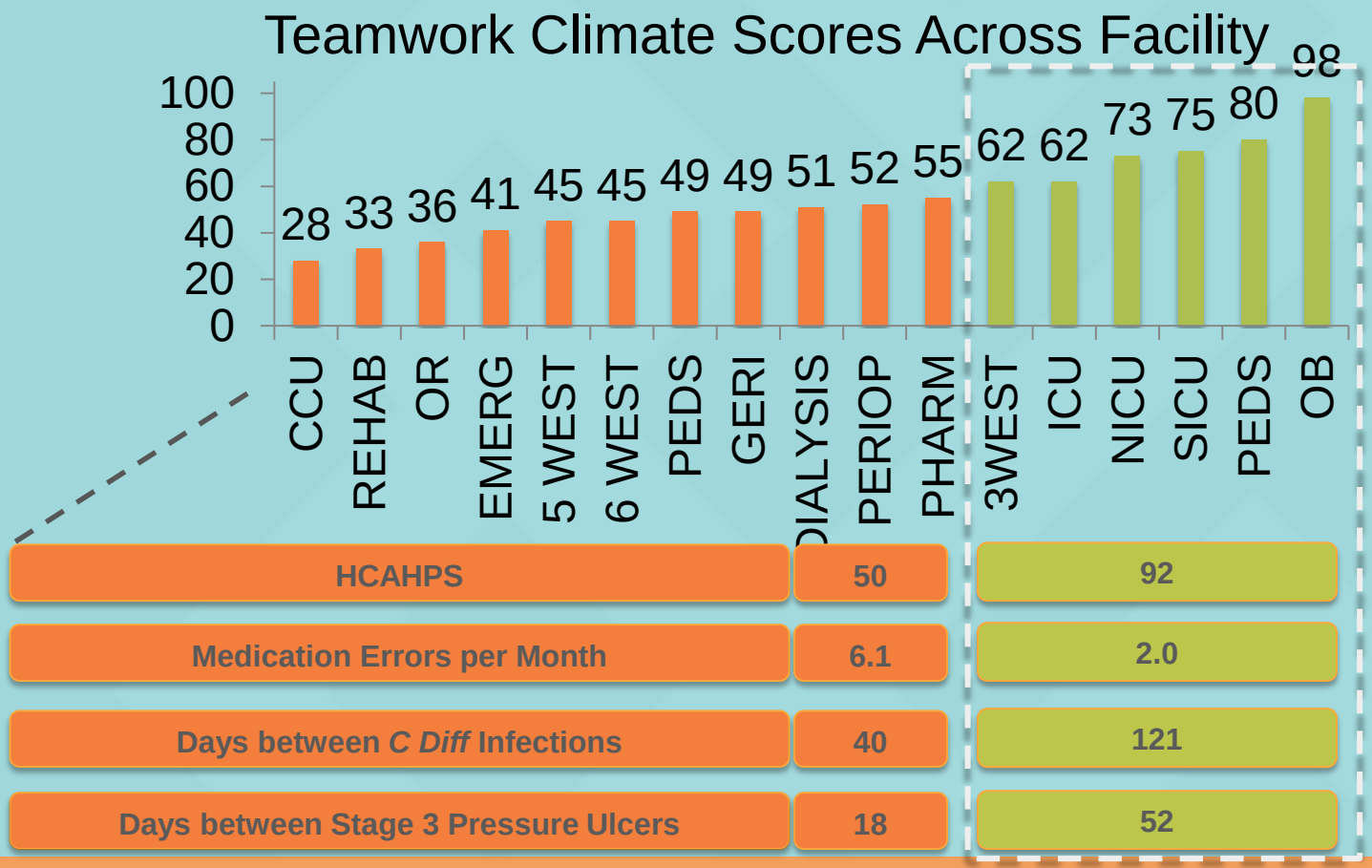
Safety Attitude Scores by Engagement Tier Level

Safety Score



Courtesy Dr. Bryan Sexton, Duke University

CULTURE IS RELATED TO…



Illustrative Data: Extracted from Blinded Client Data

.....And Employee Outcomes

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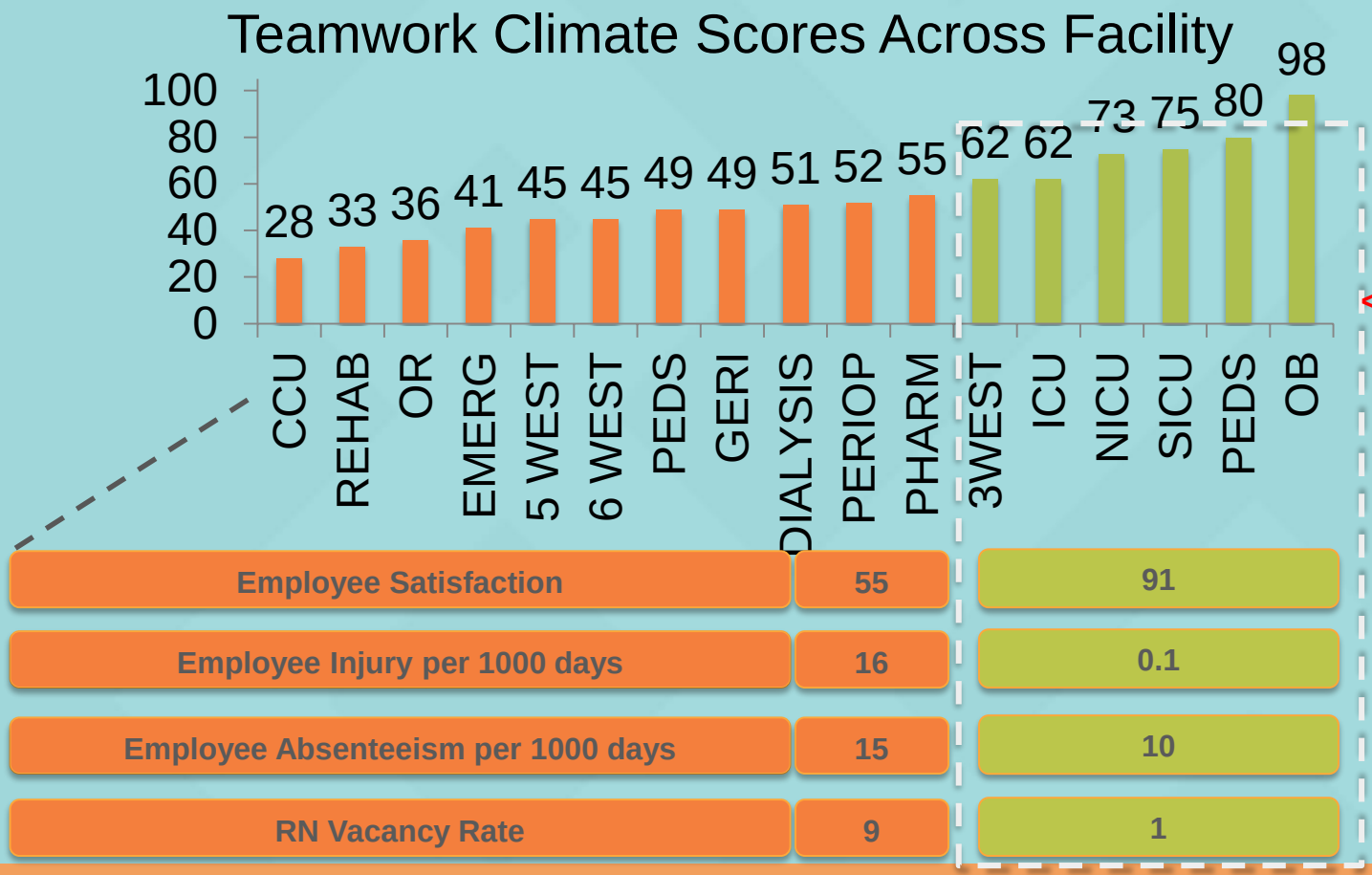

Illustrative Data: Extracted from Blinded Client Data

Where Would You Rather Have An Operation?

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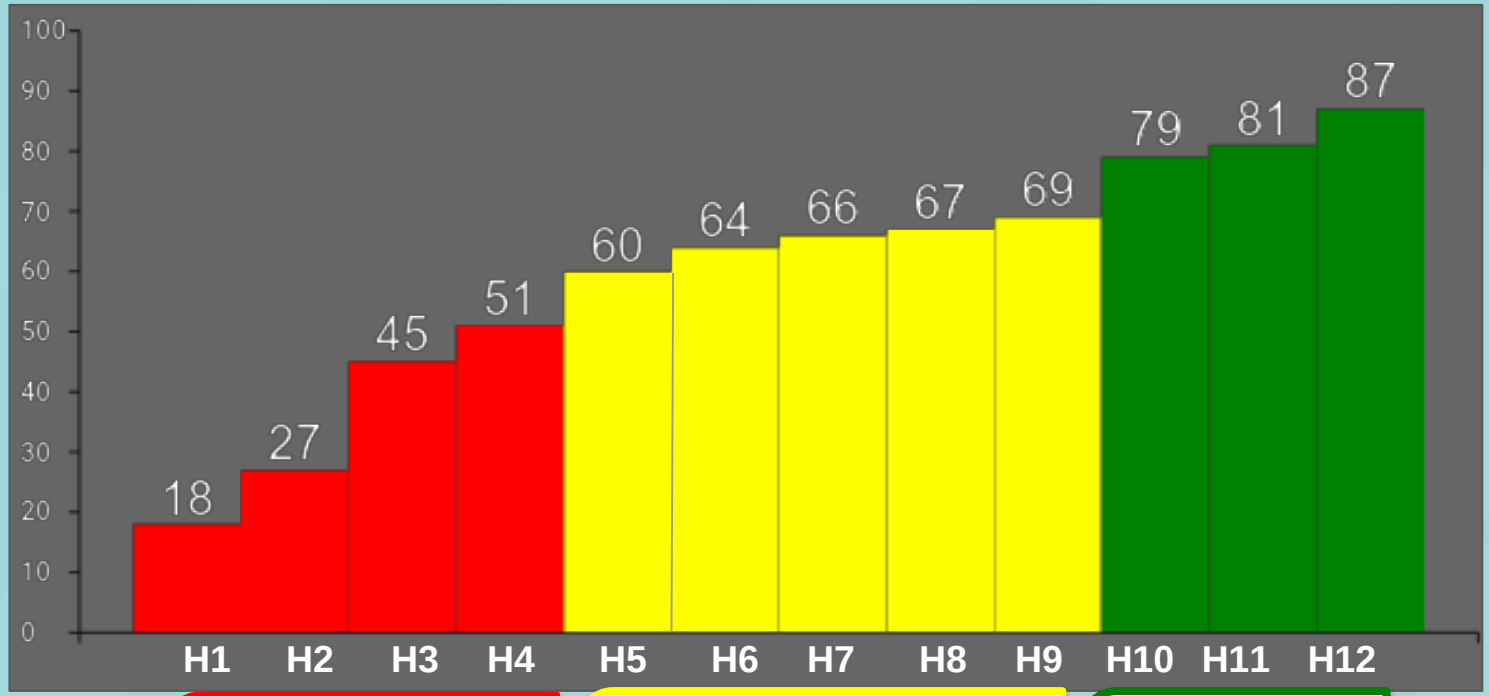


Months between Wrong Sites Surgeries or Retained Foreign Bodies

6	12	40

Senior Leadership

GENERATIVE
Organization wired for safety and improvement

PROACTIVE
Playing offense - thinking ahead, anticipating, solving problems

SYSTEMATIC
Systems in place to manage hazards

REACTIVE
Playing defense – reacting to events

UNMINDFUL
No awareness of safety culture

Cyclic flow of information with feedback and organizational learning

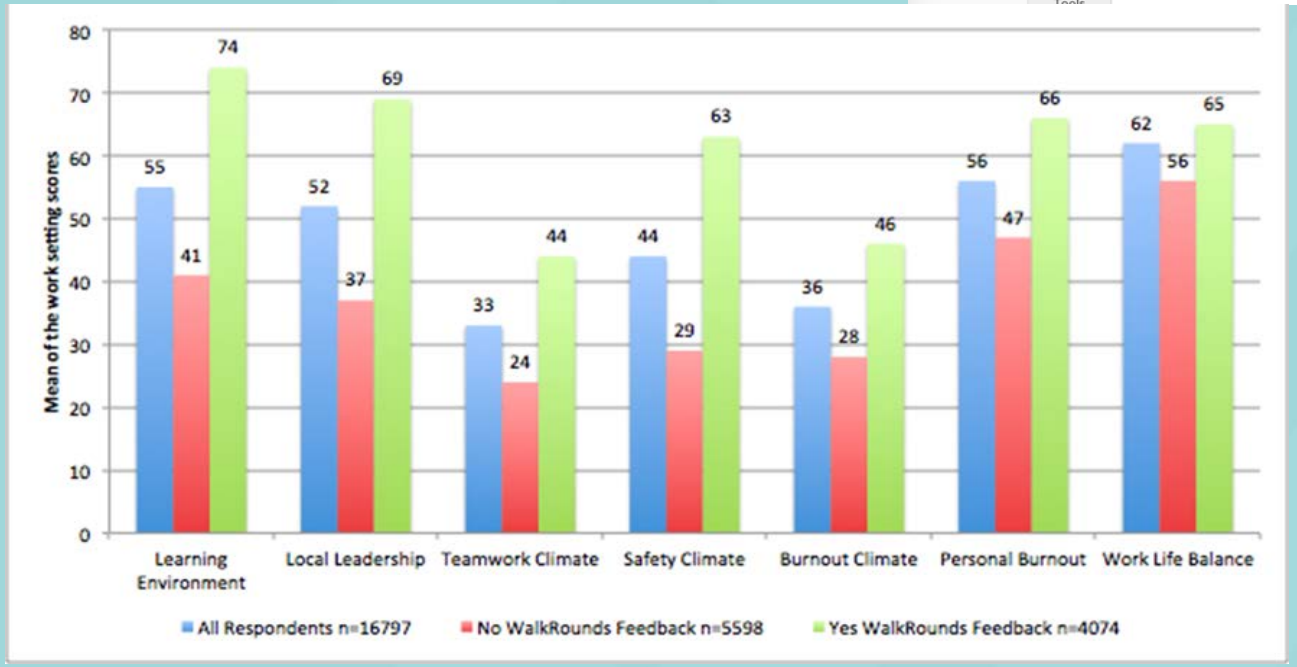
Systematic engagement with dialogue, support and learning

Process for interaction between senior leaders and front line staff

They're here – something bad must have happened

We don't know or see them

Michigan: Leadership and Culture



Michigan SCORE Data, with and without Closing the Loop

Local Leadership

GENERATIVE
Organization wired for safety and improvement

PROACTIVE
Playing offense - thinking ahead, anticipating, solving problems

SYSTEMATIC
Systems in place to manage hazards

REACTIVE
Playing defense – reacting to events

UNMINDFUL
No awareness of safety culture

Leaders create high degrees of psych safety and accountability.

Leaders model the desired behaviors to drive culture of safety

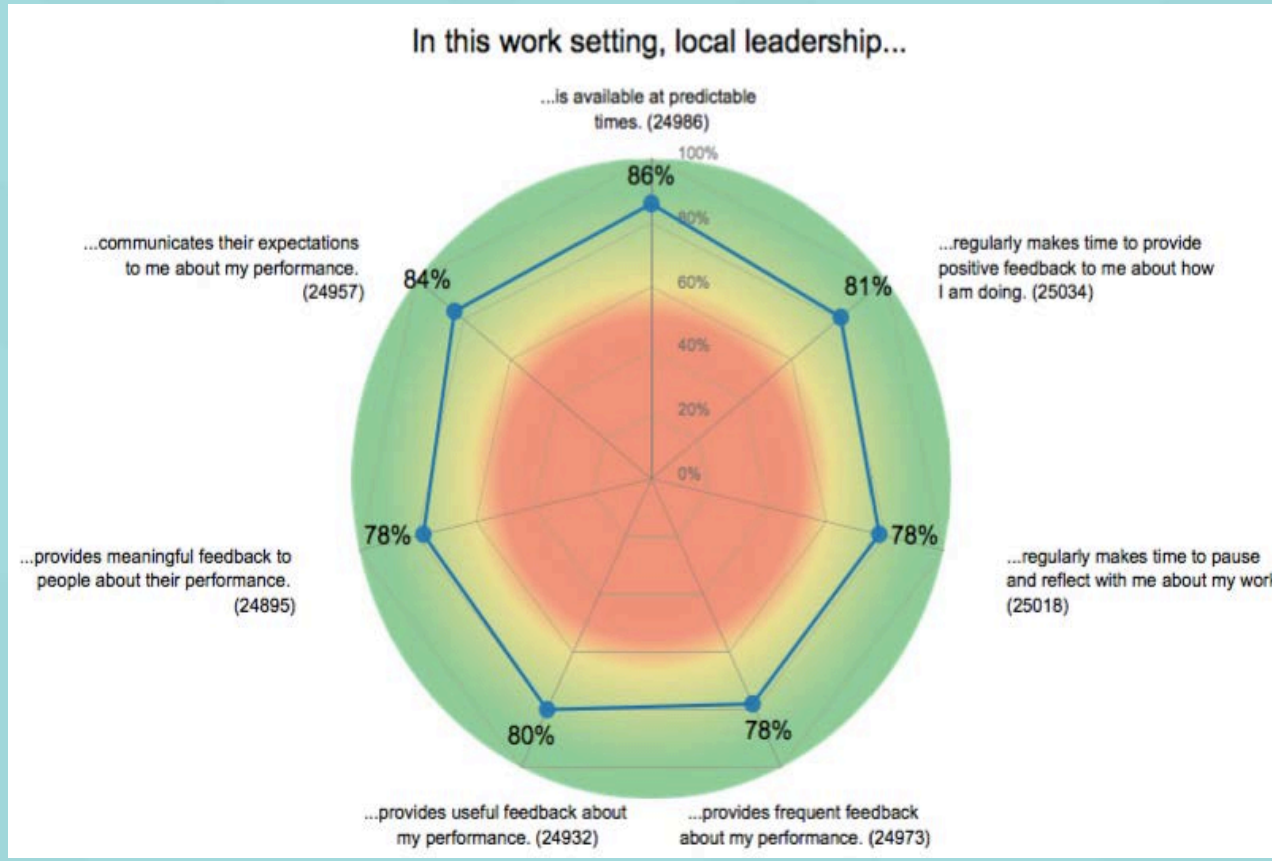
Training and support exists for building clinical leadership

Episodic, completely dependent on the individual clinician

Absent for the most part

Local Leadership

- Availability
- Feedback
- Trust
- Relationship



Percentage of positive responses.

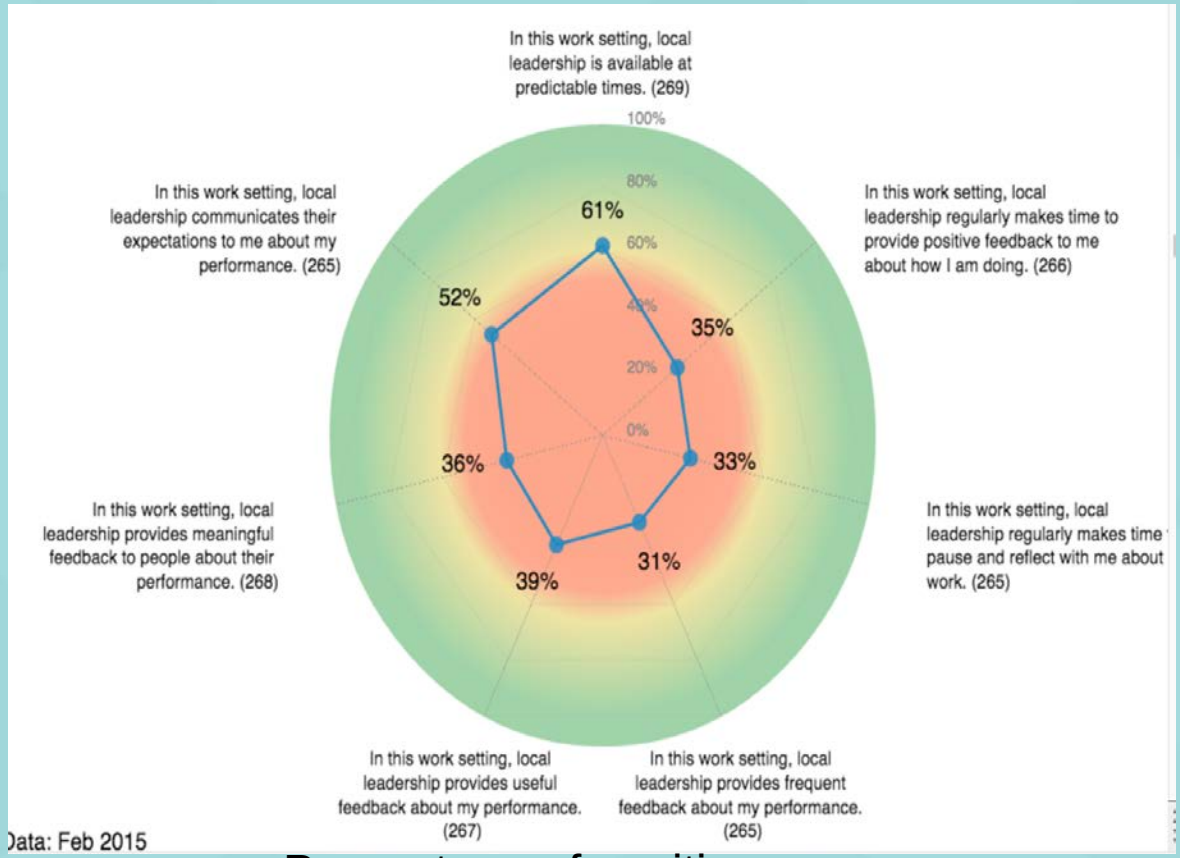
Local Leadership

- Lack of voice

- No feedback

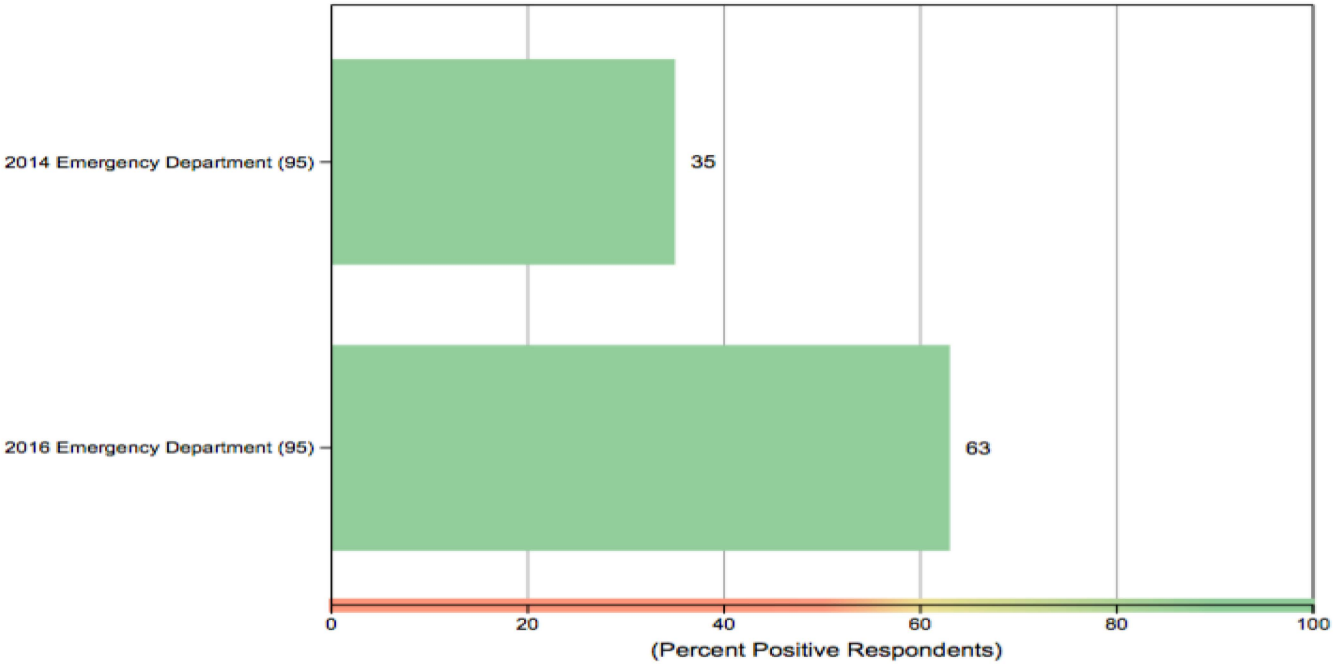
- Little trust

- Nothing gets fixed, don't have the tools



Percentage of positive responses.

In this work setting, local leadership provides meaningful feedback to people about their performance.



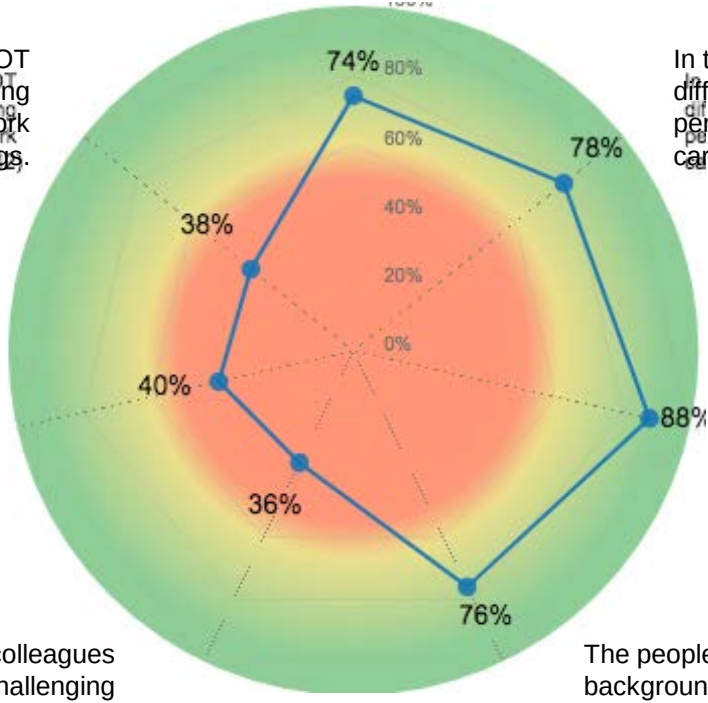
Source Data: June 2016

Teamwork Domain – All Items

Disagreements in this work setting are appropriately resolved (i.e., not who is right but what is best for the patient).

Communication breakdowns are NOT common when this work setting interacts with other work settings.

In this work setting, it is NOT difficult to speak up if I perceive a problem with patient care.



Communication breakdowns are NOT common in this work setting.

It is easy for personnel here to ask questions when there is something that they do not understand.

Dealing with difficult colleagues is NOT consistently a challenging part of my job.

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

Teams

What Teams Do:

	The associated behaviors:
Plan Forward	Brief (huddle, pause, timeout, check-in)
Reflect Back	Debrief
Communicate Clearly	Structured Communication SBAR and Repeat-Back
Manage Conflict	Critical Language

Teamwork Item

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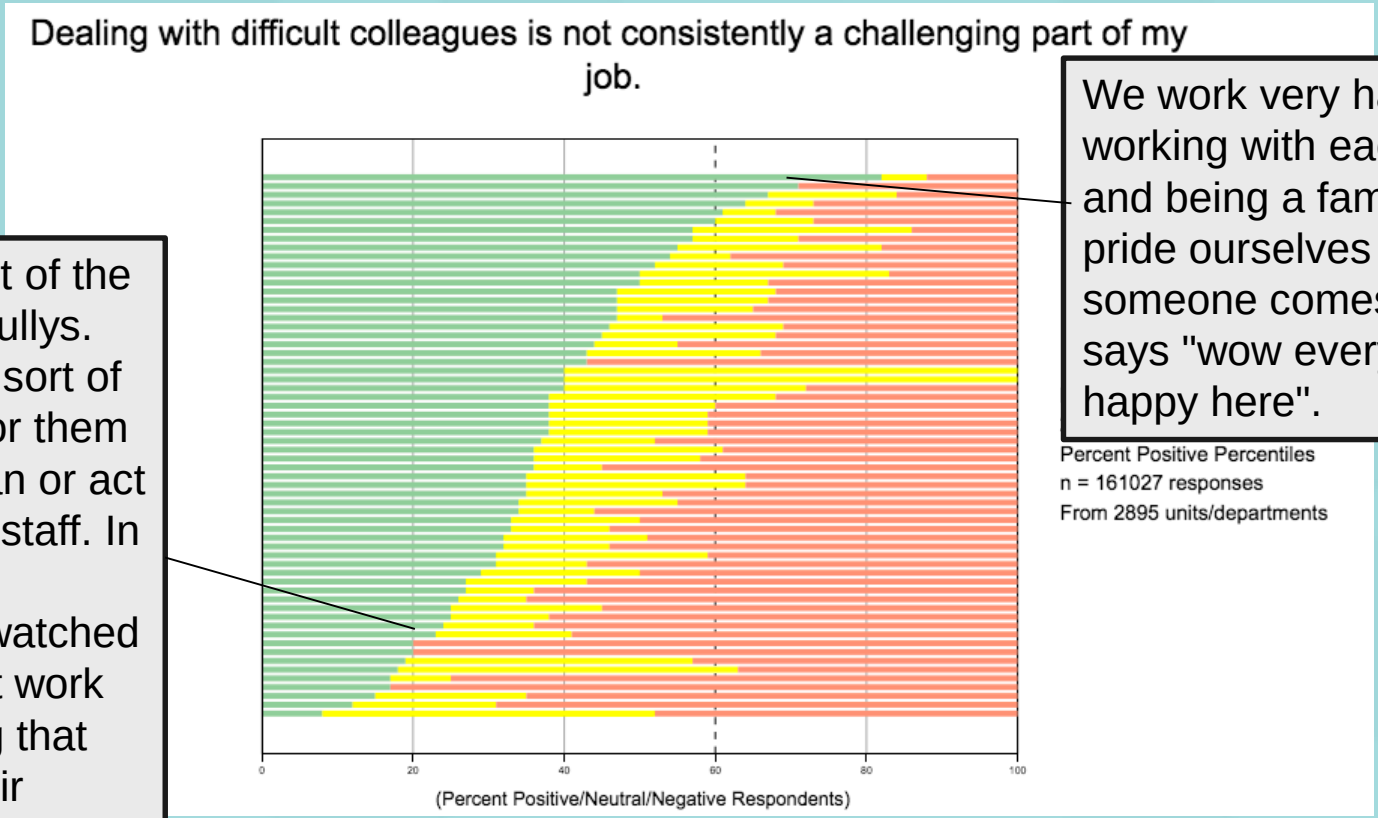


We work very hard on working with each other and being a family. We pride ourselves every time someone comes in and says "wow everyone is so happy here".

”A fair amount of the doctors are bullys. There are no sort of reprimands for them if they demean or act cruelly to the staff. In my 60 day orientation I watched a video about work place bullying that describes their actions perfectly.“

Psychological Safety

GENERATIVE
HRO - wired for safety and

PROACTIVE
Playing offense - anticipating,

SYSTEMATIC
Systems in place to manage hazards

REACTIVE
Playing defense – reacting to events

UNMINDFUL
No awareness of safety culture

Primary responsibility of leaders, continuously modeled everywhere.

Leaders model and expect the behaviors that promote psychological safety

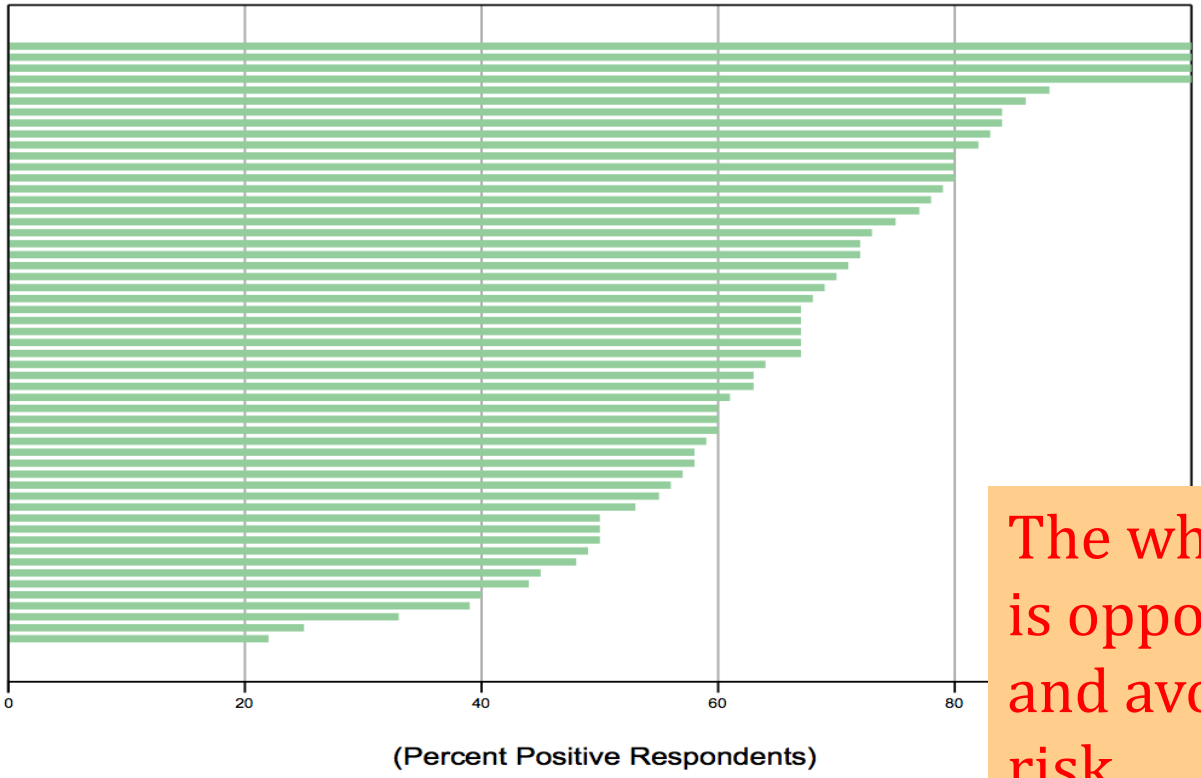
In some units it feels safe to speak up and voice a concern

Personality dependent – it depends who I'm working with

Fear based – keep your head down and stay out of trouble

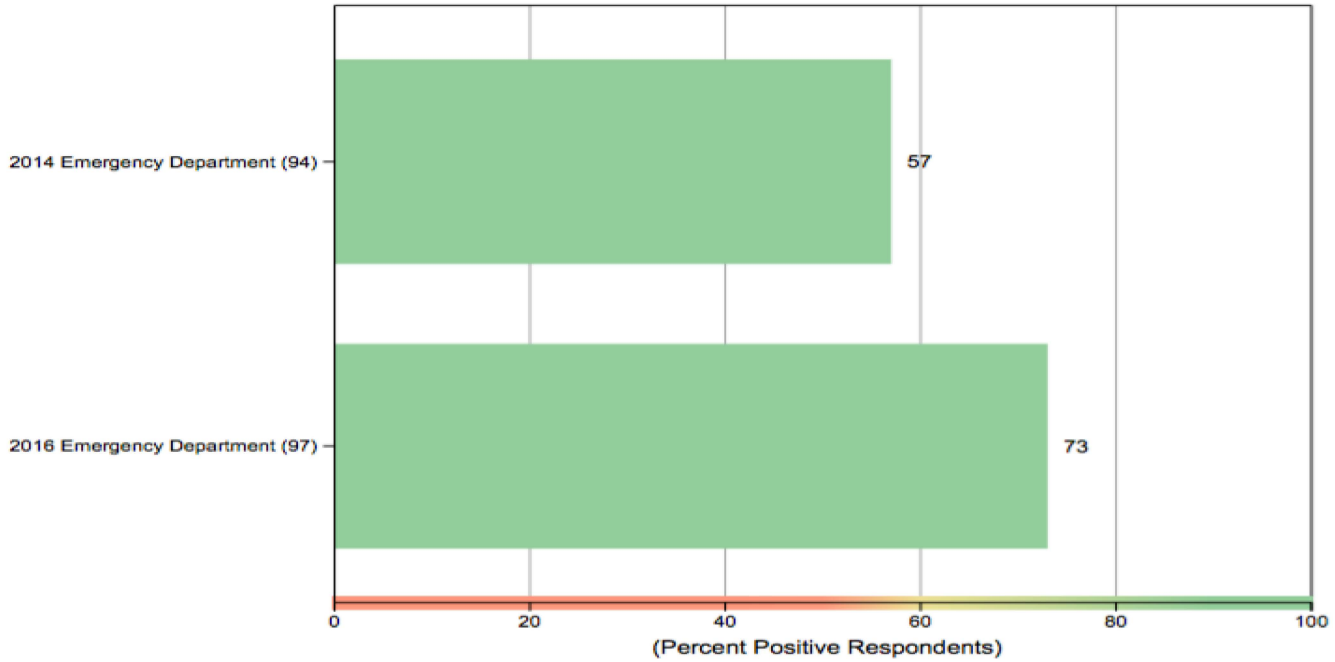
In this work setting, it is not difficult to speak up if I perceive a problem with patient care.

Hospital unit level data



The white space is opportunity and avoidable risk

In this work setting, it is not difficult to speak up if I perceive a problem with patient care.



Source Data: June 2016

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Psychological Safety

What are the things that make it hard to speak up here?

What are the 1-2 things we can do to make it better? Describe them in a way that they are actionable, visible and measureable.

Just Culture

GENERATIVE
Organization wired for safety and improvement

PROACTIVE
Playing offense - thinking ahead, anticipating, solving problems

SYSTEMATIC
Systems in place to manage hazards

REACTIVE
Playing defense – reacting to events

UNMINDFUL
No awareness of safety culture

Real events are shared by leaders, true culture of accountability and learning

Clear ways to differentiate individual v. system error, safe to discuss mistakes

Well understood algorithm, learning is the priority

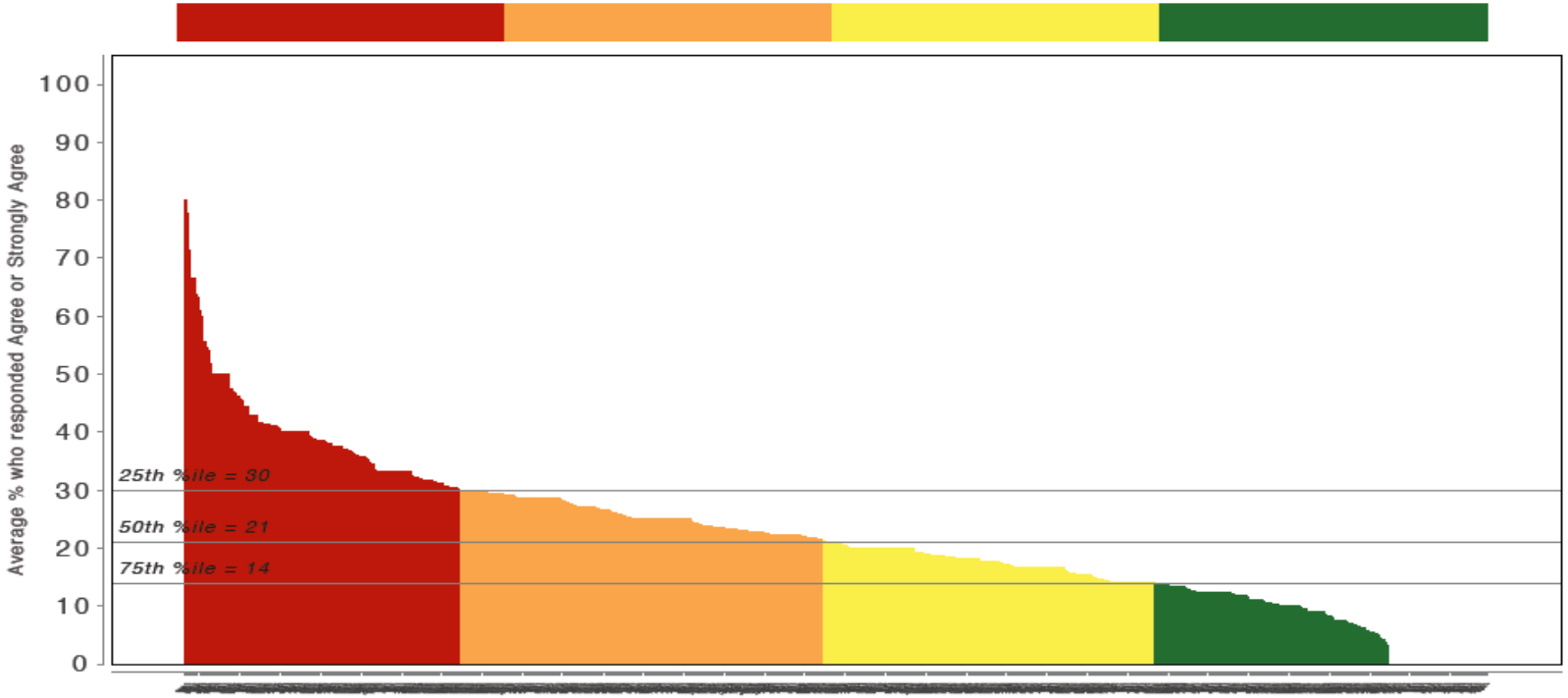
Depends who the boss is, blame and punishment are common

Nothing good will come from talking about mistakes

What Happens If You Make An Error?

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

Note: Use the multicolored bars to see how you fit with the benchmark archive. If you have less red and more green than the benchmark, you are more positive than the benchmark. If the colors all match up, you are about the same as the benchmark.



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Just Culture

Malicious

Impaired

Unintentional – Risky – Reckless

Substitution Test

History of Unsafe Acts

Just Culture Model

Organizational Fairness and Professionalism Worksheet

Reliably excellent patient centered care is dependent on healthcare departments that are effective learning systems; they routinely identify their defects and then eliminate or ameliorate them. Individuals bring to light defects only when they trust others and feel safe about voicing their insights and concerns. Professionalism and Just Culture create trust and psychological safety and are the essential foundation for all learning systems. The job of the Just Culture & Professionalism Committee is to safeguard Professionalism and Just Culture in order to protect and promote robust learning systems.

Event or Near Event

Step 1: Identify participants, and exclude those with impaired judgment or whose actions might be malicious. If impaired judgment refer to senior leaders and HR department. If malicious, refer to Risk and HR departments. If unprofessional behavior is a component in any way, perform **Professional Behavior Evaluation.**

Step 2: Assign initial level of intent:
Use best judgment to categorize each action as either Reckless, Risky or Unintentional. The categorization determines the general level of culpability and possible disciplinary actions, however these general categories must be modified using Steps 3 and 4 below.

RECKLESS ACTION	RISKY ACTION	UNINTENTIONAL
The caregiver knowingly violated a rule and/or made a dangerous or unsafe choice. The decision appears to be self serving and to have been made with little or no concern about risk.	*The caregiver made a potentially unsafe choice. Their evaluation of relative risk appears to be erroneous.*	*The caregiver made or participated in an error while working appropriately and in the patients' best interest.*

Step 3: Evaluate systems influences to modify level of intent by performing a Substitution Test: Ask 3 others with similar skills if they, in a similar situation, would behave or act similarly. If the answer is "No" the test is negative and the individual is likely accountable. If the answer is "Yes" the test is positive and system influence is likely substantial. Evaluators may ask about system factors such as schedules leading inevitably to fatigue, unrealistic expectations regarding memory, inability to effectively follow policies or procedures, an unsafe learning environment, or distractions or interruptions. If answers are divided, evaluators should assign accountability with a goal to ensure perceptions of fairness by others.

Step 4: Evaluate the individual for a history of unsafe acts: Evaluate whether the individual has a history of unsafe or problematic acts. If they do, this may influence decisions about the appropriate responsibilities for the individual i.e. they may be in the wrong job. Organizations should have a reasonable and agreed upon statute of limitations for taking these actions into account.

Step 5: Final evaluation:

RECKLESS: If the Substitution Test is positive, the system supports reckless behavior and system leaders are accountable. The caregiver's behavior is unsafe; they are accountable warranting discipline. A history of unsafe behavior may suggest the individual is in the wrong job.	**RISKY:** If the Substitution Test is positive, the system supports risky behavior and system leaders are accountable. The caregiver's behavior is unsafe; they are accountable and should receive coaching. A history of unsafe behavior may suggest the individual is in the wrong job.	If **UNINTENTIONAL**: Focus should be on correcting system issues and coaching on human factors. System leaders are accountable. A negative Substitution Test and a history of unsafe behavior suggests the individual may be in the wrong job.

Step 6: Promote learning and improvement

The caregiver should participate in teaching the lessons learned to others.	The caregiver should participate in teaching the lessons learned to others.	The caregiver should participate in investigating why the error occurred and teach others about the results of the investigation.

Professional Behavior Evaluation and Intervention

Receive Report of Concerning Behavior.

Step 1: Conduct confidential conversation with reporter regarding Focus Person (FP) behaviors. Categorize types of behaviors as well as frequency and severity. Conduct confidential interviews with others.
Behavior categories include: Demeaning/angry, hypercritical, uncollegial, shirking responsibilities, misconduct, sexual harassment, patient communication concerns, boundary issues, substance abuse, blaming, and otherwise acting in a manner that undermines trust and learning.

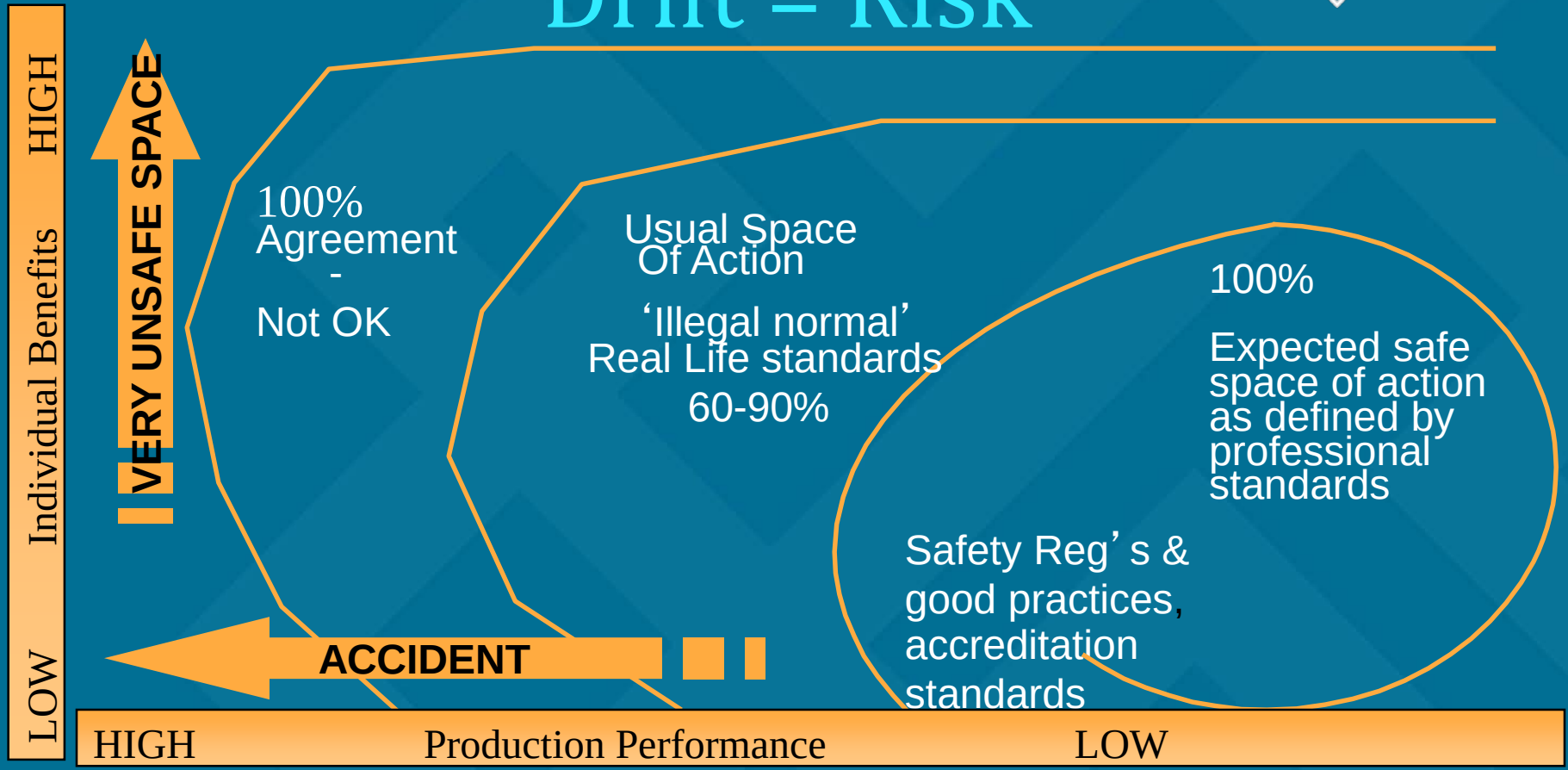
Step 2: Feedback Conversation Coaching: If the concern is deemed an isolated incident, the FP has not had any other issues, and the reporter feels safe to do so, provide coaching for the reporter on how to give the FP direct feedback regarding behaviors. If the situation is more complex, proceed to Step 3.
Step 3: Assessing Concerns: To validate the concerns and assess their frequency and severity, conduct multisource interviews to provide comprehensive insight into, and corroboration of, alleged behavior.
Step 4: Involve Supervisor: Share findings of assessment with FP's manager, department chair, division chief, or supervising physician. Discuss a plan for feedback intervention (Step 5) if deemed necessary.
Step 5: Feedback Intervention
Involved Supervisor and professionalism representative meet with FP to discuss/review:
- specific disruptive behaviors
- FP's perspective on factors (including systems) that may be contributing to the behavior
- resources for facilitating behavioral changes
- plans for monitoring behavior
- unacceptability of retaliation
- (if applicable) potential consequences for not adhering to behavioral expectations

A follow up email is sent to the FP summarizing the meeting.
Step 6: Monitoring and Support
- Inform those reporting concerns that an intervention has occurred.
- Inquire of them and others over time regarding subsequent behaviors.
- Have FP's supervisor address any systems issues discussed in Step 5.
- Keep process discrete and respectful to FP.

Step 7: Intervention to Address Subsequent Lapses
Develop a plan of action with institutional administration and legal counsel. Selected institutional administrators meet with FP to detail expected behavioral changes and consequences, including termination.

Final Step: Evaluate the individual for a history of unsafe acts: Evaluate whether the individual has a history of unsafe or problematic acts. If they do, this may influence decisions about the appropriate responsibilities for the individual i.e. they may be in the wrong job. Organizations should have a reasonable and agreed upon statute of limitations for taking these actions into account.

Drift = Risk



Attribution: Dr. Rene Amalberti

MAYO CLINIC

Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014

Tait D. Shanafelt, MD; Omar Hasan, MBBS, MPH; Lotte N. Dyrbye, MD, MHPE; Christine Sinsky, MD; Daniel Satele, MS; Jeff Sloan, PhD; and Colin P. West, MD, PhD

Abstract

Objective: To evaluate the prevalence of burnout and satisfaction with work-life balance in physicians and US workers in 2014 relative to 2011.

Patients and Methods: From August 28, 2014, to October 6, 2014, we surveyed both US physicians and a probability-based sample of the general US population using the methods and measures used in our 2011 study. Burnout was measured using validated metrics, and satisfaction with work-life balance was assessed using standard tools.

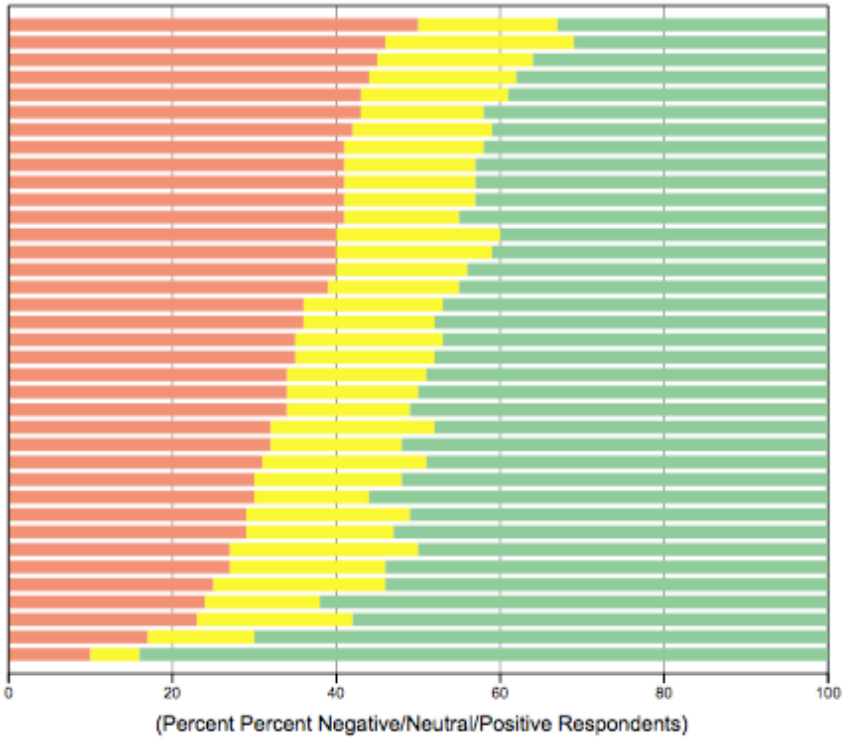
Results: Of the 35,922 physicians who received an invitation to participate, 6880 (19.2%) completed surveys. When assessed using the Maslach Burnout Inventory, 54.4% (n=3680) of the physicians reported at least 1 symptom of burnout in 2014 compared with 45.5% (n=3310) in 2011 ($P<.001$). Satisfaction with work-life balance also declined in physicians between 2011 and 2014 (48.5% vs 40.9%; $P<.001$). Substantial differences in rates of burnout and satisfaction with work-life balance were observed by specialty. In contrast to the trends in physicians, minimal changes in burnout or satisfaction with work-life balance were observed between 2011 and 2014 in probability-based samples of working US adults, resulting in an increasing disparity in burnout and satisfaction with work-life balance in physicians relative to the general US working population. After pooled multivariate analysis adjusting for age, sex, relationship status, and hours worked per week, physicians remained at an increased risk of burnout (odds ratio, 1.97; 95% CI, 1.80-2.16; $P<.001$) and were less likely to be satisfied with work-life balance (odds ratio, 0.68; 95% CI, 0.62-0.75; $P<.001$).

Conclusion: Burnout and satisfaction with work-life balance in US physicians worsened from 2011 to 2014. More than half of US physicians are now experiencing professional burnout.

 ■ Mayo Clin Proc. 2015;90(12):1600-1613

Burnout Item – SCORE Survey

People in this work setting are burned out from their work.



Note: Lower is better

25th: 55% 50th: 48% 75th: 40%
Percent Negative Percentiles
n = 162319 responses
From 106 hospitals/facilities

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Influencing Factors in Burnout / Resilience

- Do I feel valued by the organization?
- Do I have a voice?
- Do I feel supported in the work I do?
- Do I have the tools and resources to do my job?

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Professionalism

Do you have issues of unprofessional behavior in your facility?

Is there confidence that the behavior will be addressed and resolved when reported?

Is there one standard or set of rules that applies to everyone, regardless of job title?

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The Aim:

Hierarchy of *Responsibility*

No Hierarchy of *Respect*

Jo Shapiro MD, BWH

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“Behaviors that undermine a culture of safety”

- Verbal or physical threats
- Intimidation
- Reluctance/refusal to answer questions, refusal to answer pages or calls
- Impatience with questions
- Condescending language or intonation

Jo Shapiro MD, BWH

The Joint Commission Journal on Quality and Patient Safety

Safety Culture

Instituting a Culture of Professionalism: The Establishment of a Center for Professionalism and Peer Support

Jo Shapiro, MD, FACS; Anthony Whittemore, MD, FACS; Lawrence C. Tsen, MD

Leaders of medical institutions are responsible for creating environments in which physicians, scientists, and other health care professionals are able to sustain their deep capacity for high-quality, compassionate care. Creating such environments depends on supporting a culture of trust, which has been identified as the core of successful leadership.[1–3]

The mission statements of both academic and community-based medical centers and hospitals characteristically reflect high aspirations for excellence in patient care. Yet, despite significant resources directed toward improving the delivery of health care, the rate of preventable and iatrogenic patient injuries has not improved significantly.[4,5] Although a number of reasons have been cited for this lack of progress,[6,7] there is growing recognition that an environment in which professionalism

Article-at-a-Glance

Background: There is growing recognition that an environment in which professionalism is not embraced, or where expectations of acceptable behaviors are not clear and enforced, can result in medical errors, adverse events, and unsafe work conditions.

Methods: The Center for Professionalism and Peer Support (CPPS) was created in 2008 at Brigham and Women's Hospital (BWH), Boston, to educate the hospital community regarding professionalism and manage unprofessional behavior. CPPS includes the professionalism initiative, a disclosure and apology process, peer and defendant support programs, and wellness programs. Leadership support, establishing be-

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Learning Systems

Build organizational trust through identifying and resolving defects

Make learning visible – feedback is key

This requires ownership and infrastructure

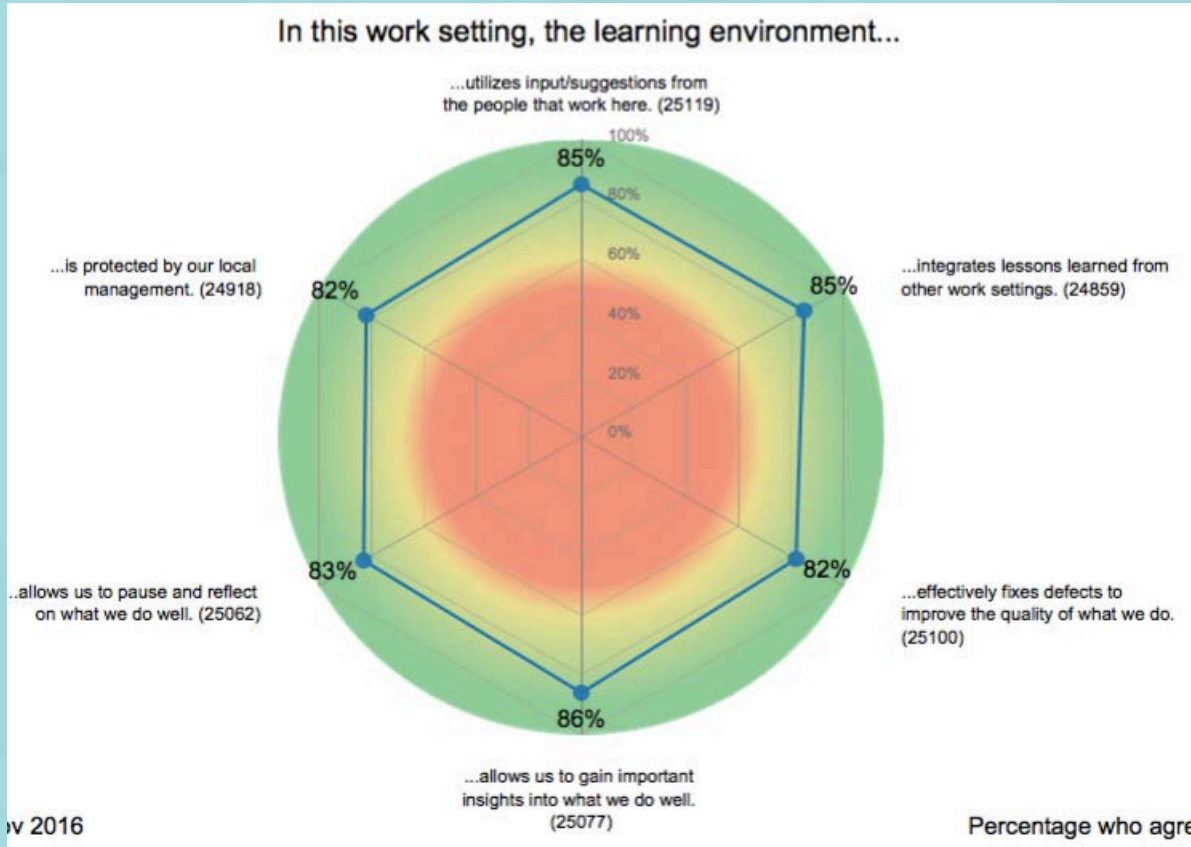
Always move toward higher order problem solving

Learning Environment

Is input well received?

Can we integrate best practices from other units?

Can we identify and fix defects?



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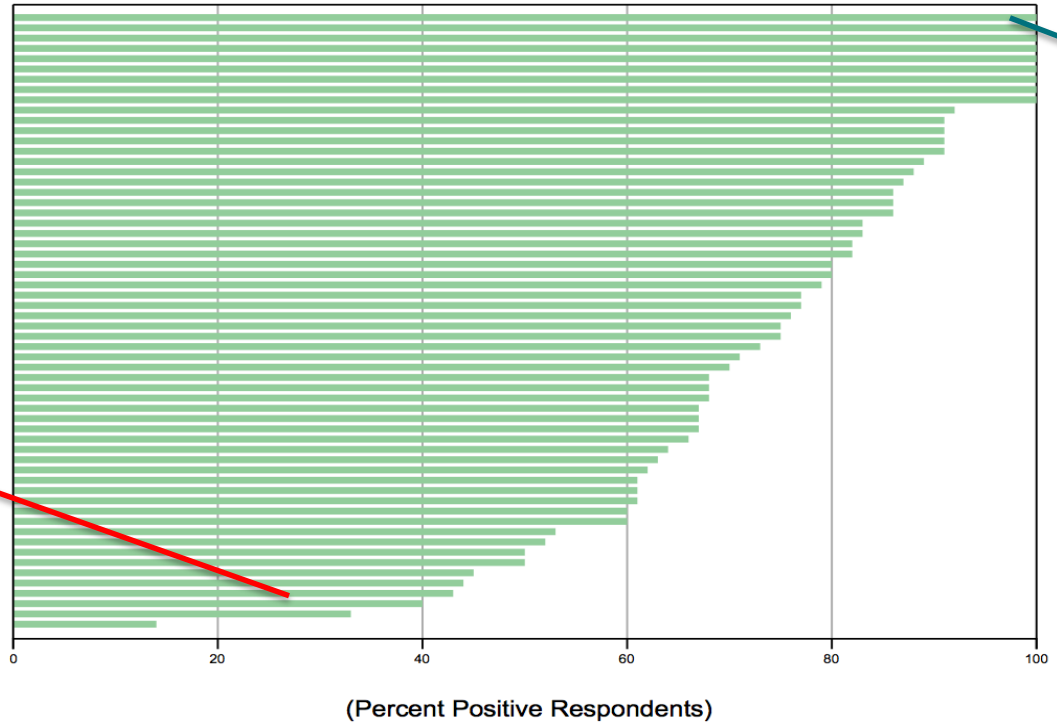
In this work setting, the learning environment effectively fixes defects to improve the quality of what we do.



"When we surface a problem, it is addressed and resolved. We're able to fix lots of things"

"In my 22 years here, I don't think they have ever acted on an issue we brought forth"

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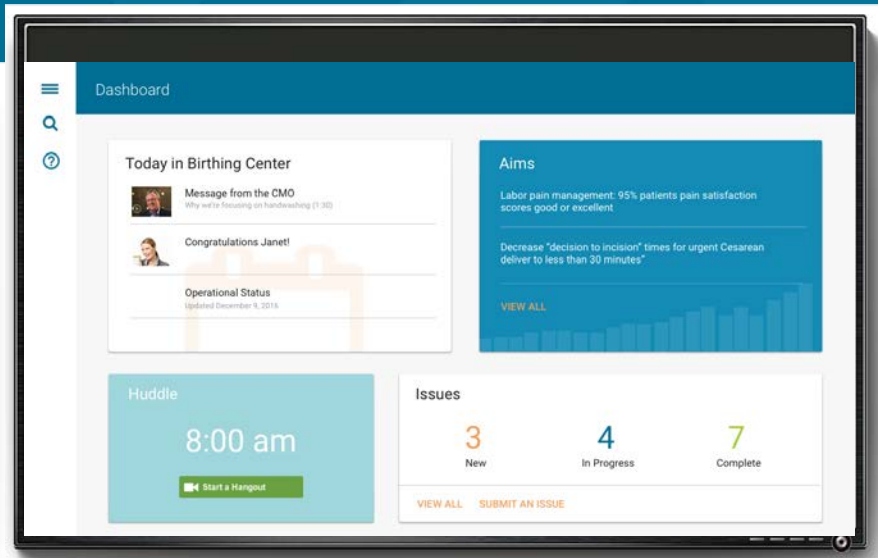
Learning boards capture ideas and issues from everyone



ANALOG: proven results

DIGITAL: available everywhere on any device.

ICU Percent of Patients Receiving all Four Aspects Of Ventilator Bundle

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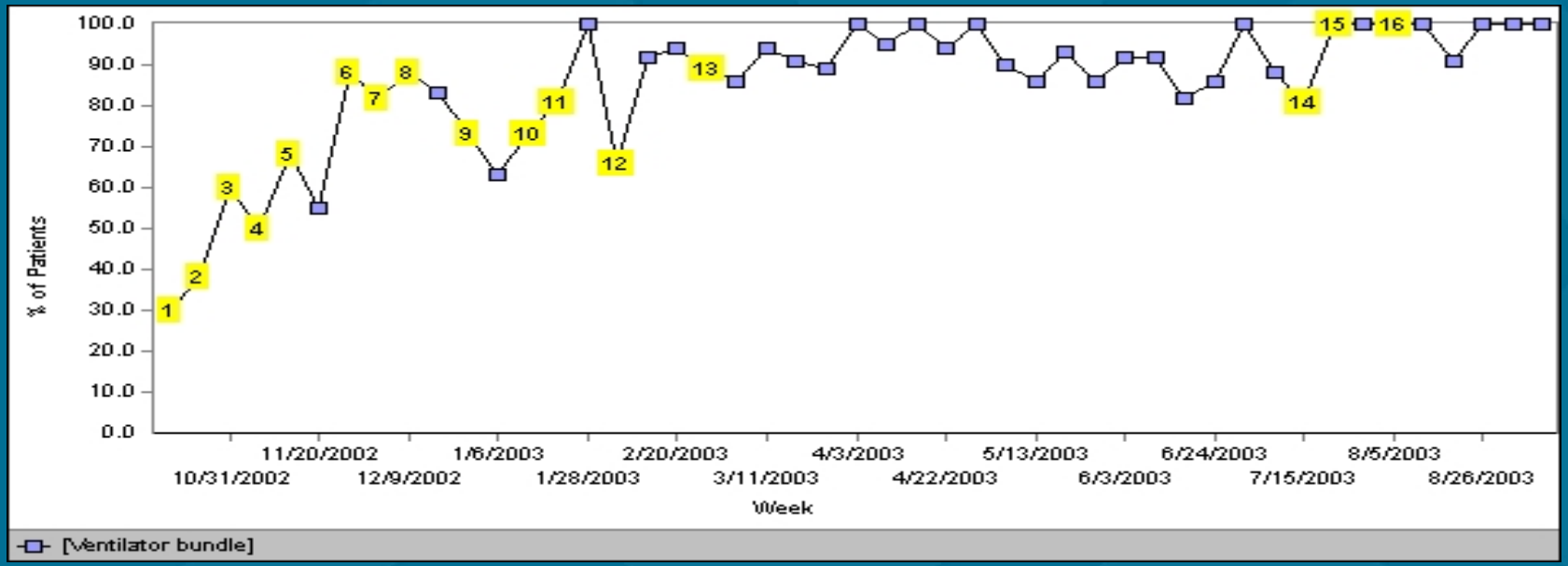
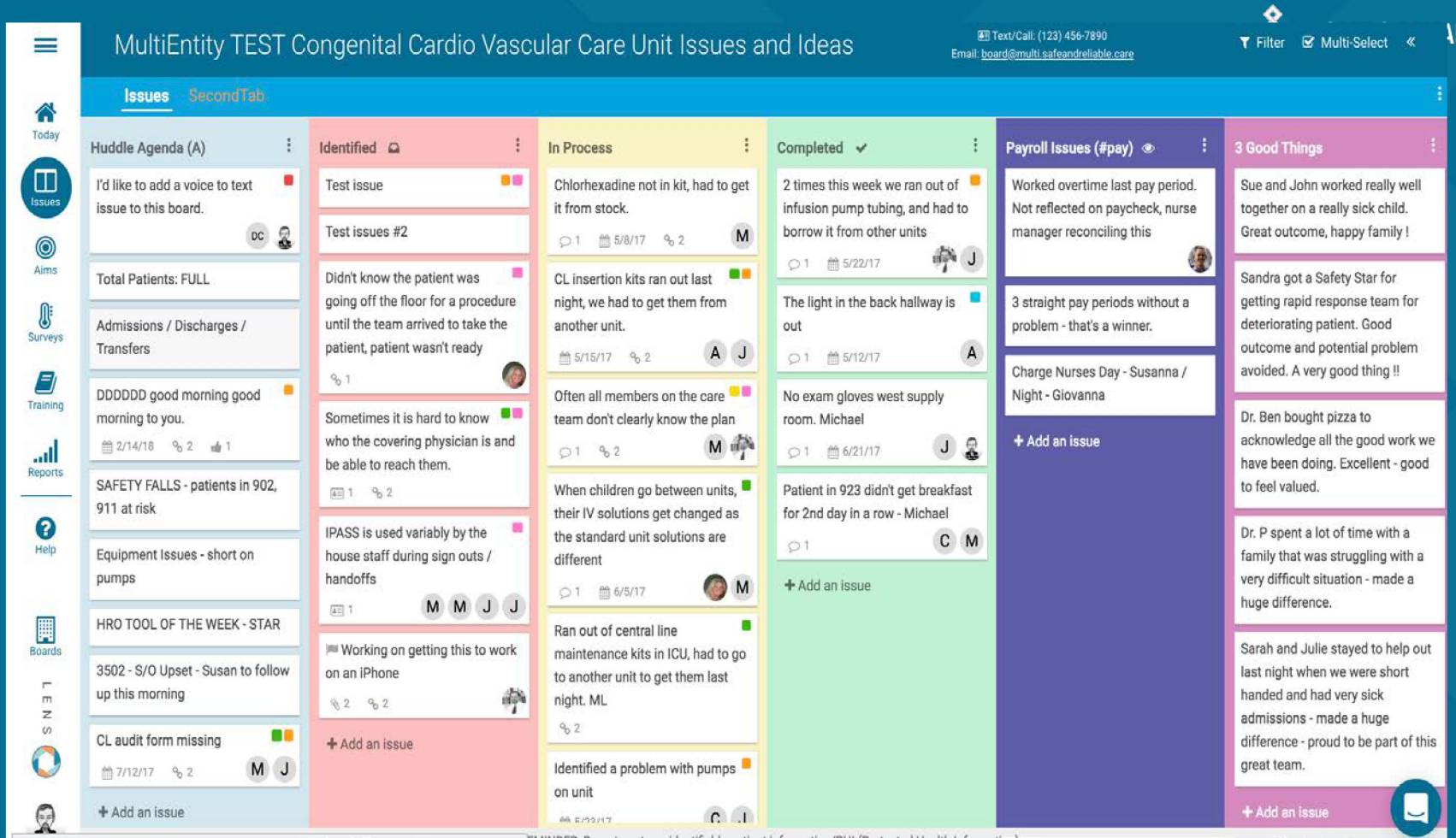


Annotations

1. Marked beds at 30 degree angle
2: Fact Sheet for staff education
3: Poster with weekly data feedback
4: Vent bundle posted in all vent patient rooms
5: Began initial trials of Daily goal sheet and pre extubation sheet
6: Initiated Powerpoint education for RT/RN
7: Initiated Clinical Pharm rounds
8: 1st test of multidisciplinary rounds
9: Expanded use of Pre extubation sheet
10: Staff education on Goal sheet; mini inservices on unit on SBT and Pre extubation sheet
11: Incorporated Goal Sheet into Multidisciplinary Rounds
12: Impact Extravaganza (staff/MD education)
13: Expanded multidisciplinary rounds to include additional disciplines
14: Check compliance on night shift past 2 weeks
15: New sign at HOB,
16: One on one follow up by Nursing & RT managers on collaboratiion in weaning process


MultiEntity TEST Congenital Cardio Vascular Care Unit Issues and Ideas
Text/Call: (123) 456-7890
Email: board@multi.safeandreliable.care
Filter
Multi-Select
Issues
SecondTab
Today
Issues
Aims
Surveys
Training
Reports
Help
Boards
Huddle Agenda (A)
I'd like to add a voice to text issue to this board.
Total Patients: FULL
Admissions / Discharges / Transfers
DDDDDD good morning good morning to you.
2/14/18
SAFETY FALLS - patients in 902, 911 at risk
Equipment Issues - short on pumps
HRO TOOL OF THE WEEK - STAR
3502 - S/O Upset - Susan to follow up this morning
CL audit form missing
7/12/17
Add an issue
Identified
Test issue
Test issues #2
Didn't know the patient was going off the floor for a procedure until the team arrived to take the patient, patient wasn't ready
Sometimes it is hard to know who the covering physician is and be able to reach them.
IPASS is used variably by the house staff during sign outs / handoffs
Working on getting this to work on an iPhone
Add an issue
In Process
Chlorhexadine not in kit, had to get it from stock.
5/8/17
CL insertion kits ran out last night, we had to get them from another unit.
5/15/17
Often all members on the care team don't clearly know the plan
When children go between units, their IV solutions get changed as the standard unit solutions are different
6/5/17
Ran out of central line maintenance kits in ICU, had to go to another unit to get them last night. ML
Identified a problem with pumps on unit
Completed
2 times this week we ran out of infusion pump tubing, and had to borrow it from other units
5/22/17
The light in the back hallway is out
5/12/17
No exam gloves west supply room. Michael
6/21/17
Patient in 923 didn't get breakfast for 2nd day in a row - Michael
Add an issue
Payroll Issues (#pay)
Worked overtime last pay period. Not reflected on paycheck, nurse manager reconciling this
3 straight pay periods without a problem - that's a winner.
Charge Nurses Day - Susanna / Night - Giovanna
Add an issue
3 Good Things
Sue and John worked really well together on a really sick child. Great outcome, happy family !
Sandra got a Safety Star for getting rapid response team for deteriorating patient. Good outcome and potential problem avoided. A very good thing !!
Dr. Ben bought pizza to acknowledge all the good work we have been doing. Excellent - good to feel valued.
Dr. P spent a lot of time with a family that was struggling with a very difficult situation - made a huge difference.
Sarah and Julie stayed to help out last night when we were short handed and had very sick admissions - made a huge difference - proud to be part of this great team.
Add an issue

Connecting on key topics, during and between huddles

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Putting it all together

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- Effective Leadership – present, learning, providing feedback, building trust
- Culture – clearly defined behaviors that support teamwork, collaboration and patient centered care
- Learning systems – units that plan forward/ reflect back, capture issues and defects for resolutions, and have clear aims to improve - cultural, operational, clinical

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Thank You

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