## A Critical Care Societies Collaborative Statement: Burnout Syndrome in Critical Care Health-care Professionals A Call for Action

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THIS OFFICIAL STATEMENT OF THE AMERICAN ASSOCIATION OF CRITICAL-CARE NURSES (AACN), THE AMERICAN COLLEGE OF CHEST PHYSICIANS (CHEST), THE AMERICAN THORACIC SOCIETY (ATS), AND THE SOCIETY OF CRITICAL CARE MEDICINE (SCCM) WAS APPROVED BY THE AACN, SEPTEMBER 2015; CHEST, OCTOBER 2015; THE ATS, NOVEMBER 2015; AND THE SCCM, SEPTEMBER 2015

Burnout syndrome (BOS) occurs in all types of health-care professionals and is especially common in individuals who care for critically ill patients. The development of BOS is related to an imbalance of personal characteristics of the employee and work-related issues or other organizational factors. BOS is associated with many deleterious consequences, including increased rates of job turnover, reduced patient satisfaction, and decreased quality of care. BOS also directly affects the mental health and physical well-being of the many critical care physicians, nurses, and other health-care professionals who practice worldwide. Until recently, BOS and other psychological disorders in critical care health-care professionals remained relatively unrecognized. To raise awareness of BOS, the Critical Care Societies Collaborative (CCSC) developed this call to action. The present article reviews the diagnostic criteria, prevalence, causative factors, and consequences of BOS. It also discusses potential interventions that may be used to prevent and treat BOS. Finally, we urge multiple stakeholders to help mitigate the development of BOS in critical care health-care professionals and diminish the harmful consequences of BOS, both for critical care health-care professionals and for patients.

**Keywords:** burnout syndrome; critical care; ICU; moral distress; posttraumatic stress disorder

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Psychological stress develops when an individual's external demands exceed their adaptive abilities. Although stress may help an individual become more focused, chronic and excessive stress has deleterious effects such as feeling pressured and being overwhelmed. Extreme stress can result in insomnia, fatigue, irritability, anxiety, and depression. For many adults, the demands from their work environment

are a major contributor to feeling stressed. Due to increasing expectations, longer hours, and a relative lack of community support in the workplace, the amount of work-related stress has increased over the

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last few decades. As a result, burnout syndrome (BOS) has become a common worldwide phenomenon, especially among members of high-stress professions: firefighters, police officers, teachers, and all types of health-care professionals. Compared with all high school graduates, physicians were 36% more likely to develop BOS (1). Among physicians, those at the front line of care (family medicine, emergency medicine, and general internal medicine) report the highest rates of BOS (i.e., >40%).

Working in an intensive care unit (ICU) can be especially stressful because of the high patient morbidity and mortality, challenging daily work routines, and regular encounters with traumatic and ethical issues (2, 3). This level of nearly continuous and excessive stress can rapidly accelerate when caregivers perceive that there is insufficient time or limited resources to properly care for patients. Until recently, the critical care community was relatively unaware of the harmful effects of working in a stressful ICU environment, including the development of BOS and other psychological disorders (3-10). Unfortunately, critical care health-care professionals have one of the highest rates of BOS (i.e., >50%) (11), and development of this disorder may adversely affect the ability to care for patients properly.

The Critical Care Societies Collaborative (CCSC) comprises four major US professional and scientific societies: the American Association of Critical-Care Nurses, the American College of Chest Physicians, the American Thoracic Society, and the Society of Critical Care Medicine. The CCSC convened a working group to acknowledge the importance of BOS and other psychological disorders in critical care health-care professionals and to publish a document in the society's four major journals that would focus attention on this issue. The primary objectives of the present commentary were to: (1) summarize the available literature regarding the diagnostic criteria, prevalence, causative factors, and consequences of BOS and related conditions, (2) raise awareness of BOS within the critical care community, and (3)inform multiple stakeholders of their potential roles in reducing BOS and its deleterious consequences in health-care professionals and their critically ill patients.

We searched the Cochrane Library and Medline by using PubMed for published research relevant to BOS. A variety of search terms were entered, including (but not limited to) the following: "burnout syndrome," "critical care," "nursing," "posttraumatic stress disorder," "moral distress," "resiliency," and "mindfulness." Search terms were grouped together and individually cross-matched.

Pertinent review articles, editorials, books, and references from identified articles were also reviewed. We preferentially selected publications from the past 10 years but also included commonly referenced or highly regarded older publications.

## What Is BOS?

First described in the 1970s, BOS is a workrelated constellation of symptoms and signs that usually occurs in individuals with no history of psychological or psychiatric disorders (12). BOS is triggered by a discrepancy between the expectations and ideals of the employee and the actual requirements of his or her position. Symptoms of BOS typically develop gradually and are usually absent when entering a new type of employment. In the initial stages of BOS, individuals feel emotional stress and increasing job-related disillusionment (13). They subsequently lose the ability to adapt to the work environment and display negative attitudes toward their job, their coworkers, and their patients. Eventually, the three classic symptoms of BOS develop: exhaustion, depersonalization, and reduced personal accomplishment (14). Exhaustion is generalized fatigue that can be related to devoting excessive time and effort to a task or project that is not perceived to be beneficial. For example, a feeling of exhaustion, particularly emotional exhaustion, may be caused by continuing to care for a patient who has a very poor chance of recovery. Depersonalization is a distant or indifferent attitude toward work. It manifests as negative, callous, and cynical behaviors or interaction with colleagues or patients in an impersonal manner. Depersonalization may be expressed as unprofessional comments directed toward coworkers, blaming patients for their medical problems, or the inability to express empathy or grief when a patient dies. Reduced personal accomplishment is the tendency to negatively evaluate the worth of one's work, feeling insufficient regarding the ability to

perform one's job, and a generalized poor professional self-esteem.

Individuals with BOS may also develop nonspecific symptoms such as feeling frustrated, angry, fearful, or anxious (Table 1). They may also express an inability to feel happiness, joy, pleasure, or contentment. BOS can be associated with physical symptoms, including insomnia, muscle tension, headaches, and gastrointestinal problems. BOS is most commonly diagnosed by using the Maslach Burnout Inventory (MBI) (14). The MBI is a 22-item, self-report questionnaire that asks respondents to indicate on a seven-point Likert scale the frequency with which they experience certain feelings related to their job. The MBI is scored according to the presence and severity of emotional exhaustion, depersonalization, and reduced sense of personal accomplishment. Individuals are diagnosed with BOS if they exceed a cutoff value on the MBI. However, accurate cutoff values for critical care healthcare providers have not been determined. As a result, the diagnostic criteria for BOS vary across studies, making comparisons difficult from one study to another.

Other conditions may overlap with BOS, including moral distress, perceived delivery of inappropriate care, and compassion fatigue (also called secondary traumatic stress) (9, 15–19). Moral distress occurs when an individual knows the ethical and appropriate action to take but feels constrained from enacting the specific action. Moral distress may be related to internal constraints such as self-doubt, anxiety about creating a conflict, and a lack of confidence. Moral distress may also be

**Table 1.** Symptoms Associated withBurnout Syndrome

Psychological	Physical
Symptoms	Symptoms
Frustration Anger Fear Anxious Inability to feel happy Being unprofessional Feeling overwhelmed Disillusionment Hopelessness Lack of empathy Feeling insufficient at work	Exhaustion/Fatigue Insomnia Muscle tension Headache GI problems

related to external constraints such as imbalances in perceived power (e.g., between a nurse and a physician), inadequate communication strategies, and pressure to reduce costs or avoid legal ramifications. Clinicians consider care to be inappropriate when it is not aligned with their personal beliefs or professional knowledge. Examples of perceived inappropriate care include: (1) differences in the amount of care given and the expected prognosis (either too much or too little care), (2) caring for patients who are persistently noncompliant, (3) holding the belief that other patients would benefit more from ICU care, (4) delivering inaccurate information to a patient or family, (5) not respecting the expressed wishes of a patient, and (6) delivering medical or nursing care believed to be of inadequate quality (9). Compassion fatigue is characterized by a gradual reduction in compassion over time that results from a cumulative and persistent desire to help suffering patients; it is sometimes referred to as "the cost of caring." Moral distress, delivery of inappropriate care, and compassion fatigue occur in critical care health-care professionals. For example, the perception of inappropriate care occurs in 25% of critical care nurses and 32% of critical care physicians.

#### Prevalence of BOS in Critical Care Health-care Professionals

Based upon multiple studies, approximately 25-33% of critical care nurses manifest symptoms of severe BOS, and up to 86% have at least one of the three classic symptoms (6, 10, 20-23). Compared with other types of nurses, critical care nurses more commonly experience BOS (5, 24). In critical care nurses, the most common symptom of BOS is emotional exhaustion (73%), followed by a lack of personal accomplishment (60%) and depersonalization (48%) (20). The prevalence of BOS in critical care nurses also varies across certain ICUs; nurses who reported the highest prevalence of BOS among their colleagues were also more likely to have BOS themselves. Therefore, units with a negative working culture might harbor a "contagion effect" among its employees (25). The relative shortage of critical care physicians and the demands for overnight ICU coverage have increased

the awareness and recognition of BOS among physicians (5). BOS is common in critical care physicians as well (7, 26-30). Up to 45% of critical care physicians reported symptoms of severe BOS (7, 28). In pediatric critical care physicians, the prevalence of BOS is 71%, more than twice the rate in general pediatricians. Compared with other types of physicians, critical care physicians have the highest prevalence of BOS, followed closely by emergency medicine physicians (11). There is a paucity of data on the prevalence of BOS in other critical care health-care professionals, such as social workers, and respiratory, physical, occupational, or speech therapy health-care professionals (31). In one study, nursing assistants were more likely to have BOS compared with other types of critical care health-care professionals (8).

## **Risk Factors for BOS**

The ability to determine the temporal relationship between the majority of risk factors and the development of BOS is hampered by the cross-sectional design of most previous studies. Risk factors associated with BOS can be divided into four categories: (1) personal characteristics, (2) organizational factors, (3) quality of working relationships, and (4) exposure to end-of-life issues (Figure 1) (10). Personal characteristics associated with BOS include being self-critical, engaging in unhelpful coping strategies, sleep deprivation, and a work-life imbalance (32). Other personal risk factors associated with BOS are idealism, perfectionism, and overcommitment; these qualities often occur in the best and most productive employees. Certain personality types, such as neurotic individuals, also reportedly have higher rates of BOS; extraverted, conscientious, and agreeable individuals, conversely, are less likely to demonstrate symptoms of BOS (33). Burnout was once thought to be a late-career phenomenon, but studies suggest that younger physicians have nearly twice the prevalence of BOS compared with older colleagues and that onset may occur as early as residency training (34). Similarly, younger age is an independent risk factor for BOS among ICU nurses (10). However, older health-care professionals who have not developed BOS may be those who remained in the work force and are therefore

overrepresented in cross-sectional studies. Having an inadequate support system outside of the work environment (e.g., having no spouse, partner, or children) has also been associated with high rates of BOS (8, 20, 35).

In general, organizational factors associated with BOS include: (1) increasing workload, (2) lack of control over the work environment, (3) insufficient rewards, and (4) a general breakdown in the work community (12). Organizational factors that are associated with BOS seem to differ between critical care nurses and physicians. For critical care nurses, the inability to choose days off, rapid patient turnover, and the lack of participation in an ICU working group are all factors associated with BOS (5, 10). For critical care physicians, the amount of work (defined as number of night shifts per month and time since the last nonworking week) was associated with the presence of BOS (7). For example, weekend coverage schedules affect the risk of BOS. Compared with having weekend coverage by another physician, working a continuous 14-day period of direct patient care was associated with increased symptoms of BOS (36). Having to make ethical decisions was also associated with higher rates of BOS for physicians. In contrast to nurses, physicians may less frequently experience moral distress, most likely because physicians are responsible for making the patient care decisions. In both nurses and physicians, problems with the quality of working relationships were common risk factors for BOS, including conflicts and poor working relationships with colleagues (5, 6). This issue is an important and potentially modifiable risk factor because measures to improve communication and reduce conflict among critical care health-care professionals can enhance relationships. Another significant source of stress is the strained relationships between health-care professionals and patients and their families.

Finally, factors related to end-of-life issues are commonly reported risk factors in nurses, including caring for a dying patient and participating in or witnessing decisions to forego life-sustaining treatments. As a result, higher unit-specific mortality rates have been associated with increased rates of BOS in critical care health-care professionals (8). Another often-minimized factor underlying the risk for BOS is the nearly inevitable consequence of extended shift work: sleep disruption. This condition

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Figure 1. Risk factors associated with burnout syndrome. ICU = intensive care unit.

may take the form of insufficient sleep quantity and/or quality, or even inadequate sleep recovery, the latter requiring periods of sleep after night shifts more extensive than would normally be the case when working normal daytime schedules (36–39). Other unit-based factors that are associated with increased rates of BOS include working in a university hospital setting and in a pediatric critical care unit (8).

## **Consequences of BOS**

BOS in critical care health-care professionals may result in posttraumatic stress disorder (PTSD), alcohol abuse, and even suicidal ideation (26). Although alcohol and substance abuse were not specifically studied in critical care providers, physicians have higher rates of these problems compared with the general adult US population (11, 29). PTSD is manifest by intrusion, avoidance, negative alterations in cognitions and mood, and marked alterations in arousal and reactivity. PTSD can occur in response to one catastrophic event or after chronic or repetitive exposure to traumatic episodes. Between 22% and 29% of critical care nurses have symptoms of PTSD, and up to 18% of critical care nurses meet the

diagnostic criteria for PTSD (20, 21, 40). In addition, almost all of the nurses (98%) with PTSD will also have symptoms consistent with BOS (20). ICU work-related triggers associated with PTSD include: participation in end-of-life issues, feeling overextended, caring for combative patients or family members, visualizing open wounds or massive bleeding, and providing postmortem care (40–42).

Many factors influence the decision of a health-care professional to leave his or her current position. For example, working in a pediatric unit, a government-owned hospital, or a hospital in a metropolitan area is favorably associated with lower rates of nursing turnover (43). However, the presence of BOS affects a health-care professional's decision to leave the profession (44). Excessive turnover rates increase healthcare costs, decrease productivity, lower staff morale, and reduce the overall quality of care because experienced professionals who leave the ICU must be replaced (45-47). Turnover occurs frequently in ICU nurses, with reported annual rates ranging between 13% and 20% (the 2013 US average annual turnover rate for all types of employees was 10.4%) (45, 48). In one survey, 41% of all nurses were not satisfied with their job, and 22% planned to leave their profession. When asked why they were considering

leaving the nursing profession, 56% desired a less stressful position (49). Based on national survey data, the total cost of replacing one critical care nurse is estimated to be more than \$65,000 (50). Therefore, at a medium-sized hospital with 40 ICU beds employing 100 ICU nurses with an annual turnover rate of 17%, the hospital's cost related to ICU nursing turnover would be approximately \$1,105,000 per year. In general, physicians with BOS are more likely to leave their practice and therefore potentially decrease access and continuity of care for patients. Recently, the total cost of burnout among Canadian physicians was estimated to be more than \$200 million (51). In the United States, replacement costs have been estimated to be at least \$250,000 for each primary care physician, an amount that may be even higher for critical care physicians (52).

BOS also results in decreased effectiveness and poor work performance, which have a direct impact on patient care. BOS in nurses is associated with reduced quality of care, lower patient satisfaction, increased number of medical errors, higher rates of health-care-associated infections, and higher 30-day mortality rates (53, 54). A national study reported that 9% of physicians had made a major medical error in the last 3 months (55). In studies of primarily physicians, there were strong dose-response relationships between burnout scores and medical errors. These errors appear to occur in a bidirectional manner: errors lead to distress, and distress leads to errors (34, 56). After a medical error, physicians may experience significant job-related stress, including anxiety about future errors, loss of confidence, sleeping difficulties, reduced job satisfaction, and perceived harm to their reputation (57). Therefore, strategies that reduce medical errors may also decrease moral distress and BOS in health-care providers. Additionally identifying strategies that reduce BOS and turnover in critical care professionals would likely have important effects on quality of care and health-care costs.

# Interventions to Prevent or Treat BOS

Currently, there are no large randomized controlled trials that have examined

strategies to prevent or treat BOS in critical care health-care professionals. Potential strategies that may prevent and treat critical care-related BOS can be divided into two categories: (1) interventions focused on enhancing the ICU environment, and (2) interventions focused on helping individuals cope with their environment. It is unlikely that any single intervention will be effective in preventing and treating BOS in critical care health-care professionals; rather, multidimensional interventions that address the ICU environmental culture and individual practitioner level are more likely to successfully prevent and treat BOS. The benefit of any potential BOS intervention needs to be weighed against the costs associated with its implementation and maintenance.

Establishing and sustaining a healthy work environment that fosters respect may be one key strategy to combat stress and BOS in the ICU working environment (58, 59). Based on a report from the American Association of Critical-Care Nurses, six standards are needed to establish and sustain a healthy work environment: (1) skilled communication, (2) true collaboration, (3) effective decision-making, (4) appropriate staffing, (5) meaningful recognition, and (6) authentic leadership (60). Additional commonly recognized tenets of a healthy ICU environment include "avoiding or managing conflicts" and "improving end-of-life care." Communication, collaboration, and effective decisionmaking during times when emotions are elevated are critical in engaging the team to decrease stress and BOS. A healthy work environment may be enhanced by utilizing team debriefings, structured communication, and collaborating with team members on critical decisions (5, 20, 41, 61).

Critical care health-care professionals should be taught how to recognize the risk factors for BOS and how to seek assistance when needed (20). Health-care professionals should consider taking individual accountability for maintaining their own emotional and physical health, and for building resiliency. Resiliency is a multidimensional characteristic that allows an individual to thrive when faced with complexity and high rates of change (21, 62). Building resilience requires a variety of interventions based on individual preferences. The foundation for resilience is adequate self-care, ensuring adequate rest, spiritual practices, exercise, meditation, and hobbies outside of the work environment (5, 18, 20, 41, 59). Additional strategies such as setting limits, establishing a work-life balance, and employing time management skills and stress reduction measures may also be beneficial in mitigating the risk of BOS (63). Among critical care physicians and nurses, interdisciplinary discussions that encourage ethical team deliberations may be useful in preventing BOS (64). Other potentially beneficial strategies that have been effectively used to prevent BOS and PTSD in other settings include support groups, cognitive-behavioral therapy, and mindfulness-based stress reduction programs (Table 2) (5, 18, 41, 59, 65). Promoting family care conferencing within 72 hours of ICU admission to enable discussion of prognosis and treatment goals is now advocated for critically ill patients, including those with severe sepsis and multiple organ system failure (66). These measures, as well as use of palliative care and ethics consultations, may mitigate moral distress in ICU clinicians, a potential mediator in the development of BOS. More research is needed to identify specific interventions that prevent and treat BOS and other psychological disorders in critical care health-care professionals.

## A Call for Action

There are more than 10,000 critical care physicians and 500,000 critical care nurses who practice in the United States (67). Much of the previous BOS-related literature has focused on the disorder's negative consequences as they correspond to patient-centric outcome measures, including patient safety, satisfaction, and quality of care. However, promoting wellness in health-care providers is also essential (34, 68). Protecting the mental and physical health of health-care professionals who are at risk for BOS should also be vitally important to the same group of stakeholders. This section provides advice for these stakeholder groups; suggestions are also included regarding ways to mitigate the development of BOS in critical care health-care professionals and diminish the harmful consequences of BOS, both for

critical care health-care professionals and for patients.

#### Critical Care Health-care Professionals and Their Friends and Family

Critical care health-care professionals have an important voice and should be involved in promoting their own wellness. Each critical care health-care professional should be personally responsible for managing their own BOS symptoms and related consequences. They should be able to recognize the features of BOS and to access currently available resources. Similarly, friends and family members of critical care health-care professionals should also become aware of early symptoms and understand BOS and its consequences.

#### **ICU Unit-based Leaders**

ICU nurse managers, medical directors, and other unit-based administrators need to be aware of the high prevalence of BOS and

**Table 2.** Potential Interventions toPrevent and Treat Burnout Syndrome inthe ICU

Environmental interventions

- Promoting healthy work environment Communication training; appropriate
  - staffing; meaningful recognitionICU self-scheduling/time off
  - Limit the maximum number of days
  - Elinit the maximum number of days worked consecutively
     Support groups
  - Support groupsCognitive-behavioral therapy
- Team-based interventions
  - Team debriefings
  - Leam debriefings
- Use of structured communication tools
   Team-building and interpersonal skills training

Practitioner-focused interventions

- Stress reduction training
- Relaxation techniques
- Time management
- Assertiveness training
- Meditation
- Work-life balance measures: hobbies, family, and social activities
- Self-care measures: ensuring adequate rest, exercise, healthy eating habits
- Interventions to mitigate risk factors • Palliative care consultations
- Ethics consultations
- Establishing goals of care for every ICU patient
- Family care conferencing within 72 h of ICU admission

Definition of abbreviation: ICU = intensive care unit.

other psychological disorders in their employees. ICU nurse managers and medical directors can empower their colleagues to participate in the oversight of the unit, recognize exemplary efforts, and strive to create a healthy work environment. In addition, managers should develop innovative staffing models that promote effective time away from the critical care environment. Collectively, ICU teams should improve their ability to function as a group, respect each other, and reduce triggers of BOS. Similarly, ICU leaders should implement programs that identify and manage employees with BOS. Measures of BOS or potential other surrogate outcomes should be benchmarked and compared across ICUs and medical centers. Based on a 2011 Joint Commission Sentinel Event Alert report, "The link between health care worker fatigue and adverse events is well documented, with a substantial number of studies indicating that the practice of extended work hours contributes to high levels of sleep deprivation and reduced productivity." (69) Consequently, nap opportunities strategically timed among high-intensity and potentially fatigued teams may provide unique reductions in BOS risk (70).

## **Hospital Administrators**

Due to financial implications and effects on patient-centered outcomes, hospital administrators have prioritized reducing turnover rates (71). More information is needed regarding the cost of BOS that occurs in all critical care health-care professionals (nurses, physicians, and others members of the multidisciplinary team). Hospital administrators should consider the reduction in turnover rates as an important quality metric of providing a successful work environment; they should also monitor job satisfaction and rates of BOS in their employees. Hospitals should provide assistance programs for employees with (or at risk for) BOS and other psychological disorders such as PTSD. Finally, hospitals or clinical practices should consider limiting the number of consecutive days that a critical care health-care professional works, while promoting healthy sleep habits and the importance of sleep recovery.

### **Funding Agencies**

Despite the impact of BOS on health-care professionals and their patients, research in this area is grossly underfunded. Based on a

2015 NIH RePORTER search (72), only two grants are currently funded to study BOS in health-care professionals, and neither is focused on the critical care setting. The ICU is a unique environment to study BOS because of the high prevalence of symptomatic health-care professionals and the unique work-related triggers. Funding agencies such as the National Institutes of Health are encouraged to develop requests for applications that will enhance critical care health-care professionals' understanding of the following: the epidemiology of BOS, BOS criteria, and cutoff values that accurately diagnose this disorder; preventative and therapeutic interventions; and appropriate and measurable outcome variables. In addition, research is needed to understand the relationship between moral distress, the delivery of inappropriate care, compassion fatigue, and BOS.

#### **Professional Societies**

One key function of professional societies is to educate and inform their members. These educational initiatives typically focus on disseminating new medical knowledge, updating health-care policies, and teaching new practice strategies. Professional societies should educate members about BOS and other psychological disorders that impair the mental and physical health of their members, reduce the quality of care of their patients, and may deter trainees from entering their specific field. Similarly, accreditation and Maintenance of Certification groups should develop educational materials to raise awareness of BOS and its consequences.

#### Academic Institutions Training the Next Generation of Health-care Professionals

Academic institutions play an important role in career counseling. Students and postgraduate trainees should pursue positions and specialties in which they are most likely to be successful. However, the recruitment of students and postgraduate trainees into specialties perceived to have high levels of stress is declining (52). Career counselors could improve the preparation of trainees for their career choices and create more fulfilling and lasting careers. Therefore, academic institutions are encouraged to develop or expand their direct counseling or didactic education sessions so that students and postgraduate trainees are better prepared for the stresses inherent to their profession. In addition, academic institutions should educate students and postgraduate trainees on effective coping mechanisms to ensure more successful careers. Furthermore, critical care fellowships should include in their curriculum education regarding the recognition, prevention, and treatment of BOS and associated psychological disorders.

## Patient Advocacy Groups

The focus of patient advocacy groups is on raising awareness, influencing policy, stimulating research, and improving the care of patients with specific disorders. Due to the negative effects of BOS on patient-centered outcomes, patient advocacy groups should be interested in improving the ability of health-care professionals to effectively care for patients. These groups should develop educational programs for critically ill patients and their families to inform them about BOS in healthcare professionals. They may also develop patient and family educational programs to teach individuals how to effectively interact with critical care health-care professionals and reduce the patient and family triggers associated with BOS. In addition, patient advocacy groups could help raise awareness about BOS and advocate for increased funding that may ultimately improve patient and family satisfaction, as well as the outcomes of critically ill patients.

## **Policy Makers**

Due to the increasing budgetary pressures on health care, government officials and other policy makers have prioritized the discovery of novel methods to produce better health outcomes at lower costs. Due to the deleterious impact of BOS on the job satisfaction of critical care health-care professionals, health-care costs, and quality of care, international and national policy makers should work with a variety of stakeholders to shape the laws and regulations that will reduce BOS in critical care health-care professionals, improve the quality of patient care, and decrease health-care costs (e.g., those associated with turnover).

## Conclusions

On behalf of the CCSC, this call to action hopefully enhances the critical care

community's interest in reducing the prevalence of BOS and other psychological disorders in health-care professionals. Our colleagues are encouraged to be more vocal on this important issue and strive to create a healthy work environment in the ICU. The CCSC will continue to working diligently to increase awareness, educate our community, enhance research opportunities, implement strategies that enhance job satisfaction, and improve the mental health of critical care health-care professionals. Collectively, healthy ICU work environments need to be created that ultimately and, most importantly, improve patients' quality of care.

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