

## Free Executive Summary



### Redesigning Continuing Education in the Health Professions

Committee on Planning a Continuing Health Professional Education Institute; Institute of Medicine

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*Today in the United States, the professional health workforce is not consistently prepared to provide high quality health care and assure patient safety, even as the nation spends more per capita on health care than any other country. The absence of a comprehensive and well-integrated system of continuing education (CE) in the health professions is an important contributing factor to knowledge and performance deficiencies at the individual and system levels. To be most effective, health professionals at every stage of their careers must continue learning about advances in research and treatment in their fields (and related fields) in order to obtain and maintain up-to-date knowledge and skills in caring for their patients. Many health professionals regularly undertake a variety of efforts to stay up to date, but on a larger scale, the nation's approach to CE for health professionals fails to support the professions in their efforts to achieve and maintain proficiency. Redesigning Continuing Education in the Health Professions illustrates a vision for a better system through a comprehensive approach of continuing professional development, and posits a framework upon which to develop a new, more effective system. The book also offers principles to guide the creation of a national continuing education institute.*

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## Summary

A workforce of knowledgeable health professionals is critical to the discovery and application of health care practices to prevent disease and promote well-being. Today in the United States, the professional health workforce is not consistently prepared to provide high quality health care and assure patient safety, even as the nation spends more per capita on health care than any other country. The absence of a comprehensive and well-integrated system of continuing education (CE) in the health professions is an important contributing factor to knowledge and performance deficiencies at the individual and system levels.

To be most effective, health professionals at every stage of their careers must continue learning about advances in research and treatment in their fields (and related fields) in order to obtain and maintain up-to-date knowledge and skills in caring for their patients. Many health professionals regularly undertake a variety of efforts to stay up to date, but on a larger scale, the nation's approach to CE for health professionals fails to support the professions in their efforts to achieve and maintain proficiency.

In one attempt to better understand the possibilities for improving CE, the Josiah Macy, Jr. Foundation convened a conference in 2007 that brought together stakeholders in health care and continuing health professional education. Agreeing that the current state of CE in the United States is inadequate, the stakeholders recommended that a national interprofessional continuing education institute be created and charged with "advancing the science

**BOX S-1**  
**Statement of Task**

An ad hoc IOM committee will undertake a review of issues in continuing education (CE) of health care professionals that are identified from the literature and from data-gathering meetings with involved parties to improve the quality of care. Based on this review, the committee will consider the establishment of a national interprofessional CE Institute to advance the science of CE by promoting the discovery and dissemination of more effective methods of educating health professionals over their professional lifetimes, by developing a research enterprise that encourages increased scientific study of CE, by developing mechanisms to assess research applications, by stimulating new approaches to both intra- and interprofessional CE, by being independent and composed of individuals from the various health professions, and by considering financing (both short and long term).

of CE.” In response, the foundation asked the Institute of Medicine (IOM) to review issues related to the continuing education of health professionals and to consider the establishment of a national interprofessional institute dedicated to improving CE (see Box S-1). The IOM appointed the Committee on Planning a Continuing Health Care Professional Education Institute. In this report, the committee examines CE for all health professionals,<sup>1</sup> explores development of a national continuing education institute, and offers guidance on the establishment and operation of such an institute. In order to add perspective to its deliberations, the committee examined a number of possible alternatives to an institute, and the report describes some of the pros and cons of the various options. The report provides five broad messages:

- **There are major flaws in the way CE is conducted, financed, regulated, and evaluated.** As a result, the health care workforce is not optimally prepared to provide the highest quality of care to patients or to meet public expectations for quality and safety.
- **The science underpinning CE for health professionals is fragmented and underdeveloped.** These shortcomings have

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<sup>1</sup> Health professionals were identified here as those health care practitioners and technical occupations classified by the Bureau of Labor Statistics that require baccalaureate or higher degrees for licensure.

made it difficult if not impossible to identify effective educational methods and to integrate those methods into coordinated, broad-based programs that meet the needs of the diverse range of health professionals.

- **Continuing education efforts should bring health professionals from various disciplines together in carefully tailored learning environments.** As team-based health care delivery becomes increasingly important, such interprofessional efforts will enable participants to learn both individually and as collaborative members of a team, with a common goal of improving patient outcomes.
- **A new, comprehensive vision of professional development is needed to replace the culture that now envelops continuing education in health care.** Such a vision will be key in guiding efforts to address flaws in current CE efforts and to ensure that all health professionals engage effectively in a process of lifelong learning aimed squarely at improving patient care and population health.
- **Establishing a national interprofessional CE institute is a promising way to foster improvements in CE for health professionals.** This report proposes the creation of a public-private entity that involves the full spectrum of stakeholders in health care delivery and continuing education and that is charged with developing and overseeing comprehensive change in the way CE is conducted, financed, regulated, and evaluated.

## THE CURRENT STATE OF CONTINUING EDUCATION

For health professionals, continuing education encompasses the period of learning from postlicensure to career's end. CE is intended to enable health professionals to keep their knowledge and skills up to date, with the ultimate goal of helping health professionals provide the best possible care, improve patient outcomes, and protect patient safety.

The reality of continuing education, however, is far different. Although there are instances of programs focused on those goals, on an overarching level the U.S. approach to CE has many flaws:

- Health professionals and their employers tend to focus on meeting regulatory requirements rather than identifying personal knowledge gaps and finding programs to address them. Many of the regulatory organizations that oversee CE tend

not to look beyond setting and enforcing minimal, narrowly defined competencies.

- The current approach to CE is most often characterized by didactic learning methods, such as lectures and seminars; traditional settings, such as auditoriums and classrooms; specific (frequently mandated) intervals; and teacher-driven content that may or may not be relevant to the clinical setting.
- CE is operated separately in each profession or specialty, with responsibility dispersed among multiple stakeholders within each of those communities.
- The scientific literature offers guidance about general principles for CE but provides little specific information about how to best support learning; for the most part, CE providers cannot determine the effectiveness of their instructional methods, and health professionals lack a dependable basis for choosing among CE programs. Further, the inability to draw definitive conclusions about the effectiveness of specific CE methods has clouded discussions about the larger value of continuing education for health professionals.
- In medicine and pharmacy—and nursing to some extent—pharmaceutical and medical device companies have taken a lead role in financing the provision of and research on CE. Such commercial funding has raised and continues to raise concerns about conflicts of interest and whether some companies are using CE to influence health professionals so as to increase market share.
- Regulations vary widely by specialty and by state, as state boards generally are responsible for determining the number of CE credits required for profession-specific *licensure*. *Certification* and *credentialing*, two other major parts of the regulatory environment, are characterized by wide variations as well. *Accreditation* of CE providers may be based on an evaluation of the quality of specific CE activities or of CE providers. Such wide variations in CE regulation lead to inconsistent learning and conflict with efforts to achieve high levels of competence and practice for every health professional.

### TOWARD A SYSTEM OF CONTINUING PROFESSIONAL DEVELOPMENT

The hallmarks of a well-prepared health professional have been delineated in several previous IOM reports. *Crossing the Quality*

*Chasm: A New Health System for the 21st Century* calls on health professionals to provide care that is safe, effective, patient-centered, efficient, timely, and equitable. *Health Professions Education: A Bridge to Quality* recommends that all clinicians possess five core competencies, which include being able to provide patient-centered care, work in interprofessional teams, employ evidence-based practice, apply quality improvement, and utilize informatics. Together, these quality goals represent the foundation for building a better continuing education system.

Requirements that are based on credit hours rather than outcomes—and that vary by state and profession—are not conducive to teaching and maintaining these core competencies aimed at providing quality care. Improving the system for CE will therefore require changes that expand its conventional boundaries.

An emerging concept, called continuing professional development (CPD), includes components of CE but has a broader focus, such as teaching how to identify problems and apply solutions, and allowing health professionals to tailor the learning process, setting, and curriculum to their needs. The principles of CPD already have been adopted in numerous other countries, including the United Kingdom and other members of the European Union, Canada, and New Zealand. Some groups in the United States, including the American Medical Association and the Accreditation Council for Pharmacy Education, also have recognized the broader learning opportunities that CPD offers and have adopted the concept as a guide. In line with such examples, the committee adopted the term CPD to signal the importance of multifaceted, lifelong learning in the lives of all health professionals.

In this new vision, a CPD system takes a holistic view of health professionals' learning, with opportunities stretching from the classroom to the point of care. It shifts control of learning to individual health practitioners and has the flexibility to adapt to the needs of individual clinicians, enabling them to be the architects of their own learning. The system bases its education methods on research theory and findings from a variety of fields, and embraces information technologies to provide professionals with greater opportunities to learn effectively.

If coordinated nationally and across the health professions, a CPD system offers the promise of advancing evidence-based, inter-professional, team-based learning; engendering coordination and collaboration among the professions; providing higher quality for a given amount of resources; and leading to improvements in patient health and safety.

## A NATIONAL CONTINUING PROFESSIONAL DEVELOPMENT SYSTEM

The committee ultimately concluded that a continuing professional development institute offered the most promise for redressing the flaws in the current approach to CE. But first the committee considered five potential routes for creating an effective system for CPD.

1. *Status quo.* While some beneficial learning is taking place under the status quo, the flaws documented in this report cannot be remedied by anything short of a coordinated national effort.
2. *New program within an existing government agency.* The committee considered placing responsibility for a national CPD system in either the Agency for Healthcare Research and Quality or the Health Resources and Services Administration, which both fund health care research. Placing responsibility for a national CPD system in one of these agencies would tie CPD to either improved quality or more team-based care. However, a federal program could not as readily incorporate collaborative decision-making, including public and private sector actors, and could also be subject to procedural and/or financial requirements that could diminish its effectiveness.
3. *Ad hoc coalition of current stakeholders and organizations.* A broad coalition of stakeholders could create a national interprofessional CPD system. The committee specifically considered a coalition that includes current stakeholders and organizations whose purposes are to improve health care quality and patient safety (e.g., National Committee for Quality Assurance and the National Quality Forum). Expanding to the requisite breadth will require a strong central convener; reducing professional and state variability is beyond the ability of such an ad hoc group for the foreseeable future.
4. *A private structure operated by professional societies and organizations.* Such a structure could include all health professions and develop collaborations with other stakeholders (e.g., employers, researchers, state boards, funders) to build the remaining infrastructure needed to support a CPD system. Two features missing from this approach are an incentive to convene and an oversight body for accountability.
5. *A new public-private structure.* Like the purely private structure, a public-private organization could catalyze participation of a broad set of stakeholders in improving health care

quality and patient safety, but it would also be accountable to the federal government. Of the five alternatives, creating a new organization with so many interested parties will be complicated.

The committee concluded that alternative 5, establishing a public-private body that would promote collaboration among a variety of stakeholders and be held accountable by the federal government, offers the most promise. By fostering collaboration among diverse groups, it could develop and oversee a comprehensive research agenda that would reach across health professions; it could serve to coordinate current licensure, certification, credentialing, and accreditation activities and encourage the groups in charge to work toward regulatory standards for CPD that reflect research findings. Collectively, the stakeholders could develop and adopt broad conflict-of-interest policies and identify new and more consistent funding sources for CPD to replace conflicted funding.

The committee therefore calls on the federal government to work with stakeholders and act as the initial convener of efforts to develop a public-private institute devoted to improving continuing professional development that will foster the delivery of high quality health care.

**Recommendation 1: The Secretary of the Department of Health and Human Services should, as soon as practical, commission a planning committee to develop a public-private institute for continuing health professional development. The resulting institute should coordinate and guide efforts to align approaches in the areas of:**

- (a) Content and knowledge of CPD among health professions,**
- (b) Regulation across states and national CPD providers,**
- (c) Financing of CPD for the purpose of improving professional performance and patient outcomes, and**
- (d) Development and strengthening of a scientific basis for the practice of CPD.**

The remainder of this report refers to the proposed public-private institute as the Continuing Professional Development Institute (CPDI). An effective CPD system would offer significant improvement over today's fragmented approach to continuing education. In designing an institute that will accomplish the broad goals of Recommendation 1, the planning committee will need to consider how to achieve each of the components of an effective CPD system.



**Recommendation 2: To achieve the new vision of a continuing professional development system, the planning committee should design an institute that:**

- (a) Creates a new scientific foundation for CPD to enhance health professionals' ability to provide better care;
- (b) Develops, collects, analyzes, and disseminates metrics, including process and outcome measures unique to CPD;
- (c) Encourages development and use of health information technology and emerging electronic health databases as a means to provide feedback on professionals' and health system performance;
- (d) Encourages development and sharing of improvement tools (e.g., learning portfolios and assessment resources) and theories of knowledge and practice (e.g., peer review systems for live documentation, such as wikis) across professions;
- (e) Fosters interprofessional collaboration to create and evaluate CPD programs and processes; and
- (f) Improves the value and cost-effectiveness of CPD delivery and considers ways to relate the outputs of CPD to the quality and safety of the health care system.

A central tenet of this report is that collaboration among various stakeholders, including patients and members of the public, is essential to developing an improved CPD system. By working together, the CPD community and the health care quality improvement community will be best able to drive more efficient resource allocation and increase the overall value of CPD.

**Recommendation 3: The planning committee should design the Continuing Professional Development Institute to work with other entities whose purpose is to improve quality and patient safety by:**

- (a) Collaborating with the Agency for Healthcare Research and Quality, the Centers for Medicare and Medicaid Services, the Joint Commission, the National Committee for Quality Assurance, the National Quality Forum, and other data measurement, collection, cataloging, and reporting agencies to evaluate changes in the performance of health professionals and the need for CPD in the improvement of patient care and safety; and
- (b) Involving patients and consumers in CPD by using patient-reported measures and encouraging transparency to the public about performance of health care professionals.

### Advancing the Science of CPD

The current body of literature does not conclusively identify the most effective CE methods, the correct mixture of CE methods, or the amount of CE needed to maintain competence or to improve clinical outcomes. The literature does offer some guidance for improved learning, suggesting that CE should be guided by needs assessments, should be interactive, and should provide multiple learning opportunities and multiple methods of education.

Future research needs to include identifying theoretical frameworks, determining proven and innovative CPD methods and the degrees to which they apply in various contexts, defining CPD outcome measures, and determining influences on learning. The fields of adult learning, education, sociology, psychology, organizational change, systems engineering, and knowledge translation can support the advancement of how CPD should be provided.

**Recommendation 4: The Continuing Professional Development Institute should lead efforts to improve the underlying scientific foundation of CPD to enhance the knowledge and performance of health professionals and patient outcomes by:**

- (a) Integrating appropriate methods and findings from existing research in a variety of disciplines and professions,
- (b) Generating research directions that advance understanding and application of new CPD solutions to problems associated with patient and population health status,
- (c) Transforming new knowledge pertinent to CPD into tools and methods for increasing the success of efforts to improve patient health, and
- (d) Promoting the development of an inventory of measurement instruments that can be used to evaluate the effectiveness and efficiency of CPD.

### Collecting and Disseminating Data

The data required to assess a health professional's educational needs, identify effective programs to meet those needs, and evaluate CPD programs are derived from a diverse range of professional fields and geographic locations. As a result of gaps in data collection, validation, and analysis, decisions about continuing education and professional development are often not based on evidence. Specifically, data should help determine what effectively influences a health professional's capacity to deliver high quality health care.

**Recommendation 5: The Continuing Professional Development Institute should enhance the collection of data that enable evaluation and assessment of CPD at the individual, team, organizational, system, and national levels. Efforts should include:**

- (a) Relating quality improvement data to CPD, and
- (b) Collaborating with the Office of the National Coordinator for Health Information Technology in developing national standardized learning portfolios to increase understanding of the linkages between educational interventions, skill acquisition, and improvement of patient care.

### **Enhancing the Effectiveness of Regulation**

The effectiveness of CPD programs is influenced by every aspect of regulation—i.e., the licensure, certification, and credentialing of health professionals and the accreditation of CPD providers. At present, the fragmentation and variation that now characterize the regulatory landscape inhibit development of a system that systematically improves professionals' competence and performance across the entire continuum of CPD.

Current regulators have the knowledge and expertise to assess learning and continuing education activities. However, their efforts are "siloed" and ineffective in achieving consistently high quality CE. The role of a national interprofessional organization is to promote collaboration across the entire CPD regulatory system, with the ultimate goal of improving health care quality and patient safety. The CPDI should work with current regulatory bodies to establish national standards that can underpin stronger systems.

**Recommendation 6: The Continuing Professional Development Institute should work with stakeholders to develop national standards for regulation of CPD. The CPDI should set standards for regulatory bodies across the health professions for licensure, certification, credentialing, and accreditation.**

### **Improving Financing**

Adequate and assured long-term financial support for the Continuing Professional Development Institute and CPD research will be necessary to realize a fully developed CPD system. Although no data exist to project whether the costs of a comprehensive CPD system would be greater or less than the costs of the current system,

the committee's judgment is that sufficient funding exists within the current structure to support better learning.

Efforts to eliminate or avoid conflicts of interests in the funding of CPD, such as practitioner-sponsored CPD and the pooling of funds contributed by various parties already are under way. By building on these, the planning committee and the CPDI would be well positioned to develop and adopt national guidelines on conflicted sources of funding for all health professions.

**Recommendation 7: The Continuing Professional Development Institute should analyze the sources and adequacy of funding for CPD, develop a sustainable business model free from conflicts of interest, and promote the use of CPD to improve quality and patient safety.**

Health care often benefits when professionals from within and across disciplines work together. But in many situations today, care may not be practiced in teams because people are not trained in teams. Interprofessional experiments have resulted in pockets of programs whose experiences can be incorporated into better CPD. A shared educational framework can align communication and share advances across all health professions.

**Recommendation 8: The Continuing Professional Development Institute should identify, recognize, and foster models of CPD that build knowledge about interprofessional team learning and collaboration.**

Before they are ready for widespread adopting, new methods for providing continuing professional development must prove their effectiveness through rigorous testing (e.g., demonstration programs). A number of innovative CPD methods remain at that stage. For example, learning portfolios, which are development tools that document professionals' progress of their practice skills, can be used across professions, but their effectiveness in improving the learning process and health professional performance must be assessed. Demonstration programs can be developed using the research and development structures currently in place.

**Recommendation 9: Supporting mobilization of research findings to advance health professional performance, federal agencies that support demonstration programs, such as the Agency for Healthcare Research and Quality and the Health Resources**

**and Services Administration, should collaborate with the Continuing Professional Development Institute.**

By its very nature, continuing professional development will be complex, involving many stakeholders playing various roles. Continuous evaluations therefore will be needed to ensure that progress is being made toward better health professional development. Evaluation could occur at four levels that will require different metrics: individual health professionals, stakeholder organizations, the Continuing Professional Development Institute, and the overall CPD system. Arguably, the most important but most difficult level of evaluation is that of the overall CPD system. To hold the CPDI accountable for its activities and stewardship of the CPD system, the institute should be required to make periodic reports, analogous to Medicare Payment Advisory Commission (MedPAC) reports, to the Secretary. The institute should provide its first report after 2 to 5 years of operation, to allow for the usual problems that typically occur in any new venture.

**Recommendation 10: The Continuing Professional Development Institute should report annually to its public and private stakeholders and should hold a national symposium on the performance and progress of professional development and its role in enhancing quality of care and patient safety.**

## **GUIDELINES FOR PLANNING AND STRUCTURING THE CONTINUING PROFESSIONAL DEVELOPMENT INSTITUTE**

### **The Planning Committee**

In implementing the recommendations in this report, the planning committee will need to define the Continuing Professional Development Institute's scope of work, develop a governance model, identify sources of financing, and identify and manage relationships with current and new stakeholders—including determining the extent of the federal role in the public-private institute. The committee should operate under four basic principles. It should be held accountable by the public and the Secretary. It should be competency-based, flexible, and nimble. It should broadly communicate with and gather input from the rest of the field (e.g., professional societies, accreditors, CPD providers, licensing bodies), but make decisions based only on the votes of the committee members. Finally, it should use consensus building, not parliamentary procedure, in developing processes.

The committee should be funded by contracts and grants from the government and private foundations to support staff and travel. The IOM committee envisions the planning committee to consist of 13-15 members. The members should be recognized leaders in their respective fields, have experience in leading change and improvement, and have some level of experience in interprofessional learning. At a minimum, membership should include practicing professionals and individuals with expertise in CPD research and government. The committee should be led by a chair who has a record of success in setting and implementing visions and building consensus.

### **The Institute**

The CPDI should be an independent body with membership and financing from both the public and the private sectors. The federal government initially should oversee and coordinate the development of the CPDI, and a competency-based board should be appointed to lead the CPDI's activities. Ultimately, upon the decision of the institute's board, the government's responsibilities should be transferred back to CPD stakeholders. Unless the board determines otherwise, the Secretary will eventually have no formal role in the institute. The size of the CPDI's budget should depend on its exact functions and breadth, and its budget should be initially projected by the planning committee and refined by the board.

The planning committee should determine the structure of the CPDI's initial board, its membership size, and the competencies that need to be represented among board members. Several members of the planning committee should be named to the board, in order to facilitate the institute's transition from planning to implementation. Once the board has achieved a more permanent structure, its members should rotate off in an overlapping manner.

Considering the breadth of issues addressed by the CPDI, the board may find it valuable to establish a number of standing councils and ad hoc committees as needed. The committee suggests four initial standing councils on issues identified in this report—on the science of CPD, on regulation, on financing, and on data collection and dissemination. The councils would involve a larger group of diverse stakeholders in raising issues and providing advice to the board, and would add transparency to the CPDI's planning and operations.

## CONCLUSION

Developing and implementing a new national system to improve continuing professional development on a broad scale, across disciplines and government boundaries, will be difficult but offers the best hope for addressing the host of problems that prevent CE from adequately serving health professionals, patients, and the nation. To help catalyze the transition to a better CPD system—one that is coordinated, harmonized, and efficient—the federal government can play a key role as a central convener, bringing together diverse stakeholders in health care and continuing education who collectively can shape a new national interprofessional institute. In turn, the institute, in collaboration with stakeholders, will be centrally positioned to foster a new CPD system that can prepare all health professionals to perform to their highest potential. Working together, these forces can fulfill the vision of ensuring that the nation has a workforce of health professionals who can provide high quality, safe care and improve patient outcomes.

# REDESIGNING CONTINUING EDUCATION IN THE HEALTH PROFESSIONS

Committee on Planning a Continuing Health Care  
Professional Education Institute

Board on Health Care Services

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The serpent has been a symbol of long life, healing, and knowledge among almost all cultures and religions since the beginning of recorded history. The serpent adopted as a logotype by the Institute of Medicine is a relief carving from ancient Greece, now held by the Staatliche Museen in Berlin.

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*“Knowing is not enough; we must apply.  
Willing is not enough; we must do.”*  
—Goethe



**INSTITUTE OF MEDICINE**  
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<sup>1</sup> Served through May 2009.

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**T**his report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. We wish to thank the following individuals for their review of this report:

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## Preface

Continuing education (CE) is the process by which health professionals keep up to date with the latest knowledge and advances in health care. However, the CE “system,” as it is structured today, is so deeply flawed that it cannot properly support the development of health professionals. CE has become structured around health professional participation instead of performance improvement. This has left health professionals unprepared to perform at the highest levels consistently, putting into question whether the public is receiving care of the highest possibly quality and safety.

*Redesigning Continuing Education in the Health Professions* is the result of the work by the Institute of Medicine (IOM) Committee on Planning a Continuing Health Care Professional Education Institute. This report does not recommend specific details about the operations of an institute—instead it illustrates a vision for a better system through a comprehensive approach of continuing professional development and a framework upon which to develop a new, more effective system. The report also offers principles to guide the creation of an institute. Refocusing the lens from CE to a system of continuing professional development supports health professionals in achieving the goal of high quality, safe health care.

CE is one of many strategies to strengthen and retool the health care workforce and just one of many pieces necessary to improve health care quality and patient safety. Yet it is a critical piece—one



that has been overlooked for too long. In the current era of health reform, transformation of CE offers an actionable agenda to begin the alignment of learning with public expectations and the needs of health professionals.

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*Chair*  
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