

Neurogastro-Compassionology

HARD Evidence
for the
Soft Skills

Justin Brandler, MD
Neurogastroenterology & Motility

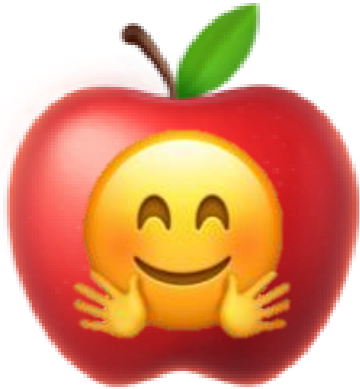
Who is this guy?

Home Grown



Who is this guy?

Home Grown



Diversely Trained



Who is this guy?



What's his specialty?

Psiquiátrico -



Neuro -



Comportamento -



Imunológico -



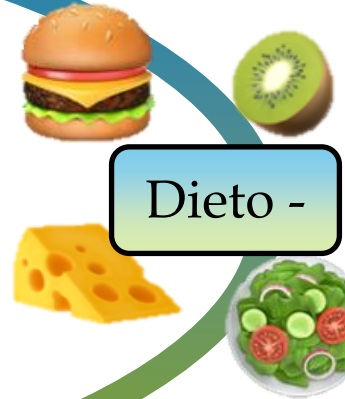
Microbiológico -



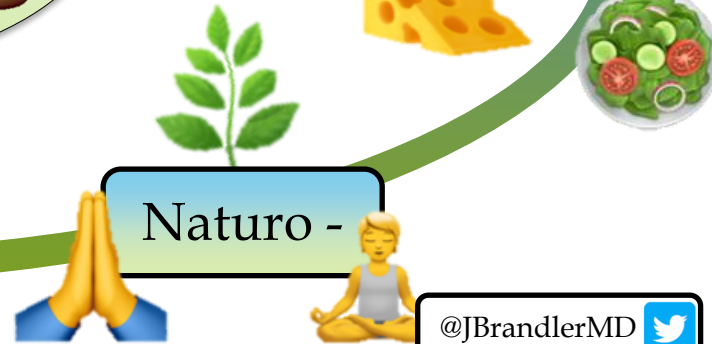
Gastroenterología -



Dietético -



Naturo -



What's his specialty?

Psychiatry



Neurology



Behavioral Health

Allergy/
Immunology



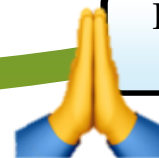
Microbiome



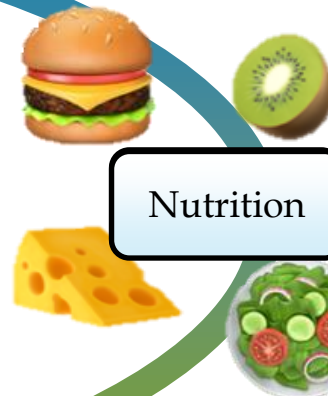
Gastroenterology



Integrative
Medicine



Nutrition



What's his specialty? (*in reality*)

Integrated



Gastroenterology

What's his specialty? (*in reality*)

Integrated



Gastroenterology



START

HOW GREAT LEADERS INSPIRE
EVERYONE TO TAKE ACTION

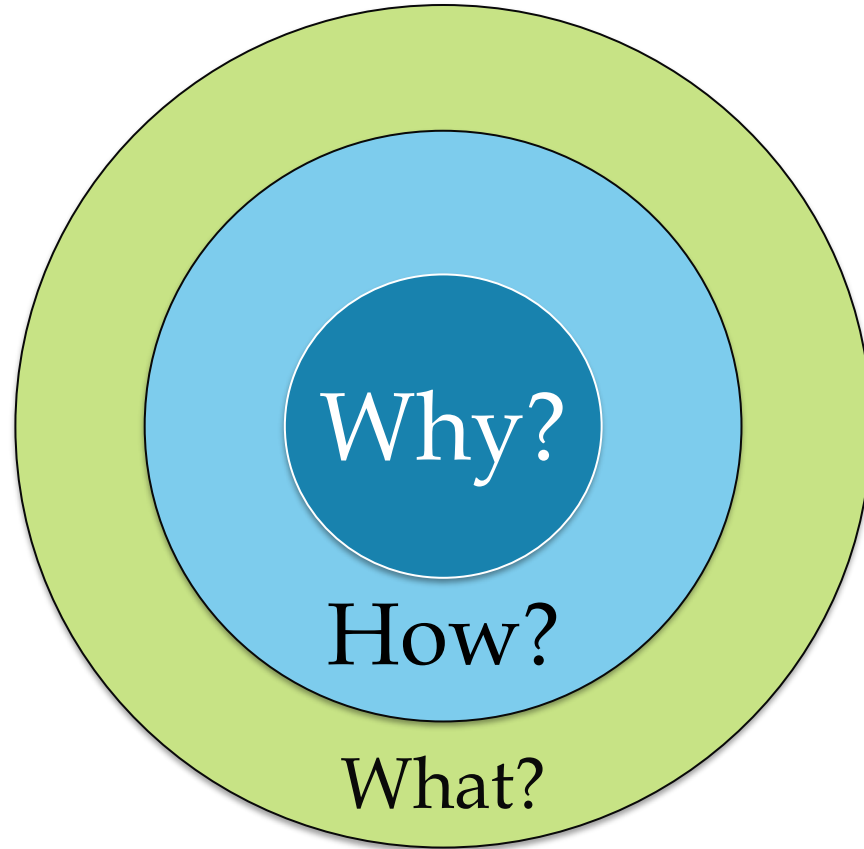
WITH

SIMON SINEK

New York Times bestselling author of *Leaders Eat Last* and *Together Is Better*

WHY





What's my Why in Medicine?

Doctor = "Teacher"

+

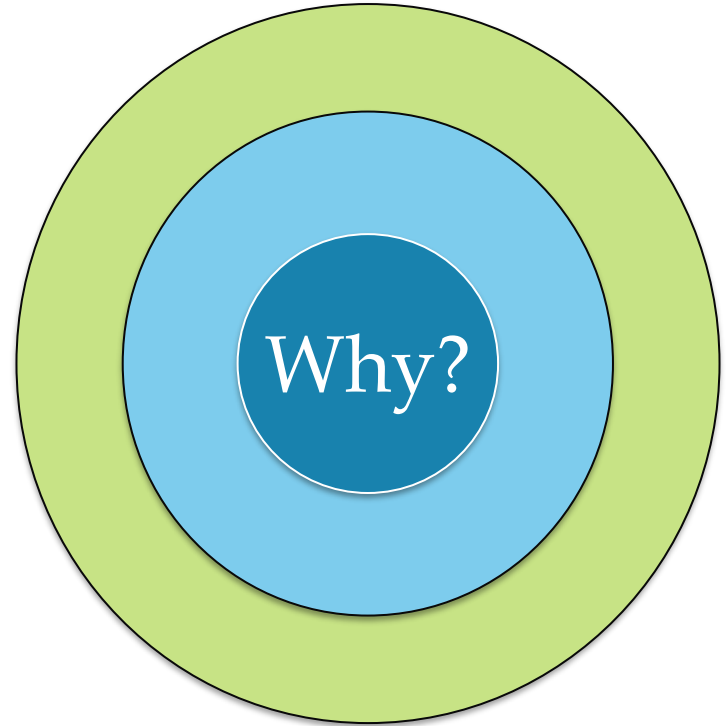
Physician = "Healer"

Revitalize our roles as

"Teachers"

&

"Healers"



What's my **Why** in **Medicine**?

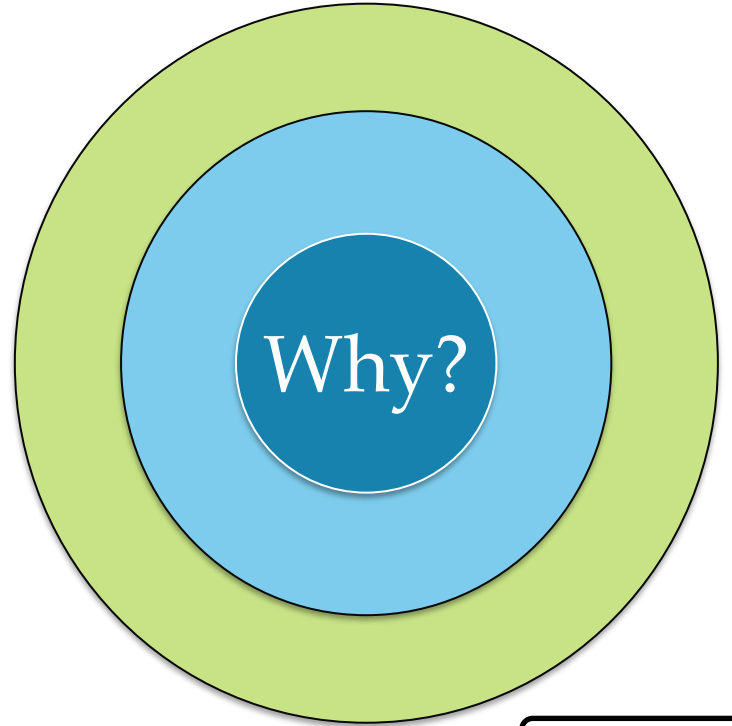
Rehumanize Healthcare

What's our Why in Medicine?

Hello humankindness®

What's my **Why** in GI?

Transform Stigma
of “functional” GI disease



What's my **How**?

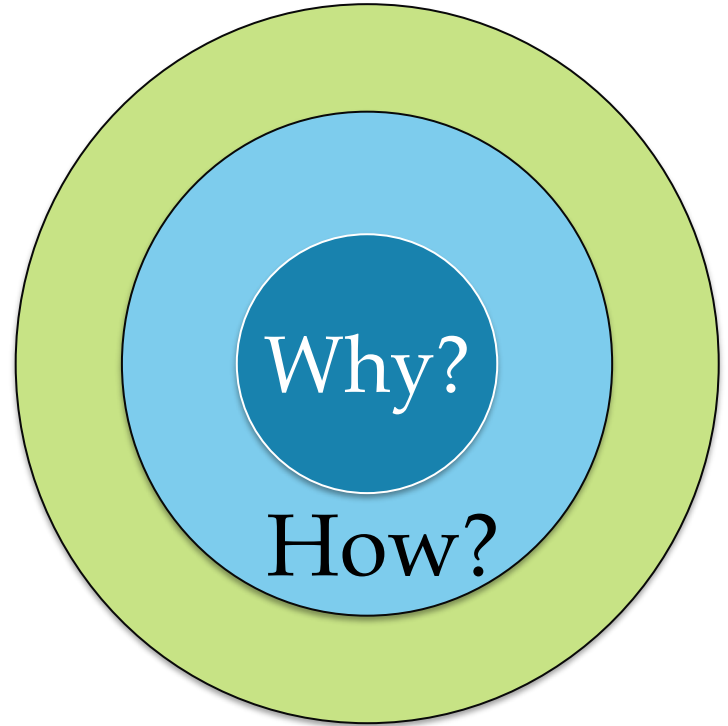
Evidence Based **Medicine**

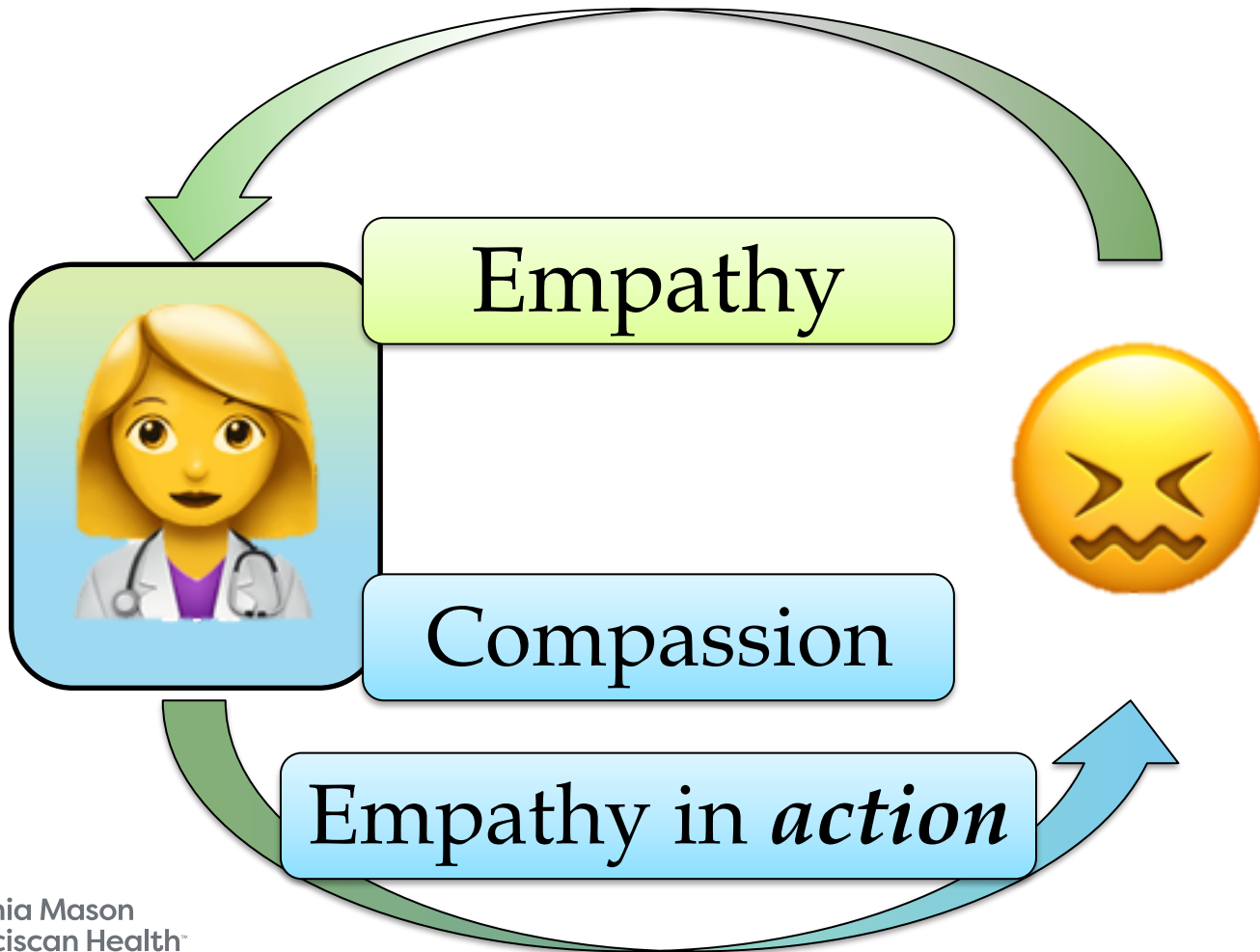
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Evidence Based **Education**

+

Evidence Based **Compassion**





Neurogastro-Compassionology

“Components of Placebo Effect: RCT in Patients with IBS”

- Single center, 262 subjects with Rome II IBS, 3 week intervals x 2
- Intervention Groups:
 - Waiting list observation: control
 - Limited placebo: sham acupuncture alone
 - Augmented: sham acupuncture + augmented patient-provider relationship
- Outcome: validated symptom and QoL scales

Neurogastro-Compassionology

What does “**augmented patient-provider relationship**” mean?

- Initial visit: 45 minutes
- 9 item agenda for encounter

Content Goals (4):

?’s on GI and non-GI symptoms, patient’s understanding of IBS



Neurogastro-Compassionology

What does “**augmented patient-provider relationship**” mean?

Style Goals (5): Warmth, active listening skills

- **Empathic** statements:

“I can understand how difficult IBS must be for you”

- Twenty seconds **thoughtful silence** feeling pulse or pondering plan

- Communicate **confidence, positive expectations:**

“I have had much positive experience treating IBS”



Neurogastro-Compassionology

Did **compassion** make the difference?

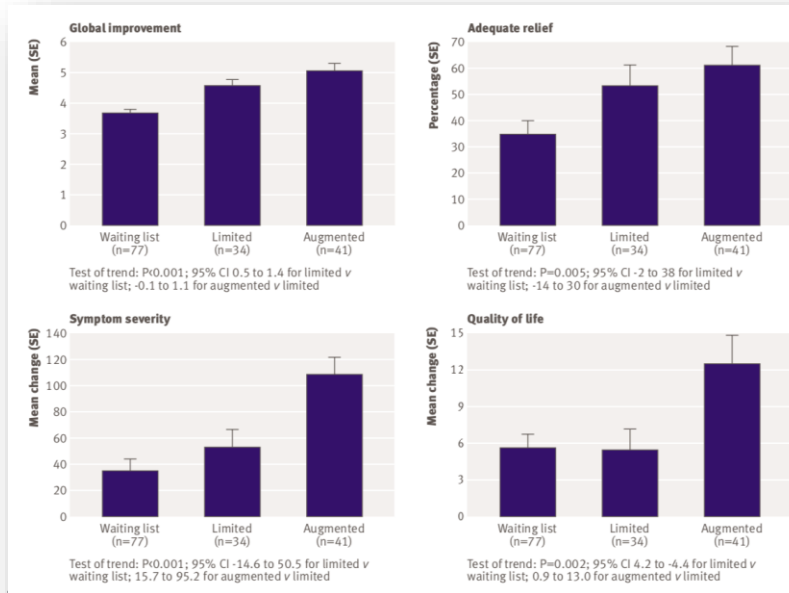


Fig 3 | Outcomes at six week follow-up

Adequate Relief Responders

- Waiting list (35%)
- Limited (53%)
- Augmented (61%)



NNT for Compassion
(Adequate relief of IBS sx's)

12.5 (vs. sham acupuncture)

3.8 (vs. observation)



Neurogastro-Compassionology

NNT for Compassion
(Adequate relief of IBS sx's)

3.8 (vs. observation)

NNH for Compassion

∞ ?

NNT for Anti-depressants
(Improved IBS symptoms vs. placebo)

4.5 (TCA's) **5** (SSRI's)

NNH for Anti-depressants

8.5 (TCA's, SSRI's)



Neurogastro-Compassionology

IF YOU REMEMBER NOTHING ELSE

Compassion Matters in IBS
(especially first impressions)

NNT = 3.8



Neurogastro-Compassionology

IF YOU REMEMBER NOTHING ELSE



YOU

Are the Treatment



What this talk is NOT

- Kumbaya session
- Guilt trip
- Personal virtue signaling



What this talk is

- **Outlining** evidence for compassionate care
- **Integrating evidence** into our practices



COMPASSION OMICS

THE REVOLUTIONARY
SCIENTIFIC EVIDENCE
THAT CARING
MAKES A DIFFERENCE



STEPHEN TRZECIAK
ANTHONY MAZZARELLI

Foreword by SENATOR CORY BOOKER



Compassion = **Empathy** in *Action*

Overwhelming scientific data shows objective impact on:

- Physiologic outcomes
- Patient self-care & medication adherence
- Health care quality metrics
- ↑ revenue + ↓ costs
- ↓ provider burnout

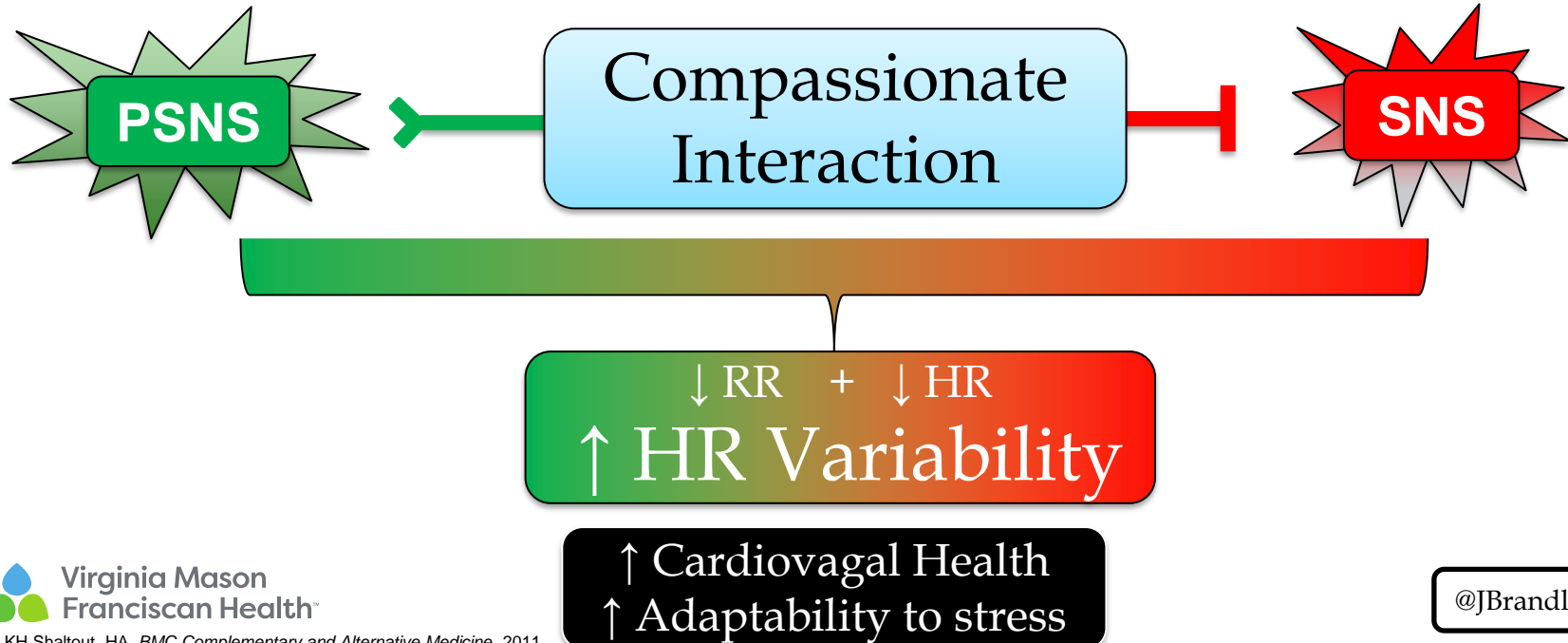
Compassion = **Empathy** in *Action*

Overwhelming scientific data shows objective impact on:

- **Physiologic** outcomes
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Neurogastro-Compassionology

Physiologic Outcomes



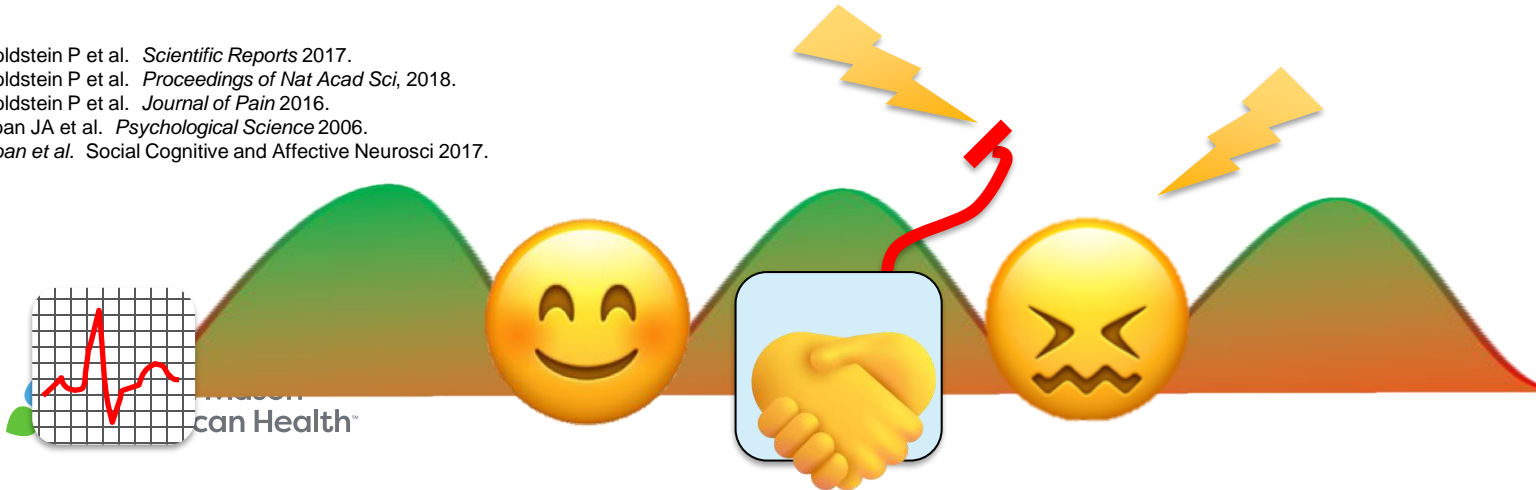
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Physiologic Outcomes

Compassionate touch from trusted relationship can lead to:

- “physiologic coupling” of HR/RR¹ and brain waves²
- ↓ pain perception by 50%³
- likely mediated via ↓ perception of threat via fMRI^{4,5}

1 Goldstein P et al. *Scientific Reports* 2017.
2 Goldstein P et al. *Proceedings of Nat Acad Sci*, 2018.
3 Goldstein P et al. *Journal of Pain* 2016.
4 Coan JA et al. *Psychological Science* 2006.
5 Coan et al. *Social Cognitive and Affective Neurosci* 2017.



Neurogastro-Compassionology

Physiologic Outcomes

Compassionate providers **are** the treatment

Post op pain

RCT

50% ↓ pain scores¹

RCT

50% ↓ morphine use²

Logistic Regression

Diabetes

↑ Hba1c control < 7% (NNT 6)⁵

↑ LDL control (NNT 7)⁵

Other pain

RCT

Back pain: 2x relief vs. PT alone³

• Migraine: ↓ HA intensity + duration⁴

Infection

RCT

- # recent hugs → ↓ susceptibility to common cold⁶
- IL-8 doubled, ↓ cold sx's 1 day, ↓ cold severity⁷
- ↑ wound healing⁸

Neurogastro-Compassionology Physiologic Outcomes



Loneliness KILLS

- Comparable to risks of smoking and EtOH abuse¹
- Worse than obesity and HTN¹
- 50% ↑ decline of ADL's² & cognitive decline³
- ↓ Immune response to flu vaccination⁴ + ↑ susceptibility to common cold⁵
- ↑ Chronic inflammation⁶



$\frac{1}{\downarrow \text{Meaningful relationships}} \propto \uparrow \text{Mortality}^{1,2,7,8}$



1 Holt-Lunstad J et al. *PLoS Medicine* 2010. 3 Donovan N et al. *Intern Journ Geriatric Psych* 2017. 5 Cohen S et al. *JAMA* 1997. 7 Holt-Lunstad J et al. *Persp on Psych Sci* 2015.
 2 Perissinotto C et al. *Archives Intern Med* 2012. 4 Prssman S et al.. *Healthy Psych* 2005. 6 Cole SW et al. *Genome Biology* 2007. 8 Rico-Uribe et al. *PLoS One* 2018.
 9 wbur.org/onpoint/2020/03/23/vivek-murthy-loneliness

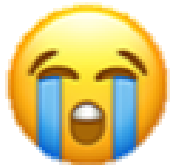
Neurogastro-Compassionology

Evidence Based Tips to Harness Compassion Physiology



2

You are not alone



3



1

Be the calm amid their storm



Neurogastro-Compassionology



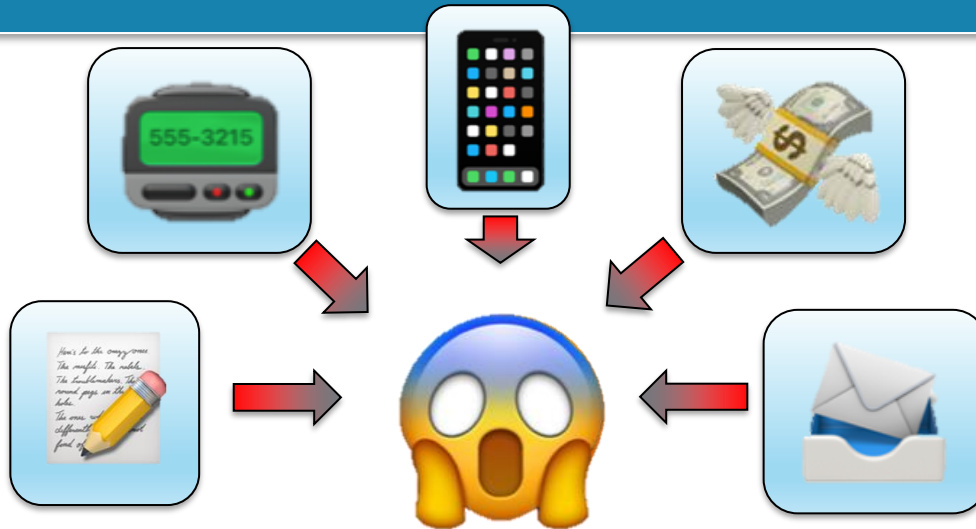
Fecalith #1

**Compassionate interactions can
change physiologic outcomes**



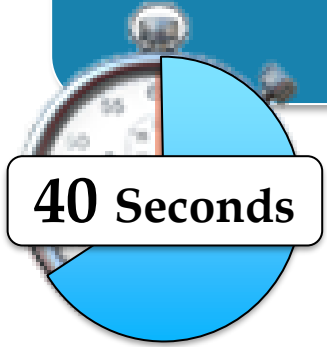
Neurogastro-Compassionology

"There's not enough time"



Neurogastro-Compassionology

“There’s not enough time”



210 women
123 BrCA survivors

Randomized

Fluke?

Enhanced compassion interaction video

*“I know this is a tough experience to go through. I want you to know that **I am here with you.** Some of the things that I say to you today may be difficult to understand, so I want you to feel comfortable stopping me if something I say is confusing or doesn’t make sense.*

We are here together, and we will go through this together.”

End of consultation...

“I know this is a tough time for you and I want to emphasize again that we are in this together. I will be with you each step along the way.”

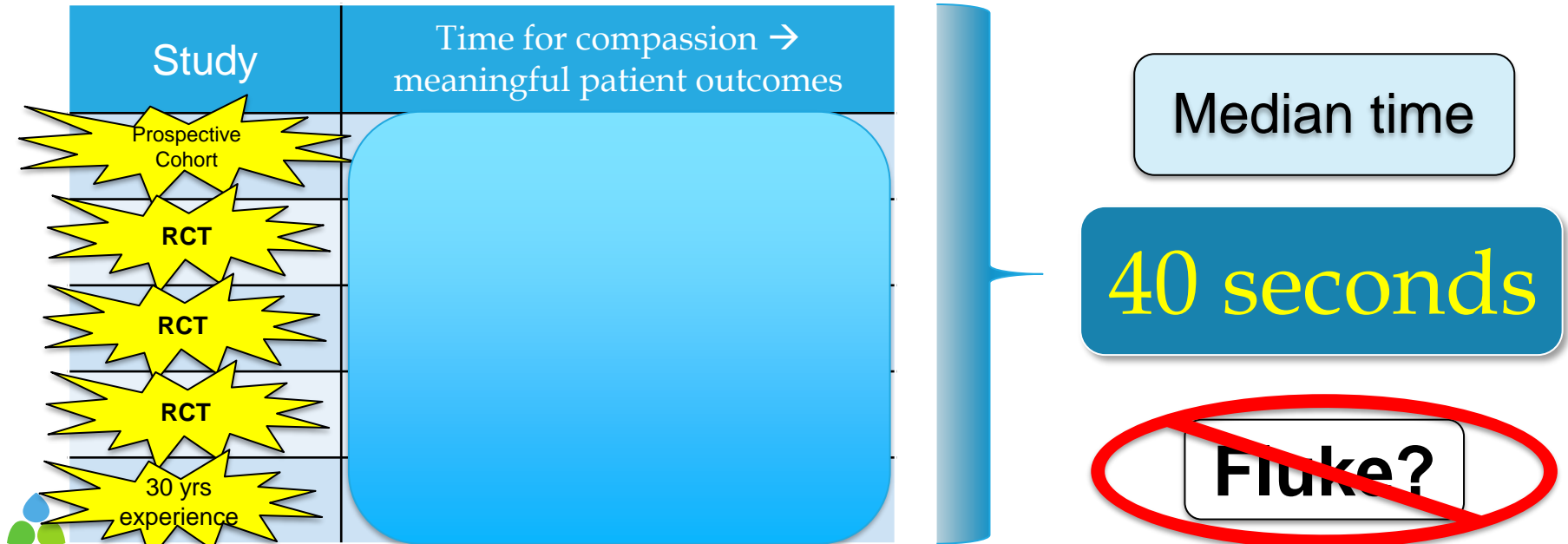
Standard consultation video

↑ Positive attributes of doctor
↓ Anxiety

Primary Outcome:
Validated Anxiety Scale

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“There’s not enough time”



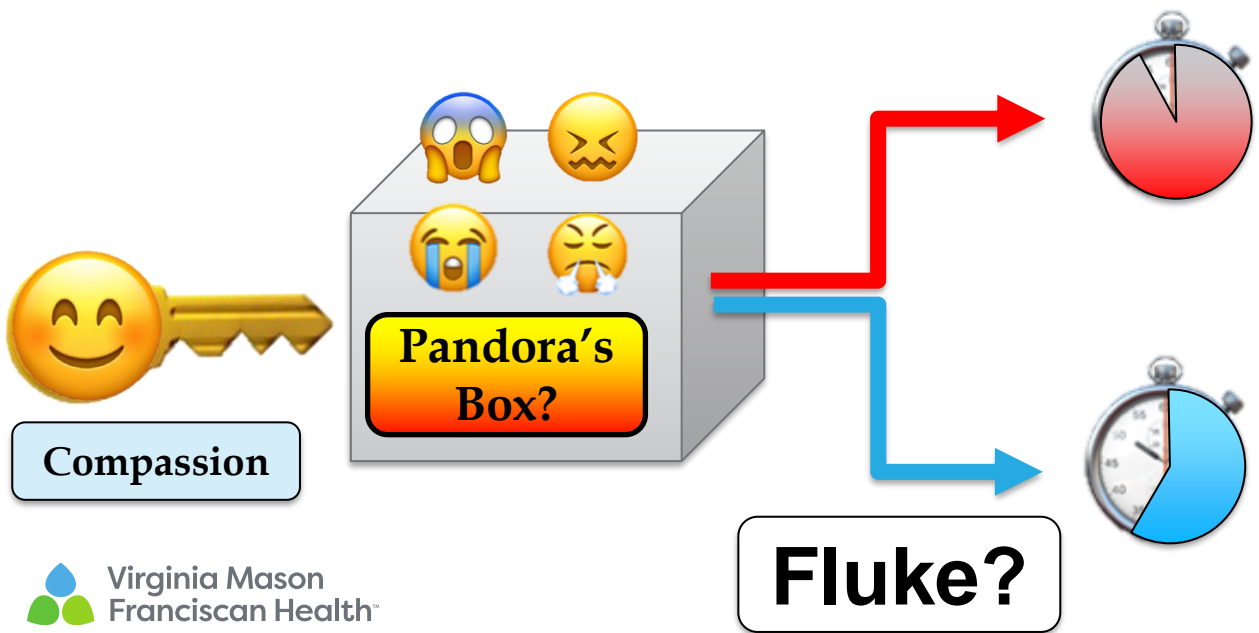
1 Bylund CL et al. *Health Comm* 2005.
2 van Osch M et al. *Health Psych* 2014

3 Sep M et al. *Patient Ed & Counsel* 2014.
4 Fogarty et al. *J Clin Onc* 1999.

5 Roter et al. *Archives of IM* 1995.
6 Dempsey C. (Chief Nursing Officer at Press Ganey Inc.) *The Antidote to Suffering*, 2017.

Neurogastro-Compassionology

Pandora's Box Fallacy



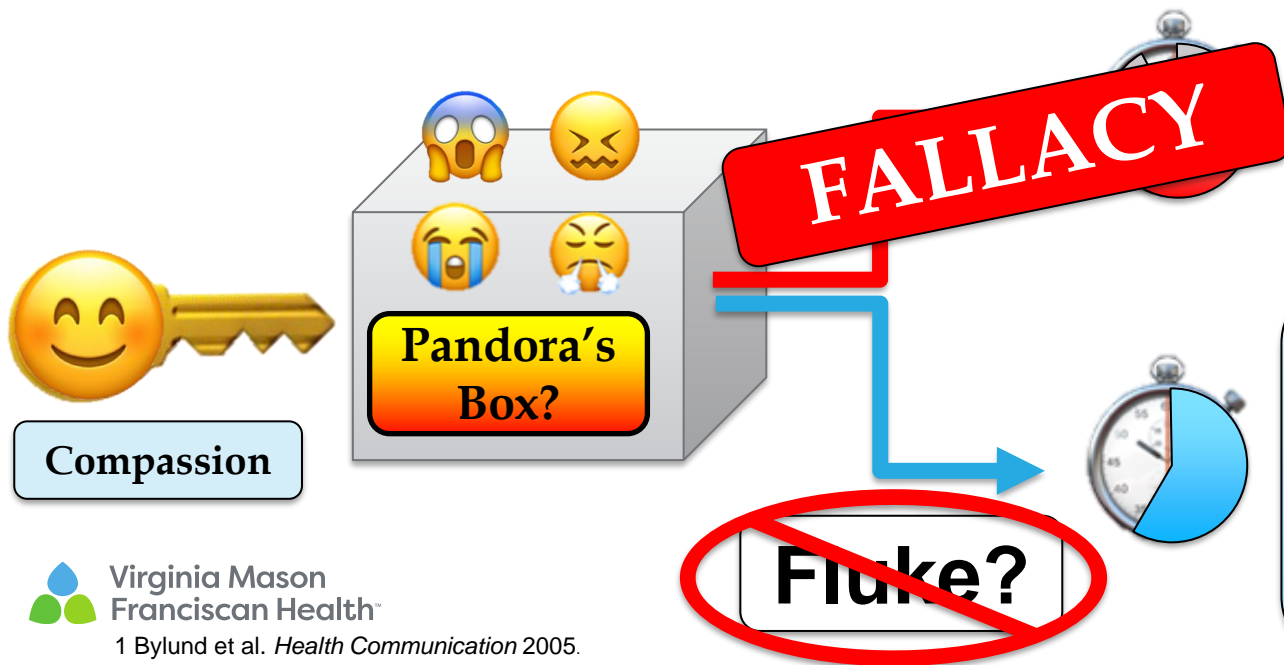
↑ Length of visit

Compassion opportunity
+ Provider response
= **Opportunity Response (OR)**

Each OR exchange = 31.5 sec
x Mean # exchanges/visit = 2.5
= **78.8 extra seconds to visit¹**

Neurogastro-Compassionology

Pandora's Box Fallacy



↑ Length of visit

- **Dose-response:** # compassionate statements to ↓ patient anxiety
- **No stat sig association:** total # statements & encounter length¹

Compassion training RCT

- ↑ Provider ratings + ↓ patient anxiety
- Took **54 secs longer** vs. control visits
- Effects last **6 months**²

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“There’s not enough time”


100% N.S.
(Non-judgmental Sincerity)

“I’m sorry you’re experiencing this” 

 “We’re in this together”

“You’re **not** alone” 




 Information recall³


 **Positive** view of provider^{3,4}


 Perceived **clinical proficiency** of provider⁵


No ↑ visit length



 Patient anxiety^{3,4}

 Physiologic arousal⁶

 Emotional distress⁵

 IBS sx severity⁷

Effect = 6 mos.

1 Swayden et al. *Patient Ed Couns.* 2012.
2 Merel SE, et al. *J Hosp Med.* 2016.

3 van Osch M et al. *Health Psychology* 2014.
4 Fogarty LA et al. *J Clin Oncology* 1999.

5 Roter DL et al. *Archives of IM* 1995.
6 Sep M et al. *Patient Ed and Couns* 2010.

7 Kaptchuk TJ et al. *BMJ* 2008

Neurogastro-Compassionology



Fecalith #2

If you have *40 seconds*,
there is always
time for compassion



Break for Insanely cute toddler curls ...



Compassion = **Empathy** in *Action*

Overwhelming scientific data shows objective impact on:

- Physiologic outcomes
- Patient **self-care & medication adherence**
- Health care **quality metrics**
- **↑ revenue + ↓ costs**
- **↓ provider burnout**



Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care

“Drugs don’t work
in patients that don’t take them”

- Surgeon General Dr. C. Everett Koop

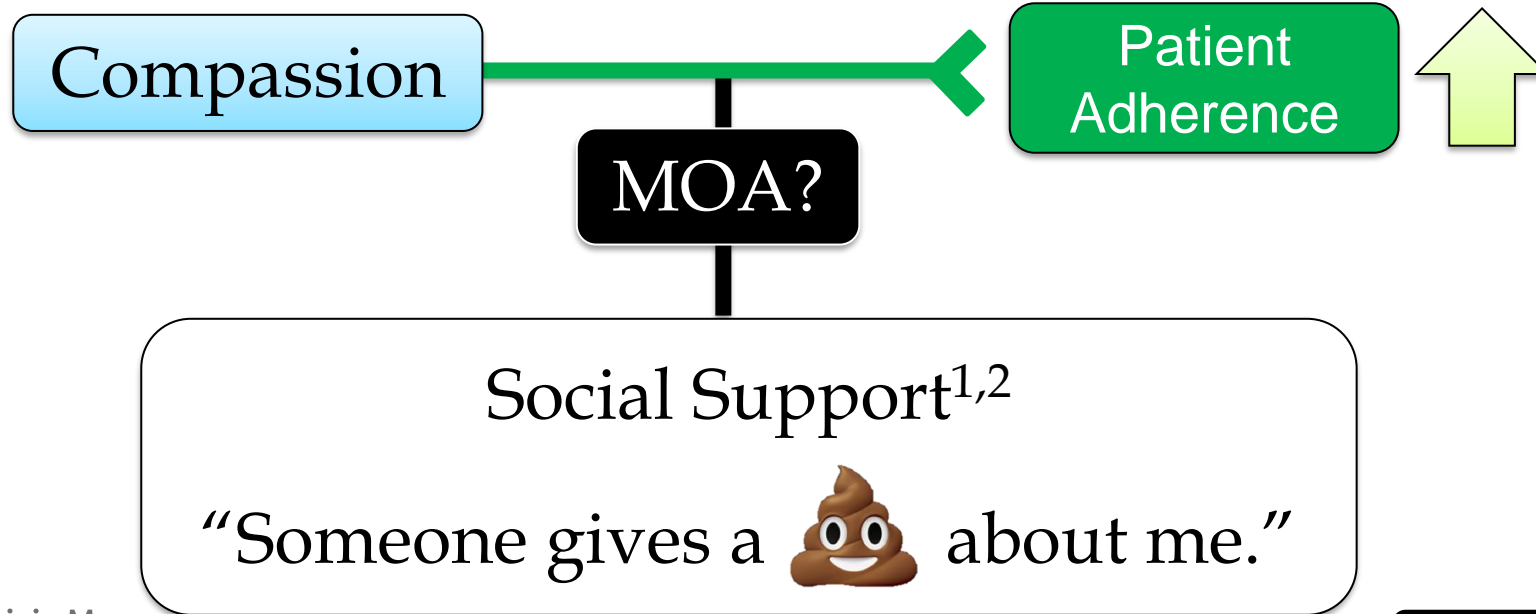
Patient non-adherence = an epidemic¹

Patients only take about $\frac{1}{2}$ of their prescribed doses^{2,3}



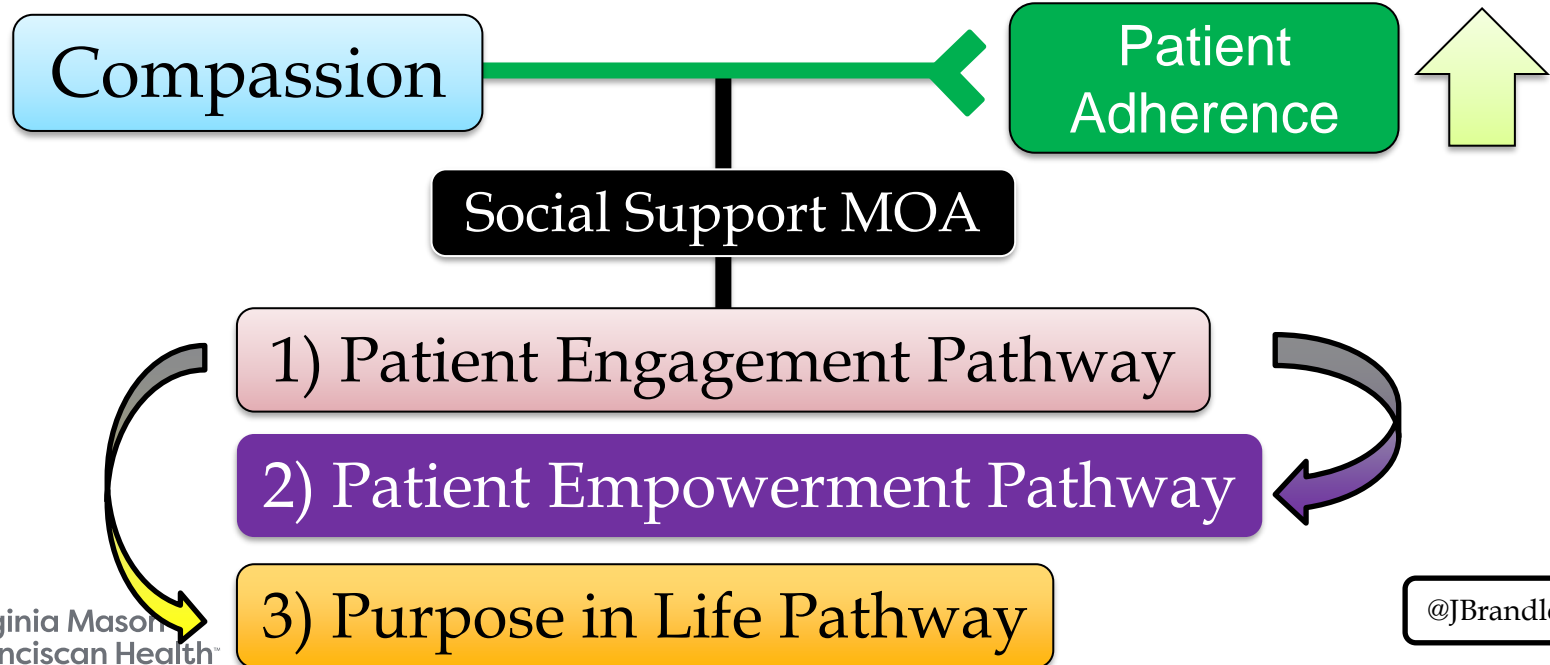
Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care



Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care



Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care



3) Purpose in Life Pathway

↑ Purpose in life → ↑ Preventative service usage¹

- ↑ aOR's (high vs. low purpose)
 - cholesterol test (1.40 [1.15-1.70])
 - mammogram (1.57 [1.29-1.92])
 - pap smear (1.37 [1.12-1.67])
 - prostate exam (1.55 [1.23-1.95])



- No change:
 - Flu shot (1.01 [0.97-1.11])
 - **Colonoscopy (1.06 [0.99-1.14])**

Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care

Compassion

Patient Adherence



Social Support MOA

3) Purpose in Life Pathway

- ↑ Purpose in life →
 - ↓ **nights** in hospital¹
 - ↑ **pep in step** (walking speed with age)²
 - ↓ incidence **sleep disturbances**³
 - ↓ **CV events**,⁴ **heart attacks**,⁵ **strokes**⁶
 - ↓ All-cause **mortality**^{4,7}



1 Kim ES, et al. *Proceedings of Nat Acad Sci*, 2014.
2 Kim ES, et al. *JAMA Psychiatry*, 2017.
3 Kim ES, et al. *J of Behav Medicine*, 2015.
4 Cohen R et al. *Psychosomatic Med*, 2016.
5 Kim ES, et al. *J of Behavioral Med*, 2013.
6 Kim ES, et al. *J of Psychosomatic Research*, 2013.
7 Hill PL, Turiano NA *Psychological Science*, 2014.

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Patient Buy-In, Adherence & Self-Care

TRUST
Acceptance
Respect
Empathy
Compassion

Experience
Wait time **COST**
Prestige of training



Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care



Fecalith #3

Giving a  about your patients
Can ↑ **treatment adherence**



Neurogastro-Compassionology

Patient Buy-In, Adherence & Self-Care

#GIEmpathyInitiative
Demonstration

Compassion = **Empathy** in Action

Overwhelming scientific data shows objective impact on:

- Physiologic outcomes
- Psychological outcomes
- Patient self-care & medication adherence
- Health care **quality metrics**
- **↑ revenue + ↓ costs**
- **↓ provider burnout**



Neurogastro-Compassionology

Financial Outcomes

“Show me the money...”



Margin

Mission



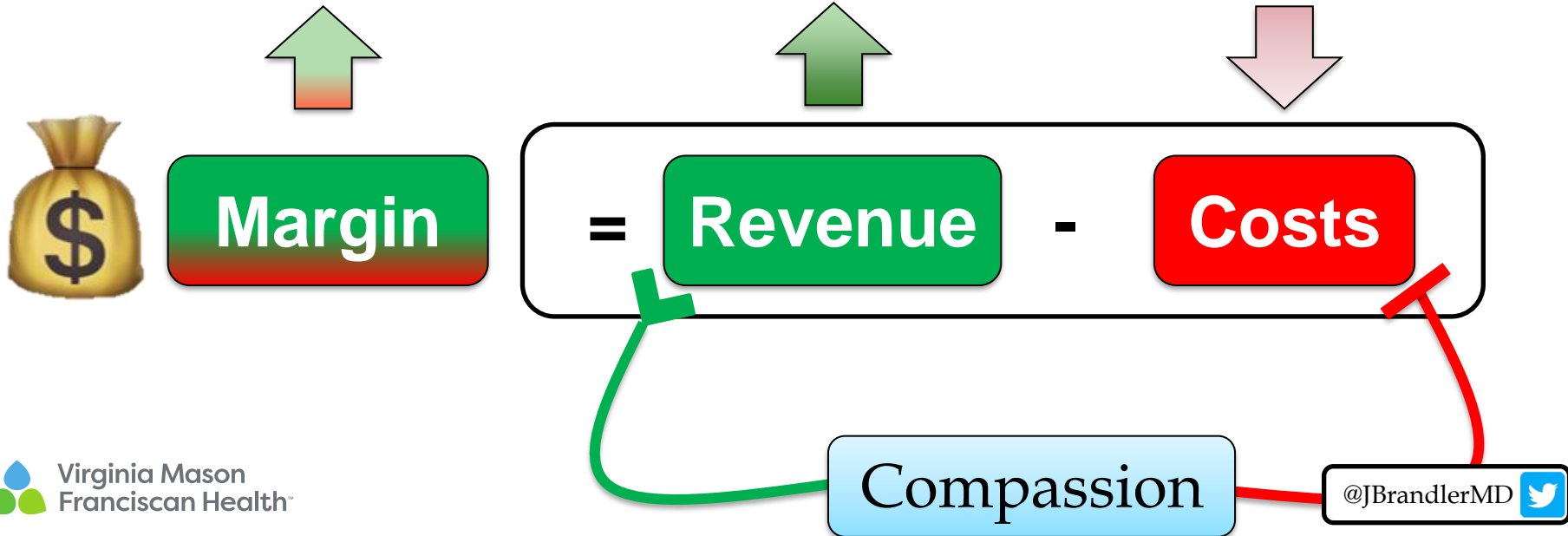
“No Margin, No Mission”



Neurogastro-Compassionology

Financial Outcomes

"Show me the money..."



Neurogastro-Compassionology

Financial Outcomes

Compassion



Revenue



Margin

Patient Experience vs. performers¹

High
4.8%



low
1.8%



- **2.7 times** profit margin
- **Compassion** = 65% of variation for satisfaction (controlled for confounders)²

¹ Betts, D et al Deloitte Center for Health Solutions, 2016.
² Menendez M et al. *J Hand Surgery*. 2015.

Neurogastro-Compassionology

Financial Outcomes

Compassion

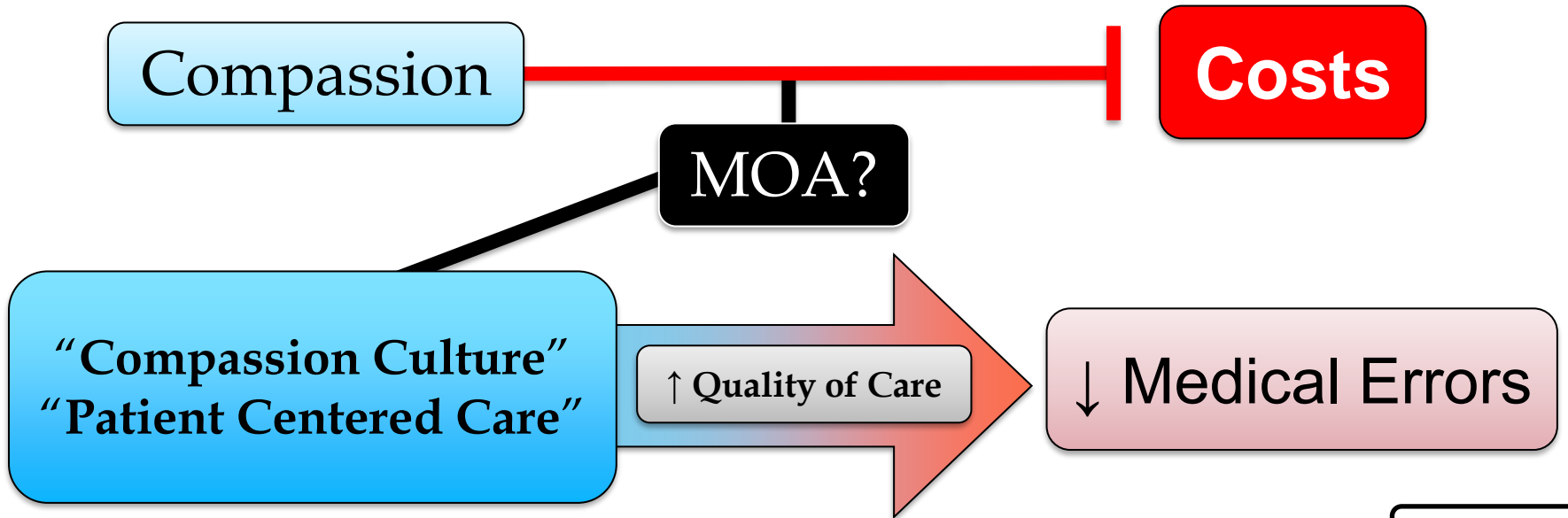
Revenue

- Patients would **pay more** for compassion
 - 87% felt kindness more important than **any other** consideration:
 - Included wait time, distance from home, cost¹
 - 85% would choose **compassion OVER pricing** when choosing a doctor²
- Patients perceive compassionate physicians as **more competent**³⁻⁵



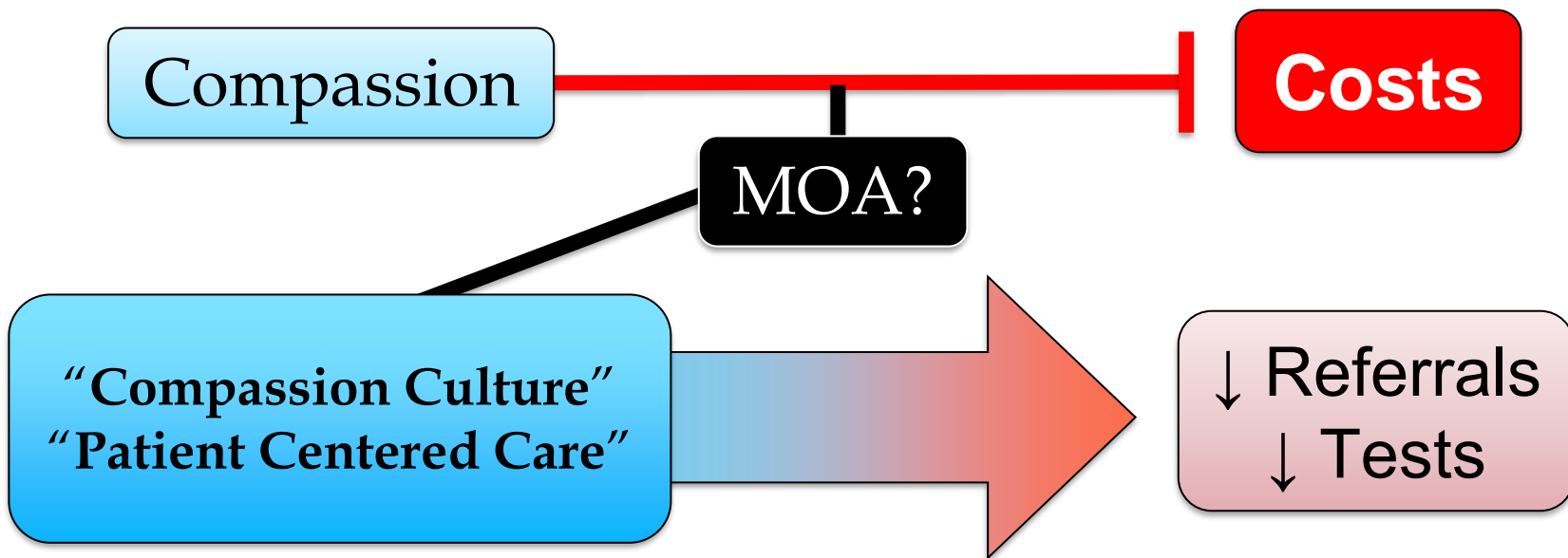
Neurogastro-Compassionology

Financial Outcomes



Neurogastro-Compassionology

Financial Outcomes



Neurogastro-Compassionology

Financial Outcomes

Compassion



Costs

Myth

“My doctor is the best.
She orders every test under the sun.”

Truth

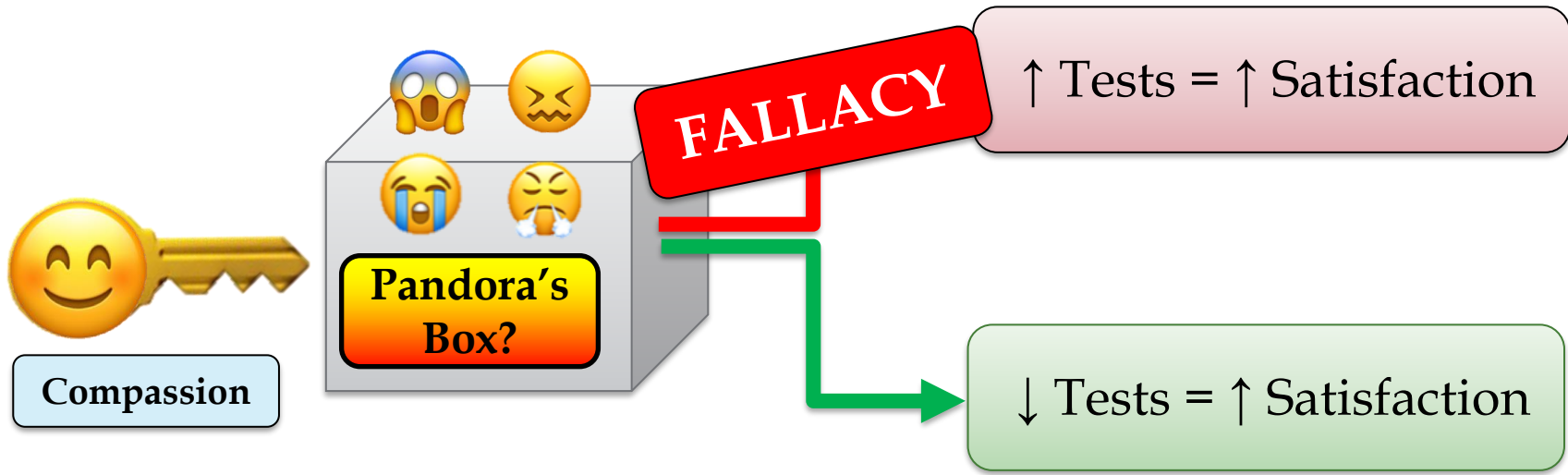
- If patient perceived care as “**patient centered**”:
↓ 51% specialist referrals + ↓ 40% diagnostic tests
- If patient perceived “**common ground has been attained**”:
↓ 59% specialist referrals + ↓ **84% diagnostic tests**¹



¹ Stewart M et al J of Family Practice, 2000.

Neurogastro-Compassionology

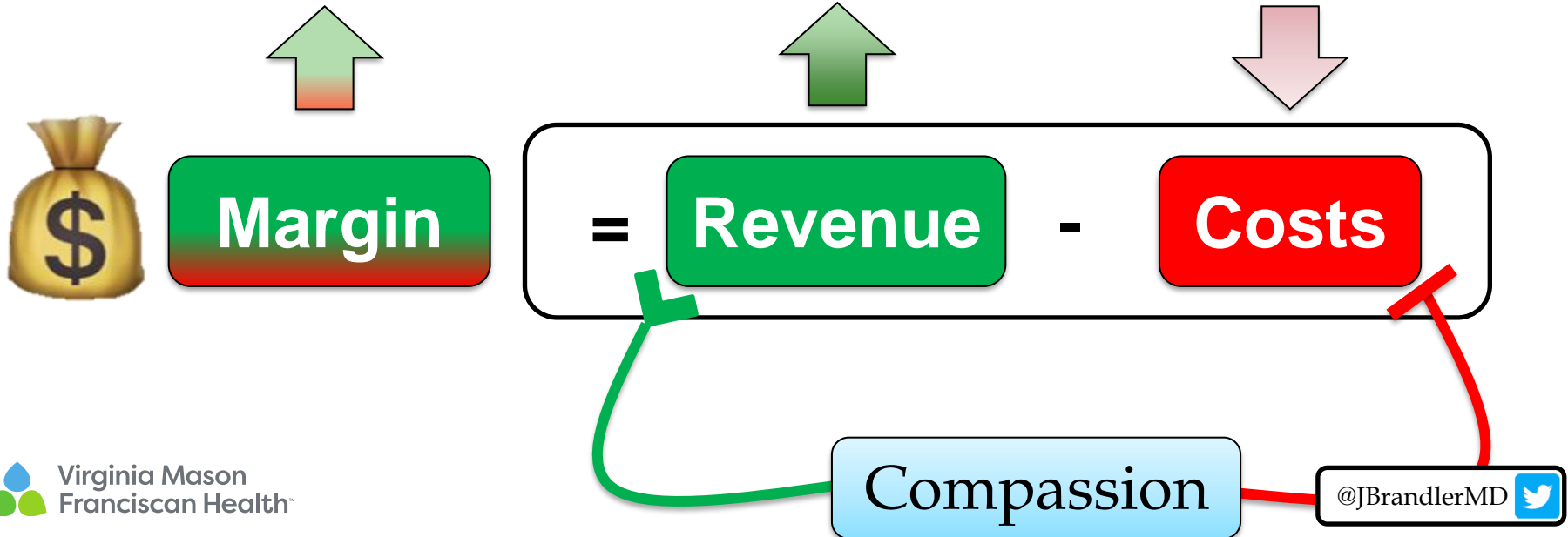
Pandora's Box Fallacy



Neurogastro-Compassionology

Financial Outcomes

"Show me the money..."



Neurogastro-Compassionology

Financial Outcomes

“No Margin, No Mission”



Margin

Mission



Compassion

“No Mission, No Margin”



Neurogastro-Compassionology

Financial Outcomes



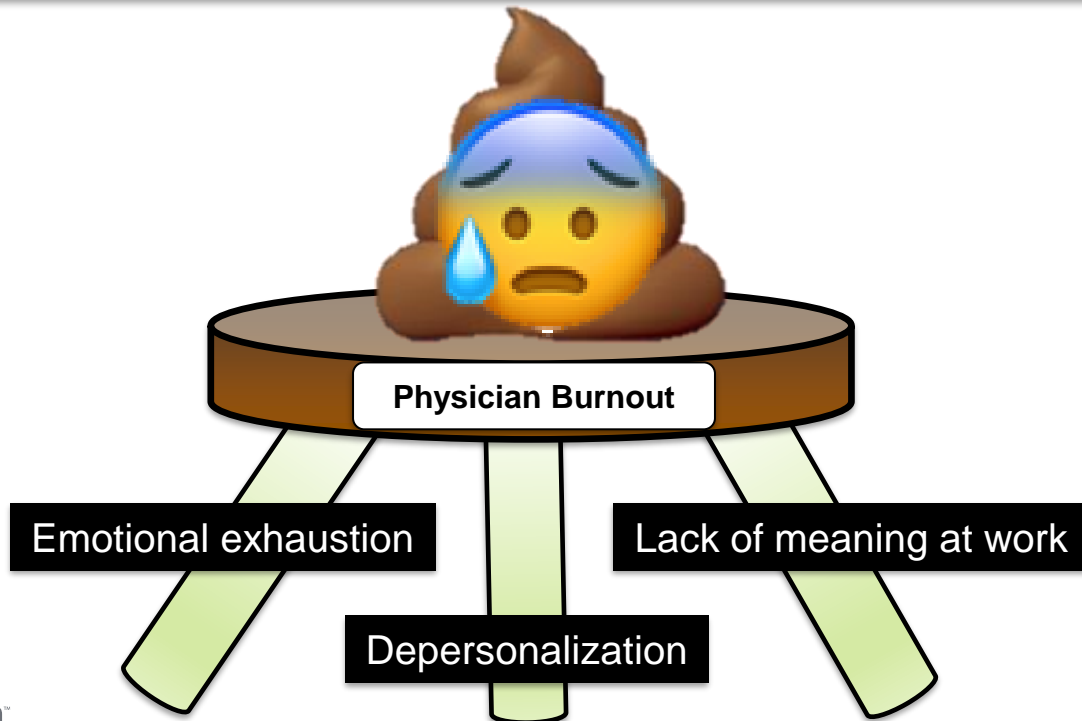
Fecalith #4

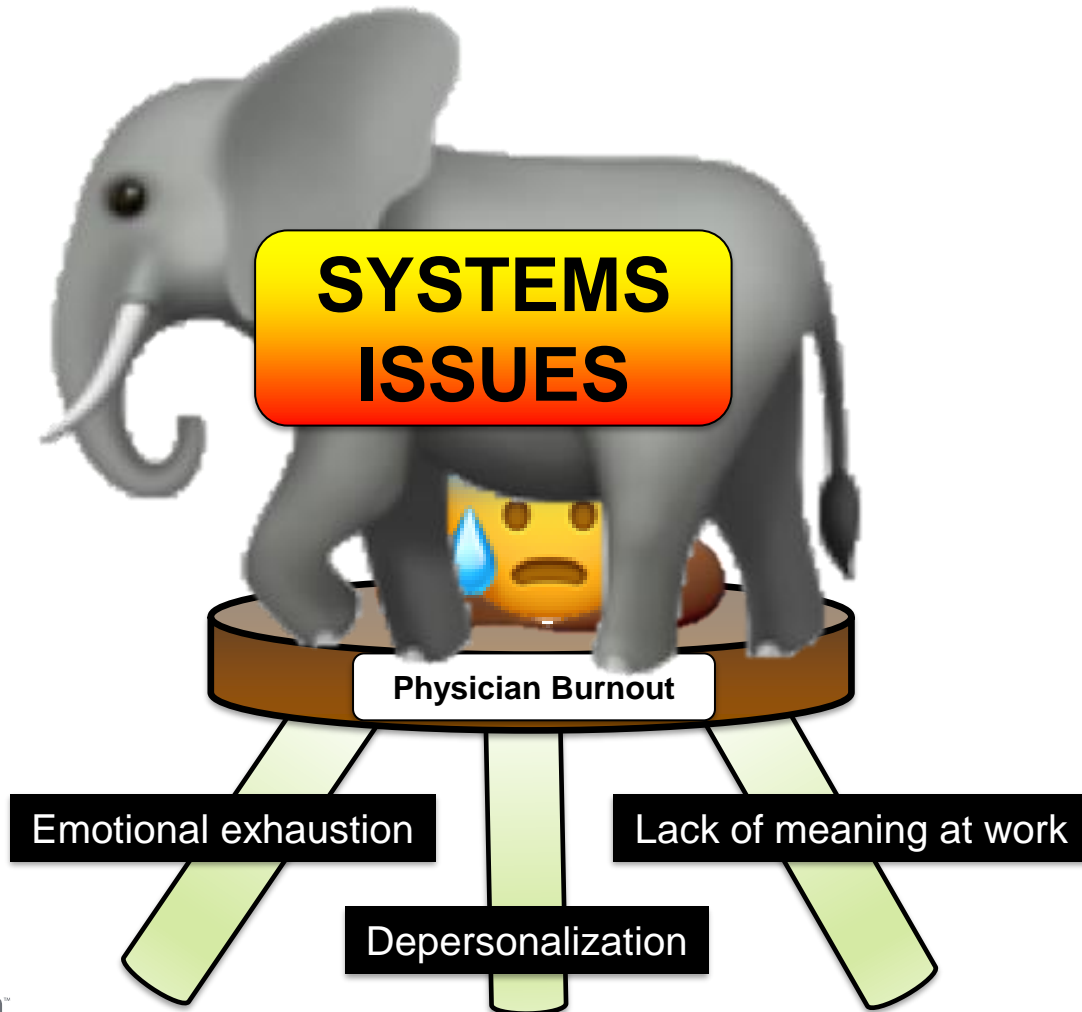
Patients (Consumers) care more about
how you make them feel
than what you know
...which will **help your bottom line**

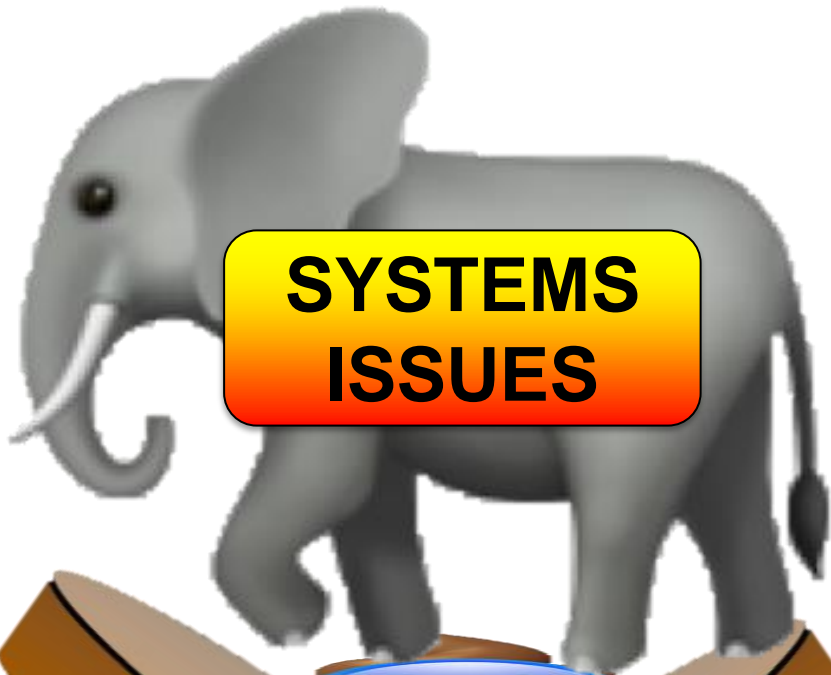


Neurogastro-Compassionology

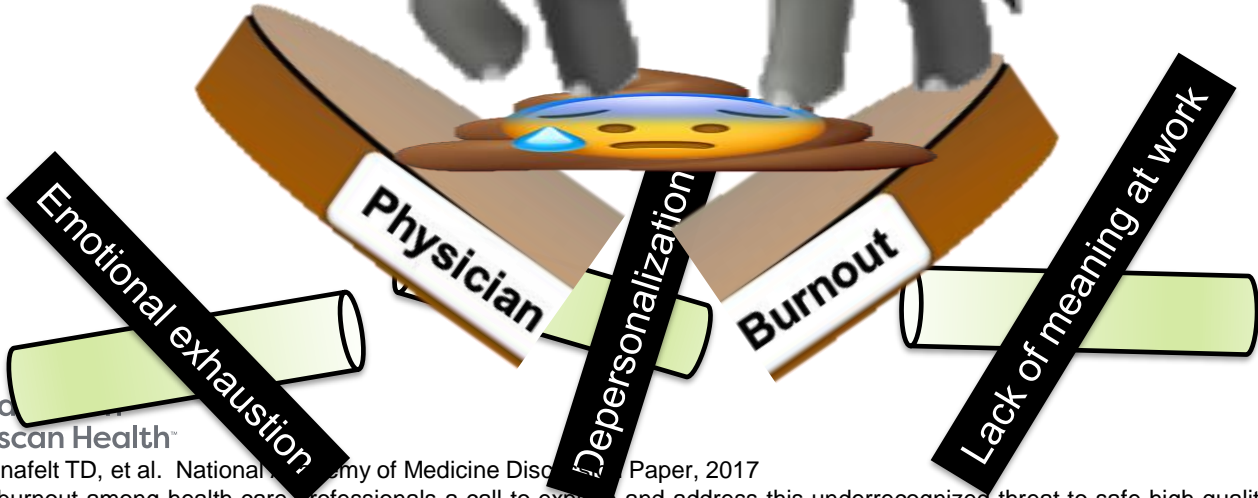
Provider Outcomes: Burnout







SYSTEMS ISSUES



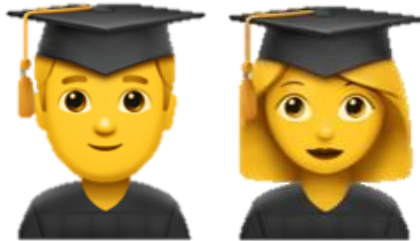
Neurogastro-Compassionology

Provider Outcomes: Burnout

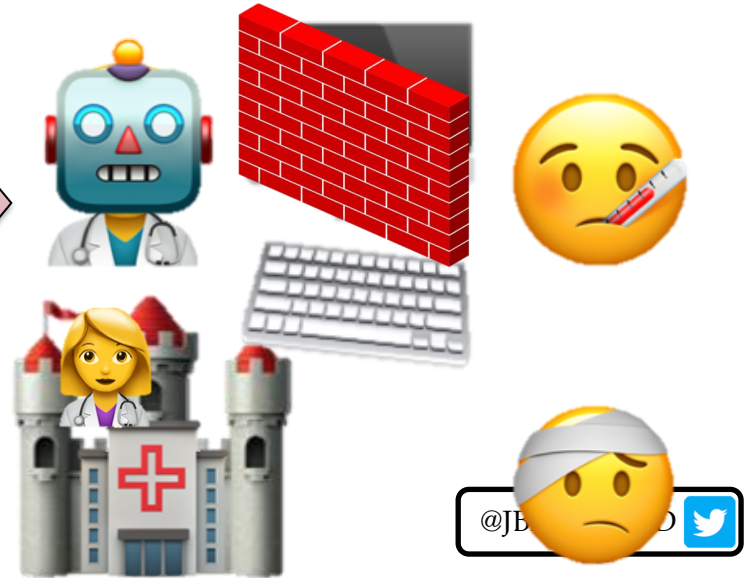
Traditional Medical Teaching



“Avoid emotional connections with patients, you will get **burnt out...**”



“Escapism”

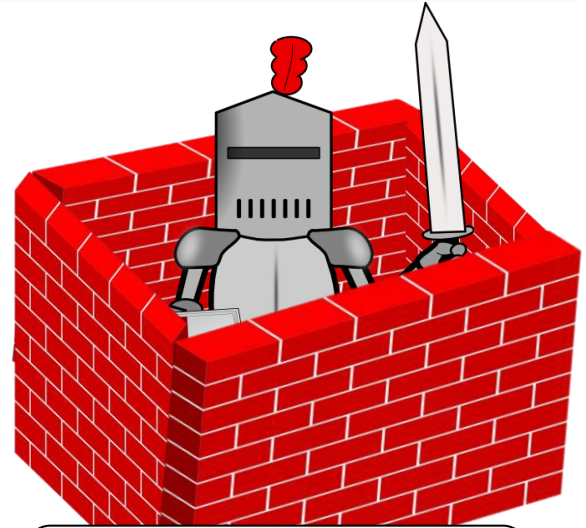


Neurogastro-Compassionology

Provider Outcomes: Burnout



**Boundaries =
HEALTHY**

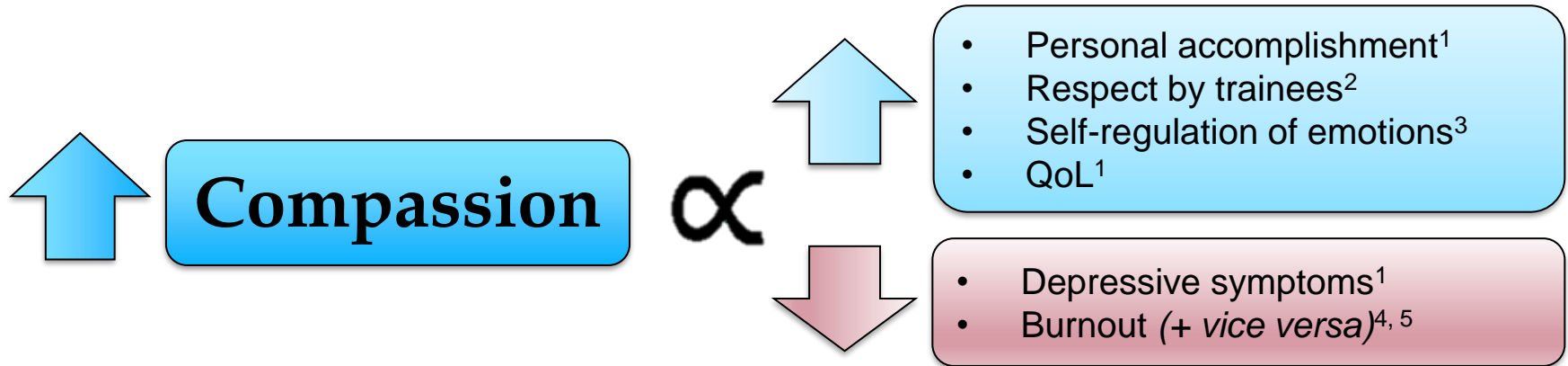


**Walls =
UNHEALTHY**



Neurogastro-Compassionology

Provider Outcomes: Burnout



Physicians **most dissatisfied** in relationships with patients risk of burnout:

OR 22.1⁶

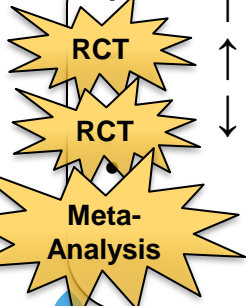
Neurogastro-Compassionology

Provider Outcomes: Burnout



Prospective Data

- ↑ well being scores, ↓ burnout scores x 8 wks.¹
- ↑ emotional regulation/calmness, ↓ anxiety/depressive sx's x **6 mos.**²
- ↓ **pre-existing depressive sx's**, most effect: ↑ depression at baseline³
- **21 RCT's**, 1200 participants:⁴
 - ↓ depression, anxiety, psych distress
 - ↑ enhanced well being



1 Krasner MS, et al. *JAMA* 2009.

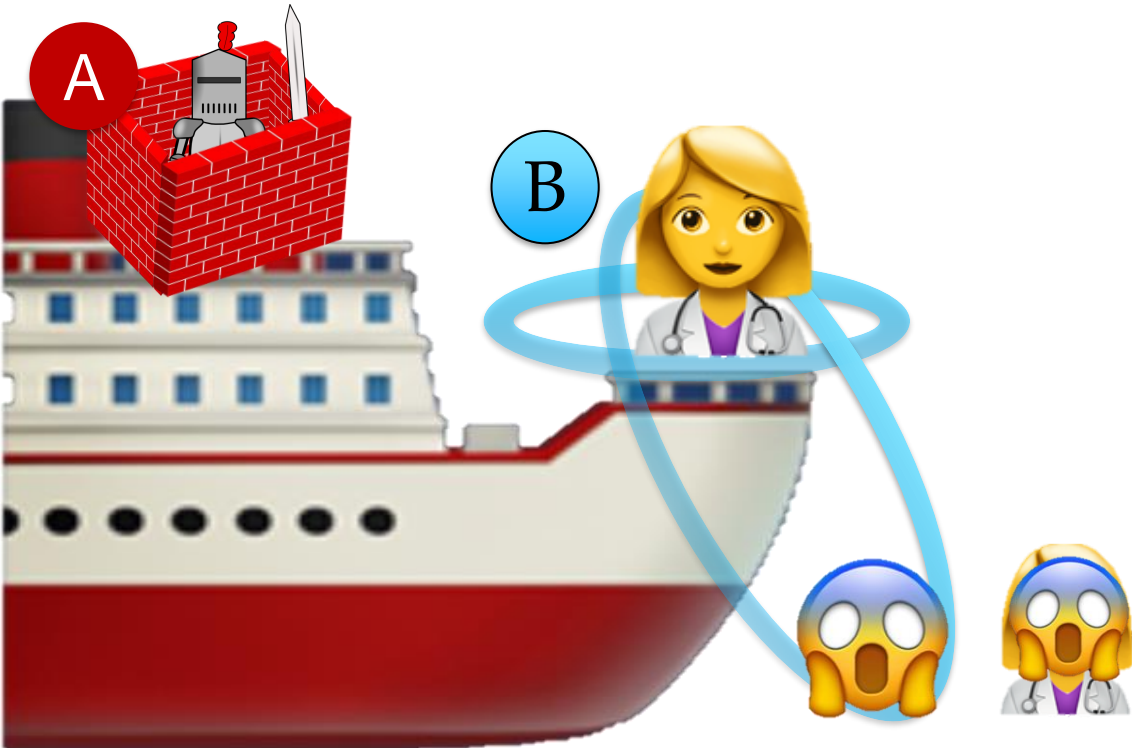
2 Mongrain M et al. *J of Happiness Studies* 2011.

3 Mascaro J, et al. *J of Positive Psychology* 2018.

4 Kirby JN et al. *Behavior Therapy* 2017.

Neurogastro-Compassionology

Provider Outcomes: Burnout



A

Walls

↓ Job satisfaction, ↑ Burnout

B

Healthy Boundaries

“Self-Other Distinction”¹ = Crucial
Their emotions ≠ My emotions

C

Enmeshment

Non-sustainable, ↑ Burnout

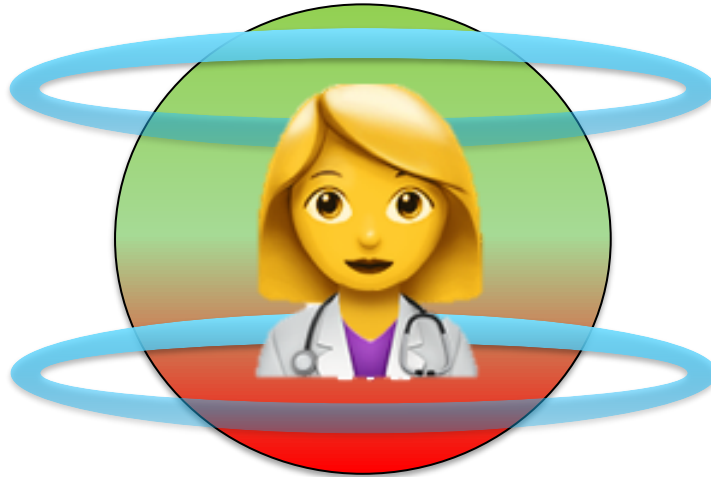
C

@JBrandlerMD



Neurogastro-Compassionology

Provider Outcomes: Burnout



“Strong Back, Warm Front”

- Brown, Brené

Neurogastro-Compassionology



Fecalith #5

Compassion
can
Protect the Healer



Neurogastro-Compassionology

*Standing on the **shoulders of giants...***

Gastroenterology 2021;161:1670–1688

SPECIAL ARTICLE

A Review of the Evidence and Recommendations on Communication Skills and the Patient–Provider Relationship: A Rome Foundation Working Team Report



Douglas A. Drossman,¹ Lin Chang,² Jill K. Deutsch,³ Alexander C. Ford,^{4,5} Alben Halpert,⁶ Kurt Kroenke,⁷ Samuel Nurko,⁸ Johannah Ruddy,⁹ Julie Snyder,¹⁰ and Ami Sperber¹¹



Neurogastro-Compassionology

Standing on the *shoulders of giants...*



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Application *Simple*



“This sounds really hard,
I’m sorry you are going through this.”



Don't

Practical Examples *Simple Statements*

Do

“I understand how you feel.”

Jump to solving the problem

Find silver lining: “At least...”

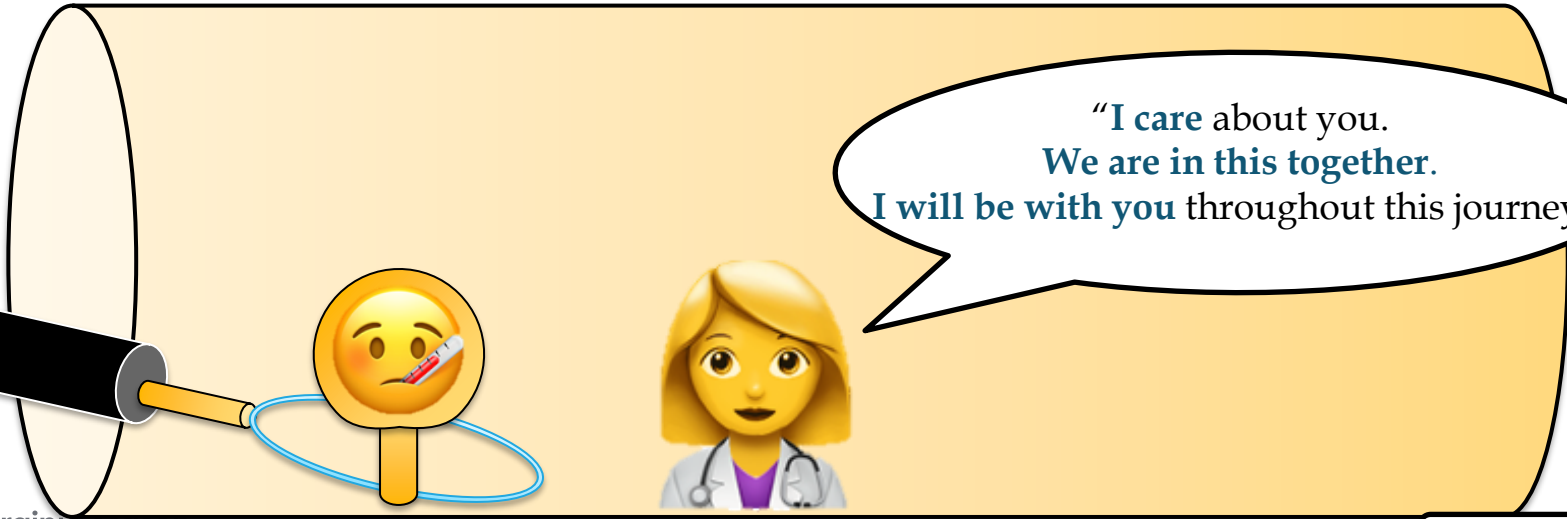
“I’m sorry you’re going through this.”

*“What’s your **main concern** right now?”*

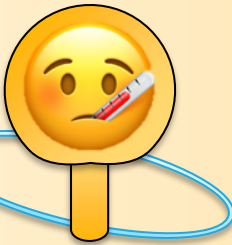
Validate feelings:
“It sounds like you are worried about...”

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Application *Intermediate*



**"I care about you.
We are in this together.
I will be with you throughout this journey."**



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Application *Advanced*

After 20 seconds thoughtful silence...

"You are not alone.

We have **extensive experience** treating similar patients &
we are confident you will see improvements.

We also work **as a team.**

Let's schedule a **phone follow-up**
with our RN in 1 week."



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Wrap-Up

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IF YOU REMEMBER NOTHING ELSE

WE are the treatment

NNT = 3.8



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#1 Compassion changes **physiology**



#2 All you need is **40 seconds**



#3 Can ↑ **adherence** & self-care



#4 Can ↑ **profit margins**

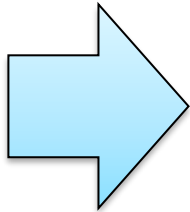
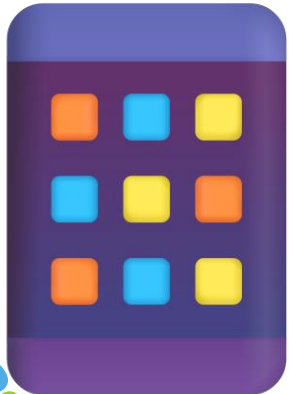


#5 Can **protect the healer**



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Make it Stick!



Make Event 🛎️ :

- 3 days from now
- 2 things you learned
- 1 change to practice



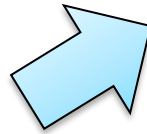
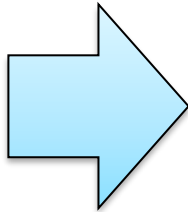
Make Event 🛎️ #2:

- 2 weeks from now
- 2 things you learned **phrased as ?'s**
- 1 change to practice



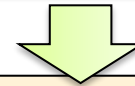
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Make it Stick!



Make Event :

- 3 days from now
- 2 things you learned
- 1 change to practice

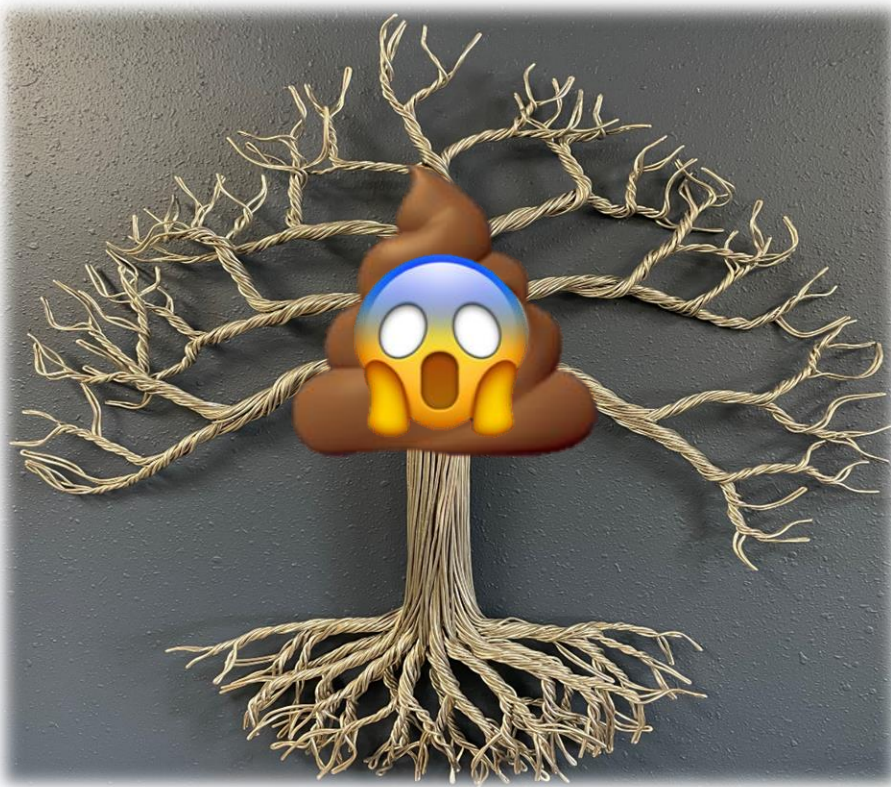


Make Event #2:

- 2 weeks from now
- 2 things you learned **phrased as ?'s**
- 1 change to practice



Building something bigger than ourselves...



Building something bigger than ourselves...



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**Thank you for
all you do!**

What do you think?

