

# Support for Mental Health and Well-Being in the Transition to Residency

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## Introduction

Transitions along the medical education continuum are often challenging and can pose threats to the mental health and well-being of those on the path to becoming practicing physicians. Transitions from medical school to residency, between postgraduate years (PGYs), and from residency into fellowship or medical practice are characterized by increases in responsibility, and potentially, doubts about one's competency and ability to meet new demands. These transitions may also be accompanied by additional stressors, including a move to a new city or institution and separation from support networks of friends and family.

Perhaps the most challenging transition is the one from medical school to residency, where medical students move from being learners only to being both learners and employees. A study by Yaghmour et al found that, from 2000 to 2014, the suicide rate for residents was highest in the first 3 months of the first year of residency.<sup>1</sup> These suicides, however, represent the tip of the iceberg of mental health problems and suffering, as many more individuals experience significant distress but do not reach the point of completed suicides.

The Accreditation Council for Graduate Medical Education (ACGME) is committed to raising awareness about this vulnerable period at the entry to residency, as well as other transitional periods, and to sharing and creating resources to help programs and institutions provide needed support. In this commentary, the authors provide an overview of the threats to mental health in the transition to residency and outline a collection of strategies that can be implemented to support residents in the early months of training.

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## Potential Threats to Mental Health and Well-Being

Mental health is the product of individuals' interactions with their environment. Threats to mental health and well-being can arise from both the self and the environment. A useful model in framing potential interventions is self-determination theory, which posits that individuals will flourish if they are supported in autonomy, feelings of competence, and connectedness.<sup>2</sup> Given that autonomy is relatively limited early in residency, efforts to support feelings of competence and connectedness are vitally important.

## Individual Characteristics, Contexts, and Vulnerabilities

Individuals bring unique sets of vulnerabilities to transitions in medicine. Residents may be moving to a new city and may be leaving behind social support systems that include friends, family, and for some, mental health providers. Many need to adjust to new institutions with unfamiliar electronic health records, policies, and procedures. Some residents enter training after not matching in their desired specialty or program. Additional threats may include recent personal life stressors, such as divorce or a breakup of a long-term relationship, the recent death of a loved one, or the birth of a child. Some residents also may have chronic health problems or disabilities (eg, hearing loss, Long COVID, etc) that make the transition to training more challenging. Residents may also begin training with significant histories of prior mental health challenges. While studies have shown that residents have very low rates of depression at or before orientation (typically around 4%), a much higher percentage (45.1% to 55.9%) report having a history of depression.<sup>3,4</sup> Sen et al found that several factors were associated with a greater increase in depressive symptoms during the first year of residency, including female sex, US medical education, difficult early family environment, history of major depression, and higher neuroticism.<sup>3</sup> It is likely that substantial numbers of residents have suffered from anxiety in the past as well.

In addition to these prior mental health challenges, many may have developed problematic mindsets preceding residency that contribute to distress, particularly in new and challenging environments. These mindsets include impostor phenomenon, maladaptive perfectionism, viewing performance as identity, and toxic comparison thought patterns which can be accompanied by feelings of inadequacy, embarrassment, and/or shame.<sup>5</sup>

Prior performance in medical school can also influence residents' transitions to residency. Individuals who struggled academically in medical school may have doubts about their own abilities, while those who have excelled may have little to no experience with performance struggles or failure.

### **Environmental Threats in Training**

Significant environmental threats to mental health and well-being occur in the transition to residency. The increase in responsibility is substantial. For the first time, many residents will be writing orders without needing co-signatures and may be managing a large number of complex patients overnight without a supervisor immediately present. During medical school, students typically have few or no overnight calls to prepare them for the rigors of residency training, exacerbating these concerns. The pressure of feeling that they have patients' lives in their hands is, for many, much more intense than in their medical school years. The increase in demands is not just qualitative, it is quantitative as well. Residents who were accustomed to carrying 3 patients or fewer as fourth-year students on a subinternship may have a dozen patients or more assigned to them on inpatient services. As mentioned earlier, if they are in a new hospital system, residents will face new policies, procedures, people, and likely, new electronic medical records systems. They have new responsibilities such as dictating discharge summaries, a task they may have never performed before.

Institutional and program factors have been found to be associated with increased risk of depression or suicidality in first-year residents. Program factors include lower ratings of learning environment and faculty feedback, and low ethnic diversity, while institutional factors include high research ranking and high altitude.<sup>6,7</sup>

While many program environments are supportive, some may be less so. Even within supportive environments, demanding and unsupportive faculty, senior residents, and nursing staff can add to the stress of transition to residency. A culture in medicine to appear strong and hide ones' vulnerability may impede help-seeking behaviors by those who may need mental health care. Finally, a subset of

residents may be made to feel unwelcome or like impostors, receiving messages both subtle and overt that they do not fit the role of physician based simply on their racial identity, gender, sexual orientation, or country of origin.

### **Strategies and Programming to Support Residents in the Transition to Training**

Several skills can be taught to help residents better manage problematic mindsets as well as accompanying cognitive distortions. Perhaps the most important is cognitive restructuring, which has been found to reduce adverse mental health outcomes in residents.<sup>8-10</sup> In addition, cultivation of mindful awareness and self-compassion can be helpful adjuncts. These skills should, whenever possible, be taught in group settings and should be followed by longitudinal support/process groups. A video workshop and facilitator guide can be found at Learn at ACGME (<https://dl.acgme.org>). In addition, a virtual coaching program that has grown significantly in reach in recent years utilizes a cognitive restructuring framework.<sup>9</sup> A third approach to teach these skills is a web-based cognitive behavioral therapy program that resulted in a 60% decrease in suicidal ideation in first-year medical residents compared to controls.<sup>10</sup> Faculty should also be taught about problematic mindsets so that they can be more effective at providing feedback and support to residents who are struggling with these mindsets.

Screening for potential risk factors in the transition to residency, both match-related and intrinsic to the individual, may be helpful in identifying and providing extra support to those at higher risk for a difficult transition. A screening system, the Transition to Residency Risk Index, has been developed and utilized to assess potential individual risk factors at orientation, as well as a stratified approach to support residents based on the total score on the index.<sup>11</sup> Those individuals scoring at moderate to high risk for a difficult transition are offered more frequent check-ins by program leadership, early assignments of peer or faculty mentors, and assistance from behavioral health resources. Recently, more programs are creating "opt-out" appointments, in which trainees early in the PGY-1 year are automatically scheduled with behavioral health specialists to provide introductions, resources, and if necessary, additional scheduled sessions for counseling, coaching, or medication management.<sup>12,13</sup>

Interventions should not just be individually focused. Programs and institutions can and must play an important role in supporting those in transitions. Potential interventions are summarized in the TABLE.

**TABLE**  
Threats to Mental Health and Interventions in the Transition to Residency

Threats to Mental Health	Potential Interventions
Excessive patient loads	<ul style="list-style-type: none"> <li>▪ Limits on the number of patients assigned to first-year residents on the ward in early months</li> <li>▪ Limits on the number of patients assigned in clinic sessions</li> </ul>
Feelings of incompetence	<ul style="list-style-type: none"> <li>▪ Early and regular check-ins by chief residents, program directors, and/or mentors</li> <li>▪ Early, frequent, and skilled feedback by senior residents and supervising faculty</li> <li>▪ Reminders to residents that they are not expected to know everything at the start of training; that they are there to learn, and their knowledge, skills, and confidence will grow over time</li> </ul>
Isolation	<ul style="list-style-type: none"> <li>▪ Social gatherings</li> <li>▪ Team-building exercises</li> <li>▪ Big sibling programs</li> <li>▪ Peer support programs</li> </ul>
Stigma and reluctance to use mental health services	<ul style="list-style-type: none"> <li>▪ Early communication about how to access mental health resources and encouragement to use these resources</li> <li>▪ Faculty disclosure of their own experience with mental health issues</li> <li>▪ Opt-out mental health appointments</li> <li>▪ Teaching faculty, residents, and staff basic principles of psychological first aid and ensure that all know how mental health resources are accessed</li> </ul>
Mistreatment and bias	<ul style="list-style-type: none"> <li>▪ Anonymous reporting system for reporting inappropriate behavior by residents, faculty, or staff</li> <li>▪ Training of faculty, residents, and staff on implicit bias and microaggressions</li> </ul>
Institutional factors—high research ranking, high altitude	<ul style="list-style-type: none"> <li>▪ Awareness by program leadership about risk associated with these factors</li> </ul>

## Conclusions

The transition to residency can be a highly stressful time associated with significant threats to the mental health of residents. Programs can take steps to address the factors associated with distress to support residents more fully in this challenging transition. These combined efforts, if instituted, will not only likely reduce depression, anxiety, and suicidal ideation in the early months of residency, but also create the foundation for a healthy learning environment through residency training. Additional resources can be found at Learn at ACGME (<https://dl.acgme.org>).

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