Foster Well-being Throughout the Career Trajectory: A Developmental Model of Physician Resilience Training

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Abstract

Physician burnout is common across specialties and largely driven by demands of the current health care industry. However, the obvious need for systems change does not address the unavoidable impact of providing care to those who suffer. An intentional, developmental, longitudinal approach to resiliency training would not distract from fixing a broken system or blame physicians for their distress. Existing models and approaches to resilience training are promising but limited in duration, scope, and depth. We call for and describe a career-long model, introduced early in undergraduate medical training, extending into graduate medical education, and integrated throughout professional training and continuing medical education, in intrapersonal and interpersonal skills that help physicians cope with the emotional, social, and physical impact of care provision.

"Physician burnout is common and largely driven by demands of the current health care industry." - Adequate resources and a culture of wellness that embraces the well-being of the entire care team as a valued aim of health care. In particular, the importance of addressing the well-being of the entire care team is emphasized. Existing models and approaches to resilience training are promising but limited in duration, scope, and depth. We call for and describe a career-long model, introduced early in undergraduate medical training, extending into graduate medical education, and integrated throughout professional training and continuing medical education, in intrapersonal and interpersonal skills that help physicians cope with the emotional, social, and physical impact of care provision.

Physician burnout is common and largely driven by demands of the current health care industry.1-8 Advocates have called for organizational change and a shift to a culture of wellness1 that embraces the well-being of the entire care team as a valued aim of health care.9-16 Without distracting from efforts to fix the health care system and untenable, exploitative work environments,17 we must also prepare physicians for the inevitable toll of being a health care professional. Undergraduate, graduate, and continuing medical education equip physicians with needed medical knowledge and skills, but comprehensive, longitudinal models of resilience training are lacking.18 We forward a rationale and framework for such training, beginning early in medical education and extending through one's professional career. This perspective is informed by both literature review and our backgrounds as medical school faculty members who practice, teach, and supervise in academic and Veterans Affairs medical centers (L.G.O., C.E.G.), one of whom is also a Licensed Marriage and Family Therapist specializing in the treatment of physicians (C.E.G.), and a clinical psychologist focused on behavioral medicine/health psychology and early intervention for traumatic stress (M.J.C.).

PHYSICIAN BURNOUT: IMPACT AND CAUSES

Burnout8,19,20 is increasingly prevalent in both medical trainees and practicing physicians.4,7,21-24 Adverse consequences of burnout include decreased productivity and poor efficiency,25,26 reduced sustainability and retention,27,28 medical errors,29-34 poorer patient satisfaction,35 nonadherence,36 and poor patient outcomes,37,38 inhibition of enacting professional values,39 reduced physician empathy,40 and physician depression, substance abuse, and suicide.41-47 Correlates of physician burnout have been identified. Systemic contributors include increased workload, panel sizes, electronic medical records, and other administrative tasks,48-50 chaotic work environments,51 personal-leadership values...
differences, and an increased focus on productivity in the context of reduced financial compensation and greater liability threats. Other contributors to burnout are interpersonal and intrapersonal in nature: poor work-life balance, personal stressors, hostile colleagues, difficult patient interactions, and job performance–based self-esteem.

CALLS FOR CHANGE

The need for systemic change is clear. Leaders have called for a shift from transactional tasks to personalized care. The merits of team-based, co-located care models and improved practice efficiency have been articulated.

At the same time, it is recognized that patient care itself is inherently demanding and can negatively impact physician well-being and functioning. Card cogently distinguished between avoidable occupational suffering, caused by systemic and organizational factors, and unavoidable occupational suffering, caused by caring for others who suffer. Systemic issues that contribute to physician suffering must be addressed, but given the inherent stressors of patient care, we must also embed resilience training within the fabric of medical education and practice.

Although recognized by some as part of the solution, authors have cautioned that resilience training is misplaced, relieves the systems of blame, invalidates the real losses physicians are experiencing, and pathologizes distressed clinicians as “weak” and coping ineffectively. Emotional reactions to the breach of the “covenant” between physicians and the health care system are warranted and have been poignantly described as “disenfranchised grief” and moral injury. Systems need thorough restructuring, but de basing resilience training promotes the broader cultural stigma around emotional distress and mental health difficulties to which physicians are vulnerable.

THE CASE FOR PHYSICIAN RESILIENCE TRAINING

Competent physicians with an array of effective coping strategies may still be susceptible to burnout because of the traits and competencies they must possess in order to enter the profession and the culture of the profession they are entering. Stereotypically, medical students and physicians are bright, performance- and achievement-oriented, perfectionistic, and able to prioritize others’ needs over their own. In systems with unreasonable demands, these strengths may also be vulnerabilities. When inevitably exposed to patients’ great emotional and physical suffering, under pressure to perform efficiently, to criterion, and under liability threat, some degree of emotional distress is inevitable. Stigma, shame, and fear that if one expresses distress there will be adverse professional implications may compound otherwise normative emotional responses. The culture of medicine and medical training may unintentionally send the message that personal emotional reactions should be compartmentalized and that the nobility of caring for others should be a shield from distress.

However, culture change is under way. The Collaborative for Healing and Renewal in Medicine (CHARM) Charter on Physician Well-Being, endorsed by the American Medical Association, implores a culture shift that, among other components, includes attention to physicians’ personal well-being from medical training through the professional career. The Liaison Committee on Medical Education, the Accreditation Council for Graduate Medical Education, and leaders in the field stress the importance of systems- and individual-level initiatives to promote physician well-being, setting the stage for training institutions to delineate and operationalize the appropriate systems changes, skills, and teaching methods.

Akin to the shift from developing “cultural competence” to striving for “cultural humility,” “resilience” and “wellness” are
not achievable states or easily defined competencies but aspirational goals. The goals of resilience training should be continuous self-reflection, self-care, and building skills to manage stress and bad outcomes in the service of maintaining personal emotional and physical health and being maximally effective in helping others.

EXISTING RESILIENCE INTERVENTIONS AND MODELS

Physician wellness interventions vary widely and have yielded mixed results. Physician-directed interventions have had smaller effects than those directed at organizational change. Physicians randomized to 9 months of biweekly facilitated discussion groups that included modules on reflections and skills regarding self, patient, and balance had increased empowerment and engagement and less depersonalization than controls but did not differ in stress, depression, quality of life, or job satisfaction. A year-long continuing medical education course based on mindfulness meditation, narrative medicine, and appreciative inquiry that targeted attention, awareness, and communication skills improved physician mood, reduced burnout, and improved attitudes reflective of patient-centered care. A voluntary mindfulness-based stress management course for physicians produced multiple benefits. Medical residents had reduced burnout after a half-day stress management workshop.

Online training platforms (eg, doccom.org, achonline.org) have been designed to teach physicians communication skills and university-based institutes (eg, ccare.stanford.edu; ggsc.berkeley.edu) have designed workshops to foster compassion, mindfulness, awareness, and emotional well-being skills in health care professionals. Although these individual components are promising, an integrated, longitudinal model of resilience training is yet to be forwarded.

A DEVELOPMENTAL MODEL OF PHYSICIAN RESILIENCE TRAINING

In this light, we propose a career-long model, introduced early in undergraduate medical training, extending into graduate medical education, and integrated throughout professional training and continuing medical education, in intrapersonal and interpersonal skills that help physicians cope with the emotional, social, and physical impact of care provision. This proposal in no way minimizes the need for organizational and systems change, nor does it view physician burnout as a sign of “weakness.” Rather, efforts to maintain physician...
well-being must include both fixing a broken system and addressing how we support physicians' understanding of themselves and their work. Such an approach would normalize and validate the full range of emotional reactions to occupational stress, acknowledge the universal emotional challenges and effects of patient care, and empower physicians to self-identify distress, seek support, and assert their needs individually and as a professional community.

This longitudinal, staged, developmental approach to resiliency training sequences and contextualizes content to correspond to distinct phases in physicians' careers to optimize the impact of concepts and skills introduced (Table). Capacities learned early on provide necessary building blocks for subsequent skill acquisition and are sustained and strengthened throughout the curricular progression (Figure).

The proposed approach is modeled after traditional medical education. In early medical school, foundational domains (e.g., biochemistry, histology, anatomy, physiology) are presented, followed by the teaching of disease states organized by organ system. Clinical rotations then focus on the process of assessing and diagnosing disease in unique individual patients. As students transition to residency, communication, teamwork, and critical thinking skills are developed through patient care and work on medical teams. The proposed approach to resiliency training similarly follows an intuitive and practical psychosocial progression. We emphasize the domains and foci of the training (Table), while the specific examples and rationale are meant to instantiate the larger themes and elicit exploration and innovation.

**Preclinical Medical School**

During the preclinical years of medical school, medical students study and function within a relatively supportive and predictable environment suited to the acquisition of foundational intrapersonal skills. This...
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<th>Career stage</th>
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<th>Rationale/specific impact</th>
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<tr>
<td>Preclinical medical school</td>
<td>DIVERSITY</td>
<td>INTRAPERSONAL</td>
<td></td>
<td>Attentional practices'</td>
<td>Meditation/contemplative practice</td>
<td>Stabilizes and focuses attention, promotes alert presence</td>
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<td></td>
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<td>Compass practice</td>
<td>Compass training</td>
<td>Builds capacity for warm engagement and mitigates self-criticism and perfectionism</td>
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<td></td>
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<td>Cognitive appraisal/ reframing</td>
<td>Cognitive behavioral therapy approaches</td>
<td>Increase capacity to appraise relevance, accuracy, and utility of own thoughts and identify resources to respond or reframe</td>
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<td>Physical well-being</td>
<td>Healthy behaviors</td>
<td></td>
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<td>Sleep, diet, exercise, and recognizing unhealthy behaviors</td>
<td>Supports adoption of healthy professional and personal lifestyle choices. Sharpens recognition of unhealthy behaviors (burnout and substance abuse) in self and colleagues</td>
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<td>Culture of medicine: diversity, equity, and inclusion</td>
<td>Safe and diverse workplaces</td>
<td></td>
<td>Unintentional biases, microaggressions, and stereotype threat</td>
<td>Exands awareness of how social identities impact well-being. Builds respectful workplaces through protecting self, patient, and colleagues from biases. Enhances sense of belonging</td>
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<td>Clinical medical school</td>
<td>EQUITY</td>
<td>INTERPERSONAL</td>
<td></td>
<td>Emotion and stress regulation skills</td>
<td>Emotional reactions and behavior in self and others</td>
<td>Enhances awareness of triggering, emotional conditioning, and unconscious emotional behavior in self (and others)</td>
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<td>States of stress and activation</td>
<td>Attunes attention to stress and overwhelm in self and others and provides tools for self-regulation</td>
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<td>Culture of medicine: communication and community</td>
<td>Group process/ social support</td>
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<td>Balint groups and support groups</td>
<td>Instills process values: communication, community building, divergent thinking, perspective taking, self-awareness. Builds appreciation of the value of diversity</td>
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<td>Reflective practice</td>
<td></td>
<td>Reflective rubric: medical content and interpersonal process</td>
<td>Provides framework to assess medical knowledge, practice, and interpersonal patterns after a clinical block. Stresses cultural humility</td>
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<td>Career stage</td>
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<td>Residency training</td>
<td>AND</td>
<td>Navigating challenging</td>
<td>Managing conflict</td>
<td>Healthy interpersonal boundaries</td>
<td>De-escalating disruptive behavior in patients</td>
<td>Encourages conscious setting of flexible and appropriate boundaries with patients and colleagues</td>
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<td>interpersonal dynamics</td>
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<td>Consciously engaging conflict</td>
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<td>Provides 3 optional paths with conflict: negotiating, protecting self, and building relationship</td>
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<td>Offers training assessing level of escalation and de-escalation skills matching each level</td>
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<td>Strengthens non-directional counseling, non-judgmental language, and joining skills</td>
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<td>Fellowship</td>
<td>INCLUSION</td>
<td>Residency or fellowship-specific issues</td>
<td>Emergency department/intensive care unit example: psychological first aid</td>
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<td>Helps process strong emotional stress reactions to emergency events: codes, unexpected, deaths, etc</td>
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<td>Hematology/oncology, palliative care example: grief processing</td>
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<td>Surgery example: error disclosure and disengaging self-criticism</td>
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<td>Early attending career</td>
<td>SYSTEMS&amp;SUSTAINABILITY</td>
<td>Managing teams and groups</td>
<td>Leading clinical care teams</td>
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<td>Presents skills for aligning and motivating care teams around common goals and structure.</td>
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<td>Giving and receiving feedback</td>
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<td>Emphasizes respectful and explicit communication. Builds skills in both delivering and eliciting frequent high-quality specific and actionable feedback</td>
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<td>Family meetings</td>
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<td>Framework for processing past ruptures and “bad calls,” aligning around current decisions and goals, while dealing with common challenging group dynamics</td>
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<tr>
<td>Ongoing attending</td>
<td>Professional fulfillment and</td>
<td>Recognizing and engaging burnout,</td>
<td>Proposes approaches for engaging at-risk colleagues through recognition,</td>
<td>Outlines stepwise approach to communicate anger and upset in nonattacking ways that increase chances of alignment/understanding</td>
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<td>career</td>
<td>organizational culture</td>
<td>depression, and substance abuse in</td>
<td>connection, and nonthreatening support</td>
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<td>colleagues</td>
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<td>Nonviolent communication</td>
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<td></td>
<td>Advocating policy and systems change</td>
<td>Supports groups of physicians to build autonomy by formulating and championing practice changes that align with values and local practice patterns</td>
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<td>Institutional leadership development</td>
<td>Teaches skills in leading groups, sections, or divisions in academic and nonacademic settings. Emphasizes focus on wellness and diversity in addition to traditional foci such as process improvement and business planning</td>
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*“Practices” imply long-term utility.*
phase introduces 5 domains (meditation, compassion, cognitive reframing, healthy behaviors, safe and diverse workplaces) framed as ongoing lifelong competencies that are ideally implemented as daily habits or practices. These and other skills described subsequently are introduced in context, via didactic presentations, discussion of actual and hypothetical situations encountered by instructors and learners, modeling, and experiential skill rehearsal and role-plays.

Mindfulness-based meditation and other secular contemplative practices build the capacity to strengthen and maintain attention, both internally and externally. Developing and sustaining alert awareness of internal states, including thought patterns, emotions, levels of stress, and impulses toward distraction, are fundamental to being able to track dynamic emotional and stress reactions inherent in exacting clinical arenas. Physicians who can maintain awareness of and fluctuations in their internal state are better able to self-regulate and maintain calm and clear functioning in interpersonally and technically challenging practice settings.

In the contained and encouraging stage of early medical school, compassion training can help students cultivate the ability to approach themselves and others with kindness. Self-valuation and compassion have been associated with reduced burnout. With compassion comes greater calm, contentedness, and positive affect, even when exposed to others’ distress, which may prevent burnout. A warm, attuned, and attentive professional presence can be deepened and stabilized when challenged in later clinical work, but only if adequate foundations and motivation have been instilled.

Cognitive reframing skills build on the attentional and self-reflective abilities grown through meditative practice. Reframing teaches trainees to identify thought patterns that may be maladaptive, irrational, or unhelpful. Recognition of habitual negative, self-critical, or perfectionistic thinking patterns (eg, imposter syndrome) can enable a conscious shift to more realistic, self-supportive, and adaptive appraisals. Reframing also supports trainees in seeking additional resiliency training and personal support when persistent unhelpful thought patterns take hold.

The physical building blocks of sleep, diet, and exercise, perhaps the most easily accessible and familiar of these concepts to medical students, may be the first to be abandoned in training. The early adoption of healthy physical lifestyle choices constitutes the bedrock of all psychosocial and relational training relevant to practicing medicine. Recognizing imbalances and unhealthy states (eg, burnout) and behavior (eg, substance abuse) in oneself and others can lead to early intervention and course correction. This module also frames the needed communication, time management, and limit-setting skills to integrate self-care behaviors into the realities of a highly demanding and busy lifestyle.

The thread of diversity, equity, and inclusion runs through this model and is introduced early to raise awareness and teach skills that ensure a safe and affirming learning environment and workplace for all. Reflection on personal identities, privilege, and biases and learning skills to prevent, recognize, and respond to stereotyping, microaggressions, and structural obstacles to equity fosters belonging for one’s self, colleagues, and patients; as with other content areas, effective delivery of such material is contingent on appropriate faculty reflection and training.

These intrapersonal skills are interrelated and foundational. For example, maintaining positive health behaviors in the context of a competitive and demanding educational/work environment is contingent on self-awareness (eg, “I am tense/anxious/tired/hungry”), self-compassion (eg, “I deserve to be healthy”), adaptive thinking (eg, “I can take time for myself and do my work effectively”), and cultural attunement (eg, “As an African American female medical student, I feel pressure to prove I belong and put work before my own needs”). Further, these intrapersonal skills underlie effective coping and functioning in the face of interpersonally demanding settings and systems.
Clinical Medical School Rotations

As trainees transition to clinical rotations, the unique combination of complex cognitive and communication-based tasks, intensely emotionally charged interactions, and physically demanding schedules draws heavily on the 4 preclinical domains and introduces the central relevance of self-regulating emotional and stress responses in context. Cognitive behavioral therapy\textsuperscript{102,103} approaches provide a framework within which trainees can identify the sequence of events that comprise strong emotional reactions in themselves and others. Learning to appreciate the triggers of emotions, potentially distorted or ruminative thoughts that extend emotional reactions, and repetitive patterned reactions allows trainees to be more aware and purposeful in experiencing, communicating about, and responding to these emotional events.\textsuperscript{108}

Per the fields of trauma-informed and compassion-focused psychotherapy,\textsuperscript{109-112} trainees learn the physiologic, cognitive, and somatic markers of stress particular to them. Awareness of their own uniquely personal experience of stress supports the acquisition of skills in regulating excessive activation (eg, anger, anxiety) or mobilizing and engaging in the face of shutdown or overwhelm. Learning to track and regulate stress-related and emotional reactions allows trainees to maintain a more calm, grounded stance and facilitates their intuitive nonverbal modes of communication with patients and colleagues. These skills support trainees' conscious choice to share strong reactions in appropriate settings rather than ignoring or suppressing them.

Within the growing attention to the "culture of medicine," 2 specific areas may have particular impact. Process groups such as Balint groups\textsuperscript{113,114} explicitly bring in the discussion of relational and emotional aspects of patient care. Structured to be safe, inclusive, nonjudgmental settings in which to reflect on the interpersonal process of medicine, such groups foster divergent thinking and perspective-taking skills critical for understanding and empathizing with self, colleagues, and patients.\textsuperscript{115,116} The realization that all health care professionals struggle with the same challenging patients and dynamics positively impacts self-judgment and perfectionism and supports group cohesion, authentic communication, noncritical empathy, and appreciation of diversity.

Second, the structure of medical postgraduate education provides an ideal opportunity for self-reflection at the close of each rotation. Guiding trainees to reflect on medical content (ie, conditions encountered and deficits in knowledge that surfaced) and interpersonal process (ie, patients who caused strong emotional reactions or interactions that evoked challenge) organizes and focuses trainee-specific learning goals and personal insight. Narrative medicine and other reflective techniques hold promise in this regard.\textsuperscript{117}

**Residency Training and Fellowship**

With residency, trainees enter the most intensely challenging and educational time-limited period of their career. Previously acquired resiliency skills are tested and may require reinforcement: revisiting regulation skills under higher levels of stress incrementally builds capacity.

The novel layer in this career stage is the application of psychological frameworks to the most challenging interpersonal patient care scenarios: those involving conflict. Drawing from dialectical behavior therapy\textsuperscript{118} and models of interpersonal effectiveness, approaches to conflict emphasizing physician autonomy and choice are introduced. Three types of potentially competing priorities (desired outcomes, personal values, relationship) are presented as informative in conflicted situations, and structured approaches to each are outlined. Our experience is that physicians often automatically move to prioritize the relationship and are relatively unfamiliar and uncomfortable with techniques for negotiating change or asserting personal views or boundaries.
Another focus is on setting professional boundaries with patients and colleagues.\textsuperscript{119-121} This basic interpersonal skill aids trainees in agenda setting, comfortably saying “no” when appropriate, and containing lengthy unfocused encounters. De-escalation skills enable trainees to follow levels of patient escalation, employ techniques appropriate to each level, and then subsequently either align with a successfully de-escalated patient or safely end and exit the encounter if unsuccessfully de-escalated.

On the other end of the conflict spectrum are passively resistant or unmotivated patients who do not respond to repeated advice and recommendations. Motivational interviewing\textsuperscript{122,123} skills help physicians move away from the familiar position of authority to that of reflective coach, intentionally giving significant responsibility back to patients.

Significant innovation in residency- and fellowship-specific topics remains to be done. For example, in fields with a high frequency of severe trauma (eg, emergency medicine, surgery, intensive care), a focus on “psychological first aid”\textsuperscript{124} may be relevant. In settings such as hematology-oncology and palliative care, guidance on processing grief in oneself and counseling grief in others would be germane. Support with self-criticism, although generally applicable, may be particularly targeted to surgeons who experience, in the context of error disclosure to patients and in morbidity and mortality conference settings, very high levels of responsibility for outcomes. Particular training programs might alter training sequence; for example, a focus on leading teams may be more central during surgery residency compared with other fields.

### Early Attending Career

As physicians function more autonomously as leaders, further develop their personal styles of care, and maintain and model work-life boundaries and integration, material from organizational psychology becomes relevant to the overarching theme of systems and sustainability. From supervising a team of residents to spearheading a multidisciplinary trauma response team to heading a department, training in leading teams and organizations becomes essential.\textsuperscript{125-127} Emphasis on principles of motivation, team development, communication, alignment of organizational and professional values, and diversity, equity, and inclusion supports this function.\textsuperscript{128-130} Second and third foci involve training on how to elicit and give quality feedback\textsuperscript{31} and how to hold effective family meetings.

### Ongoing Attending Career

As physicians mature more comfortably into their professional roles several years into their practice, the theme of long-term sustainability takes center stage. Although deepening and iterative application of earlier domains’ concepts and capacities remains important, this stage provides ample opportunity to identify and work on gaps in resiliency skills.

Consistent with earlier training, a continuing focus for this stage is identifying and engaging colleagues who exhibit signs of maladaptive coping (eg, issues with mood, anxiety, or substance abuse) and professional burnout.\textsuperscript{132,133} Physicians at all career levels can feel untrained, uncomfortable, and unwilling to discuss serious concerns with colleagues. Relatedly, assertive, nonthreatening communication skills that recognize power and privilege differences while facilitating understanding and pursuit of shared goals are introduced.

A new frontier at this stage may include advocacy. As physicians learn to build their resilience, widespread, substantive, and deeply held disagreements relating to their systems of practice and management will persist. Resiliency training supports the capacity to advocate for oneself, one’s profession, and one’s patients. Having bandwidth for advocacy may rest on skills for assertive communication, boundary and limit setting, and prioritizing advocacy over other activities. Moving to more active, empowered, and engaged advocacy for local and widespread systemic or policy change should be supported by relevant organizational approaches.
Finally, specific institutional leadership skills have been associated with reduced physician burnout. In addition to traditional foci on process improvement and business planning, training includes a focus on creating systems, policies, and structures that support a culture of individual, group, and institutional wellness and diversity.

OPTIMIZING TEACHING OF RESILIENCE MATERIAL

For those who teach resiliency skills, it is clear that there is considerable variability among learners in capacity, relative developmental strengths and growth edges, and interests, perhaps more so than in traditional domains of medical knowledge. This variability raises the question of how to best teach these skills, some of which may evoke strong personal reactions, to diverse learner populations.

Our experience suggests that an optimal approach is multimodal and involves traditional didactic delivery of concepts, small groups for reflection and exercises, and larger group discussion. The small-group context, particularly within an established learning community, offers a safe space for learners to discuss concepts and practice skills with less performance anxiety or fear of judgment. These groups, optimally 3 to 8 individuals, allow learners who may be more introverted or hesitant to learn passively while observing, gradually building familiarity with material until they feel comfortable to participate actively. This format also helps to build their social skills and self-esteem. The larger group context then allows for lively public discussion and collaborative exploration of the concepts more fully.

Another key ingredient is the provision of highly engaging clinical examples that are realistic and appropriate for the stage of the learner. When modules present issues with which learners have personally struggled, such as an example of a patient aggressively demanding opioids from an unsure resident, then discussions of conflict management are perceived as relevant. Learners and instructors sharing their own examples/experiences can be particularly helpful.

Allocating protected time and private arenas for resiliency teaching is essential. For medical students, scheduling “intersessions” at various points between clerkships provides time for delivering this material. For residents, it can be more challenging to provide protected time given their work hours and call schedule, but “carve-outs” during clinic or ambulatory rotations or other electives can be used for protected space and time without interruption. These dedicated times (particularly if residents are free from being paged) not only allow learners to dive deeply into experiential material but send the message that the content is valuable. Dedicated teaching faculty or staff who are not in an evaluative role with the trainee further promotes a safe and nonjudgmental learning environment.

While we forward a developmental, staged model of resilience training, a mandatory, linear, rigid approach may not be user-friendly. Some evidence supports the importance of flexibility and choice in the timing, types, and order of resilience activities offered. Indeed, Menon et al urged organizations to develop a portfolio of programs that foster physical wellness (eg, healthy behaviors), wellness of mind (cognitive flexibility, sense of purpose/meaning), and social wellness (common humanity, home-work integration, values-driven career path). Organic initiatives that involve trainees and physicians in the development and implementation of wellness programming should also be considered. Further, the types and relative importance of stressors and support structures may vary by occupation and discipline.

ORGANIZATIONAL INTEGRATION OF RESILIENCE TRAINING

Although systems change is needed to address workflow and workplace contributors to burnout, educational institutions and health care organizations must be adapted to provide the physical and temporal space and educational and support
structures needed to conduct resilience training.\textsuperscript{13,115} This process will entail identifying and training instructors, allocating protected time, funding, and physical space, adjusting staffing, practice environments, and resilience consultation, and continuing medical education policies and modalities (particularly for the group of physicians already in practice who may not have been exposed to resilience education during preprofessional training), and supporting research on effective wellness assessment and intervention.\textsuperscript{12,73,115}

In addition, educational institutions and health care organizations will need structures and processes to measure and guide resilience training. Monitoring and detection of burnout, distress, and workplace stressors are a priority, and measures have been developed toward this end.\textsuperscript{141-143} Self-assessment tools that help health care professionals self-identify baseline strengths and growth areas and when and in what area they need help and then guide them to modules that promote awareness, prevention, detection, and remediation in an individualized way could be integrated into medical schools and practice environments. In this way the cumulative impact inherent to caring for patients can be normalized and burnout and severe mental health disorders can be addressed before negative outcomes for health care professionals and patients occur. Feedback about level of burnout relative to physician peers may enhance intention to change behavior.\textsuperscript{144} Coaching and mentoring approaches have been advocated\textsuperscript{145-147} and documented to be effective in reducing burnout.\textsuperscript{134} Learning communities,\textsuperscript{136} group support, confidential peer support networks, and professional support are needed to facilitate more intensive intervention for physicians with clinical levels of distress and impairment.\textsuperscript{148,149-147}

CONCLUSION

Improving and maintaining physician wellness necessitates quantum change, both in the health care system and in the approach to undergraduate, graduate, and continuing medical education. Moving beyond “either-or” arguments regarding resilience training and toward a developmental, integrated model of physician wellness is what the doctor ordered.

Potential Competing Interests: The authors report no competing interests.

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REFERENCES

14. Shanafelt TD. Nonseworthy JH. Executive leadership and physician well-being: nine organizational strategies to promote...

15. Shanafelt TD, Trockel M, Ripp J, Murphy ML, Sandberg C, Bohman B. Building a program on well-being: key design considerations to meet the unique needs of each organization. Acad Med. 2019;94(2):156-161.


42. Dyrbye LN, Trockel M, Frank E, et al. Development of a research agenda to identify evidence-based strategies to
64. Card AJ. Physician burnout: resilience training is only part of the solution. Ann Fam Med. 2018;16(3):267-270.
66. Oliver D. When “resilience” becomes a dirty word. BMJ. 2017;358:j3604.