

Lecturio

Perspectives on Well-being in Medical Professions

June 23, 2021
Online Seminar



Peter Horneffer
MD

Executive Dean, All American Institute
of Medical Sciences in Jamaica

Director of Medical Education,
Lecturio

Cardiothoracic Surgeon
Maryland, USA



Helen M. Farrell
MD

Board certified Psychiatrist & Forensic
Psychiatrist

Private Practice Psychiatry
Boston, MA

Lecturer in Psychiatry, Harvard Medical
School, Boston, MA

Affiliate Psychiatrist, Beth Israel Medical
Center, Boston, MA



Christian Bjerre Real
MD, MMCI

Psycho-Oncology Clinical and
Research Fellow, Memorial Sloan
Kettering Cancer Center, NY

Host of “Thrive -
The Christian Bjerre Show”

Seminar Learning Outcomes

- 1 Participants will be able to **understand** the importance of well-being for career satisfaction and longevity
- 2 Participants will be able to **define** burnout and describe its potential causes
- 3 Participants will be able to **identify** potential solutions to mitigate burnout and apply them to promote well-being

Practitioners' and Educators' Perspectives

Helen Farrell

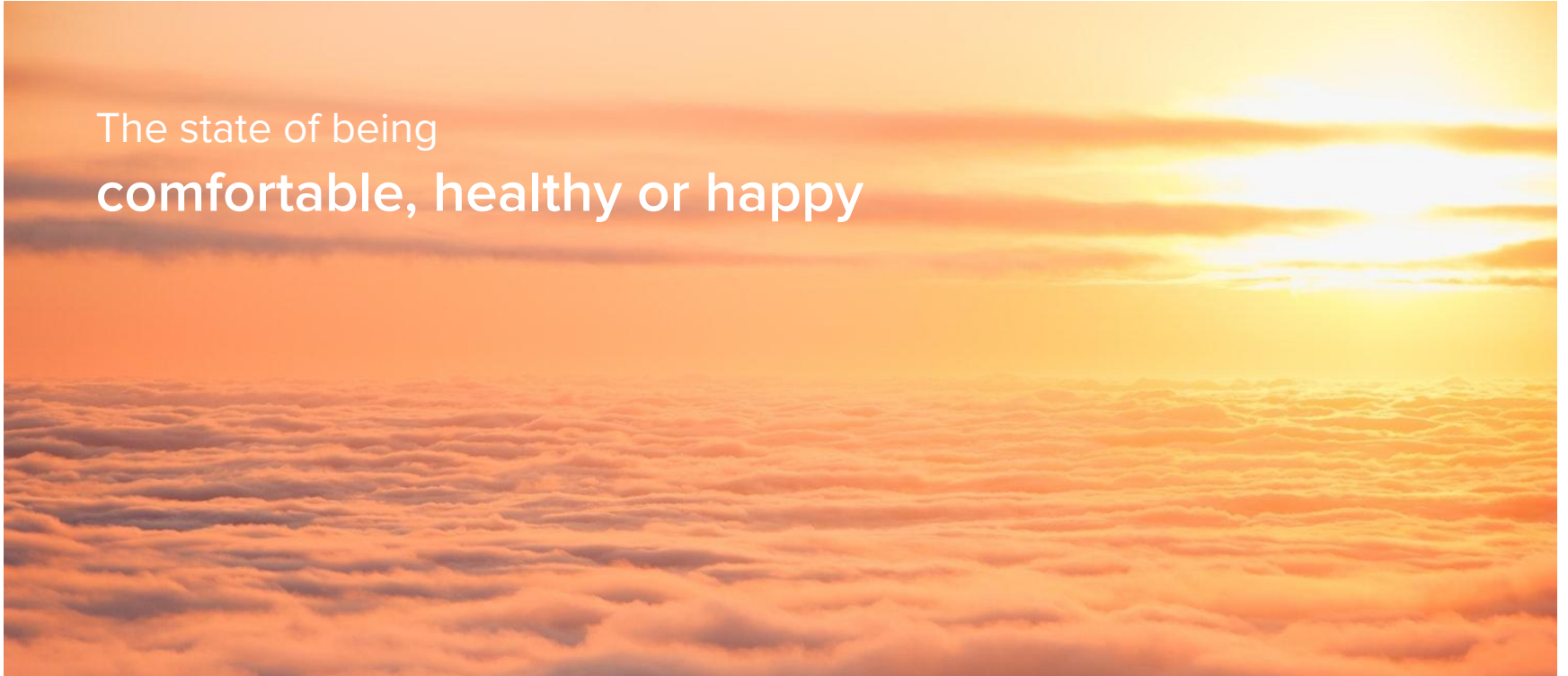
The Importance of Well-being

- About myself - from Dublin, Ireland to Boston, MA
- A multi-faceted career - clinical care, education, business
- Why well-being is important
- Tips for doctors to prevent burnout in your burgeoning career

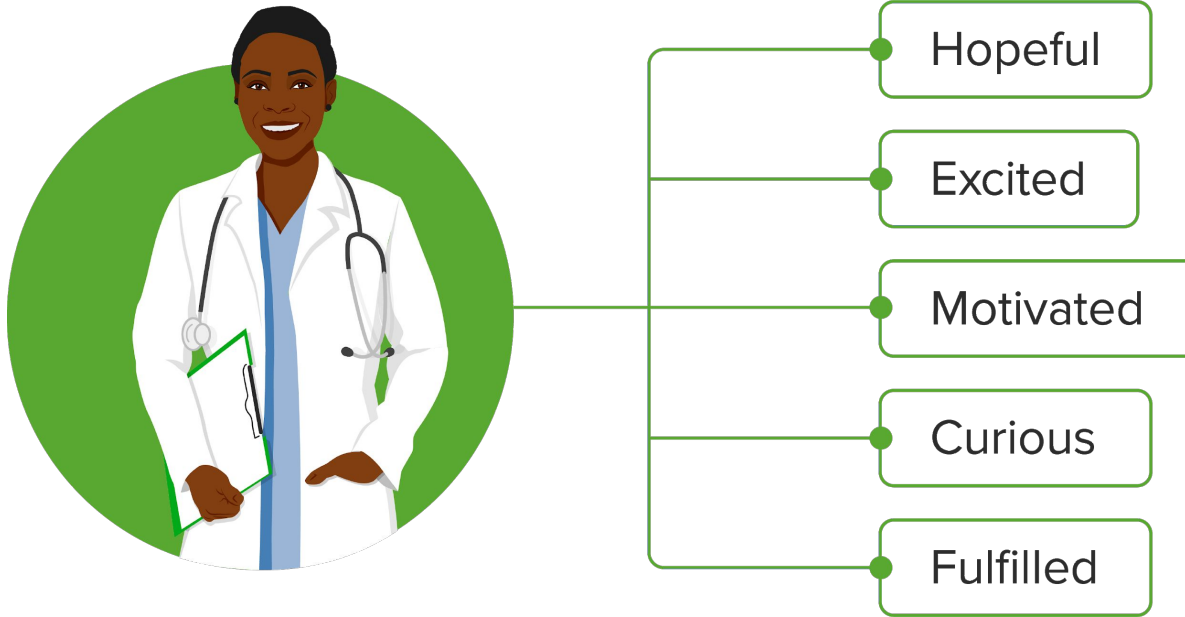


Well-being Defined

The state of being
comfortable, healthy or happy



We Take Care of Patients... But What About Ourselves?



Put Your Own Oxygen Mask on First



Could physician well-being be the key to better patient outcomes and reduced healthcare costs?



1. Wallace JE, Lemaire JB, Ghali WA. Physician wellness: a missing quality indicator. Lancet. 2009 Nov 14;37(9702):1714-21.

Burnout Defined

- **Physician burnout** - a work-related syndrome involving:
 - Emotional exhaustion
 - Depersonalization
 - Sense of reduced personal accomplishment
- **An international problem:** >60% of Chinese physicians, > 50% of US practicing physicians, and \pm 80% of doctors in the UK are either affected, experiencing, or at risk of burnout. Insufficient data on LMICs contributes to the problem.
- Contributing to adverse effects on patients, the healthcare workforce, costs and physician health.

Burnt Out Physician



Exhausted

Cynical

Ineffective

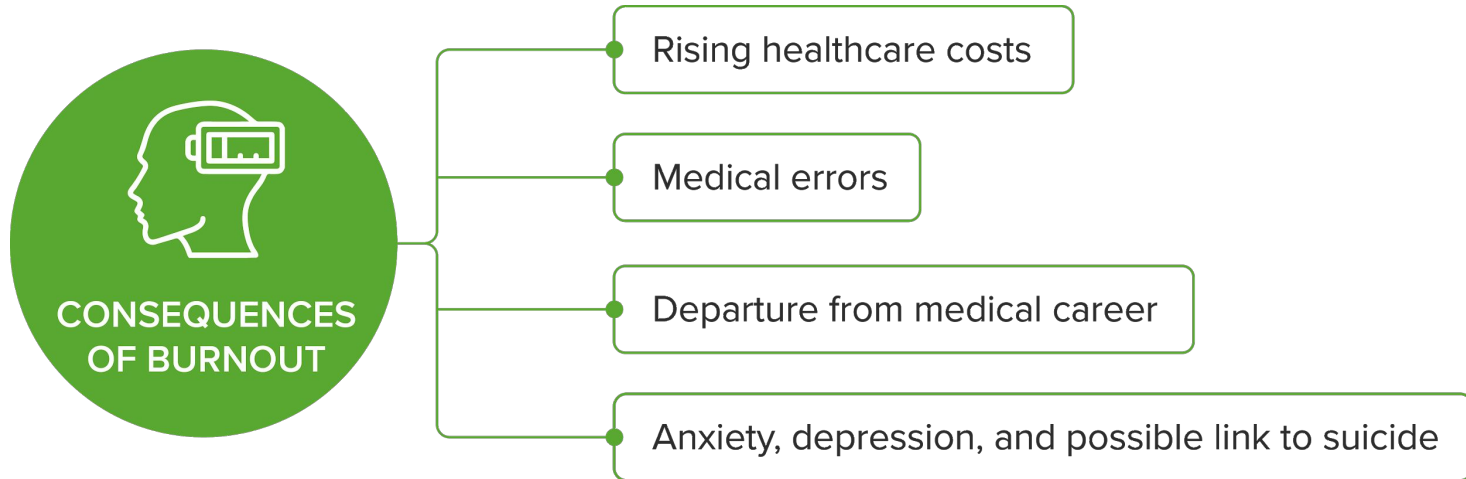
Hopeless

Fed up

Poll

Did you experience burnout?

Consequences of Burnout



Burnout Cause and Effect



Mental Illness Can Also Be a Predisposing Factor



What About Mental Health and Mental Illness?

The mental health of healthcare workers in the COVID-19 pandemic:
A systematic review (2020)



Burnout and psychiatric morbidity among doctors in the UK:
A systematic literature review of prevalence and associated factors (2017)



Suicide among doctors:
A narrative review (2020)



0 10 20 30 40 50 60 70 80

The Role of Mental Health in Burnout



The evidence reminds us that we cannot eliminate the role that mental health and mental disorders play in burnout

-
1. Vizheh M, Qorbani M, Arzaghi S, Muhidin S, Javanmard Z, Esmaeili M. The mental health of healthcare workers in the COVID-19 pandemic: A systematic review. *Journal of Diabetes & Metabolic Disorders*. 2020;19(2):1967-1978.
 2. Imo U. Burnout and psychiatric morbidity among doctors in the UK: A systematic literature review of prevalence and associated factors. *BJPsych Bulletin*. 2017;41(4):197-204.
 3. Bhugra D, Ventriglio A, Watson C. Suicide among doctors: A narrative review. *Indian Journal of Psychiatry*. 2020;62(2):114.

Promoting Well-being

Individual Approaches

```
graph TD; A[Individual Approaches] --> B[Autonomy  
Develop in workplace and personal life]; A --> C[Relatedness  
Seek out mentors]; A --> D[Explore various hobbies and other facets of your life]; A --> E[Financial Wellness  
Take control of student debt and negotiate at work*];
```

Autonomy

Develop in workplace and personal life

Relatedness

Seek out mentors

Explore various hobbies and other facets of your life

Financial Wellness

Take control of student debt and negotiate at work*

*US average student loan debt - \$200k

-
1. Kovar A, Carmichael, H. Overworked and underpaid: how resident finances impact perceived stress, career choices, and family life. J Surg Res. 2021 Feb; 258:82-87
 2. Royce TJ, Davenport KT, Dahle, JM. A burnout reduction and wellness strategy: Personal financial health for the medical trainee and early career radiation oncologist. Pract Radiat Oncol. 2019 Jul-Aug;9(4):231-238

Promoting Well-being - continued

Be flexible
with your career



Find your passion
both in your career and in
life

*Tell Us ...
what are some of your
personal strategies that
have helped you with
well-being?*

Good News

Physicians tend to be more *resilient* than the general working population

...**but** stakeholders should also institute *organizational changes* and not rely *solely* on the resiliency of physicians to solve burnout

Poll

Do you have any experience with burnout among your students, fellow trainees, or junior residents?

Our Role Toward Our Colleagues

Supporting

- How to identify burnout in your colleagues
- How to approach and ask if they are okay

Taking Action

- Active listening
Validation, normalization
- Do not problem solve

Signposting

- Depends on where you are and what is available
- Encourage them to address potential underlying issues

Promoting Well-being

Organizational Approaches

```
graph TD; A[Organizational Approaches] --> B[Incorporate mindfulness practices]; A --> C[Encourage time off and coverage of staff]; A --> D[Develop leadership programs for physician well-being]; A --> E[Coaching Programs];
```

Incorporate mindfulness practices

Encourage time off and coverage of staff

Develop leadership programs for physician well-being

Coaching Programs

Tell Us ...

What are some organizational strategies you've seen that have promoted physician well-being?

1. Goroll A. Addressing burnout-focus on systems, not resilience. JAMA. 2020 Jul 1;3(7)
2. Shanafelt, TD, Noseworthy, JH. Executive leadership and physician well-being: Nine Organizational Strategies to promote engagement and reduce burnout. Mayo Clin Proc. 2017 Jan;92(1):129-146



SUMMARY

- Remember your goals when entering medical school
- Identify what makes you happy
- Reassess how your current practice is aligning with your initial goals for medicine and your personal well-being
- Stay flexible so you can maintain wellness and prevent burnout

Students' and Residents' Perspectives

Christian Bjerre

My Story on Burnout and Wellness



Burnout in Medical Students

- **17,431** medical students
- **8,060** suffered from burnout: **44.2%**
 - **40.8%** for emotional exhaustion
 - **35.1%** for depersonalization

Burnout in Residents

- Global prevalence rates of burnout among residents:
51.0% (N= 22,778)
 - Radiology **77.16%**
 - Neurology **71.93%**
 - General Surgery **58.39%**
 - Psychiatry **42.05%**
 - Oncology **38.36%**
 - Family medicine **35.97%**

-
1. Low ZX, Yeo KA, Sharma VK, Leung GK, McIntyre RS, Guerrero A, Lu B, Sin Fai Lam CC, Tran BX, Nguyen LH, Ho CS, Tam WW, Ho RC. Prevalence of Burnout in Medical and Surgical Residents: A Meta-Analysis. Int J Environ Res Public Health. 2019 Apr 26;16(9):1479. doi: 10.3390/ijerph16091479. PMID: 31027333; PMCID: PMC6539366.

1. Emotional Exhaustion							
Question	0	1	2	3	4	5	6
I feel emotionally drained from my work							
I feel used up at the end of the workday							
I feel fatigued when I get up in the morning and have to face another day on the job							
Working with people all day is really a strain for me							
I feel burned out from my work							
I feel frustrated by my job							
I feel I'm working too hard on my job							
Working with people directly puts too much stress on me							
I feel like I'm at the end of my rope							

2. Personal Accomplishment							
Question	1	2	3	4	5	6	7
I can easily understand how my recipients feel about things							
I deal very effectively with the problems of my recipients							
I feel I'm positively influencing other people's lives through my work							
I feel very energetic							
I can easily create a relaxed atmosphere with my recipients							
I feel exhilarated after working closely with my recipients							
I have accomplished many worthwhile things in this job							
In my work, I deal with emotional problems very calmly							

3. Depersonalization							
Question	1	2	3	4	5	6	7
I feel I treat some recipients as if they were impersonal "objects"							
I've become more callous toward people since I took this job							
I worry that this job is hardening me emotionally							
I don't really care what happens to some recipients							
I feel recipients blame me for some of their problems							

Maslach Burnout Inventory

- Scoring:** The MBI items are scored using a 7 level frequency scale - never (0), a few times a year or less (1), once a month or less (2), a few times a month (3), once a week (4), a few times a week (5), every day (6)
- Result Interpretation:**

Burnout level	Emotional exhaustion	Depersonalization	Personal accomplishment
High	≥ 27	≥ 10	0–33
Moderate	19–26	6–9	34–39
Low	0–18	0–5	≥ 40

- Maslach D, Jackson S, Leite M, Schaufeli W, Schwab R. Maslach Burnout Inventory manual, general survey, human services survey, educators survey and scoring guides. Menlo Park, CA: Mind Garden; 1986

Burnout in Medical Residents

- **Work hour reductions** were associated with score decrease in the Maslach Burnout Inventory:
 - -2.73 for emotional exhaustion
 - -1.73 for depersonalization
 - Modest reduction: Still part of a complex problem
 - No effect on mean personal accomplishment
- **Self-care workshops** showed decreases in depersonalization
- **Meditation** intervention reduced emotional exhaustion

Coping Strategies

Coping Strategy	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Acceptance	–	–	+
Active Coping	–	–	+
Strategy Planning	–	–	+
Positive Reframing	–	–	+
Denial	–	+	–
Disengagement	+	+	–
Self-Blame	+	+	–
Venting	+	+	–
Humor	+	+	+

- Not all coping strategies are good
- Different strategies yield different effects toward major burnout metrics

*Tell Us ...
How do you incorporate
your hobbies and
passions into your
professional life?*

TABLE 2

SPEARMAN RANK CORRELATION BETWEEN BURNOUT DOMAINS, SPIRITUALITY, AND EMOTIONAL COPING

Parameter	Emotional Exhaustion (<i>P</i> value)	Depersonalization (<i>P</i> value)	Personal Accomplishment (<i>P</i> value)
Coping strategies			
Acceptance	−.21 (.03)	−.29 (.003)	+0.0432 (.66)
Active coping	−.30 (.002)	−.29 (.003)	+0.09 (.33)
Denial	+0.25 (.009)	+0.21 (.03)	−.03 (.74)
Disengagement	+0.40 (<.001)	+0.42 (<.001)	−.21 (.03)
Humor	+0.32 (.001)	+0.38 (<.001)	+0.06 (.53)
Strategy planning	−.15 (.14)	−.13 (.18)	+0.18 (.07)
Positive reframing	−.22 (.02)	−.25 (.01)	+0.31 (.001)
Self-blame	+0.21 (.03)	+0.11 (.27)	−0.0238 (.81)
Venting	+0.26 (.006)	+0.27 (.005)	−.20 (.04)

- Adapted from Doolittle, B. R., et al. (2013). "Burnout, coping, and spirituality among internal medicine resident physicians." *Journal of Graduate Medical Education* 5(2): 257-261.





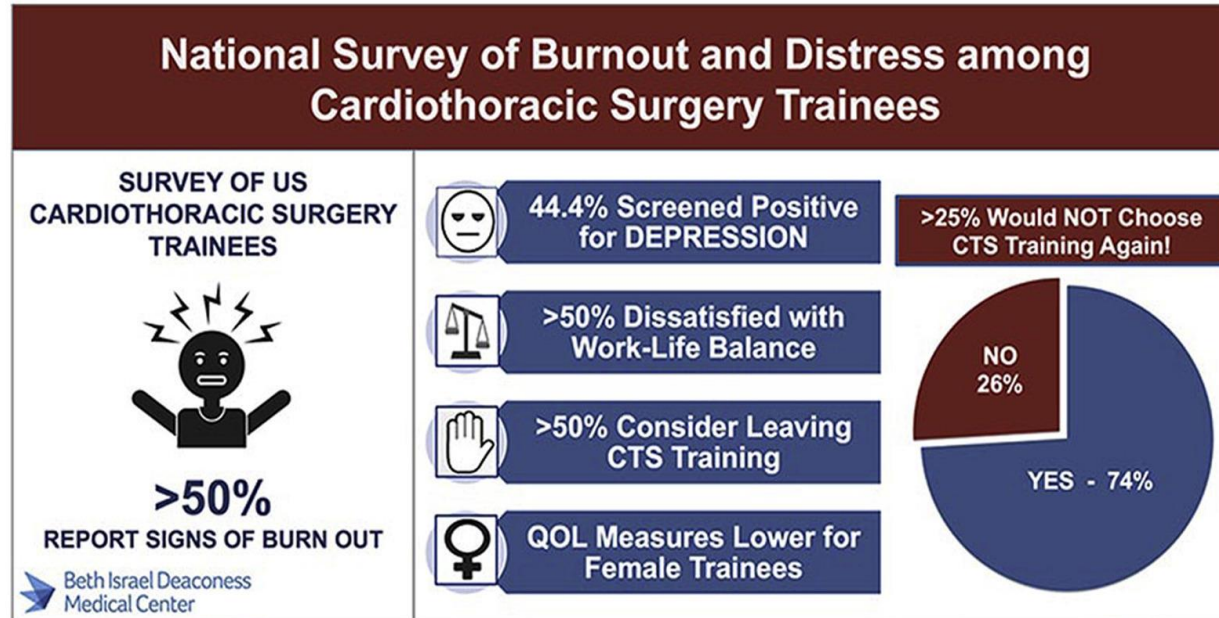
SUMMARY

- Find what you are passionate about and incorporate it into your daily activities
- Things that are meaningful to you can help stave off burnout and give daily tasks a stronger purpose
- Move forward with the right coping strategies

Education Innovators' Perspective

Peter Horneffer

High Burnout Rates Among US Cardiothoracic Surgery Trainees



THE ANNALS OF
THORACIC SURGERY
Official Journal of The Society of Thoracic Surgeons and the Southern Thoracic Surgical Association

1. Oliver S. Chow, Monisha Sudarshan, Mark W. Maxfield, et al., National Survey of Burnout and Distress Among Cardiothoracic Surgery Trainees. Published: August 27, 2020 DOI: <https://doi.org/10.1016/j.athoracsur.2020.06.062>

My Journey

Cardiothoracic surgeon:
Exciting career, but prone
to burnout



Oceania University of Medicine Samoa:
Transition to e-learning and education
capacity building



My Journey - continued

Lecturio:

Fixing the global physician shortage
and changing how medicine is
taught



All American Institute of Medical Sciences in Jamaica (AAIMS):

Leveraging technology to increase global
supply of medical practitioners

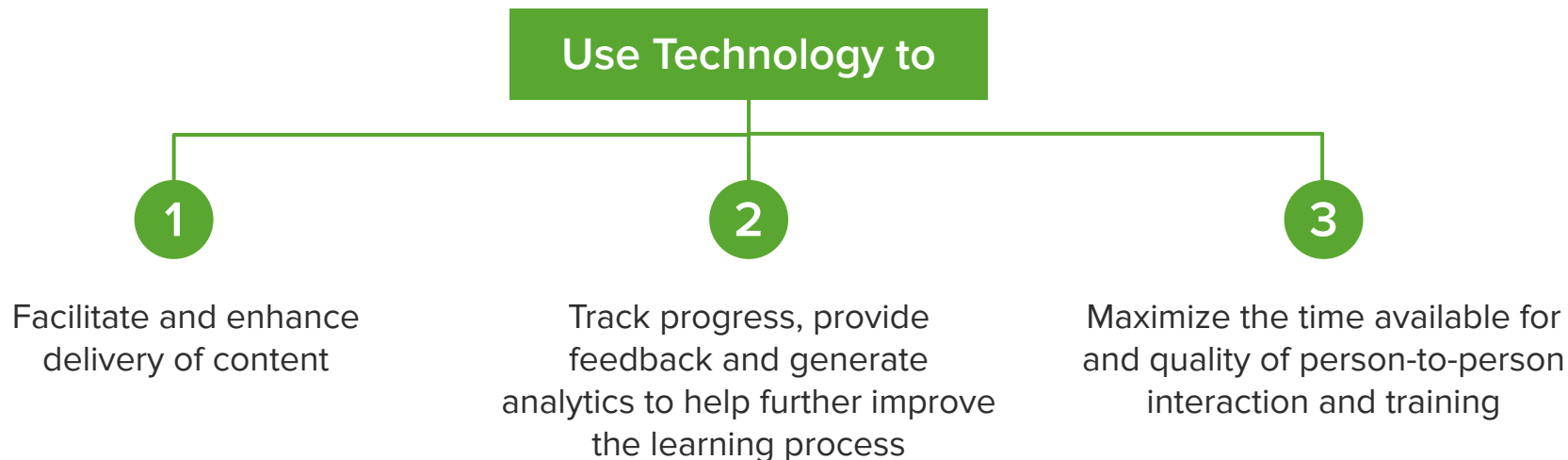


Personal Lessons Learned

- Be organized, know where you are headed and why, and find good people to work with
 - Burnout is not *only* from excess amounts of work, but *also* comes from working in adverse environments or without clear and positive objectives
 - Leverage technology and science in order to learn and work more efficiently as we have been trained to be lifelong learners
-

My Mission

- Produce an optimal learning platform to make learning and teaching medicine more effective and available. Put this concept to work!
- Evidence-based learning science to guide new approaches to learning



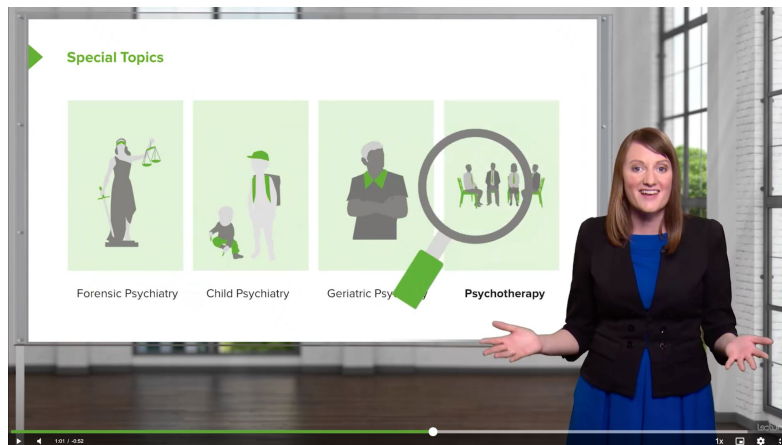
How to Make the Most of Your Time as a Teacher

36,237

Hours of Lecturio
videos viewed

7

Number of
courses taught



ca. 4,700

Students taught
via video courses

4.6/5.0

Average course
rating

Not including more than **15** million views
of her TED-ED educational videos.

Core Messages from the Panel

- **Dr. Helen Farrell:** We can make strides toward solving this problem through having a greater understanding of ourselves, by being flexible with our career goals, and encouraging institutional commitment to promote organizational changes that reduce medicine's dependence on physician resilience to prevent burnout.
- **Dr. Christian Bjerre:** Finding things that are meaningful for you, incorporating them into your daily life, and adopting positive coping strategies can be ways for physicians to reduce and avoid burnout.
- **Dr. Peter Horneffer:** Setting goals, using evidence-based tools for education, and incorporating technology as an efficiency-improving tool can be a modern solution to the problem.

Q & A

Are You Interested in Further Events?



Join Our Upcoming Seminar

Understanding Memory to Enhance Learning in Medical Education

July 22, 2021, 9:00 PDT | 12:00 EDT | 18:00 CEST

Join Us as a Panelist in Our Upcoming
Use-Case Webinar Series

Contact us: learning-science@lecturio.com



Contact us

Learning Science Team
learning-science@lecturio.com