

The Moral Injury Crisis in Orthopedic Surgeons

Department of Orthopedics and Rehabilitation Grand Rounds

November 16, 2023

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Editorial: It's More Than Burnout—The Moral Injury Crisis in Orthopaedic Surgeons

Mark C. Gebhardt MD

Disclaimer – Musculoskeletal Care

- Physical Medicine and Rehabilitation
- Sports Medicine; Peds/FM/ED
- PhD Musculoskeletal system
- MS Musculoskeletal system
- Podiatric Medicine
- Orthopedic Nurse Practitioner
- Orthopedic Case Managers
- Orthopedic Social Worker
- Orthopedic Inpatient Nurse – M6
- Orthopedics Outpatient Nurse - Tilley
- Orthopedics Physicians Assistant
- Medical Assistant
- Patient Care Assistant
- SCOA
- Cast technician
- Scheduler
- Xray Technician



Flashback



Attention, Please

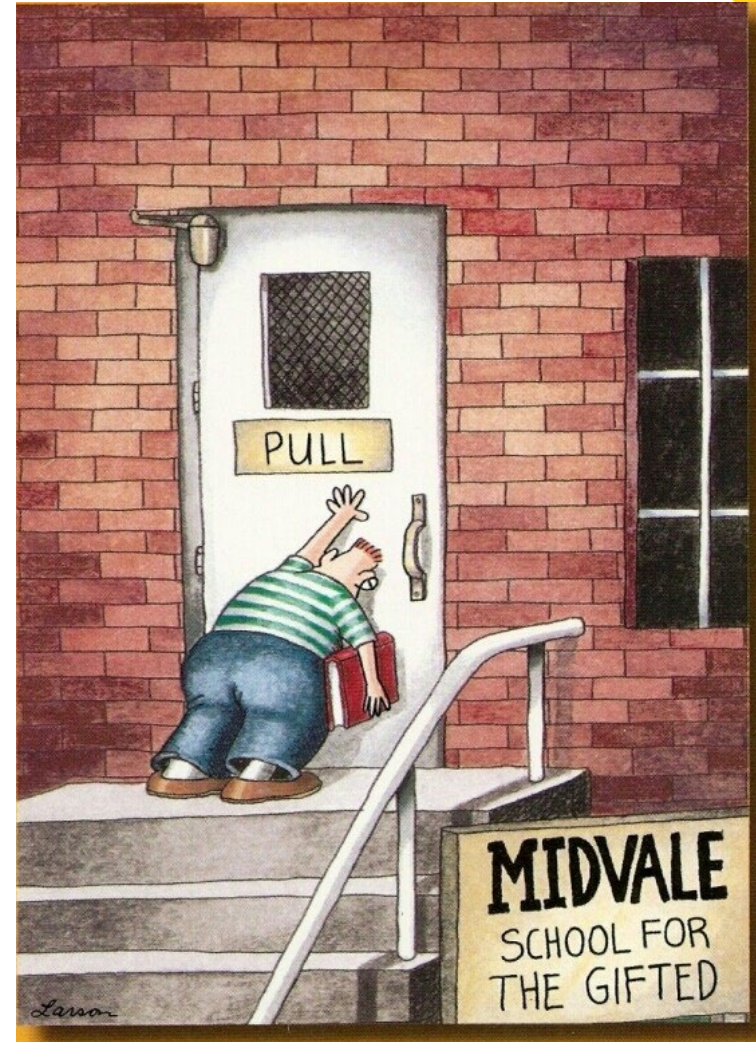
We're guessing the lecture was over, or not yet begun, in this photo that seems to have been taken in the "new" Hall A that existed on the second floor of Given from 1968 till the early 2000s. Is that person in front meditating on all the knowledge he's just ingested? And who are his classmates?

Send your thoughts to erin_post@med.wvm.edu and we'll include



Moral Injury vs Burnout

- Burnout in Orthopedic Surgery
- Moral Injury in Orthopedic Surgery
- Review of literature
- Discuss Future Steps





ABOS **WLA**

My ABOS WLA Dashboard

All Knowledge Sources

My Selected
Knowledge Sources

Sample Questions

Orthopaedic Surgeon Burnout: Diagnosis, Treatment, and Prevention.

Daniels A, et al.

J Am Acad Orthop Surg. 2016
Apr;24(4):213-9.

(Previously Completed)





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AOA Critical Issues

Burnout in Orthopaedic Surgeons: A Challenge for Leaders, Learners, and Colleagues

AOA Critical Issues

S. Elizabeth Ames, MD, James B. Cowan, MD, Keith Kenter, MD, Sanford Emery, MD, MBA, and David Halsey, MD



**Orthopaedics
Residency Course**

Home Page

Resources

Specific Curricula

Business of Orthopedics

Research & Basic Science

QI Project

Integrated Curriculum

Clinical Rotations

Simulation Training

Dept Home

Course Management**Control Panel**

Files

Course Tools

Evaluation

Users and Groups

Home Page

**Personal Letter**

Attached Files:

- 2015 MCP Ariely Work Life Balance.pdf (173.598 KB)
- 2015 Shanafelt Changes_in_burnout_work life balance US MD 2011-14.PDF (669.685 KB)
- 2016 JAAOS Orthopaedic Surgeon Burnout Diagnosis, Treatment, and Prevention.pdf (178.166 KB)
- JBJS Ames Article.pdf (512.104 KB)
- open letter Ames Charlson.pdf (436.606 KB)

There is a significant effort at the ACGME level to help combat resident burnout/suicide and improve overall wellness. You can find great information at the following link:

<http://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being/Resources>

Also, the rationale for why we care from Thomas Nasca:

https://s3.amazonaws.com/symposium-pwb-2016-streaming/MiniVideos/2017_Mini_PWB_Nasca_CTC_Generic_720.mp4

**Two Articles from Dr. Ames:**

Attached Files:

- Gawande 2011 Personal Best.pdf (1.471 MB)
- Shanafelt 2017 Systems & Burnout.pdf (1.495 MB)

Maslach Burnout Inventory (MBI)

The Maslach Burnout Inventory

How do you perceive your work? Are you exhausted? How capable are you of shaping your relationship to others? To what degree are you personally fulfilled?

Indicate how frequently the following statements apply to you and add the points indicated on top of the respective box:

- 0 = Never
- 1 = At least a few times a year
- 2 = At least once a month
- 3 = Several times a month
- 4 = Once a week
- 5 = Several times a week
- 6 = Every day



Maslach Burnout Inventory (MBI)

	<div>Never</div> <div>Every day</div> <div>↓</div> <div>↓</div>						
	0	1	2	3	4	5	6
01 - I feel emotionally exhausted because of my work							
02 - I feel worn out at the end of a working day							
03 - I feel tired as soon as I get up in the morning and see a new working day stretched out in front of me							
04 - I can easily understand the actions of my colleagues/supervisors							
05 - I get the feeling that I treat some clients/colleagues impersonally, as if they were objects							
06 - Working with people the whole day is stressful for me							
07 - I deal with other people's problems successfully							
08 - I feel burned out because of my work							
09 - I feel that I influence other people positively through my work							
10 - I have become more callous to people since I have started doing this job							
11 - I'm afraid that my work makes me emotionally harder							
12 - I feel full of energy							
13 - I feel frustrated by my work							
14 - I get the feeling that I work too hard							
15 - I'm not really interested in what is going on with many of my colleagues							
16 - Being in direct contact with people at work is too stressful							
17 - I find it easy to build a relaxed atmosphere in my working environment							
18 - I feel stimulated when I been working closely with my colleagues							
19 - I have achieved many rewarding objectives in my work							
20 - I feel as if I'm at my wits' end							
21 - In my work I am very relaxed when dealing with emotional problems							
22 - I have the feeling that my colleagues blame me for some of their problems							



Maslach Burnout Inventory (MBI)

Overall score for occupational exhaustion (EE)

Add together the answers to questions 01. 02. 03. 06. 08. 13. 14. 16. 20

Occupational exhaustion	EE < 17	EE 18 - 29	EE > 30
	Low degree	Moderate degree	High degree

Overall score for depersonalisation / loss of empathy (DP)

Add together the answers to questions 05. 10. 11. 15. 22

Depersonalisation	DP < 5	DP 6 - 11	DP > 12
	Low degree	Moderate degree	High degree

Overall score personal accomplishment assessment (PA)

Add together the answers to questions 04. 07. 09. 12. 17. 18. 19. 21.

Personal accomplishment assessment	PA < 33	PA 34 - 39	PA > 40
	Low degree	Moderate degree	High degree



Maslach Burnout Inventory (MBI)

Degree of burnout

Beware if the totals of your EE and DP answers are both in the red area, and above all if your personal accomplishment assessment is also in the red!!!

EE	Occupational exhaustion (burnout) is typically connected to a relationship with work that is perceived as difficult, tiring, stressful... Maslach sees this as different from depression, as it is likely that the symptoms of burnout would be reduced during holidays.
DP	Depersonalisation or loss of empathy is characterised by a loss of regard for others (clients, colleagues...), and by keeping a greater emotional distance, which is expressed through cynical, derogatory remarks, and even callousness.
PA	The personal accomplishment assessment is a feeling that acts as a “safety valve” and contributes to bringing about a balance if occupational exhaustion and depersonalisation occur. It ensures fulfilment in the workplace and a positive view of professional achievements.



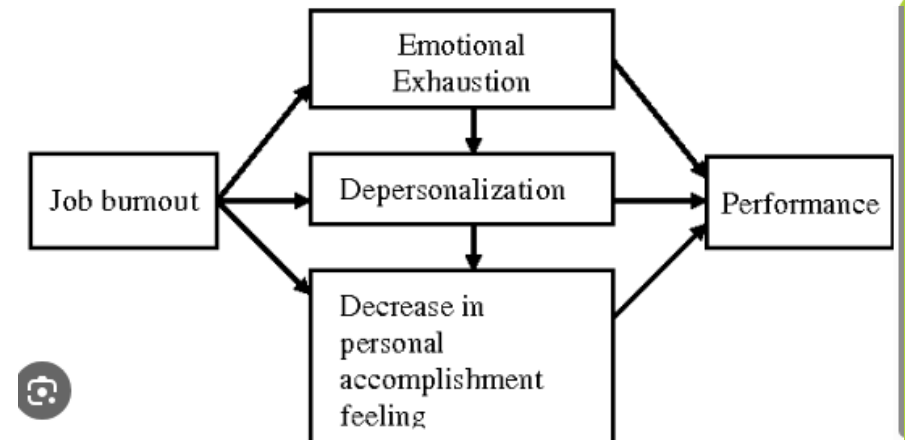
Burnout in Orthopaedic Surgeons: A Challenge for Leaders, Learners, and Colleagues

AOA Critical Issues

S. Elizabeth Ames, MD, James B. Cowan, MD, Keith Kenter, MD, Sanford Emery, MD, MBA, and David Halsey, MD

Occupational burnout – 1970s research examining effects of professionalism and behavior in caregivers and health care workers

- Emotional exhaustion
 - loss of enthusiasm for work
- Feelings of cynicism
 - Depersonalization; detached cynical view of self/patients/ colleagues
- Low of sense of personal accomplishment
 - Despite medical education and post graduate training



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Medical profession aware of burnout for over 15 years

- AOA
 - Sponsored research since 2010
- ACGME
 - 2016
 - Burnout in residency education



Burnout in Orthopaedic Surgeons: A Challenge for Leaders, Learners, and Colleagues

AOA Critical Issues

S. Elizabeth Ames, MD, James B. Cowan, MD, Keith Kenter, MD, Sanford Emery, MD, MBA, and David Halsey, MD

- Surgeon Wellness
 - Challenged work like
 - Thrive in professional career
 - Achieve success in both personal and professional life
- Professional expectations
 - Handle changes in work environment
 - Keep up to date with technical developments
 - Remain accessible
 - Develop/ maintain our own competence
- Personal expectations
 - Maintain appropriate work/ life balance
 - Spouse, significant other, children, family



Orthopaedic Surgeon Burnout: Diagnosis, Treatment, and Prevention

Alan H. Daniels, MD

J. Mason DePasse, MD

Robin N. Kamal, MD

Table 1

Summary of Burnout Studies Specific to Orthopaedic Surgeons

Study	Cohort	Emotional Exhaustion (%)	Depersonalization (%)	Low Personal Accomplishment (%)
Sargent et al ¹²	264 orthopaedic faculty	28.4	24.8	10
	384 orthopaedic residents	32	56	18
Saleh and colleagues ^{13,16}	110 orthopaedic chairpersons ^a	38 (high level); 39 (moderate level)	27 (high level); 34 (moderate level)	4 (low level)
Lesić et al ¹⁴	30 Serbian orthopaedic surgeons	70	55	29
van Vendeloo et al ¹⁵	105 Dutch orthopaedic residents	16.2	11.4	NR
Sadat-Ali et al ¹⁷	69 Saudi orthopaedic surgeons	50.7	59.4	17
Arora et al ¹⁸	51 Australian orthopaedic residents	45 (high level); 35 (moderate level)	35 (high level); 45 (moderate level)	43 (low level)

NR = not reported

^a Data in both studies was obtained from the same survey of American Orthopaedic Association members.



Orthopaedic Surgeon Burnout: Diagnosis, Treatment, and Prevention

Alan H. Daniels, MD
J. Mason DePasse, MD
Robin N. Kamal, MD

Table 2

Summary of Strategies for the Treatment and Prevention of Burnout		
Intervention/Preventive Measure	Description	Evidence
Mindfulness-based interventions	Increased physical and emotional self-awareness, education, techniques from Hatha yoga	Goodman and Schorling ²⁶ found improvement in burnout symptoms in 51 physicians. Krasner et al ²⁷ reported improvement in 68 primary care physicians.
Counseling sessions and workshops	Stress management and coping education, group discussions of burnout	Martins et al ²⁸ noted improvement only in depersonalization in 37 pediatric residents. Isaksson Ro et al ²⁹ found 3-year improvement in emotional exhaustion in 184 physicians.
Maximizing protective factors	Protective factors include support at work and home, having a mentor, being part of a national specialty organization, separating personal and professional life, meditating, exercise and hobbies, limiting alcohol intake, maintaining strong family relationships	Protective factors consistent across studies performed by Sargent et al ^{12,25} and Saleh and colleagues. ^{13,16}
Institutional adjustments	Increased physician control, increased work efficiency, encouragement of physician leadership, increased fairness	Dunn et al ³¹ reported decreased emotional exhaustion in 32 physicians after institutional changes. Choong ³⁰ noted the value of these changes for orthopaedic institutions.



Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014

Tait D. Shanafelt, MD; Omar Hasan, MBBS, MPH; Lotte N. Dyrbye, MD, MHPE; Christine Sinsky, MD; Daniel Satele, MS; Jeff Sloan, PhD; and Colin P. West, MD, PhD

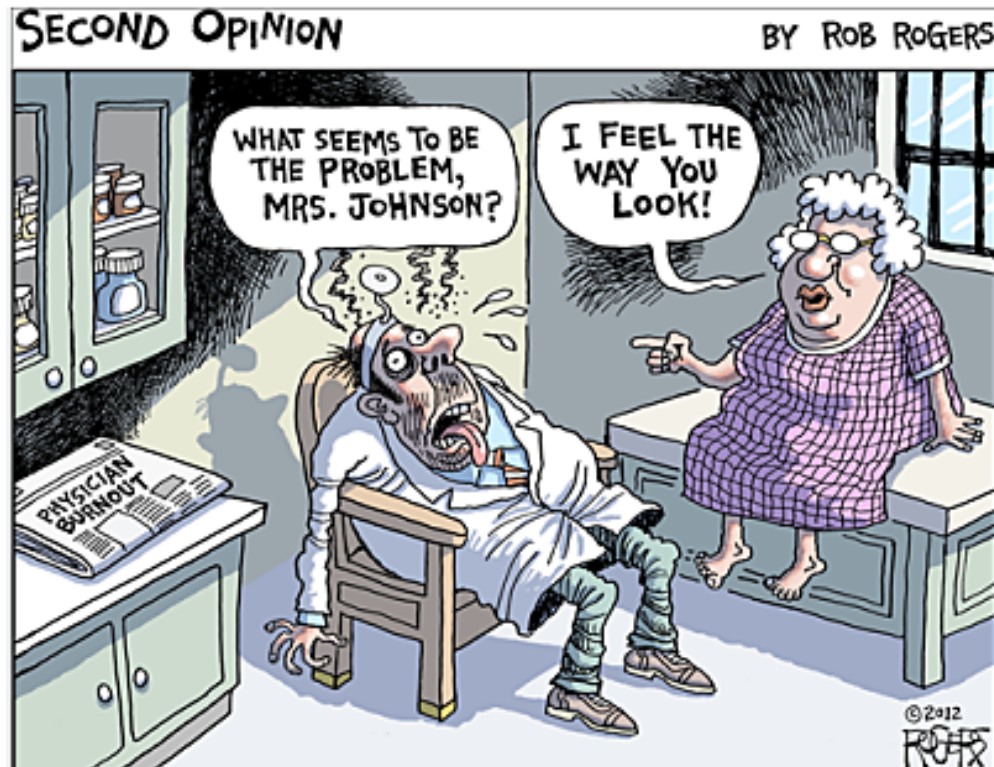
- Physicians experienced increased incidence of burnout symptoms than did workers from the general population
 - 37.9% physicians vs 27.8% general population
 - 45% physicians reporting at least one symptom of burnout
- Orthopedic Surgeons criteria for burnout increased 48.3% - 59.6%

Conclusion: Burnout and satisfaction with work-life balance in US physicians worsened from 2011 to 2014. More than half of US physicians are now experiencing professional burnout.



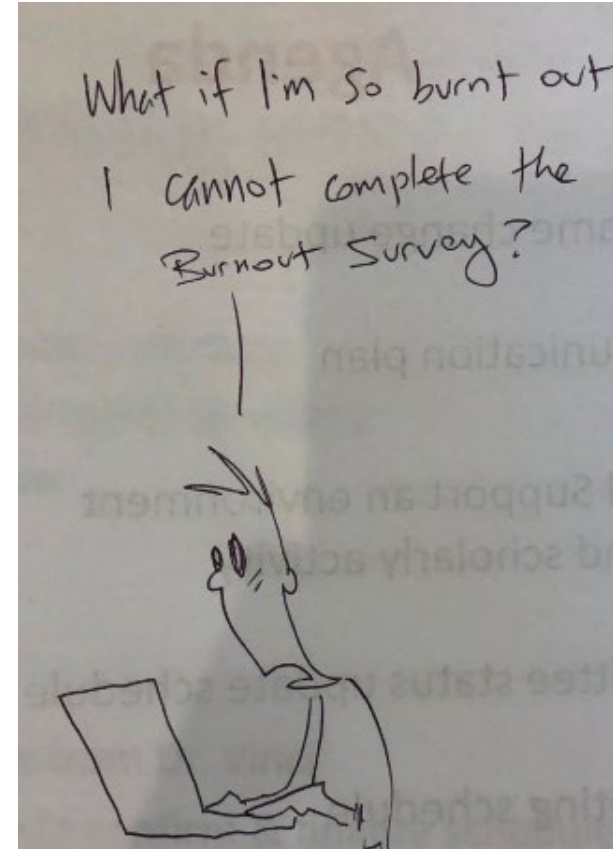
Burnout in the Medical Field

- Consequences of Occupational Burnout
- Professional
 - Erodes professionalism
 - Influences quality of patient care
 - Increase risk of medical errors
 - Early retirement



Burnout in the Medical Field

- Personal
 - Adverse consequences in personal and professional relationships
 - Suicidal ideation
 - Alcohol and drug abuse
- Hallmarks
 - Physical exhaustion
 - Poor judgement
 - Guilt
 - Feelings of ineffectiveness
 - depersonalization



Burnout Through Medical Career

Medical Students/ Residents

- Slavin et al Academic Medicine 2021
 - Medical Schools/Residency - **Well Being Individual Strategy Program**
 - yoga, mindfulness, meditation,
 - nutrition, exercise, sleep programs
 - Association of American Medical Colleges Graduation Questionnaire
 - Medical Student/ Resident response
 - Ranged from Ambivalence to resentment
 - “Well-being treated as a knowledge deficit”
 - “We don’t need more lectures on nutrition, we need access to healthy, nutritious food in the hospital
 - “Toxic positivity” – being pressured to be happy all the time
 - Program represents another way to feel disappointed in themselves if they were not successful in following through with the recommended practices

Burnout Through Medical Career

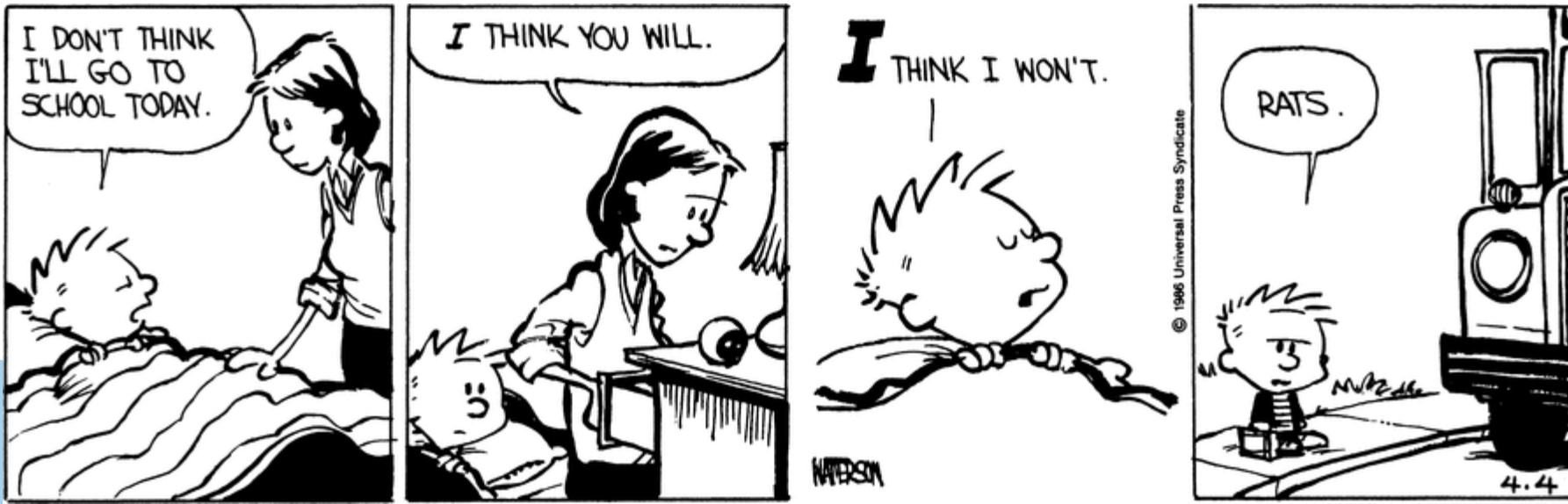
Medical Students/ Residents

- Slavin et al Academic Medicine 2021
 - Association of American Medical Colleges Graduation Questionnaire
 - **Conclusions**
 - Programs focused directly on individual well being are useful, but they have not rendered improvements in well being that have been sought and hoped for
 - Systemic Threats to students and trainees
 - School and work environment which have too often been accepted as conditions of the medical education environment
 - Experience of school and work environment rather than focusing primarily on encouraging healthy practices outside of school and work

Burnout Through Medical Career

Medical Students/ Residents

- Slavin et al Academic Medicine 2021
- Contributing factors
 - Expected workload/overload
 - Lack of control
 - Lack of sense of fairness



Clinical Faceoff: Physician Burnout—Fact, Fantasy, or the Fourth Component of the Triple Aim?

Thomas K. Wuest MD, MMM, Michael J. Goldberg MD, John D. Kelly IV MD

- CORR 2016
- Health Care Transformation
 - Improve patient outcomes
 - Increase patient satisfaction
 - Decrease overall cost
- Fourth Component of the Triple Aim
 - Physician Burnout



Orthopedic Surgeon as Canary in the Coal Mine

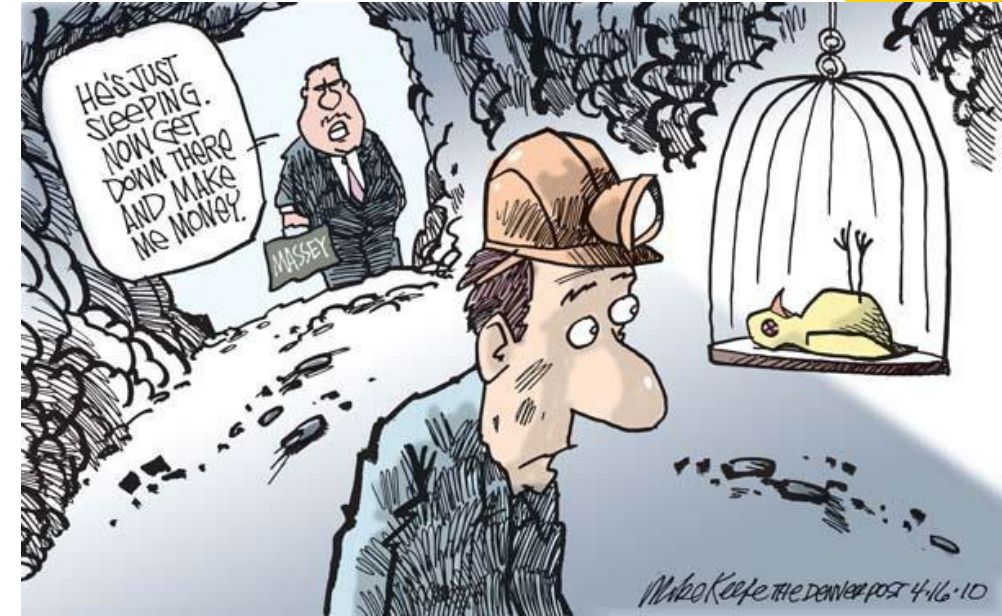
- POSNA task force survey 2018 to assess burnout – 47% response rate

Table 1 Results from the survey of POSNA members	
"I enjoy my work. I have no symptoms of burnout."	15.38%
"Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out."	46.85%
"I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion."	26.92%
"The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot."	7.34%
"I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help."	3.50%



Orthopedic surgeon as Canary in the Coal Mine


- Conclusions of POSNA Survey 2018
- Surgeon is a canary in the coal mine of a toxic, broken healthcare system
- Stop blaming the canary
 - Focus on environment sapping the energy of both patients and surgeons





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CAREER RESOURCES

Physician Wellness

 ORIGINAL ARTICLE

The Pediatric Orthopaedic Society of North America (POSNA) Adopts a Member Health and Wellness Charter

Michael J. Goldberg, MD, Kevin G. Shea, MD,† Jennifer M. Weiss, MD,‡
Cordelia W. Carter, MD,§ Vishwas R. Talwalkar, MD,|| and Richard M. Schwend, MD¶*

POSNA Adopts Wellness Charter

Abstract: The Pediatric Orthopaedic Society of North America took actions to address the well-being of its members. The epidemic of physician burnout interferes with the delivery of high-quality care that our patients and families need and deserve, and the same time places the care-providers at an increased risk of

and quality of the care they deliver, and in May 2018 adopted a Charter that prioritizes member health and wellness.

POSNA MEMBER HEALTH AND WELLNESS CHARTER



CONTACT US

Pediatric Orthopaedic
North America (POSNA)
1 Tower Lane Suite 200
Oakbrook Terrace, IL 60181

Telephone: (630) 478-0481
Fax: (630) 478-0481

EMAIL US

Burnout – Are we looking through the correct lens?

- Definition implies
- The doctor is broken and not the system
 - Focus on individual characteristics of the physician
 - Physicians are the problem
 - Weak
 - Not resilient
 - “suck it up”
 - Onus is on the physician is to solve the problem



Moral Injury

- Military term originating from Vietnam War
- PTSD- like symptoms noted in returning soldiers
 - Participating in or observing atrocities at war with symptoms did not respond to PTSD treatment
- Perceived disconnect between what a person feels or knows is correct (moral) way to do something and the imposition of external forces that lead to or compel a person to do something they perceive as incorrect or immoral
- Vietnam – difference between soldiers fighting the enemy and reality of external pressures resulting same soldiers murdering innocent noncombatants



It's More Than Burnout—The Moral Injury Crisis In Orthopaedic Surgeons

- Medicine/Surgery/Orthopedic Surgery
 - “Best and Brightest”
 - Noble profession
 - Passion driven professional
 - Hardwired to respond to intrinsic motivators
 - Helping patients
 - Improving quality of life





IF I BETRAY THESE WORDS

MORAL INJURY IN MEDICINE

AND WHY IT'S SO HARD

FOR CLINICIANS TO

PUT PATIENTS FIRST

WENDY DEAN, MD

WITH SIMON TALBOT, MD

Moral injury in medicine

- Moral injury exists when a physician or health care provider is asked to choose between the needs of patients, their personal families, their own wellness, the profits of the hospital, the growth of their practice, demands of insurance, the health care system, the laws within their state or country that interfere with the patient/physician relationship and their own productivity metrics — in addition to political and social factors that have caused many people to question the science of medicine or credibility of health care professionals
- Doctors believe this moral tug of war is antithetical to the physician's oath, which demands patients be the No. 1 priority.
- Most studies of physician dissatisfaction have been framed as burnout. The usual focus of treatment for burnout has been on self-resilience training such as yoga, mindfulness, wellness programs, meditation, mental health care and more.
 - Although such interventions may help a physician adapt, 'burnout' places the problem within the individual, who is in some way deficient. It implies that the individual lacks the resources or resilience to withstand the work environment and fails to identify the upstream causes. Some have gone as far to consider the term 'burnout' as a form of victim shaming.

Moral Injury vs Burnout

- Root of current Physician crisis
 - Physicians spend years obtaining an education
 - Learning moral/ethical/ good care
 - Developing skills to provide and deliver care
- Moral Injury – run against system constraints that impede or prevent our ability to deliver care
- Different/ potentially worse than burnout
 - Irreversible if system does not change



Moral Injury In Medicine


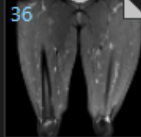

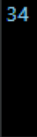
- Gebhardt CORR 2023
 - Moral injury at the root of today's physician crisis
 - Dedicate our lives to helping patients but thwarted by the dominant forces in real-world practice
 - “Production pressures” preclude patient interactions
 - Shorter more impersonal visits
 - Administration duties
 - Billing and documentation priorities
 - Impinging into family/ time outside of work



Moral Injury In Medicine

- Gebhardt CORR 2023
 - Moral injury at the root of today's physician crisis
 - Dedicate our lives to helping patients but thwarted by the dominant forces in real-world practice
 - Cost containment impacting patient care
 - Change in less expensive cotton casting materials



201: COR T1W_TSE 301: COR STIR_TSE 401: LEFT SAG STIR_... 501: LEF

Study List (22) **Study Details** **Report**

Muscles:
Normal for age with no evidence of muscle tear.

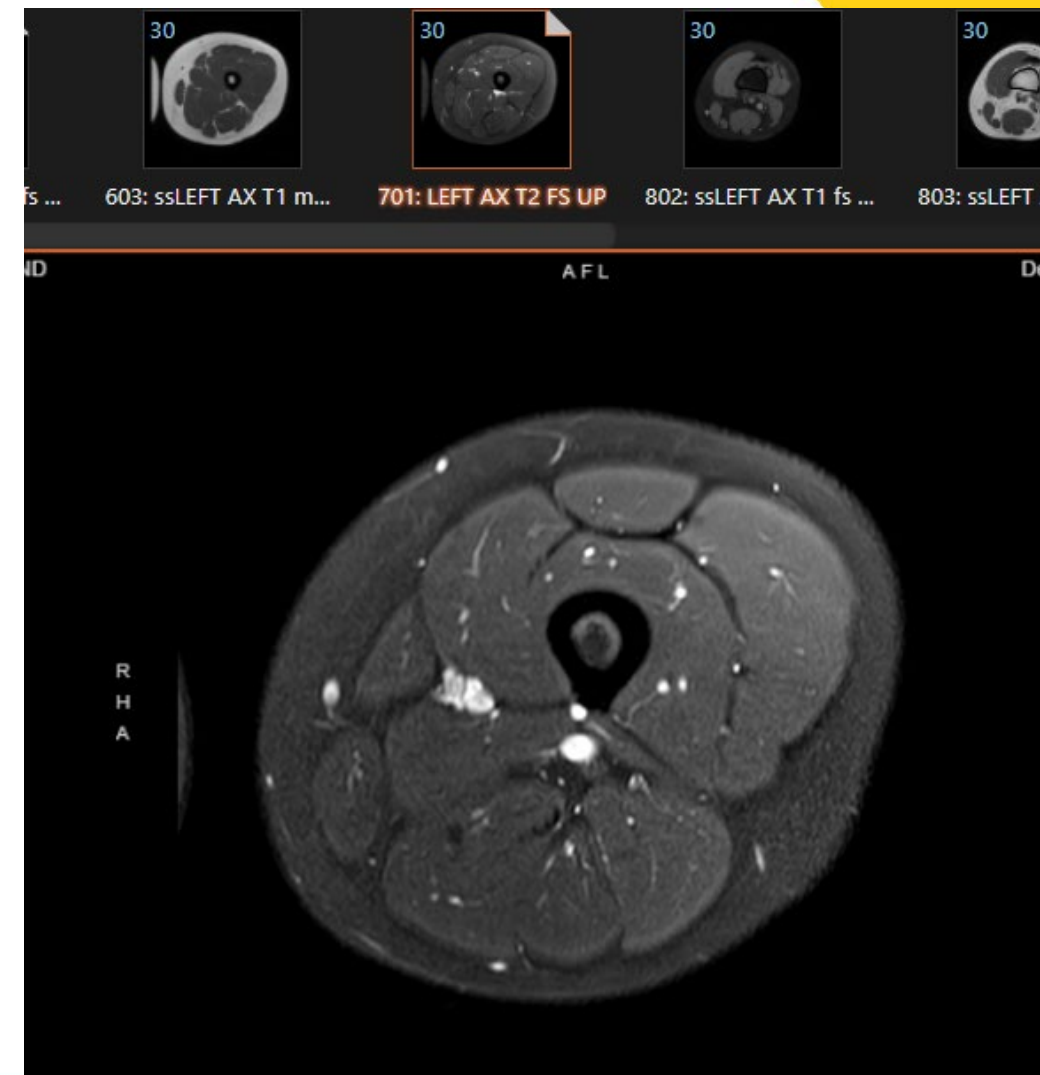
Nerves:
The neurovascular bundles appear unremarkable.

Soft tissues:
There there is an ovoid, well-circumscribed, homogeneously enhancing T1 hypointense, T2 hyperintense 9 x 5 mm structure in the anterior subcutaneous tissues approximately 10 cm above the superior pole of the patella. This lesion is located near the boundary of the rectus femoris and vastus medialis without evidence of invasion into the anterior compartment.

Other:
The contralateral right thigh is grossly unremarkable on large field of view images.

IMPRESSION:

1. Solid and enhancing, well-circumscribed 9 mm ovoid subcutaneous lesion anterior to the distal quadriceps musculature is of indeterminate etiology. Differential is wide but includes benign





D: 11/01/2023 04:43 PM
T: 11/01/2023 21:38:00 / RA
Confirmation: 30574618
Dictation ID: 303346937

cc:

Query Date: November 3, 2023

Dear Dr. Lisle:

Excision of Lesion/Mass requires physician clarification to ensure accurate coding. Please specify the following:

SIZE:

☐ x ☐ Less than 5 cm
☐ 5 cm or Greater

The greatest clinical diameter in centimeters plus margins for each lesion excised.

When responding to this query, please exercise your independent professional judgment. The fact that a question is asked does not imply that any particular answer is desired or expected.

Please consider the clinical presentation, workup, and treatment for this patient when responding.

Last signed by: Lisle, Jennifer Webster, MD at 11/3/2023 20:34

Electronically signed by Lisle, Jennifer Webster, MD at 11/2/2023 18:22

Electronically signed by Lisle, Jennifer Webster, MD at 11/3/2023 20:34



Hi Dr. LISLE,

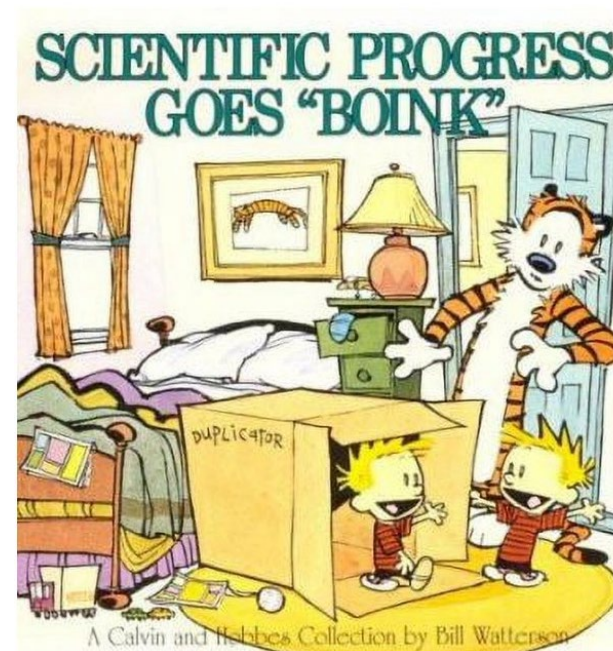
JOHN POULIN sent you a new request for documentation clarification at University of Vermont Medical Center. You can [respond to the query here](#).

Thank you for your help!

Queries to clarify documentation are critical to supporting and improving the quality of the patient record. Compliant queries are written with precise language to not lead the provider, or imply a particular answer. For this reason, some queries may appear to have obvious answers, however, your response is required by official coding guidelines.

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0020464289
Location
MR05 MR5112 1

04/25/00 (23y)
Admit
11/09/23

95209538
Discharge
11/13/23

ADD PROVIDER

REQUEST MORE INFORMATION

NOT MY PATIENT

This query requires your co-signature. Preliminary response below from DANAHER, MICHAEL, MD.

To
DANAHER, MICHAEL, MD; LISLE, JENNIFER, MD

Nov 13

Due Date
11/20/23 17:46 EST (in 5 days)

Based on the clinical information below, please select the most appropriate diagnosis

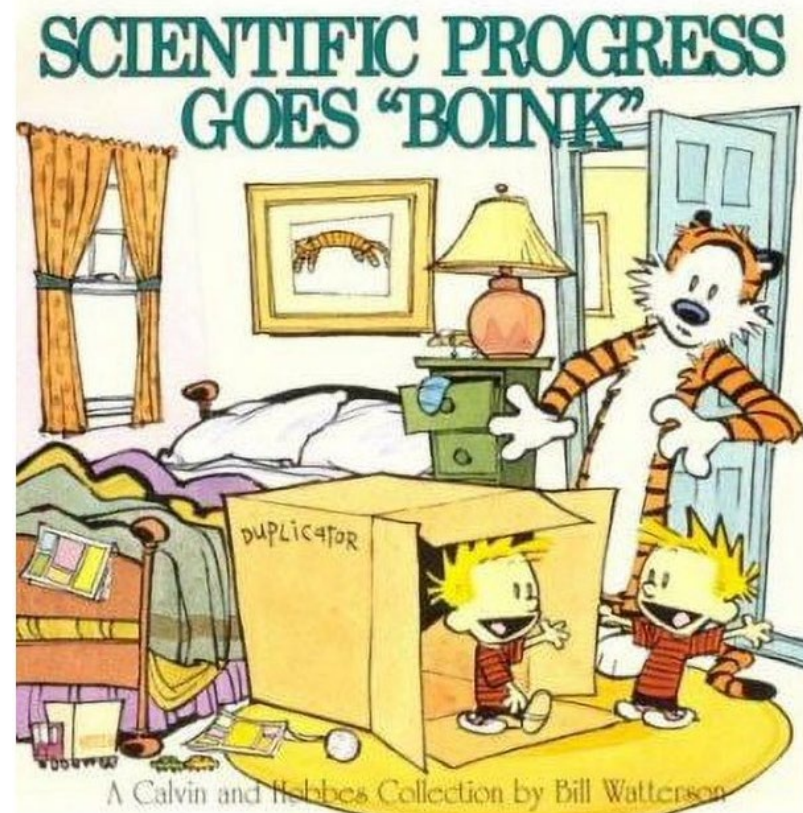
☒ Morbid (severe) obesity
BMI >40.0 or 35 or more & at least 1 weight related comorbid conditions

Obesity
BMI 30.0-39.9

Overweight
BMI 25.0-29.9

Not overweight or obese

SIGN



Moral Injury Crisis in Orthopedic Surgery

- Orthopedic surgeons
 - Overpaid data entry personnel when "signed up" for improving the health of patients
 - Lump everyone together on the healthcare team without titles, perhaps devalue the professionalism of those that have earned their training as Surgeons (?held in high esteem)
 - Providers vs what we trained to do
 - Clients (instead of patients)
- Language is important
 - Discussion as to whether lump everyone together on healthcare team without titles
 - Devalues professionalism of those who have earned their designations
 - Confusing patients
 - Demean our profession
 - Lose trust in, purpose, altruism and compassion



Possible steps forward

1. Root cause analysis moral injury in the work place
2. Patient chart
 1. Record of pertinent history/medical findings/treatment plan
“key words to up code/bill”
3. Perhaps return to
 1. Physician/surgeon instead of “provider”
 2. Patients instead of “client”
4. When we stop acknowledging the physician- patient relationship, we lose trust, purpose, altruism and compassion



File Explorer window showing the directory structure of OSC Clinics.

Address bar: This PC > S: Drive (S:) > Groups > Ortho & Rehab Services > OSC Clinics

Name	Date modified	Type
Provider Ames	6/22/2022 2:42 PM	File folder
Provider Aronsson	1/13/2015 2:48 PM	File folder
PROVIDER BARTLETT	12/19/2022 4:07 PM	File folder
Provider Benoit	6/8/2017 4:48 PM	File folder
Provider Blankstein	11/2/2018 1:30 PM	File folder
Provider Charlson	8/11/2023 8:06 AM	File folder
PROVIDER COWEY	7/31/2023 8:44 AM	File folder
Provider D.Lisle	12/20/2022 11:10 AM	File folder
PROVIDER ENDRES	9/9/2013 11:08 AM	File folder
Provider Flimlin	9/5/2013 11:51 AM	File folder
Provider Frenzen	3/24/2022 3:49 PM	File folder
Provider Geeslin	11/8/2023 2:04 PM	File folder
PROVIDER HAMMOND	12/18/2017 1:54 PM	File folder
PROVIDER HEMOND	8/3/2022 2:42 PM	File folder
Provider J. Lisle	8/31/2022 8:42 AM	File folder
Provider Jewell, Ryan	2/15/2013 10:32 AM	File folder
Provider Kavouksorian	4/21/2017 11:14 AM	File folder
Provider Krag	6/22/2022 2:41 PM	File folder
Provider L. Richard	2/21/2023 1:23 PM	File folder
Provider Levins	10/10/2023 3:08 PM	File folder
Provider Lutsky	10/10/2023 2:52 PM	File folder
Provider Mcdougall	3/3/2017 10:50 AM	File folder
Provider Merena	12/22/2021 3:08 PM	File folder
Provider Michelson	3/28/2022 3:55 PM	File folder
PROVIDER MOGAN	12/16/2013 1:47 PM	File folder
Provider Monsey	4/26/2023 9:32 AM	File folder
Provider Nelms	11/29/2022 2:17 PM	File folder
Provider Nichols	4/14/2015 2:35 PM	File folder
PROVIDER Savoy	8/18/2015 9:25 AM	File folder
Provider Schottel	7/20/2018 9:56 PM	File folder
Provider Shafritz	3/29/2023 1:27 PM	File folder
Provider Slauterbeck	6/16/2022 1:17 PM	File folder
Provider Smith	12/8/2021 3:22 PM	File folder
Provider Stone	1/6/2022 11:45 AM	File folder
Provider Thibault	12/4/2020 9:20 AM	File folder



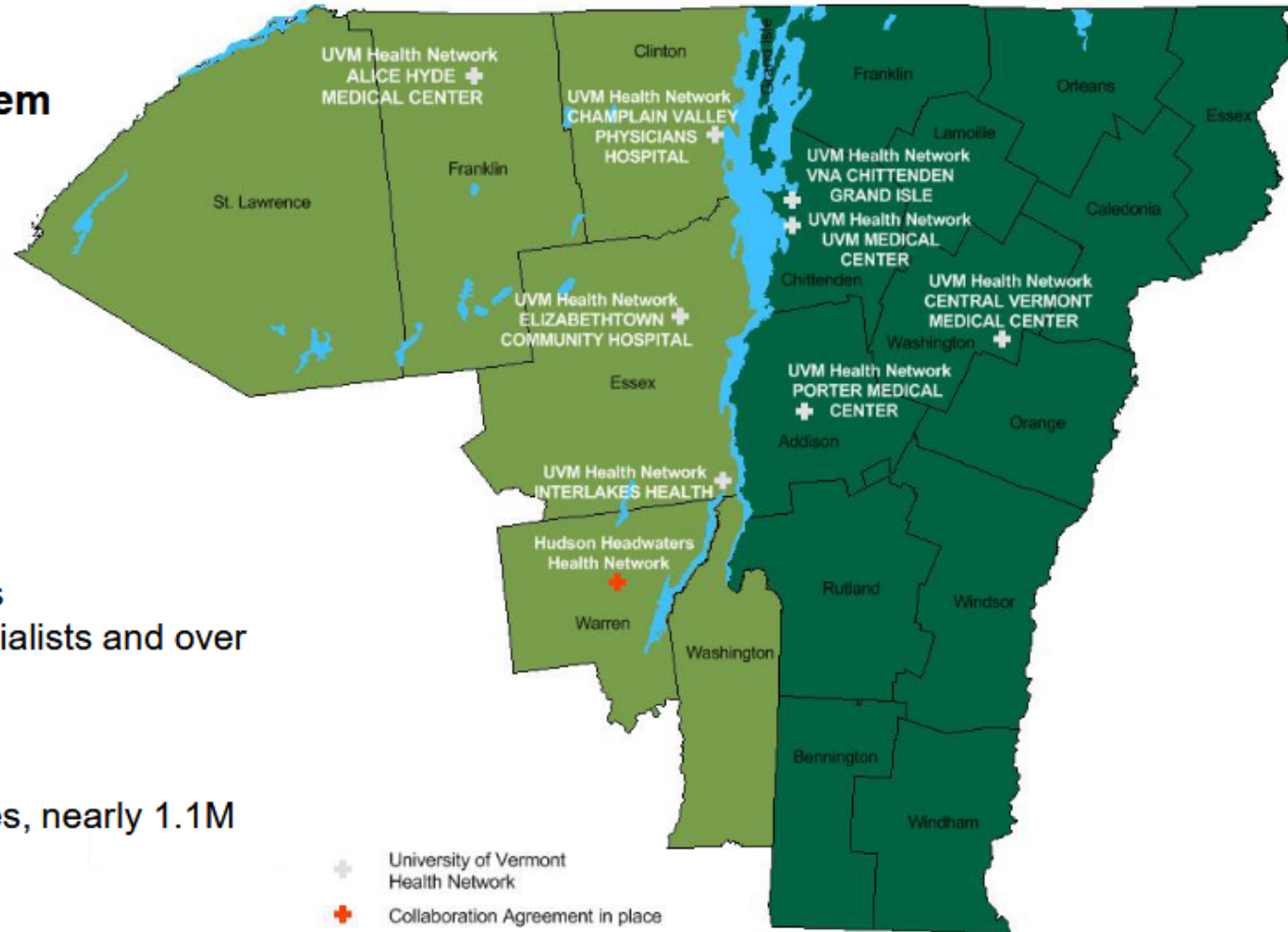
The University of Vermont Health Network

Integrated Delivery System

- Academic Medical Center
- 5 Community Hospitals
- FQHC
- Home Health
- UVMHN Medical Group
- Regional ACOs

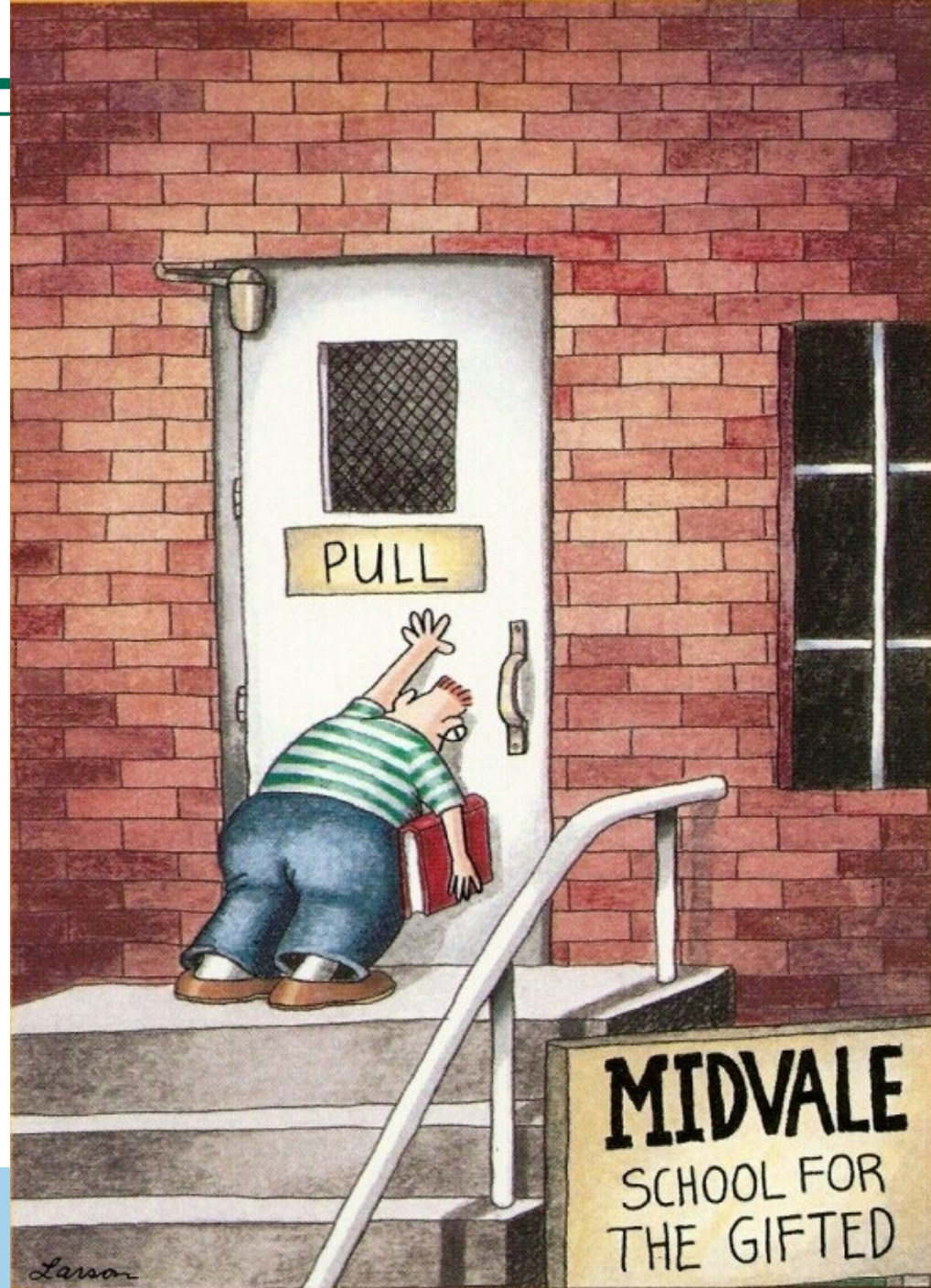
Network Numbers

- Serve 1.4 million lives
- Over 12,000 employed FTEs
- 1,100+ physicians: 850 specialists and over 300 primary care providers
- 3,600+ RNs
- 1,250 licensed IP beds
- Over 41k inpatient discharges, nearly 1.1M outpatient encounters



Note Hudson Headwaters Health Network has 16 sites in Saratoga,

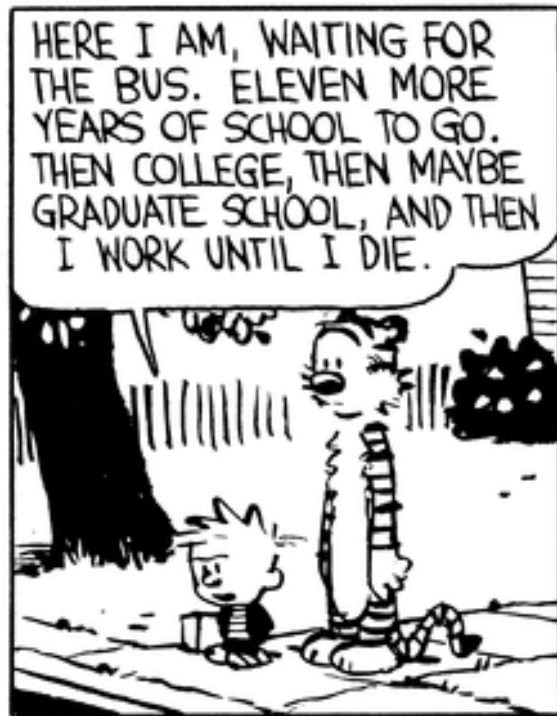




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Thank you



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Surgeon Burnout: A Systematic Review

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Table 3

Studies Identifying Commonly Reported Risk Factors Associated with Burnout Among Surgeons

Study (y)	Outcome of interest	Work/life balance	Age/years in practice	Marriage/kids	Hours worked/nights on call	Gender	Financial
Balch ¹⁶ (2011)	Burnout		Increased risk with younger age		Increased risk with number of hours worked Increased risk with number of nights on call		Decreased risk with incentive based pay
Barrack ³¹ (2006)	Burnout	Increased risk with conflict between work/home life balance			Increased risk with number of hours worked		Increased risk if having financial concerns
Bertges ⁷ (2005)	Burnout		Increased risk with younger age			Increased risk in women	
Campbell ⁸ (2001)	Burnout	Increased risk if there is imbalance between career/personal life	Increased risk with younger age		Increased risk with less weeks of vacation		
Dyrbye ¹² (2011)	Burnout	Increased risk with conflict between work/home life balance			Increased risk with number of hours worked	Increased risk in women	
Guest ²¹ (2011)	Burnout	Increased risk if time is taken from personal responsibilities					
Klimo ²⁹ (2013)	Professional stressors				Increased risk with number of nights on call		Increased risk with low collections/billing
Kuerer ¹⁵ (2007)	Burnout	Increased risk with low physical QOL Increased risk with low job satisfaction	Increased risk with younger age		Increased risk with number of hours worked	Increased risk in women	
Sargent ²⁵ (2004)	Burnout	Increased risk with conflict between work/home life balance		Decreased risk with being a parent Decreased risk with quality of marriage	Increased risk with number of hours worked	Increased risk in women	
Sargent ²⁶ (2009)	Burnout	Increased risk with poor work/life balance	Increased risk if a PGY2	Decreased risk with marriage			
Shanafelt ⁵ (2009)	Burnout		Increased risk with younger age Increased risk with more years in practice	Increased risk if has children Increased risk if spouse is healthcare professional	Increased risk with number of hours worked		Increased risk with compensation based billing

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Table A. Assessment of Burnout and Depression Within General and Subspecialty Orthopaedic Surgeons

	All Physician Participants (Mean)	Adult Reconstruction (N=14)	Foot & Ankle (N=13)	General (N=10)	Hand (N=21)	Oncology (N=5)	Pediatrics (N=31)	Shoulder & Elbow (N=4)	Spine (N=12)	Sports Medicine (N=31)	Trauma (N=8)
BURNOUT^a											
Emotional Exhaustion											
Median Score	29.7	27.9 (9.31)	27.6 (18.9)	32.0 (15.3)	29.7 (14.3)	42.9 (7.78)	25.5 (9.86)	23.0 (8.34)	26.7 (16.3)	27.8 (13.6)	33.5 (14.3)
% High Score (N)	55.9%	57.1% (8)	53.8% (7)	60.0% (6)	52.4% (11)	100% (5)	35.5% (11)	25.0% (1)	58.3% (7)	54.8% (17)	62.5% (5)
Depersonalization											
Median Score	11.5	8.93 (7.30)	11.4 (8.76)	10.0 (9.66)	11.9 (8.61)	18.7 (8.29)	9.96 (8.07)	6.66 (3.04)	11.1 (11.4)	9.68 (6.69)	16.2 (10.2)
% High Score (N)	47.5%	28.6% (4)	46.2% (6)	30.0% (3)	57.1% (12)	80.0% (4)	29.0% (9)	50.0% (2)	33.3% (4)	58.1% (18)	62.5% (5)
Personal Accomplishment											
Median Score	38.0	39.7 (6.22)	41.2 (6.08)	35.6 (7.53)	35.0 (9.60)	36.0 (8.49)	40.1 (6.12)	39.5 (9.57)	39.0 (12.3)	35.6 (8.65)	37.8 (7.36)
% Low Score (N)	17.5%	14.3% (2)	0.00% (0)	30.0% (3)	23.8% (5)	20.0% (1)	6.45% (2)	25.0% (1)	16.7% (2)	25.8% (8)	12.5% (1)
Burned Out^b											
% (N)	62.3%	57.1% (8)	53.8% (7)	60.0% (6)	61.9% (13)	100% (5)	51.6% (16)	50.0% (2)	58.3% (7)	67.7% (21)	62.5% (5)
DEPRESSION											
Screen positive for depression, % (N)	16.8%	7.1% (1)	15.4% (2)	20.0% (2)	19.0% (4)	40.0% (2)	9.7% (3)	0.00% (0)	0.00% (0)	6.5% (2)	50.0% (4)

^aAssessed using the abbreviated Maslach Burnout Inventory. Per standard scoring of the Maslach Burnout Inventory for health care workers, physicians with scores on the emotional exhaustion subscale ≥ 27 , scores on the depersonalization subscale ≥ 10 , or scores ≤ 33 on the personal accomplishment subscale are considered to have a high degree of burnout in that dimension.

^bHigh score on the emotional exhaustion or depersonalization subscale of the Maslach Burnout Inventory was used to define burn out in physicians.



Moral Injury

- Medicine
 - Root of current Physician crisis
 - Physicians spend years obtaining an education
 - Learning moral/ethical/ good care
 - Developing skills to provide and deliver care
- Moral Injury – run against system constraints that impede or prevent our ability to deliver care
- Different/ worse than burnout
 - Irreversible if system does not change



Burnout in the Medical Profession

Next Steps – What Can We Do?

- No shortage of person centered ideas for mitigating burnout
- Triple Aim to consider physician well being
- Maslach
 - Workload
 - Balance between effort and reward
 - Control
 - Community support
 - Fairness

