Combating Burn Out, Promoting Physician Well-Being: Building Blocks for a Healthy Learning Environment in GME

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ACGME Summer Spotlight Webinar

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Disclosures

• Carol Bernstein and Lyuba Konopasek have nothing to disclose
Objectives

• Describe the key factors contributing to resident burnout, strategies for improving resilience and approaches to identifying residents at risk.

• Identify stressors and supports

• Identify curricular innovations, coaching strategies, and faculty development activities to use at your own institutions

• Describe how to conduct a needs assessment for developing a resident well-being plan using a structured tool
Burnout

• Pathologic condition which develops in response to prolonged occupational stress

• Maslach described three dimensions:
  – Emotional exhaustion
  – Depersonalization and cynicism
  – Inefficacy/lack of personal achievement

• Maslach Burnout Inventory is 22 item scale which evaluates the three dimensions above

Thomas, JAMA, 2004
Burnout and Satisfaction with Life-Work Balance Among US Physicians (N=7,288)

**Burnout by specialty**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>% Reporting Burnout</th>
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<tbody>
<tr>
<td>Emergency medicine</td>
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<tr>
<td>General internal medicine</td>
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<tr>
<td>Neurology</td>
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<tr>
<td>Family medicine</td>
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<tr>
<td>Otolaryngology</td>
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<tr>
<td>Orthopedic surgery</td>
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<tr>
<td>Anesthesiology</td>
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<tr>
<td>Obstetrics and gynecology</td>
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<tr>
<td>Radiology</td>
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<tr>
<td>Physical medicine and rehabilitation</td>
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<tr>
<td>Mean burnout among all physicians participating</td>
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<tr>
<td>General surgery</td>
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<tr>
<td>Internal medicine subspecialty</td>
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<tr>
<td>Ophthalmology</td>
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<tr>
<td>General surgery subspecialty</td>
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<tr>
<td>Urology</td>
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<tr>
<td>Psychiatry</td>
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<tr>
<td>Neurosurgery</td>
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<tr>
<td>Pediatric subspecialty</td>
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<tr>
<td>Other</td>
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<tr>
<td>Radiation oncology</td>
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<tr>
<td>Pathology</td>
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<tr>
<td>General pediatrics</td>
<td></td>
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<tr>
<td>Dermatology</td>
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<tr>
<td>Preventive medicine, occupational medicine, or environmental medicine</td>
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</tbody>
</table>

**Satisfaction with life-work balance by specialty**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>% Satisfied That Work Leaves Enough Time for Personal or Family Life</th>
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<tbody>
<tr>
<td>Preventive medicine, occupational medicine, or environmental medicine</td>
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</tbody>
</table>

Burnout = lack of enthusiasm for work, cynicism and low level of personal accomplishment

Shanafelt et al, Arch Int Med, 2012
Burnout in Training

• Highly prevalent among medical students, residents and physicians
  – In residents, studies show burnout rates of 41-90%
• In residency, levels rise quickly within the first few months of residency
• ACGME work hour changes do not appear to have improved sleep, burnout, depression symptoms or errors
• Resident distress (e.g. burnout and depression) associated with medical errors and poorer patient care

<table>
<thead>
<tr>
<th>Table 2. Partial List of Contributing Causes to Physician Burnout</th>
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<tbody>
<tr>
<td>Length of training and delayed gratification</td>
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<tr>
<td>Limited control over the provision of medical services</td>
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<td>Long working hours and enormous workloads</td>
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<tr>
<td>Imbalance between career and family</td>
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<tr>
<td>Feeling isolated or loss of time to connect with colleagues</td>
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<td>Financial issues (salary, budgets, managed care, etc)</td>
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<td>Grief and guilt about patient death or unsatisfactory outcome</td>
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<td>Insufficient protected research time and funding</td>
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<tr>
<td>Sex- and age-related issues</td>
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<td>Inefficient and/or hostile workplace environment</td>
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<td>Setting unrealistic goals or having them imposed on oneself</td>
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<tr>
<td>Professional</td>
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<td>----------------------------------------------------------------------------</td>
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<tr>
<td>Poor judgment in patient care decision making</td>
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<td>Hostility toward patients</td>
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<td>Medical errors</td>
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<tr>
<td>Adverse patient events</td>
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<tr>
<td>Diminished commitment and dedication to productive, safe, and optimal</td>
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<tr>
<td>patient care</td>
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<tr>
<td>Difficult relationships with coworkers</td>
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<tr>
<td>Disengagement</td>
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<table>
<thead>
<tr>
<th>Personal</th>
</tr>
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<tbody>
<tr>
<td>Depression</td>
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<tr>
<td>Anxiety</td>
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<td>Sleep disturbances and fatigue</td>
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<td>Broken relationships</td>
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<td>Alcohol and drug addictions</td>
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<td>Marital dysfunction and divorce</td>
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<tr>
<td>Early retirement</td>
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<tr>
<td>Suicide</td>
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</table>
Depression
30% of residents met clinical criteria for depression in 1986

Martin, J Gen Int Med, 1986

• 15 experts came together to evaluate state of knowledge about physician depression and suicide
• Reviewed abstracts, presentations and key publications
• Concluded that the culture of medicine accords low priority to physician mental health despite evidence of untreated mood disorders and burden of suicide
• Barriers to treatment include discrimination in licensing hospital privileges and advancement.
• Recommended transforming attitudes and changing policies
Association Between Burnout and Depression
Epidemiology of Depression in Physicians

Higher rates in medical students (15%–30%), interns (30%), and residents than in the general population

Lifetime rates of depression in women physicians - 39% compared to 30% in age matched women with PhD’s

- Both higher than the general population

Lifetime rates of depression in male physicians (13%) may be similar to rates of depression in men in the general population, or they may be slightly elevated.

- Data from Denmark show that male physicians have elevated rates of depression

Welner et al., Arch Gen Psych, 1979; Clayton et al., J Ad Dis, 1980; Frank & Dingle, Am J Psych, 1999; Wieclaw et al., Occup Environ Med, 2006; Center et al., JAMA, 2003; Valko & Clayton, Am J Psych, 1975; Kirsling & Kochar, Psychol Rep, 1989
Depression During Internship

Specialty (N=740)

- Internal medicine 358 (48.5)
- General surgery 98 (13.3)
- OB/gynecology 42 (5.7)
- Pediatrics 94 (12.7)
- Psychiatry 63 (8.5)
- Emergency medicine 47 (6.3)
- Medicine/pediatrics 19 (2.6)
- Family medicine 19 (2.6)

Percentage with “Depression” (PHQ >10)

Mean PHQ-9 increased from 2.4 to 6.4

Sen et al, Arch Gen Psych 2010
Factors Associated with Depression During Internship (Prospective Study)

**Predictors of Increased Depressive Symptoms**

**Baseline Factors**
- Neuroticism
- Personal history of depression
- Baseline depressive symptoms
- Female sex
- US medical graduate
- Difficult early family environment
- 5-HTTLPR polymorphism

**Within-Internship Factors**
- Mean work hours
- Medical errors
- Stressful life events

**PHQ-9) Depression Scores Stratified by the Presence of at Least 1 Copy of a 5-HTTLPR Low-Functioning Allele.**

Low = at least one low functioning allele
High/high = 2 high functioning alleles

Sen et al, Arch Gen Psych 2010
Depression During Internship: Study Results

• Rate of depression increased dramatically during internship from 3.9% meeting PHQ 9 criteria up to 25.3% at intervals during the year

• Most were moderately depressed

• Depression results in increased medical errors and errors may also cause depression (corror. West)

• Direct association between the number of hours worked and the risk of depression

• No evidence that depressive symptom score before internship predicted work hours

Sen et al, Arch Gen Psych, 2010
Institution and Specialty Contribute to Resident Satisfaction With Their Learning Environment and Workload

Larry D. Gruppen, PhD, R. Brent Stansfield, PhD, Zhuo Zhao, MS, and Srijan Sen, MD, PhD
- **Population Sample**
  - 10,132 subjects (60% with DNA)
  - 48 institutions
  - 9 cohorts
  - Specialties
    - internal medicine, family medicine, surgery, pediatrics, psychiatry, OB-Gyn, emergency medicine
A Prospective Cohort Study Investigating Factors Associated With Depression During Medical Internship

Srijan Sen, MD, PhD; Henry R. Kranzler, MD; John H. Krystal, MD; Heather Speller, MD; Grace Chan, PhD; Joel Gelernter, MD; Constance Guille, MD

![Bar chart showing depression rate over time during internship.](image-url)
THE TREATMENT CHALLENGE
Attitudes about Seeking Services in a Resident Wellness Program

- Survey 800 residents and fellows
- Two psychologists and 1 psychiatrist available 5 days/week and after-hours consultation
- 71% response rate to survey
- Time the biggest barrier
- Women more concerned about taking a break
- Men more likely to question helpfulness of counseling
- 5% willing to seek help in 20014-05
- 12% in 2009-10 after marketing the program

Ey et al, JGME, 2013
Utilization and Barriers to Mental Health Services Among Depressed Medical Interns: A Prospective Multisite Study

85.2%

- Med & Therapy: 8.1%
- Therapy Alone: 6.7%
- No Treatment: 85.2%
• Lack of time (92%)
• Preference for self-management (75%)
• Lack of convenient access (62%)
• Concerns regarding confidentiality (57%)
• Concerns about stigma (52%)
• Concerns about cost (50%)
• Belief that treatment does not work (25%)
Web-Based Cognitive Behavioral Therapy Intervention for the Prevention of Suicidal Ideation in Medical Interns
A Randomized Clinical Trial

Constance Guille, MD; Zhuo Zhao, MS; John Krystal, MD; Breck Nichols, MD; Kathleen Brady, MD, PhD;
Srijan Sen, MD, PhD

Figure 3. Number of Interns Endorsing Suicidal Ideation During Internship Year

wCBT indicates web-based cognitive behavioral therapy.

Published online November 4, 2015.
Resilience: Definition

• Resilience
  – The capacity to bounce back, to withstand hardship, and to repair yourself
  – Positive adaptation in the face of stress or disruptive change

• Based on a combination of factors
  – Internal attributes (genetics, optimism)
  – External (modeling, trauma)
  – Skills (problem solving, finding meaning/purpose)

Wolin 1993, Werner & Smith, 1992
Can We Build Resilience?

- Realistic recognition (Overcoming denial/cx)
- Exercise, sleep, nutrition
- Supportive professional relationships
- Talking things out with others
- Hobbies outside medicine
- Personal relationships
- Boundaries
- Humor
- Time away from work
- Passion for one’s work

Swetz, J Palliative Med 2009
Physician Wellness: Monitoring Risks

- Sources of Stress in Residency
- Stress and Burnout Among Physicians
- Stress and Clinical Performance
- Chronic Severe Stress and Physical Health
- Stress Associated with Perceived Medical Errors
- Medical Malpractice
- Depressive Symptoms in Medical Students and Residents
- Suicidal Ideation Among Physicians
- Suicidal Rates among Male and Female Physicians
- Substance Abuse
Physician Wellness: Building Resilience

- Educating Residents and Program Directors About Physician Impairment
- Countering the Stress of Residency
- US Air Force Suicide Prevention Program
- Resident Wellness Programs:
  - Oregon Health Sciences Center
  - University of Florida Health Science Center
  - UCSD Healer Education Assessment and Referral Program (HEAR)
  - ACGME Symposium on Resident Well-Being
Table 3. Steps to Promote Personal Well-Being

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify personal and professional values and priorities</td>
<td>Reflect on personal values and priorities</td>
</tr>
<tr>
<td>Strive to achieve balance between personal and professional life</td>
<td>Make a list of personal values and priorities; rank in order of importance</td>
</tr>
<tr>
<td></td>
<td>Make a list of professional values and priorities; rank in order of priorities</td>
</tr>
<tr>
<td>Integrate these 2 lists</td>
<td>Identify areas where personal and professional goals may be incompatible</td>
</tr>
<tr>
<td>Based on priorities, determine how conflicts should be managed</td>
<td>Enhance areas of work that are most personally meaningful</td>
</tr>
<tr>
<td>Identify areas of work that are most meaningful to you (patient</td>
<td>Care, patient education, medical education, participation in clinical trials, research, administration)</td>
</tr>
<tr>
<td>Find out how you can reshape your practice to increase your focus</td>
<td>in this area/these areas</td>
</tr>
<tr>
<td>Decide whether improving your skills in a specific area would</td>
<td>Decrease your stress at work or whether seeking additional training in this or other areas would be helpful for you</td>
</tr>
<tr>
<td>Identify opportunities to reflect with colleagues about stressful</td>
<td>and rewarding aspects of practice</td>
</tr>
<tr>
<td>Periodically reassess what you enjoy most about your work</td>
<td>Identify and nurture personal wellness strategies of importance to you</td>
</tr>
<tr>
<td>Protect and nurture your relationships</td>
<td>Nurture religion and spirituality practices</td>
</tr>
<tr>
<td>Develop hobbies and use vacations to pursue nonmedical interests</td>
<td>Ensure adequate sleep, exercise, and nutrition</td>
</tr>
<tr>
<td>Define and protect time for personal reflection at least once a month</td>
<td>Obtain a personal primary care physician and seek regular medical care</td>
</tr>
</tbody>
</table>

Balch et al., JAMA Surgery, 2009
Stressors and Supports
Medical Careers (The Fantasy)
“The word ‘slave’ is so degrading. Why don’t we call you ‘intern.’”
New Stressors

• Joining a professional family
  – Is it the right one?
• Challenges to circadian rhythms
• Less control over schedule
• Executive functioning on steroids
• Calibrating uncertainty
  – Needing to make decisions about care and supervision
• Formatively focused assessment system
  – Assessment for learning and development of competence
Potential Learning Environment Stressors

- Stressed faculty and staff
- Stressed colleagues
- Lack of support services
- Fractured care
- Poor geographic localization of care
- The EHR
Baseline Stressors

- Medical
- Mental Health
- Relationship
- Family
- Financial
- Psychological make-up of medical students
- Ambivalence about career choice
Supports

• Faculty Development
• Smart-R Curriculum
• Positive Psychology Coaching
PD Development

• The PD’s role in prevention and management of trainees’ issue related to well-being,

• Topics:
  – Creating a program specific well-being plan
  – Recognizing burn out
  – Recognizing stressors in the learning environment
  – Endorsing self-care
  – Diagnosing the learner with problems
  – Identifying resources
  – Feedback strategies
Program Well-Being Plan: Components of Inventory

- Leadership
- House staff mental health resources
- Crisis management
- Orientation
- Policies
  - Duty Hour, Fatigue, Sick call, Supervision, Grievance
- Curriculum
  - Making space for reflection - Process groups
  - Building skills - Mindfulness, Resiliency
- Clinical care challenge discussions
- Mentorship and advising
- Creating community
- Faculty development

Engaging Others

- Department Chairs
- Program Coordinators
- Chief Residents
- Nurses
- Trainees
- Dept of psychiatry
- Hospital/college human resources
- Medical schools
  - Results of GQs
  - Coaching for transition to residency
Resilience

• The capacity to bounce back, to withstand hardship, and to repair yourself
• Positive adaptation in the face of stress or disruptive change

Based on a combination of factors

• Internal attributes (genetics, optimism)
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Can We Build Resilience?

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Swetz, J Palliative Med 2009
Building Resilience

How to Build Resilience:
• Educating residents and program directors about physician impairment
• Countering the stress of residency

Programs such as:
• US Air Force Suicide Prevention Program
• Resident Wellness Programs/Strategies:
  • Oregon Health Sciences Center
  • University of Florida Health Science Center
  • UCSD Healer Education Assessment and Referral Program (HEAR)
  • Web Based CBT Intervention (Sen study 2015)
  • ACGME Symposium on Resident Well-Being
MGH – SMART-R Curriculum

Stress Management and Resiliency Training Program

Adapted from Benson Henry Institute’s “Relaxation Response and Resiliency Program”

Three pronged approach to wellness, health and resiliency
SMART-R

- Eliciting the relaxation response (mindfulness meditation)
- Stress Awareness
- Adaptive Strategies
SMART-R - Structure

• For Interns: initially in medicine and psychiatry
• Three two hour sessions
• During “protected” time
• Opportunities for reflection and sharing of experience
SMART-R Curriculum Outline

Session One

• Present scientific basis for mindfulness
• Stress awareness and coping (how to recognize physical, cognitive, emotional, relational stress)
• Positive perspective taking (letter to self)
SMART-R Curriculum

Session Two

• Body Scan (relaxation techniques)
• Sleep hygiene (sleep data), negative automatic thoughts
• Creating an adaptive perspective
SMART-R Curriculum

Session Three

• Idealized Self-meditation
• Humor in medicine
• Creative expression
• Reread letter to self
Positive Psychology Coaching

- One resident paired with one faculty member
- 3-4 structured sessions per year
- 2-hour faculty training session
- Goal: promote self-reflection, leading to personal and professional growth
- Focus on the positive and self-assessment rather than evaluation by others
  - Strengths
  - Meaningful experiences in training

Palamara K. et al. JGME. 2015
Activities at Your Own Institution

• Stressors and supports discussion
• Well-being inventory completion
• Developing an action plan
  – Institution
  – Program
Learning from each other

• In 2 weeks you will be asked to complete a survey of activities to promote physician well-being and resilience that you use or know of
• We will disseminate the results back to you
Your Action Plan

• What are you ready to do in the
  – Next week?
  – Next month?
  – Next year?
Resources

• Webinar resources
  – Bibliography
  – Program Specific and Institutional Well-being Inventory
  – Stressors and Supports worksheet

• ACGME Well-Being Initiative
  – http://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being

• AAMC Well-Being in Academic Medicine