Ethics and Management of Substance Use Disorders in Anesthesiology



Detection, Intervention, and Treatment Through Recovery and Return

Michael G. Fitzsimons, MD

KEYWORDS

- Substance use disorders (SUDs) Bioethics Recovery Drug diversion
- Drug testing

KEY POINTS

- Substance use disorders (SUDs) include a family of diseases that are a source of impairment and death with particular relevance to anesthesiologists.
- SUD prevention, detection, intervention, treatment, and recovery efforts must be considered and managed within the context of the 4 core principles of bioethics.
- SUD prevention programs must balance the safety of the patient while assuring that the ill
 but unimpaired anesthesia provider maintains autonomy, avoids harm because of the process, receives the benefit from recovery, and is subject of fair and equal justice.
- Continuing efforts to reduce SUD in anesthesiology should include collaboration with department members, medical staff credentials committees, and medical boards to ensure a fair process for addressing this challenging issue to prevent the impaired physician from harming patients while protecting the privacy of those physicians in stable recovery.

INTRODUCTION

It has been 50 years since the Journal of the American Medical Association published the sentinel article recognizing that physicians suffer from the same physical and mental health issues as the general population. The article called on the medical establishment to change focus from censure and sanction to treatment and hope for the "Sick Physician." The subsequent decades saw the creation of Physician Health Programs (PHPs) to coordinate recovery services and provide physicians with a

Division of Cardiac Anesthesia, Department of Anesthesia, Critical Care, and Pain Medicine, Massachusetts General Hospital, 55 Fruit Street, Boston, MA 02114, USA *E-mail address:* mfitzsimons@partners.org

Anesthesiology Clin 42 (2024) 673–685 https://doi.org/10.1016/j.anclin.2024.01.005 1932-2275/24/© 2024 Elsevier Inc. All rights reserved.

anesthesiology.theclinics.com

nonpunitive means to heal. In the early 1980s, the American Medical Association and the American Psychiatric Association teamed to study physician mortality related to a variety of issues including death by suicide. By the late 1990s, the Institute of Medicine published, "To Err is Human," which recognized the imperfection of our systems in addressing these challenging issues while acknowledging the humanity of physicians. These welcome perspectives not only improved the environment for physician self-care but also identified ethical challenges to an establishment, which traditionally placed the interests of the patient far over the health needs and privacy of the individual provider. These ethical challenges extend from the tools that we use to detect diversion of drugs from the perioperative environment to reporting performance or behaviors that could indicate impairment by substances; to the initial intervention for a colleague who may be in distress, processes of formal treatment of the condition, and into the early period of return to a career in medicine; and finally into management of the aftermath including reporting to authorities responsible for licensure and credentialing.

THE SCOPE OF THE PROBLEM

There are 2 major problems associated with substance use disorders (SUDs) in the specialty of anesthesiology: misuse and addiction and the diversion of substances from the perioperative environment for personal use or distribution to illicit networks. Multiple studies over many years have shown that the incidence of SUD exclusive of alcohol among faculty anesthesiologists as well as trainees in the United States is 1% to 2%. ^{4–6} Problem alcohol use by physicians has been increasing and may afflict more than 25%. ⁷ The problem is not limited to the United States because similar results are reported in other countries. ⁸ The consistent incidence is especially troubling because increases in education and enhanced substance control measures have not appeared to have an impact on the incidence of these serious clinical problems. ⁴

Opioids have remained the primary substance of misuse and abuse among anesthetists including faculty, trainees, and certified registered nurse anesthetists (CRNAs).^{4,9} At the same time, there have been a number of reports documenting that abuse of other substances such as propofol, remifentanil, ketamine, benzodiazepines, and volatile agents are increasing.^{10,11}

The outcome of SUDs among anesthetists is often tragic. Death is the presenting factor in 9% to 16% of cases of SUDs, indicating how challenging it is to identify and intervene in cases of SUD.^{4,5} Among those residents who survive their initial diagnosis of SUDs and complete training, nearly 40% will experience at least one relapse within 30 years while 19% will die from a substance use-related condition.¹²

The second major problem associated with SUDs in the perioperative environment is the diversion of substances away from appropriate use for illicit purposes. Healthcare facilities have many points of vulnerability, which can be exploited by individuals to direct substances from the normal chain of control for personal use or to another individual for illegal purposes. ^{13,14} These points begin in the pharmacy system and include exploitation of procurement, storage, preparation, prescribing, and wastage. Anesthesia personnel are more vulnerable because of their access and daily procurement of drugs from medication dispensing systems or a satellite pharmacy, administration to patients, or during the wastage process. ¹³ Berge and colleagues note that health-care facilities are placed at risk through "failure to prevent, recognize, or address signs of diversion or of an impaired or addicted employee." ¹⁵ Patients can also be innocent victims of practices by impaired health-care workers including risk of infection with communicable diseases. ¹⁵ Hospitals have paid millions of dollars in fines due to the diversion of substances by workers.

Designing and implementing systems to deter, detect, and treat SUDs have been very challenging; doing so also raises significant ethical issues that must be considered for the patient, healthcare system, and the individual provider.

ETHICAL CHALLENGES IN THE PREVENTION AND MANAGEMENT OF SUDs IN ANESTHESIOLOGISTS

Ethical issues related to healthcare bioethics are addressed through the concept of Principlism. Bioethical dilemmas are addressed through 4 core principles: Autonomy, nonmaleficence, beneficence, and justice. These principles must be addressed through the perspectives of both the patient as well as the physician (Table 1).

Autonomy refers to the concept that an individual has the right to make their own decisions and take their own actions. This does not mean that a physician has the right to harm a patient or to damage the health-care system. Autonomy may also refer to a patient's right to accurate information regarding their physician and whether that physician provides their care. Embedded within autonomy is an individual's right to privacy. Whether the patient has the right to know if a physician suffers from a condition that may impair their performance or is in recovery, is unclear.

Nonmaleficence refers to the obligation of the medical establishment to prevent harm. Patients have been harmed by impaired individuals working in health care. ¹⁵ The extent of the ethical dilemma that arises relates to the degree to which actions may be taken to prevent potential harm. Nonmaleficence also applies to the process of identification, management, and reporting of medical conditions that health-care workers suffer from. Physicians are reluctant to seek care for themselves due to the stigma of identification as an impaired provider or even the potential damage to a reputation associated with merely being the subject of an inquiry. ¹⁷

Beneficence is a physician's obligation to do good. This can be extended to the obligation to perform at the highest level. Patients are entitled to physicians who perform to certain identified standards defined by license requirements and community

Principal	Patient	Physician
Autonomy	Right to safety Right to select a physician Right to information	Right to report their own impairment Right to choose or reject treatment Right to confidentiality
Nonmaleficence	Right to freedom from harm or risk by an impaired physician	Right to freedom from undue intrusion Right to freedom from false accusation Right to recovery systems without harm Right to avoidance of stigma associated with an SUD Right to health after treatment Right to freedom from excessive cost
Beneficence	Removing potential harm Higher vigilance Improving systems Lower health cost	Treatment with the highest likelihood of recovery Treatment with the highest chance of reentry into a career
Justice	Right of patient over physician rights Rights of society over individual	Equal application of policy regardless of position Due process for an impaired physician Risk of conflicts of interest in recovery programs

standards of care that impact the right to practice. Beneficence is also a factor in detecting and treatment of SUDs in anesthesiology. Tools and practices aimed at reducing SUD should have proven benefits or studied for benefit rather than merely accepted. Treatment practices should demonstrate success.

Justice refers to the right of all individuals, including those in recovery to receive equal care and that policies and regulations designed to address the problem are equally applied. This right implies that one individual should not be placed at more risk than another. Justice also refers to the need to balance the rights of society with those of an individual. Professional careers, including law and medicine, require licensure through the state to attain the right to practice in those jurisdictions. These regulatory bodies must ensure the competency of their applicants as well as the safety of those individuals utilizing the service. The principle of justice addresses the lengths to which those bodies can extend their reach to assure competence and safety.

Leaders, educators, colleagues, regulatory bodies, credentialing offices, medical boards, and individuals suffering from an SUD face ethical issues related to SUDs. These include substances to consider, methods to detect diversion, reporting potential impairment among colleagues, performing a professional intervention, treatment, monitoring, and ultimately determining whether a colleague may return to the practice of anesthesiology, another field in medicine, or whether a career change is in their best interest.

Substances of Misuse or Abuse and Performance

There is little ethical debate about the need for facilities to fulfill the obligation to minimize diversion and illicit use. When these efforts have not been adequately addressed, patients have been harmed by impaired providers and systems have been forced to pay significant fines related to the diversion of substances. Poor outcomes related to oversight and management of SUDs in healthcare workers reduce the trust that patients and the community place in our systems. The ethical dilemma concerning substances may lie more in the appropriate use of legal substances that have the potential to cause impairment or the use of legal substances for recreational purposes. Cannabis is the most pertinent current example.

Cannabis remains Schedule I, an illegal substance under federal law. The federal government does not recognize any benefit. States are continuing to legalize cannabis use for medical use, recreational use, or both. ¹⁸ The exact incidence of cannabis use among physicians is difficult to determine because studies commonly use different parameters to determine the prevalence of use such as "lifetime," "regular," "monthly," "weekly," and "daily" while others survey number of times the substance is used. Lifetime use among medical students is approximately 31% with the highest incidence among students in the United States (48.05%). ¹⁹ Among physicians entering a PHP, the lifetime incidence was 29.1% with 20% reporting abuse or dependence. ²⁰ Studies of SUDs among anesthesiologists largely focus on substances from the perioperative area and seek less detail about cannabis, leaving the exact incidence of use by practicing anesthesiology personnel unclear.

Cannabis creates the ethical justice dilemma of whether it is acceptable for a physician to use a substance, which can alter factors such as decision-making, reaction time, and judgment.²¹ No studies have been performed that evaluate the impact of cannabis use on physician performance. Studies of performance in pilots have demonstrated a significant decrease in performance 30 minutes after cannabis use, which persisted for 6 hours.²² Another more concerning study among pilots demonstrated that impaired simulated performance persisted for 24 hours after the use on measures such as vertical and lateral deviation on landing as well as distance off center.²³ None of the pilots were aware of their degree of impairment. Leirer and colleagues studied the impact

of a single marijuana cigarette in 9 pilots at 15 minutes, 4 hours, 8 hours, 24 hours, and 48 hours. Twenty-four hours after use, 7 of the 9 pilots demonstrated impairment but only one of the individuals was aware of their impairment. These findings were identified in simulated environments, which likely do not mirror the complexity encountered in an actual aviation environment. An additional point of concern is the increasing potency of marijuana since the time of studies.

Physicians have made a personal decision to enter a safety-sensitive career involving direct responsibility for another individual's life. Patients largely accept the anesthesiologist assigned to their case without the benefit of research about their skills or prior performance. The Drug-Free Workplace Program in 1986 established federal employees involved in Special Sensitive, Critical-Sensitive, or Noncritical Sensitive positions including law enforcement, national security, protection of life and property, public health or safety, or other functions requiring a high degree of public trust are subject to drug testing. This was extended by the Omnibus Transportation Employee Testing Act of 1991 to include required testing of those in safety-sensitive industries, aviation, trucking, railroads, mass transit, pipelines, and other transportation industries. Drug testing without evidence of impairment for legal cannabis has been challenged. Some states have enacted safety-sensitive "carve-outs," which allow drug testing for cannabis even though it is legal in those states among individuals who work in areas dealing with the safety of the public, the elderly, or in childcare.

Methods to Detect SUDs and Diversion

Multiple efforts are made to reduce the diversion of substances from the perioperative arena and to detect the diversion of drugs by healthcare providers. Most of these efforts are simply good practice and do not present an ethical dilemma for leaders or clinicians. These efforts include education on the signs, risks, and impact of SUDs on patients and clinicians, the use of automated dispensing systems, medical record surveillance, and control mechanisms to eliminate access to wasted substances.¹³

Impairment is defined by the Federation of State Physician Health Program as "the inability to practice medicine with reasonable skill and safety due to a health condition." Physicians are educated on the signs of SUDs among colleagues and themselves to detect indicators of impairment. Education about the risks associated with SUDs has increased over time but many anesthesiologists cannot recall receiving the education, in many cases education is elective, and a high percentage of programs do not involve spouses. Physicians often have an SUD before they are impaired by the disease to the point that their performance is affected or identified by colleagues. Physicians may maintain the role of the "functional addict" long before the signs are apparent to their colleagues. Systems that maintain the autonomy of the physician may encourage them to seek treatment at the earliest phase of their illness. Unfortunately, most physicians do not enroll in PHPs voluntarily but do so because of a mandate. Physician is a feet of the signs are departed by the disease of their illness.

Random drug testing has been implemented by an increasing number of healthcare systems to reduce diversions and SUDs among employees. 31,32 Feasibility and a significant reduction in the incidence of SUDs has been demonstrated by Fitzsimons and colleagues. 31,33 Calls have also been made to implement post-incident drug testing after significant safety events but the practice has not been implemented. Ethical challenges are encountered during program implementation, throughout testing, and when managing the results.

When the program at Massachusetts General Hospital was first designed, resident physicians could elect to participate or not, which potentially reduced the effectiveness of the program.³¹ A strategy of "anonymous and voluntary" was implemented to protect

autonomy and eliminate the fear of retaliation for nonparticipation. Faculty members were required to participate. Trainees entering since implementation are required to participate in all aspects of testing. For the trainees who are advised about the testing requirement before entering the program, their autonomy lies in the choice of whether to join the program or select another institution.

Drug testing is associated with the risk of false-positive results challenging the principle of nonmaleficence. ^{31,35} False-positive results can be due to many factors from collection, analysis, and into result interpretation. ³⁶ A vigorous system must be in place to minimize the risk of false-positive results. Split sampling is the process of retaining a second sample obtained at the initial collection for testing at a second certified laboratory; if the testing of the first sample is positive or indeterminant. Confirmatory testing with gas chromatography and mass spectroscopy virtually eliminates false-positive results associated with enzyme-linked immunosorbent assays. Initial result review by a nonbiased, outside-certified medical review officer can detect factors that may reveal a legitimate cause of a positive result maintaining justice and non-maleficence. Final scrutiny of results along with presentation to the individual subject to testing provides them with additional input into the results.

Confronting the impaired colleague and reporting suspicions of impairment or SUD Physicians are often reluctant to approach a colleague whose performance appears impaired or for whom they have concerns about a possible SUD. In one study, nearly one-third of physicians indicated that they would not report a colleague who they suspect may be impaired. Cited reasons include the impression that it is not their problem, fear of reporting in error, lack of knowledge regarding how to report, the assumption that another individual is addressing the problem, and skepticism that the report will have any impact. Physicians working in hospitals and academic medical centers are more likely to report than those working outside of a larger healthcare system. Physicians from communities underrepresented in medicine and international medical graduates (IMGs) are also less likely to report. The lower reporting rate by IMGs and underrepresented physicians may reflect fears of retaliation or biased treatment. Failure to report places the health of patients in jeopardy as well as the healthcare provider violating nonmaleficence as well as a patient's right to autonomy.

The lack of reporting colleagues with a possible SUD has significant implications. Physicians with an SUD can recover from the illness if identified and a treatment plan is implemented. Lack of approaching a physician whose performance is impaired or of whom an SUD is suspected denies them the autonomous opportunity to initiate recovery early in their disease process before long-standing damage such as patient injury, legal issues, licensing problems, and reputation damage has occurred. It also limits the likelihood of clinical errors that harm patients. Early reporting of concerns may ultimately maintain autonomy for the physician while addressing the problem later may result in legal obligations that undermine autonomy.

When physician impairment is suspected, the initial intervention should be done in a structured, supportive, and consistent manner. A confidential, nonconfrontational approach that is focused on obtaining appropriate care is more effective than a meeting focused on investigation and accusation. Such an approach benefits the physician. Approaching the impaired colleague with an air of accusation reduces trust in the system and risks the physician retreating from recovery ultimately violating nonmaleficence.³⁸

Treatment

Physicians are fortunate to have the motivation and resources to enter effective recovery systems. There is no ethical debate about the benefits of treatment for physicians

suffering from the diseases of SUD. The rate of recovery for physicians with SUD who are managed appropriately is higher than the general population.³⁹

PHPs have been in existence since the 1970s. The Federation of State Medical Boards has encouraged the development of these alternative pathways for physicians who have not caused patient harm compared with immediate reporting to the medical board. Physicians who have caused harm, refuse to receive care or pose an immediate threat to the safety of the public should be immediately reported. PHPs do not treat physicians but manage and coordinate multiple aspects of the physician recovery process. Anesthesiologists with SUDs whose recovery is managed through PHPs are just as likely as other specialties to recover from a diagnosis of an SUD.³⁰ Anesthesiologists have the same rate of program completion, disciplinary action, relapse, and death as other specialties.³⁰ Six key lessons from PHPs have been identified, which can promote long-term recovery (Table 2).⁴⁰ These key components address zero-tolerance for the use of substances, individualized treatment models, ongoing drug and alcohol testing, the use of leverage, rapid and definitive management of relapses, and the commitment to life-long recovery through involvement with 12-step programs.

Concerns have been raised about PHP oversight, due process for physicians, and potential conflicts of interest. ⁴¹ These factors primarily risk violation of the right to justice and the potential for maleficence. PHPs do not have power over a physician's license but work with state Medical Boards to provide coordination of the multiple aspects of professional recovery. It is argued that state medical boards must maintain oversight of PHPs because failure to comply with stipulations in physicians' recovery

Table 2 Lessons from State Physicians Health Programs		
Lesson	Key Points	
Zero-tolerance for any use of alcohol or other drugs	PHPs have a higher standard	
Thorough evaluation and patient-focused (rather than program-focused) care	Each individual physician in recovery is different. Blind adherence to a specific guideline does not address the needs of the individual	
Prolonged, frequent random testing for both alcohol and other drugs	Contracts stipulate that physicians in recovery must undergo random drug testing, which consists of large panels of substances	
Effective use of leverage	PHPs can work with licensing agencies, medical boards, practices, hospitals, and leadership to assist the physician through reentry into medicine	
Defining and managing relapses: swift, certain, and meaningful consequences for any substance use and noncompliance	Physicians who relapse or who are identified as in noncompliance with the stipulations of the recovery contract are immediately removed from practice and generally required to enter into inpatient treatment	
The goal of lifelong recovery rooted in the 12-step fellowships	Physicians are generally required to participate in 12-step programs such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or Caduceus (for physicians in recovery)	

Adapted from: Dupont RL, Skipper GE. Six lessons from State Physician Health Programs to Promote Long-Term Recovery. J Psychoactive Drugs. 2012;44:72-8.

contracts can lead to the loss of a medical license. Another criticism is the lack of due process when a physician disagrees with a diagnosis or requirement. Physicians may not be allowed to represent themselves effectively and may be victimized by processes, which are not fully transparent. The last criticism relates to potential conflicts of interest related to what options are offered to the physician. Even though a physician may voluntarily enter recovery coordinated through a PHP, some individuals have felt compelled to enter specific recovery programs compromising autonomy. ⁴¹ Programs that provide both diagnostic and therapeutic care may have an incentive to identify other unrelated diagnoses to justify pursuing further expensive evaluation and treatment alternatives.

Physician recovery can create a significant financial burden on the physician and their family challenging the nonmaleficence and potentially creating a barrier to recovery. 42 Costs include assessment, detoxification, inpatient treatment, outpatient care, drug testing, and well as legal fees.

Reentry into anesthesiology

The most challenging ethical consideration after a diagnosis of an SUD and treatment is whether an anesthesiologist should return to the specialty of anesthesiology, another specialty, or whether a career change from medicine is indicated. Menk and colleagues reported a 66% relapse rate among trainees who abused parenteral opioids, with death as the presenting factor in 16%. ⁴³ The relapse rate among those abusing substances other than parenteral opioids is 30%. More recent data on relapse after completion of residency show that nearly 40% will relapse and the death rate is 19%. ¹² Other negative outcomes include higher rates of failure to complete residency, failure to achieve board certification, and failure to achieve subspecialty certification. ¹² Predicting which physicians in recovery have a higher rate of relapse is difficult. Domino and colleagues identified the use of a major opioid in the presence of a coexisting psychiatric disorder or family history of an SUD increased the risk. ⁴⁴ The principle of autonomy or justice is raised when considering a family history of SUD.

The appropriate career course after a diagnosis of an SUD and rehabilitation is perhaps the most difficult ethical dilemma associated with impairment by substances. Anesthesiology is the only physician specialty where the individual directly procures, prepares, administers, and wastes substances largely on their own without the direct observation of another provider. These substances are of high potency. Anesthesiologists observe the "good" effects of these substances throughout the remainder of their careers and develop confidence that they can control the impact of the drug. Anesthesiologists may have the impression that the pharmacokinetics that they witness in the patient reflect the way a substance will act in themselves.

The long-term health of the physician and the safety of the patients under care is a major risks. Returning a physician to an environment where they will continue to handle the substances that were the source of their disease places them at risk through access. The source of substances for impaired anesthesiologists is largely due to diversion from the work environment. The risk of death from SUDs remains throughout an anesthesiologist's entire career. As Calls have been made that redirection from the specialty of anesthesiology is the safest and most compassionate course for individuals who experience SUDs. As, As The concept of "one strike, and you are out" draws a single "line in the sand" that dictates individuals diagnosed with SUDs should be redirected into another specialty. This notion lies in the impression that the return itself risks a violation of nonmaleficence.

Other opinions leave the door open for anesthesiologists to return to the practice of anesthesiology after a diagnosis of an SUD followed by appropriate inpatient treatment,

monitoring through a PHP along with drug testing, and a commitment to lifelong recovery. 47,48 Anesthesiologists treated through PHPS have a similar rate of contract completion (71%), contract extension (18%), and death (6%) as other specialties after treatment and posttreatment management through a physician's health program. Anesthesiologists' contracts often have enhanced features that address their specific environment including witnessed naltrexone administration, periodic hair testing, and enhanced security features in the operating room including witnesses, automated dispensing systems, and monitoring cameras. 30

No data is indicating that patient safety is improved by permanently removing all anesthesiologists who have been treated for SUDs. A review of 2715 cases in the ASA closed claims database revealed only 7 cases where an SUD or chemical dependency was indicated. Two of these cases involved CRNAs, 4 involved an alcoholic physician, and 1 involved a smoker. None of the cases involved opioids or other parenteral substances.⁴⁹

Anesthesiology is the specialty with the most focus on the risk of an SUD and diversion from the perioperative environment. Programs are enhancing their systems through drug testing, education, surveillance of drug transactions, and establishment of drug diversion prevention teams. Equal rates of recovery when enrolled in effective programs and under the guidance of a PHP favor return to the practice on a case-bycase basis. Effective treatment that is equally applied and adheres to the 4 bioethical principles provides the physician with the best chance of recovery.

Reporting and credentialing after a diagnosis of an SUD

Physicians returning to a career in medicine after a diagnosis of an SUD are often challenged by medical licensure at the state level and credentialing by individual hospitals. This affects the principle of justice as well as nonmaleficence because these agencies may impose sanctions on the licensee, which may be overly restrictive.

The United States Supreme Court addressed the issue of legal professional licensing and compliance with the Americans with Disabilities Act (ADA) in 2014.50 This decision effectively required agencies to limit questions on mental health to current issues, which actively impair an applicant's ability to perform professional duties. This decision was supported by the notion that current diagnosis and treatment of a condition did not necessarily predict future impaired performance. The decision also prohibited licensing agencies from imposing intrusive and burdensome conditions on applicants. The Federation of State Medical Boards (FSMB) released multiple recommendations in its Policy on Wellness that states should follow.⁵¹ The purpose of these recommendations was to increase compliance with the ADA as well as encourage physician wellness. Four recommendations are key to compliance. Questions should concentrate on active impairment, and only current conditions that are impairing should be addressed. Applications should "not seek information about impairment that may have occurred in the distant past."51 There should be a safe haven for nonreporting for physicians receiving appropriate treatment commiserate with their diagnosis and have a high likelihood of avoiding impairment. Questions should be written in supportive language in a way similar to questions about physical wellness and that normalized physician wellness.

A study performed in 2009 reviewed questions addressing physical, mental health, and substance use questions on state licensing applications. ⁵² Nearly all applications contained such questions (96%). More than half (69%) of the questions would be considered "likely impermissible" or "impermissible" under the Americans With Disabilities Act. A study performed 10 years later assessed state licensing applications

for invasiveness. Nine states were rated as an "A" indicating either the lack of questions related to mental health or containing 1 to 2 questions that addressed impairment but did not mention mental health.⁵³ Eight states still contained questions that addressed mental health even without impairment or the questions that were phrased in punitive, confusing, or adversarial language.

The most recent study was performed in 2023 evaluating mental health questions on state medical license applications and compliance with the FSMB 2018 recommendations. The review indicated that only 3 states or territories met all 4 major FSMB recommendations. Approximately half (51%) met 3 recommendations. Renewal applications were more likely to address safe-haven nonreporting as well as only current conditions than initial applications.

SUMMARY

Bioethical principles should be considered when implementing systems to identify and treat mental and emotional illness as well as SUDs that affect a physician's right to practice. Autonomy must include the voluntary participation of the provider in all aspects of diagnosis, treatment, and reasonable return to a career in medicine when impairment is no longer present, and recovery is sustained. Patients must maintain the right to their protection and the assurance that our systems only allow those physicians with unimpaired competency to engage in the practice of medicine. Nonmaleficence includes assuring that the systems we build protect the patient and the public while minimizing any current or future harm to a physician committed to their recovery. Society benefits from supporting competent physicians with mental, emotional, and substance illness by maintaining a healthcare system that encourages the ill to seek appropriate proven care. Such systems require minimization of the stigma attached to mental illness. When the concept of the "Sick Physician" was presented in 1973, the need for equal treatment of ill physicians was recognized. Ill physicians are entitled to treatment through the healthcare system with the hope that they can return to practice without the injustice of perpetual identification as an unsafe provider long after the impairment has been managed.

CLINICS CARE POINTS

- SUDs exclusive of alcohol affect 1% to 2% of anesthesiologists. Death is a common presentation at the time of initial discovery of the disease as well as during relapse. Although opioids are the most common substance of abuse, the use of others is increasing for illicit purposes.
- Prevention of SUDs and drug diversion includes multiple system-level initiatives such as education, transaction surveillance, personal and colleague monitoring, drug testing, and reporting when impairment is suspected.
- Anesthesiologists who suffer from SUDs can recover from the disease at a rate equal to other specialties. PHPs can provide a safe haven where care can be managed. Key components of recovery through PHPs include individual patient-focused care, zero tolerance for substances, drug testing, definitive management of relapses, and a goal of lifelong recovery rooted in 12-step programs.
- All components of SUD prevention programs should respect the rights of the patient and the
 ill provider and adhere to the 4 principles of bioethics. Individual autonomy must be
 maintained. Programs should not cause harm (nonmaleficence). Initiatives should benefit
 society, the patient, and the physician. Justice must be a key component.

DISCLOSURE

The author has no commercial or financial conflicts of interest related to the publication of this article.

REFERENCES

- 1. The sick physician. Impairment by psychiatric disorders, including alcoholism and drug dependence. JAMA 1973;222:684–7.
- AMA Council on Scientific Affairs. Physician mortality and Suicide: results and implications of the AMA-APA pilot study. Chicago: American Medical Association; 1982.
- Institute of Medicine (US). Committee on Quality of Health Care in America. In: Kohn LT, Corrigan JM, Donaldson MS, editors. To Err is human: Building a safer health system. Washington (DC): National Academies Press (US); 2000. https://doi.org/10.17226/9728. Available at: https://www.ncbi.nlm.nih.gov/books/ NBK225182/.
- 4. Booth JV, Grossman D, Moore J, et al. Substance abuse among physicians: a survey of academic anesthesiology programs. Anesth Analg 2002;95:1024–30.
- 5. Gravenstein JS, Kory WP, Marks RG. Drug abuse by anesthesia personnel. Anesth Analg 1983;62:467–72.
- Lutsky I, Hopwood M, Abram SE, et al. Psychoactive substance use among American anesthesiologists: a 30-year retrospective study. Can J Anaesth 1993;40:915–21.
- Wilson J, Tanuseputro P, Myran DT, et al. Characterization of Problematic Alcohol Use Among Physicians: A Systematic Review. JAMA Netw Open 2022;5(12): e2244679.
- 8. Burnett G, Fry RA, Bryson EO. Emerging worldwide trends in substances diverted for personal non-medical use by anaesthetists. BJA Educ 2020;20:114–9.
- 9. Warner DO, Berge K, Sun H, et al. Substance use disorder among anesthesiology residents, 1975-2009. JAMA 2013;310:2289–96.
- Fry RA, Fry LE, Weeks A. Substance use disorder amongst Australian and New Zealand anaesthetic trainees: an analysis of 30 years of data. Anaesth Intensive Care 2015;43:530.
- 11. Zuleta-Alarcón A, Coffman MJ, Soghomonyan MS, et al. Non-opioid anesthetic drug abuse among anesthesia care providers: a narrative review L'abus de médicaments anesthésiques non opioides parmi le personnel d'anesthésie: un compte rendu narratif. Can J Anesth/J Can Anesth. 2017;64:169–84.
- 12. Warner DO, Berge K, Sun H, et al. Substance Use Disorder in Physicians after Completion of Training in Anesthesiology in the United States from 1977 to 2013. Anesthesiology 2020;133:342–9.
- Fitzsimons MG, Soares de Sousa G, Galstyan A, et al. Prevention of drug diversion and substance use disorders: a narrative review. Braz J Anesthesiol 2023; 73:810–8.
- Fan M, Tscheng D, Hamilton M, et al. Diversion of Controlled Drugs in Hospitals: A Scoping Review of Contributors and Safeguards. J Hosp Med 2019;14:419–28.
- **15.** Berge KH, Dillon KR, Sikkink KM, et al. Diversion of Drugs Within Health Care Facilities, a Multiple-Victim Crime: Patterns od Diversion, Scope, Consequences, Detection, and Prevention. Mayo Clinical Proceedings 2012;87:674–82.
- 16. Feinberg SF. "The Impaired Physician: Medical, Legal, and Ethical Analysis with a Policy Recommendation," Nova Law Review. 2009. Available at: https://nsuworks.

- nova.edu/nlr/vol34/iss3/11/;. [Accessed 5 January 2024] https://nsuworks.nova.edu/nlr/vol34/iss3/11.
- 17. Zaman N, Mujahid K, Ahmed F, et al. What are the barriers and facilitators to seeking help for mental health in NHS doctors: a systematic review and qualitative study. BMC Psychiatr 2022;22:595.
- 18. 2020 Marijuana Policy Reform Legislation," Marijuana Policy Project, updated November 20, 2020. Available at: https://www.mpp.org/issues/legislation/keymarijuana-policy-reform/. [Accessed 5 January 2024].
- Papazisis G, Siafis S, Tsakiridis I, et al. Prevalence of Cannabis Use Among Medical Students: A Systematic Review and Meta-analysis. Subst Abuse 2018; 12:1–9.
- Cottler LB, Ajinkya S, Merlo LJ, et al. Lifetime psychiatric and substance use disorders among impaired physicians in a physicians health program: comparison to a general treatment population: psychopathology of impaired physicians. J Addict Med 2013;7:108–12.
- Crean RD, Crane NA, Mason BJ. An evidence based review of acute and longterm effects of cannabis use on executive cognitive functions. J Addict Med 2011;5:1–8.
- 22. Janowsky DS, Meacham MP, Blaine JD, et al. Simulated flying performance after marijuana intoxication. Aviat Space Environ Med 1976;47:124–8.
- 23. Yesavage JA, Leiere VO, Denari M, et al. Carry-over Effects of Marijuana Intoxication on Aircraft Flying Performance: A Preliminary Report. Am J Psychiatry 1985;142:1325–9.
- 24. Leirer VO, Yesavage JA, Morrow DG. Marijuana, aging, and task difficulty effects on pilot performance. Aviat Space Environ Med 1989;60:1145–52.
- 25. ElSohly MA, Mehmedic Z, Foster S, et al. Changes in Cannabis Potency Over the Last 2 Decades (1995-2014): Analysis of Current Data in the United States. Biol Psychiatry 2016;79:613–9.
- 26. Executive Order 12564-Drug-Free Federal workplace. Available at: https://.archives.gov/Federal-register/codification/executive-order/12564.html. Accessed February 10, 2024.
- 27. Omnibus Transportation Employee Testing Act of 1991. 49 U.S.C §§ 31301 and 31306;49 C.F.R. Part 382. Available at: https://www.transportation.gov/sites/dot.gov/docs/199111028_Omnibus_Act.pdf. Accessed February 10, 2024.
- 28. Safety-Sensitive Care-Outs by State In DISA 2019. Available at: https://disa.com/blog/safety-sensitive-carve-outs-by-state. [Accessed 5 January 2024].
- 29. FSPHP Public Policy Statement Physician Illness, Disability, and Impairment: Differentiation and Responsibility 2022. Available at: https://fsphp.memberclicks.net/assets/docs/2022. [Accessed 5 January 2024].
- 30. Skipper GE, Campbell MD, Dupont RL. Anesthesiologists with substance use disorders: a 5-year outcome study from 16 state physician health programs. Anesth Analg 2009;109:891–6.
- 31. Fitzsimons MG, Baker KH, Lowenstein E, et al. Random drug testing to reduce the incidence of addiction in anesthesia residents: preliminary results from one program. Anesth Analg 2008;107:630–5.
- **32.** Tetzlaff J, Collins GB, Brown DL, et al. A strategy to prevent substance abuse in an academic anesthesiology department. J Clin Anesth 2010;22:143–50.
- 33. Fitzsimons MG, Baker K, Malhotra R, et al. Reducing the Incidence of Substance Use Disorders in Anesthesiology Residents: 13 Years of Comprehensive Urine Drug Screening. Anesthesiology 2018;129:821–8.

- 34. Pham JC, Skipper G, Pronovost PJ. Postincident alcohol and drug testing. Am J Bioeth 2014:14:37–8.
- 35. Fitzsimons MG, Ishizawa Y, Baker KH. Drug testing physicians for substances of abuse: case report of a false-positive result. J Clin Anesth 2013;25:669–71.
- 36. Moeller KE, Lee KC, Kissack JC. Urine drug screening: practical guide for clinicians. Mayo Clin Proc 2008:83:66–76.
- DesRoches CM, Rao SR, Fromson JA, et al. Physicians' Perceptions, Preparedness for Reporting, and Experiences Related to Impaired and Incompetent Colleagues. JAMA 2010;304:187–93.
- **38.** Skipper GE. Confrontational Approach Has No Role in Addressing Physician Addiction. Mayo Clin Proc 2009;84:1040–3.
- **39.** Geuijen PM, van den Broek SJM, Dijkstra BAG, et al. Success Rates of Monitoring for Healthcare Professionals with a Substance Use Disorder: A Meta-Analysis. J Clin Med 2021;10:264.
- 40. Dupont RL, Skipper GE. Six lessons from state physician health programs to promote long-term recovery. J Psychoactive Drugs 2012;44:72–8.
- 41. Lenzer J. Physicians health programs under fire. BMJ 2016;353:i3568.
- **42.** Weinhouse S, Merlo LJ, Bundy CC, et al. Barriers to recovery for medical professionals: assessing financial support through a survey of Physician Health Programs. Am J Addict 2023;32:385–92.
- 43. Menk EJ, Baumgarten RK, Kingsley CP, et al. Success of reentry into anesthesiology training programs by residents with a history of substance abuse. JAMA 1990;263:3060–2.
- 44. Domino KB, Hornbein TF, Polissar NL, et al. Risk factors for relapse in health care professionals with substance use disorders. JAMA 2005;293:1453–60.
- 45. Alexander BH, Checkoway H, Nagahama SI, et al. Cause-specific mortality risks of anesthesiologists. Anesthesiology 2000;93:922–30.
- Berge KH, Seppala MD, Lanier WL. The anesthesiology community's approach to opioid- and anesthetic-abusing personnel: Time to change course. Anesthesiology 2008;109:762–4.
- 47. Fitzsimons MG, Baker KH. Not All Strikes Are Easy to Call. Anesth Analg 2009; 109:693–4.
- 48. Fitzsimons MG. Returning to the Practice of Anesthesiology After Treatment for a Substance Use Disorder. ASA Monitor 2020;84:22–3.
- 49. Sivarajan M, Posner KL, Caplan RA, et al. Substance abuse among anesthesiologists. Anesthesiology 1994;80:704.
- 50. Settlement agreement between The United States of American and The Louisiana Supreme Court Under the Americans with Disabilities Act. Available at: https://archieve.ada.gov/louisiana-supreme-court_sa.htm. [Accessed 5 January 2024].
- 51. Federation of State Medical Boards Physician Wellness and Burnout. Available at: https://www.fsmb.org/siteassets/advocacy/policies/policy-on-wellness-and-burnout.pdf. [Accessed 5 January 2024].
- 52. Schroeder R, Brazeau CM, Zackin F, et al. Do state medical board applications violate the americans with disabilities act? Acad Med 2009;84:776–81.
- 53. Wible P, Palermini A. Physician-friendly states for mental health: A comparison of medical licensing boards. Qual Res Med Healthcare 2019;3:107–19.
- Douglas RN, Sharpe EE, Kraus M, et al. Mental Health Questions on State Medical License Applications and Evaluation of Updates. JAMA Netw Open 2023;6: e2333360.