

How Do You Measure Resident Wellness

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Objectives

- ▶ Background on measuring resident wellness and un-wellness
- ▶ Our institutional results from measuring burnout
- ▶ Resident Wellness Scale (RWS) development process
- ▶ Brainstorming on constructs related to resident wellness
- ▶ Results from piloting the RWS
- ▶ Are you well? survey and its use for your own institution
- ▶ Discussion on institutional interventions to improve culture of wellness

Clinical Workplace Stress is Psychologically Harmful

Compared to the US population, physicians grow more burned-out and more dissatisfied over time. (Shanafelt et al, 2015)

Over half of surveyed physicians showed at least 1 sign of burnout. (Shanafelt et al, 2015)

As many as 25-75% of medical residents experience burnout, depending on specialty. (Ishak et al, 2009)

Over 300 physicians commit suicide each year. (American Foundation for Suicide Prevention website)

Female physicians have higher rates of depression than age-matched non-physician professional women. (American Foundation for Suicide Prevention website)

Make the “Invisible” Visible



Physicians



Administrators



Patients and Payors

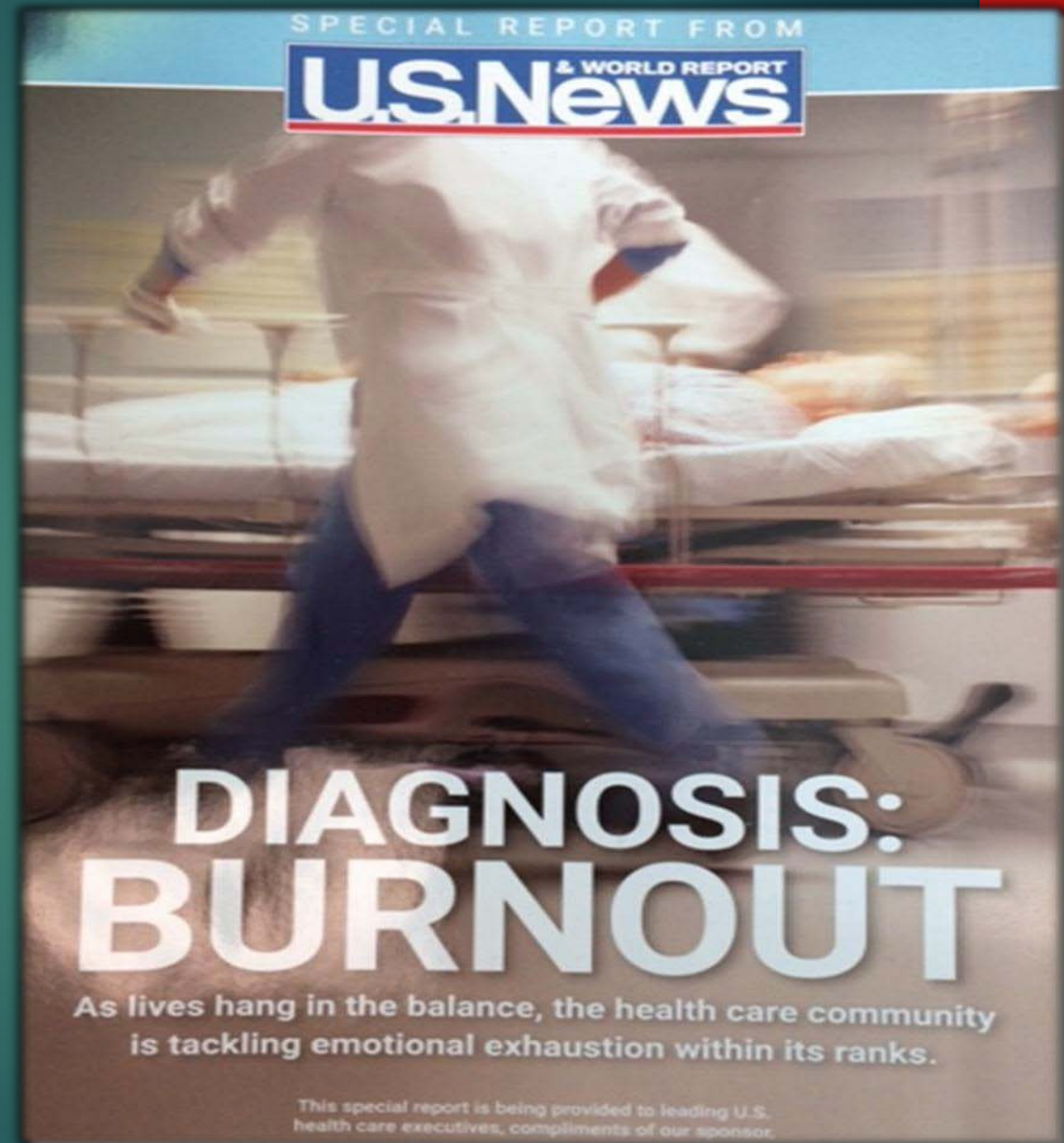
“Physician burnout is a public health crisis”

John Noseworthy MD

President & CEO Mayo Clinic

AMA Joy in Medicine CEO Consortium 9.14.16

“Burned out clinicians and staff provide burned-out clinician and staff care”



October 2016

Allocation of Internal Medicine Resident Time in a Swiss Hospital: A Time and Motion Study of Day and Evening Shifts

Nathalie Wenger, MD; Marie Méan, MD; Julien Castioni, MD; Pedro Marques-Vidal, MD, PhD; Gérard Waeber, MD; and Antoine Garnier, MD, MBA

Background: Little current evidence documents how internal medicine residents spend their time at work, particularly with regard to the proportions of time spent in direct patient care versus using computers.

Objective: To describe how residents allocate their time during day and evening hospital shifts.

Design: Time and motion study.

Setting: Swiss

Participants: 29 m

Results: Residents were observed for a total of 696.7 hours. Day shifts lasted 11.6 hours (1.6 hours more than scheduled). During day shifts, activities indirectly related to patients accounted for 52.4% of the time, and activities directly related to patients accounted for 28.0%. Residents spent an average of 1.7 hours with patients, 5.2 hours using computers, and 13 minutes doing both. Time spent using a computer was scattered throughout the day, with the heaviest use after 6:00 p.m.

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...heduled. Activities in-
..., and about half the

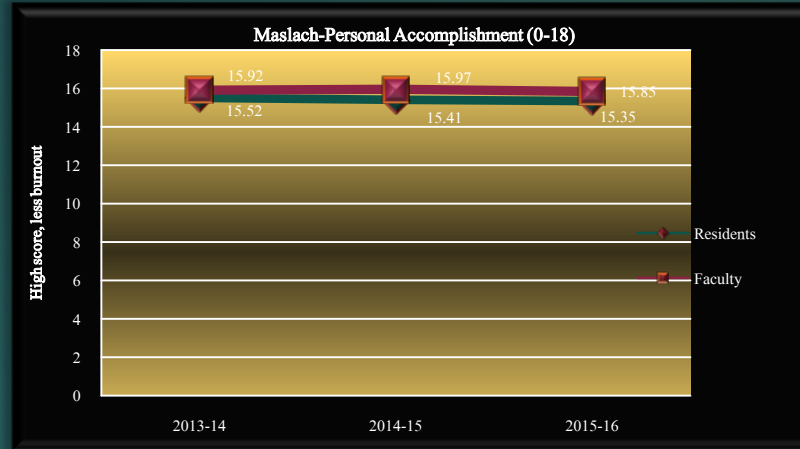
- > 50% day indirect patient care
- < 1/3 direct patient care
 - 1 hr pt care: 3 hr computer
 - 1-2 hr EHR beyond shift

Maslach Burnout Inventory



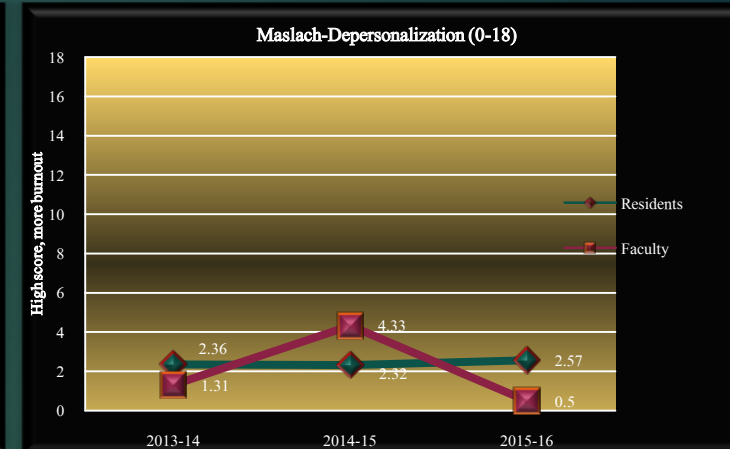
Personal Accomplishment

Higher scores indicate that residents and faculty are actively engaged in a positive manner that makes a difference. They perceive their impact as palpable.



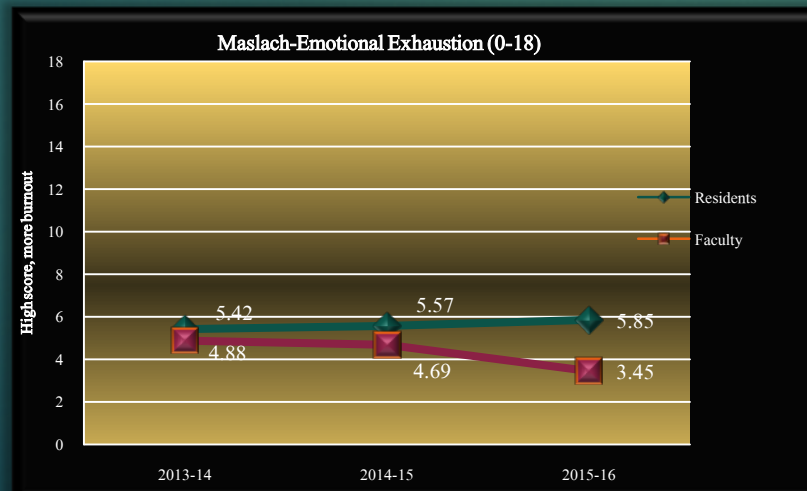
Depersonalization

Higher scores indicate that residents and faculty have not lost their ability to empathize with patients and maintain warm, open relationships with patients that promote effective care.



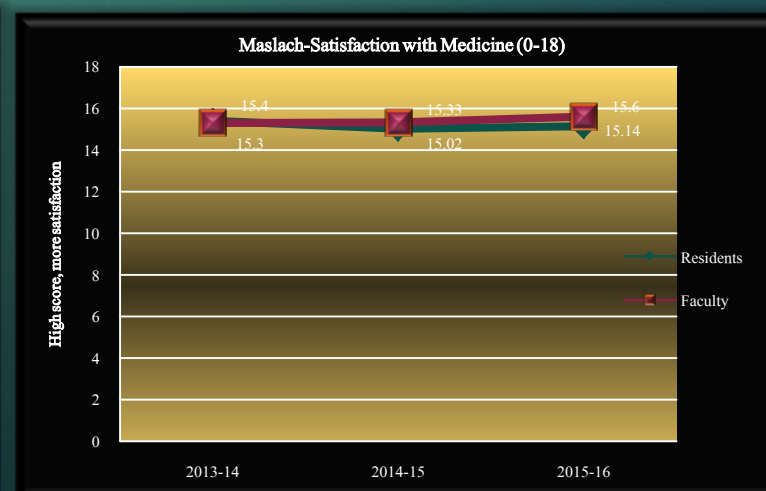
Emotional Exhaustion

Higher scores indicate that residents and faculty are energized by their work, and there is minimal negative carryover into one's off hours.



Satisfaction with Medicine

Higher scores indicate that residents and faculty derive a great deal of satisfaction from their chosen career and do not regret the decision to enter the field.



Measuring Burnout...

- ▶ Overall results look great! But...
- ▶ Mathematically there is a ceiling effect in measuring burnout
- ▶ Because of the sensitive nature of some items, respondents must feel comfortable about their true feelings
- ▶ Anonymous nature precludes using it as a screening tool
- ▶ "Sensitization" to burnout phenomenon due to personal expectations and beliefs
- ▶ Validity: is expressing burnout a measure for dissatisfaction with job or a measure of depression (prevails all aspect of life)
- ▶ Designed for all professions, but is health care different?
- ▶ Communicates message of impending doom
- ▶ Not helpful for designing program level interventions

Physician Wellness



“We must move beyond the pathological focus upon physician burnout and begin a conversation about what makes a physician well.”

Eckelberry-Hunt, van Dyke, Lick, & Tucciarone; *Journal of Graduate Medical Education*, 2009: 1(2), 225-230.



Strategies associated with Residents' Mental Well-Being: (Shanafelt et al, 2005)

Focus on Work/Life Balance

Positive Outlook

Religiosity and Spirituality

Wellness is a complex construct

Eudaimonic well-being (fulfillment) differs from
Hedonic well-being (happiness) (Ryan & Deci, 2001)

The Resident Wellness Scale



- Measures Wellness specific to Resident Physicians
- Reliable and valid
- Concise and scalable
- Open access
- Focused on identifying gaps in program learning environment
- Tracked overtime can measure effects from interventions

Step 1: Define the Construct

Panel of stakeholders
Residents, Educators, DIO's
Listed aspect of wellness
Described observable signs of wellness
Identified related and unrelated constructs
Decided on item format

Step 2: Generate Items

Wider pool of participants
Residents, Administrators, Faculty, Program Directors, Counselors
Wrote and review 93 scale items

Step 3: Pilot Long Form

92 candidate scale items
Depression (BDI) and Burnout (A-MBI)
Optimism (LOT-R), Life Satisfaction (SWL)
Social Desirability (SD), Personality (TIPI)
Completed by 62 residents

Step 4: Analyze to Create Instrument

Identified 10 items
Correlated appropriately with related and unrelated constructs
All positively worded items

Define Resident Wellness



Step 1: Define the Construct

Life Security: your basic needs are met

Meaningful Work: your work is valued

Personal Growth: you are in control

Ability: you can do a good job

Social Support: people help you

Institutional Support: your workplace supports you

Lack of Unwellness: you are free of negative behaviors

Step 2: Generate Items & Step 3: Pilot Form

92 items

5-point frequency scale

3 week period

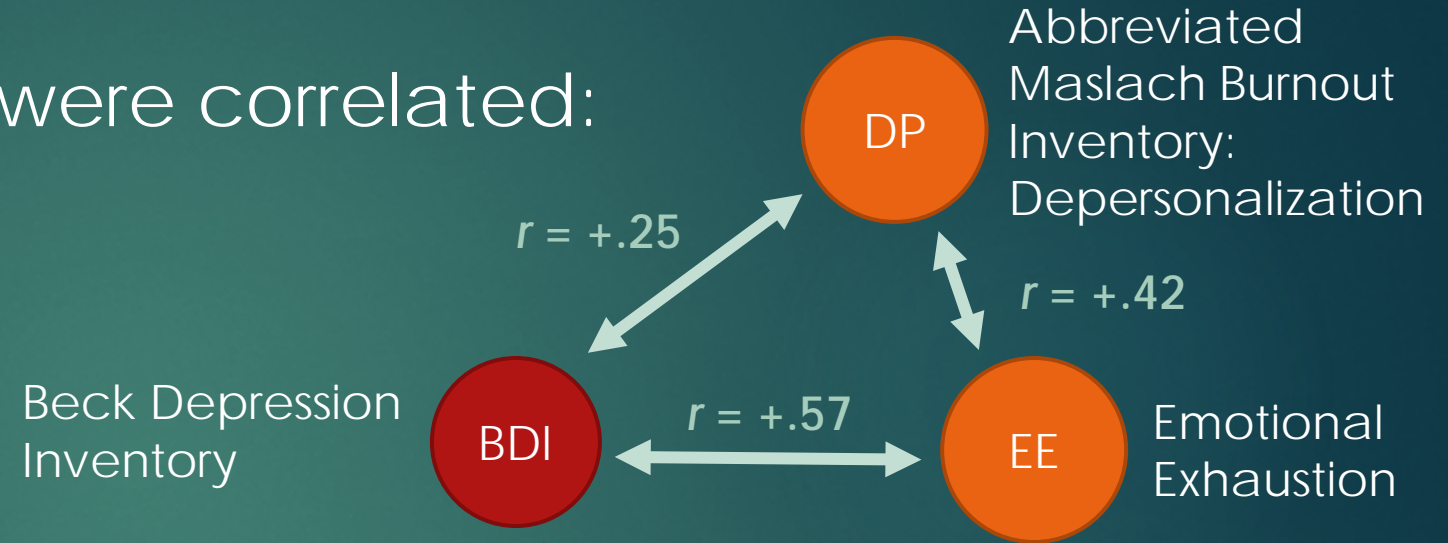
Compiled into web form

Please rate how often you have done or experienced each of the following items in the past 3 weeks:

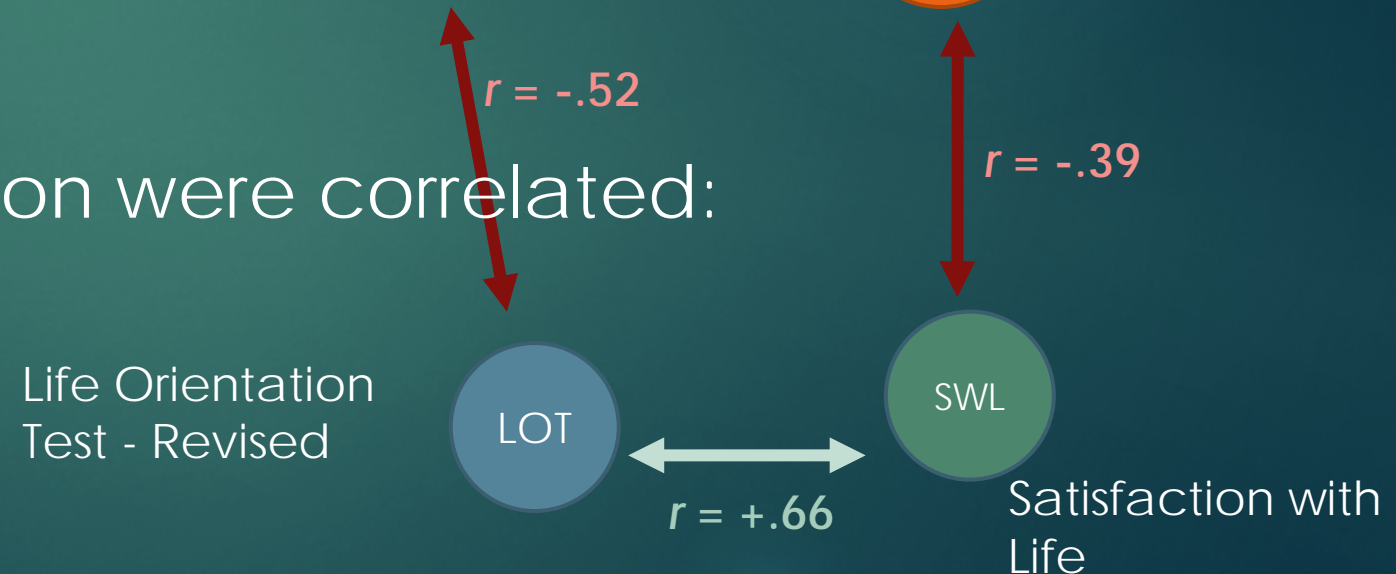
	<i>Never</i>	<i>Seldom</i>	<i>Some- times</i>	<i>Often</i>	<i>Very Often</i>
Reflected on how your work helps make the world a better place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt overwhelmed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Realized you had accomplished a lot at the end of the day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You felt comfortable where you are living	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt lonely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt inferior to your peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Convergent Validity of Scales:

Depression and Burnout were correlated:



Optimism and Life Satisfaction were correlated:



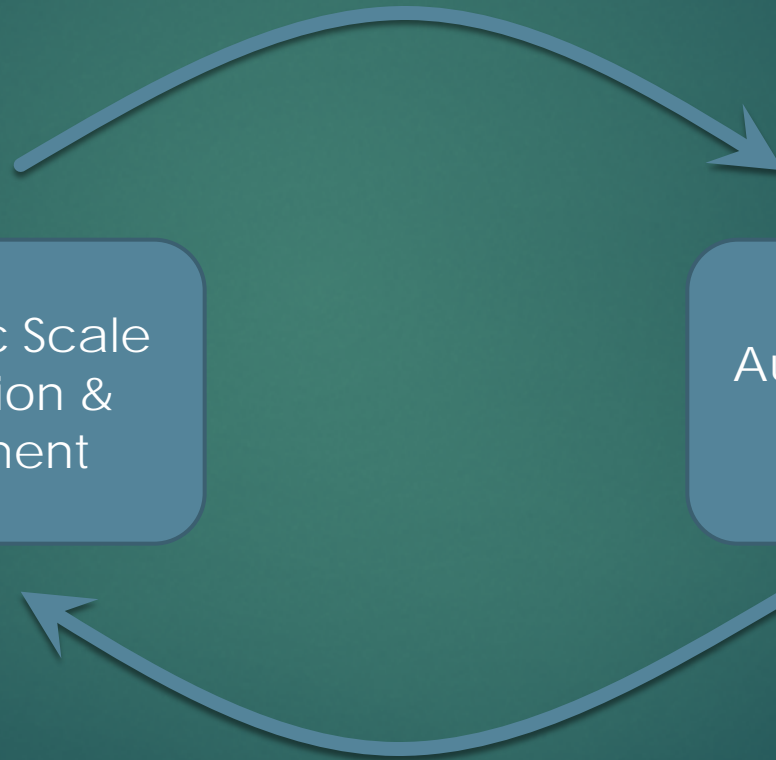
Step 4: Scale Creation:

Random selection of items
Random swapping out items
Keep iterations with best stats

Automatic Scale
Generation &
Refinement

Authors Adjust for
Face Validity

Remove redundant items
Measure entire definition
Remove awkward items



The Resident Wellness Scale (RWS)	Mean (SD)
Reflected on how your work helps make the world a better place	2.97 (1.20)
Felt the vitality to do your work	3.29 (1.00)
Felt supported by your co-workers	3.77 (0.84)
Had an enjoyable interaction with a patient	3.84 (0.81)
Was proud of the work you did	3.71 (0.91)
Was eager to come back to work the next day	2.92 (1.01)
You felt your basic needs are met	3.85 (1.01)
You ate well	3.50 (1.00)
Knew who to call when something tragic happened at work	3.31 (1.20)
You felt connected to your work in a deep sense	3.35 (1.01)
TOTAL SCORE	3.46 (0.68)



The Resident Wellness Scale

- High Cronbach's alpha: $\alpha = .87$
- Correlated with Depression: $r = -.45$
- Correlated with Burnout:
 - Emotional Exhaustion: $r = -.59$
 - Depersonalization: $r = -.45$
- Correlated with Optimism: $r = .46$
- Correlated with Life Satisfaction: $r = .58$
- Weaker correlation with Social Desirability: $r = .29$

The Resident Wellness Scale

Personality (TIPI) scores and Wellness:

Openness was associated with Wellness: $r = .51$

Emotional Stability was associated with Wellness: $r = .43$

Conscientiousness was associated with Wellness: $r = .31$

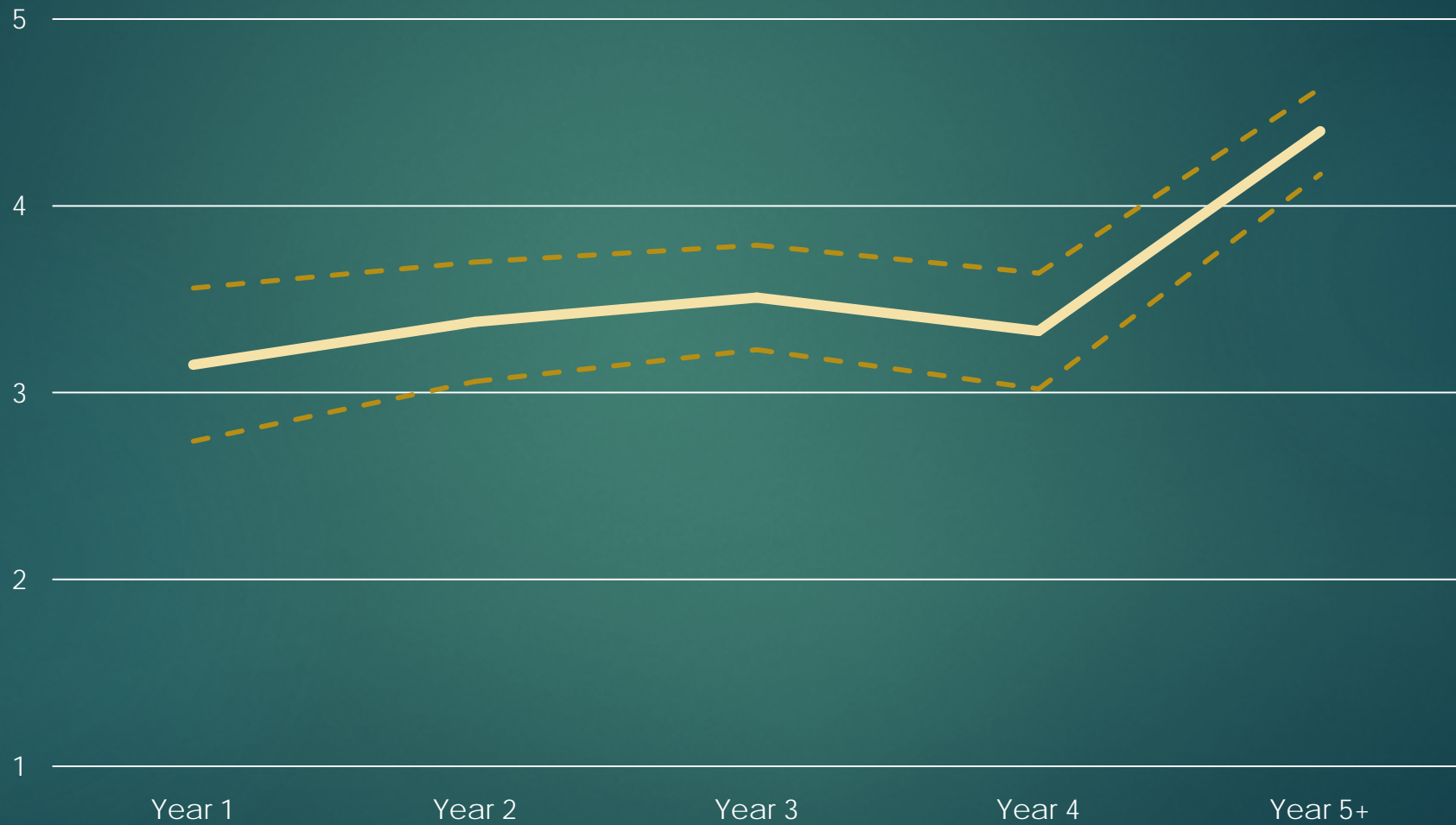
Agreeableness was slightly: $r = .13$

Extraversion was not: $r = .07$



<http://www.gme.wayne.edu/wellness>

Wellness by Year



Our Journey: The “4th Aim”

“Care of the Patient
Requires
Care of the Provider.”

Bodenheimer and Sinsky

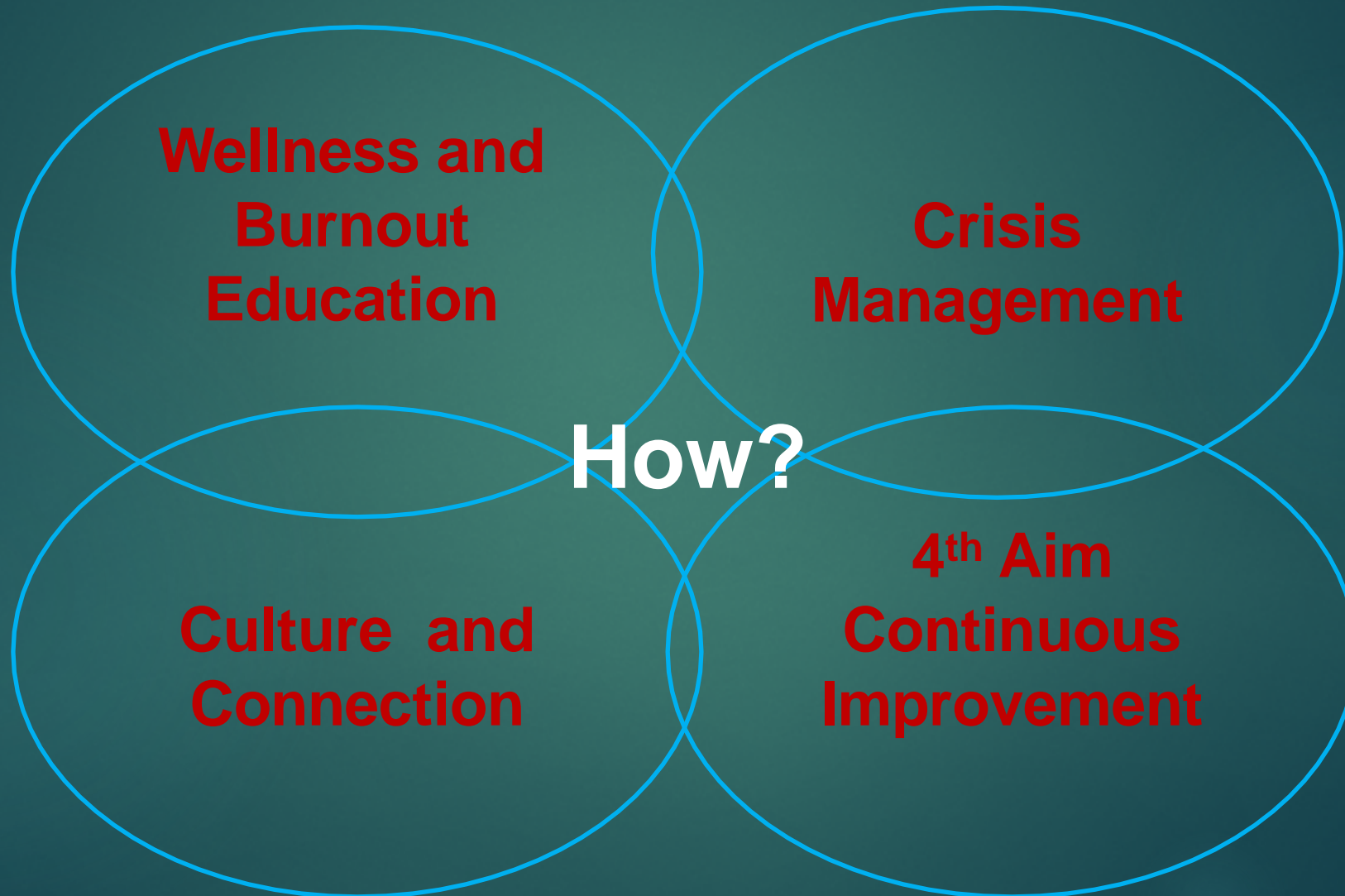


The way a group thinks, acts, and interacts

By design or by default?



Comprehensive Approach to 4th Aim Improved Clinician Experience



Design and Implement Interventions

Inoculate trainees against stress in their future careers

- ▶ Wellness advisory committee (Resident Council)
- ▶ Peer mentorship program
- ▶ Communication project: Facebook, blog, twitter, Google hang outs
- ▶ “Residents as Teachers” Certificate program (culminating edu. project to improve environment; professional empowerment)
- ▶ Resources for self-care and fitness
- ▶ Community service initiatives
- ▶ Social events, wellness activities

Ultimate Goals

- ▶ Transition from individual to program to institutional level
- ▶ Test impact of learning environment interventions
- ▶ Foster and assess culture of wellness

