Evaluation of a Formal Wellness Curriculum to Reduce Burnout in Anesthesia Residents

Centile 2017
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How it all started...2015
It is a beautiful thing when a career and a passion come together.
Results of ABA study looking at Burnout in Residents 2014-15

CA-1 Residents Respondents

- 89% felt they had a strong social support
- 82% felt they maintained a balance between professional and personal life
- 41% scored at high risk for burnout
- 23% were in distress
- 8% evidence of significant depression
Results of ABA study looking at Burnout in Residents 2014-15

**CA-2 Resident Respondents**

- 93% felt they had a strong social support
- 72% felt they maintained a balance between professional and personal life
- 50% scored at high risk for burnout
- 32% in distress
- 11% evidence of significant depression
ACGME Milestones Project 2013

• Professionalism:
  – “Responsibility to maintain personal, physical, and mental health”

• All residency programs have a “mandate” to teach within the residency curriculum
Pilot Year

- Background Research
- Curriculum Research: IRB-approval
- Residency Program Director and Chair Support
- Maslach Burnout Inventory (MBI)
- Training
I HAVE NO IDEA WHAT I'M DOING
Mindful Practice

Mindful practice is a means for health professionals to:

Appreciative Inquiry Facilitator Training (AIFT)

Appreciative Inquiry is a collaborative, strength-based approach to both personal and organizational development that is proving to be highly effective in thousands of organizations and communities in hundreds of countries around the world. It is a way of bringing about change that shares leadership and learning – fully engaging everyone in the organization.

What is an Appreciative Inquiry Facilitator Training © (AIFT)?
Pilot Year Curriculum

• Grand Rounds Presentations
  – 5 Wellness Grand Rounds
    • Substance Abuse Avoidance
    • Disclosure
    • Burnout
    • Resilience
    • Sexual Harassment

• Resident Didactic Sessions, Quarterly
• Peer Mentoring Program within Residency Program with QI projects
• Resident Wellness Dinners, Quarterly
• Monthly Wellness Article
• Creation of Wellness Email Address/ Resident Wellness Resource Card
IRB Approved Study

• Outcome measures:
  – Resident perception of value and quality of the Wellness Curriculum
  – The Maslach Burnout Inventory-Human Services Inventory (MBI-HSS) scores.

• Study Design:
  – De-identified data, confidential, MBI-HSS 3 times
  – No information to resident stakeholders
  – Participation optional, not required for attendance to events
  – Dose Response Curve
Resident Wellness Dinners

• Quarterly Occurrence
• Topics:
  – Sexual Harassment
  – Vulnerability
  – Death in the OR
  – OR etiquette
  – Gratitude
Grand Rounds x 4

- CPEP – diversion
- Title IX Panel (ethicist, Title IX office)
- Burnout and Gratefulness
- Mindfulness
- Disclosure (risk, hospital and university lawyers)
Tuesday Didactics

• Bob Flory – Resilience Workshop
• Seeing Red/Body Scan
• Heart Math
• Mindfulness Journal debrief
Journal Articles and Mentorship Groups

- Monthly email to discuss journals
- QI groups double as mentorship groups
University of Colorado—Resources for Trainees
While you are here, you are not alone.
If you or a colleague needs help, please reach out.

- Residency Director: Tony Olivia 720-848-3270
  Program Directors: Joy Hawkins, Chris Lace
- Wellness Curriculum Co-Directors: Norah Janosy 503-989-7819 & Alison Brainard 678-836-7874

Colorado Physician Health Program (CPHP) – non profit organization that offers diagnostic evaluations, treatment referrals, and support services. Safe Haven program protection www.cphp.org 303-860-0122

Behavioral Health Services – GME Benefits office can assist in finding professional services www.minesandassociates.com 303-953-4043 Mental health benefits covers 64 visits/year with a $20 copay. Use the website or phone number to find an in-network provider

- Advisors & Mentors
- Board Runner (Charge attd) at your assigned hospital
- Your attending of the day
- Risk Management Kezia Wyndam 303-724-0453
- Office of Professionalism 303-724-4776 Josette Harris and Barry Rumack professionalism@ucdenver.edu

Anesthesia.wellness@ucdenver.edu
<table>
<thead>
<tr>
<th>I have a CONCERN – Who can I call?</th>
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<tr>
<td><strong>Personal Issues</strong></td>
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<td>• We all experience stressful situations, and these can be particularly distressing during training. Feel free to bring issues to the attention of your attending, mentor/advisor, the residency or asst. residency program directors, the directors of the wellness curriculum, or the chief residents. For more serious concerns, or if you wish your maintain privacy, the Office of Professionalism, or CPHP is always available.</td>
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| **Concern for another**            |
| • Sometimes you may have concerns about a colleague. Feel free to bring any of these concerns to all of those listed above. |

| **Patient Safety**                |
| • If you have a concern about patient safety, please bring it to someone’s attention. Your attending of the day or the board runner (charge attd) are good starts, but if you don’t feel that your concerns are adequately addressed, please speak with the program directors (residency or wellness), and consider consulting risk management. |

| **Concern with Program**           |
| • If you have concerns with how the program is run, please feel free to speak with the residency or wellness directors and we will try our best to address your concerns. After all, we want these programs to be as helpful as possible for you as you establish and pursue your career and life goals. |

| **Concern with attending**         |
| • We are generally a pretty friendly bunch, but if you ever have a significant concern with your interactions with an attending, you do have options. If you feel comfortable, please come to one of the program directors or your advisor/mentor. If you feel uncomfortable with even that, you can always speak with someone at the Office of Professionalism and they will help you navigate through next steps. |
Pilot Year Study Results

• IRB approved study 43 of 45 residents enrolled

• Used Maslach Burnout Inventory (MBI) at 3 time points

• Evaluated 3 major components of the curriculum
  – Grand-rounds presentations
  – Quarterly resident wellness group meetings
  – Quarterly didactics during protected teaching time
Results of Pilot Year study

- Residents showed high levels of emotional exhaustion (Mean 29.8; SD 10.1), personal accomplishment (45.6; 6.3), and depersonalization (13.1; 4.9) at the start of the curriculum.

- Response Rate to first survey 90.7% (39/43)

- Attrition Rate 23.1% (9/39)

- Resident wellness group sessions were most impactful with significant decreases in depersonalization (p=0.001), and a trend towards decreasing emotional exhaustion (p=0.073)
  - Personal accomplishment was the only scale that showed a significant increase over time (p<0.031)
Pilot Year Study Results

Predictive Marginal Effects of Number of Wellness Groups on Emotional Exhaustion, Depersonalization, and Personal Accomplishment Scores

- Emotional Exhaustion
- Depersonalization
- Personal Accomplishment
Our Focus – The Department of Anesthesiology

- Anesthesiology Residents
  - Developed and delivered one year curriculum on wellness
  - Studied it 😊
  - Abstract accepted for ACPH, CENTILE conference

- Anesthesia Fellows
  - Professionalism/Mindfulness Curriculum
  - Quarterly Dinners

- Anesthesia Faculty
  - Project GREAT (Gratitude: Recognizing Excellent Anesthesia Teamwork)
  - Facilitate emotional debriefs after unanticipated OR events
  - Quarterly Social events to encourage collaboration/friendships

- New Resident curriculum, collaboration with Abbie
  - Inaugural resident retreat July, 2017
  - Well received
  - Studied it 😊, will continue to study it through the year

- Anesthesiologist Assistant Program
  - Wellness curriculum over 28 mo
  - Ongoing IRB to study program
Our Focus

• Anesthesiology Fellows
  – Professionalism curriculum- 6 interactive sessions
    • 2 specific wellness lectures

• Anesthesiology Faculty
  – G.R.E.A.T award: Gratitude Recognizing Excellence in Anesthesia Teamwork
  – Social events after combined faculty meetings
  – Members of QI teams at UCH/CHCO, quality, patient safety, provider wellness are so intertwined. Many interesting collaborative ideas, future projects
  – Development of Adverse Event Algorithm for Department
Department of Anesthesiology

- Expansion to other groups
- AA School
- Faculty
- Residents
- Fellows
- Project GREAT
New Wellness Website
Common symptoms of Second victim

- Disclosure summary of Grand Rounds (approved by legal team)
- CPHP (Colorado Physician Health Plan) available for residents, fellows, attendings, CAA's and students. Cphp.org
- University of Colorado Resilience website
Campus Wide Involvement

- Members of Resilience Council
- Steering committee of Peer-to-Peer support network
- R.E.S.T. team
- Resilience Leadership Team (resident curriculum)
IRB-Approved Study
Second Phase

• De-identified demographical information including: age, gender, relationship status, family information, career background

• Surveys pertaining to sleep quality, empathy, mindfulness, perceived stress, burnout and your values

• This study is designed to learn more about the best way to encourage anesthesia resident wellness and avoid burnout.
What’s to come for the Residents this year

• Quarterly Booster Sessions based on PERMA
  – Positive Emotions
  – Engagement
  – Relationships
  – Meaning
  – Achievement

• Dinner to follow 4 Tuesday didactic sessions
Inaugural CA-1 Retreat
Figure 1. PANAS Scores Pre-Post-Retreat

- Positive Affect: 13.5% Increase
- Negative Affect: 16.5% Decrease

- Pre-Retreat
- Post-Retreat
Figure 2. Flourishing Ratio Pre-Post-Retreat

Concerning "Languishing" "Flourishing"

Notable category shift
31.9% of the group moved from Languishing to Flourishing

*There were no cases in this category at either time point

Concerning Pre-Retreat Post-Retreat
Fellows

• Professionalism Curriculum at CHCO
• All fellows invited to participate
• Topics to be discussed:
  – Mindfulness/Wellness – 2 sessions
  – Impaired Physician
  – Second Victim and TRUST
  – Disclosure and Breaking bad news
  – Difficult conversations and Giving Effective Feedback (Role play)
• Dinners to follow 4 of the sessions for further
Faculty

- Project G.R.E.A.T.
- Social Gatherings after quarterly combined faculty meetings
- Peer to Peer
- Resilience Council
Resilience Council Website

Home > Faculty > Residents, Fellows, and Faculty Resilience

Resilience Program

Contact Us
Resilience@ucdenver.edu
303-724-1944

Events
Available Resources

• For Residents and Students: Wellness Center 303-724-6242
• The Depression Center 303-724-3300
• Pastoral Care can find on call chaplain using amion.com
• CPHP (303) 860-0122
• Resilience Council
• Wellness Directors
  anesthetia.wellness@ucdenver.edu
  – Can help you find/navigate necessary resources