

BACKGROUND AND PURPOSE

Emergency Medicine is an extremely tough job. We are pushed to see more patients faster, pressured by efficiency metrics and documentation requirements. Often, we might not even have time to eat, drink water or use the restroom. It spills over into our personal lives. On top of that, we are tasked with leading teams in resuscitating the severely injured and dying. If the average person were involved in a single resuscitation of a critically ill person, it would be a life-altering event. Yet, we are constantly running these types of resuscitations. In fact, governmental agencies see these types of exposures as occupational hazards and repeated exposure can lead to PTSD.

As Emergency Physicians, we should be aware of the threats posed to our holistic wellness. We can draw on teachings from other high-stakes and elite performance professions to equip ourselves to meet these challenges. We can also incorporate structured small group meetings to debrief critical incidents when they arise. To this end, the following wellness curriculum was developed to be implemented during conference and small group sessions each academic year. The primary goal is creating protected, small-group meetings through which these concepts can be explored. Ideally, residents can be vulnerable in these settings and have open and candid conversation about the challenges of residency and approaches toward mitigating stressors and preventing burnout.

CONFERENCE

General concepts and structure of curriculum and small group assignments

- Intro conference session outlining objectives, meeting dates, and small group assignments
- Objectives
 - Resident-resident mentorship
 - “On-call” peer support and culture of openness
 - Small group meetings to:
 - Create space to have honest conversations about the challenges of residency.
 - Debrief critical incidents/tough resuscitations.
 - Explore wellness curriculum concepts.
 - Compensate for time, i.e. conference credit
- Ideally, there would also be a quick announcement during the conference prior each small group meeting to highlight the coming small group meeting topics
- Small groups are a continuation of “squads” structure and will allow implementation of small group components
 - Squads are composed of 2 residents from each class for a total of 6 members, sizing can be flexible
 - Attempt to assign group leads that can take point on organizing meetings and leading discussions
- Small group topics:
 - Resuscitations
 - Mental Preparation and Mindfulness
 - On-Shift Efficiency, Nutrition and Sleep

SMALL GROUP 1: Resuscitations (Codes)

This small group is dedicated to laying the foundations for debriefing tough resuscitations (codes) in a holistic way. It might be helpful to use a recent example, if someone in the group is willing to share, but there may not be enough time to completely debrief. Hopefully, these conversations will carry on. We will also be spending time talking about the technical aspects of running an effective code. Listen generously, allow for differences, no arguing. Talk from personal experience “I - me - my.” The next two meetings will be devoted to mental preparation, mindfulness, stress management and self-care tools.

Critical Incident Stress (CIS) Debriefing

This is a process used by the Occupational Safety and Health Administration and first responders when recounting the events of an emergency or disaster. First responders and ER staff are regularly exposed to tragedy, death, serious injury, and threatening circumstances. While working as ER doctors, we may experience an acute stress reaction, especially after tough codes, which can impact our health and safety. This stress reaction is called critical incident stress (CIS) and symptoms include fatigue, confusion, guilt, inability to rest, anxiety, depression, change in appetite, antisocial behavior, chills, chest pain, and impaired cognitive function.

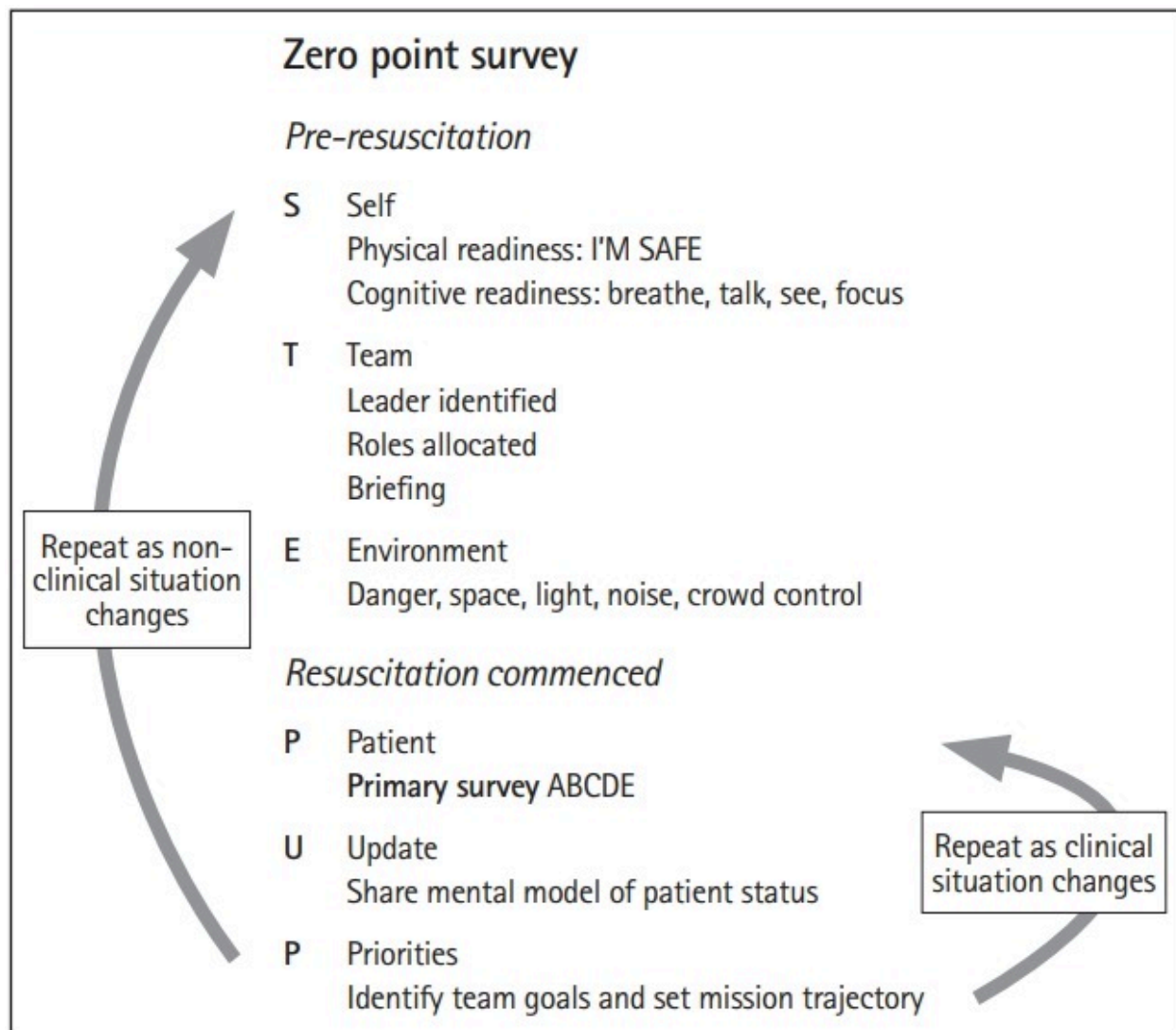
CIS is similar to Post-Traumatic Stress Disorder (PTSD), except that the timelines differ. If you experience these symptoms within the first four weeks of a critical incident, it's called critical incident stress. If you're still experiencing them after a month, it's PTSD. We will discuss CIS debriefing to address CIS during this group meeting, but there are additional resources for PTSD in the supplemental document.

Abbreviated CISD Structure

CIS debriefing is implemented in a group setting and there are seven phases completed through multiple meetings. The phases are outlined in detail in the supplemental

document but we will use an abbreviated model. Share a tough code you have had using the following steps:

1. **Facts:** In this phase the person sharing gives a brief account of the event/code from their point of view, focused on facts and not emotions.
2. **Thoughts and Feelings:** Group vents their thoughts and feelings about the incident. Validation is an important aspect of this step.
3. **Deeper Feelings:** Share the worst or most painful aspect of the event. What was it about this code that made it feel personal? For example, did the patient remind you of a loved one? Or do you blame yourself for a poor outcome? Listen generously, comfort and reassure your colleagues
4. **Troubleshooting:** Here we discuss the technical aspects of the code. What went wrong? What would you try differently? Are there approaches to running effective resuscitations?

Running an Effective Code: STEP UP

Zero point survey: a multidisciplinary idea to STEP UP resuscitation effectiveness

[Clin Exp Emerg Med.](#) 2018 Sep; 5(3): 139–143. Published online 2018 Sep 30.

doi: [10.15441/ceem.17.269](https://doi.org/10.15441/ceem.17.269)

SELF

- Rapid physical readiness checklist is provided by the I'M SAFE (illness, medication/other drugs, stress, alcohol, fatigue, eating/elimination) acronym
 - Allows the provider to be aware of aspects of their physical and emotional state that might compromise their performance(e.g. If you are not up for a code, take some time to pee, eat a snack, and drink some water)
 - A simplified mnemonic is HALT (hungry, angry, lonely, tired)
- Cognitive readiness: in the next meeting we will dig deeper into mental preparation and mindfulness (i.e. breathe, talk, see, focus).

TEAM

- Identify who is running the code
- Assign roles ahead of time, these generally include:
 - Calling family and confirming code status
 - Documenting and keeping time
 - Chest compressions (2-3 people rotate)
 - Monitor/defibrillator pads
 - RT/Bagging/O2
 - IV access and labs
 - Pharm/Medications
- You may need additional roles or to create sub-teams during the resuscitation
 - Airway team, central venous access, arterial line, etc.
- Brief your team as best you can before the patient arrives. Use preparatory information (patient's age, mechanism of injury, field vital signs, etc.) to help construct a shared mental model for the anticipated resuscitation that will guide both task-work (what will need to be done and back-ups) and teamwork (how the team will work together to complete the tasks).
 - e.g. "EMS is bringing us an unresponsive 60-year-old male who collapsed 10 minutes ago while shoveling snow. CPR is ongoing, he's been shocked twice for v fib, sounds like a STEMI. In addition to the roles we've

assigned, we'll need to prioritize getting an EKG. In the meantime, let's find out who's on-call for interventional cardiology."

ENVIRONMENT

- Scan the resuscitation room continuously to identify safety threats, and to optimize safety and adequacy of the room, especially noise and crowd control

PATIENT

- Primary survey: ABCDE and addressing issues as they are identified
- During the code use effective communication skills:
 - Three Cs of communication
 - Cite names
 - Clear instructions
 - Close the loop
 - Closed loop:
 - Sender communicates a message
 - Receiver acknowledges its receipt and communicates it back
 - Sender confirms that that is the intended message
 - Receiver communicates when the action is done

UPDATE and PRIORITIES

- Take a mental step back from the code, provide a situational report. Give a brief recap of what has taken place so far. How has your mental model changed?
Reset your goals and trajectory
 - "10x10" principle: 10 seconds for situational report after every 10 minutes of a complex resuscitation or whenever there seems to be little progress made toward meeting team goals
- "Use this method whenever the situation doesn't add up or is going bad:
 1. Announce you have no idea what the f**k is going on
 2. Eliminate ALL assumptions
 3. Troubleshoot" -[Scott Weingart, MD FCCM](#)

SMALL GROUP 1: Resuscitations (Codes) Supplement

Critical Incident Stress Debriefing

Seven steps of CISD (Devilly & Cotton, 2003; Mitchell et al., 2003):

1. The Assessment Phase: Tailoring the program for the situation, the people, and the specific needs of the group. This has largely been completed already through the development of wellness curriculum and small groups
2. The Fact Phase: Share a brief account of the event from your point of view, focused on facts and not emotions.
3. The Thought Phase: Group vents their thoughts and feelings about the incident. Validation is an important aspect of this step.
4. The Reaction Phase. People discuss the impact of the event. Facilitators prompt participants to share the worst or most painful aspect of the event for them.
5. The Symptom Phase. Participants share the physical, emotional, behavioral, and cognitive symptoms they've been experiencing.
6. The Teaching Phase. Facilitators help the group understand their reactions and provide stress management and self-care tools.
7. The Re-entry Phase. The group leaders summarize the takeaways from the session and encourage people to ask questions or share what they've learned. Facilitators provide information about next steps and additional resources. Team leaders often hold individual meetings afterward as the first step in follow-up care.

See also:

<https://www.osha.gov/emergency-preparedness/guides/critical-incident-stress>

<https://www.osha.com/blog/critical-incident-stress-debriefing>

Post-Traumatic Stress Disorder and Written Exposure Therapy

CIS debriefing has been shown to decrease anxiety and depressive symptoms, decrease ruminative cognitions, and restore appropriate defenses in ER providers; however, it does not adequately address PTSD or always provide emotional closure. Anonymous and free mental health resources are available to us through Advocate Employee Assistance Program (EAP). Contact EAP immediately if you are having

thoughts of suicide for free and anonymous help 24/7. EAP can also help with emotional support and to schedule mental health services:

- Call EAP: 1-800-236-3231
- Email eap@aah.org
- Text 741741
- National Suicide Prevention Lifeline: dial 988 or 1-800-273-TALK (8255)

The gold standard in treating PTSD is generally monotherapy or a combination of trauma-focused psychotherapy or medication. Written Exposure Therapy is emerging as an effective alternate brief intervention to address PTSD and provide emotional closure. It includes writing about a specific traumatic event, with a focus on details of the event and thoughts and feelings that occurred during the event, for 30 minutes at a time. Written Exposure Therapy is a useful practice in mitigating the harmful effects of witnessing or experiencing a traumatic event. Exposure to trauma appears to increase the risk of developing PTSD with subsequent traumatic events. PTSD is excessive corticolimbic inhibition and overmodulation in the hypothalamic-pituitary-adrenal (HPA) axis – memory impairment, depersonalization, derealization, and emotional numbness. By definition, PTSD lasts more than 1 month and causes significant distress or impairment in social, occupational, or other important areas of functioning. PTSD can cause persistent, distorted cognitions about the cause or consequences of the traumatic event that leads the individual to blame himself/herself or others. PTSD also causes persistent negative emotional state (eg, fear, horror, anger, guilt, or shame) or inability to experience positive emotions (eg, inability to experience happiness, satisfaction, or loving feelings). PTSD can also cause depersonalization and derealization.

- Other symptoms of PTSD include:
 - Irritable behavior and angry outbursts typically expressed as verbal or physical aggression toward people or objects.
 - Reckless or self-destructive behavior.
 - Hypervigilance.
 - Exaggerated startle response.
 - Problems with concentration.
 - Sleep disturbance (eg, difficulty falling or staying asleep or restless sleep).

If you are experiencing these symptoms, seek professional help. Again, the gold standard in treating PTSD is generally monotherapy or a combination of trauma-focused psychotherapy or medication. Written exposure therapy can also be a useful tool in bringing about emotional closure.

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- Previous exposure to trauma and PTSD effects of subsequent trauma: results from the Detroit Area Survey of Trauma. Breslau N, Chilcoat HD, Kessler RC, Davis GC. *Am J Psychiatry*. 1999;156(6):902.
- Written Exposure Therapy vs Prolonged Exposure Therapy in the Treatment of Posttraumatic Stress Disorder: A Randomized Clinical Trial. Sloan DM, Marx BP, Acierno R, Messina M, Muzzy W, Gallagher MW, Litwack S, Sloan C. *JAMA Psychiatry*. 2023;80(11):1093.
- A meta-analysis of structural brain abnormalities in PTSD. Karl A, Schaefer M, Malta LS, Dörfel D, Rohleder N, Werner A. *Neurosci Biobehav Rev*. 2006;30(7):1004.

Additional resources on running resuscitations

- Consider Resuscitation elective and solo code simulation
- Watch or listen to C. Hicks's *Making complex problems simple*, available at <https://smacc.net.au/2018/08/making-complex-problems-simple/> (22 minutes)
- Read P. Brindley's *Improving verbal communication in critical care medicine*, available at <https://emcrit.org/wp-content/uploads/2016/06/Improving-Verbal-Communication-in-Critical-Care.pdf> (5 pages)
- Listen to S. Weingart's *Mind of a resuscitator: logistics over strategy*, available at <https://emcrit.org/emcrit/mind-resus-doc-logistics/> (10 minutes)
- Listen to S. Weingart's *Mind of the resuscitator: stop points*, available at <https://emcrit.org/emcrit/stop-points/> (23 minutes)
- Read C. Reid's *Towards excellence in resuscitation: analyzing difficult resuscitation cases #1*, available at <https://emcrit.org/emcrit/analyzing-difficult-resuscitation-cases-1/> (approximately 10-minute read)

SMALL GROUP 2: Mental Preparation and Mindfulness

“The EM mindset is as much a philosophy as it is a skill set. Part warrior Zen, part mental calisthenics. The key is to give these skills a name, and then practice and train them explicitly.” (Chris Hicks, MD, MEd - St. Michael's Hospital, Canada)

This session we will talk about “cognitive readiness: breathe, talk, see, focus” (BTSF). We will talk about mindfulness and using awareness techniques like BTSF to further develop your Zen warrior “on-stage” persona. Recognize that reflection, like meditation, is helpful in managing negative emotions and washing off the negative “residue” left over from a bad shift, but it will not help your burn-out. Escaping the ER will not ease burn-out. But human connection and compassion for yourself, patients, and colleagues will help us find joy in our work again.

Mental Preparation

Elite Performance Careers	Careers with Life/Death Implications	Careers with culture of mental performance training
<ul style="list-style-type: none"> • CEO • Athlete • Musician • Actor • Race Car Driver • Military • Law Enforcement • Fire Rescue • Airline Pilot • Physician 	<ul style="list-style-type: none"> • Race Car Driver • Military • Law Enforcement • Fire Rescue • Airline Pilot • Physician 	<ul style="list-style-type: none"> • CEO • Athlete • Musician • Actor • Race Car Driver • Military • Law Enforcement • Fire Rescue • Airline Pilot

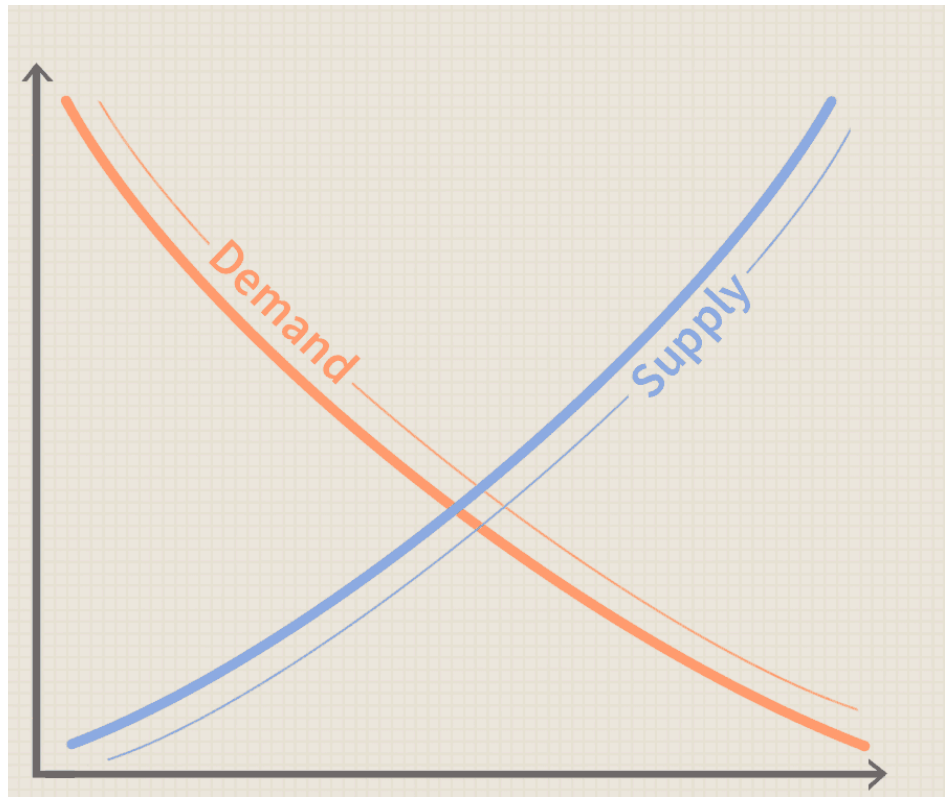
(Listen to [The Emergency Mind Podcast on Spotify](#) to hear more about mental performance approaches from different industry leaders with Dr. Dworkis, author of *The Emergency Mind* book)

Stress is a physical, mental, or emotional factor that causes bodily or mental tension. It is an interplay between people and their environments and does not follow a “one size fits all” approach. Ultimately, stress results from an imbalance between the demands of a situation and our appraisal of those demands. Our appraisal of situational demands is best conceptualized by the threat-challenge appraisal paradigm:

THREAT (a negative mindframe where stress can overwhelm our ability to compensate)

CHALLENGE (a positive mindframe where our coping strategies allow for us to perform optimally despite stressors)



"Supply vs. Demand" theory of stress:

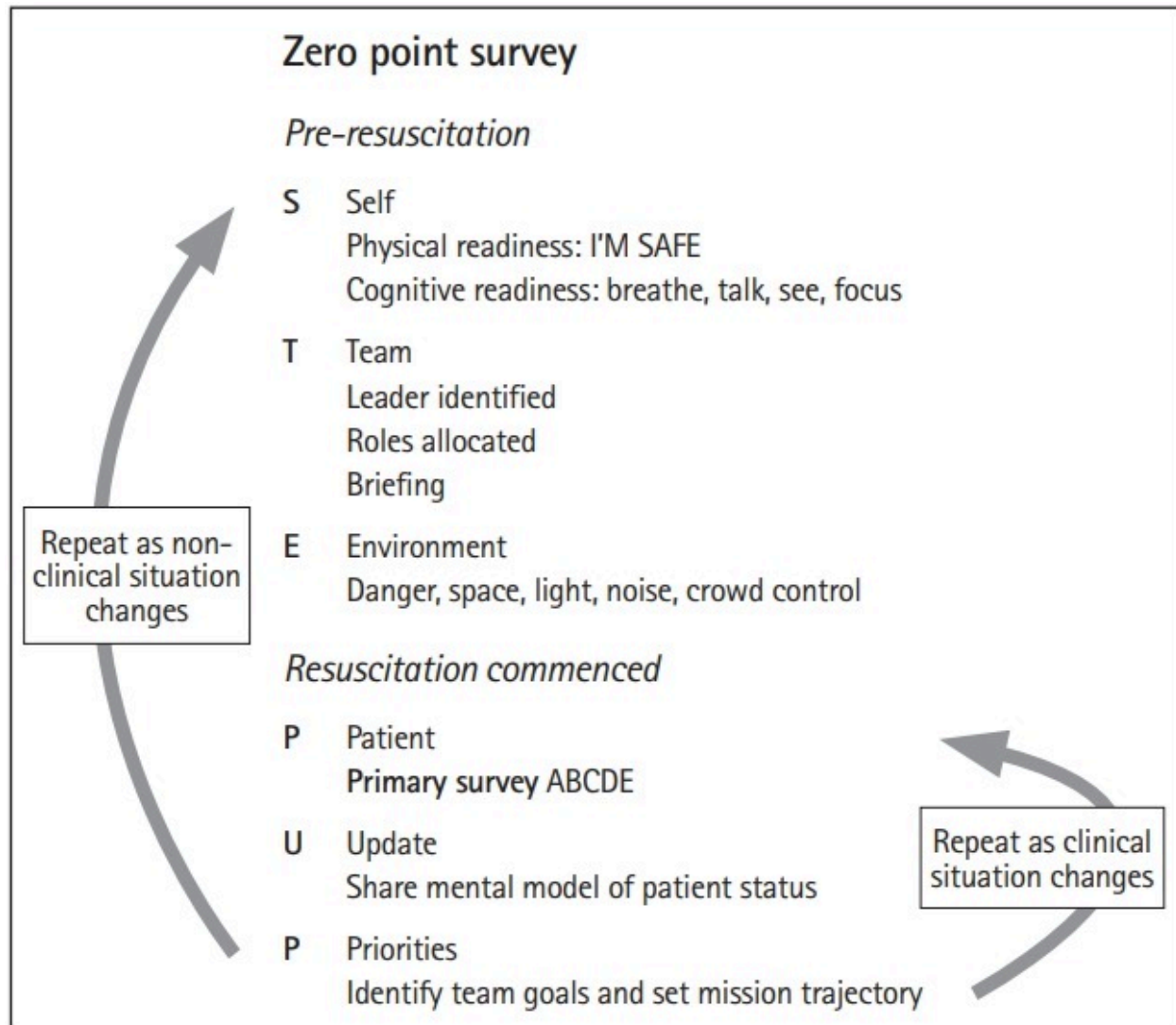
Demands = stressors

Supply = ability to deal with stressors

You can think about the x-axis as quantifying your ability to categorize a situation as a challenge and not a threat.

The y-axis is mental and emotional resources.

If you feel threatened constantly at work, you will feel overwhelmed and quickly become mentally and emotionally exhausted as the stressors pile up. If you are not challenged enough, you will not grow. There should be a sweet spot somewhere in the middle.



Cognitive Readiness: Breath, Talk, See, Focus (BTSF)

A simple technique to bolster our mental and emotional resources and allow us to view a situation as a challenge and not a threat

- **Breathing**

- Chill breath (3 sec inhale through nose, 6 sec passive exhale through nose or pursed lips allowing your chest to recoil and slowly release the air in your lungs, no accessory muscle use)
- Box breathing (4 sec inhale, hold 4 sec, 4 sec exhale, hold 4 sec, repeat)
- Straighten your spine, increase intrathoracic pressure > stimulate parasympathetic > slow heart rate/decrease cortisol, PEEP improves gas exchange

- **Talk:** self-talk, Jordan mentality vs. imposter syndrome

- Recognize your internal dialogue. What are you saying to yourself right now? How are you viewing yourself and this situation? Are your thoughts negative or positive? Focus on the positive, discredit the negative
- **E.g. “I can do this. I’ve been trained for this. What can I learn from this?” vs. “I can’t do this. I don’t belong here. I’m a fraud.”**
- You are not the best and you are not the worst but you are a capable and competent ER doctor. You are a valuable asset. In 2020, there were only ~50,000 ER doctors in the USA, serving a population of 331 million. You were in the small group of applicants out of thousands that were accepted to your medical school. Out of that highly-competitive cohort, you were one of a handful of applicants to be accepted as an ER resident.



“Failure isn’t just accepted; it’s expected. When you stretch yourself past your current limits, failure is inevitable.”

“If you have doubt or concern about a shot or feel the 'pressure' of that shot, it's because you haven't practiced it enough.”

“My attitude is that if you push me towards something that you think is a weakness, then I will turn that perceived weakness into a strength.”



“To conquer fear, you must become fear”

“Instead of mercilessly judging and criticizing yourself for various inadequacies or shortcomings, self-compassion means you are kind and understanding when confronted with personal failings—after all, who ever said you were supposed to be perfect?” (Dr. Kristin Neff, pioneer in self-compassion research)

- Think about what you would say to a loved one or close friend if they made a mistake, use that self-talk on yourself when you feel discouraged

"Michael [Jordan] didn't have a memory. He had the shortest memory of anyone I've ever seen. Whether he made the shot or missed the shot, he had already moved on to the next play. He had an amazing capacity to just be in the moment."

“Whoever tries the most stuff (and screws the most stuff up the fastest) wins.”
(Tom Peters, author on business management practices)

- If you dwell on the past then you will be depressed. If you dwell on the future then you will be anxious. Great athletes, like Michael Jordan, Kobe Bryant, Steph Curry, LeBron James, have similar physical capabilities as other NBA players, their mentality sets them apart. They were elite scorers because they took more shots than their teammates. They trained themselves to embrace failure, forget the last shot and believe that the next shot will go it. Each patient interaction is another repetition, another opportunity to improve and fine-tune our craft.

Recap of Talk (self-talk):

1. You are capable and well-trained
2. Embrace failure
3. Practice self-compassion and amnesia

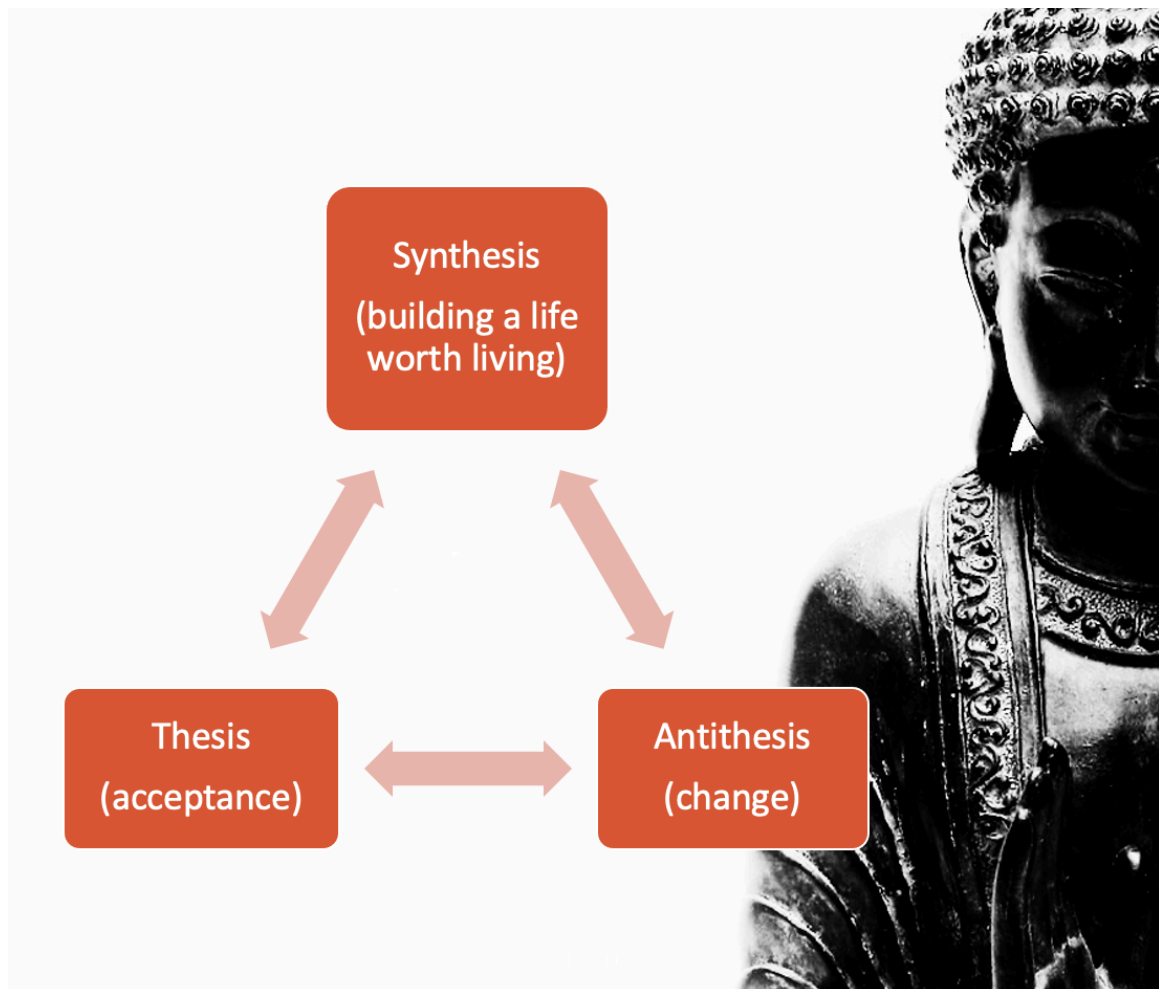
Tell yourself: “I can do this. I’ve been trained for this. What can I learn from this?”

- **See:** Visualization and mental rehearsal
 - Thinking through the steps of a procedure before it happens
 - Focus on things that could go wrong and try to mitigate those factors before the actual event occurs
 - Creating and verbalizing mental models with your team, especially before a resuscitation, like we discussed during last session
- **Focus** with trigger words
 - Engages selective attention just before a high-stress situation, e.g. procedures or resuscitations
 - Should be short and simple (i.e., “Let’s go,” “Focus,” “Now,” etc.)

Try using habit stacking to practice BTSF throughout your shift. For example, when you leave a patient room and reach for hand sanitizer, run through BTSF. In the future, when you reach for the hand sanitizer going into a code or procedure you can snap into your flow state quicker by using this anchoring technique.

Mindfulness

Mindfulness has roots in contemplative religious practices, an example is the traditional Japanese concept of *wabi-sabi*, derived from the Buddhist concept of three marks of existence: accepting that all natural things are "imperfect, impermanent, and incomplete" and at the same time beautiful. Mindfulness has been applied to evidence-based psychiatric therapies. An example is dialectical behavior therapy, essentially cognitive behavioral therapy infused with Zen Buddhism. The dialectic, or framework, is not necessarily religious. The driving force is radical acceptance: approaching patients, situations, and life in general, non-judgmentally, without labeling them as positive or negative, good or bad. As we practice acceptance, we find ourselves making positive change, which seems to be at odds with acceptance. The product is a flux state, constantly practicing acceptance while creating positive change toward finding meaning in work and life.



This flux state of consciousness overlaps with **Flow State**, the melting together of action and consciousness; the state of finding a balance between a skill and how challenging that task is. You can move closer to this state by practicing awareness techniques. The following is an example of an awareness/meditation exercise that can be practiced sometime in the next day or two:

- Take 5 chill breaths (feet grounded, spine straight, 3 sec inhale through nose, 6 sec passive exhale through nose or pursed lips allowing your chest to recoil and slowly release the air in your lungs, no accessory muscle use), then:
 - Silently acknowledge 5 things you see around you
 - Silently acknowledge 4 things you can touch/feel around you
 - Silently acknowledge 3 things you hear
 - Silently acknowledge 2 things you can smell
 - Silently acknowledge 1 things you can taste
 - Say these 5 words out loud “I am a good doctor”
 - This is a mantra, you can find many on google. They can be used to keep your mind in the present (“This moment is perfect, whole, and complete”) or practice gratitude (“I am grateful for...”).
- You can do this exercise, or some variation, before shift, on-shift, first thing in the morning, before bed, etc. This could be the beginning of a regular meditation practice. As you practice, it will become easier to snap into a relaxed flow state.




Clinical Psychology Review

Volume 109, April 2024, 102414



Review

A meta-analytic review of anger management activities that increase or decrease arousal: What fuels or douses rage?

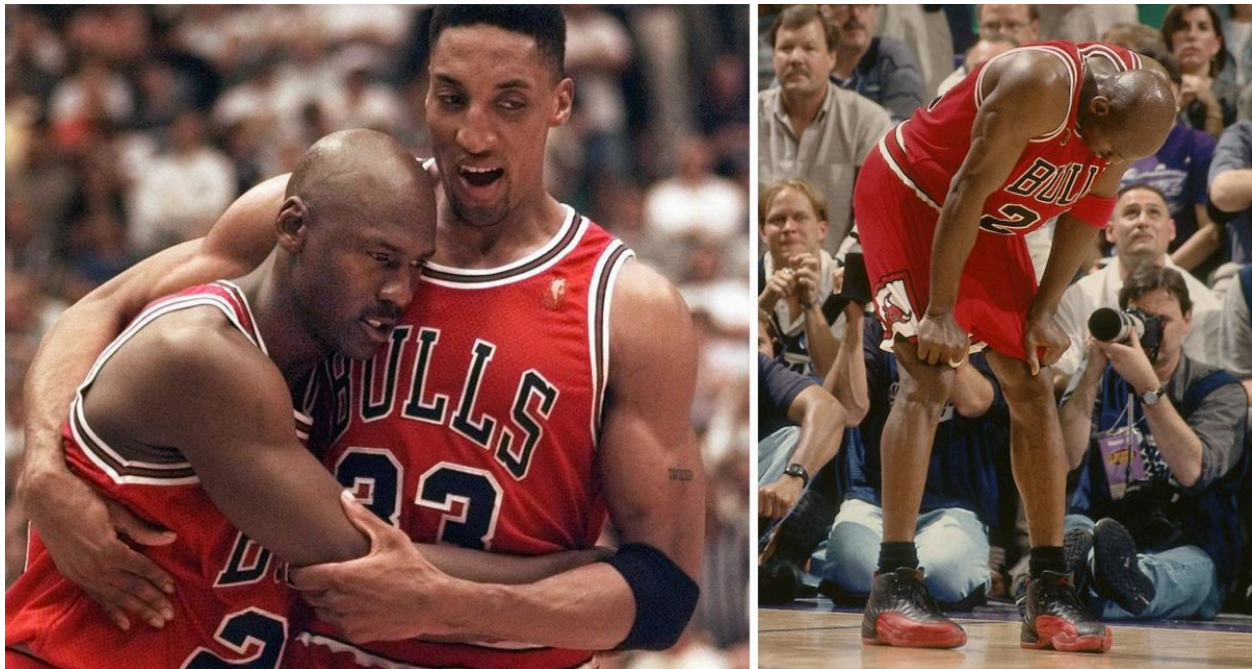
[Sophie L. Kjærvik](#)^{a b} , [Brad J. Bushman](#)^a  

Highlights

- Of all the unpleasant emotions, anger is also the most difficult one to regulate.
- Activities that decrease arousal (e.g., breathing, meditating, yoga) decrease anger.
- Popular wisdom suggests that venting reduces anger and aggression, but it does not.
- Going for a run might be good for your heart, but it is not good for managing anger.

*venting: including social media

- Meditation will not fix your burnout, neither will calling off or more vacation. Escaping the ER will not help, but more human connection can. Leaning into others, giving more of yourself. Become a leader.



WELLNESS ≠ EASY AND COMFORTABLE

There are many theories about what made Jordan so sick on the night of game 5 of the 1997 NBA finals in Salt Lake City, Utah. Some believe he was given a tainted pizza the night before by a Utah Jazz fan. Some think he had the flu. Regardless, Jordan was visibly ill, near collapse, vomiting on the bench. He willed himself to score 38 points and win the game. After the game, he said he pushed himself so hard because he believed he was playing for something greater than himself. He was playing for his teammates, the fans, his family, and the city of Chicago.

Our place of work is open 24/7/365 (see [EMRA documentary](#)) treating the most ill of society. We signed up for this, we believe in the mission. We have to push ourselves sometimes, even if we are tired or sick. If we call out of a shift, it means a heavier load for our colleagues and worse care for our patients. If we don't show up on time or leave

a bad sign-out (e.g. signing out procedures, not staying to care for a patient that crashes during signout), that shows disrespect to our colleagues, it's bad for morale.

Beyond Moral Injury — Can We Reclaim Agency, Belief, and Joy in Medicine?

Lisa Rosenbaum, M.D.

The current conceptualization of “well-being” may be antithetical to trainees’ professionalization. Can we, for the sake of both doctors and patients, reclaim agency, belief, and joy in medicine?

March 7, 2024

N Engl J Med 2024; 390:951-955

DOI: 10.1056/NEJMms2311042

“for the first time that day she felt her work had meaning. So she wondered: What if improving our own well-being sometimes means spending more time at work rather than less?”

We all started med school altruistic and other-focused. At some point during training, we start to become jaded, like Dr. Cox from Scrubs. If we lean into our patients and colleagues, even if it means staying later, like Dr. G, we will find human connection, meaning in our work and life, and restore our joy in medicine. Obviously, we need adequate time off to reflect and recharge. We should not be pushing to work excessively but the cure for burn-out is not escaping. The cure is caring more for the people around us, not less. This will lead to a long, happy and sustainable career.



VS



- Don't stay late to finish notes but do stay late to:
 - speak to a grieving family member
 - care for a patient who became hypoxic as you were signing out
 - help another resident in a grueling resuscitation
- Spending more time being a doctor/caring for people will help restore your joy in medicine.
- Spend extra time with your co-residents, friends and family, those people who remind you of your true self.

(see supplement for mindfulness question prompts to deepen your sense of self and meaning)
- We'll close this session with allowing awe in medicine: we will briefly share a recent experience that has caused you to have a sense of mystery, awe, or inspiration while practicing medicine

SMALL GROUP 2: Mental Preparation and Mindfulness Supplement

Mindfulness Question Prompts

Factor	Questions	
Personhood	<ul style="list-style-type: none"> What perceptions do I have about myself that give me inherent value? What gives my life meaning if anything? 	<ul style="list-style-type: none"> Do I believe that my life has purpose? If not why not? If so, what purpose?
Identity	<ul style="list-style-type: none"> What do my worldviews and associated beliefs say about who I am in relation to others? How would I answer the question, "Who am I?" 	
Growth Orientation	<ul style="list-style-type: none"> What mindset do I use to progress through life? On what do I base this mindset? 	<ul style="list-style-type: none"> In what do I engage that shapes this mindset? What am I reading to reinforce this mindset?
Personal Agency	<ul style="list-style-type: none"> Over what do I have the ability to exercise control? What aspects of my life are completely out of my control? 	<ul style="list-style-type: none"> What can I do about adverse situations in my life over which I have no control? How do I handle guilt and shame?

Factor	Questions	
Coping Strategies	<ul style="list-style-type: none"> How do I typically respond when experiencing adversity? What, if anything, has worked well? 	<ul style="list-style-type: none"> What has not worked? How can I improve my ability to cope with adversity?
Connection	<ul style="list-style-type: none"> To what or whom do I feel most connected? How am I reinforcing those connections? What connections cause significant distress? How can I healthfully disconnect from those? 	<ul style="list-style-type: none"> If disconnection is impossible, how can I manage the connection to minimize the distress? How can I re-establish damaged connections? Who, if anyone, do I need to forgive to include myself?

Additional Resources:

- [The Emergency Mind Podcast on Spotify](#)
- Dworkis D. *The Emergency Mind*. 1st ed. Independently published; 2021.
- EMRA 24|7|365: The Evolution of Emergency Medicine: <https://vimeo.com/99666716>
- [Vox article: Meditation is more than either stress relief or enlightenment](#)
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- FM 7-22 HOLISTIC HEALTH AND FITNESS, Oct. 2020, DEPARTMENT OF THE ARMY

SMALL GROUP 3: On-shift Efficiency, Nutrition and Sleep

During this session, we will discuss many ways to make yourself more efficient on-shift. But performing at a higher level starts before your shift and is impacted by how you spend your days off. In the chapter “Humans Not Robots” from the book *The Emergency Mind*, Dr. Dworkis explores the concept of “residue,” meaning what you experience can stick with you, whether or not you are aware. Actors recognize this concept and undergo a process to “remove, absorb, or accept that residue” of their old character when taking on a new role and character. We should recognize that what happens to us on-shift leaves a “residue” and it is important for us to address this on our days off. Dr. Dworkis cites performance-science expert Katie Holmes, “what we choose to do on our *days off* deeply affects what we’re able to do on our *days on*.”

How we use our time just before we are on-shift is equally important. Sync the ByteBloc and ACMC Conference calendars with your Google Calendar to make scheduling easier. Try developing a pre-shift routine. Make sure you eat a meal or snack before you start your shift. Maybe listening to music on the way to work that calms you or helps you focus. Maybe drink a coffee/enjoyable beverage on the way. Use the restroom before going into the ER. Thinking through how you are using your time off and time leading up to your shift will help you be more efficient with your time in the ER.

On-shift Efficiency: What Is It?**Efficiency is...**

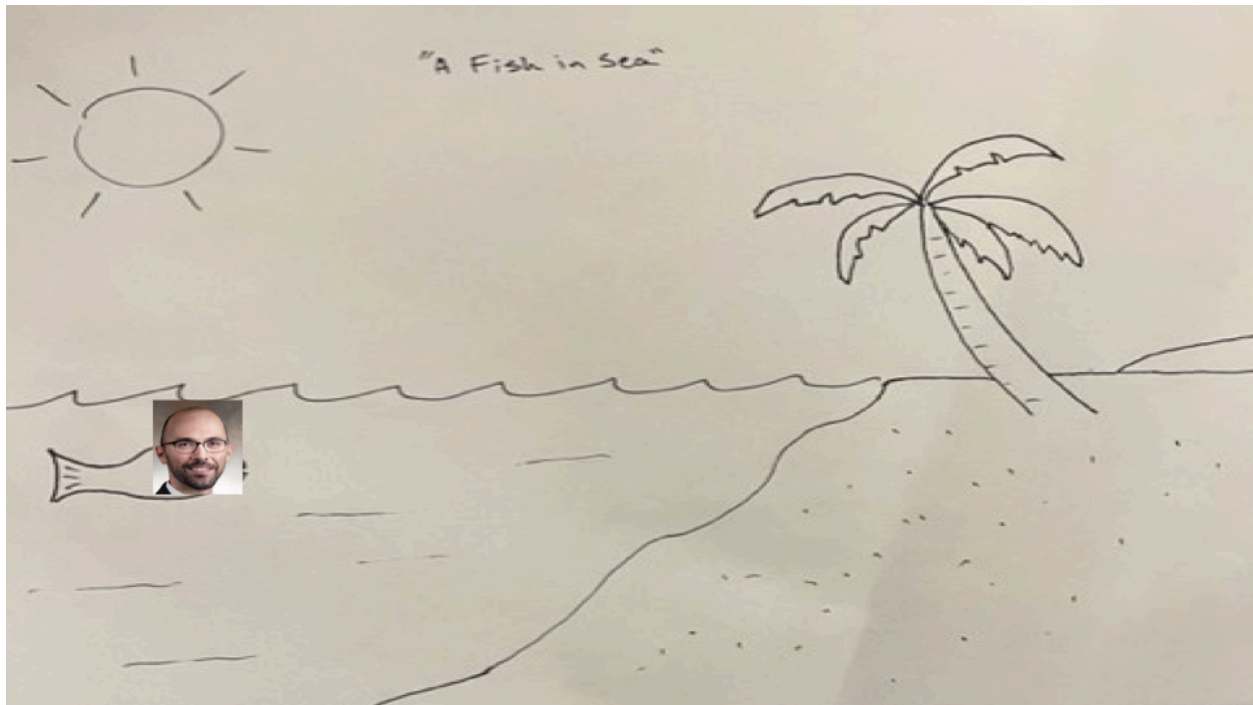
“Clinical efficiency is being able to predict the next step that might block progression through the system.”

**Efficiency is...**

“Knowing which fires are worth putting out. Sometimes you just gotta let ‘em burn.”



Often it just feels like this...



Nursing on Efficiency:

- Goal is to be quick and safe
- Collaborate with the team: relay the plan and anticipated tasks
- Avoid dropping an order every 5 minutes, prioritize tasks, and consolidate care

How to Improve Your Efficiency:

- Leave every patient room with a plan for their disposition
- Avoid tests that won't change your management
 - Remember, we are ER doctors, not internists
- Order tests concurrently, not in sequence
- Identify rate limiting step in work-up/dispo and be proactive in making it happen
 - Anticipate phone calls to consultants and admitting physicians/residents
- Communicate the plan to nursing, techs, charge, etc.
 - Practice gratitude when communicating, assume positive intent
 - Anticipate and cooperate, delegate as much as you can
- Stay focused, don't waste free time

- Disposition patients as soon as you can
- Run through your patient lists early and often
- Download Haiku app
 - Use it to check results and enter orders while away from your workstation
- Charting hacks
 - For a clean H&P note
 - EPIC > EPIC drop-down tab in top left corner > SmartPhrase Manager > User: “SEMENCHUK” Search: “.nsnote”
 - Many “.ns” premade MDMs and note templates
 - [EM DOT PHRASES](#): premade MDMs, DC instructions, etc.
 - **Be careful with dot phrases, make sure to proofread**
 - Tim Ketterhagen has many great Peds MDMs and DC instructions
 - EPIC > EPIC drop-down tab in top left corner > SmartPhrase Manager > User: “KETTERHAGEN” Search: “.tk”

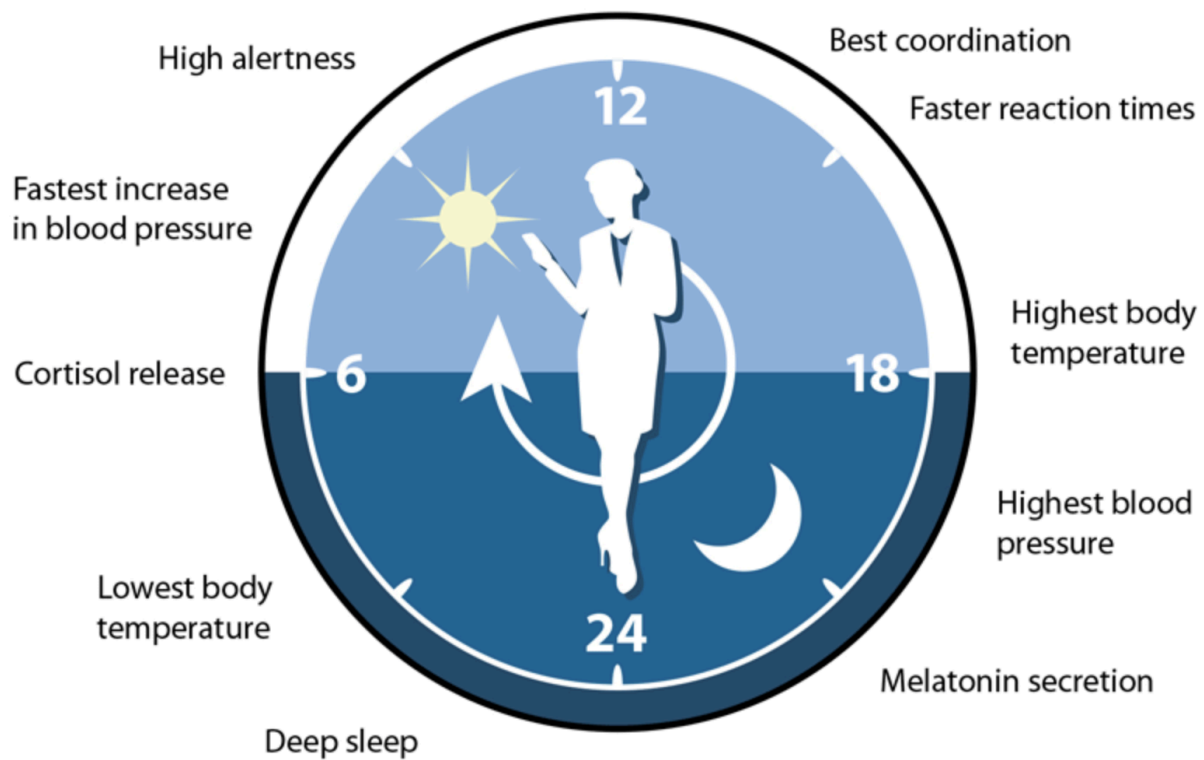
Examples:

- Problem:
 - CBC sent down for a patient with GI bleed, other labs resulted already
- Solution:
 - Call lab to get abnormal results as a preliminary, get a VBG/ABG
- Problem:
 - CT done 1 hour ago, CT ended, can't see images
- Solution:
 - Call CT, the images need to be released
- Problem:
 - Initial labs back, lipase still “pending add-on”
- Solution:
 - Call lab, they may not see add-on order if RN didn't send label

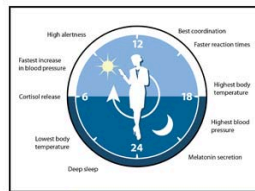
For more on this, visit [ALIEMU ED Efficiency Courses](#)

Nutrition and Sleep Hygiene

The National Toxicology Program of the U.S. Department of Health and Human Services determined shift-work is carcinogenic due to disruptions in circadian rhythm.



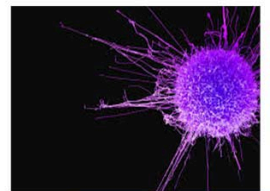
Night Shift Work/LAN



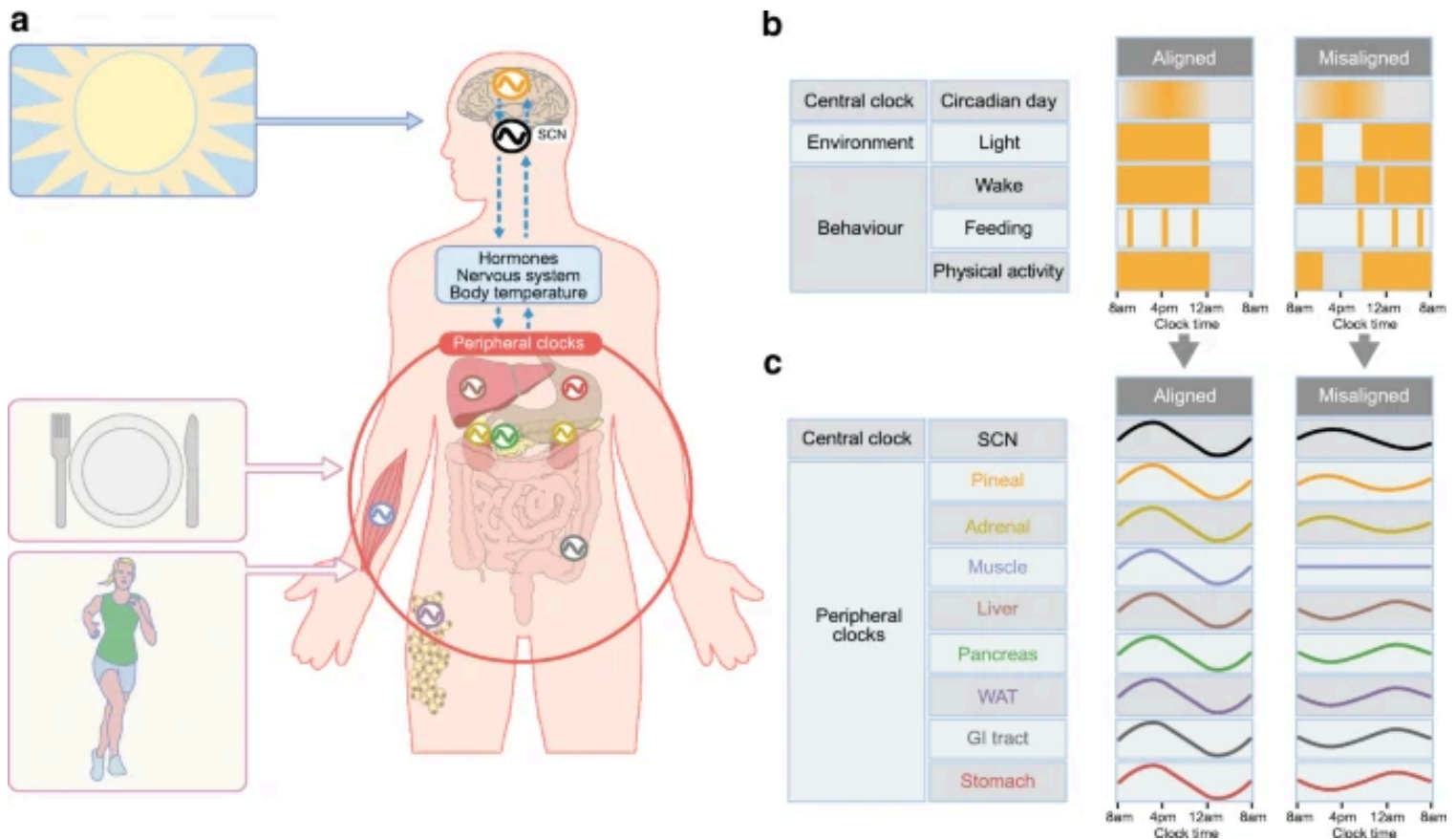
Circadian Disruption



Biological Effects



Cancer

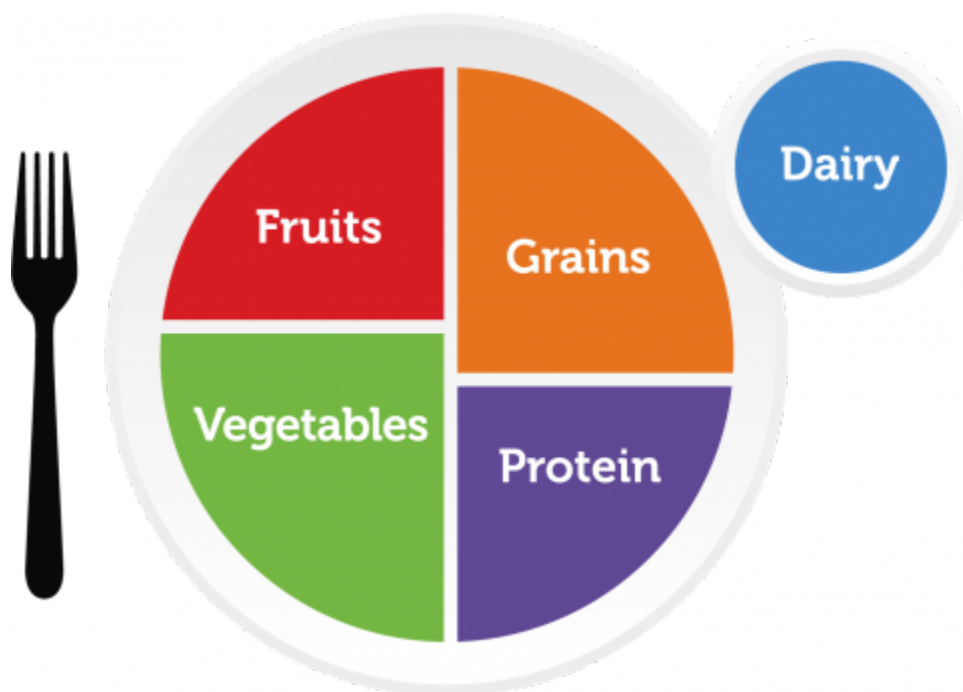


(a) Signals from the environment (e.g. light) and behaviors (e.g. food, physical activity) affect rhythms of the central clock (i.e. the SCN [black]) and peripheral clocks (pineal gland [orange], liver [brown], adrenal gland [yellow], pancreas [green], stomach [red], muscle [blue], white adipose tissue [purple] and gastrointestinal tract [gray]).

(b) Alignment and misalignment between central clock and environmental/behavioral rhythms. Timing of the central clock, light exposure and behaviors are shown as yellow bars across a 24 h period. In the 'misaligned' condition, light exposure, wake, feeding and physical activity are shifted. This misalignment is a type of circadian disruption.

(c) Alignment and misalignment between central and peripheral clocks. Timing of the central and peripheral clock rhythms are shown schematically as cosine waves across a 24 h period. In the misaligned condition, the rhythms are dampened and shifted. This misalignment between central and peripheral clocks is another form of circadian disruption, also called 'internal misalignment' or 'internal desynchrony'.

- It will take effort to mitigate the negative effects of circadian disruption
- Limit sugary drinks, drink half of a gallon of water daily
 - FDA recommends keeping added sugar intake to less than 25 grams/day
 - The average can of soda or your latte and frappuccino has 30-40 grams
- Be especially careful of dietary choices during night shifts/24s
 - “Marynowski Diet,” ever notice how he eats on-shift? Ask him about it
 - High protein, high fiber snacks, limit sugar
- Five healthy eating activities:
 - A day without fast food
 - A day without soda/pop/sugary drinks
 - A day eating at least five servings of fruits and/or vegetables
 - A day with at least one sit-down meal at home
 - A meatless day
- Try meal prepping once a week. Green Chef and HelloFresh have healthcare discounts. Meals should look something like this (low-fat dairy or water to drink):



- Try to eat different colors of fruits/vegetables daily (especially green and orange)
- Limit processed foods, should be able to understand all ingredients on packaging
- Ozempic is an intriguing option for [curbing cravings beyond just food](#)

- Caffeine has a long half-life, track your intake over 24 hours
 - More than 3 cups coffee/day linked with developing atrial fibrillation
 - Too much alcohol and poor sleep also linked to a. fib.
 - Try to avoid caffeine and alcohol at least 4 hours before bed
 - 400 mg is the Canadian government's recommended daily limit
- Energy drinks with "proprietary blend" or high niacin/B3 damage liver and heart
- Alcohol
 - UK NHS: 14 drinks per week max, spread out over 3 or more days
 - Heavy drinking episodes weekly linked to morbidity and mortality
- Schedule regular physical activity to help preserve circadian rhythm
 - Does not have to be in the gym, but activities should meet these criteria:
 - 150 mins weekly of activity that gets your heart rate up
 - OR 75 mins of vigorous-intensity aerobic activity weekly (e.g. running, HIIT, lifting but maintaining HR ~120 between sets)
 - At least 2 days of resistance training weekly



Adults need a mix of physical activity to stay healthy.

Moderate-intensity aerobic activity*

Anything that gets your heart beating faster counts.



Muscle-strengthening activity

Do activities that make your muscles work harder than usual.



If you prefer vigorous-intensity aerobic activity (like running), aim for at least **75 minutes a week**.

If that's more than you can do right now, **do what you can**. Even 5 minutes of physical activity has real health benefits.




Walk. Run. Dance. Play. **What's your move?**



- Sleep duration
 - Think of sleep like money in a bank, if you are short one night, you need to sleep extra the next night to make up the deficit, track weekly
 - Should be getting 6.5 - 8 hours a night, need at least 5 to be functional
 - Can break this up around night shifts to preserve circadian rhythm
 - E.g. sleep less the night before a night shift so that you can get a 2-hour nap right before your shift, then sleep 4.5 hours after your night shift so that you can go to bed at a regular time that night
- Sleep hygiene
 - Exercise earlier in the day to tire out your body
 - Avoid eating 3-4 hours before bed
 - Use natural light and low light after sundown
 - 1-hour wind down before bed, no screens
 - Can't get your mind to stop racing? Try a 10-min "brain dump." Set a timer for 10 mins, make a to-do list, allow yourself to be anxious, write down any worries. When the timer goes off, put it away.
 - No screens in bed, read a book instead
 - Try melatonin or magnesium
 - Be careful with sleep aids, like Benadryl and Ambien, can be habit-forming
 - We sleep best in environments that are dark, cold, and quiet
 - Make your room as dark as possible or use sleep eye mask
 - Turn down heat to cool room, blanket or bed heater to stay warm
 - Nordic parents open the window in the children's room right before bed for cooling. They also put a bed heater in the bed. When they bring the child to bed, they remove the bed heater and close the window. Think: cool room, warm bed
 - Use ear plugs or sound machine, as needed, for sound dampening

SMALL GROUP 3: On-shift Efficiency, Nutrition and Sleep Supplement

ALIEMU ED Efficiency Courses: <https://aliemu.com/courses-all/?catid=66>

 <p>Improving your ED Efficiency 103: Effective Team and Patient Communication</p> <p>Enroll Now</p>	 <p>Improving your ED Efficiency 102: Anticipating and Surpassing Roadblocks</p> <p>Enroll Now</p>	 <p>Improving your ED Efficiency 101: Efficient Workflow Strategies to Up Your Clinical Game</p> <p>Enroll Now</p>
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