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Why Should I Obtain the Certified Professional in Patient Safety (CPPS) Credential?

by Jonathan B. Cohen, MD, MS, FASA, CPPS, and Patricia A. McGaffigan, MS, RN, CPPS

Anesthesia professionals have a long history of paving the way in patient safety. The Anesthesia Patient Safety Foundation was launched in 1985, four years before the publication of *To Err is Human*, and twelve years before the founding of the National Patient Safety Foundation.^{1,3} Significant progress has been made in patient safety over the past several decades, but there is growing evidence that continued progress in harm reduction has stalled.^{4,7} Further, despite the advancements that have made the delivery of anesthesia safer today than it has ever been, knowledge of the science underlying patient safety is not instinctual and not always straightforward. Popular misconceptions that place greater emphasis on the need for human vigilance over the design of safe systems and cultures which support human performance have resulted in the persistence of adverse events (Table 1).

In order to overcome the misconceptions and inertia with progress in eliminating preventable harm, health care requires clinicians, leaders, and faculty who embrace a fundamental commitment to constancy of purpose for safety and demonstrate the requisite knowledge and competencies to lead and ensure this progress. Anesthesia professionals are optimally suited to leverage their profession’s focus on patient safety to become health care leaders that shepherd the evolution of the field and organize safe systems of care. One such path for validating knowledge and competencies and advancing progress in safety is through formal certification in patient safety.

THE CPPS CERTIFICATION AND RE-CERTIFICATION PATHWAYS

In 2011, the National Patient Safety Foundation (which merged with the Institute for Healthcare Improvement in 2017), formed the Certification Board for Professionals in Patient Safety (CBPPS) to develop and oversee a program to credential individuals with knowledge and competencies in patient safety.²¹ To date, more than 6300 professionals from all 50 US states and 32 countries have earned the Certified Professional in Patient Safety (CPPS) credential.²² This professional certification program serves several purposes.²² It establishes core standards for the field of patient safety, sets an expected proficiency level of those who practice it, and provides those inter-

MISCONCEPTIONS ABOUT PATIENT SAFETY

Misconception	What is supported by safety science:
The creation of strict rules that everyone must abide by universally improves patient safety.	<ul style="list-style-type: none"> • While rules are necessary, rules alone are insufficient. • Rules often reflect <i>work-as-imagined</i>, a sometimes “pollyannaish” state of how tasks are envisioned to be accomplished versus <i>work-as-done</i>, which is how health care professionals must actually accomplish the tasks given the context and constraints of the complex work system. • Organizations often create so many rules that they encroach upon the space necessary to do daily work, conflict with other rules, and paradoxically lead to more adverse events.^{8,9} • Violations of rules frequently precede adverse events, but they can also precede daily work without resulting in harm for many years. This is indicative of the importance of the adaptive capacity of health care professionals to their complex work environment.¹⁰
Punishment of individuals sends a clear message that safety violations will not be tolerated by an organization.	<ul style="list-style-type: none"> • Virtually all safety issues are heavily influenced by the systems in which the health care professionals work.¹¹ • Humans are incapable of error-free performance and admonitions to individuals to remain more vigilant are ineffective, as vigilance cannot be sustained indefinitely.^{12,14} • A punitive approach to these events will not improve safety; rather systems need to be designed that support vigilance and create barriers, recoveries, and redundancies to mitigate harm.^{13,14} • Punishing individuals for making errors leads to concealment, making it harder to detect areas in which systems improvement is necessary.^{15,16}
Safety reporting accurately reflects the incidence of adverse events	<ul style="list-style-type: none"> • Safety reporting in health care was never intended to capture incidence.¹⁷ • Reporting rates are determined by a wide range of cognitive, social, and organizational factors including ease of reporting and the perceived utility in reporting.¹⁸ This may lead reporting to grossly underestimate the true incidence of adverse events and near misses.¹⁹ • No single detection method will adequately capture the full range of adverse events; multiple methods are necessary.²⁰

Table 1: Some Common Misconceptions About Patient Safety.

ested in patient safety a way to demonstrate their knowledge and skill. It also serves to provide a means for employers and organizational leadership to validate a professional’s competencies in patient safety. In 2023, the CPPS examination became the first and only certification examination dedicated to patient safety to be accredited by the National Commission for Certifying Agencies (NCCA).

To be eligible to sit for the CPPS certification examination, a professional must have at least a Baccalaureate degree and three years of experience in a health care setting or with a provider of services to the health care industry, or an associate degree or equivalent plus five

years of experience. Those who are in training, or have recently completed training, may satisfy this requirement with time spent in clinical rotations and residency programs. The content of the domains covered by the examination was originally developed in 2011 after an initial job analysis of patient safety professionals was conducted. The purpose of the job analysis, which is repeated over time, is to identify the practice, knowledge, and tasks associated with professional certification in patient safety and to inform a relevant, valid certification examination that is supported by evidence. While the first CPPS job analysis was informed

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primarily by survey respondents from within the United States, subsequent job analysis surveys have widely incorporated feedback on practice from diverse respondents from around the world. The current CPPS examination includes the five domains of culture, leadership, patient safety risks and solutions, measuring and improving performance, and systems thinking and design/human factors. Additional information about the CPPS certification examination and recertification requirements is available in the **CPPS Candidate Handbook** at <https://forms.ihf.org/hubfs/CPPS/CPPS%20Candidate%20Handbook%20April%202023.pdf>.²³

The CPPS certification examination, practice examination, and recertification programs are overseen by the CBPPS. The CPPS review course, offered by IHI, is separately developed, offered, and taught by subject matter experts, who are unaffiliated with the CPPS examination to create a firewall and ensure integrity between the preparation and examination activity. The CPPS review course is offered in multiple formats, including live in-person and virtual sessions, and a self-paced, online format. Additional information about the **IHI CPPS review course** is available at <https://www.ihf.org/education/cpps/review-courses>.²⁴

Much like the practice of anesthesiology, patient safety is a science, and knowledge of best practices continues to evolve. Lifelong learning in patient safety is essential. Maintenance of the CPPS credential indicates that those who have the certification remain current in this knowledge. Recertification follows a three-year cycle, and there are two approved pathways that can be taken: 1) earning 45 continuing education or experiential hours in content areas that align with the domains that comprise the current CPPS certification exam or 2) retaking and passing the CPPS certification exam within a year prior to the expiration date. Anesthesia professionals have access to a significant amount of continuing education material offered by professional societies both online and at conferences and meetings that meet the criteria for the first recertification pathway.

THE EVOLUTION OF CPPS CERTIFICATION

In the early years of CPPS certification, exam candidates were primarily US-based, and more highly experienced and tenured patient safety, quality, and risk officers or leaders. Since the first exam was offered in 2012, diverse candidates from a variety of roles, specialties, and geographies have earned the CPPS credential. This includes health care executives, clinical department leaders, and direct patient care



providers and clinicians across the continuum of care, as well as colleagues from medical technology companies, accreditation organizations, quality and safety associations and agencies, consultants, and patient and family advocates. Examples of specialties include anesthesiologists, CRNAs, surgical, perioperative, critical care, and pain management staff.

EXAMPLE OF CPPS INTEGRATION INTO MEDICAL EDUCATION

The CPPS review course and exam are increasingly incorporated into graduate medical, nursing, and safety and quality education. Inspired in part by the Lucian Leape Institute's report *Unmet Needs: Teaching Physicians to Provide Safe Patient Care*, the leaders of the University of North Texas Health Science Center's Texas College of Osteopathic Medicine restructured their curriculum to prepare graduates with demonstrated knowledge and competencies in safety.²⁵ In the three-year period since integrating the CPPS review course into their third-year curriculum, 27 academic leaders and faculty and nearly 850 students have earned the CPPS credential, entering residency more prepared to practice safely and serve as advocates for patient safety. More graduate programs in health care are integrating the CPPS review course into their curriculum offerings.

THE VALUE OF CERTIFICATION IN PATIENT SAFETY

Individuals pursue certification in patient safety for a range of reasons, including personal and professional recognition of their knowledge and competencies. In recent years, the CPPS credential has become a requirement upon hire or within the first year of employment, especially for safety, quality, and risk positions to distinguish their capabilities from other candidates. Seventy-nine percent of those who have

earned the CPPS credential report that it has helped them improve patient care at their organization, and 81% report that they have led organization, or system-wide initiatives, leading to critical improvements, since earning the CPPS credential.²²

Specific examples include leading opioid and other medication safety initiatives, developing sedation and monitoring guidelines, collaborating with risk management and quality/safety departments to educate on just culture, safety reporting and risk reduction strategies, and reengineering undergraduate medical school and other safety education programs.

Although quality improvement and patient safety have been combined over the years, it is increasingly recognized that the skills necessary to become a leader in patient safety are distinct from those necessary in quality improvement.^{26,27} The rapidly evolving health care landscape offers expanded opportunity for anesthesia professionals to contribute their safety expertise across new and diverse roles and settings of care. The CPPS credential is distinct in that it is the only certification that recognizes professionals' skills and knowledge specifically in the field of patient safety. In 2007, Paul Batalden and Frank Davidoff challenged us in health care to not only do our work every day, but to improve upon it.²⁸ The CPPS credential, through its evidence-based identification of relevant safety domains, testing of candidate knowledge, and requirement for continuing education or demonstrated experience in safety, provides both the map and the destination for developing professionals dedicated to improving patient safety.

As a result of the collaborative efforts of the APSF, ASA, IHI, and CBPPS, a CPPS review course will be offered at the 2024 ASA Annual Meeting in Philadelphia, PA, in October, and a discount is available to anesthesia professionals who elect to take the CPPS examination.

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REFERENCES

1. Institute of Medicine (US) Committee on Quality of Health Care in America, Kohn LT, Corrigan JM, Donaldson MS, eds. *To err is human: building a safer health system*. Washington (DC): National Academies Press (US); 2000.
2. Stoelting RK. APSF History. <https://www.apsf.org/about-apsf/apsf-history/>. Accessed February 2, 2024.
3. Agency for Healthcare Research and Quality. National Patient Safety Foundation. <https://psnet.ahrq.gov/issue/national-patient-safety-foundation>. Accessed February 2, 2024.
4. Bates DW, Levine DM, Salmasian H, et al. The safety of inpatient health care. *N Engl J Med*. 2023;388:142–153. PMID: 36630622.
5. Berwick DM. Constancy of purpose for improving patient safety—missing in action. *N Engl J Med*. 2023;388:181–182. PMID: 36630628.
6. Wears R, Sutcliffe K. *Still not safe: patient safety and the middle-managing of American medicine*. Oxford University Press; 2019.
7. Dekker S. *Safety differently: Human factors for a new era*. CRC Press; 2014.
8. Reason J. *Managing the risks of organizational accidents*. Routledge; 2016.
9. Reason J. Safety paradoxes and safety culture. *Int J Inj Control Sa*. 2000;7:3–14. doi.org/10.1076/1566-0974(200003)7:1:1-V;FT003
10. Dekker S. *Foundations of safety science: A century of understanding accidents and disasters*. Routledge; 2019.
11. Marx D. Patient safety and the just culture. *Obstet Gynecol Clin North Am*. 2019;46:239–245. PMID: 31056126.
12. Shappell SA, Wiegmann DA. A human error approach to accident investigation: the taxonomy of unsafe operations. *Int J Aviat Psychol*. 1997;7:269–291. doi.org/10.1207/s15327108ijap0704_2.
13. Cohen JB. Achieving a successful patient safety program with implementation of a harm reduction strategy. *APSF Newsletter*. 2023;38:93–95. <https://www.apsf.org/article/achieving-a-successful-patient-safety-program-with-implementation-of-a-harm-reduction-strategy/>. Accessed February 7, 2024.
14. Cohen JB, Lin DM, Fermin L, Catchpole KR. Vigilance in anesthesia practice: what's new in 2024?. *ASA Monitor*. 2024;88:48–51. doi: <https://doi.org/10.1097/01.ASM.000101930815748.fc>
15. Leape LL. Testimony before the Subcommittee on Health of the Committee of Veterans' Affairs House of Representatives one Hundred Fifth Congress First Session, United States, October 12, 1997. <https://www.congress.gov/congressional-report/106th-congress/house-report/1041/1?s=1&r=16>. Accessed April 22, 2024.
16. Institute for Healthcare Improvement & Lucian Leape Institute. Statement from IHI and LLI about the risks to patient safety when medical errors are criminalized. <https://www.ihl.org/about/news/statement-ihl-and-lll-about-risks-patient-safety-when-medical-errors-are-criminalized>. Accessed February 7, 2024.
17. Cook R, Woods D, Miller C. *A tale of two stories: contrasting views of patient safety*. 2002. Chicago, IL: National Health Care Safety Council of the National Patient Safety Foundation & American Medical Association.
18. Macrae C. The problem with incident reporting. *BMJ Qual Saf*. 2016;25:71–75. PMID: 26347519.
19. Hoops K, Pittman E, Stockwell DC. Disparities in patient safety voluntary event reporting: a scoping review. *Jt Comm J Qual Patient Saf*. 2024;50:41–48. PMID: 38057189.
20. Shojania KG. The frustrating case of incident-reporting systems. *Qual Saf Health Care*. 2008;17:400–402. PMID: 19064653.
21. McGaffigan P & JB Copper. Professional certification in patient safety: an opportunity for expanding the horizons for anesthesia professionals. *APSF Newsletter*. 2016;31:136–37. <https://www.apsf.org/article/professional-certification-in-patient-safety-an-opportunity-for-expanding-the-horizons-for-anesthesia-professionals/>. Accessed February 7, 2024.
22. Institute for Healthcare Improvement. CPPS. <https://www.ihl.org/education/cpps>. Accessed February 7, 2024.
23. Institute for Healthcare Improvement. Certified professional in patient safety candidate handbook, January 2024. <https://241684.fs1.hubspotusercontent-na1.net/hubsfs/241684/CBPPS%20Handbook%20Jan%202024%20j.pdf>. Accessed February 7, 2024.
24. Institute for Healthcare Improvement. Certified professional in patient safety review course. <https://www.ihl.org/education/cpps/review-courses>. Accessed February 7, 2024.
25. Lucian Leape Institute. Unmet needs: teaching physicians to provide safe patient care. 2010. <https://www.ihl.org/resources/publications/unmet-needs-teaching-physicians-provide-safe-patient-care>. Accessed February 7, 2024.
26. Cohen JB, Patel SY. The successful anesthesia patient safety officer. *Anesth Analg*. 2021;133:816–820. PMID: 34280174.
27. Fairbanks RJ, Kellogg KM. How we must change the trajectory of safety progress – it's time for a disruptive change. Lecture Presented at: 2023 IHI Patient Safety Congress; May 22, 2023; National Harbor, Maryland.
28. Batalden PB, Davidoff F. What is "quality improvement" and how can it transform healthcare? *Qual Saf Health Care*. 2007;16:2–3. PMID: 17301192.