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# Physician Burnout: Why We Should Care and What We Can Do About It

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# Financial Disclosures

- None

# Objectives

- **Understand the scope of the problem of physician burnout.**
- Be informed regarding contributors and consequences of physician burnout and distress.
- Learn some evidence-based methods to prevent burnout and promote physician wellbeing.

# Background

- Physician well-being has come under increased scrutiny in recent years
- Common:
  - Burnout
  - Low job satisfaction
  - High stress
  - Low quality of life
- Affects all stages of physician training and practice
- Affects all specialties



## Historical Perspective

- “Engrossed late and soon in professional cares you may find, too late, with hearts given way, that there is no place in your habit-stricken souls for those gentler influences which make life worth living.”

Osler 1899

# What is Burnout?

Burnout is a syndrome of depersonalization, emotional exhaustion, and low personal accomplishment leading to decreased effectiveness at work.

# Depersonalization

*“I’ve become more callous toward people since I took this job.”*

# Emotional Exhaustion

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*“I feel like I’m at the end of my rope.”*



# Low Sense of Personal Accomplishment

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*“My work doesn’t matter...”*

# Brief Summary of Epidemiology

- Medical students matriculate with BETTER well-being than their age-group peers
- Early in medical school, this reverses
- Poor well-being persists through medical school and residency into practice:
  - National physician burnout rate exceeds 54%
  - Affects all specialties, perhaps worst in “front line” areas of medicine
  - >400,000 physicians burned out at any given time

# Mayo Multi-center Study of Medical Student Wellbeing

## Student distress:

- 45% Burned out
- 52% Screen + for depression
- 48% At risk alcohol use
  - Compared to 28% age matched MN & 24% age matched US pop

Dyrbye Acad Med 81:374-84

# Burnout among Residents

National Data (West et al., JAMA 2011)

Internal medicine residents, 2008 Survey

Burnout: 51.5%

Emotional exhaustion: 45.8%

Depersonalization: 28.9%

Dissatisfied with work-life balance: 32.9%

# Burnout among Practicing Physicians

National Data (Shanafelt et al., Arch Intern Med 2012;  
Mayo Clin Proc 2015)

	2011	2014
Burnout:	45.8%	54.4%
Emotional exhaustion:	37.9%	46.9%
Depersonalization:	29.4%	34.6%

Dissatisfied with work-life balance: 36.9%, 44.5%

# Burnout among Surgeons

2008 ACS Survey

n=7905

39.6% burnout overall

15.4% alcohol abuse

6.3% suicidal ideation in last 12 months

# Demographics of Burnout

More common for:

Women

Younger doctors

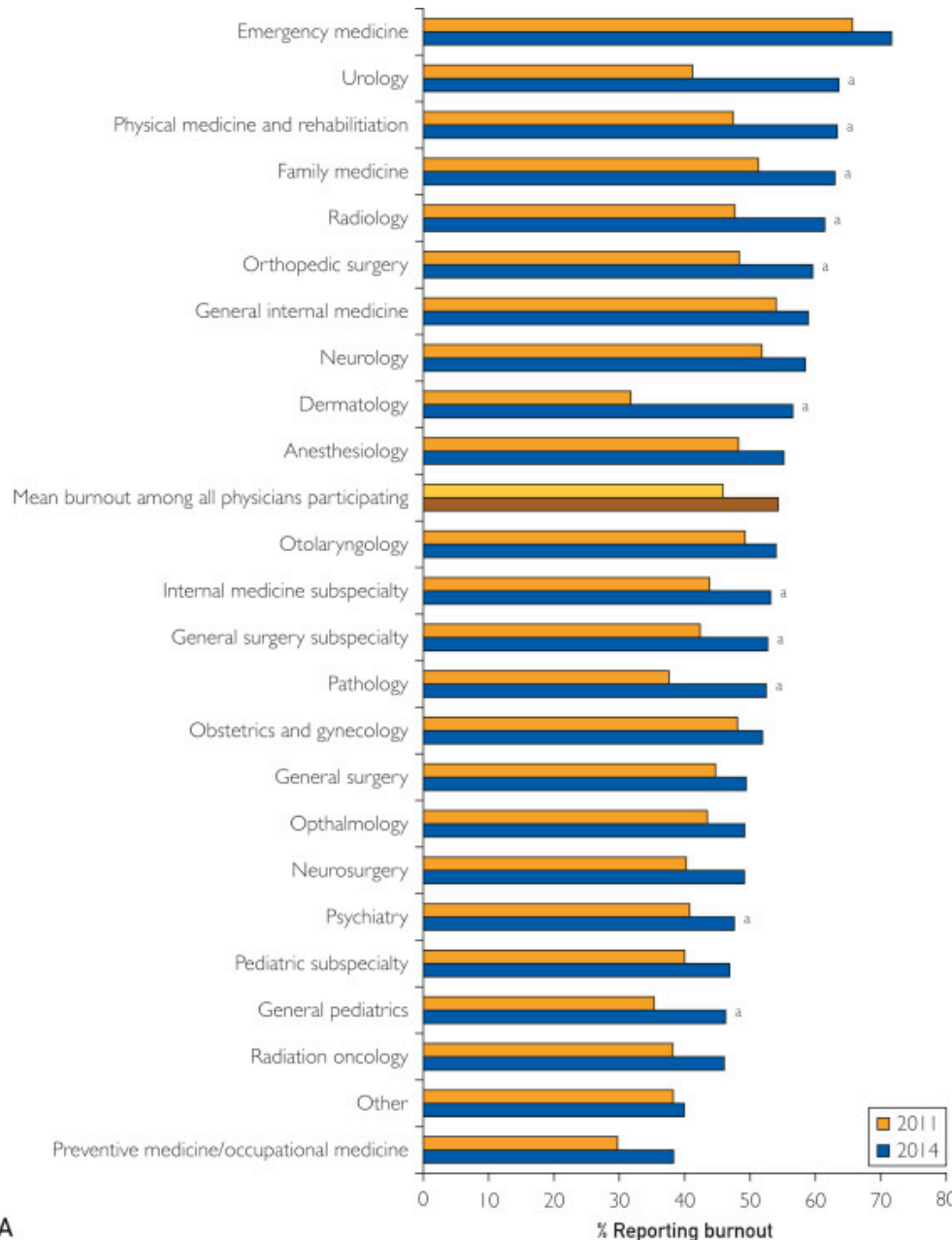
“Front line” specialties

Greater number of work hours per week

Private practice

Incentive-based salary structure

# Burnout by Specialty (National)



Shanafelt *et al.*  
Mayo Clin Proc 2015



But Don't Burnout and Distress Affect Everyone?

## 2014 AMA Survey Employed Physicians vs. Employed U.S. Population

	Physicians n=5313	Population n=5392	p
Male	62%	54%	<0.001
Age (median)	53	52	<0.001
Hrs/Wk (median)	50	40	<0.001
Burnout*	49%	28%	<0.001
Dissatisfied WLB	49%	20%	<0.001

\* As assessed using the single-item measures for emotional exhaustion and depersonalization adapted from the full MBI. Area under the ROC curve for the EE and DP single items relative to that of their respective full MBI domain score in previous studies were 0.94 and 0.93

# 2011 AMA Survey

- Adjusting for:
  - Age, gender, relationship status, hours worked/week, education
- Education (ref. high school graduates):
  - Bachelors degree: **OR=0.8**
  - Masters degree: **OR=0.71**
  - Doctorate or non-MD/DO professional degree: **OR=0.6**
  - MD/DO: **OR=1.36**

# Objectives

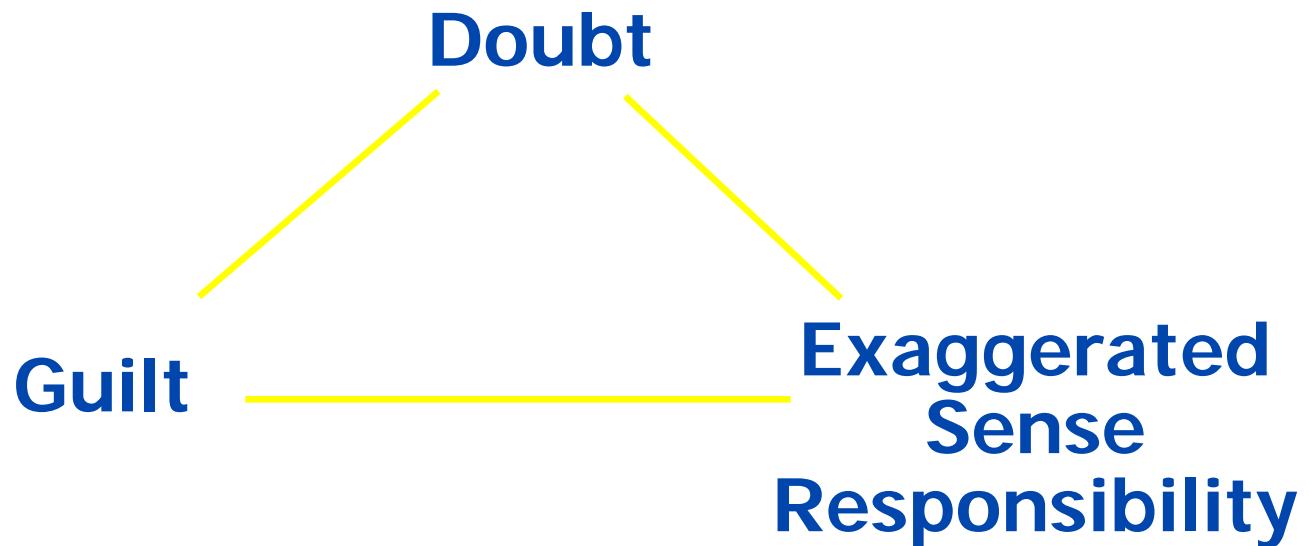
- Understand the scope of the problem of physician burnout.
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# Physician Distress: Key Drivers

- Excessive workload
- Inefficient work environment, inadequate support
- Problems with work-life integration
- Loss autonomy/flexibility/control
- Loss of values and meaning in work

# Are physicians at inherent risk? The “Physician Personality”

## TRIAD OF COMPULSIVENESS



Gabbard JAMA 254:2926

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**"Look, I'm half-way through a meeting, this better be bloody important!"**

# The “Physician Personality”

## Adaptive

- Diagnostic rigor
- Thoroughness
- Commitment to patients
- Desire to stay current
- Recognize responsibility of patients’ trust

## Maladaptive

- Difficulty relaxing
- Problem allocating time for family
- Sense responsibility beyond what you control
- Sense “not doing enough”
- Difficulty setting limits
- Confusion of selfishness vs. healthy self-interest
- Difficulty taking time off

Gabbard JAMA 254:2926



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*Baldwin*



“He had chest pains. A real wake-up call to slow down a bit. Unfortunately, he was on another line and missed it.”

# Consequences of Distress

- Alcohol and substance abuse
- Suicide
- Personal life: marital conflict
- Poor self care
- Low satisfaction
- Attrition
- Absenteeism
- Lesser academic performance
- Academic dishonesty
- Cynicism
- Unwillingness to care for chronically ill
- Loss of professionalism

# Burnout's Effect on Academic Faculty

- Surgical/Med faculty of UW Summer 2004
- Intention to leave academic medicine next 36 months:
  - If burned out: 38%
  - If not burned out: 8% ( $p < 0.001$ )

Goitein/Shanafelt JGIM 2008

# Consequences of Physician Burnout

- Medical errors<sup>1-3</sup>
- Impaired professionalism<sup>5,6</sup>
- Reduced patient satisfaction<sup>7</sup>
- Staff turnover and reduced hours<sup>8</sup>
- Depression and suicidal ideation<sup>9,10</sup>
- Motor vehicle crashes and near-misses<sup>11</sup>

<sup>1</sup>JAMA 296:1071, <sup>2</sup>JAMA 304:1173, <sup>3</sup>JAMA 302:1294, <sup>4</sup>Annals IM 136:358,  
<sup>5</sup>Annals Surg 251:995, <sup>6</sup>JAMA 306:952, <sup>7</sup>Health Psych 12:93, <sup>8</sup>JACS 212:421,  
<sup>9</sup>Annals IM 149:334, <sup>10</sup>Arch Surg 146:54, <sup>11</sup>Mayo Clin Proc 2012

# Objectives

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# Physician Distress: Key Drivers

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# Recommendations in the Literature

Choices with regard to work-life balance

- Manage work-home conflicts

Stress management techniques

Spiritual nurturing

Positive life philosophy

Self-care (exercise, health, recognition of place on the “stress curve”: reflection, mindfulness)

Strive for meaning in work

Shanafelt *et al.*, Am J Med 2003; Dyrbye *et al.*, Mayo Clin Proc 2005

# Studied Approaches

- SMART program
- Personal stress reduction training
- Fostering self-awareness (“mindfulness training”)
- Balint groups
- Informal Doctoring to Heal physician discussion groups
- Facilitated small group curricula
  - Mayo studies recently completed



## An Intriguing Model

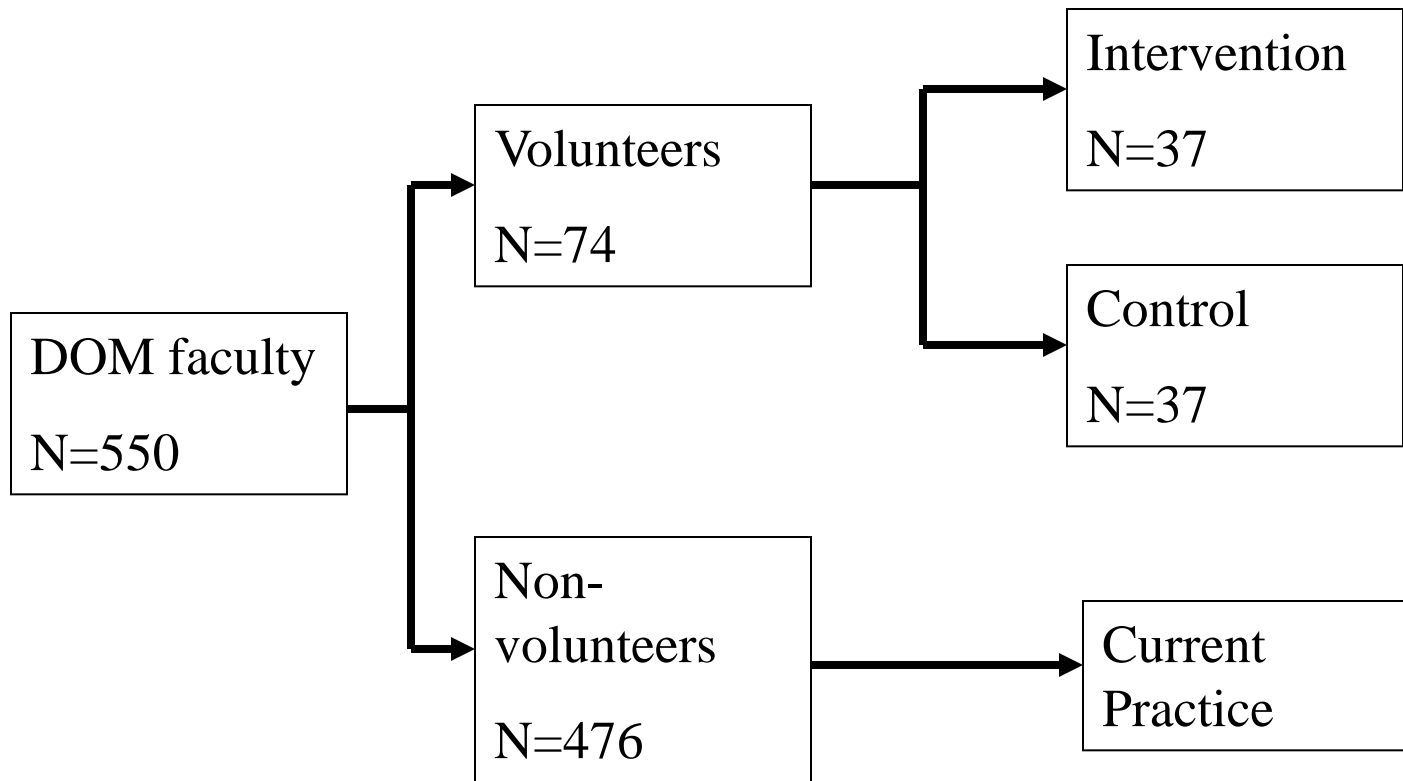
- Krasner *et al.* reported large effects of a 52-hour mindfulness training program administered over 1 year
  - Markedly improved burnout in all domains
  - Improved empathy
  - Improved mindfulness
  - Results sustained 3 months post-intervention
- Limitations
  - No comparative control group
  - Volunteer bias
  - All participants were primary care providers
  - Training occurred after hours and on weekends

Krasner *et al.*, JAMA 2009;302:1284-93.

# Intervention Trial

- RCT testing if an established, portable, low-cost curriculum administered during regular work hours can promote meaning and reduce burnout
  - Arm A (Intervention):
    - meet 90 minutes (12:30-2) every other wk (60 mins protected time, ~1% FTE)
    - 9 months
    - Facilitated curriculum, small groups of 6-8 physicians
  - Arm B (Control):
    - Receive 60 minutes every other week for professional/administrative tasks (~1% FTE)
- Outcomes assessed quarterly, 3 months post, 12 months post

# Intervention Trial



# Intervention Trial

- Intervention broad and varied:
  - Built on prior literature
  - Goals:
    - Identify and promote meaning in work
    - Foster collegiality and community
    - Share techniques for dealing with challenging professional issues
    - Identify and share ways to promote personal and professional satisfaction
    - Learn specific skills: self-reflection, mindfulness, effective coping strategies

# Intervention Trial

- Topics: 3 Modules

- SELF

- Physician well-being
    - Physician distress
    - Meaning in work
    - Personal resources
    - Thriving

- PATIENT

- Patient connectedness
    - Barriers to care
    - Bad news
    - Medical mistakes and errors
    - Being present

- BALANCE

- Personal/professional balance
    - Personal/professional identity
    - Personal/professional relationships
    - Gender and generational differences
    - Resiliency

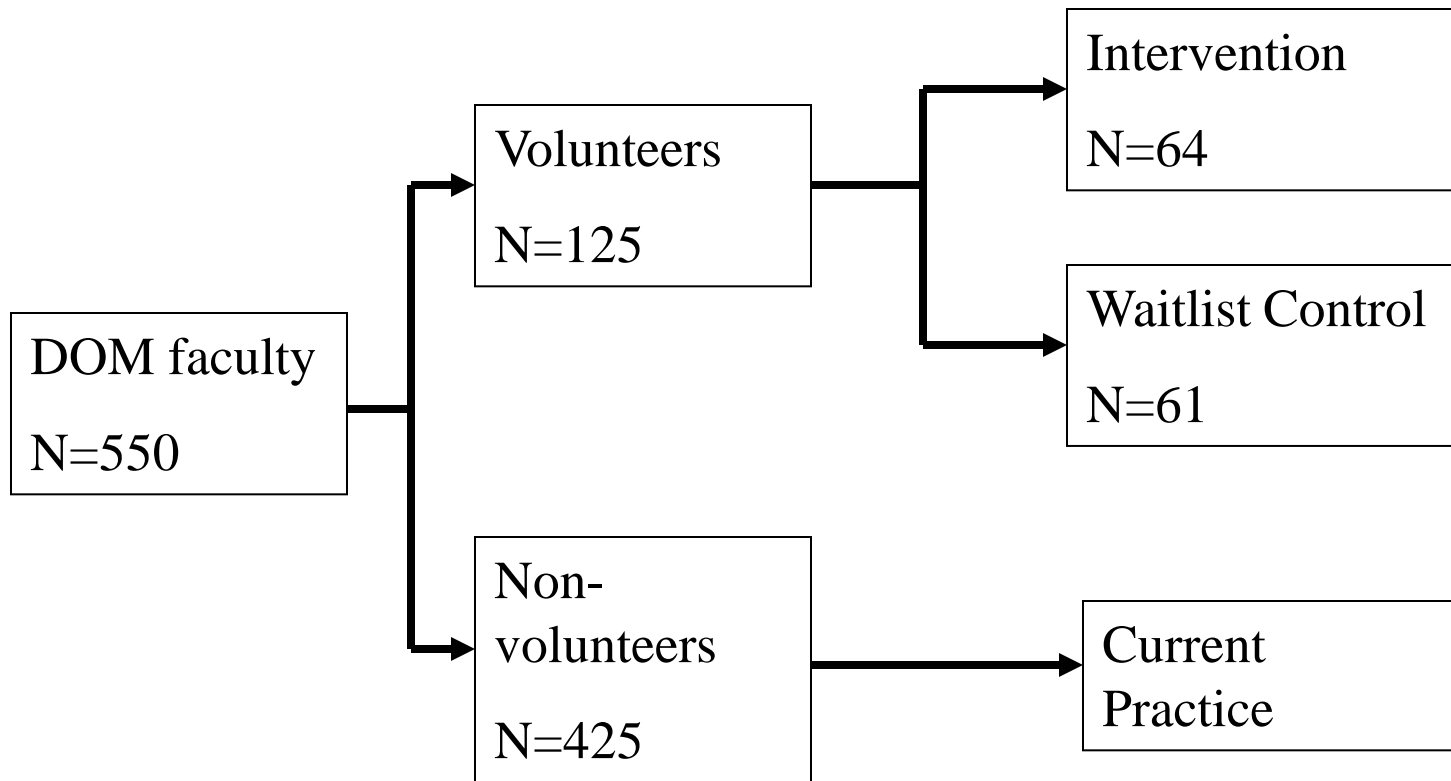
# Intervention Trial

- Session structure (60 minutes)
  - Check-in (5 minutes)
  - Cueing exercise (15 minutes)
  - Group discussion (20 minutes)
  - Skills and solutions (15 minutes)
  - Check-out/summary (5 minutes)

# Conclusions

- A small amount of protected time during the workday resulted in improved meaning from work and reductions in burnout
  - Effects larger in facilitated small group arm than in “free time” control arm, particularly in promoting meaning and reducing depersonalization.
  - Follow-up study data found sustained benefits at 1 year after the close of the study.

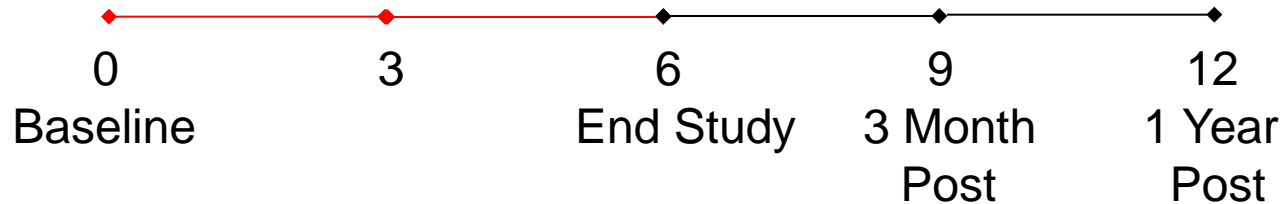
# Second Intervention Trial





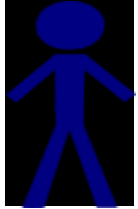
# Results – 2 Groups

- Comparison of two intervention arms
  - Moderate trial size: detectable effect size 0.50 (medium)
  - Assess quarterly longitudinal data

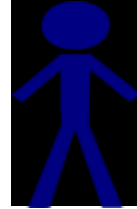


# Conclusions

- Compared to the wait-listed control group, the facilitated small group intervention improved:
  - Depersonalization
  - Personal accomplishment
  - Overall QOL
  - Depression
  - Meaning from work
  - Social isolation at work
  - Job satisfaction
  - Likelihood of leaving in next 2 years
- Initial intervention shows benefit with sustained changes over subsequent 6 months.



# Individual Strategies



- Identify Values
  - Debunk myth of delayed gratification
  - What matters to you most (integrate values)
  - Integrate personal and professional life
- Optimize meaning in work
  - Flow
  - Choose/focus practice
- Nurture personal wellness activities
  - Calibrate distress level
  - Self-care (exercise, sleep, regular medical care)
  - Relationships (connect w/ colleagues; personal)
  - Religious/spiritual practice
  - Mindfulness
  - Personal interests (hobbies)

# Delayed Gratification: Life on Hold?

- 50% residents report “Survival Attitude” - life on hold until the completion of residency
- 37% practicing oncologists report “Looking forward to retirement” is an essential “wellness promotion strategy”
- Many physicians may maintain strategy of delayed gratification throughout their entire career

Shanafelt, J Sup Oncology 3:157

# Factors Associated with Burnout

- Hours worked (OR 1.02;  $p=0.03$ )
- Conflict between work-personal responsibilities in last 3 weeks
  - (OR 2.0;  $p=0.05$ )
- Resolving last conflict in favor of work (OR=1.8;  $p=0.02$ )



# What Can Organizations Do?



- Be value oriented
  - Promote values of the medical profession
  - Congruence between values and expectations
- Provide adequate resources (efficiency)
  - Organization and work unit level
- Promote autonomy
  - Flexibility, input, sense control
- Promote work-life integration
- Promote meaning in work

# Organizational Solutions

## Recognition of distress:

- **Physician Well-Being Index (Dyrbye 2013, 2014)**
  - Simple online 7-item instruments evaluating multiple dimensions of distress, with strong validity evidence and national benchmarks from large samples of medical students, residents, and practicing physicians
  - Evidence that physicians do not reliably self-assess their own distress
  - Feedback from self-reported Index responses can prompt intention to respond to distress
- **Suicide Prevention and Depression Awareness Program (Moutier 2012)**
  - Anonymous confidential Web-based screening
- **AMA STEPSForward modules**
  - Mini Z instrument (AMA, Linzer 2015): 10-item survey

## The Evidence in Total

- Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West 2015):
  - 15 RCT's, 36 non-RCT's
    - Results similar for RCT and non-RCT studies
  - 24 studies of residents (7 RCT's totaling 308 participants)
  - 19 studies of organizational/structural interventions (3 RCT's, only 1 in residents with total n=41)
    - 10 of Duty Hour Requirements (0 RCT's, 1 study of 2011 DHR's)



# The Evidence in Total

- Emotional exhaustion (EE):
  - -2.9 points,  $p < 0.001$
  - Rate of High EE: -14%,  $p < 0.001$
- Depersonalization (DP):
  - -0.7 points,  $p = 0.008$
  - Rate of High DP: -15% for staff ( $p < 0.001$ )
- Benefits similar for individual-focused and structural interventions

# The Evidence in Total

- Individual-focused interventions:
  - Meditation techniques
  - Stress management training, including MBSR
  - Communication skills training
  - Self-care workshops, exercise program
  - Small group curricula, Balint groups
    - Community, connectedness, meaning

# The Evidence in Total

- Structural interventions:
  - Duty Hour Requirements for trainees
    - Unclear but possibly negative impact on attendings
  - Shorter attending rotations
  - Shorter resident shifts in ICU
  - Locally-developed practice interventions

# Physician Well-Being: Approach Summary

	Individual	Organizational
Workload	Part-time status	Productivity targets Duty Hour Requirements Integrated career development
Work Efficiency/ Support	Efficiency/Skills Training	EMR (+/-?) Staff support
Work-Life Integration/ Balance	Self-care Mindfulness	Meeting schedules Off-hours clinics Curricula during work hours Financial support/counseling
Autonomy/ Flexibility/ Control	Stress management/Resiliency Mindfulness Engagement	Physician engagement
Meaning/Values	Positive psychology Reflection/self-awareness Mindfulness Small group approaches	Core values Protect time with patients Promote community Work/learning climate

# Recommendations

- We have a professional obligation to act.
  - Physician distress is a threat to our profession
  - It is unprofessional to allow this to continue
    - Evolve definition of professionalism? (West 2007)
  - SHARED RESPONSIBILITY
- We must assess distress
  - Metric of institutional performance
    - Part of the “dashboard”
  - Can be both anonymous/confidential and actionable

# Recommendations

- The toolkit for these issues will contain many different tools.
- There is no one solution ...
- ... but many approaches offer benefit!



# Physician Distress: Key Drivers

- Excessive workload
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# Thank You!

- Comments/questions
- [west.colin@mayo.edu](mailto:west.colin@mayo.edu)