Implementation of “Flex Time” in a Plastic Surgery Residency Program: Impact on Duty Hours, Case Volume, Research Productivity, and Symptoms of Burnout

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No disclosures
Finding balance between clinical duties, educational requirements and personal needs can lead to burnout among residents


**Professional Burnout in United States Plastic Surgery Residents: Is it a Legitimate Concern?**

Coombs DM¹, Lanni MA², Fosnot J³, Patel A⁴, Korentager R⁵, Lin IC⁶, Djphan R¹.

- 146 US PRS residents surveyed from 2018-2019
- “overall burnout rate was 57.5%, and on average, all residents experienced work exhaustion and interpersonal disengagement”
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<td>VI.C. Well-Being</td>
<td>July 1, 2017</td>
<td>July 1, 2019*</td>
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**VI.C.1.b)**

[This responsibility must include:]

attention to scheduling, work intensity, and work compression that impacts resident well-being; *(Core)*

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**VI.C.1.e)**

[This responsibility must include:]

attention to resident and faculty member burnout, depression, and substance abuse. The program, in partnership with its Sponsoring Institution, must educate faculty members and residents in identification of the symptoms of burnout, depression, and substance abuse, including means to assist those who experience these conditions. Residents and faculty members must also be educated to recognize those symptoms in themselves and how to seek appropriate care. The program, in partnership with its Sponsoring Institution, must: (Core)
Background

**Prevalence of Burnout among Plastic Surgeons and Residents in Plastic Surgery: A Systematic Literature Review and Meta-analysis.**

Ribeiro RVE¹, Martuscelli OJD¹, Vieira AC¹, Vieira CF².

- 6 publications, including 2,670 plastic surgeons and 90 residents in plastic surgery
- Prevalence of burnout = Plastic Surgeons (32.32%) and PRS Residents (36.66%)
- “it is necessary to perform an early assessment and to regulate this phenomenon, with a focus on identifying, diagnosing, and providing appropriate treatment”
May 2018, outside agency conducted a resident engagement survey
  - Showed moderate to high levels of burnout

Solution: “Flex Time”
  - Residents are released from clinical duty at 12:00 PM after each night of home call

Implemented on July 1st, 2018
• **Flex Time** is to be used for:
  o Scholarly activity
  o Personal study
  o Required non-clinical assignments
  o Personal needs
  o May stay for unique/educational cases
Objectives

- To examine the impact of adopting Flex Time on:
  - Duty hours
  - Case volume
  - Research productivity
  - Symptoms of burnout
• Single-institution retrospective examination
• Study period: 2017-2018 (Pre) and 2018-2019 (Post)
• 3 residents in each cohort (Pre and Post)

• **New Innovations**
  o Duty hours

• **ACGME Case Logs**
  o Case volumes

• **Maslach Burnout Inventory**
  o Emotional Exhaustion
  o Depersonalization
  o Personal Achievement
Average weekly work hours per resident

Pre: 69.3
Post: 63.9

7.7% decrease
Average annual case volume per resident

- Better prepared
- No concerns for meeting requirements
Research Productivity

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<tr>
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<tr>
<td>Pre</td>
<td>1</td>
<td>0</td>
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**Maslach Burnout Inventory Scores**

**Emotional Exhaustion**
- Pre: 32 (H)
- Post: 20 (M)

**Depersonalization**
- Pre: 27 (H)
- Post: 16 (H)

**Personal Achievement**
- Pre: 23.33 (L)
- Post: 34.33 (M)

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<th>Low</th>
<th>Mod</th>
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<tr>
<td>Emotional Exhaustion</td>
<td>≤ 17</td>
<td>18-29</td>
<td>&gt; 30</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>≤ 5</td>
<td>6-11</td>
<td>&gt; 12</td>
</tr>
<tr>
<td>Personal Achievement</td>
<td>≤ 33</td>
<td>34-39</td>
<td>&gt; 40</td>
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Limitations:

- Small sample size
  - 3 data points per year
- Retrospective responses to Maslach Burnout Inventory
Summary

- Improvement in research productivity
- Improvement in all 3 categories of burnout

- Decreased work hours
- Decreased case volumes
Institution of a protected post-call time can greatly improve research productivity and decrease rates of burnout, without compromising overall clinical training.
Thank you