

Trauma Informed Systems for Healthcare Retention

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Financial Disclosures

- None

Disclaimer

- I am not an expert
- What I am:
 - A clinician- focus on middle-down and middle-up strategies
 - A patient advocate
 - A colleague, a leader
 - A worker who experienced burnout, secondary traumatic stress, questioned my own retention
 - A believer in the power of quality care and change making in the system

Objectives

- Discuss the state of the healthcare workforce
- Discuss factors that impact workforce retention
- Define and explore Trauma Informed Systems
- Discuss and brainstorm implementable Trauma Informed Systems interventions



The 'Great Resignation' Is Taking a Toll on U.S. Health Care

One in 4 Americans have noticed or personally experienced the impact of staffing shortages in health care, polling shows.

Dec. 1, 2022, at 7:51 a.m.

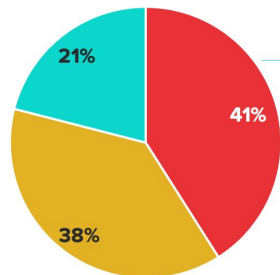


The Association of American Medical Colleges (AAMC) projected in 2020 that physician demand will continue to grow faster than supply, leading to a shortage of between 54,100 and 139,000 physicians by 2033, with the most alarming gaps in primary care and rural communities.⁴⁴

About 4 in 5 Health Care Workers Say They've Been Affected by Shortage of Medical Professionals

Health care workers were asked whether the national shortage of medical workers had affected them and their place of work

■ Major impact ■ Minor impact ■ No impact



Those who said the shortage has had an impact were asked to describe it

"Our emergency rooms are at or over capacity all the time and we are getting more complaints"

"Have to work more hours as others have quit because of vaccine mandates and not making enough money"

"An almost insurmountable workload that has caused the remaining individuals to become completely burnt out"

MORNING CONSULT

Poll conducted Sept. 2-8, 2021, among 1,000 U.S. health care workers, with a margin of error of +/-3%. Figures may not add up to 100% due to rounding.

HEALTH

Nearly a third of nurses nationwide say they are likely to leave the profession

May 2, 2023 · 5:00 AM ET

By Jaclyn Diaz



Miriala Gonzalez, a registered nurse in Miami, carries a monkeypox vaccine. A new survey highlights major concerns from nurses nationwide regarding future staffing levels in hospitals.

Joe Raedle/Getty Images

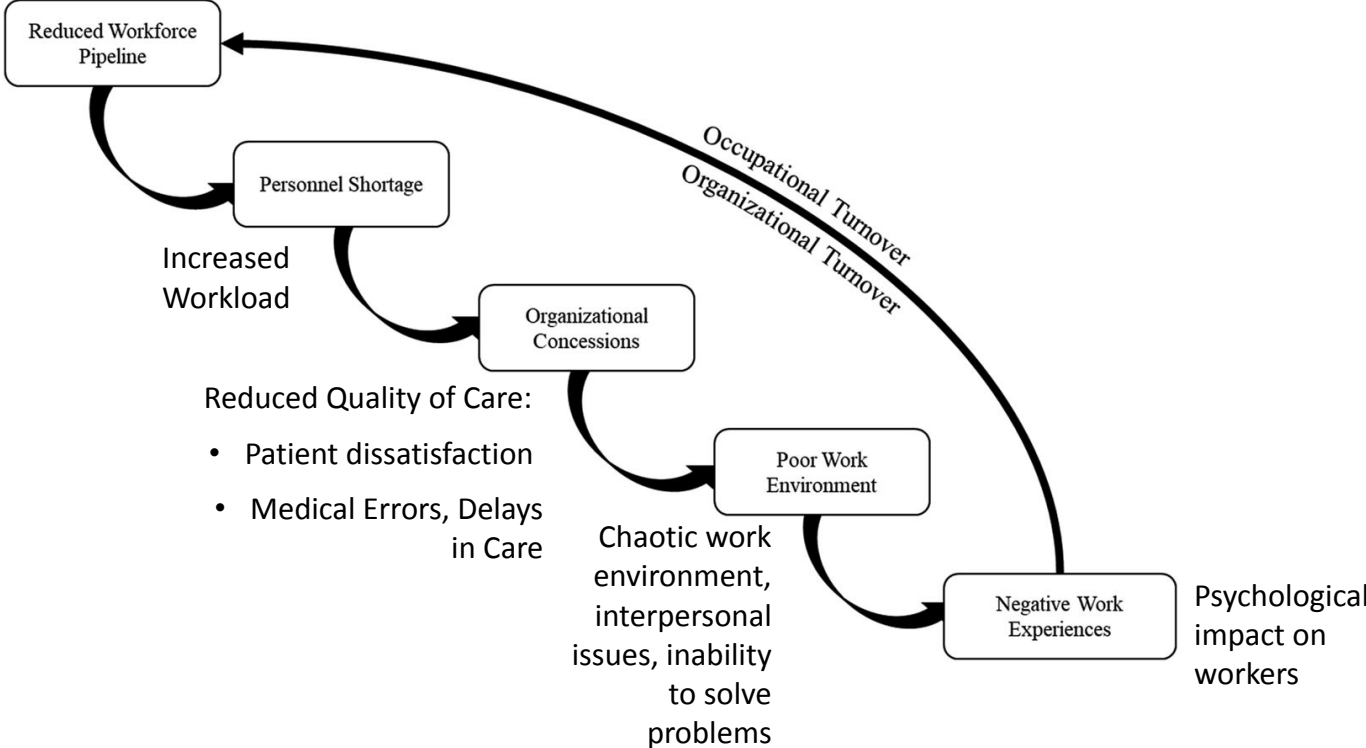
Close to a third of nurses nationwide say they are likely to leave the profession for another career due to the COVID-19 pandemic, a new survey from AMN Healthcare shows.

Worse retention in underserved communities

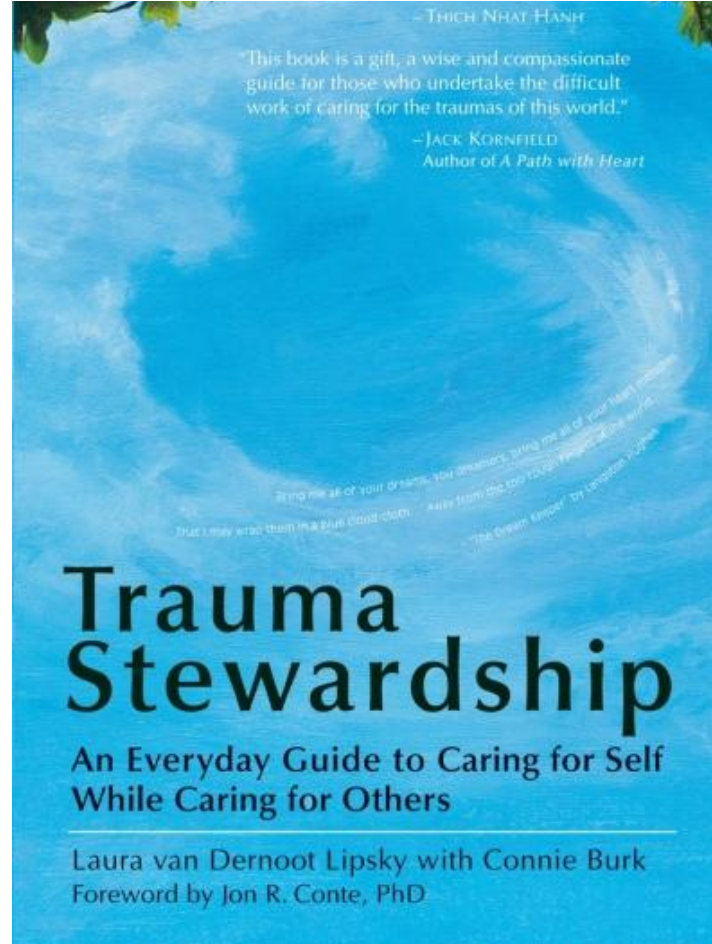
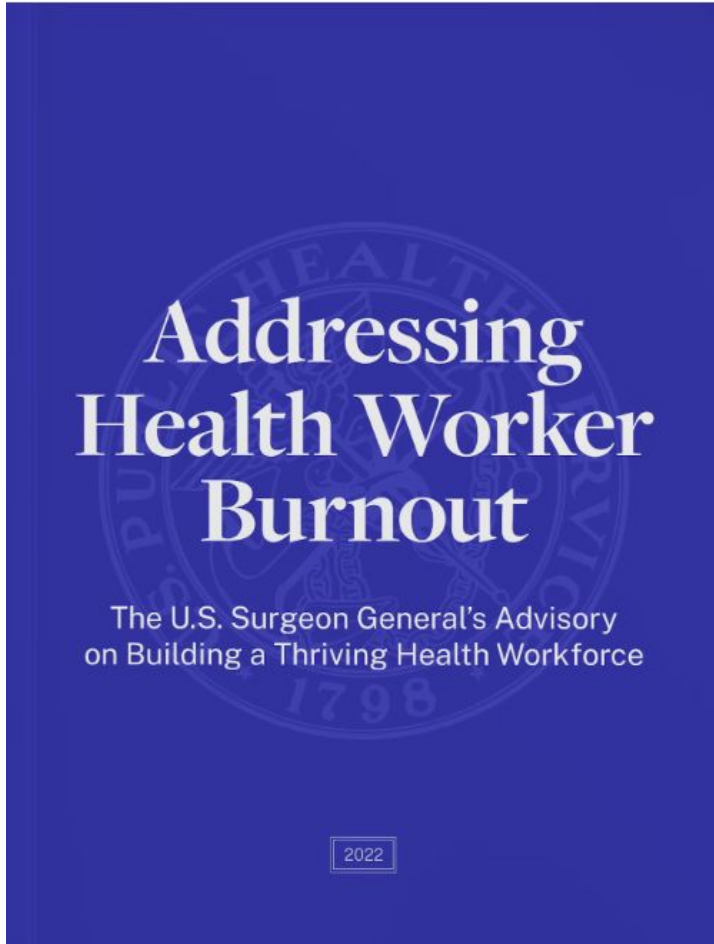
National Association of Community Health Centers: Current State of the Health Center Workforce (2022)

- 68% of health centers report losing 5-25% of their workforce in the last 6 months, while 15% of health centers report losing 25-50%.
 - Largely consistent between rural and urban centers, and small and large centers
- Nurses represent the highest ranked category of workforce loss, followed by administrative staff, behavioral health staff, and dental staff
- Competition from other employers and pandemic stress are the most common reasons for staff departure.

Reinforcing Cycle



Main Resources



- SAMHSA Trauma Informed Care
- SF Dept of Public Health Trauma Informed Systems
- Trauma Stewardship by Laura van Dernoot Lipinsky (2018)
- US Surgeon General: Addressing Health Worker Burnout

What is trauma?

- SAMHSA's Definition:
 - “Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as **physically** or **emotionally harmful** or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being.”
- Can this apply to the healthcare worker experience?

Psychological Phenomenon in Healthcare

- Trauma Exposure Response, Vicarious Trauma, Secondary Traumatic Stress
- Burnout, Compassion Fatigue
- Moral Distress, Moral Injury
- Secondary Victim Syndrome



Secondary Traumatic Stress

- Or vicarious trauma? Trauma Exposure Response? What's the difference?
- Vicarious trauma: The “emotional residue” from exposure to traumatic stories and others' experience of suffering
- Secondary traumatic stress: PTSD-like symptom presentation after incidences of vicarious trauma
- Can threaten our perceptions of the world
 - Are there good things in the world?
 - Is there an order or meaning to how things work?
 - Do we all just experience suffering all the time?

Compassion Fatigue



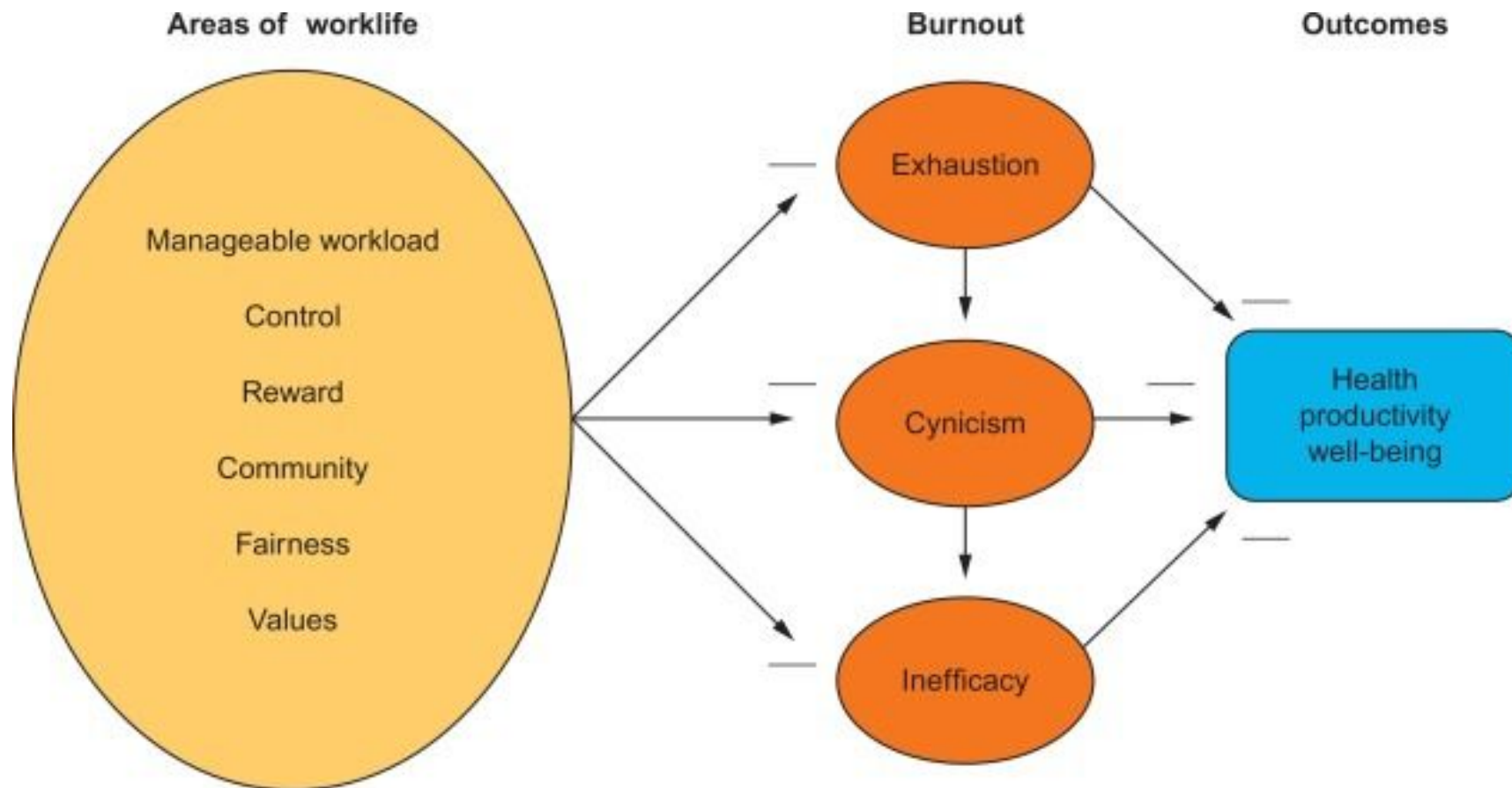
- “Running out” of compassion
- Feel frustrated, angry, resentful to others including coworkers, family and friends, and patients
- Can lead to negative interactions with patients, an inability to address implicit bias which may unintentionally stigmatize or traumatize a patient
 - “Why doesn’t she just ...”
 - “I don’t know what she’s talking about, the injection doesn’t hurt that bad.”
 - “How can he think it’s okay?”
 - “He’s not even trying.”



Moral Distress vs Moral Injury

- Moral distress: can be caused by experiencing or witnessing higher levels of suffering (even if we might “expect it” in a healthcare role)
 - In community health and low resourced settings, this can be beyond healthcare suffering: can include engaging with homeless individuals, victims of trauma, those who are uninsured
 - Can be mitigated with training, preparation, and post-event intervention
 - Moral injury: when someone engages in or fails to act in situations that go against their values or moral compass
 - Can happen in healthcare in general
 - Worsened during the pandemic: Staffing issues, PPE and equipment shortages, limitations of visitors, triaging patients and care
 - Can result in symptoms of guilt, shame, PTSD-like symptoms
 - If feelings of betrayal in the organization/system, can feel anger, resentment, and diminished confidence in the organization
-

Burnout





Health worker burnout can have many negative consequences



“I can’t provide the best care to my patients...”

“I can’t get the care I need...”



Health Workers

- Insomnia, heart disease, and diabetes
- Isolation, substance use, anxiety, and depression
 - Relationship and interpersonal challenges
- Exhaustion from overwhelming care and empathy

Patients

- Less time with health workers
- Delays in care and diagnosis
 - Lower quality of care
 - Medical errors

Health Care System

- Health workforce shortages and retention challenges
 - Limited services available
- Risk of malpractice and decreased patient satisfaction
 - Increased costs

Community and Society

- Erosion of trust
- Worsening population health outcomes
 - Increased health disparities
- Lack of preparedness for public health crises

Factors associated with burnout among health workers



Societal and Cultural

- Politicization of science and public health
- Structural racism and health inequities
- Health misinformation
- Mental health stigma
- Unrealistic expectations of health workers

Health Care System

- Limitations from national and state regulation
- Misaligned reimbursement policies
- Burdensome administrative paperwork
- Poor care coordination
- Lack of human-centered technology

Organizational

- Lack of leadership support
- Disconnect between values and key decisions
- Excessive workload and work hours
- Biased and discriminatory structures and practices
- Barriers to mental health and substance use care

Workplace and Learning Environment

- Limited flexibility, autonomy, and voice
- Lack of culture of collaboration and vulnerability
- Limited time with patients and colleagues
- Absence of focus on health worker well-being
- Harassment, violence, and discrimination

“This is beyond my control...”



Assessing factors of your burnout

Figure 1. Burnout Mismatches According to Maslach⁷



FIGURE 2

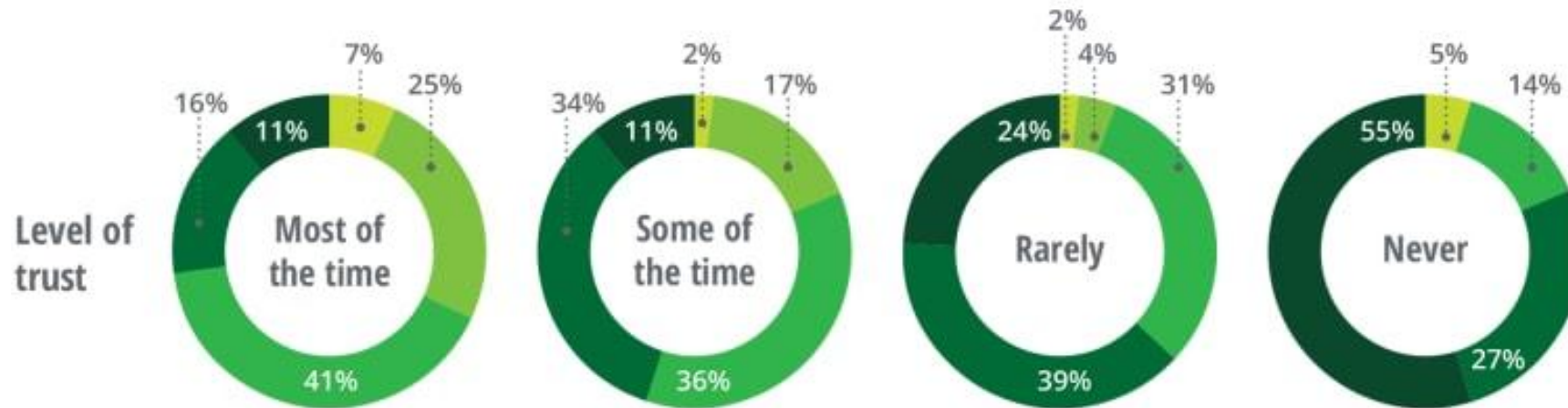
Clinician burnout rate is highest among those who have lost trust in their organization's leadership

Survey question:

Do you trust your organization's executive leadership to do what's right for the workers?

The burnout I experience today is ...

■ No burnout ■ Minimal ■ Modest ■ High ■ Very high

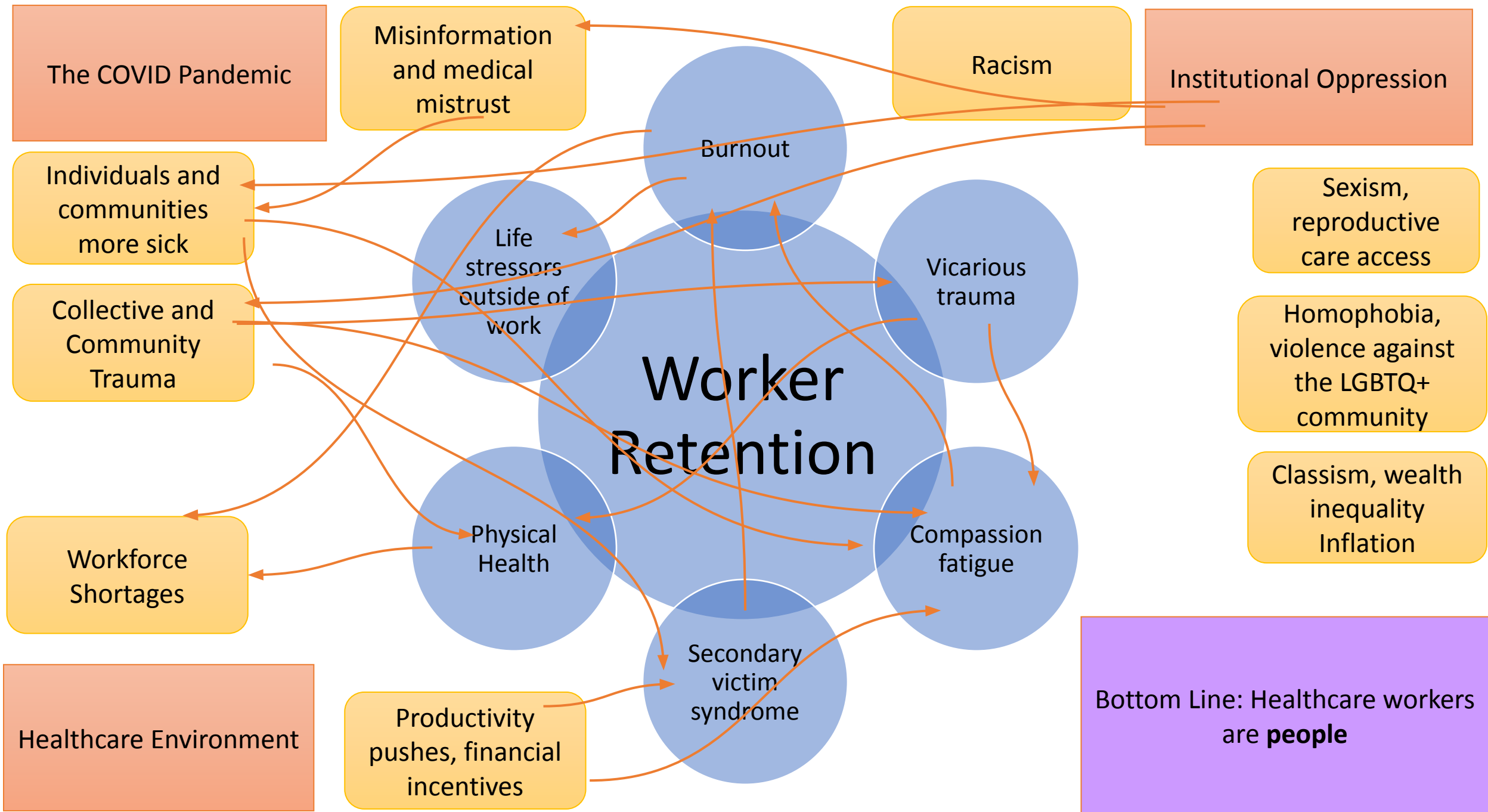


Note: N = 486 (clinicians currently in clinical practice).
Source: Deloitte 2022 Survey of US Frontline Clinicians.

Second Victim Syndrome

- What happens when we make an error-medical error, avoidable delay in necessary care
- This can cause similar feelings to moral distress and injury particularly if it is not addressed in an appropriate manner
- HIGH RISK in understaffed, high patient complexity environments





Who does this impact? Everyone in the system

- Providers, nurse, mental health clinicians may have received training in how to manage and cope with the stress of contact with suffering
- Those in other staff roles such as care techs, receptionists, environmental services, administrative staff and many others likely did not have specific training in this and may be at risk for worsened mental health outcomes
- This is compounded by less benefits, lower wages, less access to supportive resources like mental healthcare



"Nobody is insignificant. Without environmental service, without dietary, without secretaries, without medical and surgical techs and certified nursing assistants (CNAs), it wouldn't be a hospital."

Tony Powell
Hospital administrative coordinator



"One minute you are important enough. The next minute it is like, you aren't that important to get the proper equipment, but you are important enough to clean for the next patient."

Andrea
ICU housekeeper



"When I was in the Navy, when we went to war, I was getting paid hazardous duty pay. To me, it is a hazardous job right now. We should be getting paid hazardous pay."

David Saucedo
Nursing home cook



"Sometimes I listen to commercials and I see how they clap when the doctors and nurses come out. Don't get me wrong, I appreciate them 100 percent. But I never hear anything thanking the home health aides. It's the doctors, the nurses. Yes, they are in the hospitals, but what about the people out here trying to prevent these people from going into the hospital?"

Yvette Beatty
Home health aide



Trauma Informed Approach

“A program, organization or system that is trauma-informed **realizes** the widespread impact of trauma and understand potential paths for recovery; **recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and **responds** by fully integrating knowledge about trauma into policies, procedures, practices, and seeks to actively **resist re-traumatization.**”

Six Principles:

- Safety
 - Trustworthiness and Transparency
 - Peer Support
 - Collaboration and Mutuality
 - Empowerment, Voice, and Choice
 - Cultural, Historical, and Gender Issues
-

What is Trauma Informed Systems?

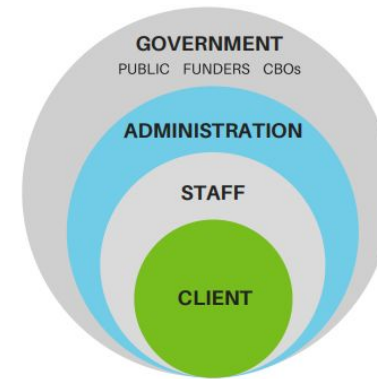
- *“Trauma Informed Systems principles and practices support reflection in place of reaction, curiosity in lieu of numbing, self-care instead of self-sacrifice and collective impact rather than silo-ed structures.”*

-Epstein, K | Speziale, K | Gerber, E | Loomis, B (2014)



TRAUMA-ORGANIZED

- Reactive
- Reliving/Retelling
- Avoiding/Numbing
- Fragmented
- Us Vs. Them
- Inequity
- Authoritarian Leadership



TRAUMA-INFORMED

- Understanding of the Nature and Impact of Trauma and Recovery
- Shared Language
- Recognizing Socio-Cultural Trauma and Structural Oppression



HEALING ORGANIZATION

- Reflective
- Making Meaning Out of the Past
- Growth and Prevention-Oriented
- Collaborative
- Equity and Accountability
- Relational Leadership

TRAUMA INDUCING

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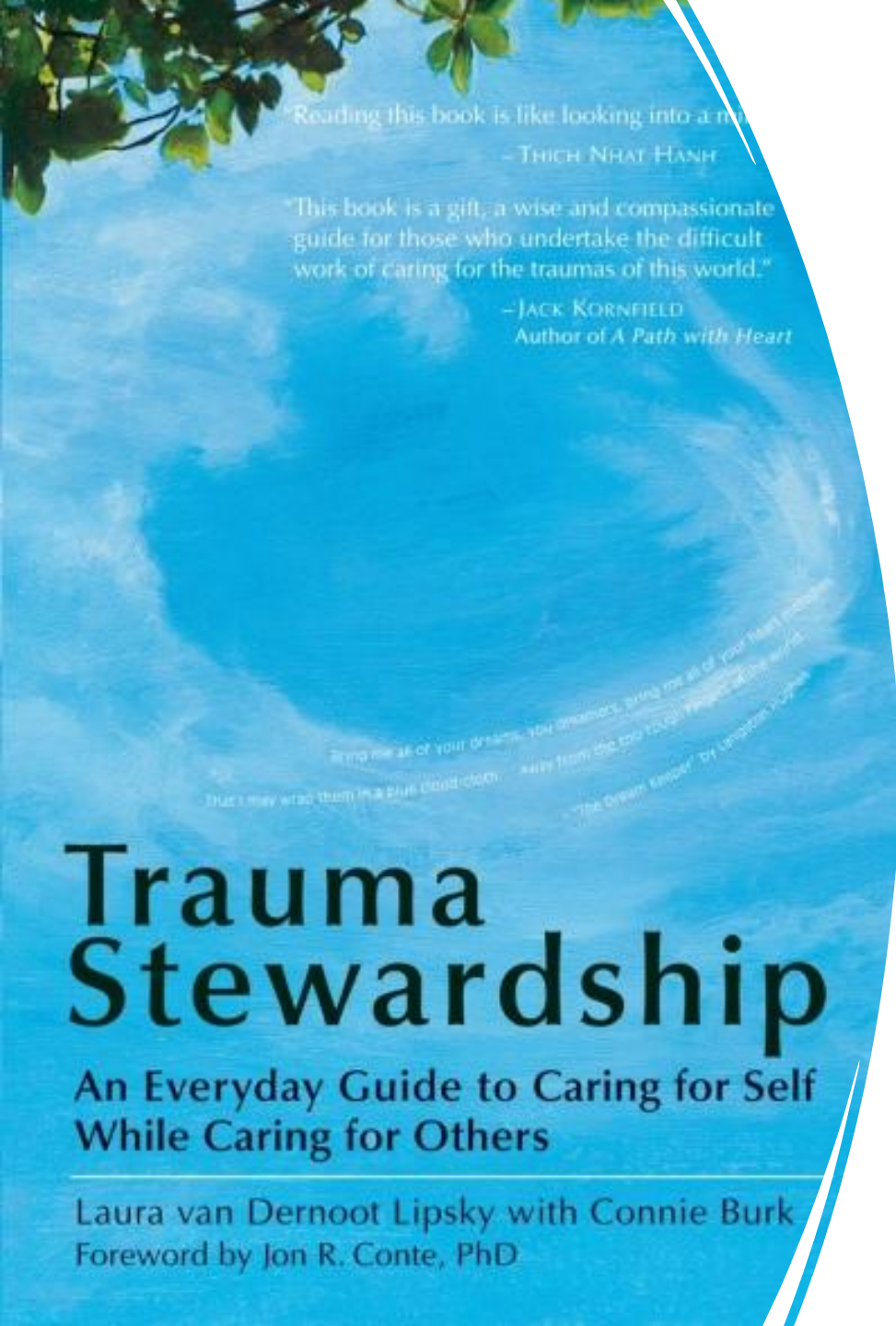
TRAUMA REDUCING



Trauma Informed *Systems vs Care*

Exhibit 1. Key Ingredients for Creating a Trauma-Informed Approach to Care

Organizational	Clinical
<ul style="list-style-type: none">▪ Leading and communicating about the transformation process▪ Engaging patients in organizational planning▪ Training clinical as well as non-clinical staff members▪ Creating a safe environment▪ Preventing secondary traumatic stress in staff▪ Hiring a trauma-informed workforce	<ul style="list-style-type: none">▪ Involving patients in the treatment process▪ Screening for trauma▪ Training staff in trauma-specific treatment approaches▪ Engaging referral sources and partnering organizations



"Reading this book is like looking into a mirror."

— THICH NHAT HANH

"This book is a gift, a wise and compassionate guide for those who undertake the difficult work of caring for the traumas of this world."

— JACK KORNFIELD
Author of *A Path with Heart*

Trauma Stewardship

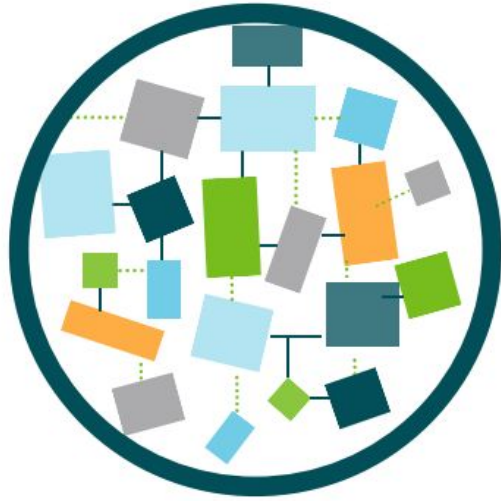
An Everyday Guide to Caring for Self While Caring for Others

Laura van Dernoot Lipsky with Connie Burk
Foreword by Jon R. Conte, PhD

Contextualizing our organizations: Trauma Stewardship

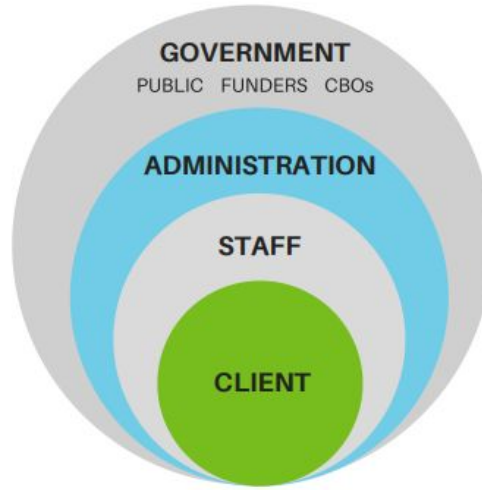
Trauma Stewardship

- "A daily practice through which individuals, organizations, and society's tend to the hardship, pain, or trauma experienced by humans, other living beings, or our planet itself.
- By developing the deep sense of awareness needed to care for ourselves while caring for others and the world around us, we can greatly enhance our potential to work for change, **ethically and with integrity**, or generations to come."
- **Three levels of Trauma Stewardship**
 - Personal Dynamics: personal history can help or hurt. How we interact with others can improve or worsen trauma history
 - Empathy, consistency
 - Organizational Tendencies: "reflection of collective capacity," can mitigate or exacerbate impact of trauma exposure on workers
 - Societal Forces: the context in which trauma occurs- oppression, community,



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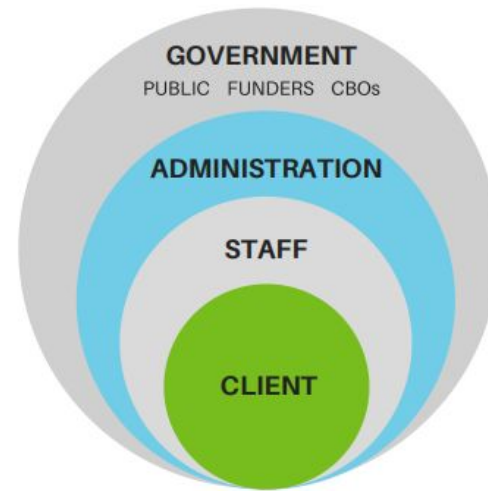
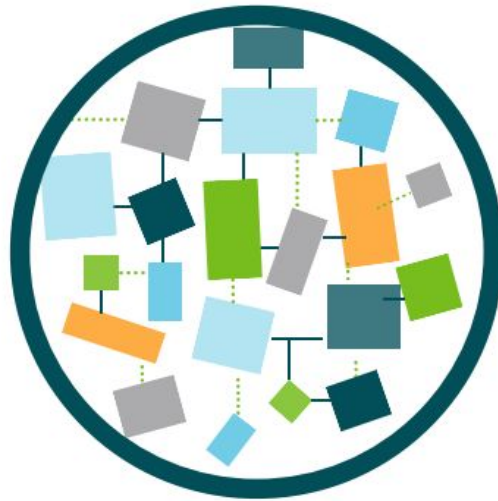
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Exercise: What does your organization do?

- Think about the standing policies, upcoming policies, or vision plans at your organization. Do any of these already fit into Trauma Informed Systems Approach?



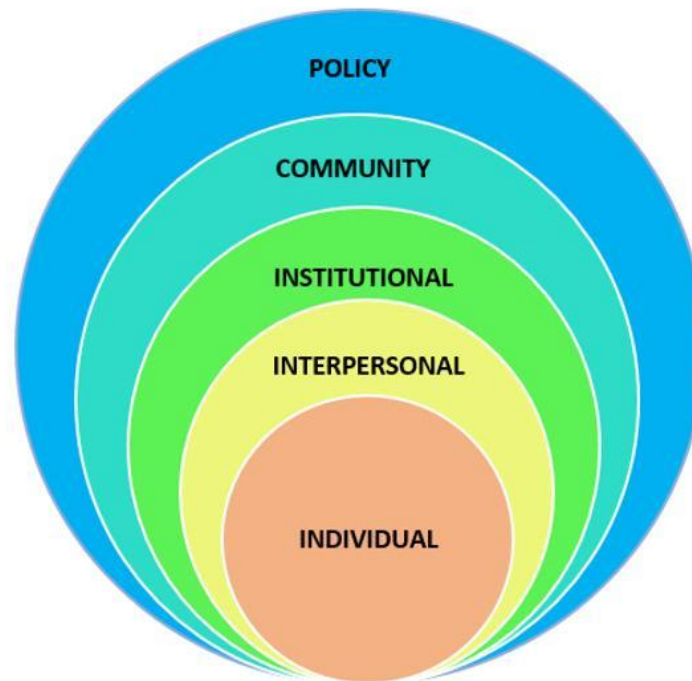
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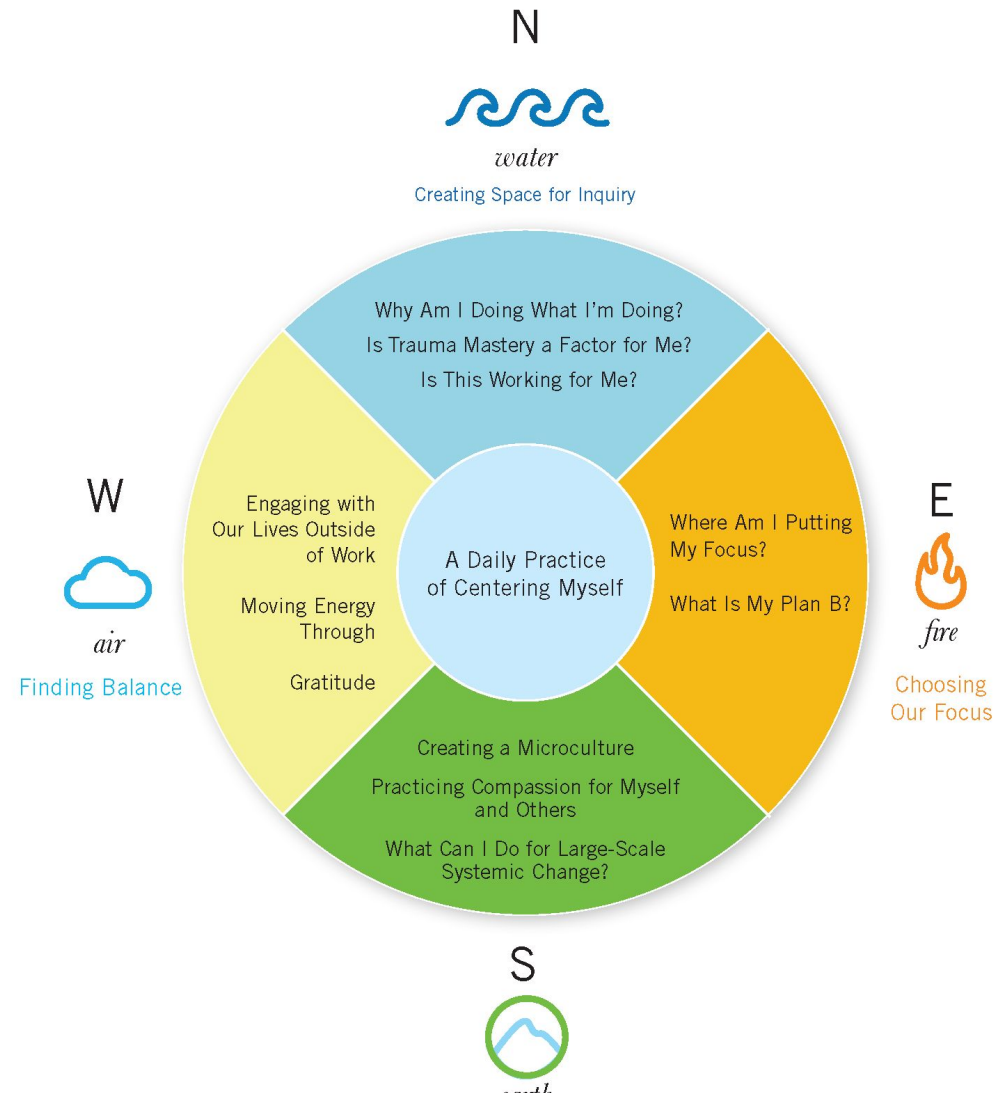
Table 2. Sample Change Efforts Implemented Through the Trauma-Informed Systems' (TIS) Champions Learning Collaborative.

TIS principle	Sample change efforts
Cultural Humility & Responsiveness	<ul style="list-style-type: none">• Introduction of workforce training on racial humility• Alignment of preexisting racial equity efforts with TIS principles
Resilience & Recovery	<ul style="list-style-type: none">• Creation of a comprehensive staff wellness lounge• Development of an incentive system for staff self-care activities
Compassion & Dependability	<ul style="list-style-type: none">• Creation of a “respectful culture” workplace campaign• Team building activities built into monthly meetings
Understanding Trauma & Stress	<ul style="list-style-type: none">• Discussion of a TIS principle at each staff meeting• Offering complementary trainings (e.g., Nonviolent Communication)
Safety & Stability	<ul style="list-style-type: none">• Hosting of “town halls” on safety to gather and address concerns• Distribution of personal safety alarms to staff



Individual Interventions

- THERAPY
- Utilizing PTO, sick days for full recovery
- Trauma Stewardship- the Five Directions
- Leaning into tools- community, spirituality, external joys



October 8, 2021

Health Care Professionals' Spirituality and COVID-19

Meaning, Compassion, Relationship

Anne L. Dalle Ave, MD, MS^{1,2}; Daniel P. Sulmasy, MD, PhD^{2,3}

» [Author Affiliations](#) | [Article Information](#)

JAMA. 2021;326(16):1577-1578. doi:10.1001/jama.2021.16769

Spirituality can be defined as “a dynamic and intrinsic aspect of humanity through which persons seek ultimate meaning, purpose, and transcendence, and experience relationship to self, family, others, community, society, nature, and the significant or sacred. Spirituality is expressed through beliefs, values, traditions, and practices.”⁵

empirically.⁷ Patients struggle with these questions, but so do HCPs. They ask, “Why must my patients experience such pain, struggle to breathe, and die in isolation?” “How can I preserve their dignity in such catastrophic circumstances?” “Why do I experience real grief whenever any patient dies?” These questions could aptly be described as spiritual, regardless of whether a person believes there is a deity or a transcendent answer to these questions.

Although death cannot be avoided, human desire and hope may reach deeper than death. Ultimate hope is not a prediction but the conviction that events will make sense, no matter what the outcome. The object of ultimate hope is thus a source of meaning, and that meaning may transcend the limits of finite, corporeal, and individual human existence. The opposite of hope is despair, but *despair* is just another word for meaninglessness.² The hope that there is a meaning beyond the disease, pain, and distress they confront daily among patients may permit HCPs to continue their task of caring for patients with advanced disease and those who are dying.

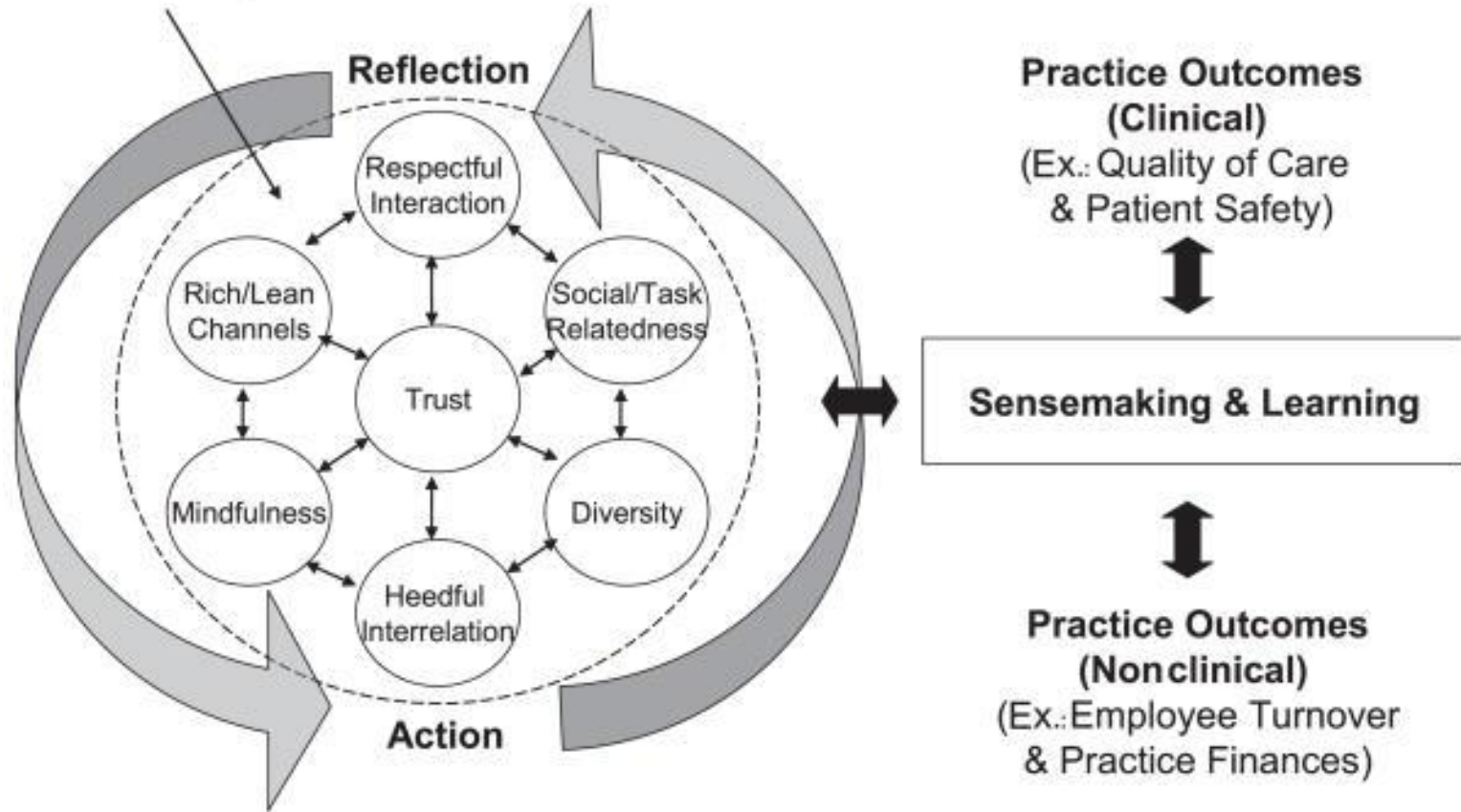
Small System Interventions

- Clinical debriefing
- Clinical change projects
- Healthy interpersonal promotion



Healthy Interpersonal Relationships

System of Practice Relationships



Clinical Debriefing

There is not one right way to debrief!




Important steps include:

1. Psychological safety
2. Acknowledgement and solicitation of reactions
3. Discussion of the case itself





Safety-II Healthcare Debriefing Tool

	Debriefing Phase	Main Concept	Sample Phrase(s)
	Set the Scene	Cue participants into inclusion of Safety-II	Let's collaboratively discuss what went well and why in order to capitalize on it in the future
	Analysis	Variability	Why did X* go so well in this case? How was this case and this outcome similar or different than other cases?
		Reproducing Success	How can we ensure the factors that led to success are present again in the future? What resources enabled good performance in this case?
		Adaptability	How did people adapt to overcome challenges in this case?
		Workarounds	Were there workarounds used? Are there strategies or workarounds that were used in this case that should become part of normal work?
		Near Misses/ Hard Mitigation	Were there any near misses? If so, what prevented harm from occurring? Are there examples of cases like today's when it did not go as well? What are the differences between that case and today's?
	Summary/ Take Home	Lessons Learned for Reproducing Success	What occurred in this case that we want to continue in the future? What is needed to ensure this happens reliably in the future?
		Identifying Opportunities for Systems Improvement	What insights did we gain that could improve the system for the future?

@SBentleyEMSim, @ThisIsSYMh, @KroussMD, @KomalBajajMD

T Step 1: Target
What shall we discuss to improve patient care?
Share your perspective.

A Step 2: Analysis
Explore your agreed target, if appropriate consider:
1. What helped or hindered...
communication / decision making / situational awareness?
2. How can we repeat successful performances or improve?

L Step 3: Learning Points
What can the team learn from the experience?

K Step 4: Key Actions
What can we do to improve and maintain patient safety?
Who will take responsibility for actions? Who will follow up?



Values

Positivity: Identify positive strategies and behaviours.
Avoid negative comments, choose neutral expressions.

Focus on finding solutions, rather than pointing out blame.

Professional communication, valuing everybody's input.

Step by step: Identify small objectives and follow up outcomes.



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University Healthboards



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CLINIC
English Innovation



HELSE STAVANGER
Stavanger universitetssjukehus

Local Clinical Change Projects

- Engage staff in improvement projects: increase investment in the job
- Allows opportunity for staff members to express concerns and provide solutions
- Provides the team unique insight from different roles and perspective
- Promotes team functioning, which can strengthen workplace community
- Promotes environment that is flexible and responsive to staff and patient needs





Large System Interventions

- Change in culture, conception of the workforce
 - Avoiding toxic positivity
 - DEIB, experience groups
- Policy support to prioritize healthcare worker wellness
 - Support and plan for use of PTO, sick days
 - Provide mental health resources through the organization to prevent barriers
 - Logistics- reduce administrative burdens on healthcare workers
 - Long term: shift focus from productivity. This may be seen through APM
- Culture of Safety- secondary traumatic stress
- Change projects- include all levels, let clinicians solve their problems. Provide resources for solutions

Culture of Safety

AHRQ defines key features of the culture of safety:

- acknowledgment of the high-risk nature of an organization's activities and the determination to achieve consistently safe operations
- a blame-free environment where individuals are able to report errors or near misses without fear of reprimand or punishment
- encouragement of collaboration across ranks and disciplines to seek solutions to patient safety problems
- organizational commitment of resources to address safety concerns
- Workflows, policies, plus healthcare workforce management

A Culture of Safety: The Six Domains



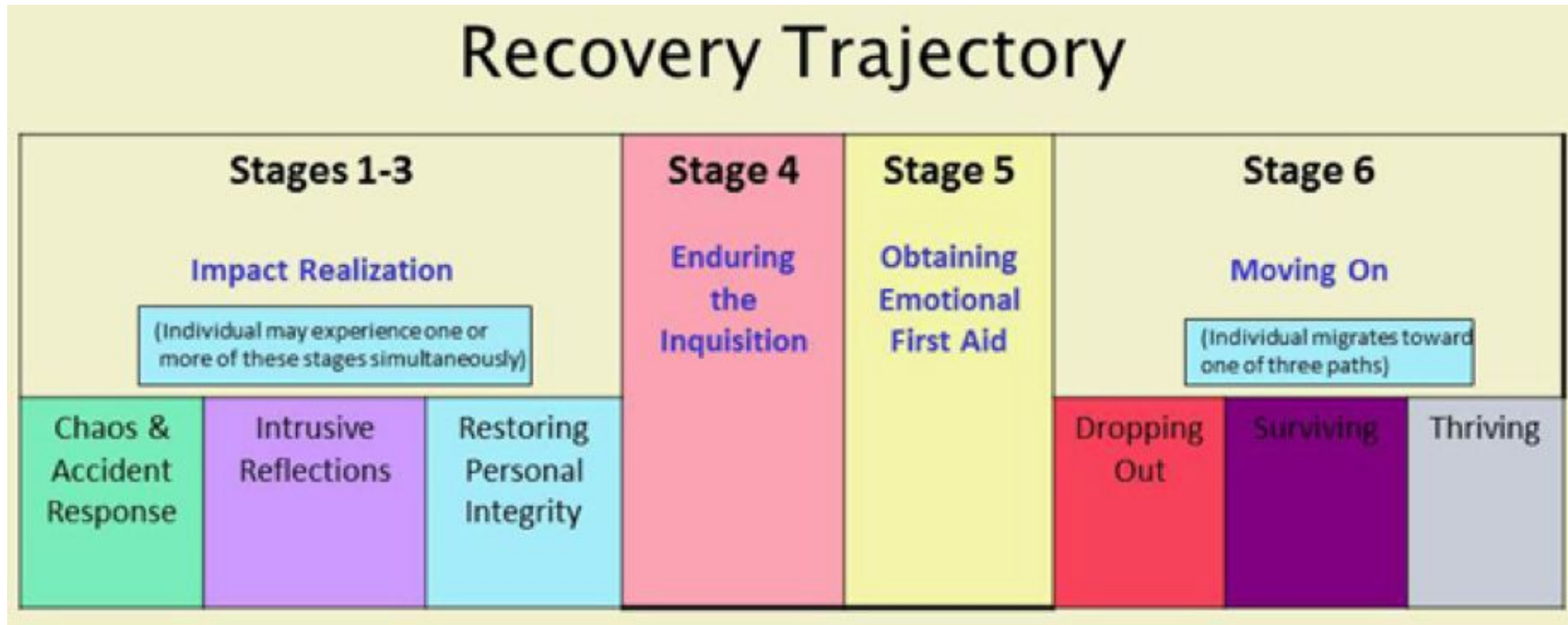
Organizational Response to Error

- Organizational response to a medical error is CRUCIAL to the human response of the HCW in short- and long-term response to the error
- Organizational mishandling medical error can lead directly to HCWs leaving the profession
- Additionally, errors are MORE LIKELY in understaffed environments and when clinicians are burnt out

“The problem is not bad people in health care--it is that good people are working in bad systems that need to be made safer.”

- To Err is Human: Building a Safer Health System, Institute of Medicine

Second Victim Syndrome



Moving On

Dropping Out

- Feelings of inadequacy and failure
- Leave current role by transferring to different facility or unit
- Consider quitting profession all together

Surviving

- Coping with what has transpired
- Persistent sadness prevails
- Trying to learn from event
- Assist in defense of legal action

Thriving

- Does not base practice/work on one event
- Minimal adverse effect from event
- Advocates for patient safety initiatives
- Tries to make a difference for the next patient or clinician

Our goal is to help you to thrive.

However, it is totally normal if you first find yourself in the “dropping out” mode or the “surviving” mode.
It may be a process.

Conclusions



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Images/Photo References

- Slide 4: https://media.istockphoto.com/id/1326071794/vector/thank-you-to-the-doctors-and-nurses.jpg?s=612x612&w=0&k=20&c=mwWfd7G2n7iFoXgnnlzPUuuZTaO-U_dn7k67URxcg1M=
- Slide 7: https://www.emerald.com/insight/proxy/img?link=resource/id/urn:emeraldgroup.com:asset:id:article:10_1108_JMP-04-2022-713/urn:emeraldgroup.com:asset:id:binary:JMP-04-2022-713001.tif
- Slide 10: <https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRvfSCOeSV5laU7MX5BX6jgSBWTVGYJYmqV2Tr-oluniWAuBUaLFoXg73J4pZxauG0Rgk&usqp=CAU>
- Slide 15: Surgeon General Report on Healthcare Burnout
- Slide 16: https://www.researchgate.net/publication/322498713_Compassion_Fatigue_and_Burnout_History_Definitions_and_Assessment_Veterinarian's_Money_Digest_2017110-15
- Slide 17: <https://www2.deloitte.com/us/en/insights/industry/health-care/healthcare-workforce-shortage-solutions.html>
- Slide 18: Stock Photo
- Slide 20: <https://www.brookings.edu/articles/essential-but-undervalued-millions-of-health-care-workers-arent-getting-the-pay-or-respect-they-deserve-in-the-covid-19-pandemic/>
- Slide 22: SF Public Health- Trauma Transformed
- Slide 26-28: SF Public Health- Trauma Transformed
- Slide 30: Trauma Stewardship
- Slide 32: https://img.freepik.com/free-vector/detailed-doctors-nurses_52683-59927.jpg?w=2000
- Slide 33: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2928073/>
- Slide 34: <https://www.cflowapps.com/process-improvement-tools/>
- Slide 35: <https://www.sciencedirect.com/science/article/pii/S2210844021001052>
- Slide 36:
- Slide 37: <https://revcycleintelligence.com/features/4-key-strategies-for-accountable-care-organization-success>
- Slide 38: <https://psnet.ahrq.gov/primer/culture-safety>
- Slide 40: <https://www.muhealth.org/about-us/quality-care-patient-safety/office-of-clinical-effectiveness/foryou>
- Slide 41: Methodist College UnityPoint Health
- Slide 42: https://img.freepik.com/free-vector/hand-drawn-nurse-team-background_52683-9109.jpg?w=2000

References

- Creighton, S. (2021, July 9). *Staff engagement in Qi: Benefits and impact on care*. Staff Engagement in QI: Benefits and Impact on Care. <https://blog.lifeqisystem.com/staff-engagement-qi>
- Dernoot, L. L. van, & Burk, C. (2010). *Trauma stewardship: An everyday guide to caring for self while caring for others*. Accessible Publishing Systems, Pty, Ltd.
- Diaz-Navarro, C., Leon-Castelao, E., Hadfield, A., Pierce, S., & Szyld, D. (2021). Clinical debriefing: Talk© to learn and improve together in healthcare environments. *Trends in Anaesthesia and Critical Care*, 40, 4–8. <https://doi.org/10.1016/j.tacc.2021.07.004>
- Institute for Healthcare Improvement. (n.d.). *Linking quality, safety, and wellness through Health Care Debriefing*. <https://www.ihl.org/communities/blogs/linking-quality-safety-and-wellness-through-health-care-debriefing>
- Lanham, H. J., McDaniel, R. R., Crabtree, B. F., Miller, W. L., Stange, K. C., Tallia, A. F., & Nutting, P. A. (2009). How improving practice relationships among clinicians and nonclinicians can improve quality in primary care. *The Joint Commission Journal on Quality and Patient Safety*, 35(9). [https://doi.org/10.1016/s1553-7250\(09\)35064-3](https://doi.org/10.1016/s1553-7250(09)35064-3)
- Medlock, M., Radis, E., Abrams, K., Bhatt., J. (2022). Addressing health care’s talent emergency. *Deloitte Insights*. <https://www2.deloitte.com/us/en/insights/industry/health-care/healthcare-workforce-shortage-solutions.html>
- Phillips, E. C., Smith, S. E., Tallentire, V., & Blair, S. (2023). Systematic Review of Clinical Debriefing Tools: Attributes and evidence for use. *BMJ Quality & Safety*. <https://doi.org/10.1136/bmjqs-2022-015464>
- Toews, A. J., Martin, D. E., & Chernomas, W. M. (2021). Clinical debriefing: A concept analysis. *Journal of Clinical Nursing*, 30(11–12), 1491–1501. <https://doi.org/10.1111/jocn.15636>