A call to action

Improving clinician wellbeing and patient care and safety

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Stakeholder engagement

This project was informed by a multi-stakeholder Advisory Committee made up of representatives from public and private organizations. This brief was also informed by interviews with state and national subject matter experts listed below:

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This brief builds on the work of the **National Academy of Medicine's Action Collaborative on Clinician Well-Being and Resilience**. The Action Collaborative's recent report, *Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being*, informed the development of this brief and is referenced throughout.

Download the full report and access the resource page at
www.hpio.net/a-call-to-action/

Note: **Blue, bolded text** throughout this report indicate hyperlinks in the electronic version

Overview

A growing body of research indicates that healthcare clinicians are facing serious problems related to their overall health and wellbeing. This includes experiencing relatively high rates of burnout, depression, addiction and suicide.

Poor wellbeing also impacts a clinician's ability to provide high-quality care by increasing medical errors and unsafe prescribing behaviors, decreasing empathy and compromising patient-centered interactions. At the same time, when care and treatment do not go as planned, clinicians face trauma and despair that threatens their health.

This brief serves as a call to action to improve clinician wellbeing and its impacts on patient care and safety, providing a:

- Framework for the relationship between clinician wellbeing and patient care and safety
- Summary of research findings
- Review of evidence-informed policies, programs and practices that improve clinician wellbeing and support high-quality, safe patient care
- Set of evidence-informed state policy options

Focus of this brief

The term "clinician," used throughout this brief, includes members of the healthcare team that provide direct patient care. Much of the research on clinician wellbeing in the United States focuses on physicians, with emerging research on nurses, pharmacists and clinicians in educational or residency programs (health professional students). Far fewer research studies have focused on the health and wellbeing of other clinicians. Because of these gaps in research, this brief focuses primarily on findings for physicians, nurses and pharmacists. However, findings from this brief can also be applied to other clinicians within the healthcare team.

Throughout the literature, the terms "wellbeing," "wellness" and "health" are used to describe clinician wellbeing. Each of these terms are used throughout this brief.

In addition, this brief focuses on state-level policies, programs and practices that can improve clinician wellbeing. Much of the data and information provided in this brief is derived from national research studies and findings. When possible, Ohio-specific data or programs are also highlighted.

3 key takeaways for state policymakers and healthcare leaders

1. **There is a bidirectional relationship between clinician wellbeing and patient care and safety** (see figure 1). There are also mediating factors that impact clinician and patient outcomes.
2. **Clinicians face serious problems related to their overall health and wellbeing,** including high rates of burnout, depression, addiction and suicide. This contributes to poor patient outcomes and is associated with high costs due to increased clinician absenteeism, presenteeism, turnover and lost productivity.
3. **Improving outcomes for clinicians and health professional students requires a comprehensive approach that provides a continuum of prevention, treatment and recovery supports.** This includes establishing a positive organizational culture that supports wellness, implementing evidence-informed policies and programs and improving access to mental health and addiction treatment and recovery supports.

Inside

What is the relationship between clinician wellbeing and patient care and safety?

Understanding the relationship between clinician wellbeing and patient care and safety enables state policymakers and healthcare leaders to allocate resources, implement programs and develop policies that effectively improve both clinician and patient outcomes.

Figure 1 outlines a bidirectional relationship between clinician wellbeing and patient care and safety:

1. Improving clinician wellbeing, including preventing and treating burnout, mental health conditions and addiction, improves patient care and safety.
2. Improving patient care and safety, including decreasing rates of medical errors and adverse patient events, improves clinician wellbeing.

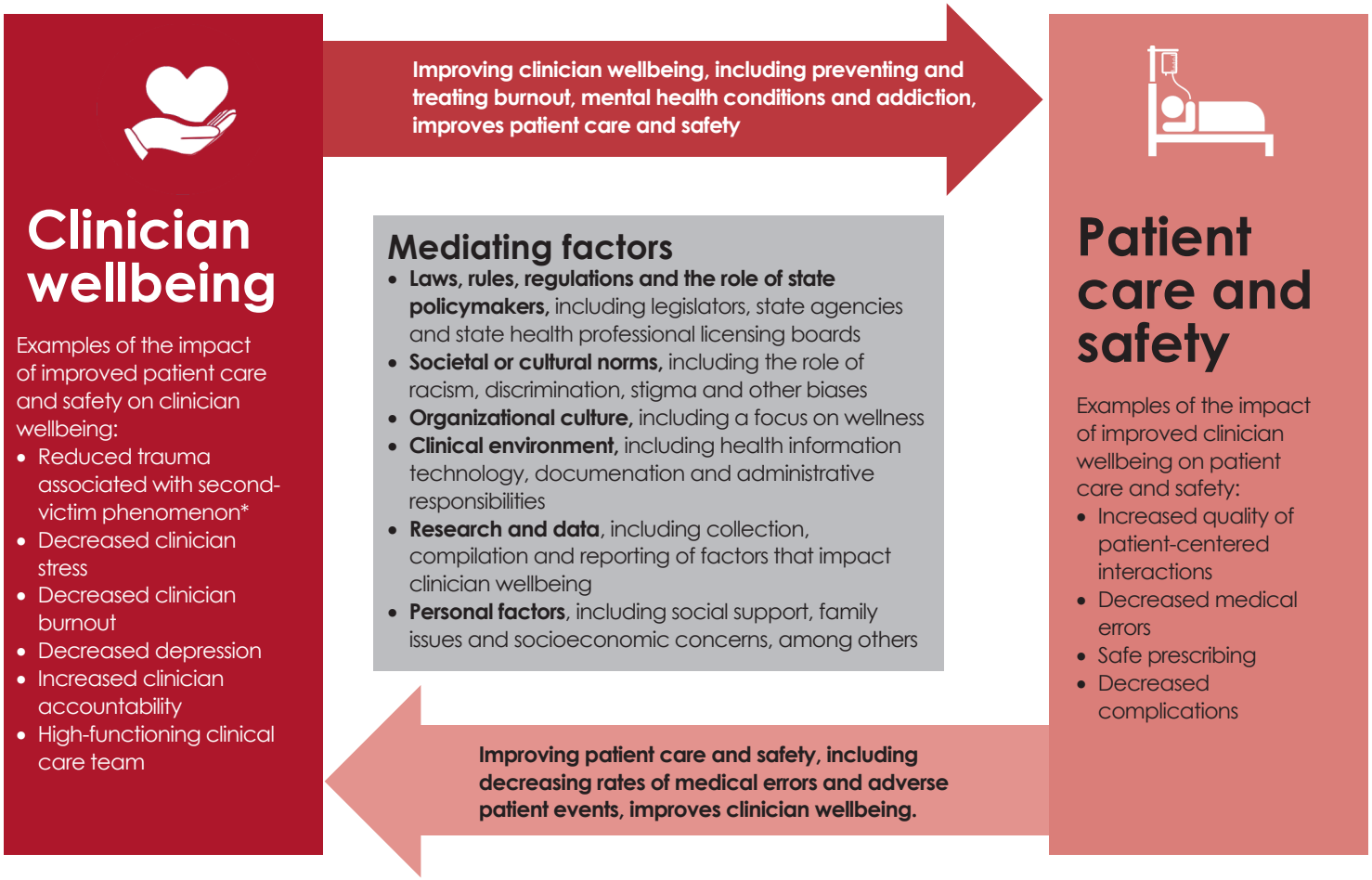
Impact of clinician wellbeing on patient care and safety

Overall wellbeing, including mental, physical, social and emotional health, impacts a clinician's performance. Poor wellbeing impacts a clinician's ability to provide high-quality care by increasing medical errors and unsafe prescribing behaviors, decreasing empathy and compromising patient-centered interactions.

Burnout

Burnout is a severe type of work-place stress characterized by emotional exhaustion, cynicism and a reduced sense of personal accomplishment.[4] Research identifies burnout as a significant threat to safe, high-quality patient care, leading to decreased work effectiveness and performance among clinicians, an increase in medical errors and decreased patient satisfaction.[5]

Figure 1. **The relationship between clinician wellbeing and patient care and safety**



*Second victim phenomenon: Psychological trauma endured by clinicians after being involved in an adverse event (Stehman, et al, 2019)
Note: Framework informed by literature review conducted by the Health Policy Institute of Ohio and the National Academy of Medicine Action Collaborative on Clinician Well-Being and Resilience's *Factors Affecting Clinician Well-Being and Resilience – Conceptual Model* (2018).

Much of the research on burnout focuses on its link to increased medical errors among clinicians:

- A 2018 study published in *Mayo Clinic Proceedings* showed that physicians, across specialties, who showed signs of burnout were 2.2 times more likely to report a perceived medical error.[6] The findings suggest burnout, poor wellbeing and perceptions of poor safety are associated with major medical errors.[7]
- A 2012 study published in the *American Journal of Infection Control* found that high nurse burnout was associated with a higher rate of patient infections.[8]

In addition to being harmful to the clinician and a threat to patient care and safety, burnout is expensive for hospitals and health systems. A 2019 cost-consequence analysis, published in the *Annals of Internal Medicine*, found that turnover associated with physician burnout can cost an organization approximately $7,600 per physician, per year.[9]

Depression

Depression in clinicians is associated with poor patient care.[10] Several studies have demonstrated that clinicians experiencing depression are more likely to make medical errors. Sometimes these medical errors are due to presenteeism, which is when workers are physically present at work but are not functioning to the best of their abilities due to their mental or physical health. For example:

- Of the physicians surveyed by Medscape for the *National Physician Burnout, Depression and Suicide Report 2019*, 35% of physicians who are depressed say they are easily exasperated with patients, 26% say they are less careful with patient notes and 14% say they make errors they might not normally make.[11]
- A 2018 cross-sectional survey of U.S. nurses, which described the relationship between nurses' health and medical errors, found that nurses with poor health have a 26% (at best) to a 71% (at worst) higher likelihood of making medical errors.[12] The study found depression to be the strongest predictor of medical errors.[13]
- A 2017 prospective longitudinal study observed resident interns from 55 universities throughout the U.S. and found that depressive systems among interns was strongly linked to presenteeism.[14] The study estimated that, across all residents working in the U.S., depression-related presenteeism adds an additional $1,226,142,642 to U.S. healthcare costs.[15]
- A 2016 literature review found that depression among registered nurses is linked to increases in presenteeism, and nurses who report presenteeism are more likely to report more medication errors, patient falls and overall poorer quality of patient care.[19]
- A 2010 study from the Mayo Clinic, which surveyed over 7,900 American surgeons, showed depression was among the strongest factors associated with reporting a major medical error.[20]

Addiction and substance use

State regulatory boards frequently take disciplinary action against clinicians for substance use that impairs their ability to practice. Ohio-specific data is highlighted below to indicate the scope of this issue.

As of June 30, 2019, the State Medical Board of Ohio (SMBO) regulates 88,039 active licenses.[21] In state fiscal year (SFY) 2019, the SMBO initiated disciplinary action against 135 clinicians. The largest percent of these disciplinary actions (27%) were on the basis of clinician impairment (i.e., "habitual or excessive use or abuse of drugs, alcohol or other substances that impair ability to practice").[22] Impairment has been the most common reason for disciplinary action through the SMBO over the past five years (see figure 2).

For clinicians licensed through the Ohio Board of Nursing, 750 complaints (10%) were made on the basis of drug or alcohol use in SFY 2019.[23] Additionally, the Ohio Board of Pharmacy opened 249 new disciplinary cases on the basis of theft of drugs, 206 for deception to obtain dangerous drugs, 133 for questionable prescribing and 58 for questionable dispensing in SFY 2019.[24] Details

Burnout, racism and discrimination

Research suggests that a clinician's empathy, compassion and professionalism may be compromised by burnout.[16] The negative emotional state associated with burnout can increase a clinician's expression of racial prejudice towards their patients, impacting the quality of care they provide.

A 2019 study published in *JAMA Network Open* followed U.S. medical students and resident physicians from 2010 through 2017. Among resident physicians, symptoms of burnout were associated with greater racial bias, specifically in non-black physicians toward black patients.[17] Other studies have shown non-black physicians with higher bias toward black patients have fewer patient-centered interactions, leading to distrust and non-adherence to treatment among their black patients.[18]

Figure 2. **Top reasons for disciplinary action, State Medical Board of Ohio, state fiscal year (SFY) 2015-2019**

Top reasons for disciplinary action	SFY 2019 (n=135)	SFY 2018 (n=114)	SFY 2017 (n=165)	SFY 2016 (n=200)	SFY 2015 (n=156)
Impairment (e.g., due to drugs, alcohol, or other substances)	27%	32%	28%	25%	35%
Prescribing issues	25%	27%	19%	20%	19%
Criminal acts/convictions	17%	8%	14%	13%	12%
Actions by other boards or agencies	12%	10%	10%	8%	11%

Note: Impairment for the State Medical Board of Ohio is defined in the Ohio Revised Code as "...impairment of ability to practice according to acceptable and prevailing standards of care because of habitual or excessive use or abuse of drugs, alcohol, or other substances that impair ability to practice."
Source: State Medical Board of Ohio, 2019 Annual Report

of these claims, such as whether questionable prescribing was for personal use, are not publicly available.

Impact of patient care and safety on clinician wellbeing

Clinicians who provide direct patient care face intense individual, organizational and social pressures not to make mistakes. The mental health and wellbeing of clinicians is at stake when they do not have adequate support from their employers to cope with adverse events, including medical errors, that arise in the healthcare setting. Two examples of how this can manifest are described below.

Second victim phenomenon

Poor patient care and safety have emotional consequences for clinicians, which impacts their overall health. The term "second victim" describes a clinician who suffers emotionally when the care they are involved in results in harm to the patient, or the clinician is involved in an adverse event.[25] Potential emotional consequences of second victim include anxiety, depression, decreased confidence, consideration of leaving their profession and suicidal ideation.[26] For example, a 2011 study of 7,905 U.S. surgeons found the perception of having made a medical error was strongly associated with suicidal ideation.[27] Second victim can be both a cause and a consequence of burnout.[28]

Compassion fatigue

The day-to-day responsibilities involved with caring for patients, especially those who are suffering, can be highly emotional. "Compassion fatigue" is the secondary traumatization a caregiver endures as a result of continuous exposure to emotional and interpersonal stress involved with patient care.[29] It is a well-documented problem among clinicians, particularly in emergency and critical care environments, that contributes to poor clinician wellbeing and often co-exists with burnout.[30] Further, compassion fatigue is associated with clinician retention problems.[31]

Mediating factors

There are also a number of mediating factors that impact clinician wellbeing and patient care and safety highlighted in figure 1. These include:

- **Laws, rules, regulations and the role of policymakers**, including legislators, state agencies and health professional licensing boards. A state's policy landscape can determine whether a comprehensive approach to improving clinician wellbeing can be achieved.
- **Societal or cultural norms**, including the role of stigma, racism, discrimination and other biases. These factors impact systemic, institutional and individual drivers of poor clinician wellbeing.
- **Organizational culture**, including leadership, values, policies and practices. A healthcare organization's culture is shaped by its leadership and is influenced by both internal and external factors (policies and practices, laws and regulations, societal norms).

- **Clinical environment**, including health information technology, documentation and administrative responsibilities and workforce staffing practices. These factors impact a clinician's workload and work-life balance.
- **Research and data**, including collection, compilation and reporting of factors that impact clinician wellbeing. Policymakers, healthcare organizations and academic institutions need reliable data to accurately identify problems and develop effective solutions.
- **Personal factors**, including social support, family issues and socioeconomic concerns. Each clinician has unique experiences, circumstances and responsibilities beyond their professional role that impact their overall wellbeing.[32]

Mediating factor examples

Approaches to improving clinician wellbeing must consider the influence of mediating factors, both individually and in combination. Examples of mediating factors that are often discussed in the research and that can be barriers to improved clinician wellbeing are highlighted below.

The role of stigma cuts across all factors that impact clinician wellbeing. Stigma among clinicians, healthcare organizations, academic institutions and state policymakers impacts perceptions of clinician mental health and wellbeing. In doing so, stigma serves as a barrier to a comprehensive approach to improving clinician mental health and wellbeing.

For example, an important aspect of clinician wellbeing is making sure clinicians can ask for and receive help for a mental health condition. Generally, clinicians are not educated or prepared to care for their own mental health, or to ask for help when they are struggling.[33] The stigma of clinician mental health conditions, which begins in the educational environment, may deter clinicians from asking for help or accessing care. Further, clinicians may choose not to seek help or access treatment out of fear of personal or professional consequences.

Longer shift lengths are associated with poor clinician wellbeing, burnout and poor patient outcomes.[34] Increased fatigue, errors, adverse events/outcomes and burnout have been associated with shifts that exceed 8 hours.[35] Shifts longer than 12 hours have been shown to negatively affect nurses' health and result in lower-quality patient care.[36] Research has shown, however, that flexibility and choice in shift length can contribute to a positive work environment.[37] While there is not consensus in the research on a "one size fits all" shift length that best supports both clinician wellbeing and patient care and safety, considering all of these factors in the creation of shift length policies can positively impact clinician wellbeing.[38]

Health information technology, including the use of electronic health records (EHRs), is associated with burnout among clinicians.[39] A 2016 study published in *Annals of Internal Medicine* found that for every hour physicians have direct face time with patients, almost two hours is spent on the EHR and administrative work.[40] Further, clinicians may spend up to two hours of personal time each night on documentation and clerical responsibilities.[41]

While research has shown use of EHRs takes away time spent with patients and contributes to burnout, there are also documented benefits.[42] For example, the use of health information technology has the potential to improve the quality and safety of patient care.[43] Taking all this into consideration is important in addressing clinician wellbeing and patient care and safety.

Figure 3. **Consequences of burnout for clinicians**

Physical consequences	Psychological consequences
• Exhaustion • Fatigue • Inattentiveness • Irritability • Risk of motor vehicle accidents	• Stress • Substance abuse • Disruptive behavior • Mood disorders • Depression • Suicidal ideation

Source: Adapted from Patel, Rikinkumar S.,et.al. "Factors related to physician burnout and its consequences: A review." *Behavioral Sciences* 8, no. 11 (2018): 98.

What is the scope of the problem?

Clinicians are at a high risk for burnout and emotional exhaustion, leading to depression, addiction and other mental health conditions that negatively impact wellbeing and increase risk for suicide. At the same time, poor clinician wellbeing contributes to an increased risk for medical errors and other adverse patient events. A 2016 analysis estimated medical errors as the third leading cause of death in the U.S., resulting in over 250,000 deaths per year.[44] While poor clinician wellbeing is not the only factor contributing to medical errors, its increasing prevalence poses a significant threat to patient outcomes.

Notably, clinician burnout is also associated with increased clinician absenteeism, presenteeism (lost productivity due to poor health) and turnover rates.[45] Modeling estimates indicate that each year in the U.S., burnout is attributed to $4.6 billion in costs related to physician turnover and reduced clinical hours.[46] Based on a survey distributed to more than 200 hospitals, the ***2019 NSI National Health Care Retention and RN Staffing Report*** estimated costs associated with bedside nurse turnover ranged from $40,300 to $64,000 per nurse.[47] Total costs associated with nurse turnover for an average hospital were estimated to range from $4.4 million to $6.9 million in 2018.[48]

The following sections provide data and information on the current state of clinician wellbeing with a focus on clinician burnout, mental health conditions, addiction and suicide. Much of the data and information on the prevalence of these issues among clinicians is limited to single- and multi-institutional studies, many of which are not specific to clinicians practicing in the U.S. Research was not included in this brief if it was (1) conducted or published outside of the U.S., or (2) published prior to the year 2000.

Burnout

Research indicates that burnout increases a clinician's risk for depression, addiction and suicidal ideation.[49] Figure 3 highlights the potential physical and psychological consequences of clinician burnout. According to the National Academy of Medicine's (NAM) 2019 report, *Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being*, between 35% and 54% of U.S. nurses and physicians experience symptoms of burnout.[50] NAM's report also found burnout impacts clinicians early in their careers. For example, up to 60% of medical students and residents experience burnout.[51] The severe professional and personal consequences of early burnout can persist throughout a clinician's career and can negatively affect the quality of care provided to patients.

Mental health

A significant factor that increases risk of clinician suicide is untreated or inadequately treated mental health conditions.[52] The prevalence of mental health conditions among clinicians, particularly depression, has been found to be alarmingly high over the past decade:

- Research indicates the rate of depression among pharmacy residents is higher than the general U.S. population.[53] A 2018 study found approximately 39% of pharmacy residents reported moderate to severe depressive symptoms.[54] The same study showed that, in March 2016, 7.3% of pharmacy residents reported severe depressive symptoms, compared to an estimated 0.6% rate of severe depression in the general U.S. population.[55]
- A 2016 study found that almost 50% of female physicians believed they met the criteria for mental illness and did not seek treatment.[56]
- A 2015 systematic review and meta-analysis estimated the prevalence of depression or depressive symptoms among resident physicians was 28.8%.[57]
- Similarly, a 2016 literature review found nurses experience symptoms of depression at almost twice the rate of individuals in other professions.[58] This same review found that young, female nurses, and nurses working in intensive care or psychiatric units, reported higher rates of depression than nurses working in other types of units.[59]

- A 2013 study found the overall prevalence of any type of depressive symptom among pharmacy students was 52.4%.[60] Even more concerning, this same study indicated that pharmacy students may be under-diagnosed with mental health disorders, such as depression and Obsessive-Compulsive Personality Disorder.[61]

Addiction

Research has found that alcohol misuse or dependence is associated with factors that negatively impact clinician wellbeing.[62] These factors include emotional exhaustion, depersonalization (cynicism), depression, suicidal ideation, poor quality of life and low career satisfaction. Substance use disorders and untreated addiction also contribute to high clinician suicide rates.[63]

Notably, data regarding the prevalence of addiction and substance use disorders among clinicians is limited, with several commonly cited research articles being more than two decades old.[64] However, several more recent studies highlight alcohol use as a significant problem for clinicians and health professional students:

- A 2015 study found that 12.9% of male physicians and more than one-fifth of female physicians (21.4%) met the criteria for alcohol abuse or dependence.[65]
- Alcohol abuse and dependence was also identified as a significant problem for surgeons in the U.S.[66] A 2010 survey of members of the American College of Surgeons found the prevalence of alcohol abuse or dependence for male surgeons was 13.9%, and 25.6% for female surgeons.[67]
- One study showed over 25% of pharmacy students had indicators of harmful alcohol use.[68]

Research also suggests that clinicians and health professional students face unique risk factors for drug abuse, such as the high demands of education and providing patient care, as well as easy access to substances.[69] Drug abuse may begin as self-treatment for stress and untreated mental health issues.[70] Notably, as compared to the general population, addiction among physicians tends to be more advanced before it is even diagnosed as a problem.[71]

Suicide

As shown in figure 4, suicide is a "tip of the iceberg" indicator of the poor overall health and wellbeing of clinicians, signaling many challenges below the surface.

Suicide deaths were more common among nurses, pharmacists and physicians as compared to all U.S. workers of the same race and sex cohort, based on an analysis of the Centers for Disease Control and Prevention's National Occupational Mortality Surveillance (NOMS) data (see figure 5). Because death from suicide is a downstream indicator of other physical, mental or emotional health problems, this data serves as a call to action to address the root causes of poor clinician wellbeing.

Figure 4. **Suicide as a measure of clinician wellbeing**

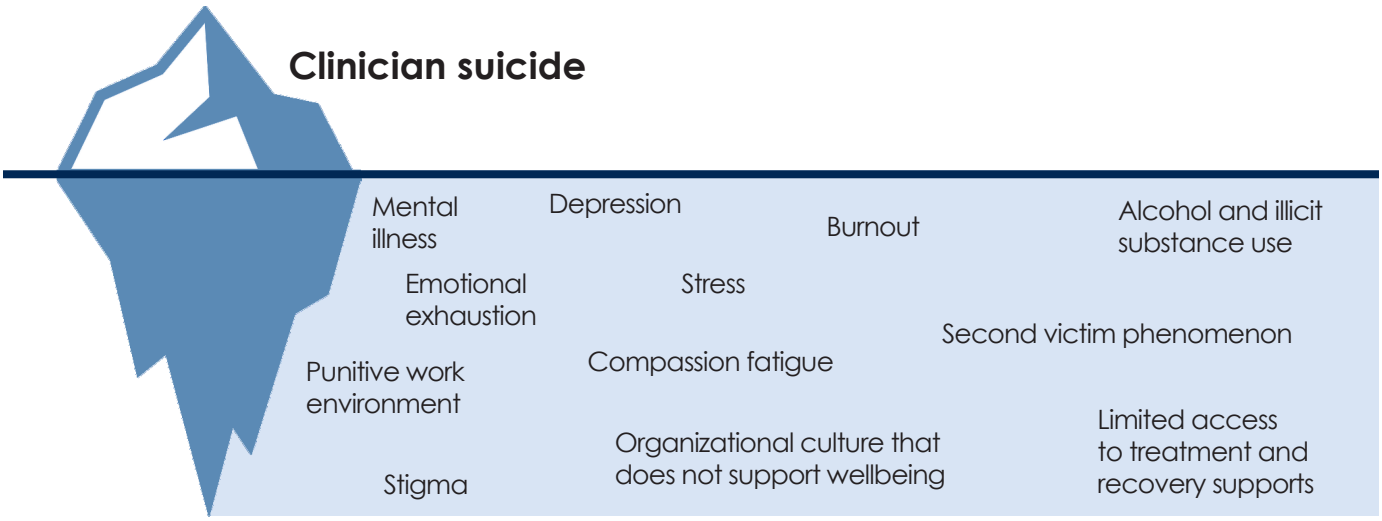
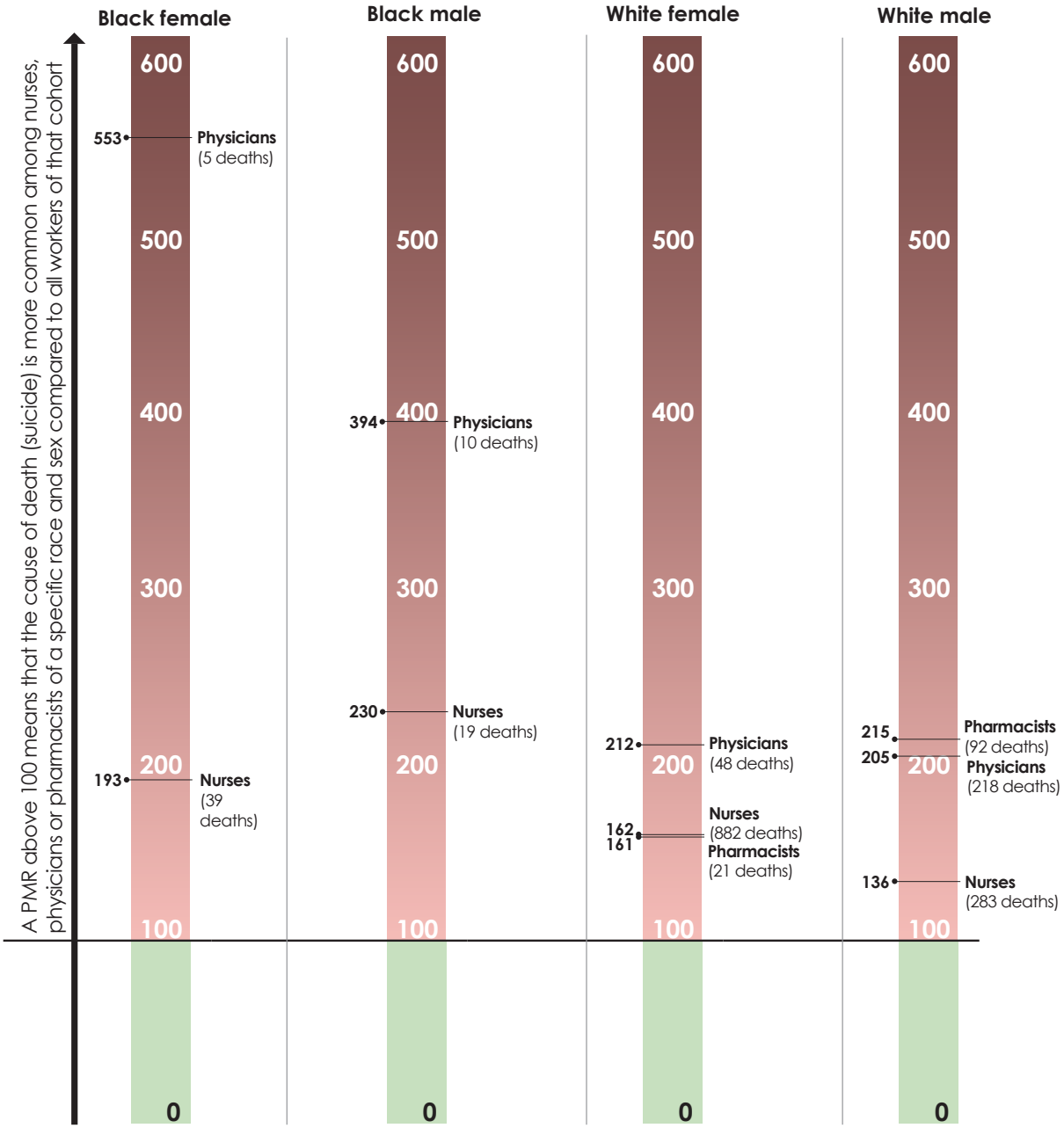


Figure 5. **Proportionate mortality ratio (PMR) for nurses, pharmacists and physicians for suicide for adults ages 18-64, by race and sex, U.S., 1999, 2003-2004, 2007-2014***



* Data was collected from 26 states, including Ohio.

Notes: PMR not calculated for black female and male pharmacists because there were fewer than five deaths due to suicide for these groups. PMRs cannot be used to compare outcomes across race and sex. For more information on the limitations of PMRs, see the **CDCs NOM FAQ**.

Suicide is referred to as "intentional self harm" in this data

Source: The National Institute for Occupational Safety and Health, CDC

What is a PMR?

A proportionate mortality ratio (PMR) compares the proportion of deaths due to a specific cause within a population subgroup to the proportion of deaths due to that cause in the entire population.[72] The PMRs displayed in figure 5 compare the proportion of deaths due to suicide among workers in three healthcare-related occupations, disaggregated by race and sex, to the proportion of deaths due to suicide among all workers of that race and sex.[73] A PMR above 100 indicates the cause of death is more common among workers with a specific occupation, and a PMR below 100 indicates that the cause of death is less common.

Examples of how to interpret the data in figure 5:

Worker population	Occupation	PMR	Interpretation
Black, male workers	Nurses	230	Black, male nurses are about 2.3 times as likely to die from suicide as black, male workers in general.
White, female workers	Physicians	212	White, female physicians are more than twice as likely to die from suicide as white, female workers in general.

PMRs cannot be used to compare outcomes across race and sex. For more information on the limitations of PMRs, see the **CDC's NOM FAQ**.

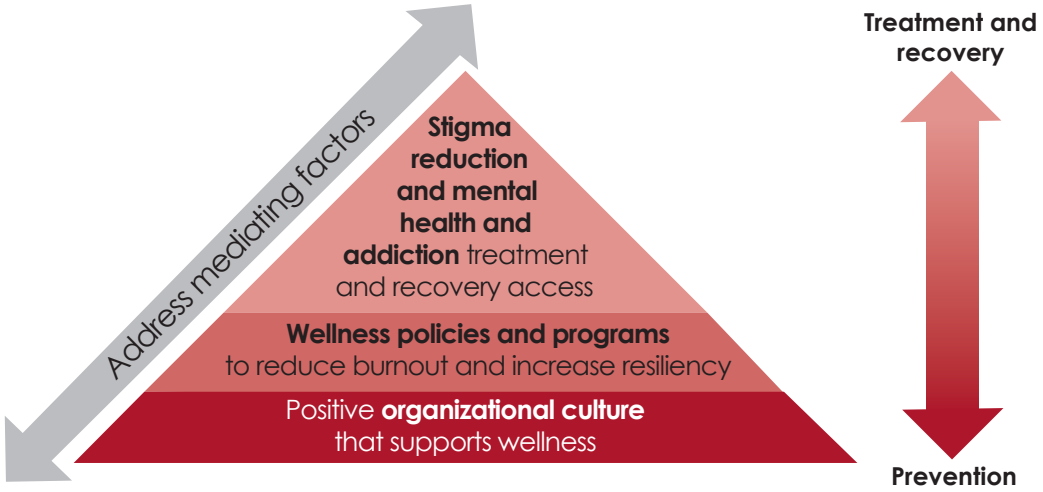
Aligned with these findings, a recent CDC report showed that female registered nurses, nursing, psychiatric and home health aides, and personal care aides were among occupations with statistically higher rates of suicide in 2016.[74] A recently published longitudinal analysis of the CDC National Violent Death Reporting System dataset found that nurses were at a higher risk of suicide than the general population.[75]

What can be done to improve clinician wellbeing and improve patient care and safety?

An in-depth literature review, as well as input from subject matter experts on clinician wellbeing, informed the development of the following evidence-informed key findings.[76]

The key findings highlight that improving clinician wellbeing requires a comprehensive approach that includes a continuum of prevention, treatment and recovery supports (see figure 6). This means both preventing factors contributing to poor wellbeing such as stigma and burnout, in addition to providing adequate treatment and recovery services for clinicians with mental health conditions or addiction.

Figure 6. **Evidence-informed key findings**



Evidence-informed key finding No. 1: Develop and maintain a positive organizational culture that supports wellness and safety

The culture within a healthcare setting, (i.e., hospital, health system, health professional school) shapes the day-to-day experience of clinicians and heath professional students. It is well documented that the organizational culture of healthcare and academic institutions, as well as the clinical practice environment, plays an important role in preventing burnout and improving wellbeing.[77] Clinician and student wellbeing and mental health is at risk when organizational culture does not prioritize wellness and patient safety.

This section highlights how a positive organizational culture can be established and maintained by providing examples of evidence-informed strategies that can be implemented in healthcare settings and health professional schools.

What is a positive organizational culture?

A positive organizational culture prioritizes wellness and safety and recognizes that clinician wellbeing is not the sole responsibility of the clinician or health professional student.

Wellness culture is a key component of a positive organizational culture. A health system or university with a wellness culture has a vested interest in employee/student health and wellness, a culture and environment that promotes health and wellness and leadership that actively engages in the promotion and role-modeling of wellbeing.[78]

Leadership prioritizes wellness

The executive leadership of a healthcare organization has an important responsibility in creating a positive organizational culture that supports clinician and student wellbeing.[79] There are several strategies that can be deployed to affirm leadership's commitment to wellness:

Appointing a Chief Wellness Officer (CWO) ensures commitment to wellness is maintained throughout all areas of the organization. The CWO is a member of the organization's senior leadership and is equipped with the resources to support wellness initiatives, such as assessment of wellbeing and improvement efforts.[80] The organization's commitment to wellness is viewed as a day-to-day responsibility of the CWO. The CWO is dedicated to overseeing the creation, implementation and coordination of the organization's wellness culture and initiatives for staff.[81]

Ensuring all leaders throughout the organization improve the wellness of the work environment within the scope of their role.[82] In addition to identifying problems impacting clinician and student wellbeing, leadership must listen to the needs of clinicians, provide resources and model healthy behaviors. Doing so fosters trust and an environment where all members of the organization work together to improve wellbeing.[83]

Open acknowledgment and discussion of the importance of clinician wellbeing as a shared organizational value.[84] When clinicians perceive that their values align with their organization's values, engagement and job satisfaction increase.[85] It follows that lack of aligned values can increase stress and result in burnout.[86] Clinicians may be more comfortable asking for help if an employer demonstrates a shared commitment to clinician wellbeing. This can be manifested, for example, by incorporating clinician wellness as part of an organization's mission and/or vision.

Psychological safety, confidential assessment and referrals

When suffering from burnout, mental health conditions or addiction, clinicians and health professional students need to be able to ask for help without fear of punishment. Research shows, however, that most healthcare organizations view addressing burnout as strictly a responsibility of the individual clinician or student.[87] A punitive work environment that does not support wellbeing and mental health also contributes to clinician distress.[88]

Confidential mental health and addiction screening, assessment and referral programs support access to appropriate treatment for burnout, mental health conditions and addiction. For example, the Healer Education, Assessment and Referral (HEAR) Program is an evidence-based confidential assessment and referral program that has been shown to be effective for clinicians and students. The American Medical Association has also identified the HEAR Program as a best practice for suicide prevention.[89] A more detailed description of the HEAR Program can be found on page 17 of this brief.

Just culture
A "just culture" focuses on accountability for both individuals and the organization responsible for patient care and safety.[90] Punitive approaches that seek out individual clinicians as solely responsible for error do not solve or prevent errors.[91] Clinicians should be supported when they bring up safety concerns and should not fear punishment. At the same time, clinicians must be held accountable for their decisions and actions when assessing concerns of patient safety. A culture that promotes the honest disclosure of errors can ensure those involved have access to emotional support following an adverse event, supporting the wellness of clinicians and patients.[92]

Wellness as a quality indicator
Hospitals, health systems and health professional schools can demonstrate the significance of wellbeing by routinely and consistently measuring it.[93] This can be done by utilizing validated and reliable tools to measure burnout and depression among clinicians, such as the Maslach Burnout Inventory (MBI) and the Patient Health Questionnaire (PHQ-9).[94] The Well-Being Index (WBI) is another peer-validated and reviewed, brief instrument that can be used to assess symptoms of burnout, depression, stress, fatigue and poor mental and physical quality of life.[95] In addition to using these tools, wellness can be established as a quality indicator for the organization.[96] Measuring and tracking wellness indicators allows leadership to implement effective strategies to prevent and reduce depression, burnout and other contributors of poor clinician outcomes.

Diverse and inclusive environment

A 2017 survey by Medscape and WebMD found that 59% of physicians have experienced bias from a patient based on a personal characteristic.[97] Only 24% of respondents had documented the incident, and about 10% reported the incident.[98] African American/black and Asian physicians were most likely to experience bias from patients.[99]

A positive organizational culture is one in which clinicians, health professional students and patients of all backgrounds feel valued and safe. Bias, when unaddressed, is a significant barrier to clinician wellbeing and high-quality patient care. Although most health systems have policies for how to respond to patient prejudice, there are often limited resources available to clinicians who experience discrimination.[100] The following strategies can be implemented to mitigate bias and racism faced by clinicians:

Leadership is committed to changing cultural norms so clinicians feel safe reporting bias.[101] Members of the healthcare team need to be aware of bias and how to respond effectively.[102] All members of the organization must understand the relationship between race, racism and health.

Using the Implicit Association Test (IAT) to assess individual bias can increase understanding among leaders, clinicians and students of the ways bias influences their decisions.[103] Patient care and outcomes can improve when clinicians know their own biases.[104] The American Hospital Association has identified **four ways** healthcare organizations can utilize IAT.[105]

A positive diversity climate can be supported by evidence-informed strategies aimed at increasing diversity among health professions. According to the National Academy of Medicine, racial and ethnic inclusiveness affects health professional student wellbeing.[106] A 2016 study cited in the NAM report showed that exposure to a negative "medical school diversity climate" was associated with higher depressive symptoms among all students.[107]

The Health Policy Institute of Ohio's (HPIO) 2014 policy brief, "**The Role of Diversity in Ohio's Health Workforce**," includes several strategies that can be adopted by academic institutions and policymakers to increase diversity in the healthcare workforce.[108] For example, health professional schools can prioritize a holistic review of applications, looking to more than an applicant's grades and test scores. A holistic review includes a focus on factors such as life experience, race and ethnicity and socio-economic background.[109]

Joy in work

Promoting "joy in work" is an evidence-informed approach to reduced burnout and turnover, improved clinician satisfaction and a better patient experience.[110] This can be accomplished by meeting social and psychological needs of clinicians and students, eliminating the structural drivers of burnout and strengthening resilience.[111]

The Institute for Healthcare Improvement (IHI) identifies four steps that can support creating and maintaining joy in the workplace. These include:
- Asking staff "What matters to you?"
- Identifying challenges that get in the way of the needs of clinicians and health professional students
- Creating a shared responsibility for organizational culture
- Using an evidence-based improvement method to improve the work environment[112]

The ***IHI Framework for Improving Joy in Work*** can serve as a guide for healthcare leaders.[113]

Patient- and family-centered care

Patient- and family-centered care, including shared decision making, improves overall quality of care by improving patients' self-management of chronic conditions and helping patients make better health decisions.[114] Patient access to medical records, family participation in care-team rounds, patient and family advisors and patient satisfaction surveys are examples of ways to promote shared decision-making and support patient- and family-centered care.[115] Patient-centered care is further promoted when administrative and regulatory responsibilities, including health information technology, are limited to those that contribute value to patient care.[116]

Order entry and documentation support may alleviate administrative burdens for the clinical care team.[117] Medical scribes improve the patient and provider experience and decrease the time clinicians have to spend documenting and complying with administrative and regulatory requirements.[118] Research suggests the use of medical scribes is associated with increased efficiency, improved physician satisfaction, increased volume of patients cared for and a neutral or positive effect on patient satisfaction.[119]

Evidence-informed key finding No. 2: Implement evidence-informed policies and programs that support clinician wellbeing, reduce burnout and increase resiliency

Wellness programs provide clinicians and health professional students with strategies to cope with burnout and foster resiliency. This section highlights the following evidence-informed policies and practices:

- Cognitive behavioral therapy/skills building
- Mindfulness-Based Stress Reduction (MBSR)
- Trauma support and recovery
- Compassion and self-care skills building

These evidence-informed policies and programs can be implemented by academic institutions, hospitals, health systems and other healthcare organizations to improve the wellbeing of all members of the healthcare team.

Cognitive behavioral therapy/skills building for clinicians and students

Building cognitive-behavioral skills is an effective strategy to support treatment of post-traumatic stress disorder, anxiety, depression and addiction.[120] The following are examples of evidence-based programs that utilize cognitive behavioral therapy (CBT):

OSU College of Nursing MINDSTRONG. The Ohio State University (OSU) College of Nursing MINDSTRONG program aims to improve resiliency and overall wellbeing of students. MINDSTRONG, also known as "COPE" in the literature, relies on evidence-based cognitive-behavioral skills building. The seven weekly sessions teach strategies and coping mechanisms that support positive adaptation to stress, anxiety and depression.[121] Research on COPE has shown decreased anxiety, depression, stress, suicidal intent, increased academic performance, and improved healthy lifestyle behaviors, as well as overall job satisfaction among participants.[122] The MINDSTRONG program is provided to all nursing, first-year medical and veterinary medical students, and is available to all OSU students.[123]

MINDBODYSTRONG for Healthcare Professionals Program. MINDBODYSTRONG for Healthcare Professionals, an adaptation of "COPE," is a CBT-based skills building program. The aim of the program is to improve the mental health, healthy lifestyle behaviors and job satisfaction of participants. The eight-session program focuses on three areas: (1) caring for the mind, (2) caring for the body and (3) skills building. Research has shown the program is effective at improving the mental health, healthy lifestyle beliefs, healthy lifestyle behaviors and job satisfaction in newly licensed registered nurses.[124] A study evaluating 6-month effects of the program on newly licensed registered nurses showed significant improvement of depressive symptoms and job satisfaction.[125] MINDBODYSTRONG has strong potential for sustaining positive outcomes related to depressive symptoms, perceived stress, anxiety, job satisfaction and healthy lifestyle behaviors.[126]

Mindfulness-Based Stress Reduction (MBSR) and Mindfulness Based Intervention (MBI)

MBSR is well-researched and findings indicate the practice is an effective strategy for reducing burnout.[127] Increasing mindfulness skills may also improve a clinician's response to their own implicit racial bias that threatens patient outcomes.[128] Research has also shown implementation of mindfulness interventions is associated with personal and organization health cost savings.[129]
MBSR typically utilizes mindfulness meditation and yoga to manage stress and other health issues.[130] An abbreviated MBSR program is a time-efficient way to improve well-being and manage burnout.[131] The following are examples of MBSR practices.

Mind-Body Skills Training for Resilience, Effectiveness, and Mindfulness (STREAM). Mindfulness and stress management programs can be effective approaches to reducing burnout.[132] The OSU STREAM program is designed to build resiliency among clinicians and manage stress. The training includes 12 one-hour modules. Research has shown significant acute improvements in stress, empathy, resilience and mindfulness.[133] These findings suggest the online program may increase a clinician's ability to cope with high levels of stress and burnout.

Mindfulness in Motion (MIM). Mindfulness in Motion is an on-site, workplace stress reduction Mindfulness Based Intervention (MBI). Based on traditional MBSR, MIM was developed to uphold the elements of mindfulness and meet the needs of working adults.[134] The program, developed at The Ohio State University College of Medicine, teaches mindful awareness, rehearses mindfulness in a group setting, utilizes gentle yoga, incorporates relaxing music and requires participants to engage in daily mindfulness practice.[135] Clinicians participate in the program for eight weeks and meet as a group for an hour each week. Research has shown a significant increase in work engagement and resiliency among MIM participants.[136]

Trauma support and recovery

Evidence suggests providing trauma support, such as through peer support programs, can provide clinicians with the opportunity to address the emotional impact of adverse events.[137] Programs that are readily available, voluntary and confidential may support communication and compassion in the workplace without stigma.[138] Examples of these programs include:

Stress, Trauma and Resilience (STAR) Program. The Ohio State University STAR program offers support to trauma survivors through evidence-based, trauma informed identification, education and treatment.[139] The STAR program provides mental and psychological support and recovery services to clinicians and patients who endure trauma. The **STAR Brief Emotional Support Team Training** (OSU STAR BEST Program) provides evidence-based training and therapy to clinicians to prepare for traumatic exposures, develop resiliency and cope with stress.[140]

Peer Support Network (PSN). A PSN that includes support at three levels (departmental, team, and expert clinical professionals) may successfully provide support to a clinician who is struggling with compassion fatigue. Research suggests that PSN may also prevent compassion fatigue.[141]

Resilience curriculum and emotional debriefing. Research has shown emotional debriefing can reduce clinician burnout and promote resilience.[142] Team based debriefing can be used following challenging and stressful clinical events to help clinicians cope.[143] A resilience curriculum for healthcare team leaders ensures leaders are equipped to lead their teams through debriefings following difficult clinical events.[144]

Compassion and self-care skills building

Research suggests that providing structured training aimed at cultivating and improving compassion can address burnout and student wellness, while also positively impacting patient interactions.[145]

The DAISY Foundation. The DAISY Award is a meaningful recognition program administered through the DAISY Foundation, with the goal of recognizing nurses for clinical skill and compassion.[146] Research has shown that nurses who received meaningful recognition had significant decreases in burnout and higher compassion satisfaction (i.e., sense of accomplishment as a result of caring for trauma patients).[147]

Compassion training. A study on the University of Louisville School of Medicine's elective course, based on the Stanford Center for Compassion and Altruism Research and Education's (CCARE) Compassion Cultivation Training (CCT), demonstrated that medical students developed compassion and mindfulness skills.[148] Research has also shown CCT may prevent burnout, promote clinician mental health and improve patient care.[149]

"What is in Your Self-Care Skills Toolbox?" A 90-minute interactive educational presentation addressed compassion fatigue by promoting the following 14 self-care skills: Journaling, stress awareness, stress management, grieving, breathing exercises, meditation, muscle relaxation, hand massage, physical activity, back protection, sleep hygiene, healthy nutrition through reading food labels, awareness of the benefits of drinking water and health promotion reminders.[150] Research showed that the implementation of this brief, low-cost intervention showed an improvement in Certified Nursing Assistant (CNA) retention in a state-run veterans nursing home.[151]

Evidence-informed key finding No. 3: Reduce mental health and addiction stigma and increase access to treatment and recovery services

One of the barriers faced by clinicians early on is harmful stigma, shame and fear, when dealing with mental health and addiction issues. Stigma often begins in health professional education and continues throughout a clinician's career. As a result, clinicians and health professional students may avoid getting treatment for mental health and addiction issues.

Reducing mental health and addiction stigma and increasing access to treatment and recovery services is necessary to improve clinician outcomes. Research places a strong focus on the following evidence-informed policies and practices:

- Ensuring language used in health professional licensing applications does not stigmatize clinician mental health or addiction
- Providing confidential addiction and mental health treatment services for heath professional students and for clinicians as an alternative to disciplinary action

Health professional licensing boards and health professional associations

Organizations that represent health professional licensing boards and health professional associations are cited throughout the findings in this section. The primary role of health professional licensing boards is to protect the public from harm, while health professional associations are entities that advocate on behalf of clinician groups and their interests. Taking into consideration and balancing these dual roles is key to improving both clinician wellbeing and patient care and safety.

Health professional licensing board applications

Generally, health professional licensing boards ask questions regarding "impairment" due to substance use or mental health conditions on license applications.[152] Research suggests the way these questions are phrased can impact whether a clinician is comfortable seeking treatment and support. Physicians, for example, are more reluctant to seek help for substance misuse or mental health conditions if medical licensing board application questions inquire about any history of impairment.[153]

A 2017 study on medical licensure applications found that 40% (5,892) of U.S. physicians surveyed reported they would be reluctant to get formal mental health treatment based on concerns of repercussions to their license.[154] Physicians showed more reluctance to seek care when the application (initial and/or renewal) inquired beyond current impairment (12 months).[155] Physicians were less reluctant to seek care in states where the licensing applications (initial and renewal) only inquired about current impairment (within the last 12 months).[156] These research findings support American Psychiatric Association (APA) guidelines.[157] The study also found, however, that only one-third of states had questions that matched current recommendations put forth by the APA, Federation of State Medical Boards (FSMB), American Medical Association or had complied with the Americans with Disabilities Act of 1990.[158]

The position of the APA is that prior diagnosis and treatment of a mental health condition is not relevant to the question of current impairment.[159] The APA recommends that licensing board questions only inquire about current impairment. The APA provides examples for structuring the questions in alignment with these recommendations[160]:

- "Are you currently using narcotics, drugs, or intoxicating liquors to such an extent that your ability to practice [medicine] in a competent, ethical and professional manner would be impaired? (Yes/No)"
- "Are you currently suffering from a condition that impairs your judgment or that would otherwise adversely affect your ability to practice [medicine] in a competent, ethical, and professional manner? (Yes/No)"

In their 2018 report ***Physician Wellness and Burnout***, FSMB also outlined recommendations for state medical and osteopathic boards concerning physician wellness and burnout.[161] The FSMB recommends the following language be used when medical boards ask about the health of applicants:

- "Are you currently suffering from any condition for which you are not being appropriately treated that impairs your judgment or that would otherwise adversely affect your ability to practice medicine in a competent, ethical and professional manner? (Yes/No)"

A 2017 study published in *Family Medicine* found that many state medical boards evaluate mental health with more scrutiny than physical health.[162] This study

suggests treating mental health conditions differently from physical health may reinforce stigma that prevents clinicians from seeking treatment.[163] It is also important for health professional boards to distinguish between the presence of a condition or illness and the functional impact of impairment on a clinician's ability to provide safe care.[164] The presence of a condition or illness, or participation in mental health or addiction treatment, may not impact a clinician's ability to safely care for their patients.[165]

Health professional licensing board applications in Ohio

In Ohio, each licensing board (Medical, Nursing, and Pharmacy) defines impairment. Professional and employer reporting and disciplinary requirements are determined by the licensee's respective board and are outlined in the Ohio Revised Code (ORC) and Ohio Administrative Code (OAC).[166]

In 2016, the **State Medical Board of Ohio** (SMBO) approved revisions to substance use and mental health impairment questions on their licensing application.[167] Questions regarding substance use only inquire about current impairment. SMBO does not limit inquiry about mental health to current impairment – information is asked regarding the past five years.

The **Ohio Board of Nursing's** license application for nursing includes a question regarding diagnosis or treatment of a psychotic disorder within the last five years, and specifically asks about bipolar disorder, schizophrenia, and paranoia.[168] An additional question asks if the applicant has been admitted, since the age of 18 or in the past five years, for treatment of a psychotic disorder. The question regarding substance use impairment focuses on current use of an illegal chemical or controlled substance. The question clarifies the definition of "current" to include: "…recently enough so that the use of drugs may have an ongoing impact on one's functioning as a certificate holder or licensee, or within the past two years."[169]

The **State of Ohio Board of Pharmacy's** license application for pharmacists does not include questions that directly ask about an applicant's mental health or drug use.[170] The license application does include legal and disciplinary questions regarding drug offenses under state or federal law, including if an applicant was granted treatment in lieu of conviction.[171]

Confidential mental health and addiction treatment services for health professional students and clinicians

Healthcare professional colleges and schools, residency programs and academic medical centers can promote student wellbeing by increasing access to timely mental health care, developing educational strategies that mitigate risks of burnout, utilizing mental health and suicide screening tools and implementing a wellness curriculum.[172]

For example, the University of California San Diego School of Medicine Healer Education Assessment and Referral Program (HEAR Program) educates students and faculty about burnout, depression and suicide. In addition, the program provides confidential, online assessment of stress, depression and other related mental health conditions, and also makes personalized referrals to local mental health clinicians and community resources.[173] Medical students, residents, faculty physicians, pharmacists, nurses and clinical staff have access to the HEAR Program.[174] From 2009 to 2017, over 1,500 UC San Diego health system clinicians were screened, 320 individuals communicated with a counselor and more than 300 received a confidential referral for mental health evaluation and treatment.[175]

The HEAR Program was developed in collaboration with the American Foundation for Suicide Prevention (AFSP) and the model can be implemented in academic and clinical settings for all clinicians.[176] For example, the HEAR Program has been shown to be an effective approach for improving nurses' access to educational outreach, emotional incident debriefings, and screening and referral for mental health treatment.[177]

State health professional boards can also support clinician mental health by ensuring licensing language and policies are not stigmatizing, and by supporting clinician's access to confidential treatment and monitoring for mental health and addiction. Clinicians may be encouraged to take preventive measures for their mental health when confidential resources are accessible. Confidential monitoring and treatment can provide an effective combination of treatment and support for clinicians suffering from addiction.[178]

When a clinician is impaired due to addiction or a mental health condition, the licensing board has a responsibility to take action to ensure that the impaired clinician is not a threat to patient safety.[179] In many cases, a health professional board can balance this objective and support clinician wellbeing by providing confidential monitoring and treatment services for a clinician suffering from addiction or mental illness. This can be provided in partnership with a state clinician health program (see box on page 18).

Physician health programs

State physician health programs (PHPs), that provide confidential addiction treatment and monitoring to clinicians, are the most discussed state clinician health program in the research. The complete care provided by PHPs, including confidential treatment and monitoring, has shown to support successful recovery from addiction.[180] A 2009 study published in the *Journal of Substance Abuse Treatment* identified the beneficial outcomes and components of PHPs.[181] PHPs have shown significantly higher success rates compared to alternative treatment options that are less rigorous.[182] In some states, PHPs expand their programs to include clinicians other than physicians.[183]

Although studies have shown that state PHPs are effective, they vary in their approaches, organization and structure. Further research for systematic development of PHP best practices is needed.[184]

The outcomes of confidential treatment and monitoring have implications for both clinician wellbeing and patient safety. In 2011, The Federation of State Medical Boards (FSMB) established its *Policy on Physician Impairment*. According to the policy, PHPs have a commitment to protect the public that is consistent with the mission of their state medical and osteopathic boards.[185] State health professional licensing boards can refer to FSMB's policy to effectively develop PHPs to facilitate evaluation, recovery, rehabilitation and monitoring.[186]

Confidential monitoring and treatment services in Ohio

In Ohio, each health professional licensing board has its own approach to handling addiction and mental health concerns of licensees.

The **State Medical Board of Ohio** (SMBO) has two alternatives to discipline programs: one for addiction (the One-Bite Program), and another for mental health monitoring.[187]

- SMBO's One-Bite Program provides licensees with access to confidential treatment and monitoring for a substance use disorder as an alternative to facing disciplinary action by SMBO.[188] The Ohio Physicians Health Program is contracted by the State of Ohio to determine eligibility, oversee evaluation, treatment, and monitor One-Bite program participants.[189]
- In August 2018, SMBO established a confidential mental health monitoring program, eliminating the need for immediate public, formal disciplinary action.[190] This program is overseen by the Board.

The **Ohio Board of Nursing's Alternative Program for Substance Use Disorders** (Alternative Program) provides confidential substance use disorder monitoring for clinicians who have current substance use disorders.[191] The program, overseen by the Board, is available to licensees who request the opportunity and meet various qualifying criteria, including initially voluntarily placing their license on inactive status.[192] Successful completion of the program requires at least four years of monitoring, abstaining from alcohol and drugs and obtaining appropriate substance use disorder treatment, among other requirements outlined in the Ohio Revised and Administrative Codes.[193]

The **State of Ohio Board of Pharmacy** does not contract with any specific service provider for confidential substance use disorder treatment and monitoring. A licensee who presents to the Board of Pharmacy with a substance use disorder impairment is typically subjected to a suspended license with probation. The terms of discipline are determined on a case-by-case basis, and the licensee may meet terms outlined by the Board of Pharmacy to request a re-instatement of their license. While not offered as an alternative to discipline program, the licensee can choose to pursue treatment and monitoring services independently and report compliance to the Board of Pharmacy as needed.[194]

Licensees may choose to utilize services provided by the Pharmacists Rehabilitation Organization, Inc. (PRO OH). PRO OH is a non-profit and volunteer peer assistance organization that provides assessment and referrals to treatment and monitoring for pharmacists and pharmacy interns.[195] Ohio is one of 46 states with a program for assisting pharmacy professionals.[196]

The **Ohio Physicians Health Program, Inc.** (OPHP), a nonprofit organization, provides confidential monitoring services to Ohio clinicians.[197] OPHP coordinates the immediate treatment process for clinicians and provides monitoring services post-treatment.[198] Any Ohio clinician can voluntarily utilize OPHP's services. From 2004 to 2018, OPHP reported that 91.5% of individuals under a monitoring agreement with OPHP had maintained recovery.[199] Participants who relapse (8.2%) during monitoring receive additional treatment and recovery supports.[200] Five Ohio licensing boards (State Medical Board of Ohio, Ohio State Dental Board, Ohio Veterinary Medical Licensing Board, Ohio Vision Professionals Board, Ohio State Chiropractic Board) use OPHP services, to some extent, as an alternative to reporting or discipline.[201]

Evidence-informed policy options for improvement

Improving clinician wellbeing requires a comprehensive, multi-stakeholder approach that provides health professional students and clinicians with a full continuum of prevention, treatment and recovery supports to address stigma, burnout, mental health and addiction. Efforts to address clinician wellbeing can lead to both improved patient outcomes and reduce costs associated with increased clinician absenteeism, lost productivity and high turnover rates.

State policymakers, including legislators, state agencies and health professional licensing boards, and **healthcare leaders** in hospitals, health systems, health professional schools and statewide health professional associations all have a role to play. State policymakers and healthcare leaders can **implement, advocate for and allocate resources** to the following evidence-informed policies to improve clinician wellbeing:

Advance an organizational culture that supports wellness

- Ensure that leadership within a healthcare setting (e.g., hospital, health system or health professional school) prioritizes clinician wellness and promotes a positive organizational culture by appointing a Chief Wellness Officer, adopting approaches such as Joy in Work and Just Culture and implementing the Implicit Association Test to assess how bias impacts decisions in the organization
- Increase the diversity of the health workforce to combat racism and discrimination faced by clinicians, for example, through educational pipeline programs, student loan repayment programs and targeted recruitment and retention
- Take into consideration and provide supports to address the burden of additional administrative demands imposed on clinicians when crafting polices or implementing programs

Promote wellness programs that reduce burnout and foster resiliency among health professional students and clinicians

Implement strategies that reduce burnout and increase resilience among health professional students and clinicians, such as: Cognitive behavioral therapy/skills building; Mindfulness-Based Stress Reduction (MBSR) and Mindfulness Based Intervention (MBI); Peer support, meaningful recognition and compassion programs

Require confidential mental health and addiction screening, referral and treatment services for health professional students and clinicians and support policies that reduce stigma

- Incorporate confidential screening assessment, referral and treatment services, such as the Healer, Education, Assessment and Referral (HEAR) Program in the curriculum of health professional schools and clinician employers
- Establish a confidential treatment and monitoring program as an alternative to discipline option for clinicians with a mental health condition or substance use disorder
- Limit clinician licensure application questions regarding mental health conditions and substance use to inquire only about current impairment
- Explore opportunities for health professional licensing boards to partner with an independent organization to oversee treatment and monitoring of clinicians who have a mental health illness or substance use disorder

Monitor and track data on health professional student and clinician wellness

- Utilize reliable measurement tools to measure burnout and depression among clinicians and health professional students, such as the Maslach Burnout Inventory, PHQ-9 and the Well-Being Index
- Establish a statewide reporting mechanism to track comprehensive health sector workforce data that includes monitoring and public reporting of clinician wellness and related measures (e.g., burnout, depression, suicide, addiction) as quality indicators

Download the full report and access the resource page at
www.hpio.net/a-call-to-action/

Notes

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