

# Caring for You – Caring for Me:

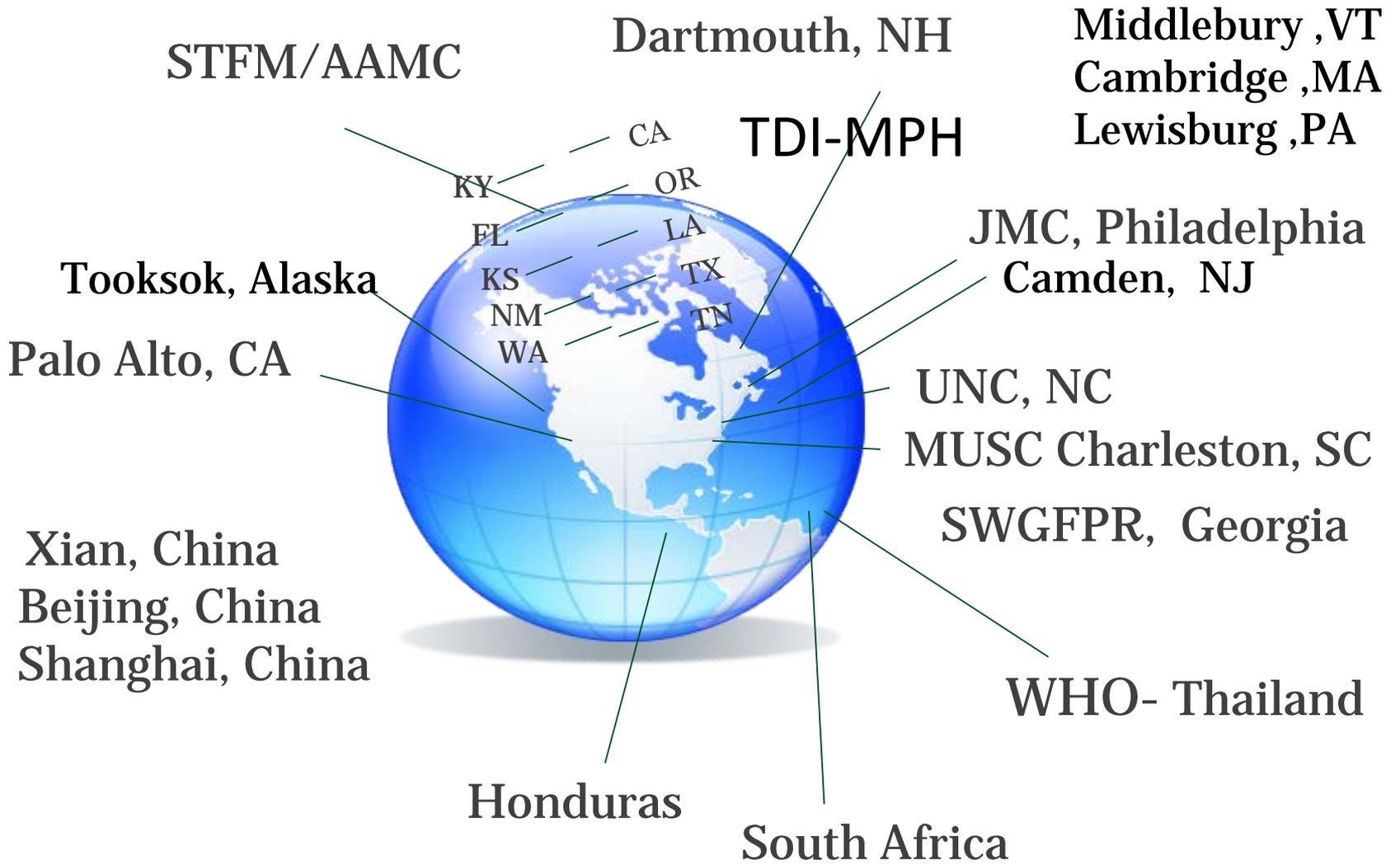
## *A Call to Prioritize Health in Health Professionals and Health Care Systems*

*"Knowing yourself is the beginning of all wisdom." ~Aristotle*

Catherine Florio Pipas, MD, MPH  
Geisel School of Medicine Dartmouth  
College of Medicine Humanism in Medicine Grand Rounds  
Florida State University  
April 19, 2018



# Pipas Pathway



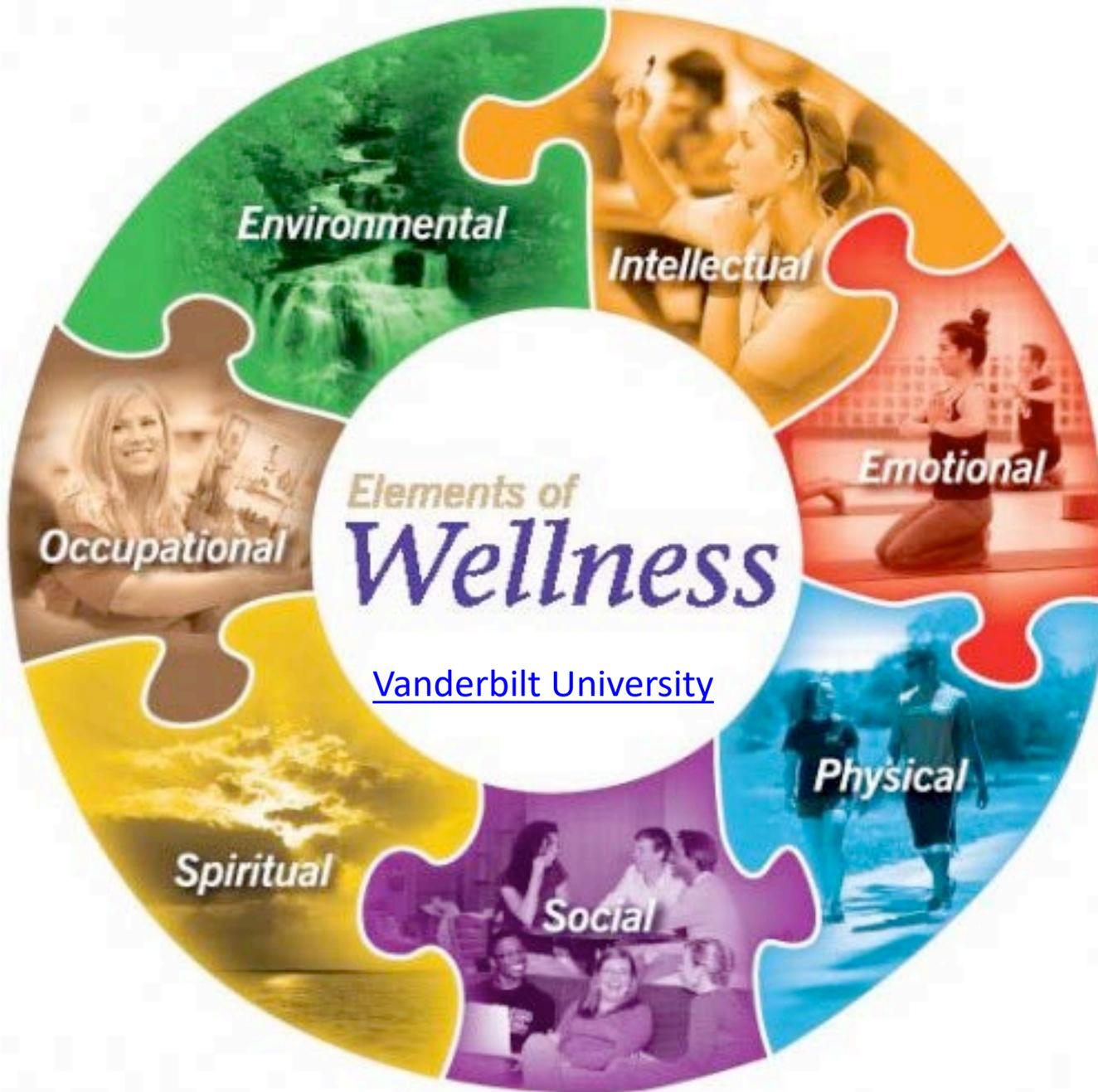
# Plenary Objectives:

- Discuss the importance of **Self-Care** and the **Impact of Burnout**
- Describe **factors that threaten** personal health and organizational wellness.
- Explore evidence-based **strategies** for leading change personally and at the system level.



A top-down view of a doctor in a white lab coat with a stethoscope around their neck. The doctor's hands are holding a small globe of the Earth. The text is overlaid on the globe.

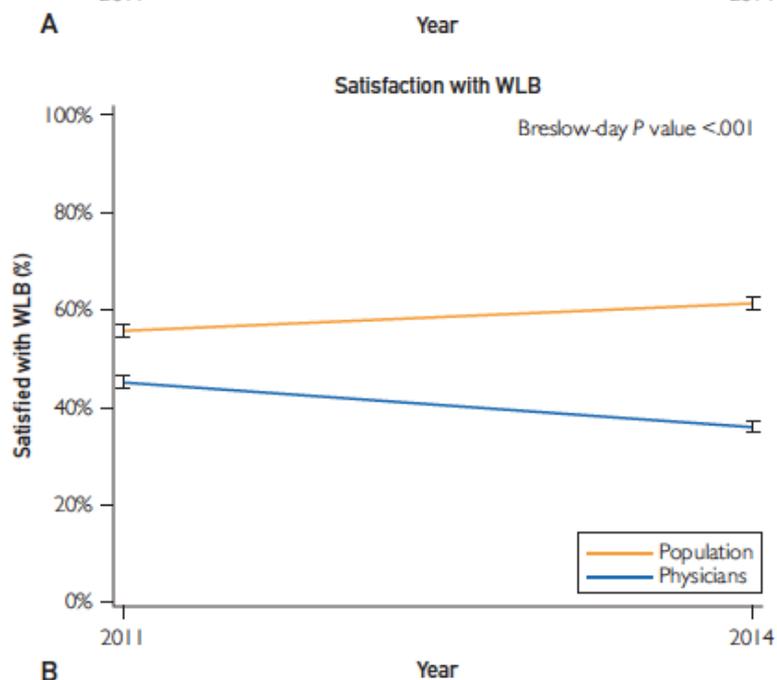
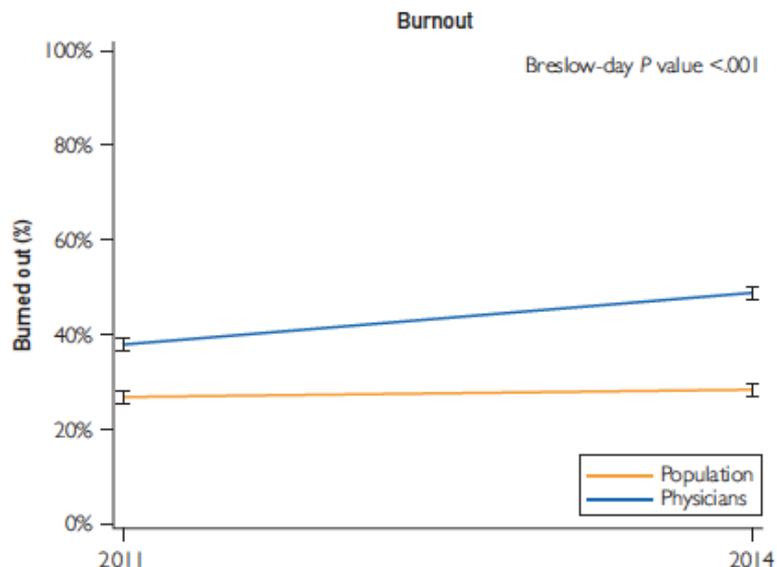
My Health  
is Critical to  
My Effectiveness  
as a ...



# THE EPIDEMIC OF BURNOUT

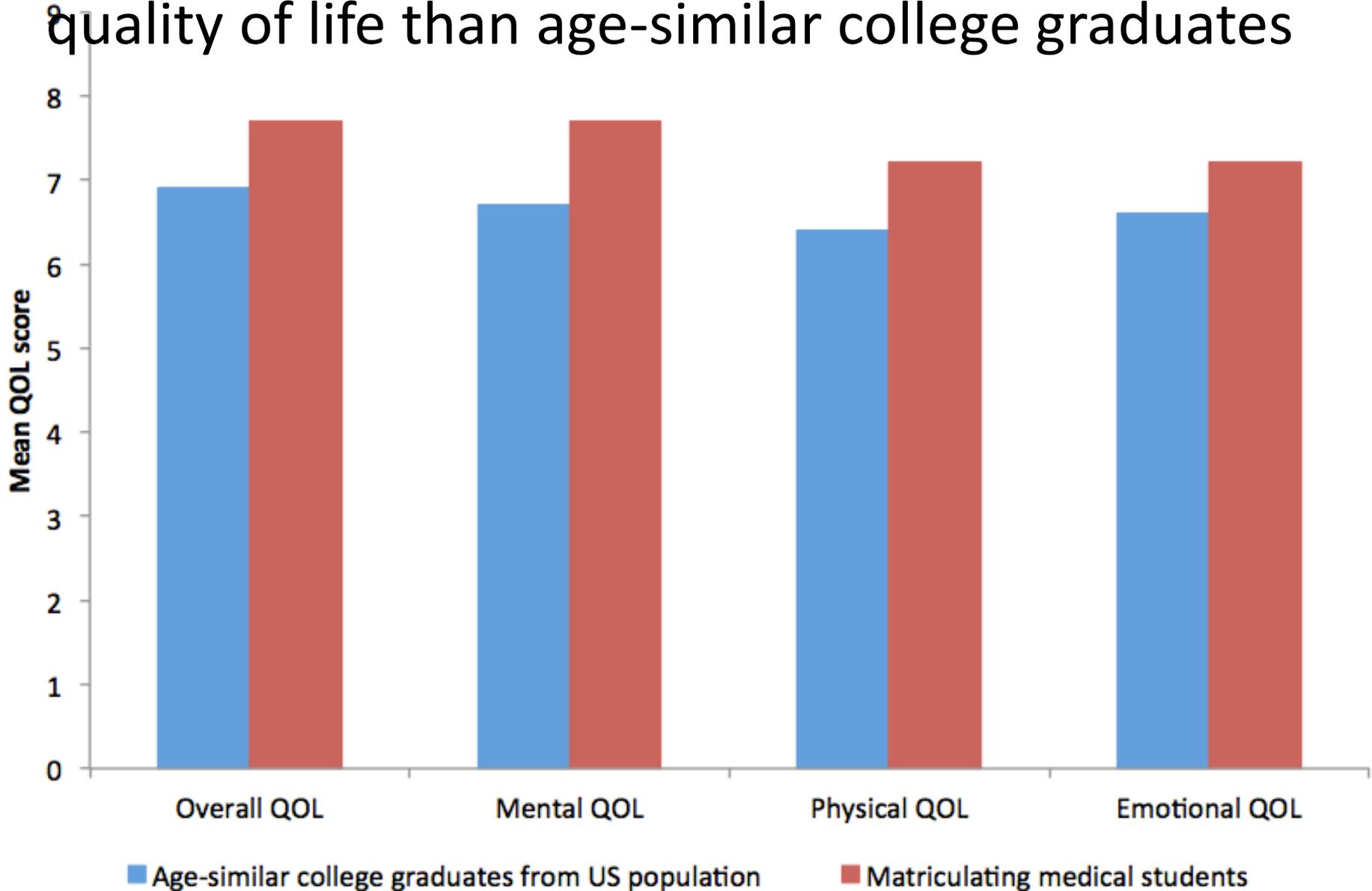
> 50%  
Students  
Residents  
Nurses  
Clinicians  
Researchers

Shanafelt et al.  
*Mayo Clin Proc.* 90(12):1600-1613 Dec 2015

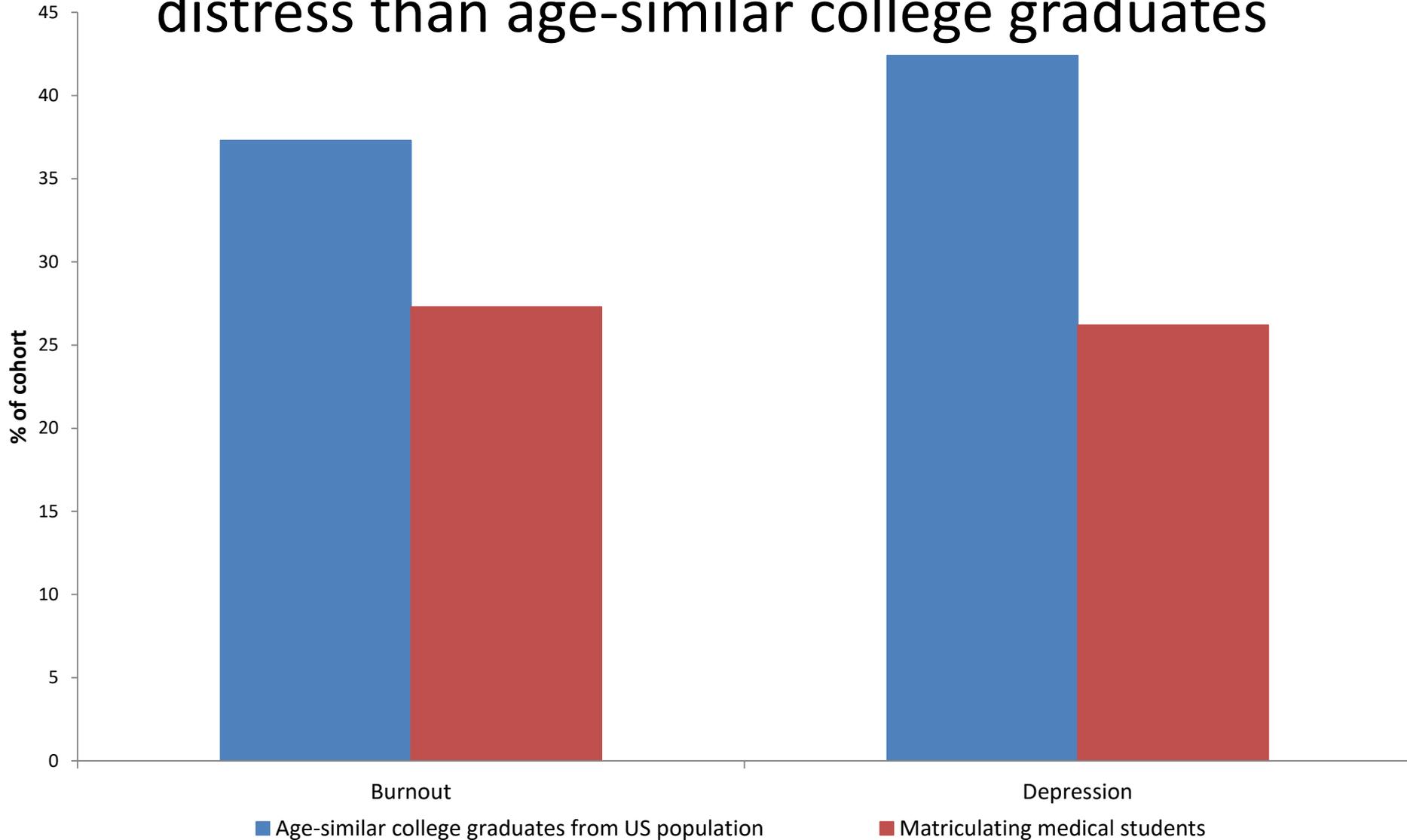


**FIGURE 2.** Changes in burnout and satisfaction with WLB in physicians and population year are shown on the x axis. Burnout (A) and satisfaction with WLB (B) are shown on the y axis. WLB = work-life balance.

# Matriculating medical students report better quality of life than age-similar college graduates



# Matriculating medical students report lower distress than age-similar college graduates



# Education is Protective Against Burnout

## 2011 AMA Burnout Survey

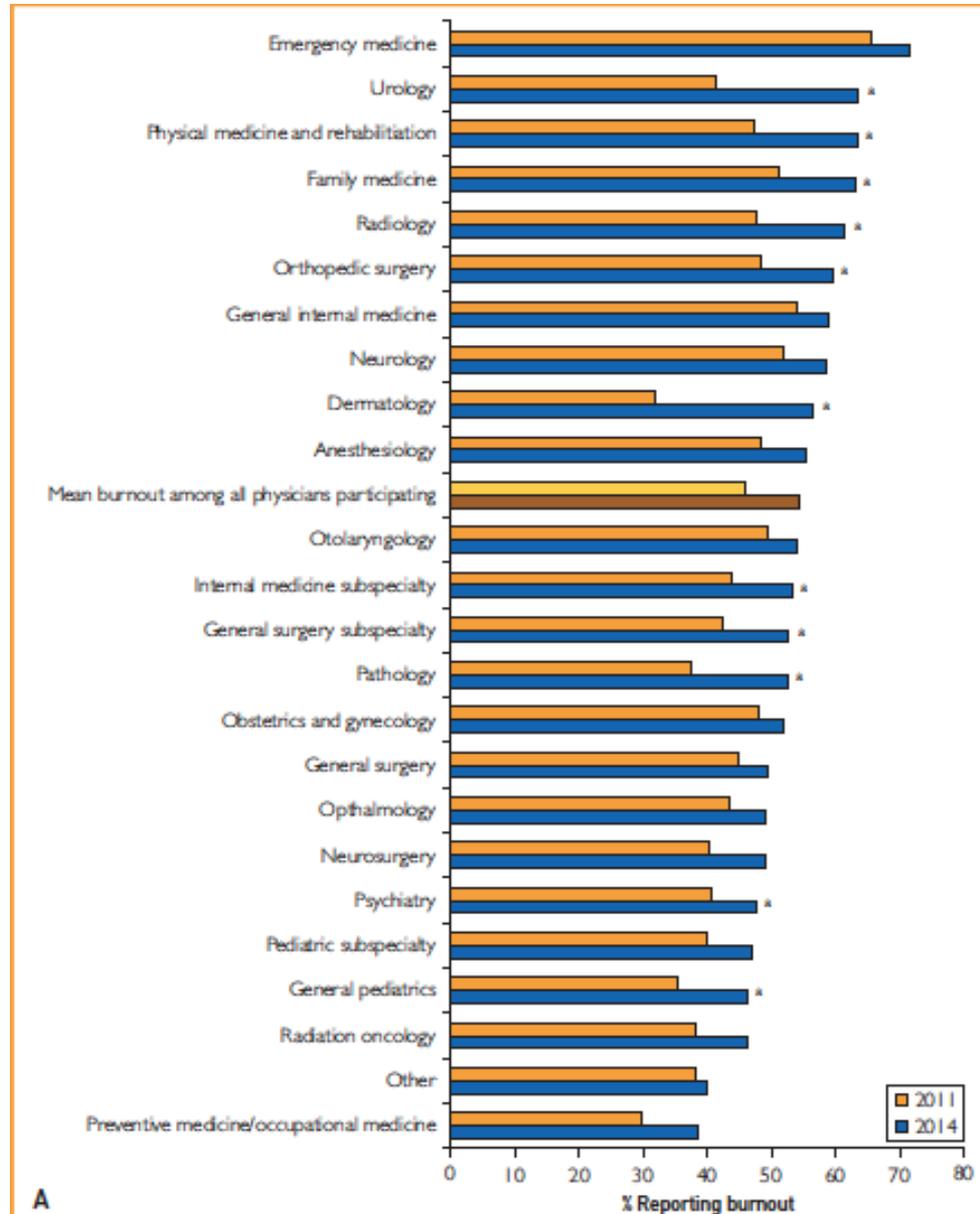
### Education (ref. high school graduates)

- Bachelors degree **OR=0.8**
- Masters Degree **OR=0.7**
- Doctorate ( non- MD/DO) professional degree **OR =0.6**
- MD/DO **OR = 1.36**

(Adjusting for age, gender, relationship status, and hours worked)



# BURNOUT BY SPECIALTY 2011- 2014



**A**  
**FIGURE 1.** Burnout (A) and satisfaction with WLB (B) by specialty 2014 vs 2011. For 1A and 1B, specialty discipline is shown on the y axis and burnout (A) and satisfaction with WLB (B) are shown on the x axis. For

Shanafelt et al.  
 Mayo Clin  
 Proc.90(12):1600  
 -1613 Dec 2015

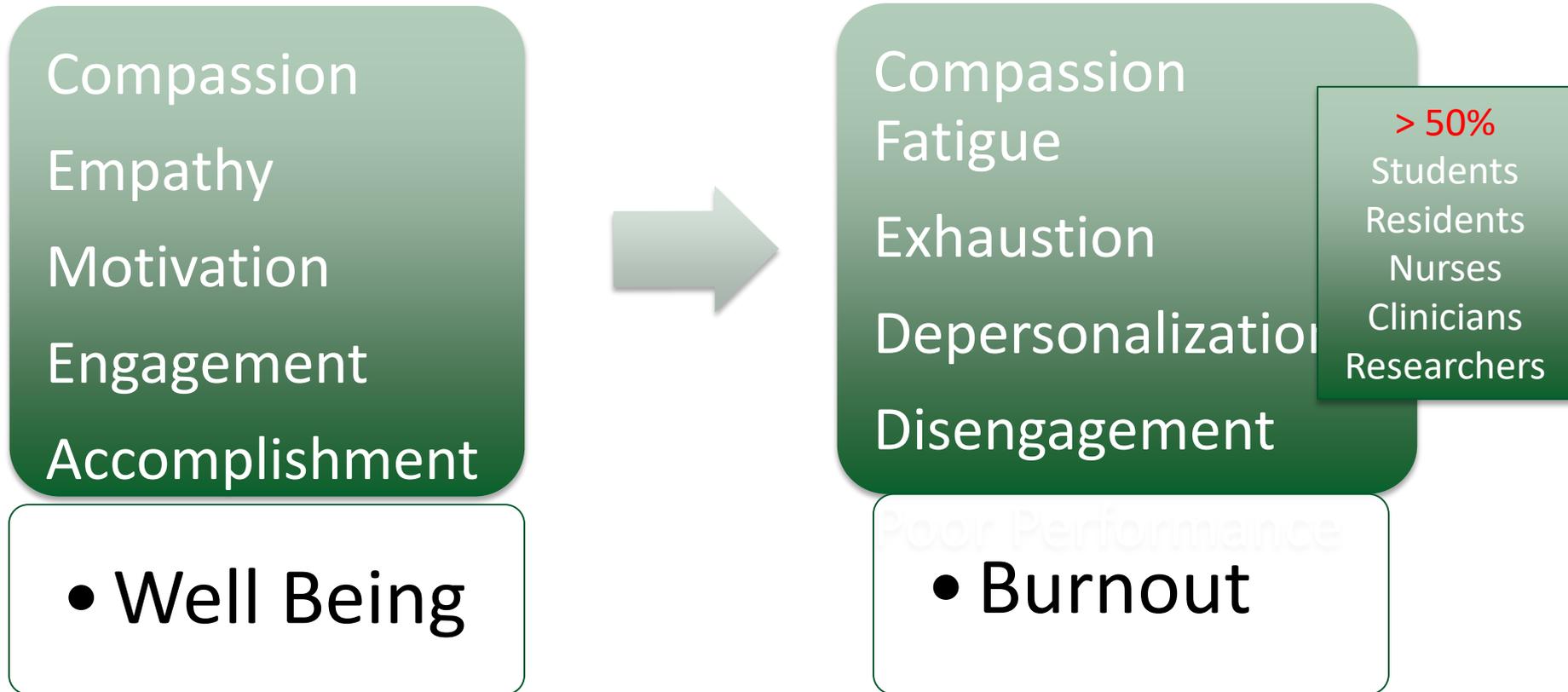
# Physician Well-Being Index (Dyrbye 2013,2014)

- 7-item online instrument
  - evaluating multiple dimensions of distress,
  - strong validity and national benchmarks,
  - large sample of medical students, residents and practicing physicians
- **Physicians DO NOT reliably self-assess their own distress**
- Feedback from self-reported responses can prompt intention to respond to distress



# Burnout – What does it look like?

“ Progressive loss of idealism, energy, and purpose experienced by people in the helping professions as a result of the conditions of their work”



(Tait 2015) (Kearney 2009)



# BURNOUT Screening:

## *Maslach 22 item Burnout Inventory Survey*

- Emotional Exhaustion
- Depersonalization
- Personal Accomplishment ( protective)

“Do you feel burned out from your work?”

Maslach 1999



# IMPACT OF BURNOUT

**Individual:** job dissatisfaction, anxiety, sleep disturbance, MSK pain, memory impairment, unprofessional behavior, substance abuse, depression and suicide

**PUBLIC HEALTH CRISIS**

**Organization:** performance, absenteeism, presenteeism, turnover, increased costs (\$1.6M -3.4B)

**Society:** (case of health professionals) suboptimal care, medical error, dissatisfaction, distrust, poor quality and outcomes

[Sandra Sanchez-Reilly](#) 2013, Dewa 2014, Shanafelt 2010, 2016, Ratanawongsa 2008, Forbes 2016, CEO's ROI Health Affairs



WHY?

WHY?

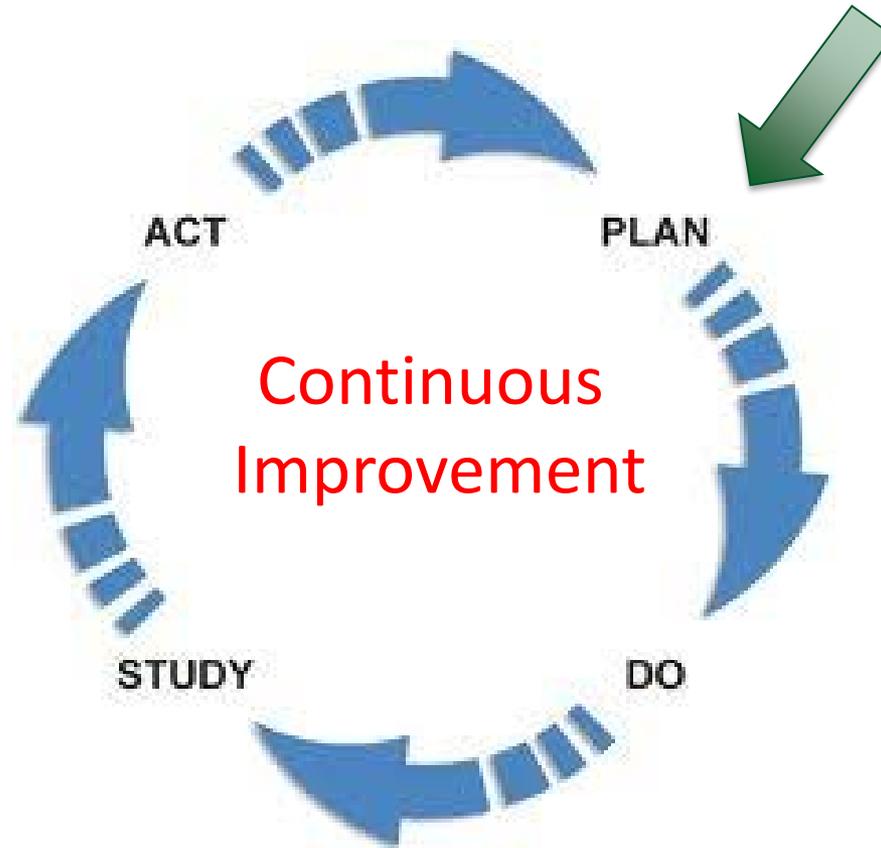
WHY?

WHY?

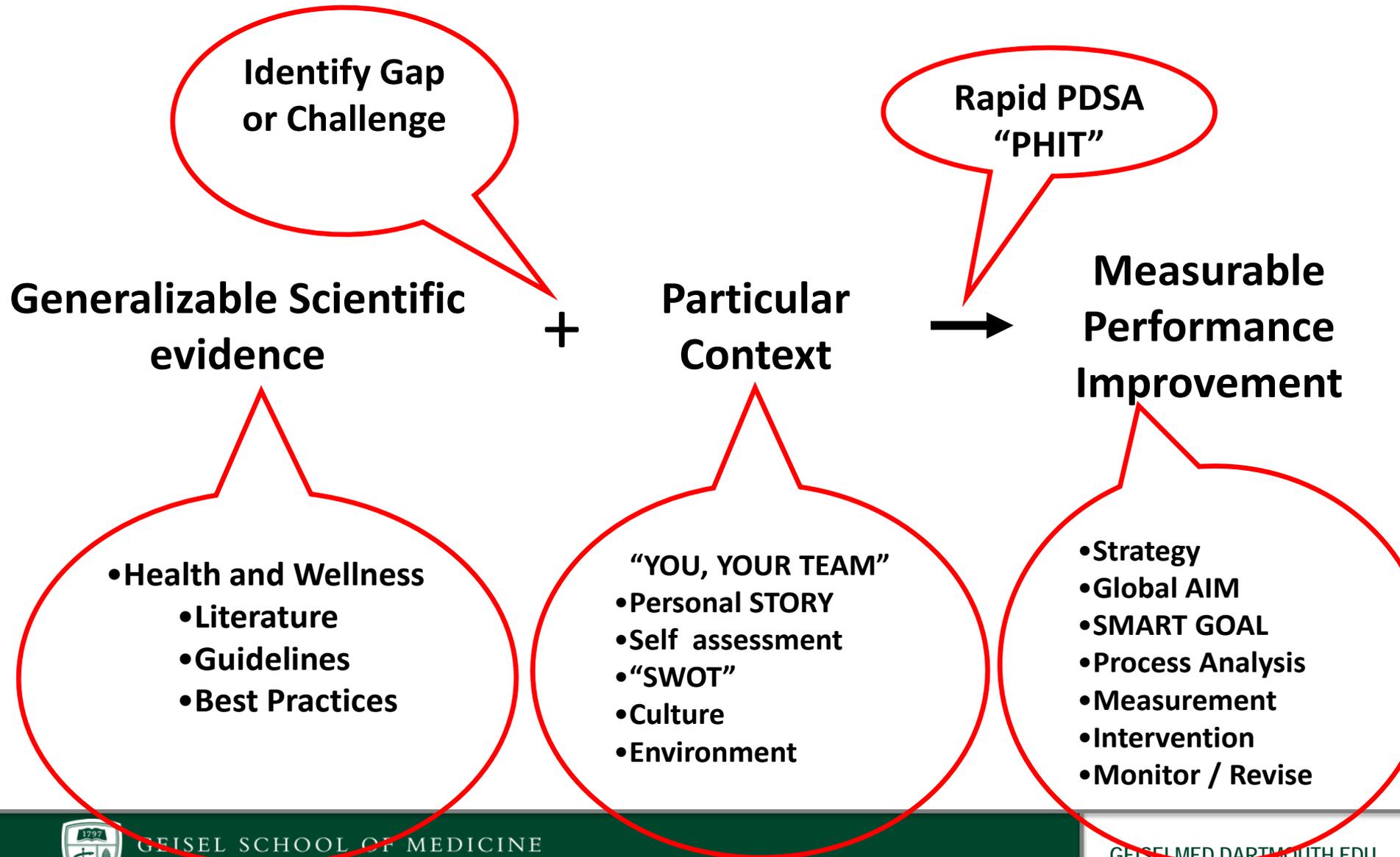
WHY?



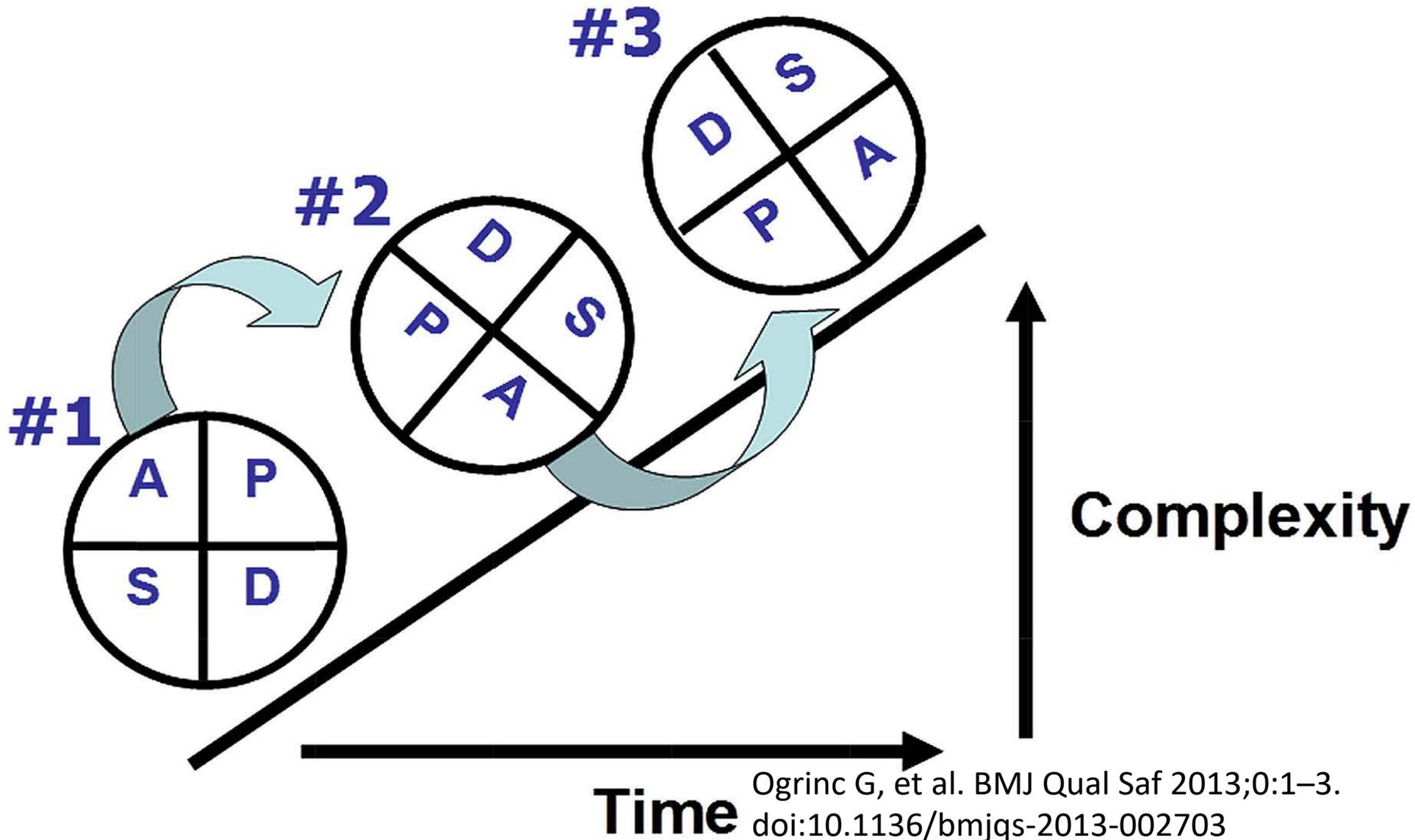
# Improvement Framework for Personal and System Wellness



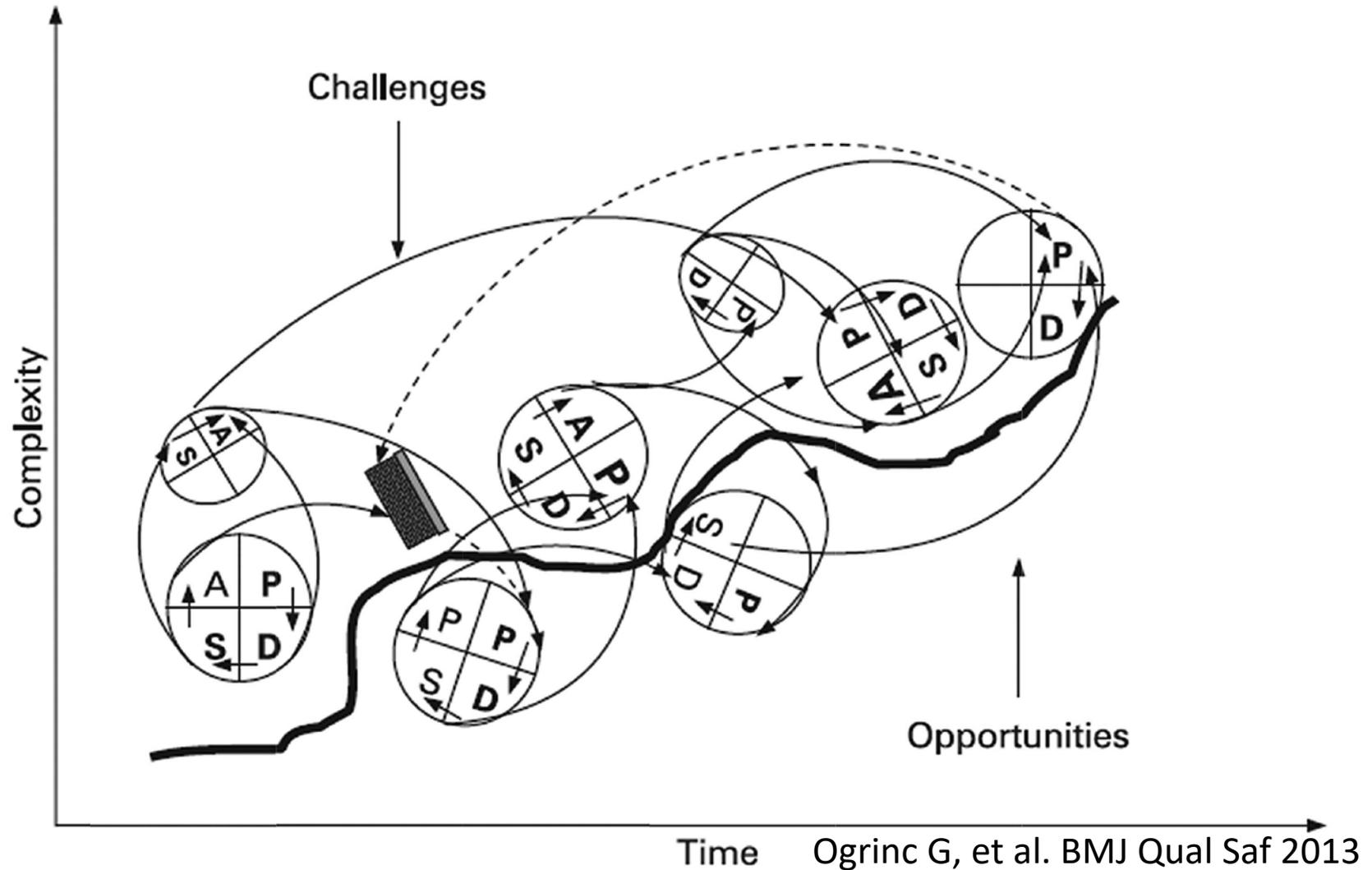
# Evidence-based Improvement Process



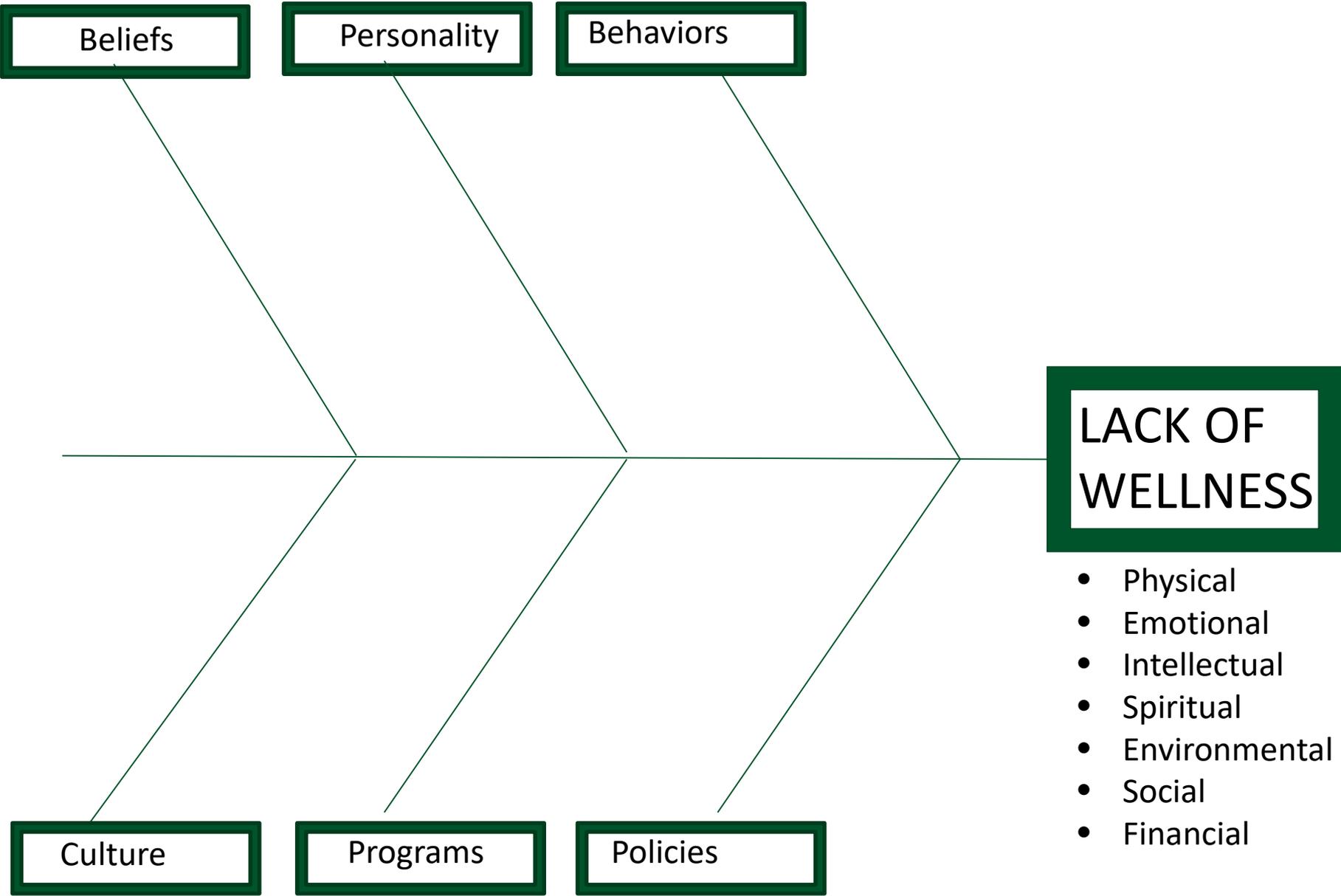
# THEORETIC IMPROVEMENT MODEL



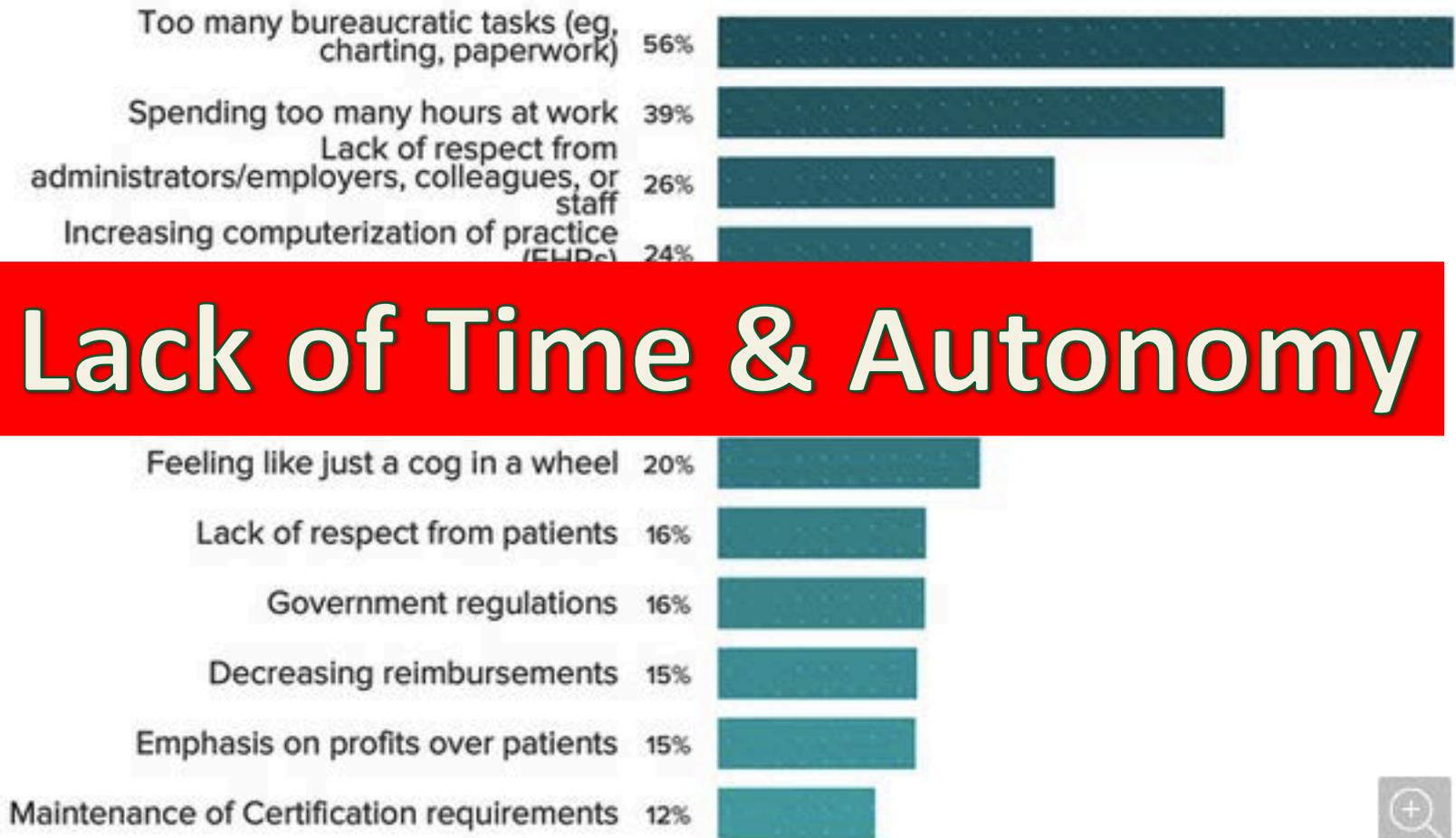
# ACTUAL IMPROVEMENT MODEL



# What Factors Threaten Wellness ? (Individual and System)

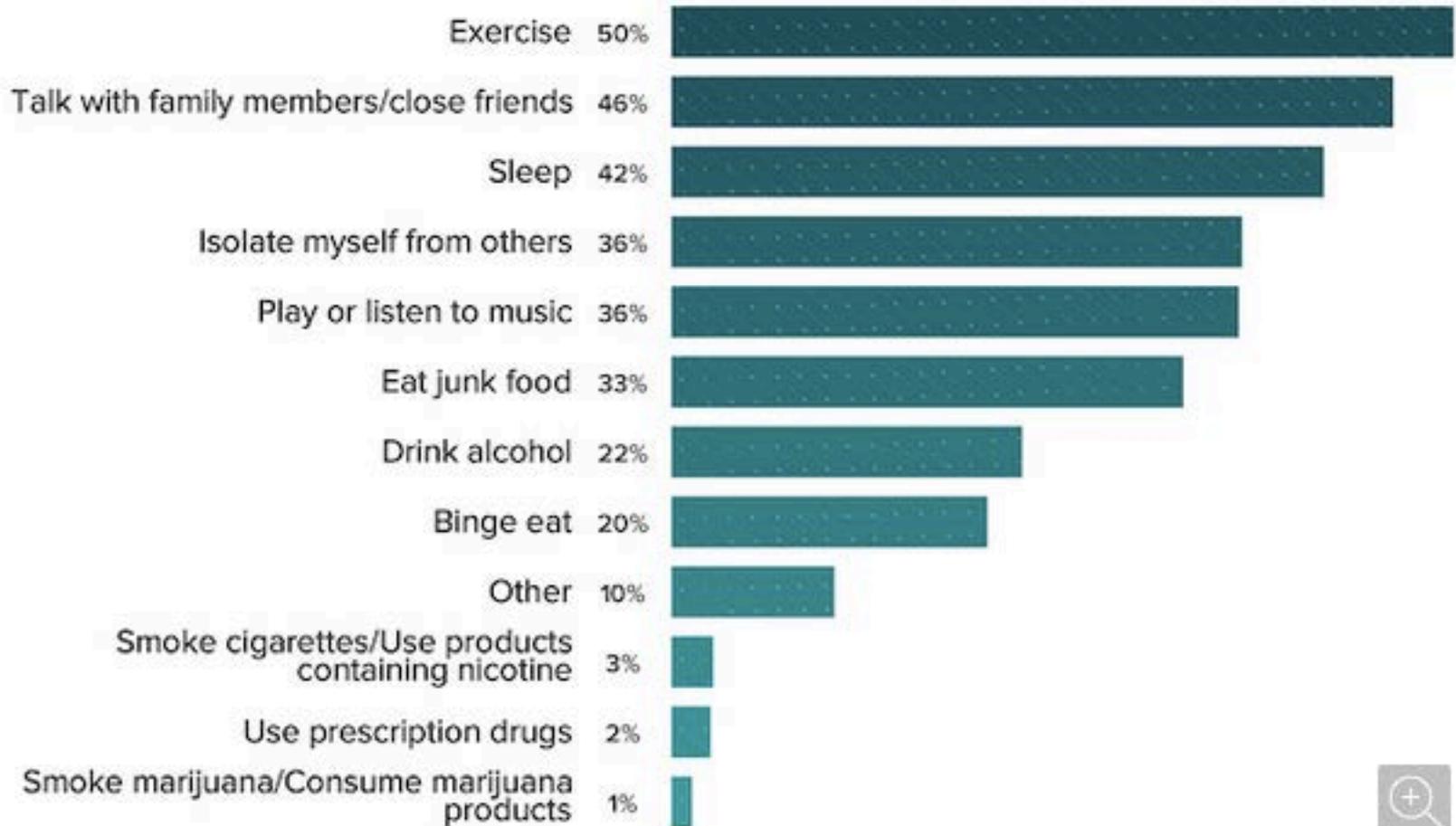


## What Contributes to Physicians' Burnout?



# Medscape National Physician Burnout & Depression Report 2018

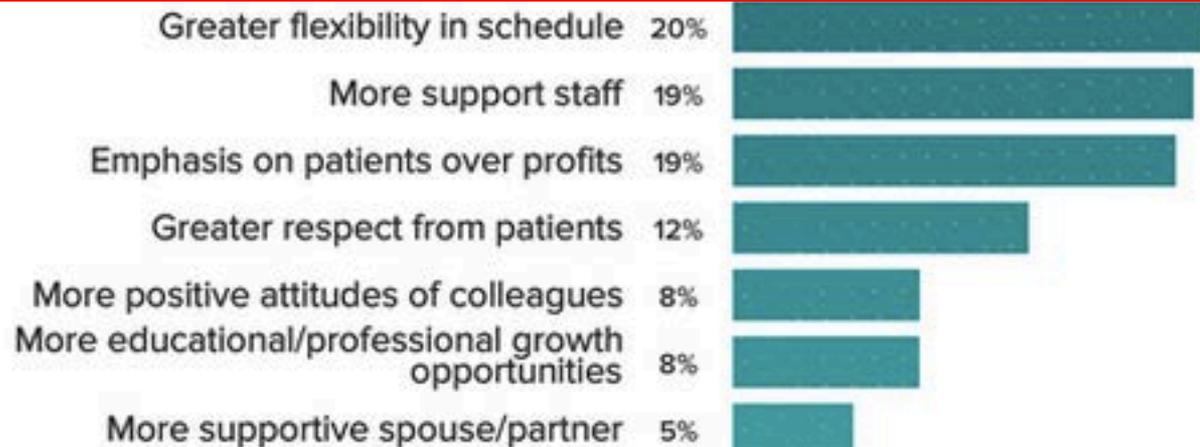
## How Do Physicians Cope With Burnout?



## What Would Reduce Your Burnout?



# Time, Resources & Autonomy



# From Triple to QUADRUPLE AIM:

Better  
Care

Better CARE of Health CARE TEAM

**From Triple to Quadruple Aim: Care of the Patient Requires Care of the Provider**

[Thomas Bodenheimer](#), MD<sup>1</sup> and [Christine Sinsky](#), MD<sup>2,3</sup>

*Ann Fam Med November/December 2014 vol. 12 no. 6 573-576*



# REFLECTION:

What STRATEGIES does your SYSTEM use to Sustain Wellness ?

?

?

?

Health &  
Wellness



# LANCET 2016

## Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis

Colin P West, Liselotte N Dyrbye, Patricia J Erwin, Tait D Shanafelt

### Summary

**Background** Physician burnout has reached epidemic levels, as documented in national studies of both physicians in

# Organizational & Individual Strategies

Science, and the Education Resources Information Center from inception to Jan 15, 2016, for studies of interventions to prevent and reduce physician burnout, including single-arm pre-post comparison studies. We required studies to provide physician-specific burnout data using burnout measures with validity support from commonly accepted sources of evidence. We excluded studies of medical students and non-physician health-care providers. We considered potential eligibility of the abstracts and extracted data from eligible studies using a standardised form. Outcomes were changes in overall burnout, emotional exhaustion score (and high emotional exhaustion), and depersonalisation score (and high depersonalisation). We used random-effects models to calculate pooled mean difference estimates for changes in each outcome.

**Findings** We identified 2617 articles, of which 15 randomised trials including 716 physicians and 37 cohort studies including 2914 physicians met inclusion criteria. Overall burnout decreased from 54% to 44% (difference 10% [95% CI 5–14];  $p < 0.0001$ ;  $I^2 = 15%$ ; 14 studies), emotional exhaustion score decreased from 23.82 points to 21.17 points (2.65 points [1.67–3.64];  $p < 0.0001$ ;  $I^2 = 82%$ ; 40 studies), and depersonalisation score decreased from 9.05 to 8.41 (0.64 points [0.15–1.14];  $p = 0.01$ ;  $I^2 = 58%$ ; 36 studies). High emotional exhaustion decreased from 38% to 24% (14% [11–18];  $p < 0.0001$ ;  $I^2 = 0%$ ; 21 studies) and high depersonalisation decreased from 38% to 34% (4% [0–8];  $p = 0.04$ ;  $I^2 = 0%$ ; 16 studies).

**Interpretation** The literature indicates that both individual-focused and structural or organisational strategies can result in clinically meaningful reductions in burnout among physicians. Further research is needed to establish which interventions are most effective in specific populations, as well as how individual and organisational solutions might be combined to deliver even greater improvements in physician wellbeing than those achieved with individual solutions.



Perspective January 25, 2018

# Beyond Burnout — Redesigning Care to Restore Meaning and Sanity for Physicians

Alexi A. Wright, M.D., M.P.H., and Ingrid T. Katz, M.D., M.H.S.

Perspective

# To Care Is Human — Collectively Confronting the Clinician-Burnout Crisis

Victor J. Dzau, M.D., Darrell G. Kirch, M.D., and Thomas J. Nasca, M.D.



NATIONAL ACADEMY OF MEDICINE

ABOUT THE NAM | PROGRAMS | INITIATIVES | PERSPECTIVES | NEWS | SUPPORT | MEMBER RESOURCES



Article **Figures/Media**

5 References

**T**HE ETHICAL principles that guide clinical care — a commitment to benefiting the patient, avoiding harm, respecting patient autonomy, and striving for justice in health care — affirm the

Audio Interview



## Organizational Commitment Statements

To provide an opportunity for organizations across the country to discuss and share plans of action to reverse clinician burnout and promote clinician well-being, the National Academy of Medicine (NAM) has collected statements describing organizational goals or commitments to action. By sharing their commitment to improving clinician well-being and reducing clinician burnout, these organizations are an active contributor to the NAM's Action Collaborative on Clinician Well-Being and Resilience. The following organizations have submitted formal statements:

- National Academy of Medicine
- Association of American Medical Colleges\*
- Accreditation Council for Graduate Medical Education\*
- ABIM Foundation\*
- Accreditation Council for Continuing Medical Education\*
- George Washington University School of Nursing
- Harvard Medical Faculty Physicians and Beth Israel Deaconess Medical

# Medical Education Strategies

- improving access to mental health providers,
- reducing stigma/barriers to mental health treatment,
- implementing wellness programs
- ~~changes to course content, contact hours, scheduling~~

limited evidence

need for quality education research

Slavin SJ, 2014 Acad Med, Wasson, LT, 2016 JAMA





# A Culture of Wellness Pilot 2018

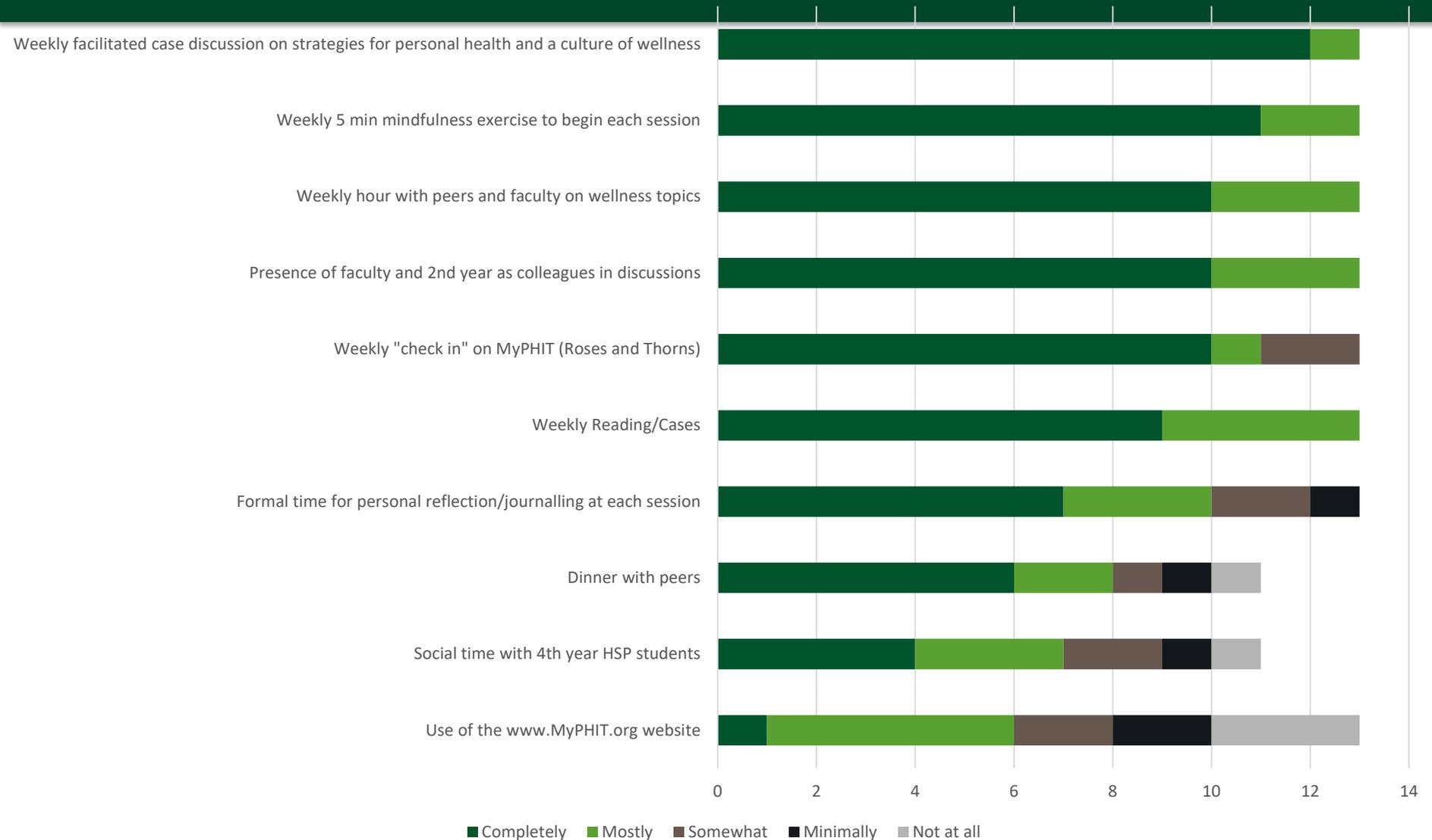
20 - Year 1 Students and Faculty with Controls & 4 Measures  
Time (8 hrs / 8 weeks), Tools (cases) and Permission (culture)



GEISEL  
— SCHOOL OF —  
MEDICINE  
AT DARTMOUTH

# Culture of Wellness:

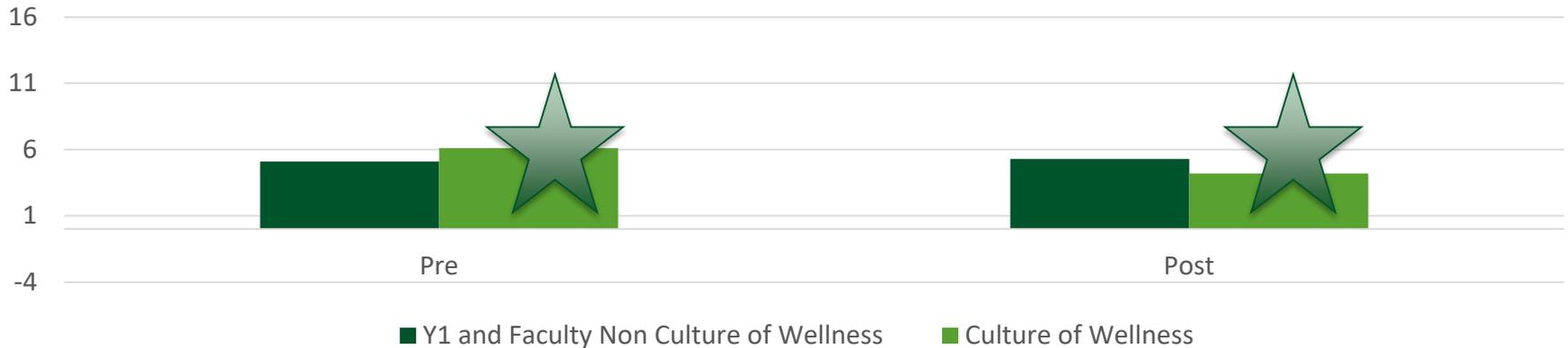
## To what degree did the following components add value to your wellbeing?



	Pre	Post	Difference
Y1 and Faculty Non Culture of Wellness	5.1	5.3	-0.2
Culture of Wellness	6.1	4.2	1.9



### Perceived Levels of Stress

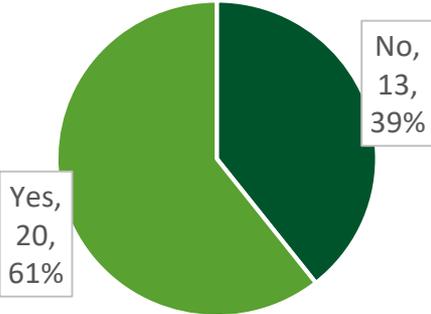


PSS-4 scores are calculated by summing across four items, which are measured on a 0-4 point scale. The possible range of scores is **0 to 16**, and **higher scores are correlated with higher perceived levels of stress**. Only participants who responded to every item on the scale are included in the summary statistics. The mean PSS-4 score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is often considered to be reliable if the estimate is 0.7 or higher.

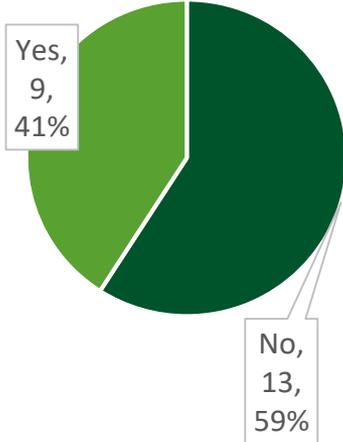


# Over the last month have you felt **burned out** from your work?

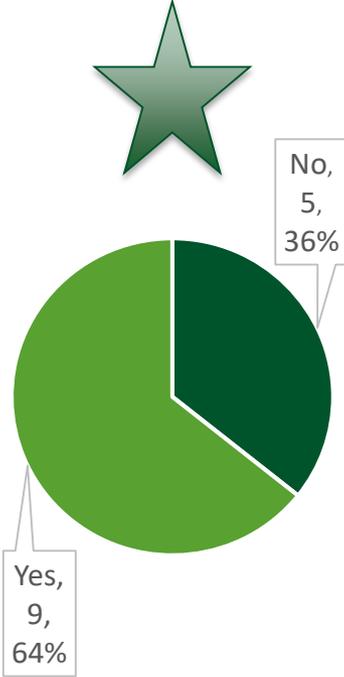
PRE- (control)



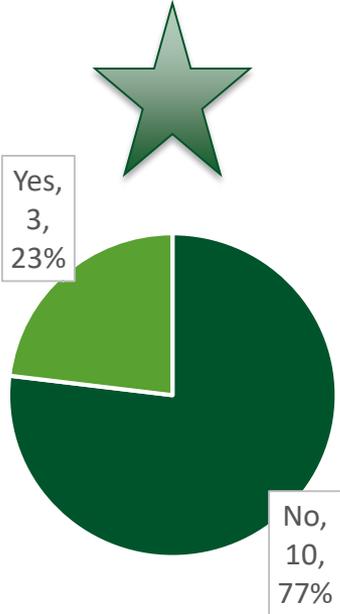
POST- (control)



PRE- (Culture of Wellness)



POST- (Culture of Wellness)



■ No ■ Yes

■ No ■ Yes

■ No ■ Yes

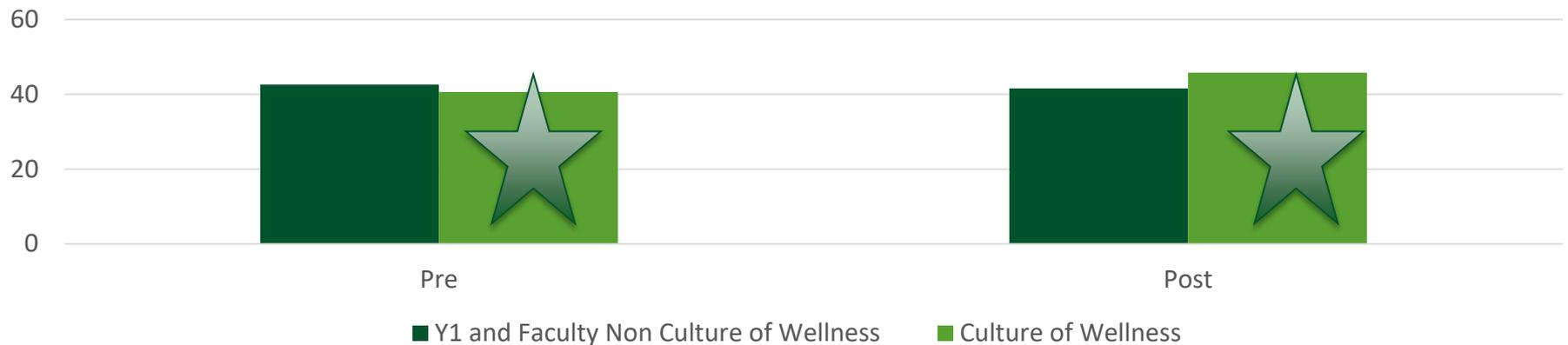
■ No ■ Yes



	Pre	Post	Difference
Y1 and Faculty Non Culture of Wellness	42.6	41.6	-1.0
Culture of Wellness	40.6	45.8	5.2



### Quality of Life



\*The Quality of Life (QOL) scale, which includes items from the Linear Analogue Self-Assessment Scale (LASA-6), is a measure of the following aspects of life: overall quality of life, mental (intellectual) well-being, physical well-being, emotional well-being, level of social activity, and spiritual well-being. QOL scores are calculated by summing across the six items, which are measured on a 0-10 point scale. The possible range of responses is **0 to 60**, and **higher scores are correlated with higher quality of life**. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is often considered to be reliable if the estimate is 0.7 or higher.



# Over the last month to what degree have you felt **present in the moment**?

	<b>Average 5 pt scale</b>	<b>Standard Deviation</b>
<b>PRE</b>	3.1	.88
<b>POST</b>	3.4	.91
<b>POST- Culture of Wellness</b>	3.5	.88



# What IMPACT has the *C of W* had ON YOU ?

“This program was essential to my personal health this semester. I needed to have this **time** to meditate, to reframe, to think about

## TIME, TOOLS and Permission

get me through me. I needed this program to show me that taking time for myself **is okay**, that replenishing myself is essential.”



# List one thing you will do differently to support our culture of wellness?

“Actively investigate the wellness of my friends and use these tools to support them by checking in. I will ask peers about their thorns and roses”

## TIME, TOOLS and Permission

“I will encourage peers to also make time to do the things that bring joy!”



# Select Strategies for Personal Health & Wellness

## Self Awareness *“Know yourself”*

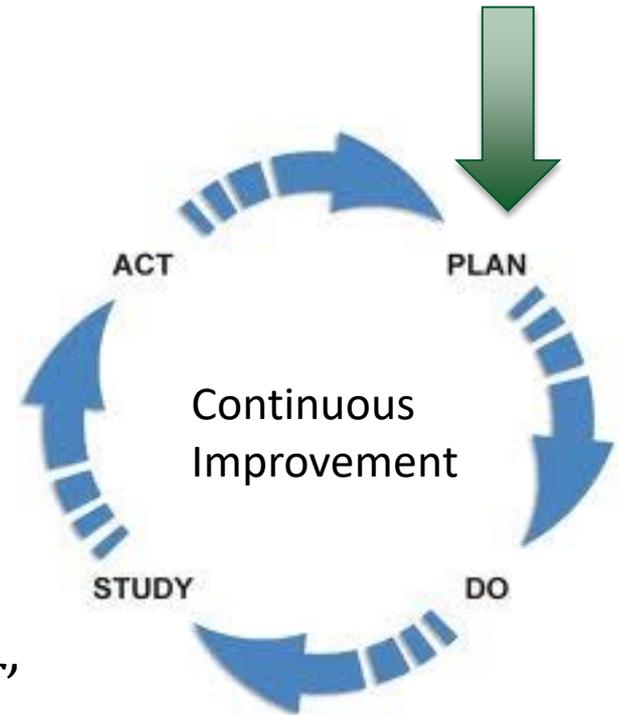
1. Mindfulness
2. Self Assessment

## Self Care *“Be authentic to yourself”*

3. Personal Mission & Vision
4. Personal Resilience

## Self Improvement *“Improve yourself”*

5. SMART GOALS
6. Personal Health Improvement Tool (PHIT)



# APPLICATION EXERCISE: SELF SWOT

**MY Strengths**

**MY Weaknesses**

**MY Opportunities**

**MY Threats**

Adapted from SWOT analysis template – a free resource from [www.businessballs.com](http://www.businessballs.com). Template © Alan Chapman 2005.



Be Present  
Mindfulness

Ask Questions  
Self Reflection

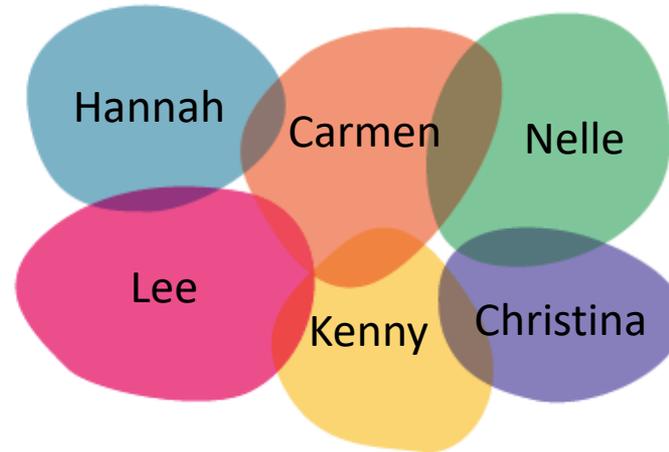
Build Resilience  
PTG Training

Write Your Story  
Narrative Journaling

Fill Your Tank  
Exercise/Healthy Eating

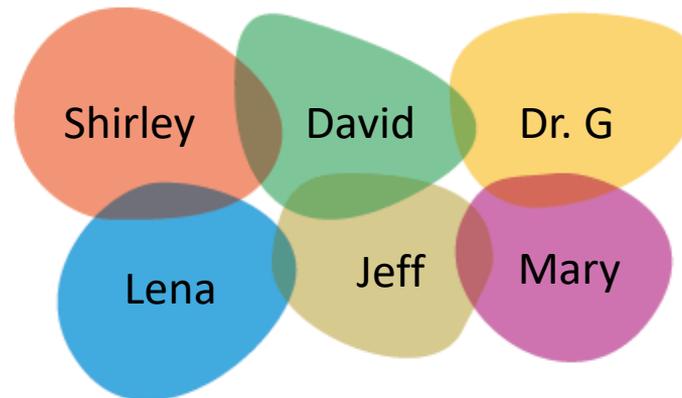
Renew Relationships  
Social Supports

*For health professionals—and everyone else*



## A DOCTOR'S DOZEN

12 STRATEGIES FOR PERSONAL HEALTH  
AND A CULTURE OF WELLNESS



CATHERINE FLORIO PIPAS MD, MPH

Replenish 24/7  
Time Management

Cultivate a Healthy  
Environment  
Role Modeling

Embrace Change  
Emotional Intelligence  
SMART CQI

Make Healthy Choices  
Prioritize Purpose

Rewrite Your Story  
Cognitive Reframing

Celebrate  
Practice Gratitude

# Self Improvement: Analyze SWOT & CHOOSE “SMART”

“The Superior man is modest in his speech, but exceeds in his actions” Confucius

## SMART Objective:

**S**pecific –Actionable

**M**easurable – Process/Outcome

**A**chievable – Confidence 1-10

**R**elevant – Importance 1-10

**T**imely – Set dates

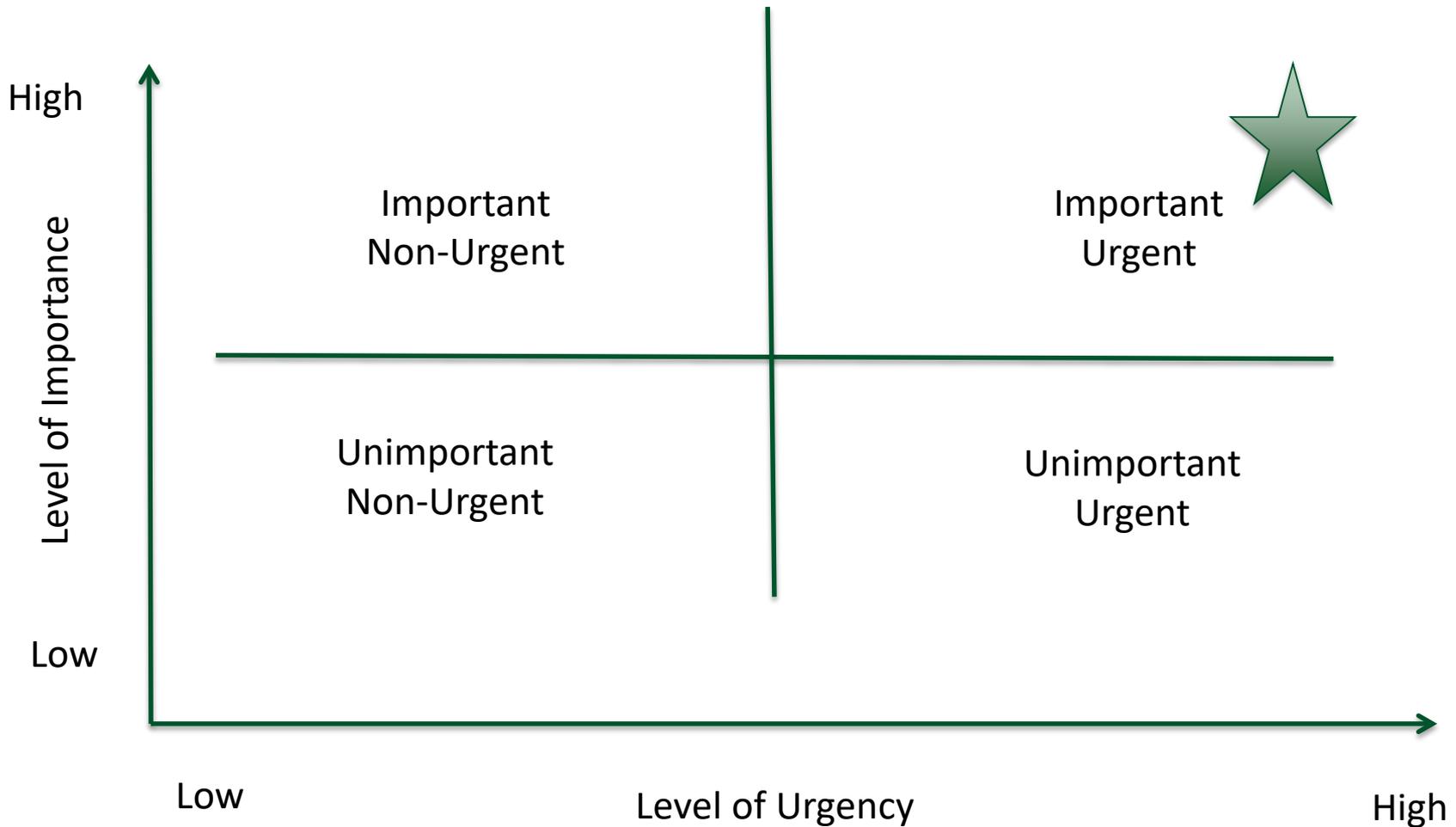
MY Strengths	MY Weaknesses
MY Opportunities	MY Threats

Adapted from SWOT analysis template – a free resource from [www.businessballs.com](http://www.businessballs.com). Template © Alan Chapman 2005.



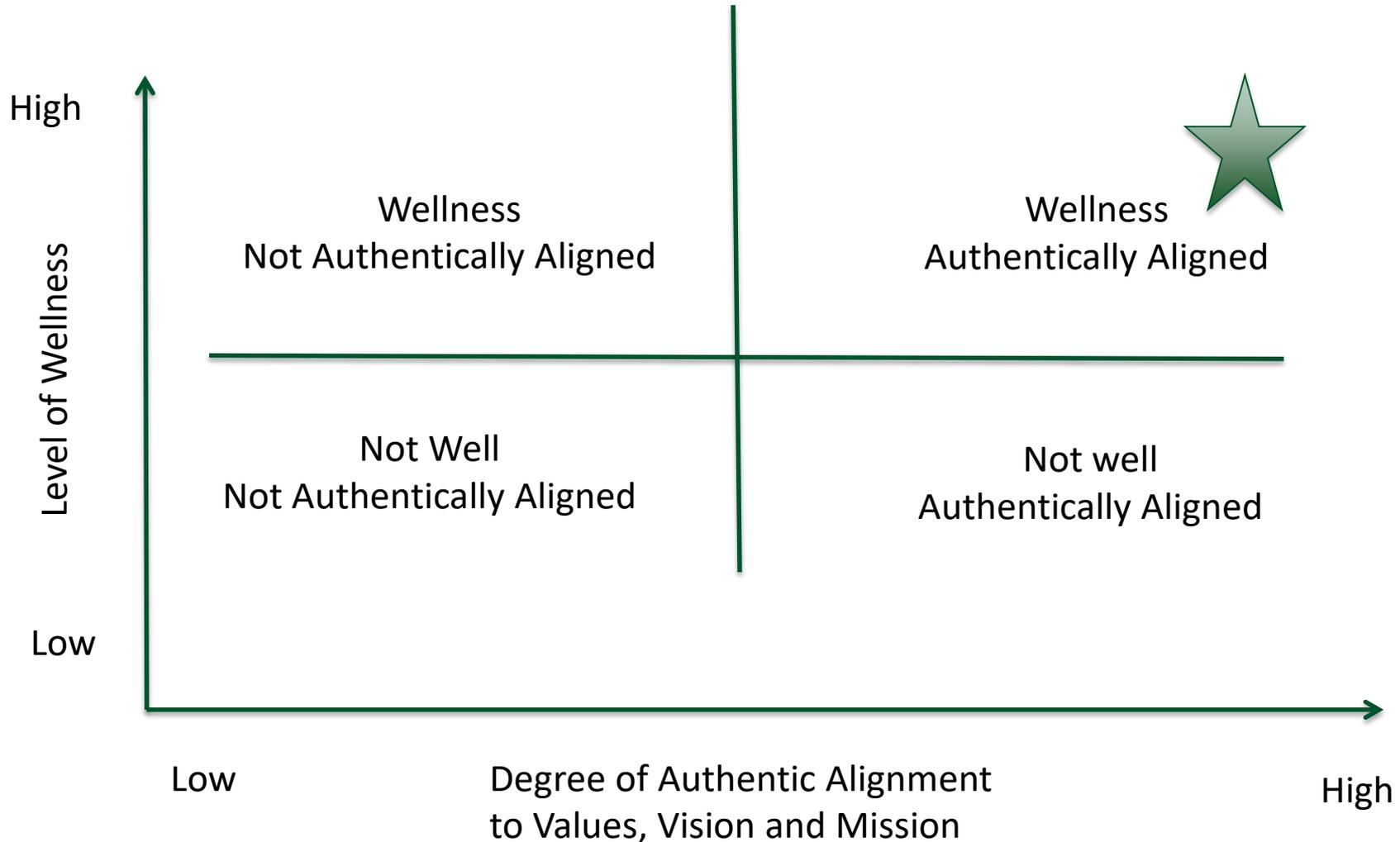
# Traditional view of Choice

*Adapted from D. Sull, C. Spinosa, Promised-based Management, HBR2007*



# Wellness View of Choice

*Adapted from D. Sull, C. Spinosa, Promised-based Management, HBR2007*



# Personal Health Improvement Plan

**GOAL:** Increase Energy through Physical Exercise

**SMART OBJECTIVE:**

**Specific** – Run 5 times/week for 25 minutes

**Measurable** – Process: completed(yes/ no) , Outcome: personal rating of energy (1 to 5 scale)

**Achievable** – confident 9/10

**Relevant** – important 10/10 to my goal

**Timely** – beginning today and 5x/w for 1 month



# Personal Health Improvement Plan

**GOAL:** Reduce stress through mindful meditation at lunch

**SMART OBJECTIVE:**

**Specific** – 10 min meditation QAM

**Measurable** – Process complete, personal rating of stress (on 1 to 5 scale)

**Achievable** – confident 8/10

**Relevant** – important 10/10 to goal

**Timely** – begin today for 21 days



# Personal Health Improvement Plan

**GOAL:** Improve Time Management

**SMART OBJECTIVE:**

Specific –Unplug for 3 hours a day

Measurable – Process complete, self assess  
“free time” 1-10 daily

Achievable – confident 7/10

Relevant – important 10/10 to my goal

Timely – begin today & daily for 30 days



# Personal Health Improvement Plan

**GOAL:** Improve Resilience through Social Connections

## **SMART OBJECTIVE:**

**Specific** – Contact 1 family/team member daily

**Measurable** – Process complete, self assess

“connectedness” 1-10 daily

**Achievable** – confident 9/10

**Relevant** – important 9/10 to my goal

**Timely** – begin today & daily for 60 days



# EX. Personal Health Improvement Plan

**GOAL:** Enhance Positivity with Appreciative Inquiry (AI)

## **SMART OBJECTIVE:**

**Specific** – **Daily AI journal**, list one item I did well, or identify the good that can come from an adverse experience

**Measurable** – Process completed, Outcome personal rating of positivity (1 to 5 scale)

**Achievable** – confident 9/10

**Relevant** – important 10/10 to my goal

**Timely** – begin today & daily for 21 days



# Personal Health Improvement Plan



GEISEL SCHOOL OF MEDICINE  
AT DARTMOUTH

## PERSONAL LEADERSHIP PLAN

©Center for Continuing Education in the Health Sciences and the Office of Community-Based Education and Research at Dartmouth

1. **Learning Goal:** Write a statement that describes what you want to learn or change related to a topic covered in this session or conference. Aim for a goal that is specific, actionable, measurable, relevant and achievable within a reasonable time frame (e.g., 3-months).

2. **Consider factors that may affect the likelihood of your success. Circle response.**

a. How important is it for you to achieve your goal on a scale from 1-10? (1=not at all important; 10=extremely important)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

b. How confident are you that you can achieve your goal (or make progress towards your goal) on a scale from 1-10 (1=not at all confident, 10=extremely confident)?

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

\*\*If you rated either question as a 6 or below, consider choosing a different goal.

3. **Learning activities/strategies to accomplish the goal:** What will you do? Aim to define two specific and measurable strategies e.g., "locate and read three recent reviews on treatment of diabetes" versus "read updates on diabetes".

a.

b.

4. **Timeline:** Define a timeline for your strategy. When do you plan to start, assess, and finish process?

Start date	Assess date	Finish date

5. **Measures to know if the goal is accomplished:** How will you know that you've reached your goal? What will you measure and how will you measure it? (e.g., monitor 20 statin prescriptions given during a 400,000 period).

a. What will you measure?

b. How will you measure it?

6. **Resources to help accomplish your goal:** What resources do you have or need to achieve the above? ~~Are there~~ Are there staff who could help collect measures? Could you arrange with another participant or colleague to review your progress?

a. Resources I have: 1. \_\_\_\_\_ 2. \_\_\_\_\_

b. Resources I need: 1. \_\_\_\_\_ 2. \_\_\_\_\_





IMPROVE YOURSELF IN JUST 30 DAYS.

My Personal Health Improvement Tool (PHIT)

# Increase Social Supports

Let's Get Started



## Plan your PHIT

*What is your health priority? Choose a theme and plan your SMART goal to improve your Personal Health.*



## Track your PHIT

*How was today? Monitor your progress towards a healthier you.*



## Share your PHIT

*You're not alone! Share your wellness journey, see what others are working on in the PHIT community.*

# Top 10 *MyPHIT.org* themes

1. Begin Meditation/Mindfulness
2. Enhance Physical Exercise
3. Advance Healthy Eating
4. Improve Sleep Hygiene
5. Foster Reflection/ Journaling
6. Un Plug from Technology
7. Improve Time Mgmt.
8. Increase Social Supports
9. Promote Positivity/Appreciative Inquiry
10. Pursue a passion- new/old hobby (read, write, sing)





## BENFRANKLIN'S

# 13 VIRTUES

### **1. TEMPERANCE**

Eat not to dullness and drink not to elevation.

### **2. SILENCE**

Speak not but what may benefit others or yourself. Avoid trifling conversation.

### **3. ORDER**

Let all your things have their places. Let each part of your business have its time.

### **4. RESOLUTION**

Resolve to perform what you ought. Perform without fail what you resolve.

### **5. FRUGALITY**

Make no expense but to do good to others or yourself: i.e. Waste nothing.

### **6. INDUSTRY**

Lose no time. Be always employed in something useful. Cut off all unnecessary actions.

### **7. SINCERITY**

Use no hurtful deceit. Think innocently and justly; and if you speak, speak accordingly.

### **8. JUSTICE**

Wrong none, by doing injuries or omitting the benefits that are your duty.

### **9. MODERATION**

Avoid extremes. Forebear resenting injuries so much as you think they deserve.

### **10. CLEANLINESS**

Tolerate no uncleanness in body, clothes or habitation.

### **11. CHASTITY**

Rarely use venery but for health or offspring; Never to dullness, weakness, or the injury of your own or another's peace or reputation.

### **12. TRANQUILITY**

Be not disturbed at trifles, or at accidents common or unavoidable.

### **13. HUMILITY**

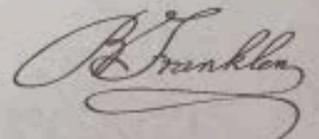
Imitate Jesus and Socrates.



Franklin didn't try to work on all 13 virtues at once. Instead, he would work on one and only one each week "leaving all others to their ordinary chance." While Franklin didn't live completely by his virtues, and by his own admission he fell short of them many times, he believed the attempt made him a better man and greatly contributed to his success and happiness. This is why he devoted more pages to this plan in his autobiography than to any other single point. Franklin wrote, "*I hope, therefore, that some of my descendants may follow the example and reap the benefit.*"

*The Thirteen Virtues  
of Benjamin Franklin at Age 20*

1. *"TEMPERANCE.* Eat not to dullness; drink not to elevation."
2. *"SILENCE.* Speak not but what may benefit others or yourself; avoid trifling conversation."
3. *"ORDER.* Let all your things have their places; let each part of your business have its time."
4. *"RESOLUTION.* Resolve to perform what you ought; perform without fail what you resolve."
5. *"FRUGALITY.* Make no expense but to do good to others or yourself; i.e., waste nothing."
6. *"INDUSTRY.* Lose no time; be always employ'd in something useful; cut off all unnecessary actions."
7. *"SINCERITY.* Use no hurtful deceit; think innocently and justly, and, if you speak, speak accordingly."
8. *"JUSTICE.* Wrong none by doing injuries, or omitting the benefits that are your duty."
9. *"MODERATION.* Avoid extremes; forbear resenting injuries so much as you think they deserve."
10. *"CLEANLINESS.* Tolerate no uncleanness in body, cloaths, or habitation."
11. *"TRANQUILLITY.* Be not disturbed at trifles, or at accidents common or unavoidable."
12. *"CHASTITY.* Rarely use venery but for health or offspring, never to dullness, weakness, or the injury of your own or another's peace or reputation."
13. *"HUMILITY.* Imitate Jesus and Socrates."



TEMPERANCE.

Eat not to dulness: drink not to elevation.

	Sun.	M.	T.	W.	Th.	F.	S.
Tem.							
Sil.	*	*		*		*	
Ord.	*	*				*	*
Res.		*				*	
Fru.		*				*	
Ind.							
Sinc.							
Jus.							
Mod.							
Clea.							
Tran.							
Chas.							
Hum.							

中国联通 6:33 pm 32%

**Benjamin Franklin's  
Thirteen Virtues**  
 Based on Benjamin Franklin's Original Chart



Begin ▶



**“Healthy Communities begin with Healthy  
Individuals who Prioritize Personal  
Wellness”**

**Self Awareness- Self Care- Self Improvement**

# Cheers to Our Health – NOW !!

It is ridiculous to say “Wait until I finish this, then I will be free to live in peace.” What is “this” ? A diploma, a job, a house, the payment of a debt? If you think that way, peace will never come. There is always another “this” that will follow the present one. If you are not living in peace at this moment, you will never be able to. If you truly want to be at peace, you must be at peace right now. Otherwise, there is only “the hope of peace someday.”

- Thich Nhat Hanh, The Sun My Heart



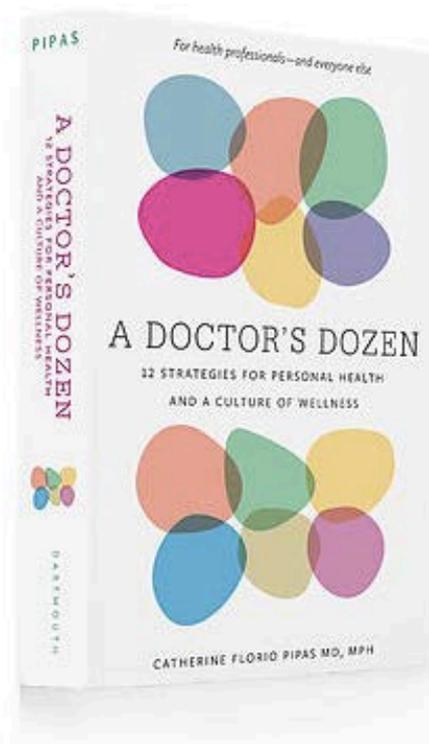
# CATHERINE FLORIO PIPAS

MD, MPH



Personal  
Health

Culture  
of  
Wellness



Available  
September 2018

**About the Book**  
[Reviews](#)  
[Excerpts](#)  
[Book Events](#)

# REFERENCES

- Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. *Mayo Clinic proceedings*. 2015;90(12):1600-1613.
- Dewa CS, Loong D, Bonato S, Thanh NX, Jacobs P. How does burnout affect physician productivity? A systematic literature review. *BMC Health Serv Res*. 2014;14:325.
- Shanafelt TD, Dyrbye LN, West CP, Sinsky CA. Potential Impact of Burnout on the US Physician Workforce. *Mayo Clinic proceedings*. 2016;91(11):1667-1668.
- Ratanawongsa N, Roter D, Beach MC, et al. Physician burnout and patient-physician communication during primary care encounters. *Journal of general internal medicine*. 2008;23(10):1581-1588.
- Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons. *Ann Surg*. 2010;251(6):995-1000.
- Holleman WL, Cofta-Woerpel LM, Gritz ER. Stress and morale of academic biomedical scientists. *Academic medicine : journal of the Association of American Medical Colleges*. 2015;90(5):562-564.
- Brazeau CM, Shanafelt T, Durning SJ, et al. Distress among matriculating medical students relative to the general population. *Academic medicine : journal of the Association of American Medical Colleges*. 2014;89(11):1520-1525.
- Dyrbye LN, West CP, Satele D, et al. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Academic medicine : journal of the Association of American Medical Colleges*. 2014;89(3):443-451.
- Leiter MP, Maslach C. Six areas of worklife: a model of the organizational context of burnout. *Journal of health and human services administration*. 1999;21(4):472-489.
- Shanafelt TD, Noseworthy JH. Executive Leadership and Physician Well-being: Nine Organizational Strategies to Promote Engagement and Reduce Burnout. *Mayo Clinic proceedings*. 2017;92(1):129-146.
- Panagioti M, Panagopoulou E, Bower P, et al. Controlled Interventions to Reduce Burnout in Physicians: A Systematic Review and Meta-analysis. *JAMA internal medicine*. 2017;177(2):195-205.
- Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Annals of family medicine*. 2014;12(6):573-576.
- Sanchez-Reilly S, Morrison LJ, Carey E, et al. Caring for oneself to care for others: physicians and their self-care. *The journal of supportive oncology*. 2013;11(2):75-81.
- Kearney MK. Self-care of physicians caring for patients at the end of life: "Being connected ... a key to my survival" JAMA. 2009;301(11):1155-1164. E1
- **Maslach, C., Leiter, M P.** Six Areas of Worklife: A Model of the Organizational context of Burnout, *Journal of Health and Human Services Administration*, Vol. 21, No. 4 (SPRING, 1999),pp. 472-489
- [lager AJ](#)<sup>1</sup>Association Between Physician Burnout and Identification With Medicine as a Calling, [Mayo Clin Proc](#). 2017 (16)30770-4.,



# Strategy References and Readings

- Colin P West, Liselotte N Dyrbye, Patricia J Erwin, Tait D Shanafelt Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis 2016 The Lancet
- Panagioti, M., et al. (2017). "Controlled Interventions to Reduce Burnout in Physicians: A Systematic Review and Meta-analysis." JAMA Intern Med **177**(2): 195-205
- McEwen, B. S. (2007). "Physiology and neurobiology of stress and adaptation: central role of the brain." Physiol Rev **87**(3): 873-904.
- Matthieu Ricard, *Mind of the Meditator*, Scientific American (November 2014), 311, 38-45
- Beach, MD, MPH , A Multicenter Study of Physician Mindfulness and Health Care Quality, Ann Fam Med 2013;421-428.
- Fortney, MD, Abbreviated Mindfulness Intervention for Job Satisfaction, Quality of Life, and Compassion in Primary Care Clinicians: A Pilot Study, Ann Fam Med 2013;412-420. doi:10.1370/afm.1511
- McEwen, B. S. OBSERVE FOR HALLMARKS OF STRESS. (2007). "Physiology and neurobiology of stress and adaptation: central role of the brain." Physiol Rev **87**(3): 873-904
- Coutu, D. L. (2002). "How resilience works." Harv Bus Rev **80**(5): 46-50, 52, 55 passim.  
<http://www.ncbi.nlm.nih.gov/pubmed/12024758>
- Southwick, S. M. and Charney, D.S. (2012). "Resilience, The Science of Mastering Life's Greatest Challenge Cambridge University Press 2012
- Souba, W. W. (2001). "Leadership and strategic alignment--getting people on board and engaged." J Surg Res **96**(2): 144-151.
- SWOT analysis template free resource [www.businessballs.com](http://www.businessballs.com).Template © Alan Chapman 2005.
- Krasner, Epstein, JAMA 302:1284-1293, 2009,
- Dobkin 2013,



# QI RESOURCES

- AAMC Educating for Quality  
<https://www.aamc.org/initiatives/cei/educatingforquality/>
- Institute for Healthcare Improvement (IHI) *Open School* includes essential training and tools in an online, educational community to help you and your team deliver excellent, safe care. (Register as an academician to avoid costs)  
<http://www.ihl.org/education/IHIOpenSchool/Pages/default.aspx>
- HRSA Quality Improvement Toolkit  
<https://www.hrsa.gov/quality/toolsresources.html>
- Mayo Clinic Quality Academy <http://qiresources.mayo.edu/>

