Caring Reliably:
HRO tools in Healthcare

- Dr. Laurie Chern

- OAFP Conference May 2026

Disclosures

I have no actual or potential conflicts of interests in relation to this program and presentation.

About me

Current positions:

- Regional Medical Director for Providence Medical Group Oregon Urgent Care Clinics
- Providence St. Vincent Medical Center, Department Chair Family Medicine
- Physician development coach, mentor, advisor

Training:

- Undergraduate: University of Pennsylvania, Philadelphia, PA
- Graduate: Virginia Commonwealth University/Medical College of Virginia, Richmond, VA
- FM residency: University of Pittsburgh/St. Margaret Memorial Hospital, Pittsburgh, PA

Learning Objectives

High Reliability Organization

HRO tools

Applying HRO tools in healthcare

Psychological Safety and impact on Well Being

Case #1

Case #1

- 75 yo gentleman is accompanied to clinic by his wife (also of similar age) for his regular medical appointment.
- Wife tells front desk receptionist that she hasn’t been feeling well and has dizziness and chest pressure.
- Receptionist is concerned and goes to find the clinic RN.
- RN is offsite.
- Dr. X is in an exam room with a patient. Last time she knocked on the door, she was yelled at for the interruption.
- MA tells receptionist to make an appointment for the wife at the next available timeslot which is in one week.

What is a High Reliability Organization

- An organization that operates in **complex**, **high-hazard environments** for extended periods of time without serious accidents or catastrophic failures despite the **inherent risks**.

HRO characteristics

Sensitivity to Operations

Reluctance to Simplify

Preoccupation with failure

Defer to Expertise

Continuous Improvement

HRO key principles

1. **When errors occur, Focus on the Why, and not the Who**
2. **Create a “Just Culture” that balances unintentional human error, individual accountability, and systems thinking**
3. **Employees feel safe to report harm, errors, near misses**
4. **Reports and feedback are understood as development opportunities, not punitive**
5. **Leaders set the intention and the frontline staff help to inform the direction**
6. **Empower staff to lead continuous improvement projects within their own workspace**

- A Guide to High-Reliability Organizations (HRO) in Healthcare | GHX
- What are high reliability organizations (HRO)? | Wolters Kluwer

Impact of medical errors

- Estimated ~134 million adverse events occur globally each year (1:10)
- US data estimates ~250,000 deaths per year (3rd leading cause of death in the US)
  - Adverse drug events 39%
  - Surgical or procedural events 30%
  - Falls and pressure ulcers 15%
  - Other healthcare associated infections 12%

>50% errors go unreported

WHY

- Patient safety
- High quality work
- Reduce errors
- High functioning teams

HRO Tools

PAY ATTENTION TO DETAIL

COMMUNICATE CLEARLY

HAVE A QUESTIONING ATTITUDE

SPEAK UP FOR SAFETY

OPERATE AS A TEAM

TOOL #1:

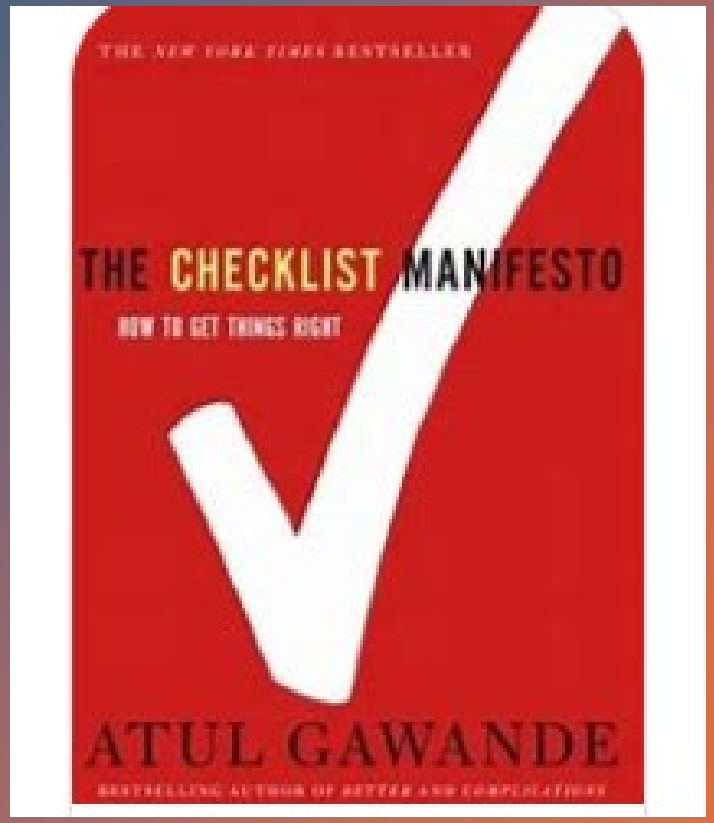
Pay Attention to Details

- Skills errors increase with

TOOL #1:

Pay Attention to Details

- Skills errors increase with
  - Time pressure
  - Interruptions
  - Distractions
  - Fatigue
  - Task complexity



The Checklist Manifesto | Atul Gawande, 2009

Explored the use of checklists in improving efficiency and reducing errors in complex tasks

Peer check

Peer Check: Multiply your Error Probability

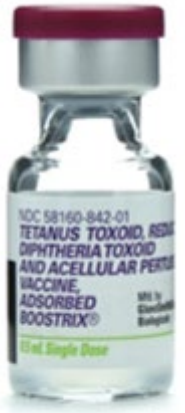
$0.01 \times 0.01 = 0.0001$

Pause: Taking a 1 second pause reduces the probability of error by a factor of 10

2 seconds by a factor of 100

Case #2

1. 35yo mother accompanies her 12yo daughter to your office.
2. They are roomed together.
3. Mother requests COVID vaccination.
4. Daughter is due for her TDaP booster.



What could possibly go wrong?

HRO solutions

- Checklists & Protocols
- Written orders (avoid verbal orders when possible)
- Organization of medications
- Quiet spaces for prep
- Barcode scanners
- Peer check
- Validate and verify (patient and medication)

TOOL #2:

Communicate Clearly

- Ask clarifying questions
  - I heard you say….is this correct?
  - I want to verify…
- 3 way repeat back
  1. “the dose is 100mg”
  2. “I heard you say 100, that’s one-zero-zero milligrams”
  3. “Yes, that is correct”
- Phonetic and numerical clarification
- SBAR
  - Situation
  - Background
  - Assessment
  - Recommendation

SBAR

- Situation
- Background
- Assessment
- Recommendation

- **Situation:**
  - Should we change our current wound care practice from using topical antibiotic ointment to petroleum ointment?

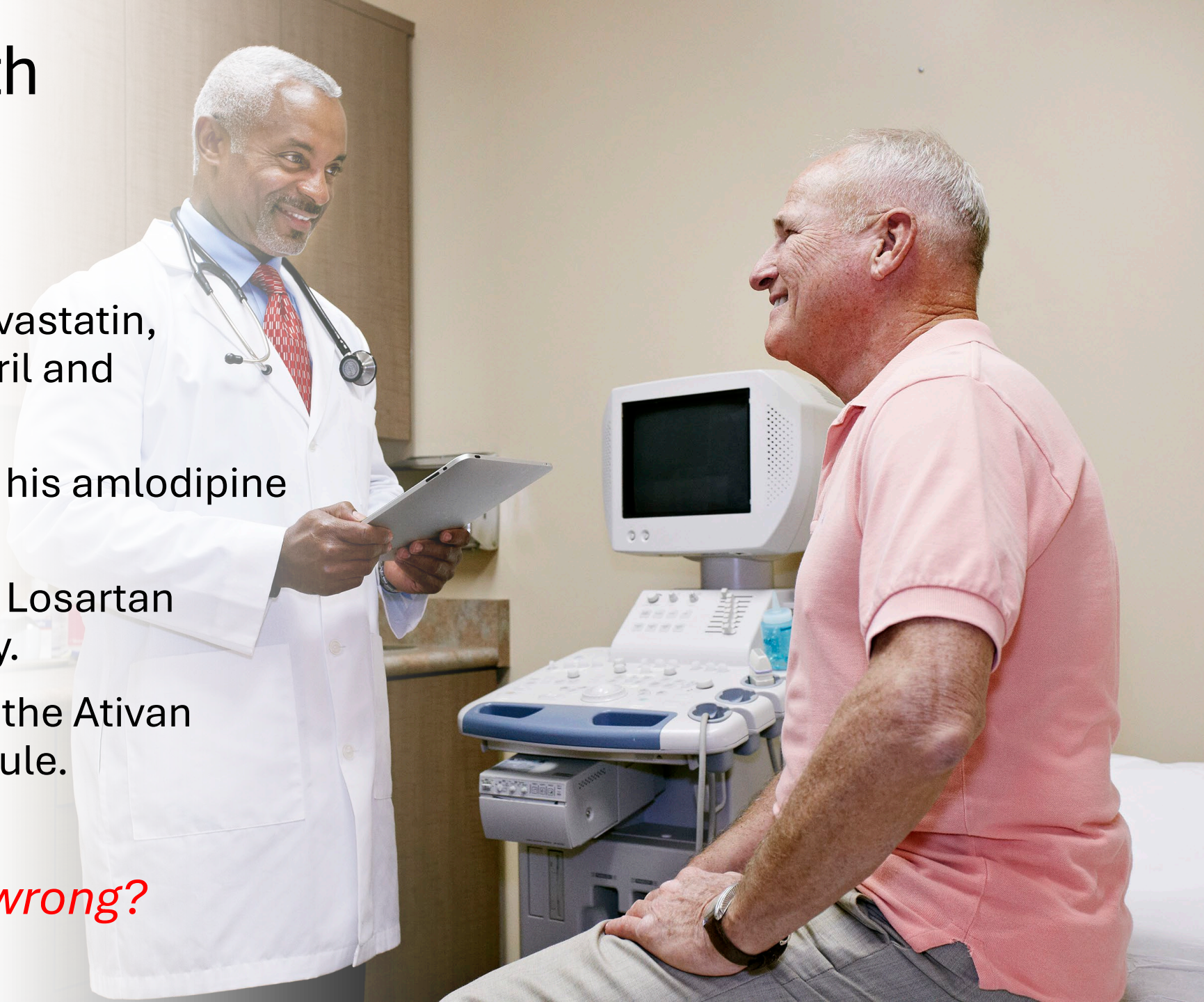
- **Background:**
  - Current wound care practice is to apply Bacitracin ointment to suture/staple repairs, abrasions, minor wounds.

- **Assessment:**
  - Petroleum ointment with similar outcomes in wound healing to antibiotic ointment.
  - No statistical significance in wound infections in both “clean” and “dirty” wounds.
  - Lower incidence of dermatitis is seen from petroleum jelly.
  - Petroleum ointment is more cost effective and easier to obtain which translates to cost savings for clinic and patient.
  - Dermatology clinics are using petroleum ointment as their standard.

- **Recommendation:**

  Standardize use of petroleum ointment as first line topical agent for routine wound dressings for all urgent care clinics.

Case #3: 67 yo with HTN



- He is taking apixaban, atorvastatin, amlodipine, Ativan, lisinopril and hydrochlorothiazide.
- You advise him to increase his amlodipine from 2.5 to 5 mg
- You change his lisinopril to Losartan starting at 50mg once a day.
- You discuss weaning off of the Ativan using a dosing taper schedule.

What could possibly go wrong?

HRO Solutions

- Write it down
- Simplify language
- Reduce complexity of the actions
- Repeat back
- Review

TOOL #3:

Have a Questioning Attitude

- Understand why the protocol is in place and how to apply it.
- If the rule does not make sense, the ask/question it.
- Validate the information with yourself (does this make sense to me?)
- Verify the information with others (does this make sense to you?)

Case #4

- 35 yo woman presents for her routine contraceptive DepoProvera shot.
- MA notifies doctor to place the medication order.
- Doctor types “Depo” into the EMR and signs off on the order.
- MA reviews order and notes that the medication ordered (DepoMedrol) does not match the patient’s medication list for DepoProvera.
- MA alerts doctor who corrects the medication error.

HRO Solutions

- This near-miss event was reported in our reporting platform
- Discussed at our Risk & Safety committee
- Clinical pharmacist identifies that “DEPO” refers to a method and not an actual medication
- Education shared with ordering clinicians
- EMR medication list is updated to make ensure that more characters are entered before medication choices appear

TOOL #4:

Speak Up For Safety

- CUS

CUS

I have a Concern...

I am Uncomfortable...

STOP

Case #5

- Elderly gentleman brought in by caretaker from his adult foster home
- He is noted to be pale, confused and actively vomiting.
- Patient is brought into the back clinic quickly to RN triage.
- Per protocol, vital signs and EKG are to be obtained.
- However, based on RN's assessment, patient having difficulty with protecting his airway. Foregoes vitals and EKG and positions to protect airway, enlists help from other caregiver staff and clinician.
- EMS is called for transport to the ED

HRO tools

- I have a concern…

  front desk notes patient does not look well and immediately alerts RN

- I am uncomfortable…

  RN recognizes that this is a more urgent situation and breaks protocol for taking vital signs and EKG

TOOL #5:

Operate as a Team

- **Brief**
- **Execute**
- **Debrief**

Case #6

- Man collapses in the paved road just outside of the clinic.
- RN is first on scene and assesses man; no pulse and is not breathing, starts chest compressions.
- Another staff arrives along with lead clinician. 911 called.
- 2 more staff are slower to get to scene as they try to get large “crash cart” rolled outside.
- Brief moments of confusion about placement of chest pads with new AED machine.
- Physician orders Narcan; RN draws up syringe of medication and administers.
- EMS arrive on scene and take over resuscitation efforts and transport to ED

Debrief

Realities

- Codes are very high stress situations.
- We are human – sometimes people freeze, forget the sequence, make mistakes.
- Role clarity is important so that each person knows what they should be doing.
- Clear communication is key.
- People take different amounts of time and ways to process events.

Learning and Improvements

Periodic “code drills” are needed to keep people prepared and rehearsed.

Ensure staff are aware of and practice with new equipment.

Developed a Grab&Go bag with essentials for emergencies outside of the clinic.

Stock Nasal Narcan.

Round back as a group and individually to help person process event.

WHY

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Psychological Safety

Psychological Safety

- Fostering workplaces that decrease and eliminate
  - Power differential
  - Tones
  - Biases
  - Personal Discomfort
  - Unfamiliarity
  - Embarrassment

- What is psychological safety at work? Here's how to start creating it
- The Fearless Organization by Amy Edmundson, 2018
- https://youtu.be/x8Q815IsnU0

OXFORD JOURNALS
International Journal for Quality in Health Care

. 2025 Jan 17;37(1):mzaf002. doi: 10.1093/intqhc/mzaf002

Psychological safety, job satisfaction, and the intention to leave among German early-career physicians

Nicola Etti [1,2,*], Matthias Weigl [3], Nikoloz Gambashidze [4]

Demographics (n=432; 85.6% full time employed; 78% female)

Sex	Male/Female/Other
Age Group	25-30yrs; 31-35yrs, 36-40yrs, >40yrs
Current employment tenure	<6mo, 6-11mo, 1-3 yrs, >3yrs
Employed	Full-time; Part-time
Clinical area	FM IM Pediatrics Anesthesiology Surgery
Employer	University Hospital General Hospital Other
Organization ownership	Public Nonprofit Private

Study Conclusions

- **Importance of leadership, workplace, and safety culture for job satisfaction and retention.**

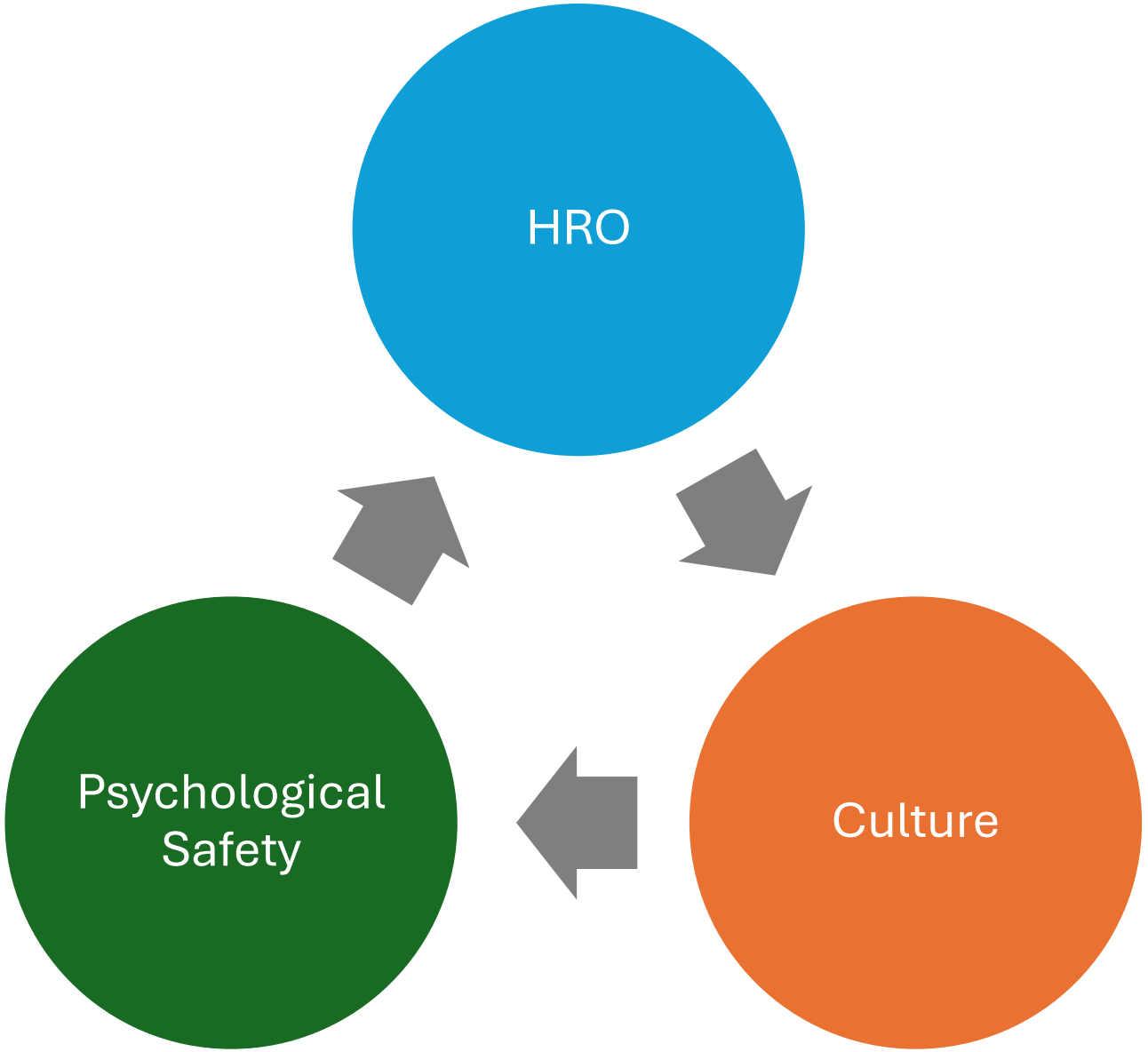
- Psychological safety related to team leader scored the lowest and highest related to peer.

- 47.2% among early career physicians who scored low to medium levels of psychological safety indicated intention to leave their current employment.

Psychological Safety

A culture in which people feel safe sharing their ideas, concerns, and mistakes

without the fear of humiliation and/or punishment.


HRO
Culture
Psychological Safety


HRO
Culture
Psychological Safety
Well Being

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Case #1 revised

- MA asks receptionist about the concerns and recognizes these are symptoms on the urgent/emergent symptom list.
- MA comes to the front desk and brings the wife back to an empty exam room and takes vital signs.
- MA knocks on Dr. X's exam door and alerts him of her concern and gives a brief SBAR summary.
- Dr. X excuses himself from his current patient and quickly assesses and handles the situation.
- Dr. X, the MA, and the receptionist debrief on this unusual event, both acknowledging the "good catch" and inquiring about opportunities for improvement.

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How do we , as leaders of our local teams, clinics, and organizations

improve the CULTURE, WELLNESS, and QUALITY of our workplaces?

It starts with us.

I've come to the conclusion that I am the decisive element in my workplace.

It's my personal approach that creates the climate.

It's my daily mood that makes the weather.

I have tremendous power to make another's life miserable or joyous.

I can be a total of unrest or an instrument of inspiration.

I can humiliate or humor, hurt or heal!

In all situations it is MY RESPONSE that decides whether a crisis will be escalated or deescalated, and a person humanized or dehumanized.

Haim Ginott, psychologist and educator

Thank You

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