A Descriptive Study of the View from the Top: Perspectives of Experts in Continuing Medical Education

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A Descriptive Study of the View from the Top: Perspectives of Experts in Continuing Medical Education

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education
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Keywords: adult education, continuing professional development, commercial support, performance improvement, accreditation

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Dedication

This project is dedicated to my parents, John W. and Jane R. Baker, whose guidance, love, and perseverance inspired me to pursue this terminal degree and to my brother, Scott W. Baker, who would have celebrated his birthday on the day of my final oral examination.
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A Descriptive Study of the View from the Top: Perspectives of Experts in Continuing Medical Education

Martha C. Baker

ABSTRACT

This study describes and explains the perspectives of selected experts in continuing medical education (CME) and provides a glimpse at their lived experience. The theoretical frameworks are inclusive of constructivism and social constructivism reflecting the learning that takes place in medicine and that which occurs in the interview process. The voice of the researcher is heard through her professional role as a continuing medical education provider.

The major elements of CME are identified as the role of accreditation and physician involvement in the design and delivery of CME; the primary influences as funding, physician involvement and accreditation; the significant issue is the expertise of CME providers; the future of CME is to be molded by the funding of CME, its providers and technology in continuing education venues. Performance improvement continuing medical education will continue to be the gold standard of accredited organizations.

Implications for practice are many as the role of the CME provider changes to meet the expectations of the Accreditation Council for Continuing Medical Education, the Institute of Medicine and organizations such as the American Association of Medical Colleges and American Association of Colleges of Nursing. Future research studies could include the following: interviewing experts in similar work environments may provide more focused findings that would assist that particular segment of the profession.
and their respective institutions; a comparison of local and national providers may shed light on how similar or disparate they are in the design, delivery, measurement, and funding of CME; a prospective longitudinal study looking at the implementation and outcomes of the IOM initiative for conflict of interest in medicine, the IOM initiative for the redesign of continuing education in the health professions or interdisciplinary lifelong learning in the health professions as proposed by the AAMC and AACN; investigate the proposed Continuing Professional Development Institute in five to seven years to determine if it achieved the desired design and function, and finally, repeating this study with experts from the same categories in about ten years should reveal significant changes in continuing medical education as compared to the findings presented in the current study.
CHAPTER ONE

INTRODUCTION

Continuing medical education (CME) has existed since medicine became a profession due to the need for practicing physicians to remain current in the field of medicine. Through study, research, practice, and time, the field of medicine has accelerated, at times faster than some physicians can keep pace. In an effort to ensure the competence and performance of practicing physicians, CME has developed along two paths: “the development of producing and delivery of CME activities, and CME credit leading to certification, membership in specialty organizations and licensure” (Davis & Loofbourrow, 2007, p. 142). Most states have established rules and laws regarding physician licensure, which include participation in continuing medical education. In addition, many states have mandatory CME topics required for licensure and re-licensure. Providers accredited by the Accreditation Council for Continuing Medical Education (ACCME) must provide CME acceptable to state licensing boards and the American Medical Association (AMA). These providers are accountable for following the guidelines and policies set in place by the ACCME to maintain accreditation status. Physician participants rely on the providers for educational activities that meet their needs and assist in maintaining and improving competency and performance. That improvement can ultimately enhance the health of their patients and, eventually, the health of the general population.
As a provider of CME, I have witnessed a variety of changes in the field of CME in terms of accreditation guidelines, commercial support, outcome measurement, certification of providers, reform and repositioning initiatives, and just-in-time CME on the Internet among others. The current study is designed to learn about the perspectives of experts, to understand their lived experience and further my knowledge about the field.

Background

Several reports and recommendations between 2000 and 2007 suggested a study of CME from the perspective of experts in the field. The Institute of Medicine produced two reports, *To err is human: Building a safer health system* (2000) and *Crossing the quality chasm: A new health system for the 21st century* (2001), that captured the attention of the Conjoint Committee on CME of the Council of Medical Specialty Societies (CMSS) and led them to examine the current state of affairs in CME and set the stage for comprehensive change. This examination produced the *Reform and Repositioning Recommendations* in 2005 (Reforming and repositioning continuing medical education, 2005). The Accreditation Council for Graduate Medical Education (ACGME) developed core competencies for medical residents (Accreditation Council for Graduate Medical Education, 2008a) comparable to the competencies established by the American Board of Medical Specialties (ABMS) Maintenance of Certification programs (American Board of Medical Specialties, 2009.)

In 2007, a group of professional continuing education leaders met to address continuing education in the health professions. The final product was a monograph entitled, *Continuing Education in the Health Professions: Improving Healthcare through Lifelong Learning* published in 2008. Representatives of medical schools, medical
journals, professional and organizational associations, medical systems, databases and government programs comprised the conference participants, presenters, and researchers (Continuing education in the health professions: Improving healthcare through lifelong learning, 2008).

Published in 2007, the Agency for Healthcare Research and Quality (AHRQ) report on CME investigated the effectiveness of CME and provided suggestions for future research including the impact of simulation in improving clinical outcomes and measurement of effectiveness at multiple points of post-investigation. The report recommended that a national research agenda should clearly define what constitutes CME and offer standardized approaches to describing CME interventions, media techniques and exposure volumes based on a conceptual model of effective CME (Marinopoulos, Dorman, Ratanawngsa, Wilson, Ashar, Magaziner et al., 2007).

The impetus for the current research was the consensus that CME needed change, and that research to advance the science of CME was essential for the field to move forward. For the purposes of this research, the researcher analyzed reports and documents and infused them with the interview data.

During my eight-year tenure in CME, change has been dramatic. The pharmaceutical industry evolved from being the host for social events with tidbits of education to moving educational grants out of the marketing division into the medical affairs division. Pharmaceutical representatives in both office and hospital settings facilitated CME in the past; however, they are no longer allowed to discuss funding via commercial support with providers.
In addition to changes in the pharmaceutical industry, government oversight brought to light issues regarding funding and commercial support of CME. Finally, the accreditation body, ACCME, promulgated new standards for commercial support to guarantee independence and transparency, and new standards for accreditation forcing providers to demonstrate that learners were actually learning and changing practice behaviors rather than just filling seats at a conference or other educational activity.

New CME formats approved by the American Medical Association include education via the Internet and self-assessment and process improvement in individual practice. Process improvement participation in the hospital setting is also a form of CME for those who complete all the required components (American Medical Association, 2010).

In addition, ACGME developed new competencies for graduate medical students (Accreditation Council for Graduate Medical Education, 2008a) coinciding with those expected during the Maintenance of Certification process with the American Board of Medical Specialties (American Board of Medical Specialties, 2009.)

As of 2009, CME providers can gain community recognition by passing a certification exam offered by the National Commission for Certification of CME Professionals, Inc. Becoming a Certified Continuing Medical Education Professional assures the providers/practitioners are qualified and competent to coordinate and manage CME programs (National Commission for Certification of CME Professionals. 2009).

Purpose of the Study

The purpose of this study is to describe and explain the perspectives of selected participants on continuing medical education.
Research Questions

The research questions that guided this study were as follows:

1. What are the major elements of CME?
2. What influences CME?
3. What are the most significant issues in CME?
4. What is the future of CME?

Problem Statement

Tension exists regarding the future of CME in the United States.

Theoretical Framework

Constructivism guided this study because it is the theory that best fits my personality and understanding of how learning occurs and develops. Since one must consider the impact of others in the construct of knowledge, social constructivism was also a factor. Social constructivism places a strong emphasis on dialogue and interaction with others, and negotiating meaning or refining understanding by contrasting personal perspectives with others. Learning, then, occurs as the learners change their views based on, or in response to, the views of others. According to Svinicki (2004), meaning lies in the collective understanding that we achieve as we experience the world together. Constructivist theory is very similar to social cognitive theory in its assertion that learning is an interaction between the learner, the environment, and the behavior to be learned. (p. 243)

Since CME is the last phase of lifelong learning for physicians, it is important for providers to understand how physicians learn and in what settings. Constructivism can
explain how learning occurs and guide teachers/instructors to the most effective instructional techniques, which, in turn, can apply to CME.

Physicians learn by comparing outcomes, by discussing patients with their colleagues, by trying new techniques and combinations of medications, and by noting the results for the future. They also learn by listening to national and local opinion leaders, researchers, and their patients. Sometimes learning occurs during hands-on workshops or on the battlefield. Self-reflection and reflective practice are other learning experiences. In short, physicians develop and refine their skills by the constant construction of new knowledge.

In her article, The Role of Educational Theory in Continuing Medical Education: Has It Helped Us, Mann (2004) noted constructivism asserts that learning is the process of constructing meaning and making sense of our experience, based on our past experience. Constructivism has served to facilitate analysis of the process of reflection and aided understanding of those opportunities in which individuals mutually develop their understanding of situations and build knowledge together. It informs the understanding of learning from experience and reflective practice and highlights the fact that individuals build their knowledge in very different ways. That is not to say that individuals have their own view of what knowledge is; every group has a core of mutually agreed-on knowledge. However, the differences in the way in which knowledge is constructed and acquired are important in our recognition of how learning occurs from experience in practice. (p. S28)
Constructivism and social constructivism relate both to the learning process often observed in continuing medical education and to the act of interviewing, wherein the researcher and the participant dialogue and interact, and negotiate meaning or refine understanding by contrasting personal perspectives. Constructivism is reviewed in greater detail in Chapter 2 and briefly discussed in Chapter 3.

Method

This qualitative research study describes the lived experience of select experts in CME. Data collection included eight semistructured interviews with eight participants, researcher observations documented in field notes, a document review, and a reflective journal. The data collected allowed crystallization, as described by Janesick (2000), into a final set of conclusions.

Summary

Chapter One introduced the broad concepts of the study, including the background, purpose, the problem statement, research questions, theoretical framework, and the qualitative research method. The following definitions and abbreviations were suited to the purposes of this study. A review of the literature in Chapter Two includes a brief history of adult education, continuing professional education, the history of medical education, the current state of affairs, and the history of CME, highlighting recent and varied initiatives for reform and repositioning in CME, and recommended research found in CME literature.
Definitions and Abbreviations

Academic medical center. Also known as a teaching hospital, an academic medical center is where Americans turn “for specialized surgeries, life-saving care, and complex treatments. They are where medical knowledge continuously evolves and new cures and treatments are found. They are where critical community services, such as trauma and burn centers, always stand ready. They are the training ground for more than 100,000 new physicians and other health professionals each year. Teaching hospitals also are a vital part of America's safety net, providing care to millions of the nation's uninsured” (Association of American Medical Colleges, 2009.)

Accreditation Council for Continuing Medical Education (ACCME). The ACCME's mission is the identification, development, and promotion of standards for quality continuing medical education (CME) utilized by physicians in their maintenance of competence and incorporation of new knowledge to improve quality medical care for patients and their communities (ACCME, 2008)

Accreditation Council for Graduate Medical Education (ACGME). Responsible for the accreditation of post-MD medical training programs within the United States. Accreditation is through a peer reviewed process and is based on established standards and guidelines (ACGME, 2008b).

Accreditation Council for Pharmacy Education (ACPE). The national agency for the accreditation of professional degree programs in pharmacy and providers of continuing pharmacy education (ACPE, 2008).
Accreditation. A voluntary process of evaluation and review based on published standards, following a prescribed process, conducted by a non-governmental agency of peers (ACGME Glossary of Terms, 2007).

Accredited CME. “The ACCME uses the term accredited CME to encompass the educational programs and educational activities of providers accredited within its system. The ACCME holds (state and ACCME) accredited providers accountable for all activities presented under the ‘mark’ of the ACCME/SMS accreditation statement. Any requirements we promulgate are applicable to all continuing medical education activities presented by ACCME/SMS accredited providers. In turn, the ACCME stands accountable to the public, the physicians, the government, the ACCME member organizations and the organizations of medicine, in general, for the manner in which this accredited CME is conducted and presented. The ACCME cannot be held accountable for all CME for which learners receive ‘credit’ or all CME that is ‘certified for credit’ – but only for CME presented under the umbrella of an ACCME (or state medical society) accreditation statement” (Accreditation Council for Continuing Medical Education, 2008b).

Agency for Healthcare Research and Quality's (AHRQ). AHRQ’s “mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. Information from AHRQ's research helps people make more informed decisions and improve the quality of health care services. AHRQ was formerly known as the Agency for Health Care Policy and Research” (Agency for Healthcare Research and Quality Mission and Budget, 2009).
American Association for Adult and Continuing Education (AAACE). AAACE “is dedicated to the belief that lifelong learning contributes to human fulfillment and positive social change. We envision a more humane world made possible by the diverse practice of our members in helping adults acquire the knowledge, skills and values needed to lead productive and satisfying lives” (American Association for Adult and Continuing Education, 2009).

American Medical Association (AMA). “The American Medical Association helps doctors help patients by uniting physicians nationwide to work on the most important professional and public health issues. AMA policy on issues in medicine and public health is decided through its democratic policy-making process in the AMA House of Delegates. The AMA's activities with for-profit entities are directed by AMA guidelines for corporate relationships and its Internet products follow AMA guidelines for health and information Web sites” (American Medical Association, 2010).

American Medical Association Physician Recognition Award (AMA PRA Category 1 Credit(s)TM). “The AMA Physician's Recognition Award (PRA) and the related credit system recognize physicians who demonstrate their commitment to staying current with advances in medicine by participating in certified continuing medical education (CME) activities” (American Medical Association, 2006).

Association of American Medical Colleges (AAMC). “The AAMC and the medical schools, teaching hospitals, academic and professional societies, faculty, residents, and students we represent are committed to improving the nation's health through medical education, research, and high-quality patient care. We are dedicated to the communities we serve, committed to advancing the public good, and steadfast in our
desire to earn and keep the public's trust for the role we are privileged to play in our society” (Association of American Medical Colleges, 2009).

Continuing Medical Education (CME). CME “consists of educational activities which serve to maintain, develop, or increase the knowledge, skills, professional performance and relationships that a physician used to provide services for patients, the public, or the profession. The content of CME is that body of knowledge and skills generally recognized and accepted by the profession as within the basic medical sciences, the discipline of clinical practice and the provision of health care to the public” (Accreditation Council for Continuing Medical Education, 2008b).

Medical Education and Communication Companies (MECC’s). “NAAMECC was founded in 2002 by four medical education professionals and their companies and has since grown exponentially. There are hundreds of medical education and communications companies (MECCs) in the United States and approximately 110 are accredited by the Accreditation Council for Continuing Medical Education (ACCME). As a result, MECCs play a crucial role in educating thousands of medical professionals and patients each year, ultimately affecting millions. In the past, there has been no organized voice for MECCs. In the ever-changing and complicated medical education and communications environment, NAAMECC functions as a representative and advocate of our industry.” (North American Association of Medical Education and Communication Companies, 2010)

Continuing Physician Professional Development (CPPD). Also known as, Continuing Professional Development (CPD), “CPPD or CPD is the term that describes the wider arena of skills and specialized education, including but not limited to cognitive
knowledge that physicians employ in the delivery of patient care. Leadership, team management, communication skills and systems based competency all provide examples of professional skills that improve the quality of care. CPPD asserts not just that physicians will continue learning new medical knowledge but also that they will learn how to keep learning (i.e., use of new electronic clinical resources to assist with patient care, continuous assessment of practice through performance improvement interventions, etc.). CPPD also refers to the division within the Medical Education Group at the AMA, which deals with CME/CPPD related issues” (American Medical Association, 2010).

*Pharmaceutical Research and Manufacturers of America (PhRMA).* PhRMA represents the country’s leading pharmaceutical research and biotechnology companies, which are devoted to inventing medicines that allow patients to live longer, healthier, and more productive lives. PhRMA companies are leading the way in the search for new cures. PhRMA members alone invested an estimated $44.5 billion in 2007 in discovering and developing new medicines. Industry-wide research and investment reached a record $58.8 billion in 2007. PhRMA's mission is to conduct effective advocacy for public policies that encourage discovery of important new medicines for patients by pharmaceutical/biotechnology research companies (Pharmaceutical Research and Manufacturers of America, 2008).

*United States Food and Drug Administration (FDA).* “The FDA is responsible for protecting the public health by assuring the safety, efficacy, and security of human and veterinary drugs, biological products, medical devices, our nation’s food supply, cosmetics, and products that emit radiation. The FDA is also responsible for advancing the public health by helping to speed innovations that make medicines and foods more
effective, safer, and more affordable; and helping the public get the accurate, science-based information they need to use medicines and foods to improve their health” (United States Food and Drug Administration, 2010).
CHAPTER TWO

LITERATURE REVIEW

The purpose of this study was to describe and explain the perspectives of selected participants on continuing medical education. The researcher compared their perspectives to the existing literature, select documents, and personal experience as a CME professional. The literature review outlines a brief history of adult education, continuing professional education, the history of medical education and continuing medical education, a review of reform initiatives, suggested future research in CME, and the author’s theoretical framework, concluding with an overview of qualitative research.

Adult Education in the United States

The history of adult education is a rich resource that can help us understand our past and how we fit into the mosaic of the field … Each of us has a responsibility to develop some understanding of our past so that we can avoid being controlled by it … Often, the preparation or professional development of adult educators ignores or downplays the history of the field. This is unfortunate because history can be an invaluable tool in the development of reflective practitioners and scholars.

(Merriam & Brockett, 1997, pp.74-75)

Merriam and Brockett (1997) discussed five books that provided a comprehensive history of adult education, each covering similar topics but with individual interpretations.
Merriam and Brockett noted that Stubblefield and Keane (1994) wrote from the perspective of adult educators rather than historians in their 1994 book *Adult Education in the American Experience*. Stubblefield and Keane explained that adult education in the United States and in Western Europe coincided with the expansion of democracy and the industrial revolution with the term adult education first used in England early in the nineteenth century. Although there were a variety of other terms, adult education became the preferred term around 1910. Stubblefield and Keane identified five major themes in the development of adult education. First, Americans valued education in adulthood and created multiple educational systems. Second, minority groups, such as women, immigrants, Native Americans, African Americans, farmers and industrial workers, had limited opportunities for adult education, thus they created alternative educational systems. Third, new forms of education reflected a dynamic society and its change from an agricultural to an industrial to an information society. For those in professions, education became a lifelong pursuit. Fourth, creating new forms of adult education shaped individuals and society and was an agency for change. Fifth, adults used existing information systems to bring them closer to the larger world of culture and knowledge (Stubblefield & Keane).

In the 1920s, the Carnegie Corporation charted the field via commissioned studies that highlighted the social significance of adult education. These studies led to the organization in 1926 of the American Association for Adult Education (AAAE), which supported research studies, projects, conferences and publications. The second book recommended by Merriam and Brockett, *Adult Education* written by Lyman Bryson in 1936, was the first textbook on adult education. His definition of adult education was “all
activities with an educational purpose that are carried on the people engaged in the ordinary business of life” (cited in Stubblefield & Keane, 1994; Merriam & Brockett, 1997).

Bryson regarded adult education as a voluntary activity characterized by the self-direction of adult learners who were attempting to improve their personalities: personal improvement was the fundamental motive of individuals for learning, and liberal education was the term that best described this kind of education. From the perspective of the agencies providing adult education, their purposes ranged from the remedial to the occupational to the relational to the liberal (education for the new leisure) to the political. The definition emphasized adult education as the provision of institutions, and the participation of individuals as motivated by the desire for self-improvement. (Stubblefield & Keane, 1994, p. 3)

The three other books, written by early contributors who framed the history of adult education between 1944 and 1962, included historians James Truslow Adams (Frontiers of American Culture, 1944), C. Hartley Graham (In Quest of Knowledge, 1955), and professional adult educator Malcolm S. Knowles (The Adult Education Movement in the United States 1962, revised 1977). These authors were followed by revisionists in the 1960s that attacked the traditional view of the history of education. Next, radical revisionists expressed their concern about the glossing over of conflict and struggle in adult education, while others wrote more inclusive histories of adult education that included gender, race and class perspectives and issues (Stubblefield & Keane, 1994).
Later, Knowles (1980) presented his view that adult education had at least three meanings: the process of adults learning, the technical aspect of organized activities, and a combination of the two into a movement or field of social practice.

In this sense “adult education” brings together into a discrete social system all the individuals, institutions, and associations concerned with the education of adults and perceives them as working toward the common goals of improving the methods and materials of adult learning, extending the opportunities for adults to learn, and advancing the general level of our culture. (Knowles, 1980, p. 25)

Merriam and Brockett (1997) offered the following definition of adult education: “activities intentionally designed for the purpose of bringing about learning among those whose age, social roles, or self-perception define them as adults” (p. 8). They also pointed out that the modern era of adult education focuses on education and retraining programs to keep the United States competitive in a global market. Population trends, shifts from industrial to a service- and information-based economy, and technological advances influenced adult education now. The related term, continuing education, combined with adult education in the 1990s, resulted in the preferred term, adult and continuing education (Merriam & Brockett, 1997).

Continuing Professional Education

Adult education provided the foundation for continuing professional education (CPE). The works of Malcolm Knowles, Cy Houle, Phil Nowlen and others guide the field from theory to program development.
The ultimate aim of every advanced, subtle, and mature form of continuing education is to convey a complex attitude made up of readiness to use the best ideas and techniques of the moment but also to expect that they will be modified or replaced … The major lesson of continuing education is to expect the unexpected will continue to occur. (Houle, 1980, p. 75)

Cervero (2001) reflected in his *International Journal of Lifelong Education* article entitled Continuing Professional Education in Transition, 1981-2000 that it had been assumed the pre-professional training with a few refreshers now and then were sufficient to sustain an effective professional practice. However, the first sign that Continuing Professional Education (CPE) was the way to prepare professionals for the rapidly advancing research-based knowledge, technology and social change was Dryer’s 1962 *Journal of Medical Education* publication entitled Lifetime Learning for Physicians: Principles, Practices and Proposals. The use of continuing education as a basis for relicensure and re-certification became widespread in the 1970’s followed by the appearance of CPE as a *distinct area of practice and study* with many books and proposals on how to improve the conceptualization, organization and delivery of CPE the 1980’s. The update model of CPE, which will be described later, was predominate in the 1990’s and, as will be addressed later, persists today. Cervero noted the state of transition in continuing education as providers experimented with various purposes, forms and institutional locations.

While conducting this analysis of CPE from 1981-2000, Cervero identified five trends:
1. the amount of continuing education offered at the workplace dwarfs that offered by any other type of provider, and probably all other providers combined,

2. an increasing number of programmes are being offered in distance education formats by universities, professional associations and for-profit providers,

3. there are increasing collaborative arrangements among providers, especially between universities and workplace,

4. the corporatization of continuing education has increased dramatically

5. and continuing education is being used more frequently for to regulate professional practice. (pp. 19-24)

Cervero then discussed three fundamental issues, posed as questions, to be addressed in the building of systems of continuing education.

1. continuing education for what? The struggle between updating professionals’ knowledge versus improving professional practice

2. who benefits from continuing education? The struggle between the learning agenda and the political and economic agendas of continuing education

3. who will provide continuing education? The struggle for turf verses collaborative relationships. (pp. 25-28)

Cervero states that workplace, professional association, university and government leaders needed to consider these issues as they further developed systems of CPE and concluded with the following.
This process will be marked by fundamental struggles over the educational agenda and the competing interests of the educational agenda and the political-economic agendas of the multiple stakeholders for continuing education. As a political process, then, it is crucial that all of the stakeholders participate in a substantive way on negotiating these agendas for continuing education. For the immediate and long-term negotiation of these struggles will define whether continuing education can make a demonstrable impact on the quality of professional practice. (pp. 28-29)

One area of continuing medical education that is politically driven is mandatory education for the purpose of re-licensure. Florida, for example, requires two CME hours of prevention of medical errors for each licensure renewal and two CME hours of domestic violence every other renewal. A total of 40 CME hours are required for each renewal. My first research project revolved around the why of mandatory CME. Typically it is determined by the state legislature and may have nothing to do with public health concerns or challenges facing local physicians. Young (1998) noted that mandatory education was often debated and criticized, but he sought to find the positive aspects and its impact on continuing professional education. With a group of his students, he had also looked at the why various professions embraced mandatory continuing professional education (MCPE). Via a modified nominal group process they studied higher education institutions, professional associations, employers, government agencies, society, and individual practitioners to determine why they supported MCPE. Across those six domains, the common reasons were litigation avoidance, improved revenue, and maintenance of uniform standards of practice. Of course, some reasons
identified were unique to each group. In reviewing MCPE, Young, like Cervero (2001),
stated that it began in the early 1970’s as a result of political and social forces, which
continued through the time of his research, rather than educational rationales.

It is much easier to legislate classroom activities than it is to restrict or rescind
licenses to practice. It appears next to impossible for professions to create
standards of practice that go beyond minimal levels of competence. MCPE will
go on being used as a method to promote positive public image by informing the
public that all members of a profession are engaged in educational activity that
helps maintain, expand, and extend competence and performance. (p. 135)

MCPE has, however, been used effectively to address incompetent, impaired or otherwise
unable to perform professionals who do not meet expectations in standards or level of
practice. This is remedial education which is especially effective when paired with
lifestyle changes. It has also been an insulator for professionals against public scrutiny
and criticism. “In summary, the dinosaur, the multimillion dollar mandatory continuing
professional education enterprise, is alive and well and increasing in importance,
sophistication and power” (p. 138).

The alternative presented by Young was to take the CPE personnel from the
budget page to the content presentation page (p. 138-139). Diverting room rental, meals,
faculty expenses, etc. to the development of appropriate learning activities would lead to
immediate changes in curriculum and would take place with the focus on the learner
rather than the sponsor. He said, “Put it together, your professional customers will love
it” (p. 139). Young discovered and documented an improved alternative to how MCPE
and CPE in general should be provided. The field of CME is still struggling to reach this goal as will be seen in the results of the current study.

The theories of continuing professional education for health professionals incorporate three existing program development models, update, competence and performance, addressed below.

**The Update Model.** Knowles (1980) described the difference between pedagogy, the art and science of teaching children, and andragogy, the art and science of helping adults learn. The transmittal of knowledge and skills in a pedagogical model does not always meet the needs of adult learners who are not dependent but self-directed, who use previous experience as a resource for further learning, and whose readiness to learn associates with their social role. Adults apply new knowledge immediately making their orientation to learning performance-centered as opposed to subject-centered and their preference for participatory experiential techniques (Knowles, 1980). CME utilizes both approaches depending on the model for program development.

One of the models typically used in continuing healthcare professional education is the update model, which delivers knowledge updates gleaned from scientific research to professionals in a short course didactic setting. The update model keeps professional practice and skill base in line with the latest research, new technology, or new legislation. Its popularity is likely due to the continuing education provider’s lack of familiarity with adult education concepts and innovative practices, but its objective unifies the field of continuing professional education (Nowlen, 1988).

Nowlen noted that professional associations and universities were more interested in the impact of new information, legislation, conceptual frameworks, skills, procedures,
and technology. However, the Accreditation Council for Continuing Medical Education was less concerned with updating physicians than with requiring improved competencies and outcomes in terms of changes in practice behavior and, ultimately, in improved patient outcomes.

Mott (2000) stated that this model “fails to account for the subjective, social and negotiated aspects of knowledge in professional practices that are complex, indeterminate, and value laden” (p. 25). If professionals adhered only to this model, they could not keep up with the knowledge base required for professional practice. Cervero (2000) identified the bottom line of continuing education as the improvement of professional group practice, but noted the update model was unsuccessful in improving performance in these groups (Cervero, 2000). Based on their review, Davis, O'Brien, Freemantle, Wolf, Mazmanian, & Taylor-Vaisey (1999) questioned how the model could persist considering the consensus that didactic programs did not change practice performance when paired with knowledge about adult, self-directed learning. They noted that activities based on the update model were easy to create and deliver, commercial support was relatively easy to acquire, and providers relied on the undergraduate medical education model (Davis et al.).

In guiding physicians in the selection of appropriate CME activities, Davidoff (1997) shared a dim view of the update-model. Although it met the hour requirements for licensing or credentialing, it could be expensive for the physician participant and offered little in terms of competency, improved practice performance, or health outcomes. He referenced Nowlen, as have other scholars, describing the informational update as professionals sitting in “audiovisual twilight, making never-to-be-read notes at rows of
narrow tables covered with green baize and appointed with fat binders and sweating pictures of ice water” (cited in Davidoff, 1997, p. S15). Cervero (2001) used the same quote, adding it would be amusing if the subject matter were not so important. He characterized continuing education in the late 1990s as “devoted mainly to updating practitioners about the newest developments, which are transmitted in a didactic fashion and offered by a pluralistic group of providers (workplaces, for-profits, associations and universities) that do not work together in any coordinated fashion” (p.18). In researching medical Grand Rounds (a recurring traditional teaching format for physician, medical residents and medical student audiences), Herbert and Wright (2003) also questioned why they persist. They noted the format created inertia where education was not the only objective; lectures were easy to deliver and efficient in disseminating information to large groups versus small group sessions that were less practical but promoted adult learning.

**The Competence Model.** “Assessing, creating, maintaining, reviewing, enhancing, or assuring competence is frequently not only the goal that providers and consumers have in mind, but also a goal that immediately reveals the limitations of the update paradigm” (Nowlen, 1988, p. 31). Competence, as described by Nowlen, is “sufficient aptitude, skill, strength, judgment, or knowledge without noticeable weakness or demerit” (p. 31). Professional organizations define standards of competence and design educational programming to enhance them (Nowlen). Mott (2000) illustrated this by describing the “curricula based on competencies required in specific work settings and enhanced through relevant exercises, role-playing, case studies and problem solving”(p. 25). Knowles (1980) outlined four ways to develop models of required competence, through research, the judgments of experts, task analysis, and group participation. He
added, “Since the conditions and requirements for performing most roles are constantly changing it is important that competency models be continuously reviewed and updated” (p. 229).

According to Heffron (2007), competency acquisition of physicians can be described from the trainee level to a practicing physician level as occurring over time or as an identifiable threshold where one either has “it or doesn’t have it … continued competence becomes an evolving life-long process towards expertise” (p. 215). Heffron describes the six general competencies for residents, and fellows developed by the Accreditation Council for Graduate Medical Education (ACGME) and the same ones for practicing physicians by the American Board of Medical Specialties (ABMS). Heffron also reviewed the focus of certifying boards on self-audits and competency based education. In order to build on these, the Accreditation Council for Continuing Medical Education (ACCME) Task Force on Competency and the Continuum advised that common definitions and terms be established so that these competencies could be utilized through the continuum (Heffron, 2007).

Harrison and Mitchell (2006) recommended using a job competence/functional analysis model so that “competence is defined in terms of performance outcomes and not the qualities someone should possess” (p. 169). In medical education, the aim of competence-based education is to make links between education and practice with education tailored to the requirements of practice or learner.

Current CME providers must design programs that link to these competencies and create outcome measures to show that educational activities impact competence, performance, or patient outcomes. The Kaiser Permanente system implemented Haven’s
model (based on the work of Donald Kirkpatrick in 1994 and 1996, which was the outcome measure model recommended for CME providers. In the model, the levels of outcome, from least to most desirable (Level 1- Level 5), are 1) participant satisfaction; 2) change in knowledge, attitudes or skills or intent to change; 3) self-reported behavior change; and 4) objectively-measured change in practice and objectively-measured change in treatment outcomes or health status. Measuring the first two levels could take place immediately after an educational intervention; however, the last two might require significant time to elapse before identifying a change, thus making them more difficult to measure (Haven, Bellman, Jayachandran, & Waters, 2005). Currier (2007) added that the last two were also expensive to measure using traditional paper charts. However, the increased use of electronic medical records would make the identification and quantification of improvements quick and easy.

The most serious flaw in the competence approach is its implicit assumption that performance is entirely an individual affair that leads the model logically, if erroneously, to an exclusive focus on the individual. Even in the methods that are sensitive to the organizational context of business and professional activity, it is the individual and his or her individual competence that is at the center of inquiry. (Nowlen 1988, p. 60)

An important factor absent in this model involved situations where a practitioner might be competent, but for a variety of reasons, such as marital conflict, illness, caring for aging parents, among others, might demonstrate impaired performance for short or long periods of time. In addition, impaired or enhanced performance could be the result
of organizational influences such as peers, supervisors, and systems. Intervention at an individual level might be required to return performance to the previous level. Organizations, then, designed continuing education programs to boost individual and organizational performance. “When performance critical-learning objectives drive the design and selection of continuing education experiences, the field will have progressed from updates, through the competence model, to a performance model” (Nowlen, 1988, p. 62).

**The Performance Model.** Assessment of performance in the areas of knowledge, understanding and insight, skills, attitudes, interests and values require different assessment procedures.

The purpose we are concerned with here is to help individual adults look objectively at their present level of performance in a relatively small sample of behaviors that are important to them at a given time in their development to determine where they want to invest energy in improving their performance in the light of their models of desired behaviors…The final step in the self-diagnostic process is for individuals to assess the gaps that exist between their models of desired behaviors and their present level of performance. (Knowles, 1980 p. 230)

Performance can be viewed as a *double helix* composed to two interactive, matched or mismatched strands – cultural and individual. Individuals in various cultural structures influence other individual performance as well as the performance of the group or organization. The continuing education performance model could be a type of triage system, where both the individual and the organization employ guided self-assessment to
produce learning and development agendas. The product for providers could be referral to their programs and performance-related assessment data re-measured to ascertain performance improvement. When moving to a performance model, programs would be more varied, use different resources, and extend constituencies to include organizations as well as individuals (Nowlen, 1988).

Education programs within the performance model assess the needs of the professionals and the system in which they work. They are more difficult to develop and harder for practitioners to locate, but are …potentially the most effective of educational approaches. If performance-mode education sounds familiar, it is because it shares many of the elements of continuous quality improvement, the increasingly powerful approach to managing messes that has evolved outside, and in parallel with, continuing education over the past several decades. (Davidoff, 2007, p. S16)

Mott (2000) stated the “model asks, and therefore challenges continuing professional education to answer, What is the profession all about?” (p. 25).

The literature reviewed indicated that appropriate educational interventions, or combinations thereof, could be effective in changing physician practice and performance and, in some cases, health outcomes. Melnick (2004) discussed physician performance and the challenges for CME and continuing professional development. He recommended that programs be based on needs within a competency framework, focus on behavior change and knowledge acquisition, and integrate assessment to determine baselines and monitoring for behavior change, thereby aggregating data. He expected that licensure and
certification would drive programming and anticipated desirable changes in behavior would be evident if providers implement these steps.

Rouse (2004) concurred that the medical literature demonstrates that continuing education could be effective but “are not usually curricular in nature, do not optimally address all required competencies, and are not always successful in affecting change in practice behaviors” (p. 2071). However, using multiple methods and participatory learning activities could produce sustainable learning and practice change when efforts were self-directed, based on identified needs, are relevant to practice, interactive and ongoing, have defined outcomes, and can be reinforced through practice.

*Adult Learning Theories and Practices*

Adult education forms the basis for continuing professional education, and, as such, providers rely on learning theories and practices to develop appropriate programs. Felch and Scanlon (1997) noted new developments in CME that included an influx of non-physicians, such as experts in adult education, computer science, quality assurance, communications, and continuous quality improvement, as well as a shift from focusing on the educator and the teaching process to the learner and the learning process. CME changed to being self-directed and related to problem solving.

The update model is designed to help professionals keep abreast of whatever is new. As noted, the didactic nature of the update model is pedagogical and reflects undergraduate medical education. Learners must reflect on their practice and be self-directed to ascertain updates critical to their practice and select them accordingly.

Competence based programming also involves reflective practice and self-direction to determine what areas of practice require bolstering. Because credentialing
and certifying boards pre-determine some of the areas, many professionals might simply select those areas for study.

Remaining competent requires cognitive development. Eva (2003) presented four theories to explain that the aging process and age-induced cognitive changes could affect clinical competencies. He reported the work by the Physician Review and Enhancement Programme (PREP) pointed to increasing age as one of the strongest predictors of poor clinical performance. Certain kinds of skills, which require identification, were more likely to decline than were others. Another factor in aging was whether individuals were intuitively aware of cognitive decline, and whether they, consequently, reduced their practice or narrowed its scope. These implications need to consideration when planning continuing education and ways in which to maintain competence.

The performance model and a new model described later, utilized adult education theories in program development and employed a variety of strategies to make an impact on individual practice change and organizational performance. The theories incorporated andragogy, reflective practice, self-directed learning, cognitive development, knowledge translation, interprofessional education, and transformative learning. Educational interventions could be practice-based, problem-based, evidence-based, or guideline-driven and delivered in a variety of valuable formats (Eva).

Mann (2004) discussed the role of educational theory in CME and questioned how it has helped. In addressing the ways in which practice and theory inform each other, she reviewed seven approaches: behaviorist, cognitivist, humanist, social learning, constructivist, sociocultural, and situational.
1. Examples of practice in the behaviorist approach include systematic design of instruction, behavioral objectives, competency-based education, skills training, and feedback.

2. The cognitive orientation in practice is problem solving, wherein the basis of physician competence is the ability to frame and solve problems in a variety of circumstances.

3. According to Mann, “[S]elf-directed learning, reflective practice and critical reflection, experiential learning, transformative learning and adult learning theory all have their roots in the humanistic orientation” (p. S26).

4. Social learning theories incorporate behavioral and cognitive theories and focus on learning interaction with others and the environment. The use of role models and observation, educational influentials, or opinion leaders typifies this theory in practice. The goal of this approach in medicine is practice change.

5. Constructivism in practice includes learning from experience through the process of reflection.

6. Sociocultural learning, an emerging theory, reveals that knowledge exists not only within the individual but also in the community.

7. Situated learning in medicine is an apprenticeship wherein students move from the periphery of the community toward the center, a theory, which furthered the notion of communities of practice.

Mann concluded by suggesting the need for more theory-based research. Medical education and CME incorporate each of the models depending on the need of the target audience. Graduate medical education initially employs didactic approaches, and
gradually moves students into the performance-based model. In order to understand the
genesis of each model, it is necessary to review the history of medical education.

History of Medical Education

The American Medical Association (AMA) created the Council on Medical
Education in 1904 to promote the restructuring of educational programs, recommend
standardized entry requirements for medical school, promote a curriculum with two years
of laboratory science training and two years of clinical rotations in a teaching hospital.
The AMA Council asked the Carnegie Foundation for the Advancement of Teaching to
help initiate the reform. (Beck, 2004)

In 1905, the Carnegie Foundation was entrusted with an endowment created to
benefit teachers, colleges, and universities in the United States, Canada, and
Newfoundland. Foundation president, Henry Pritchett, selected Abraham Flexner, a
schoolmaster and educational theorist, to study and report on medical schools in 1908.
His report, Medical Education in the United States and Canada A Report to the Carnegie
Foundation for the Advancement of Teaching, was published in 1910. Flexner studied
undergraduate and graduate medical education by visiting 150 medical schools in the
United States and Canada, gathering information on facilities, resources, and methods of
instruction. The American Medical Association, the Association of American Medical
Colleges, and independent observers confirmed the information in the report, which
included all sections of medical schools. As Pritchett stated in the volume’s introduction,

It is clear that so long as a man is to practice medicine, the public is
equally concerned in his right preparation for that profession, whatever he
call himself, - allopath, homeopath, eclectic, osteopath, or whatnot. It is
equally clear that he should be grounded in the fundamental sciences upon which medicine rests, whether he practices under one name or another.

(Flexner, 1910, p. viii)

Flexner described the history of medical education in the United States as well as its status at the time of his study. He discussed the development of commercial medical schools and recommended moving them to university settings. He also suggested more stringent admission criteria. Finally, he provided detailed descriptions of each medical school he visited. One of the major concerns was the commercialization of medical education, resulting in poorly trained physicians. Other findings were as follows:

1. An overabundance of “uneducated and ill trained” practitioners produced over the past 25 years.

2. Too many commercial schools attracted those employed in an industry that produced poorly trained physicians.

3. Because the didactic method was the primary mode of learning, it was profitable to run a medical school until the need for modern technical laboratories and hands-on training were recognized.

4. Hospitals under educational control were necessary for medical schools and advanced teaching in a hospital was beneficial.

Flexner suggested having a smaller number of medical schools that were better equipped and administered, producing fewer practitioners who were well educated and trained. Universities with medical schools should take responsibility for the professional school and provide support (Flexner, 1910).
Beck (2004) noted that Flexner’s “unique contribution was to promote educational reform as a public health measure” (p. 2140), along with promotion of the university-based medical school model including laboratory- and hospital-based research. That plan reached fruition in the 1930s, coinciding with the demise of the proprietary schools.

The University of Medicine and Dentistry of New Jersey commemorated the seventy-fifth anniversary of Flexner’s report with a meeting of invited speakers in November 1985. In the forward to the published proceedings of that meeting, Stanley Bergen, Jr. described the reason for the conference. The essay, entitled “Flexner: 75 Years Later: A Current Commentary on Medical Education” noted it was an opportune time to recall the critical spirit of its findings and the reforms associated with them, to evaluate the issues and problems confronting present-day medical education, and, through these linkages, project the future of medical education and professional medical practice … We sought insight into the changing role and responsibility of the physician. Equally important to us was a judgment about the impact upon medical education of the social and behavioral science disciplines and the ties to the humanities to technology in medicine. (Vevier, 1987, pp. vii-viii)

Despite efforts to improve medical education in the United States since Flexner’s seminal work, there was still a need for reform. For example, Arky (2006) delivered the 115th Shattuck Lecture for the 2005 Annual Meeting of the Massachusetts Medical Society entitled “The Family Business – To Educate.” He offered a brief summary of the
Flexner report, noting that the recommendations implemented in the 30 years following the report brought the standard of the medical schools in the United States and Canada up to, and then beyond, those in Europe. Arky spent four decades observing the consequences of Flexner’s work, which led to improvements in undergraduate medical education, the goal of which was to “ensure that students can be transformed into the most effective deliverers of patient care that is possible” (p. 1925). However, he was concerned about the level of teaching in medicine and compared the triple threat football player, who could run, pass, and punt, to the triple threat medical professional who could be a physician, researcher, and teacher. He observed there were few triple threat physicians remaining because teaching as a medical specialty was not valued and most teachers had to supplement their income with clinical work or research. In terms of continuing medical education, the time allotted for a practicing physician to read and reflect was limited, plus the concept of just-in-time learning via the Internet or through electronic medical records was still under development. Unfortunately, the findings he reported indicated inappropriate treatments given 50% of the time during general practitioner visits. That, combined with the extent of commercial support in CME, was enough for him to suggest a restructuring of CME. “In truth, the analogy between the state of undergraduate medical education in 1905 and the state of continuing medical education 100 years later is striking. Clearly we are in dire need of another Flexner or Carnegie” (Arky, 2006, p. 1926).

Whitcomb (2007), Editor of Academic Medicine, also recommended medical education reform and suggested a new Flexner report in his January 2007 editorial. He reflected on a series on contemporary issues in medical education published by the New
and applauded their commitment to discuss current issues and needed reform. His concern was that professional organizations controlling aspects of medical education failed to change policies and procedures that would improve physician education. He suggested establishing a commission to study and report on the state of medical education, as did Flexner, with a special focus on how well it served patient interests.

In 2008, the AMA realized that, in some respects, the process of training physicians had not kept up with the times. “To help address this need, the AMA is working to strengthen the medical education and training system across the continuum, from premedical preparation and medical school admission through continuing physician professional development” (p.1). Guided by the Initiative to Transform Medical Education, the association identified gaps in physician education and the intersection with modern health care systems. At the time of the current study, the last step, implementation of recommendations, was underway, initially focusing on the learning environment to ensure it supported the development of appropriate attitudes, behaviors, values, knowledge, and skills. Other focus areas included the admission process, physician lifelong learning, and physician re-entry with 2010 targeted for completion as a celebration of the 100th anniversary of the Flexner report (Makeover under way in medical education, 2008).

Subsequent to undergraduate medical education, students proceed to graduate medical education where they complete internships and residencies in a specific area of medicine. Some receive fellowships for further specialization. All practicing physicians begin a lifelong learning process, coined continuing medical education or continuing
physician professional development, which is, of course, the longest phase of a physician’s education. Since it includes requirements for licensure, maintenance of certification and credentialing, continuing education is a popular topic of discussion among physician learners, faculty, and academics as well as in medical societies and associations.

*Continuing Medical Education*

Public medical lectures gained popularity in the mid 1700s with the smallpox epidemic and absence of medical schools. These lectures supplemented the apprenticeship of medical practitioners as a form of continuing professional education, promoted general cultural development, or simply provided entertainment. Since the colonial governments lacked resources to meet the educational needs of the public, another educational venue was voluntary associations that offered libraries, societies, and institutions. For example, the founding of the Boston Public Library in 1673 was a due to a donation of books from an individual collection, and the Boston Medical Society provided continuing professional education to early practitioners. The society published articles and held meetings to promote professional interests and the science of medicine in 1735. The Massachusetts Medical Society began in 1781, followed by a library in 1782, and the publication of *Medical Communications*. These organizations and their outreach efforts benefited a small number of individuals outside of the profession. However, they laid a foundation for more popular agencies and informal education that eventually served everyone (Stubblefield & Keane, 1994).

Continuing education or self-education of physicians most likely existed since the beginning of the profession; however, it was not until the early 1900s that it became
formalized (Davis & Loofbourrow, 2007; Rosof & Felch, 1992). Interest in CME, categorized by Uhl, was in four stages: 1) Sir William Osler’s identification in 1900 that lifelong study would be necessary for clinicians to maintain their competence; 2) the 1930s postgraduate study courses with content developed to meet the needs of individual practitioners; 3) the post World War II explosion in medical science and specialization that made continuing education imperative; and 4) the influence of educators in the 1960s that applied the principles of adult learning to the field of postgraduate education (Uhl, 1992).

George Miller, MD, then the Director of Research in Medical Education at the University of Illinois College of Medicine, presented to the section of CME at the 77th Meeting of the Association of American Medical Colleges in 1966. His presentation, entitled “CE for What?” was published in the Journal of Medical Education the following year. The answer to that question was to improve the quality of patient care. He then asks, “…what care needs improvement?” (p. 320) He noted that physicians were flooded with information and CME educators seized any programmed instruction based on categorical content which failed to change substantially physician behavior. Miller called for a different education evidence-based model based on how adults learn (student centered) rather than teacher centered. He coined it the “Process Model” which involved the learners in problem identification and seeking ways to solve them thereby identifying their own learning needs and selecting their preferred learning experience. The ultimate objective is “…leading practitioners to a study of what they do, to an identification of their own educational deficits, to the establishment of realistic priorities for their own educational programs” (p.323). To accomplish this end, Miller suggested
delineating the health need of the populations served and then studying hospital data in order to improve patient health. “…the method provided a start in systematic definition of the individual and social problems physician encounter in the patient population with which they deal” (p. 323). Physicians then need to be involved in resource identification and solution implementation to solve the problem or conduct research problems that still need to be solved. He also encouraged physicians to be involved in “…an analysis of the extent to which they use themselves and the available resources to meet the needs that have been identified” (p. 324). His concern was that content–oriented educators would not be able to produce process–oriented continuing education programs without intervention via faculty development. This approach is now identified as process improvement CME. When I inquired of William H. Young, III, EdD why the field did not pick up on this model early on, he stated that Miller and his associates were “…way ahead of their time” (Personal communication, May 12, 2010).

In 1986, Miller presented at the First International Conference on Continuing Medical Education and the presentation in full was published in the Journal of the American Medical Association (JAMA) the following year. He reiterated his earlier observation that CME did not meet the needs of the learners but rather was content oriented in an update format. He was also concerned, as we are now, about the role of commercial support in CME and that bio-medical research was pushing the CME agenda.

In America, at least, it is big business and that commercial flavor is being sensed in an ever-widening geographic area. In most of the world, CME is content oriented; everywhere, it is teacher dominated. On the other hand, it is not continuing but episodic; it is rarely education as much as instruction. With few
notable exceptions it is not process oriented, and it does not often address the
question of whether specific behavioral learning objectives have been
achieved…But if CME, as well as basic medical schooling, is to contribute more
to effectively improving health care, then a very different program mode is surely
called for. (p. 1352, 1354)

Twenty years had passed since Miller introduced his concept of the process-oriented
model and he was beginning to notice problem-based or competency-oriented curriculum
development. He encouraged approaching CME with a fresh view and a focus on efforts
rather than form. (1987)

Three years later, Miller was invited to address the use of standardized patients as
a method to assess practicing physicians. Acknowledging that no single assessment
method could provide an adequate amount of data for a complete review of a physician’s
delivery of professional services, he began by presenting the now well known “Miller
Pyramid” as represented in Figure 1.
Figure 1. Framework for Clinical Assessment

The learner can be at one of four phases in the process of clinical assessment ranging from novice to expert. The first is that the learner knows, progressing to knows how, shows how and finally does representing knowledge, competence, performance and action respectively. The common measurement of knowledge is objective testing which is important but would yield an incomplete appraisal. Competence is the skill of acquiring knowledge, analyzing and interpreting data and translating findings into a diagnostic or management plan demonstrating functional adequacy. Miller described measuring performance as a challenge. Typically performance was measured by limited direct observation and limited samples of clinical problems so the final measure was the accuracy of the diagnosis and patient management rather than the process used to reach the conclusion. The action component, what a physician actually does in practice, is the most difficult to measure accurately and reliably. Miller stated the most effective
substitute for reality was simulation of a clinical encounter with a standardized patient. Further he discussed the difficulty in determining the components of professional behavior to be assessed and the best method for scoring such an encounter. He encouraged broader adoption of standardized patients as the most effective method to measure action. (Miller, 1990)

Pijanowski (1998) called for transition in CME because despite a significant amount of research in the field in the previous decade which suggested ways to improve CME, current practices still looked like traditional CME. She called for a modification in CME to better facilitate change in physician practices and ultimately impact patient care outcomes. By training physicians how to learn they could better utilize CME resources to meet personal lifelong learning needs and gain more meaning from formal learning activities.

Pijanowski presented selected emerging issues for health care, practicing physicians, and accreditation that were challenging business as usual CME. “The establishment of a nationwide managed care environment will have many implications for CME; educational activities will become learner centered and will respond to individual learning needs. Quality management principles will link CME with measureable outcomes of patient care” (p. 152). The challenges here are changing demographics of practitioners and patients, population expansion, the variety of health conditions continues to expand, social consideration, and the implementation of continuous quality improvement plans in hospitals. CME providers have a difficult time providing just-in-time training and physicians struggle with remaining current as the result of the expediential development of pharmaceutical products, medical technology,
information technology as well as protocols and procedures. Physicians also had to worry about managed care and recertification to prove competency. As a result of integrated health systems, she expected that CME providers would be able to link interventions with patient health status and ultimately health care outcomes to determine the impact of CME. Pijanowski briefly discussed the 1995 emergence of the new ACCME policies and procedures moving CME from a process orientation to a focus on outcomes. The goal was to further develop CME programs that would promote change in physician practice which in turn would positively influence the health status of patients.

In order to address all of these issues, Pijanowski outlined a new paradigm for the 21st century noting that CME needed to commence a *dramatic transformation*. Central to this model was a learner-centered orientation inclusive of identification of learning needs, learning style preferences and the evaluation of the experiences. This can be individualized to assist physicians pursue life-long learning goals and maintain, or better yet, enhance competency. Ideally, CME interventions would be presented with attention to frequency, intensity, and timing, utilization of multiple resources as well as the data and feedback gathered from an individual practice, group or system to effect a change in physician performance. Additionally, Schön’s *reflective practice* model based on one’s ability to learn from experience can also change behavior and performance.

In terms of CME providers, it was recommended that these educators become facilitators of learning to direct the transfer of new knowledge into practice. The didactic model was not expected to disappear but would be used appropriately long with instructional methodologies such as journal clubs, role playing, academic detailing, etc. Clearly, then, providers would need to acquire a more *sophisticated skill set* inclusive of
technology, self-directed learning and quality improvement. Collaboration or the strategic formation of alliances to garner resources was envisioned along with true interdisciplinary education to support a team-oriented approach to health care delivery.

It is clear that the primary focus of the new CME paradigm will be to improve patient health care through the facilitation of change in physician practice...The enterprise will no longer exist as an isolated, ineffectual, albeit revenue-generating, activity. Continuing medical education will become a dynamic force within an integrated health care system; transformational, action oriented, lifelong learning will characterize the CME paradigm of the future. (p. 165)

Pijanowski summarized beautifully what the experts were writing about and accurately predicted where the experts in the current study say we are today. Now we turn to the history of the CME credit system.

Davis and Loofbourrow (2007) delineated the development of CME in two areas, the development, production and delivery of CME activities, and the CME credit movement. Professional organizations in medicine became actively involved in the credit movement for continuing medical education. Davis (2004) stated that, in 1947, the bylaws of the American Academy of General Practice (AAGP) required 150 hours of continuing medical education per every three years of membership with formal training provided by medical schools and AAGP and informal training by other providers. In 1955, category I and category II credits replaced those hours. Later, the AAGP Commission of Education allowed external organizations to provide continuing education for general practitioners as long as those organizations completed an application process and met the criteria. This paved the way for the American Academy of Family Physicians
(AAFP) CME accreditation system, which required 150 hours of CME, 75 of which prescribed by AAFP, for every three years of membership (Davis & Willis, 2004). In turn, the American Medical Association (AMA) established the Physician’s Recognition Award (PRA) in 1968 as a formal way to identify and quantify postgraduate continuing medical education; “by establishing an award that could be achieved by all physicians, regardless of specialty, the AMA brought sharp focus to its efforts to increase the role and visibility of CME as the traditional third phase of the medical education continuum” (Wentz, 2008a, p. 2). Prior to the PRA, the AMA House of Delegates (AMA-HOD) established the standing Advisory Committee on Continuing Medical Education in 1961 that, by 1962, suggested that a nationwide accreditation system for continuing medical education providers was feasible. By 1967, a formal system was in place. As the number of providers and the popularity of CME increased, the hours of participation became AMA PRA credits. In 1977, five CME-related organizations formed the Liaison Committee on Continuing Medical Education, and became the Accreditation Council for Continuing Medical Education (ACCME) in 1981. Providers accredited by the ACCME could offer AMA PRA credits (Wentz, 2008a).

During the 1990s, the AMA PRA required strict adherence to their guidelines for Gifts to Physicians from Industry and Continuing Medical Education for approved AMA PRA activities. Teaching at conferences and self-directed learning became options for earning AMA PRA credit, as was credit for learning new skills and procedures. More recently, journal-based CME, publishing in peer-reviewed journals, manuscript review, test item writing, performance improvement activities, point-of-care learning using the Internet, independent learning plans, education committee membership, and obtaining
medically-relevant advanced degrees were *AMA PRA* eligible. *The Physician’s Recognition Award and credit system - Information for accredited providers and physician 2006 revision* lists all eligible formats for *AMA PRA Category 1 Credit(s)*\textsuperscript{TM}.

All states and licensing boards acknowledge the *AMA PRA*, and most physician learners consider the award a seal of approval for the CME offered. In opposition to states that require mandatory CME, the AMA officially opposes education that has no relationship to learning or clinical performance just to get credit. Obtaining CME at an international conference is acceptable and physicians can enjoy reciprocity with the AMA and the European Accreditation Council for CME of the Union of European Medical Specialists. The AMA continues to redefine the credit system in order to stay relevant and Wentz (2008b) contended that the *AMA PRA* would continue to meet many requirements for practicing physicians.

As noted above, formal accreditation for CME was in 1947. Since that time, much as been written about CME in terms of mandatory education, efficiency, effectiveness, needs assessment, evaluation, outcomes, program development, learning models, and commercial support. Professional organizations, such as the Accreditation Council for Continuing Medical Education (ACCME) and the Alliance for Continuing Medical Education (ACME), develop and enforce accreditation standards and provide support for professional CME providers. However, no individual organization conducts research specifically on Continuing Medical Education, but the CMSS Conjoint Committee on CME initiative, beginning in 2002, brought together stakeholders to discuss CME reform and repositioning.
Reform and Repositioning

CME is an important aspect of the continuous learning process for physicians; however, many, including professional associations, have questioned its effectiveness in the modern healthcare environment. The need to restructure and strengthen the CME system became a priority, beginning with the establishment of the Conjoint Committee on Continuing Medical Education in 2002. This group, organized by the Council of Medical Specialty Societies, was comprised of 15 stakeholder organizations, listed below, and 32 members. They outlined system deficiencies and sought solutions to reform CME (Spivey, 2005). The rationale for reform was due to the questionable effectiveness of the CME system in the contemporary healthcare environment compounded by the evidence that the quality of patient care was variable, and the safety of patients was not uniformly optimal. Quality and performance improvement, regulation/accreditation, public scrutiny, funding, and global trends also influenced the need for change (Reforming and repositioning continuing medical education, 2005). The stakeholder organizations are as follows:

- Accreditation Council for Continuing Medical Education (ACCME)
- Accreditation Council for Graduate Medical Education (ACGME)
- Alliance for Continuing Medical Education (ACME)
- American Academy of Family Physicians (AAFP)
- American Board of Medical Specialties (ABMS)
- American Hospital Association (AHA)
- American Medical Association (AMA)
- American Osteopathic Association (AOA)
- Association for Hospital Medical Education (AHME)
- Council of Medical Specialty Societies (CMSS)
- Federation of State Medical Boards (FSMB)
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- Liaison Committee on Medical Education (LCME)
- National Board of Medical Examiners (NBME)
- Society for Academic Continuing Medical Education (SACME)
The Conjoint Committee initially presented their report, *Reforming and Repositioning Continuing Medical Education*, at the Alliance for CME Annual Conference in January 2005. The rationale for reform noted:

One key to rectifying this lapse in consistency of quality care is a restructuring and strengthening of the existing CME system. Today’s physician must stay current by learning smarter, not working harder. Continuing to educate physicians beyond medical school and medical specialty training requires a coordinated lifelong learning process of timely and effective CME, with measurable outcomes. Because it is imperative that every physician practice at the highest possible level, the CME system must be ever vigilant and responsive to a physician’s educational needs. (p. 1)

In addition, the system will need to “be sufficient to support physician’s ongoing needs for periodic re-licensing, re-credentialing, re-privileging, and Maintenance of Certification” (Reforming and repositioning continuing medical education. 2005, p.2).

In the second part of the report entitled *Recommendations and Next Steps* (2005), the Committee presented a list of seven recommendations along with steps intended to steer implementation. Each component was assigned to a lead organization within the stakeholders group that established timelines (Reforming and repositioning continuing medical education, 2005). These recommendations were one of the documents reviewed during the data collection process for the current research.

Spivey (2005) outlined the 22 next steps for the seven recommendations and listed the evidence, including qualitative studies, the experience of those involved with
the committee, and the lead organizations in charge of implementation. He discussed the ways in which the committee planned to implement the reform in a three to five year timeline. The physician end user was the focus of the various CME entities in order to achieve a functional and improved format, including simplified rational and identical reporting of CME credit. The intent of the reform was to “reduce bias, enhance behavioral change, and facilitate lifelong learning” (p. 142).

The lead organizations assigned were already innovators and had a special interest in the implementation. For example, the American Medical Association was assigned to take the lead in metrics because they were already involved in novel educational activities such as Internet based point-of-care and just-in-time activities. The American Academy of Family Physicians led *Valid Content and Evidence-based Medicine* because they had been working in these areas and already had mechanisms in place to address them (Reforming and repositioning continuing medical education, 2005). The Alliance for CME managed those areas relating to CME professionals, had already identified competencies and performance indicators, and was in process of designing self-assessment modules (Dr. B.J. Bellande, personal communication, July 25, 2005).

The committee’s PowerPoint© presentation, *Reforming and repositioning CME; Report of the Conjoint Committee on CME; Context, Recommendations and Implications*, includes *Current and Future CME Implications*, delineated 16 categories that needed to be addressed by CME providers. For example, classroom/meetings should evolve into point of care, and just-in-time learning and credit hours into measurement metrics and outcomes; from expert driven instruction to self-assessment and lifelong learning; from faculty driven content with potential bias to valid and evidence-based content; and from
physician self-directed learning to directed self-learning-CME core curricula. Others included an increase in external assessment, balanced funding, uniformity in reporting requirements, and maintenance of certification/licensure/competence (Reforming and repositioning continuing medical education, 2005).

Leach (2005) noted that the report from the Conjoint Committee came when there was hopeless fragmentation of organized medicine, at a time when it was important to have a united front. However, with the “emergence of common language for competencies, common metrics of competence, technologic advances in learning portfolios, conceptual advances about the use of data on physician competence and an inexorable focus on improved patient care” (p. 162), a more coherent system would be possible. He also anticipated that once the reform took place, a radical transformation of medical educational accreditation would follow (Leach, 2005).

Nahrwold (2005) pointed out the fundamental impetus for this reform was the development of the six general competencies by the ACGME that residents must learn and demonstrate. The American Board of Medical Specialties (ABMS) had identical competencies used for the Maintenance of Certification (MOC) programs. The four requirements for MOC included “evidence of professional standing (licensure), cognitive expertise (a secure examination), practice-based learning and improvement (CME) and performance in practice (outcomes)” (Nahrwold, p. 169). The six competencies shared by both groups included patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice. Practicing physicians should also demonstrate these competencies for the MOC program, but the categories were difficult to address in the traditional CME program.
However, the Conjoint Committees proposition for reform should allow CME to be relevant to the day-to-day practice of physicians. Another aspect of the reform, as noted by Nahrwold, was the importance of the public’s health and the hope that the new CME would be practice specific and centered on the needs of the individual physician’s patients. He also discussed the burden of CME reform on physicians because of their responsibility for educational self-assessment, locating specific CME to address the identified needs, and recording the CME for future verification. He suggested electronic documentation, especially via the electronic medical records where just-in-time CME could be easily documented (Nahrwold, 2005).

**Recent Reform Recommendations**

Davis and Loofbourrow (2007) reported on the scope and delivery of CME for the Macy Foundation Conference on *CE in the Health Professions* and looked specifically at regulatory policy, research, and data collection. They examined data from the accreditation bodies for CME, contacted key informants, and searched and reviewed the literature to identify the major categories of CME providers, the types of activities provided, and trends. They also considered the forces affecting the CME enterprise, such as accreditation, professionalism and training for CME providers, commercialization, and outcomes, and the social, contextual and practical issues shaping CME. However, they were not able to reflect on the content or method of educational delivery, the location, or the effect on the patient or healthcare systems because the data they reviewed did not contain this information.

Thus, it is evident to us that what we portray here – the numbers and types of courses and other offerings, the history and processes of accrediting
bodies, and the processes for producing education – operates at a level removed from the actual delivery of care or even the delivery of education. Further these elements operate in ways that appear to be at odds with what is currently known about physician learning and change. Examination of this complex structure reveals a heavy dependence on at least two major premises on which these systems are built, and on which their linkages to competence, performance, and healthcare outcomes are maintained. The first is the dependence on the physicians’ ability to self-assess learning needs and to direct his or her attention to meeting them; the second is the heavy dependence - despite attempts to augment this category of learning or add new independent leaning methods to it - on formal CME or similar educational activities, such as clinical meetings, rounds, and conferences. (Davis & Loofbourrow, pp. 160-161)

The authors offered possible solutions in four areas: the physician as learner, the methods and means of the educational system, the accreditation of those systems, and the competence of the learner-clinician and the healthcare system. Self-assessment by physicians and commercial bias were both issues in CME. Physicians should determine their learning needs, including competency in evidence-based healthcare, and conduct their own performance appraisal. These areas could be included as required areas of instruction by CME providers or even as state-mandated courses (Davis & Loofbourrow, 2007).

Cohen (2006), President of AAMC, concurred that CME failed to meet the need of practicing physicians for effective support of lifelong learning. Physician practice
should drive CME in order for the quality of healthcare to improve. In his opinion, the traditional lecture format should be only for basic scientific breakthroughs, while the majority of CME should be self-directed, interactive, and relevant to enable physician learners to acquire the knowledge and skills needed to go beyond minimum expectations.

Davis and Loofbourrow (2007) suggested that CME providers should have a more comprehensive understanding of the CME literature and its “incorporation into the production and delivery of educational interventions” (p. 162). They posited that the accreditation system should be more evidence-based to match the essentials and standards to the principles of effective CME delivery, and to provide practice-based feedback focused on performance or outcomes. Finally, the measurement of physician competence in CME is, in effect, the number of hours spent in lectures, the equivalent of awarding a medical degree based on attendance. They recommended using portfolios, reviewed annually with a senior physician, to triangulate self-learning, self-identified needs, and competency and performance. This would allow scientific measurement and incorporate the principles of adult learning. Additional suggestions included the application of quality improvement and 360-degree assessments of clinical performance.

Marinopoulos et al. (2007) investigated the effectiveness of CME, and presented the results in a report to the Agency for Healthcare Research and Quality.

We conducted a systematic review of the medical literature to evaluate the effectiveness of CME in improving knowledge, attitudes, skills, physician behavior and clinical outcomes. Overall, despite the generally low quality of the evidence, most of the studies reviewed suggest that CME is effective, at least to some degree, in not only achieving, but also in
maintaining the objectives studied. Despite the wide variety of CME techniques, media, exposures used, and despite the heterogeneity of the studies reviewed, we found common themes among studies which applied across objectives … CME appears to be generally effective not only in the acquisition or achievement of knowledge, attitudes, skills, behaviors, and clinical practice outcomes, but also in their retention, and there are certain techniques, methods or exposures which seemed to be better than others. Unfortunately, most studies did not describe 60 multiple evaluation points after the intervention, which did not allow us to determine at what point the CME effect, when persistent, became extinguishable and might have needed reinforcement. (pp. 57, 59)

The authors suggested several areas for future research including the impact of simulation in improving clinical outcomes and measurement of effectiveness at multiple points of post-investigation. They suggested a national research agenda with a clear definition of what constitutes CME, including standardized approaches to the descriptions of CME interventions, media techniques, and exposure volumes based on a conceptual model on the effectiveness of CME. They further suggested a national consensus conference to “lay the foundation for a comprehensive research agenda for CME. In addition, greater resources should be devoted to funding education researchers to design higher quality CME studies as well as tools to evaluate CME outcomes” (Marinopoulos et al., 2007, p. 60).

A White Paper, Continuing Medical Education, Professional Development, and Requirements for Medical Licensure: A White Paper of the Conjoint Committee on
Continuing Medical Education, (2008) also advocated the urgent need for research. Specifically,

Research in CME and physician assessment should be raised as a national priority, eventually allowing for greater uniformity of CME for licensure requirements as well as creating best practices for physician continuing professional development and maintenance of competence. (Miller et al., 2008, p. 97)

Beginning in 2002, the Conjoint Committee on CME, with support from the 15 stakeholders, led the movement for reform and repositioning. The committee published and presented the original recommendations in 2005 with updates posted on the Council of Medical Specialty Societies website.

With the continued work of the Conjoint Committee and its stakeholders, the conference sponsored by the Josiah Macy, Jr. Foundation, the Effectiveness of Continuing Medical Education report from the Agency for Healthcare Research and Quality (AHRQ), and recommendations for further research found in the literature, it was logical to conduct research at a national level. The Macy Conference participants proposed establishing a national interprofessional CE institute devoted to medicine, nursing, and pharmacy. Although proposing an institute model is beyond the scope of the current study, the first phase was initiated by the IOM Committee on redesigning continuing education in 2009.

Research

Most of the CME literature recommended future research. Authors offered a variety of suggestions to demonstrate the breadth of needed research.
Nahrwold (2005) stated, “Because the goal of CME reform is to improve the outcomes of care, the CME industry and providers must design and conduct studies to determine if this goal is being met. Only through research will the ideal CME be identified” (p171). He suggested research regarding the burden on CME providers and physicians and interdisciplinary CPD/CE.

Harden (2005) described the CRISIS (convenience, relevance, individualizations, self-assessment, independent learning, and systematic) model developed by Harden and Laidlaw in 1992 and the ways in which the criteria related to Brookfield’s six principles of effective practice in facilitating adult learning. Distance or e-learning could meet the CRISIS criteria for effective CME. Harden suggested continued research and development to identify the delivery and evaluation of CME as well as a longitudinal analysis across the diverse content areas and CME activities. He also recommended that developing standards for online distance CME could be “a synthesis of practical knowledge, wide agreement on best procedures, and scientific evidence” (Harden, 2005, p. 49).

Other recommended research from the literature included: teamwork technologies; CME in practical settings with functional groups; utilization of advanced simulation technology (Smith & Schmitz, 2005); analysis of strengths and weaknesses; efficiency and effectiveness; expansion of focus to continuing professional development (Pohlmann, 2007); physician motivation and behavioral change (Abrahamson et al., 1999); professional development in practice (Calman, 1998); Internet technology; asynchronous versus synchronous learning; CME design, development, and delivery formats (Curran & Fleet, 2005); impact of complex interventions with multiple
professions in quality improvement (Grol, 2001); trusted agent and REBEL (Leach, 2005); CME/CPD impact on patient outcomes (Melnick, 2004b); medium to long-term benefit of evidence-based educational program design (Sanci & Coffey, 2005); Internet based CME (Fordis et al., 2005); relationship between commercial support and bias in accredited CME (Cervero & He, 2008); valid and reliable evaluation tools (Wood, Marks, & Jabbour, 2005); data collection; self-study of practice (Manning, 2003); performance improvement; systems thinking; (Margolis et al., 2004); physician preference of CME instructional method (Bower, Girard, Wessel, Becker, & Choi, 2008); faculty development in CME research; assessment of faculty interest and overall level of medical education research in an academic institution (Christiaanse et al., 2008); role of portfolios and informationists in CME (Zeiger, 2004); and integrating CME and quality improvement models to sustain organizational change and achievable patient and health system outcomes (Price, 2005).

Constructivism

Knowing and cognitive processes are rooted in our biological structure,

The mechanisms by which life evolved – from chemical beginnings to
cognizing human beings – are central to understanding the psychological
basis of learning. We are the product of an evoluntional process and it is
the mechanisms inherent in this process that offer the most probable
explanation of how we think and learn. (Fosnot, 2005, p. 11)

Constructivism is perhaps the most current learning theory, according to Fosnot and Perry (2005). Although the basis of constructivism was initially derived from the later work of Jean Piaget and Lev Vygotsky, contemporary biologists and cognitive
scientists extended the theory when they studied complexity and emergence. The theory differs from behaviorism because cognitive development and deep understandings are the focal points rather than the goal of instruction. The stages are not the result of maturation where conceptual knowledge is dependent on one’s developmental stage, but are constructions of active learner reorganization. It is complex and nonlinear. Piaget began to look at the mechanism of learning, rather than the global stages as descriptive of learning, and the process enabling constructions of new perspectives instead of identifying the type of logic used by learners. The impact of social interaction on learning and cognitive structuring was an important aspect in Piaget’s work. Vygotsky focused on the effect of social interaction, language, and culture on learning. He agreed that learning was developmental and constructive but differentiated between spontaneous and scientific concepts. Spontaneous learning occurs in a child’s everyday experience, whereas scientific concepts emerge in the more structured activity of a classroom. He studied the ways in which a child could move from spontaneous concepts to the scientific via the proximal development (Fosnot & Perry, 2005).

In the social sciences, constructivism is the “belief that the mind is active in the construction of knowledge” (Schwandt, 2001, p. 30). Knowing is active, not passive or a simple imprint, and the mind does something with impressions to form abstractions or concepts. In other words, humans do not discover knowledge, they construct it.

We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience … We do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, languages, and so
forth. This ordinary sense of constructivism holds that all knowledge claims and their evaluation take place within a conceptual framework through which the world is described and explained. (Schwandt, pp. 30-31)

Said another way by vonGlaserfeld (2005),

establishing the fundamental principle that learning is a constructive activity that the students themselves have to carry out. From this point of view, then, the task of the educator is not to dispense knowledge but to but to provide students with opportunities and incentives to build it up. (p. 7).

Phillips (1995) described constructivism as a secular religion in “The good, the bad, and the ugly: The many faces of constructivism” with each sect somewhat distrustful of the other. He noted that the literature on constructivism available at the time was enormous, including the 1993 AERA (American Educational Research Association) Annual Meeting Program sessions. He reviewed the range of constructivist authors including Ernst von Glasersfeld, Immanuel Kant, Linda Alcoff, Elizabeth Potter, Thomas Kuhn, Jean Piaget, and John Dewey. He followed with his framework for comparing the different forms of constructivism, noting that they represented not one issue but a variety of complex issues, which included: individual psychology versus public discipline, humans the creator versus nature the instructor, and construction of knowledge as an active process described in terms of individual cognition or social and political processes. The dimensions were epistemologically related but differ with respect to the intensity with which they harbor various educational and sociopolitical concerns. For it is apparent that although
some constructivists have epistemological enemies whom they are anxious
to defeat, most have pressing social and political concerns that motivate
their work. (Phillips, 1995, p. 10)
Phillips concluded that the ugly indicated the quasi-religious or ideological aspects of
constructivism, the good emphasized the active participation of the learners and the
recognition of the social nature of learning, and the bad identified as the different forms
tending toward relativism or treating the justification of knowledge as being entirely a
matter of sociopolitical processes.
My own view is that any defensible epistemology must recognize – and
not just pay lip service to – the fact that nature exerts considerable
constraint over our knowledge-constructing activities, and allows us to
detect (and eject) our errors about it. This still leaves plenty of room for us
to improve the nature and operation of our knowledge-constructing
communities, to make them more inclusionary and to empower long-
silenced voices. (Phillips, 1995, p.12)
Svinicki (2004) provided a review of constructivist theories noting their
relationship to cognitive theory because they focused on mental representations of
information by the learner. Some constructivists held that a learner’s constructs of reality
were unique, while others posited there was an external reality
[and] that the learner’s representation of that reality can coincide with it
and with others’ constructions, and, as a result, it is possible for a teacher
to mold a learner’s construction … Constructivist methods put the learner
at the center of the process and in the driver’s seat. Learning will follow
the path dictated by the learner’s activities. (p. 243)

By using instructional methods, such as student discovery and active interaction with the
environment and other students, the learner could form a construction of reality from the
experiences (Svinicki, 2004).

Principles from Fosnot and Perry (2005) included:

• learning is development, which requires invention and self-organization of the part of
  the learner including the generation of hypotheses, testing the validity and then
discussing them
• disequilibrium facilitates learning and errors need not be minimized or avoided;
  contradictions need to be illuminated, explored and discussed
• reflection (journaling or discussing connections over experiences or strategies) is a
  driving force of learning and
• dialogue within a community offers the opportunity to defend, prove, and justify
  learner-constructed “big-ideas” which may lead to undoing or reorganizing earlier
  conceptions.

They defined constructivism as:

Constructivism is a poststructuralist psychological theory (Doll, 1993),
one that construes learning as an interpretative, recursive, nonlinear
building process by active learners interacting with their surround – the
physical and social world. It is a psychological theory of learning that
describes how structures, language, activity, and meaning-making come
about, rather than one that simply characterizes the structures and stages of
thought, or one that isolates behaviors learned through reinforcement. It is a theory based on complexity models of evolution and development. The challenge for educators is to determine what this new paradigm brings to the practice of teaching. (p. 34)

**Qualitative Research**

Denzin and Lincoln (2003) defined qualitative research as cutting through disciplines, fields, and subject matter. In addition, interconnected terms, concepts, and assumptions are associated with the term. Qualitative research *operates* in a complex historical field of seven moments that overlap and are in the present. Their definition of qualitative research, provided below, must work within the seven moments.

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. (pp. 4-5)

Further, there was no single theory or paradigm in qualitative research but researchers “claim use of qualitative research methods and strategies from constructivist to cultural studies, feminism, Marxism, and ethnic models of study … It does not belong to a single discipline” (Denzin & Lincoln, 2003, pp. 9-10)
Qualitative research involves a variety of empirical materials, such as case study; personal experience; introspection; life story; interview; artifacts; cultural texts and productions; observational, historical, interactional, and visual texts that serve to describe …routine and problematic moments and meanings in individual’s lives (p. 5) …No single method can grasp all the subtle variations in ongoing human experience. Consequently, qualitative researchers deploy a wide range of interconnected interpretive methods, always seeking better ways to make more understandable the worlds of experience they have studied.

(p. 31)

Denzin and Lincoln described the five phases of the research process, which work their way through the biography of the researcher. The five phases are:

1. the researcher as a multicultural subject,
2. theoretical paradigms and perspectives,
3. research strategies,
4. methods of collection and analysis, and
5. the art, practices and politics of interpretation and presentation

According to the authors, the researcher phase considers the history and research traditions in which the researcher is located while guiding and constraining the work, that person’s conception of self and of the other, and the ethics and politics of research. The text lists and details the theoretical paradigms. The research strategies, such as case study and life history/testimonial, are reviewed along with the methods, such as interviewing. The final phase of interpretation and presentation consider the criteria for judging adequacy, practice, and politics of interpretation, writing as interpretation, policy
analysis, educational traditions, and applied research. Detailed reviews of the phases are beyond the scope of this study.

Janesick (2000) provided an outline for qualitative study design, which she compared to a dancer’s warm up, exercises, and cool-down and the choreographer’s preparation, exploration, and illumination/formulation as the researcher makes a series of decisions throughout the study. “Just as dance mirrors and adapts to life, qualitative design is adapted, changed and redesigned as the study proceeds, due to the social realities of doing research among the living” (p. 395). The researcher must stay in the setting over time and by doing so

the researcher has the opportunity to use crystallization, whereby he or she may view the approaching work in the study through various facets to deepen understanding of what is going on in the study. This allows for multiple ways of framing the problem, selecting research strategies, and extending discourse across several fields of study…Qualitative research design is an act of interpretation from beginning to end. (Janesick, p. 395)

**Summary**

This chapter presented the theoretical framework of the study, introduced qualitative research, and reviewed a brief history of adult education, continuing professional education, a history of medical education and continuing medical education, and reform and repositioning initiatives in CME. Recommendations for future research in CME from the literature demonstrated the need for continued research and the dynamic state of continuing medical education. Chapter 3 outlines the research method, describes the role of the researcher, considers ethical issues, reviews the pilot study, presents the
interview questions, details a timeline for completion, discusses participant selection, describes data collection and preservation, and lists review documents.
CHAPTER THREE

METHOD

The previous chapter reviewed relevant literature related to the history of adult education, medical education, and continuing medical education as well as reform and repositioning initiative in CME, and recommendations for future research. The chapter provided the theoretical framework for this study and a brief overview of qualitative research. This chapter describes the research methods, including the purpose, research questions, problem statement, theoretical framework, rationale, role of the researcher, ethical considerations, a pilot study, interview questions, timeline, participant selection, data collection and preservation, member check discussion, and review documents.

Purpose of the Study

The purpose of this study was to describe and explain selected participants’ perspectives on continuing medical education.

Research Questions

The research questions that guided this study were:

1. What are the major elements of CME?
2. What influences CME?
3. What are the most significant issues in CME?
4. What is the future of CME?

Problem Statement

Tension exists regarding the future of CME in the United States.
Theoretical Framework

Constructivism guided this study because it was the theory that best fit my personality and understanding of how learning occurs and develops. Since one must consider the impact of others in the construct of knowledge, social constructivism also guided the study, placing a strong emphasis on dialogue and interaction with others, and negotiating meaning or refining understanding by contrasting personal perspectives with others. Constructivism and social constructivism relate to the learning process observed in continuing medical education, and to the act of interviewing wherein the researcher and the participant dialogue, interact, and negotiate meaning or refine understanding by contrasting personal perspectives.

Method and Rationale

The current research is a descriptive case study that utilized interviews with national experts, researcher observations documented in field notes, a reflective journal, and review documents as data. The results offered the most complete description of CME in the United State from the experts’ perspective. The four data sets allowed crystallization (Janesick, 2004) of the data into a final set of conclusions. Janesick (2000) discussed Richardson’s 1994 explanation of crystallization, as “Crystallization recognizes the many facets of any given approach to the social world as a fact of life. The image of the crystal replaces that of the land surveyor and the triangle. We move on from plane geometry to the new physics” (p. 392).

A qualitative approach unveiled essence and ambience and referred to the “meanings, concepts, definitions, characteristics, metaphors, symbol and descriptions of things” (Berg, 2007, p. 3). Janesick (2004) described the characteristics of qualitative
work as holistic, focused on relationships and the social setting, referring to the personal and immediate interactions in a given setting, requiring equal time in the field and in analysis, incorporating a description of the role of the researcher and considering the researcher as a research instrument, incorporating informed consent responsive to ethical concerns and acknowledging ethical issues in fieldwork, and considering participants as co-researchers. In the latter case, the most important questions would be about the participant’s views of his or her life and work.

For the current research, the initial interview design was approximately one hour in duration with a range of 30 to 80 minutes. The researcher conducted all but one interviews in person, with one conducted via telephone due to scheduling conflicts. Professional meetings provided a good venue to meet with the participants. Prior to the interview, the researcher provided the eight participants with the interview questions. Participants gave permission to use a digital audio recorder with a back up digital recorder during the interviews. The interviews had professional transcription with one hour of recording equaling approximately 15 pages of interview data. The researcher compared the transcripts to the digital recording, making corrections as needed. Participants had the opportunity to review the transcripts (See member check form in Appendix E) with one participant editing his transcript to correct names and text.

Field notes were maintained, which included observations made before, during, and after the interviews. These notes assisted in recalling the specifics of the interview setting, the participant’s characteristics and demeanor, how I felt about the experience and other relevant information. A researcher journal was also utilized to track progress, or lack thereof, describe what was happening during the research process, talk about my
destination for each interview and what was happening in conjunction with the interview, professional meetings that we were attending, for example. A journal can also be used to reflect on personal experiences and feelings throughout the life of the research project that may influence the next step, the next selection of literature, what to do about barriers to completion, etc. In this case, my researcher journal was weak and I realized that memory does not serve one well during the dissertation journey. Establishing the habit of journaling daily would have offered a rich description of the entire journey, helped in the decision making process, given opportunities to reflect on later, and so on. (Excerpts are included in Chapter Four with the presentation of data.) Maintaining a researcher’s journal is highly recommended for any study undertaken.

Peer Reviewers read drafts of this manuscript, discussed content, and questioned the researcher about everything from the theoretical concept to sentence structure and always found typographical errors. Their ability to offer another perspective and confirm understanding of the material presented was priceless. Some of the peer reviewers are students at University of South Florida in the Adult, Career, and Higher Education program who participate with this researcher in an ongoing support group. This is an invaluable opportunity to help maintain focus, obtain feedback, provide in kind support to fellow students, and remain motivated to continue with the dissertation journey.

The process used to analyze the interview data, code, and develop themes was based on the works of Merriam (1998) and Rubin and Rubin (2005). Merriam states Data collection and analysis is a *simultaneous* activity in qualitative research. Analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypotheses direct the next phase
of data collections, which in turn leads to the refinement or reformulations of questions, and so on. It is an interactive process throughout that allows the investigator to produce believable and trustworthy and findings…rigor in qualitative research derives from the researcher’s presence, the nature of the interactions between researcher and participants, the triangulations of data, the interpretations of perceptions and rich, thick description (p. 151).

Merriam describes that data analysis had been a mysterious metamorphosis until analytic techniques in a number of publications had recently described. She noted that it is a highly intuitive process and that she would only try to introduce how one might proceed based on what had worked for her and presented techniques that had been commonly used in educational research. Of those, the current study used a blend of narrative analysis – the study of experience is through stories – as participants used stories or experiences to better explain their perspectives, and the constant comparative method – to constantly compare (pp.155-159).

It is suggested that data be managed and organized through the use of coding – assigning a short-hand designation to various aspects of the data for easy retrieval. The codes, created by the researcher to be relevant to the data at hand, identify themes as illustrated by quotes or occurrences (Merriam, 1998).

Rubin and Rubin (2005) suggest that analysis occur throughout the research project and that systematic examination must be completed by immersion in the data to code and extraction of information from the transcripts rather than looking for confirmation of initial ideas or relying on memory to recall and report on the data. In addition, a reminder that qualitative data analysis is not counting or numeric
summarization, rather it is to discover variation, portray shades of meaning, and examine complexity (p. 202). The authors review the initial stages of analysis which may include searching for concepts and themes suggested by literature in the field of study or in the interviews themselves. Within the interview transcripts, concepts and themes may be found based on the questions asked or those raised and/or frequently mentioned by the participants. Some may be indirectly revealed by statements or expressed emotions, and those that arise out of comparing interviews and new related themes from those the researcher has already identified by grouping concepts, refining them and considering what they may imply. They also recommend considering figures of speech, slogans, symbols and stories to suggest concepts and themes.

Once you have found a concept, theme, event, or topical marker and worked out what you think it means you look for these same ideas elsewhere in all the interviews. You compare instances of the same idea and progressively define, refine, and label these emerging concepts. You continue doing so until you are comfortable that you have worked out a consistent understanding of each concept and theme and have noted most. You put all the concepts, themes, events and topical markers you are going to use in the analysis on a coding list, and then use that list to guide your coding, or marking of the text (p. 216).

In the current study, codes were embedded in the raw data (transcripts) and built upon as the analysis progressed and themes emerged across the aggregate data. A constant comparison to responses for each interview question was made to check for consistency in the development of themes.
The initial phase was a review of transcripts consisting of simply reading and taking notes shortly after the individual interviews. The second phase included a detailed review of individual transcripts and assignment of initial codes created as short-hand descriptors. For example, [e ACCME] quickly identified responses that were related to accreditation as a major element of CME. Mr. Green, in response to my question regarding the major elements of CME, stated “So, obviously those are some of the major elements of CME …but can you describe for me what you feel those elements are in terms of CME?” stated, “Yeah, the major components of what this thing is called? Called CME? (Laughs.) I’ve talked to people in the past about this, and I still believe the same basic things, that you saying something is CME you just can’t get away from an adherence to the ACCMA criteria. [e ACCME] That has to be referenced, to tell people what you’ve done and saying that you are going to be accredited or you’re going to produced a certified CME.” Each of the codes was identified according to the research question to be answered with the data. Therefore, a letter before the code represented a category created to identify general answers to an interview question which, in turn, was associated with the research questions - e represented elements of CME, I for influences, s to describe significant issues/barriers to advancement, f to identify responses regarding the future of CME, and “?” corresponded to closing question responses to, “What haven’t I asked? Or, is there anything else you would like to add at this time?” See Appendix J for the Original Categories and Codes and Appendix K for the Final Categories and Codes which represent the final themes.
Guidelines for efficacy of categories for the constant comparative method include the following:

- Categories should reflect the purpose of the research. In effect, categories are the answers to your research question(s)…
- Categories should be exhaustive…
- Categories should be mutually exclusive…
- Categories should be sensitizing…
- Categories should be conceptually congruent… (Merriam, 1998, p. 183-184).

Merriam (1998, p. 169-170) describes the use of qualitative software programs and office software, such as word processors, as appropriate tools for managing data. Word processing applications are popular due to researchers’ familiarity with the format and the text editing strengths. Rubin and Rubin (2005) also address software programs and refer to a word processor programmed specifically to help retrieve codes (p.221). For the current study, a word processor was utilized to manage the data. All of the transcripts were combined into a single document and the embedded codes were identified as needed using the command Find in Microsoft Office Word 2007. This allowed for easy retrieval of relevant interview transcript passages.

Once the categories were developed and the coding was complete, the raw data was reviewed over and over again to ensure all relevant data had been captured. Passages from the interviews, representing the categories specific to the research questions, were selected for inclusion in Chapter Four by searching for the associated codes with the Find command. The data was constantly compared to check and re-check categories, identify
themes as well as locate direct quotes for placement into the data analysis section of this document.

Data analysis is the process of making sense out of the data. And making sense out of the data involves consolidating, reducing, and interpreting what people have said and what the researcher has seen and read – it is the process of making meaning. Data analysis is a complex process that involves moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation. These meanings or understandings or insights constitute the findings of a study (Merriam, 1998, p. 178).

Document Review

A document review is an unobtrusive method rich in portraying the values and beliefs of the participants, supplements interview data, observations, and the reflective journal. Documents may include meeting minutes, logs, announcements, formal policy statements, and letters to help develop an understanding of the setting or group. Archival data can further supplement the data. Content analysis is a systematic examination of the communications to document pattern, which creates an unobtrusive and nonreactive method. “The researcher determines where the greatest emphasis lies after the data have been gathered. Also, the method is explicit to the reader. Facts can therefore be checked, as can the care with which the analysis has been applied” (Marshall & Rossman, 1995, p. 86).

In the current study, the documents suggested for review initially included the following: Macy Conference monograph, Conjoint Committee on CME 2005 Reform and
Repositioning recommendations, AHRQ Report on CME, ACGME Competencies, ABMS Maintenance of Certification requirements, ACCME accreditation standards and associated correspondence regarding proposed changes, ACCME Standards for Commercial Support, and other documents recommended by the participants or appropriate based on data analysis. After gathering the data, the review documents selected were two Institute of Medicine reports, Resigning Continuing Education in the Health Professions and Conflict of interest in Medical Research, Education, and Practice, the Lifelong Learning in Medicine and Nursing Final Conference Report, ACCME’s CME as a Bridge to Quality: Leadership, learning, and change within the ACCME system, AMA’s The Physician’s Recognition Award and credit system: Information for accredited providers and physicians. Websites for National Commission for Certification of CME Professionals and the ACME were included. In addition, I reviewed articles by Bridget Kuehn, Susan Nedza, Robert Orsetti, and Patrick Kelly.

Findings from these review documents were relevant to the current study and were presented as data in tandem with the transcript excerpts selected to demonstrate how participant’s responses answered the research questions. Selections from the review documents supported the themes identified in the analysis phase. For example, Question One asked about the major elements of CME. One theme identified in the participant’s responses was accreditation. The materials in ACCME’s publication CME as a Bridge to Quality: Leadership, learning, and change within the ACCME system describes the importance of offering accredited CME as an essential component of physician continuing professional development. The purpose of the publication was to assist CME providers share that fact with their stakeholders. The examination and inclusion of this
review document data supported interview data analysis and findings that accreditation is a major element of CME.

Role of the Researcher

My path as a student and as a professional circumvented a pre-designed curriculum and established career ladders. I spent my middle school years at an independent private school, reminiscent of A.S. Neill’s Summerhill School, where letter grades were non-existent and self-discipline was the key to success in an open learning environment. The school encouraged creative solutions and dreams became realities as we explored topics of our choosing. Transferring to a public high school was a challenge; however, I was able to enroll in advanced placement courses, opted out of physical education, and substituted competitive figure skating, jazz, and ballet. Involvement in a Montage production was one of my most memorable high school experiences because it was an all-student production reflecting the popular Carole King song *Tapestry*. The first verse follows:

> My life has been a tapestry of rich and royal hue,
> An everlasting vision of the ever-changing view.
> A wondrous woven magic in bits of blue and gold
> A tapestry to feel and see, impossible to hold. (King, 2008)

Did I know then that a tapestry, in the form of text, would be something that I would want to produce as a doctoral dissertation? No, I did not; however, as noted by Denzin and Lincoln (2003), a text montage producing such a tapestry or quilt was the goal of many qualitative researchers.
The qualitative researcher may take on multiple and gendered images: scientist, naturalist, field worker, journalist, social critic, artist, performer, jazz musician, filmmaker, quilt maker, essayist. The many methodological practices of qualitative research may be viewed as soft science, journalism, ethnography, bricolage, quilt making, or montage. The researcher in turn, may be seen a bricoleur, as a maker of quilts, or, as in filmmaking, a person who assembles images into montages. (p. 5)

The researcher as a bricoleur uses the tools or strategies that are at hand or invents them and fits them together as needed. The practice is not necessarily set in advance because it depends on the questions and what the researcher can do in that setting. “Montage and pentimento, like jazz, which is improvisation, create the sense that images sounds and understandings are blended together forming a composite, a new creation” (p. 6). It also invites the viewers to construct interpretations that build on one another. A qualitative researcher using montage does the same thing as a quilt maker who stitches, edits, and puts together pieces of reality together. This creates imagery with different voices, perspectives, points of view, and angles of vision, creating spaces for give-and-take between the writer and the reader. The use of a variety of methods leads to crystallization in an attempt to obtain an in-depth understanding of a phenomenon. Denzin and Lincoln describe these montages or quilts as crystals. Unlike triangulation, where validation uses different methods to locate a fixed point, the central imagery for validity is the crystal, which combines symmetry and substance with an infinite variety of shapes, substances, transmutations, multidimensionalities, and angles of approach.
Crystals grow, change, alter, but are not amorphous. Crystals are prisms that reflect externalities and refract within themselves, creating different colors, patterns, and arrays, casting off in different directions. What we see depends upon our angle of repose. Not triangulation, crystallization. In postmodernist mixed-genre texts, we have moved from plane geometry to light theory, where light can be both waves and particles … crystallization provides us with a deepened, complex, thoroughly partial, understanding of the topic. (Richardson, 2000, p. 934)

There are several types of bricoleur researchers, including methodological, theoretical, researcher-as-ricoleur-theorist, interpretive, political, and narrative. The gendered, narrative bricoleur also knows that researchers tell stories about the worlds they have studied. Thus the narratives, or stories, scientists tell are accounts couched and framed within specific storytelling traditions, often defined as paradigms (e.g., positivism, postpositivism, constructivism) (Denzin & Lincoln, p. 9).

I am an interpretive and narrative bricoleur researcher because I wish to tell a story. The product of the interpretive researcher is “a complex, quiltlike bricolage, a reflexive collage or montage – a set of fluid, interconnected images and representations. The interpretive structure is like a quilt, a performance text, a sequence of representations connecting the parts to the whole” (Denzin & Lincoln, p. 9).

Returning to my path, undergraduate studies took place at a small liberal arts college. After struggling with the pre-med curriculum, I pursued and graduated with an individually designed major in Psychobiology, which was in its infancy as a field of
study. Again, I took the less traveled highway to my destination. In addition to the required credit hours, I took advantage of a variety of volunteer opportunities. Aside from the wonderful liberal arts foundation, many of the extracurricular experiences prepared me for the world of work. Once there, however, I found that a Bachelor’s degree was not enough. The completion of a Masters degree in Guidance and Counselor Education led me to a job in private sector vocational rehabilitation with now defunct organization where I honed my skills in medical case management. From there, my career in healthcare began as one of the few non-nurse case managers in a hospital setting. Shortly thereafter, I became a manager and interim director in the rehabilitation department, then practice support manager in the outpatient clinic, and currently in a position that initially combined two jobs, conference center coordinator and continuing medical education coordinator, into one management role. Subsequently, I gained the assignments of librarian, budget management of our two residency programs, and Medical Staff Services; another montage.

I am a professional who oversees the provision of accredited continuing medical education programs. I researched mandatory continuing medical education as well as repositioning and reform in CME. I witnessed significant changes in the accreditation process, changes in the utilization of commercial support for CME, and the development of a certification process for CME professionals designed to ensure some consistency in the qualifications of CME professionals. In fact, I earned the Certified Continuing Medical Education Professional (CCMEP) designation. As a result, I entered this study with a set of biases that became evident to me while reading the interview transcripts.
When I reflected on my practice as a continuing medical education manager, I decided to hone my skills in this particular area via enrollment in the Educational Program Development program at the University of South Florida in 2004. The results were delivery of more creative activities, making the program popular both in the hospital setting and in conjunction with external groups. As progressed through my doctoral courses and watched my field evolve, I became keenly interested in learning about the perspectives of experts, to appreciate their lived experience, and further my knowledge about the field and its future.

The acquisition of researcher skills is, in part, the goal of attaining an advanced degree. Berg (2007) discussed what Yin (1998) identified as the five researcher skills associated with good case studies. They were 1) to have an inquiring mind, 2) to have the ability to listen, including observation and sensing (and to assimilate large amounts of new information without bias), 3) to be adaptable and flexible, 4) to have a thorough understanding of the issues being studied, and 5) to provide an unbiased interpretation of the data (Berg, 2007). In completing this study, I have developed these skills.

Ethical Issues

The generic ethics of research include informed consent and maintaining the anonymity of participants, but there may also be situation specific ethical considerations and dilemmas (Marshall & Rossman, 1995). Denzin and Lincoln (2000) described a Code of Ethics as the conventional format for moral principles adopted by professional and academic associations. The principles overlapped in four areas: informed consent, deception, privacy and confidentiality, and accuracy. Marshall and Rossman (1995) discussed the need to anticipate issues such as negotiating entry into the lives of
participants, reciprocity (if appropriate), role maintenance, and receptivity while maintaining ethical principles. The researcher is responsible for demonstrating that the research is feasible and ethical and must demonstrate an awareness and appreciation of the ethical principles of research.

Janesick (2000) noted that qualitative researchers are attuned to making decisions regarding ethical concerns, because this is part of life in the field. From the beginning moments of informed consent decisions, to other ethical decisions in the field, to the completion of the study, qualitative researchers need to allow for the possibility of recurring ethical dilemmas and problems in the field. (Janesick, 2000, p. 385)

One of the collective identity characteristics of a profession is ethical practice. Once established, a profession should refine its ethical practice and develop a code of ethics and rules. The ethical tradition must be strong enough to prevent violation from practitioners or employers, yet flexible enough to accommodate a variety of problems. Providers develop opportunities to discuss and debate ethical issues and practical applications via inquiry, instruction, and performance.

Ethical problems in continuing professional education stem from a conflict of values between the professionals and the professions they serve. As the field of continuing education changes, so do the ethical problems facing it (Lawler, 2006).

Decisions about whose interests will be represented, what aims will be pursued, how the learner community will be defined, how resources will be allocated, what instructional approaches will be used, how the program
will be financed, and how “success” will be determined all involve making moral commitments. (Sork, 2000)

One of the most prevalent ethical issues confronting continuing education in the healthcare professions is the provision of commercial support for CME programs.

In sum, it is unethical for academic institutions and educational organizations to accept any support that is explicitly or implicitly conditioned on industry’s opportunity to influence the selection of instructors, speakers, invitees, topics, or content and material of educational sessions…medical education providers and medical professional societies should avoid all industry interactions that might diminish, or appear to diminish, their objectivity or concern for patients’ best interests. To do otherwise is to endanger the integrity of the profession and the public confidence it enjoys. (Coyle, 2002, pp. 405-406)

In researching the use of commercial support, Herbert (2003) calculated the cost of Grand Rounds if the hour or more spent weekly equated to time spent in compensated clinical activity at a billing rate of $325 per hour, each was worth about $9750. He also looked at the sources of funding for the pharmaceutical industry, departments of medicine, hospitals, medical schools, and other facilities, and found that 49% of the funding came from the pharmaceutical industry. (Herbert & Wright, 2003)

The organizations that accredit continuing medical education (ACCME) and continuing pharmacy education (ACPE) addressed the ease of obtaining funds and industry influence on the content of programs in their guidelines for providers and by the
Pharmaceutical Research and Manufacturers of America (PhRMA). However, Brennan et al. (2006) proposed a policy to implement more stringent controls to eliminate or modify the provision of small gifts, drug samples, CME, travel funds, speaker’s bureaus, ghostwriting, consulting, and research contracts. The proposal included psychology and social sciences research on receiving gifts and giving that indicated “current controls will not satisfactorily protect the interests of patients” (p. 429).

In 2007, the United States Senate Committee on Finance, which has exclusive jurisdiction over the Medicare and Medicaid programs, noted increased federal spending on prescription drugs. Their interest in drug marketing and utilization patterns, which included funding of educational programs, was clear. Of particular interest was “use of educational grants to encourage physicians to prescribe products for uses beyond their Food and Drug Administration (FDA) approval” (p. 1). Another concern was that the ACCME and FDA did not provide real time monitoring of CME activities. A survey of 23 pharmaceutical manufacturers revealed that, “In 2004, expenditures by commercial sponsors to support CME exceeded $1 billion” (p. 9). ACCME reported to the Committee that spending on accredited CME in 2005 equaled $2.25 billion with $1.12 billion representing commercial support. Steinbrook (2005) commented that, if the standards released by ACCME in 2004 made support for CME seem less valuable to industry, companies might decrease their support. If so, the medical profession might have to assume more of the true cost of its own continuing education.

The use of commercial support for continuing medical education is particularly contentious and produced an ethical dilemma considered in this study. The government, the pharmaceutical industry, academic medical centers, and CME providers were in the
midst of deciding how to resolve this issue. The use of pharmaceutical monies in the form
of educational grants to support educational activities could be just another way to market
a product. Many commercial support and conflict of interest guidelines are in place with
PhRMA, ACCME, and ACPE in an effort to eliminate bias in educational activities.

The ACCME requested comments in August 2008 regarding their position that
“the manner of interaction between potential commercial supporters, or their agents, and
some Accredited Providers may need to be altered” (p. 4). The CMSS submitted
comments in several areas via a letter to ACCME dated August 15, 2008. Specific to this
discussion was the response to commercial support for individual activities only under
certain criteria.

[CMSS] does not support the new paradigm in its current draft
format…but rather recommends modifications to ensure the separation of
bias from commercial support of CME, and further recommends a process
for debate and discussion of the proposed new paradigm, so that it may
ultimately come to be as universally accepted as are the ACCME
Standards for Commercial Support. (p. 5)

Further, they offered the Conjoint Committee on CME as a vehicle for forwarding
discussion and proposing a national solution (Council of Medical Specialty Societies,
2008)

Pharmaceutical companies have changed the ways in which they provide
commercial support in order to be compliant with PhRMA guidelines and government
regulations. Of particular interest was Pfizer’s July 2, 2008 announcement that they
would no longer provide direct funding for Continuing Medical Education/Continuing
Education (CME/CE) programs by commercial providers, including medical education and communication companies (MECC’s). Pfizer’s decision marked an effort to address ongoing criticism of conflicts of interest in industry-supported CME/CE. They also announced there would be stricter criteria to qualify for commercial support from Pfizer. In a July 2, 2008 e-mail to CME/CE Providers, Joseph M. Feczko, Senior Vice-President and Chief Medical Officer of Pfizer Inc. said:

We continue to believe in the value that industry-supported CME/CE provides to healthcare professionals and ultimately to patients, and we will still support continuing medical education programs at many of the world’s leading academic medical centers and teaching hospitals, as well as programs sponsored by associations, medical societies and community hospitals, in keeping with the shared goal of improving public health. Continuing medical education/continuing education improves healthcare provider understanding of disease, expands evidence-based treatment, and contributes to patient safety. However, we understand that even the appearance of conflicts in CME/CE is damaging and we are determined to take actions that are in the best interest of patient and physicians.

(Personal Communication)

Pilot Study

In preparing for the current study, the researcher used a semi-structured interview technique with and observations of David A. Weiland, II, MD on two occasions in September and October, 2007. The interviews with Dr. Weiland aided in understanding his role and lived experience as the Medical Director of the Hospice of the Florida
Suncoast in Clearwater, Florida, and served as the pilot for the current research. Each interview was one hour in duration and recorded using two digital recorders. Observation notes became part of the final report to describe the interview settings and to supplement the interview transcripts. After transcription, a professional transcriptionist forwarded the data electronically to the researcher, who compared them to the digital recordings to ensure accuracy. Data analysis aided in locating themes as they related to Dr. Weiland’s role and lived experience; this information and documents and photographs from the Hospice of the Florida Suncoast website made up the final report. Dr. Valerie Janesick provided guidance for the assignment, incorporating her *Rules of Thumb* for conducting qualitative interviews (Janesick, 2004).

Although I have known Dr. Weiland for approximately nine years as a colleague and friend, the experience of interviewing him and the results that the data provided were in greater depth than I could have anticipated. The detail he provided, along with the emotional component he described, were moving and revealed a side of him that I would not ordinarily be able to hear, see, feel, or comprehend. The concepts and practice of hospice and palliative care became much clearer. The importance of communication with the care team, the patient, and family was obvious based on his description of conversations and interactions in his daily work. In addition, the opportunity to write a descriptive was refreshing and enjoyable. The overall experience encouraged me to pursue a descriptive study of expert perceptions and lived experience in the field in which I work.
Interview Format

Having confirmed the participation of eight experts and agreeing on a date and location, I used a semistructured (Rubin & Rubin, 1995)/semi-standardized (Berg, 2007) interviewing format. The interviews were in person for one hour in and audio taped. Each participant responded to the interview questions listed below, and included probing questions to digress, guide the conversation, clarify an answer, request additional information, or delve more deeply. Following transcription and content verification, each participant had an opportunity to review their transcript and correct any errors. Follow up interviews were not necessary due to data saturation.

Interview Questions

1. From your perspective, what are the major elements that define CME?
2. Please describe your current role in CME.
3. Based on your experience, what factors influence CME?
4. Please describe the issues in CME that are most relevant for the advancement of the field.
5. What, from your perspective, is the future of CME?
6. Is there anything else you would like to add at this time?

Timeline and Costs

- Review of literature – March 2008 – August 2009
- Complete Proposal Chapters 1-3 - September 2008 – March 2009
- Protection of Human Subject training – November 2008
- Proposal Submission to Committee and Oral Defense – April 2009
- IRB Application – April 2009
• Interviews/Observations/Data Collection – May – September 2009
  o Travel Cost $3000.00
  o Office Supplies $100.00
• Researcher Reflective Journal– March 2008 to completion
• Data analysis – May 2009 to January 2010
  o Transcription Cost $720.00
• Preparation of Chapters 4 and 5 – October 2009 to March 2010
  o Copy Editor $1600.00
  o Drafts and Final Copies (FedEx Office) $325.00
• Protection of Human Subject continuing education– March 2010
• IRB Progress Report – March 2010
• Dissertation Defense – April 2010
• Publication – After August 2010
  o ETD Fee $100
  o ProQuest Fee and personal bound copies $354

TOTAL $6099

Purposeful Sample

Qualifications for the deliberate selection of participants included their having acquired an advanced degree (masters or doctorate) or professional degree in medicine, and being employed in the field for at least ten years as experts, opinion leaders, researchers, academics, editors, or officers of professional or academic associations. The rationale for selection was that participants were active in the field in a leadership capacity of some type, and had an impact on CME or might have an impact on the future
of CME. These criteria constituted experts in the field; as defined by Merriam-Webster, an expert is “one with the special skill or knowledge representing mastery of a particular subject” (Merriam-Webster Online Dictionary, 2010). Finally, all participants were willing to participate in the study and signed an Informed Consent. Names have been changed to ensure confidentiality.

Invitations were extended to representatives from the various facets of CME, which included the following:

- Officer or Committee Member – American Medical Association
- Officer or Committee Member – Association of American Medical Colleges
- Editor/Associate Editor/Consulting Editor – Medical or Professional Journal
- Officer, Accreditation Reviewer of Committed Member – Accreditation Council for Continuing Medical Education
- Senior Manager or Director, Medical Education Grant Office – Pharmaceutical Industry
- Officer or Committee Member – Alliance for Continuing Medical Education
- Participant - 2007 Macy Conference

Informed Consent

Each participant signed an informed consent form (see Appendix A) prior to the interviews. The version incorporates IRB requirements at the University of South Florida,
Sample Consent Forms developed by Janesick (2004), and a modified version of the one used prior to the interview with Dr. Weiland.

**Methodological Assumptions**

A descriptive study gathers information about the lived experience and perspectives of the participants, which, in combination, offers rich description. Critics of the approach may say that the selection of the participant group is too purposeful, that the method is the least efficient way to collect the necessary data, or that telephone interviews or questionnaires are more appropriate. However, the method of interviewing provides the richest data when supplemented with the researcher’s observations and review of documents. Neither a questionnaire nor a telephone interview could yield the type of data needed to present a complete study.

Locke, Spirduso, and Silverman (1993) suggested that qualitative research required an open contract. During the proposal phase, the researcher might need to “move back and forth between data sources and ongoing data analysis during the period of data collection. Initial questions are progressively narrowed or, on occasion, shifted entirely as the nature of the living context becomes apparent through preliminary analysis” (p. 111). This was true in the current research as I went back and forth between data sources both during and after data collection and reviewed the data multiple times.

**Delimitations and Limitations**

According to Locke, Spirduso, and Silverman (1993), delimitation described the populations to which generalizations can be made. “Delimit literally means to define the limits inherent in the use of a particular construct or population” (p. 17). Limitations refer to limiting conditions or restrictive weaknesses. “They occur when all factors cannot be
controlled as a part of the study design, or sometimes the optimal number of observations simply cannot be made because of problems involving ethics or feasibility” (p. 18). If problems occur and the information gained is valid and useful, the researcher can proceed but needs to consider and note the limitations to assure the reader of the study’s validity.

Delimitations in the current research include that generalizations to other populations are not possible because of the individual lived experiences described. However, other researchers could replicate similar results with similar experts in the same field. Limitations included the inability to obtain sufficient interviews due to illness, travel delays, cancellations, or other uncontrollable problems. Other issues may include the inability to access desired documents for review, and funding problems for travel and transcription services, among others.

Data Collection and Preservation

The researcher recorded the interviews using two *Olympus* Digital Voice Recorders with the data transcribed verbatim by a transcriptionist. The interview transcripts were stored electronically and as hard copies to ensure the data were not lost. Field notes included researcher observations, ideas for later consideration, descriptions of the interview settings, reflections on the interviews, and immediate impressions. During the interviews, the researcher noted ideas for the second set of protocol questions. The researcher’s journal became part of the final report. The data analysis involved the identification of themes, which, in conjunction with the literature and document reviews, aided development of the final analysis and conclusions.

Participants had the opportunity to read the transcripts to ensure accuracy. Transcripts will be available to the transcriptionist, the primary investigator, the
individual participants, and the major professor for two years after the completion of the program.

Summary

This chapter presented the purpose of the study, the problem statement, and the theoretical framework that guided the current study. The qualitative research design and method were outlined; the role of the researcher explored, ethical issues considered, participant selection described, and the interview questions were stated.

The goals of this study were to examine the perspectives of CME experts, review recent literature and documents, describe participants’ lived experience, identify themes and provide conclusions. Ancillary goals were to hone my skills as a qualitative researcher, improve my creative and scientific writing, and contribute to the larger body of literature in continuing medical education.
CHAPTER FOUR

PRESENTATION OF THE DATA

Introduction

The purpose of this study was to describe and explain selected participants perspectives on continuing medical education. This chapter includes descriptions of the participants, the interview settings, and selected excerpts from the interview transcripts in tandem with review document data and recent literature that parallel the interview data analysis and findings. Excerpts from the reflective journal and field notes are included.

Participant Overview

The researcher selected nine individuals as prospective participants based on their educational level and national involvement in CME as described earlier. Eight experts accepted the invitation.

Upon receiving permission from the USF IRB, I contacted nine prospective participants and all agreed to participant except one and, as of June 13, I have not heard from her after two attempts. Two of the 7 have not been scheduled as yet. I was delighted and surprised that they would say yes so readily! My friend Suzanne said that the doctoral club is not very big and they are willing to support me as a result. (Reflective Journal, June 13, 2009)

To protect the identity of participants, the composite view provided in Table 1 below includes no individual identification. The selected experts had many years of experience, achieved advanced degrees, and met the criteria set forth.
Upon interviewing the experts and reviewing vitas, resumes, and biographies, a long list of professional positions and a wide range of work settings emerged. These are presented below in Table 2.

<table>
<thead>
<tr>
<th>Alias</th>
<th>Meets Professional Criteria</th>
<th>Education</th>
<th>Years of Experience</th>
<th>Interview Date</th>
<th>Interview Duration (in minutes)</th>
<th>Informed Consent</th>
<th>CV/Bio</th>
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<tr>
<td>Mr. Blue</td>
<td>Yes</td>
<td>MD</td>
<td>40</td>
<td>June 29</td>
<td>56</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. Gray</td>
<td>Yes</td>
<td>PhD</td>
<td>33</td>
<td>June 25</td>
<td>56</td>
<td>X</td>
<td>x</td>
</tr>
<tr>
<td>Mr. Green</td>
<td>Yes</td>
<td>EdD</td>
<td>30</td>
<td>June 25</td>
<td>41</td>
<td>X</td>
<td>x</td>
</tr>
<tr>
<td>Mr. Red</td>
<td>Yes</td>
<td>MEd</td>
<td>20</td>
<td>June 30</td>
<td>54</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ms. Amber</td>
<td>Yes</td>
<td>PhD</td>
<td>18</td>
<td>June 30 – phone</td>
<td>30</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. White</td>
<td>Yes</td>
<td>MD</td>
<td>37</td>
<td>July 22</td>
<td>80</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mr. Black</td>
<td>Yes</td>
<td>MD, MS</td>
<td>20</td>
<td>July 2</td>
<td>45</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ms. Brown</td>
<td>Yes</td>
<td>MA</td>
<td>13</td>
<td>July 15</td>
<td>60</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
## Table 2
**Participant Work Settings, Work Roles and Leadership Roles**

<table>
<thead>
<tr>
<th>Work Settings</th>
<th>Professional Associations</th>
<th>Leadership Roles</th>
<th>Employment Roles</th>
<th>Other Designations</th>
</tr>
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<tbody>
<tr>
<td>Medical School</td>
<td>ACCME</td>
<td>Committee Chair</td>
<td>Physician</td>
<td>Fellow, ACME</td>
</tr>
<tr>
<td>University</td>
<td>ACME</td>
<td>Accreditation Committee</td>
<td>CEO</td>
<td>CCMEP</td>
</tr>
<tr>
<td>Pharmaceutical Industry</td>
<td>AMA</td>
<td>Surveyor</td>
<td>President (private company)</td>
<td>Distinguished Service Award, ACME</td>
</tr>
<tr>
<td>Government</td>
<td>AATD</td>
<td>Committee Member</td>
<td>Medical Director</td>
<td>President’s Award, ACME</td>
</tr>
<tr>
<td>Regulatory Agency</td>
<td>NAAMECC</td>
<td>IOM Committee</td>
<td>Professor</td>
<td>Frances Maitland Award, PACME</td>
</tr>
<tr>
<td>Medical Association</td>
<td>GAME</td>
<td>Member or Reviewer</td>
<td>Assistant Dean</td>
<td>Precepts of Hippocrates Award, GAME</td>
</tr>
<tr>
<td>Medical Specialty Societies</td>
<td>ABMS</td>
<td></td>
<td>Associate Dean</td>
<td>Six Sigma</td>
</tr>
<tr>
<td>Accreditation Agency</td>
<td>SACME</td>
<td></td>
<td>Vice Chancellor</td>
<td>Fellow, RCPC</td>
</tr>
<tr>
<td>Private Companies</td>
<td>PACME</td>
<td></td>
<td>Consultant</td>
<td>Fellow, ACPE</td>
</tr>
<tr>
<td>Entrepreneurial Ventures</td>
<td></td>
<td></td>
<td>Project Consultant</td>
<td></td>
</tr>
</tbody>
</table>
The Interviews

The following section describes the settings and the interviews. Participant introductions are “in order of appearance” and described in detail in the field notes. The interviews of Mr. Gray and Mr. Green were in the same location, while we attended a professional meeting where they were speakers. Because of a last minute change in reservations, we moved from a semi-private dining area just off the main restaurant to a concierge room, which was more conducive to conversation due to the unanticipated noise level in the semi-private space. The concierge room was essentially a hotel guest room with a small sitting area where we were able to make ourselves comfortable. There was a large curtained window, and the room was furnished with dark brown tables and dressers accented by colorful Mediterranean decor. Fortunately, the hotel dining staff and management were accommodating about the change in location and brought coffee for Mr. Gray’s meeting. We had lunch outside during a break from the conference and the interviews.

On June 25 and 26, I attended the [state] CME Providers Conference in [city]. I interviewed [Mr. Gray] and [Mr. Green] who presented at the conference. [Ms. Amber] also lectured but I interviewed her via telephone on June 30. Interestingly, both [Mr. Gray and Mr. Green] repeated some of the same opinions expressed in the interview in their presentation. As it turns out, they know each other pretty well and have similar perspectives about ACCME and PI-CME as well as where they think CME is going. I am looking forward to finding themes to see if they are that similar.

Of course my arrangements for a private dining room fell apart, but the staff was able to offer a guest room (concierge room) so that the interviews were conducted in a very quiet place … just a little weird to be in a guest room. The dining room would have been too loud anyway. Mr. Gray did not want breakfast, so we had coffee. Mr. Green had already eaten lunch, complaining that the breakfast offered was not adequate for his needs. (Reflective Journal, July 2, 2009)
I interviewed Mr. Blue and Mr. Red during the course of a professional meeting where they were both meeting attendees and speakers. My conversation with Mr. Blue took place during lunch in a private dining room in an historic hotel in the northeastern United States. The staff was very attentive and tried to be quiet coming and going. However, as we sat down, the fire alarm went off and was so loud that we had no other choice but to go outside until it stopped. We even watched the firefighters arrive – axes in hand! Luckily, it was a small problem and we were able to enjoy our lunch. Mr. Red and I met in a small meeting room during breakfast on the following day. (Note: In the future, I would avoid interviewing during a meal due to the constant interruptions and the challenge in transcribing the interview). Once more, the staff was very gracious and accommodating. The room was a simple one, large enough to hold about 12 people comfortably around a conference table. I noticed the deep blue paint, wide white trim and floral wallpaper accents. It was quiet and we were able to converse easily.

On June 28-30, I went to the [Conflict of interest] in [city] at the [Hotel]…very nice! [Three participants] presented the CME component on Sunday. I then interviewed [Mr. Blue] on Monday and [Mr. Red] on Tuesday. [Mr. Blue] and I met in the [room] a small private dining room, which was wonderful until the fire alarm when off for about 10 minutes. We ordered lunch, stepped outside to chat, and saw the arrival of the firefighters with axe and pick in hand! There was no big emergency thank goodness. Trying to have a meal while interviewing is a little difficult due to the constant interruptions and extra noise, but [Mr. Blue] appreciated the lunch. I interviewed [Mr. Red] in the [room], a small conference room on the lower level. We used room service for our breakfast, which was also appreciated and there were fewer interruptions. (Reflective Journal, July 2, 2009)

Ms. Amber was a speaker at one of the professional meetings as well, but with her schedule, we were not able to talk in person. Instead, she was interviewed via telephone using an ear device to record the conversation. While attending the conference in late June, I found an historic lounge with carved oak wall panels and trim, beautiful
chandeliers, furniture befitting the 1900s when it was built, and huge floor to ceiling windows, graced with beautiful red window coverings, overlooking the commons. According to the hotel description, the room is reminiscent of a British Officer's Club in the Orient. The dark wood paneling and mirrors that flanked the dining area were offset in the bar by smooth marble. Ornately gilded and painted coffered ceiling displayed coats of arms and related symbols.

I selected this space to conduct my phone interview when the dining management assured me the large lounge area would be quiet during that time of day. However, as it turned out, it was anything but tranquil. The only other person in the lounge, who was at least 40 feet away, was a very loud patron with plenty to say. The conversation was further interrupted by the clamor of the bar staff while they completed their mid-afternoon task of unloading clean glasses, plates, and silverware. My stress level escalated and the transcriptionist had a difficult time discerning the conversation.

I interviewed Mr. Black in his very cool corner corporate office with wedge windows overlooking a large Midwestern city. His assistant initially greeted me in the modern lobby, and shortly thereafter Mr. Black escorted me to his office.

I am en route to [city] to interview [Mr. Black] at his office…this will be interview #6. I am very excited to hear his perspective. I heard him speak at the [conference] presented by the [organization] on [month the 28th specific to CME].

(At Starbucks) Arrived in [city] at [organization] and of course the [related organization] is in the same building! Could have tried to set something up there…oh well! [Mr. Black] will try to meet with me early as the airport is expected to be jammed at 4pm ish. The security lady said to get there two hours early!

…[Mr. Black] was awesome and had different perspectives all together. He was able to see me early so that I was able to get back to the airport early. Note to self: Don’t travel right before a holiday for school stuff!! This does make for a long day but better than an overnight stay, I guess.
He was dressed casually (short sleeve dress shirt). Corner office – literally – with couch and chair, conference table and desk. Nice size. Cool metal flower sculpture and mobile. Grand view of [city]. [Assistant] came out to introduce herself – the receptionist was also very nice. [Restaurant] is next door and, apparently, that is the corner where baseball fans congregate prior to baseball games then take the train to the game. (Reflective Journal, July 2, 2009)

The only participant who travelled to see me was Mr. White. He visited for several days with a friend, and dropped by my office. My work space is small and sports an interior window, offering a view of the library. It was decorated about fourteen years ago with teal-gray modular furniture in an L shape against the walls and an oval desk. I have two guest chairs, and the usual computer set up along with several filing cabinets. Other than the window, my favorite view is of a large Banyan Tree water color.

On July 22, I interviewed [Mr. White] in my office. He has so much going on and so much information at his fingertips – especially about the history of CME and AMA, etc. It was a little difficult to stay on track because the information he provided was very interesting to me and we went off on many tangents. He was delightful. The book he is editing sounds very interesting as well – it is about the history of CME. (Reflective Journal, August 5, 2009)

I interviewed Ms. Brown in a small meeting room on the first floor of her office building. The receptionist greeted me, and I waited in the lobby for a short time, enjoying a pictorial history of the state. We sat at a beautiful round table in a colonial style room with red carpet, robin egg blue walls, and white trim. It had a very high ceiling. The lofty window allowed the morning sun to drift in.

Interviewed [Ms. Brown] at her office building on July 15th in [city], which went very well. She has a very interesting perspective since she is an accreditor, a provider, and a site surveyor. As expected she had a lot to say. I was a little surprised about the fact that the Medical Associations were not involved in the most recent changes in the guidelines. She seemed to be quite frustrated about that lack of involvement or lack of input. But she attributed it to [the fact that ] they [ACCME] wanted to make a change without having to wait and it made for a clean cut change. (Reflective Journal, August 5, 2009)
I am really very excited about my research and the outcomes thus far. I am hoping to conduct the follow up via telephone just because of the time and expense. Everyone has been excited about what I am doing, is eager to see the final product and has been complimentary of my background and experience, indicating that I should be able to find a job fairly easily…let’s hope so! (Reflective Journal, July 2, 2009)

Research Questions

The research questions for this study were:

1. What are the major elements of CME?
2. What influences CME?
3. What are the most significant issues in CME?
4. What is the future of CME?

Summarized data obtained from the interviews follows along with direct quotes from the participants. As described in Chapter Three, I reviewed, categorized and coded the answers for each question from the transcripts to search for general themes.

I have read through four of the eight interviews and listened to two [so far] to be sure that the transcription was accurate – especially [Ms. Amber’s] as there was a lot of background noise and [the transcriptionist] had a hard time with it…however, she did a great job capturing 90-95% of the entire conversation – I just had a few corrections.

Now I need to refocus on looking for themes in the four transcripts – I keep going back and forth about how I should do it and am VERY distracted by the absolutely beautiful weather. Today it is clear as a bell with a nice breeze. Am about ready to take off for the Beach!!!!!!!!!! Will need to get up earlier tomorrow and get to the WiFi place so I can do a little research in the Qualitative Weekly, etc. Rubin and Rubin is OK, but I think I have other books to use as well …. they are due back at the library! (Reflective Journal, August 5, 2009)

Question One - What are the major elements of CME?

Accreditation and physician involvement were the themes identified by the participants. ACCME was the short hand code representing the accreditation element,
and physician involvement the code which was inclusive of physician participation in the planning process, attendance, and support of CME initiatives. (Please refer to Appendix J for the original categories and codes and Appendix L for the final categories and codes.)

Even experts in the field have difficulty narrowing down the answer to this question because there are so many components as exemplified by Mr. White.

I don’t know how to answer that. I think CME has got to be committed to one cause which is helping physicians stay current and not only in clinical knowledge, but in the developments around them. That’s the CPD [continuing professional development] part so it’s working with themes, it’s working in the systems, it’s exemplified by the maintenance of certification programs of the ABMS Boards [American Board of Medical Specialties]. The ACGME is now enforcing residency training requiring these various competencies. CME has to stay focused on these new directions and not get hung up on any one area. But it really needs to keep doing many things including research. Without research and without publication, it’s never going to achieve the academic respect it needs.

**Accreditation.** Providers must have the accreditation component in order for the American Medical Association to accept CME, for it to meet state and federal requirements, and to maintain certification. In its publication, *CME as a Bridge to Quality* (www.accme.org), the ACCME encouraged providers to take action and demonstrate the value of CME to their stakeholders. In his introductory letter, Dr. Murray Kopelow stated:

It is a critical time for continuing medical education (CME) to address the competence and performance gaps of physicians that underlie deficits in the quality of US healthcare.

Accredited CME is an essential component of continuing physician professional development in the eyes of the US organizations of medicine that comprise the ACCME member organizations. For almost 30 years, the ACCME system for accredited continuing medical education has provided
standards, criteria, and policies that define what it means to be a provider of CME.

The ACCME recognizes that US healthcare is at a crossroads, and that accredited continuing medical education is being asked to provide solutions to bridge healthcare quality gaps. The ACCME system is an essential link between the lifelong learning of physicians and State and Federal requirements for physician licensure and Maintenance of Certification™. Accredited CME connects current practice to best practice. Your stakeholders need to understand just how important this role of CME is to the healthcare mission of your organization.

In this framework, accredited CME is one of our nation’s strategic assets for improving care—and an important partner for change to your physicians and your community of practice. (Accreditation Council for Continuing Medical Education, 2008a)

However, the IOM committee in Redesigning Continuing Education in the Health Professions (2009) noted:

Health professionals and their employers tend to focus on meeting regulatory requirements rather than identifying personal knowledge gaps and findings programs to address them. Many of the regulatory organizations that oversee CE tend not to look beyond setting and enforcing minimal, narrowly defined competencies. (p. 3)

The report further stated in Recommendation 6 that the new Continuing Professional Development Institute (CPDI) “…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” (Redesigning continuing education in the health professions, Institute of Medicine, p. 90). Consistent regulatory and accreditation approaches could further assist in the interdisciplinary team education envisioned by the development of the CPDI.

Mr. Red was an eager participant. Dressed in business attire, he was relaxed and thoughtful. In fact, he seriously considered my questions and had made notes in advance. He seemed very interested in my perspective as well and was complimentary of my skill set as a CME provider. Interestingly, he was one of the first national figures with whom I identified early in my CME career. He was an effective presenter and not shy about sharing his personal opinion. The topics that stood out in our conversation included balanced funding, MECC’s role in CME, Conflict of Interest, and PI-CME. Here, he shared his perceptions on the element of accreditation:

Alright because what does define it today in my view and goes to part of your other question is that it’s much too oriented around process issues. When I think of CME as a profession it’s all about process, which is very different that what in my view of what it should be. The profession is very focused on outcomes and quality indicators…For example, while I have great respect for the ACCME, [he] talked about some process measures the other day. Someone asked him about medical education companies, and his defense of them is that they’re more compliant than the other providers.

He was talking about how they’re more compliant basically. And if you look at process measures in terms of the activity files and consider the resources and personnel they have, absolutely they’re more compliant. But that’s completely a process measure that belies that fact, and I don’t want to skewer them all because there are wonderful ones out there, but as a general statement from my experience they are far less compliant in a much more serious way than the provider types. So that for me is but one example of the system is driven by process measures. And you as a provider are encumbered by an extraordinary expense around those process measures. Extraordinary bureaucracy that you have to follow, that at the end of the day does not contribute to patient health. So when I think of the kind of
major elements that define CME today, I’m struck by it. It’s much more process rather than outcomes oriented. What it could be is very different.

MARTHA: What do you think it should look like?

I think the intention, and I think the ACCME has articulated this so I don’t want to sound anti-ACCME but I think the orientation towards being the strategic asset for quality improvement within a healthcare institution is absolutely dead on right. I believe very much in that. I think we’re too slow in getting there. I think we have too many legacy issues, like a lot of the issues around commercial support and MECCS and different provider types that will slow things down. Too much time is being spent managing those issues, rather than moving faster towards becoming integrated within institutions like yours, where you’re probably like many, probably politically marginalized more than you should be. So those types of issues are very much on my mind.

MARTHA: So do you think a sort of bureaucracy issue with the organization itself? I don’t think you’re alone in that in thinking that there are too many concerns about “what’s in the file” and how many “T’s” you cross correctly, or which “I’s” you forgot to dot.

Well said. That’s exactly what I’m talking about. (Mr. Red)

Mr. Gray is well known in the field and I have had the opportunity to meet him in the past. He was easy to interview and he was funny. He focused on PI-CME and the quality improvement process. I learned during our discussion that he completed a qualitative dissertation and was very interested in my work. He dressed in business casual attire, was very animated, and a fluid conversationalist. He expressed his opinions and bias unabashedly. He is an excellent speaker and teacher. The areas that stood out were PI-CME, “if I were King of ACCME,” physician funded CME, and mission driven CME.

You can come at that from a lot of different directions. I always kind of take it from the physician’s perspective. To me, physicians by training and by bend have a particular interest in being sure they keep as current as they possibly can, given all of the constraints they have, to provide the best possible care. Continuing medical education to me is a resource system that physicians go to feed on that professional interest, that’s one of their professional obligations. So when I look at defining continuing medical education and when I talk about it, I talk about it as we’re not the engine on the train of quality for health care; we’re just kind of coal in the coal car. We’re one resource physicians can use. We have an
obligation in continuing medical education, especially now. We’ve been talking for many, many years in our domain of practice to really have an understanding of what practice is.

So one element of continuing education as far as I’m concerned for your particular target group, whatever that is, is to have some sense of what practice should be, what should be going on. Then we have the obligation of working with our physician colleague to identify the difference between what is and what ought to be, the kind of old model that we’ve always used, and really specifying what we think are the gaps in there. As CME providers, one of the elements our responsibilities is clearly to find the practice gaps, and then engage ourselves as educators because it is continuing medical education, and identifying from those things what things can be changed by education. Not all of them can, in fact, most of them can’t. It’s not that the physicians don’t know; it’s just that they don’t do. So understanding our practice and understanding the practice of our constituents, and understanding the gap between the current practice and the desired practice, I think, is one of the elements of continuing medical education from a provider prospective and I think that when physicians come to us they should have an expectation that we know what we’re talking about, that we can demonstrate to them that we understand what’s going on in their world a bit. We understand that there are some things in their practice that maybe because of advancements or slight changes or old uses or new uses of old products or new products, that we are actually able to engage them in an activity that fits how they approach problem solving and design our learning activities or design our learning resources so that it’s easy for them to look at and engage in and to learn from. From that side of continuing medical education, I think those are some of the major elements. Of course, we always want to know if we make a difference so there’s got to be evaluation there. But you know the components, when you look at the different elements, there’s a whole way to look at it from a systems perspective, continuing medical education to be integrated – when you’re in a hospital setting, you’re in a hospital setting. One of the things that ought to be a part of a hospital continuing education is the way you integrate themselves into the institutions efforts to improve their overall care they’re providing the patients. How do you do that? One element of that is collaboration. You’ve got to collaborate with the quality people. You’ve got to collaborate with the clinical people. There’s that whole collaborative thing. You bring something to the table to help them manage, so within an organization one element of continuing medical education has to be an understanding of this system and integration into the system. And one way to demonstrate the value that you have in that organization by showing what you do makes a difference. It means you can actually qualitatively or quantitatively show that we did these things and we had this impact. So that’s another element.

There’s the whole external elements now, external requirements that are put on us by our accredited providers, understanding that, the stark [Stark Law], the PhRMA code, the FDA stuff … so another element of continuing education is an understanding of all of those things and how they impact your practice wherever
you are in terms of your own organization. Then there’s that annoying litany that we have to go through with regard to disclosure and financial support, and all of those kinds of things so it’s kind of like physicians aren’t smart enough to know the difference between market-driven education and a real good clinical education so you have to be their intellectual chastity belt, I guess you would say…So one element is regulatory, one element is education, one element is systems. From a personal perspective, it’s my responsibility, to maintain some capabilities to work in all of those areas, so that’s an individual capability. When you talk about elements of CME, it’s all over the place. It’s not an easy job. It’s fun but it’s not an easy job. (Mr. Gray)

Mr. Green also wrote a qualitative dissertation. The key to CME from his perspective is to increase self-directed study in CME, particularly since younger physicians are the most self-directed group ever seen. However, he feels this group will remain independent in the search for knowledge via technologically advanced tools. He also anticipates a move toward physician funded continuing education. From his perspective, CME research is not necessary because it does not differ from other types of adult education.

Yeah, the major components of what this thing is called? Called CME? (Laughs.) I’ve talked to people in the past about this, and I still believe the same basic things. That you saying something in CME you just can’t get away from an adherence to the ACCMA criteria that has to be referenced, to tell people what you’ve done and saying that you are going to be accredited or you’re going to produced a certified CME. You’re now engaged in a national definition of what this thing is. There is an old joke about the umpire, and the star hitter; and the ball being thrown by the pitcher and the umpire immediately announcing if it was a ball or a strike, and on the three and two count the ball thuds into the catcher’s mitt, and there’s no word from the umpire for a few seconds so they all start whirling around saying “What was it? It was a ball or a strike?” The umpire says “Sonny, it ain’t nothing until I call em.” (Laughs)

Your educational activity “ain’t nothing” in terms of CME if it doesn’t address the criteria, so aside from that it kind of relates to the criteria, but beyond the criteria the CME should be about topics that are focused on particular highly identified needs of a particular physician audience. Say you have particular need, [a] particular audience and there has to be a meeting, a juxtaposition of those elements. If you’ve got things that a physician audience has been shown demonstratively to need, they recognize that they need it, and they’re engaged in educational pursuit to close that needs-learning gap, then that’s CME. (Mr. Green)
Mr. Black, attired in business casual, was prepared for the interview and clearly, it was not his first one. Before we began, he clarified the purpose of the interview. “It’s on continuing medical education and its directions and evolution. And you are talking to us because we contribute to those directions and evolutions. We might have insights about the future and the past. OK. That’s the path that CME has taken.” As described above, Mr. Black also generally defined CME as a set of resources. The other thoughts I had immediately after the interview were accountability, strategic management and leadership, a revised credit system, and high expectations regarding the skill set of the individual CME providers. A primary component of CME from his perspective is the need for strong oversight in an effort to ensure that providers are working within the boundaries of appropriate behavior.

First some lingo. To me, continuing medical education is a set of resources that support the continuing professional development in physicians. So CPD is an individual journey and a journey that the whole population of docs go through starting with questions in practice, from getting new information, developing new knowledge, putting that knowledge in the presence of wisdom or judgment into new strategies and putting it into practice, testing it in a practice, and keeping it going. CME are the sets of resources that support that journey. So lectures, the web, and what you read is didactic in nature; going to get new information. When you do a small group work and work with experts, you’re doing analysis, and synthesis, and putting it into strategy. And when you’re doing hands on educational activities, that’s transferring it from your strategic strategy perspective right into practice. And you do that just before you use it in practice. So that’s CME as a set of resources to put it into place. I guess there’s different ways to look at the CME system and the components of it, like the organization of it.

As individuals and as professionals and as organizations, we need to have a manner of acting. We need to understand the difference between what’s acceptable and what’s not acceptable, what’s good enough and what’s not good enough. In society, there’s a proper way to behave so society doesn’t fall apart. But as you move into having a task to do, there’s deliverables. There’s a right way to do it. The fellow who fills up the dairy case in the store has to put his apron on properly, and wear his hat properly, and stack everything properly in order to
deliver what the storeowner wants. It’s the same with any professional pursuit, especially where there’s heterogeneity of the people involved, and the values aren’t all recognized and shared. There’s a need for an external application of standards. In society we have the law. But mostly we’re not regulated by the law. We’re regulated by our own personal value set and what we understand. CME is the same. It’s a heterogeneous group. Most medical schools, specialty societies, education companies; they don’t really need our rules to do a good job, to do the right job. But there are always places where people don’t know what to do, so they have rules to guide them. And there are people who don’t know the difference between right and wrong. If you get somebody who comes from automobile sales and is now involved in pharmaceutical sales, they don’t necessarily understand the rules of this game, and you need a set of guidelines and rules to manifest it. And that’s what accreditation is about. It’s about reflecting what’s right. It’s not about creating what’s right. It’s about reflecting what’s right. [ACCME] is made up of the seven member organizations that expect and require that we operate within certain constraints, what our mandate is, and everything we do needs to be focused on clarifying and improving how people conduct themselves as facilitators of CME. Whatever resource you pick to be, there needs to be some sort of guidelines on how to behave. That’s what accreditation is. (Mr. Black)

Ms. Brown was relaxed, talkative, and animated. Outfitted in business casual, she too was prepared for our conversation. She is an energetic woman who cares deeply about her role in CME. Her insights were different from the others due to her role in CME. Physicians should be the centerpiece of CME and it should be “by physicians, for physicians.” She expressed a genuine concern for training the state accredited providers and assisting them in maintaining their accreditation. She considered the ACCME a partner but reflected on the lack of input provided when there were significant changes made without comment from state medical associations and other providers.

Every year the ACCME holds a state medical conference. We gather as a group of professionals, and it’s a meeting that’s run by the ACCME but its content is directed towards state medical associations. I would have to say that the implementation of the updated criteria, the state medical associations have no voice at all. In fact, the day that I learned about the updated criteria, it’s the same day you learned about the updated criteria. It was an email in September of four or five years ago. We were on our way to annual meeting, I opened up this email and that’s the way that it came. I would say that
was a surprise because in the past there have been a lot more opportunities for comment. I think the ACCME are always pretty inclusive of the whole CME community and so they usually would propose something, there would time for comment, discussion and review of any information that might come forth from that call for comment, and then they would make that final decision. That might be an 18-24 month process. So I think that state medical associations, I think the way we view our relationship with the ACCME is a partner. We’re an accreditor just like they are. Obviously, it’s a tiered system. They’re more responsible for the defining policies, procedures and criteria, but in partnership with the state medical associations. I think the ACCME doesn’t see it quite as a partnership. I think that to me was a defining moment in our relationship with the ACCME. Although I spoke to a few physicians on the accreditation review council for the ACCME at that same time, and they learned about the updated criteria on the same day as we did as well. That’s probably more indicative that the ACCME had made a decision that there needed to be a sharp turn in the direction that CME was going in, and I think the board decided that this is the way we’re going to do it. And that was definitely a left turn or a right turn, or whatever. But I think that in general the ACCME is a partner with the state medical associations, and for sure that the understanding is that whether you’re state accredited or nationally accredited it’s the same thing. The same expectations, the same quality, the same output of education if you will, and that is definitely that the [state medical association] takes very seriously. We should be the role model. Whatever we want our providers to do, for sure we should be doing it times ten. So we really try to do that, and I think we’ve been fairly successful in being a role model or mentor for organizations located in [this state]. (Ms. Brown)

**Physician Involvement.** Involvement at the physician level is crucial to a successful CME program because their knowledge, expertise, and front line work experience aid in developing educational initiatives that meet the needs of their colleagues and close knowledge gaps.

At any rate I see a physician becoming aware that they need to learn things and then consulting with a CME office and putting together a learning plan that might include formal CME, some sort of mentorship, or I’m going to travel now to Tennessee to spend the day with Dr. Baker [referring to the researcher after graduation here] who is going to teach me how to do this particular technique, or to improve my practice with management skills, whatever the learning skills. I might do some online kinds of things, I might do some patient simulation kinds of things, and then the CME office will be in charge of monitoring the quality of that experience and assigning the appropriate credit. That’s what I see. It kind of begs the question, who will pay for this?

Martha: Good question. Well, you’d think it would be the physician.
It’s going to be the physician. I think the self-directed kind of CME that I see coming will be physician directed and physician financed by and large. And do I think some hospitals will pay for that? Will Bayfront pay for that? Maybe. CME’s can be more about physician practices than it will be about hospital needs. The kind of problem we have now with whose accredited? And what is their mission? Is it their mission to make sure that every doctor on their staff gets all of their little learning needs met? (Mr. Green)

I guess the way I view CME and it’s very much based on and the education that I received from our CME committee. I was mentored right from the very beginning when I got here, and CME is education is planned by physicians for physicians. Sometimes I wonder if there aren’t other organizations, other people who have a different opinion of that but from my standpoint it is for physicians, planned by physicians, so physicians have the instrumental role in defining gaps, planning, setting the objectives, choosing the speaker, setting the content. I think to me that is a sacred role. Physicians have to remain at the center of the system. If they don’t, then it’s just professional education for anybody, for everybody. But I also think that it’s definitely based on principles of adult education. I recognize that, so I think that it is extremely important to recognize how adults learn. Physicians are no exception to that. For sure adult education, but again the role of physician to me, I can’t overstate it is that too many times we try to take them out of the equation and that’s wrong. And I also see the CME system that facilitates learning, rather than a system that just produces curriculum. What I mean by that is that as a CME provider, I’m not really teaching physicians as much as I’m helping physicians to learn to teach themselves what they need to know. That’s how I view CME. So those are the elements to me. You’ve got the physician role, the adult education, and then a system of not teaching but facilitating learning on the part of physicians, so they can change themselves.

The thing about adult education is I think that because we’re adults, we know a lot about adult education. We may not know we do. We may not have the terminology, but we know from going to classes, or anything that we do we understand. I think subconsciously. Ok lecture is not as good as whatever but I think they don’t know that they do know what they know. I think we have to really develop the talent of our CME planners. I think we also need to really develop our physician champions. And that I don’t know how to do. Again, one of the things we’ve talked about is the time crunch that physicians are under. We had a speaker at a meeting, I don’t know if you were there, five or six years ago, Dr. Trae Dunaway. You really have to date your doctor to get him to be that physician champion. That was his theme, “You have to date a doctor to really encourage him or her to get involved in the process.” It’s kind of a wooing process; grooming, and I think that’s really tough. And it’s physician leadership and understanding the rules, and just being involved in the process. That to me is the difference between a successful CME program, and a CME program that follows the rules but there’s no enthusiasm, no energy, there’s no magic. If you don’t have a physician who is pushing, because the staff can’t really do it. It has
to be physicians because it’s their program. It’s for them, and I think the administrators listen to the doctors, listen to the physicians; not so much for the staff. The physicians are the ones who make it happen, so that’s the difference when you look at a CME program. You can follow the rules, and review the paperwork and all that stuff but if you don’t have some physicians that are on fire and committed; “We’re going to have this program”, then it’s not going to work. It’s just kind of there and there’s not a lot of success. And so I think professional development not only for staff but for physicians. I think that providers need to learn to embrace the idea of partnership more. I think that we think that we have to do everything and be everything, do the evaluation, try to figure out how to measure change; technology. We can’t be everything. And so I think we have to really start thinking about strategic alliances and partnerships, and reaching out to other organizations and types of providers who can help us become more successful. (Ms. Brown)

Mr. Blue was an inspiration to me as a CME professional and doctoral student. His work, like several of the participants, generously sprinkles throughout CME literature and includes sentinel research. He has employed qualitative research. He seemed delighted that I would be interested in what he does and was yet another animated and energetic conversational partner. Dressed in business attire, he managed to stay focused over lunch and, of course, during the fire alarm! As he pointed out, another perspective of physician involvement is the knowledge translation that occurs with the physician learners in the educational process. The physician’s practice environment also needs consideration in the planning and implementation of the educational activity.

MARTHA: You kind of mentioned though what you’re doing now is some of the major elements that comprise continuing education in medicine. Well and/or across the professions it seems most recently that the performance improvement is where people think we’re going.

I think so. There are a lot of things to say. I know you have other questions. The first thing to say is that primarily just thinking about CME that the thing that would change your behavior, learn pretty quickly, that wasn’t true. That it’s other things. I embarked on the change study with [co-authors] and learned a lot through that. Part of it was ethnographic measures, quality of interviews, so I learned a lot.

MARTHA: (laughs) Imagine that!
I learned a lot about what makes best change, and it wasn’t just CME activity. Then lately in the last twenty years or so, I’ve been involved in knowledge translation efforts, which are more comprehensive, which understand the setting of the practice environment. The uptake by patients as well as by professionals and policy makers, payment systems, reimbursement systems, so the whole package of how we go from “here’s a good thing to do” to “get the doc to do it” isn’t so simple. So one of the efforts for me going into [this job] is to take this knowledge of thirty years of experience, and all the knowledge that we know about Continuing Ed and lifelong learning, and to be able to put it into place to make policies happen. That’s the excitement of it but that’s challenge of it because it’s not easy to change systems. I never thought that when I came here that healthcare reform would even see the light of day. No matter who is elected president, we’re not going to see healthcare reform.

And I didn’t think we’d see the amount of scrutiny about CME and conflict of interest. I never thought we’d see that. That was an elephant in the room that nobody would touch, just like healthcare reform. And I thought my challenges would be harder, because who would be listening? Practically everybody’s listening to the issues in CME, some of them in a negative way but mostly in a positive way responding to the challenges.

MARTHA: And isn’t the AMA is doing their transformation work too so it goes hand in hand with what…

There’s a lot of activity going on all in the same domain, all in the same time. So the CEJA efforts, the AMA’s effort, I’m a big fan of the AMA and what it’s doing…we’re pretty collegial with almost every organization…the Federation of State Medical Boards for example is also thinking of maintenance of licensure. The American Board of Medical Specialty thinking about certification in a meaningful way…a long way off from where I’d want it to be, but I’m a big fan of the U.K.’s system of revalidation which is pure chart audit I was part of something like that in Ontario. You could go in, watch another physician, look at his or her charts, give them some advice, pick out those people who might be drifting a little bit from best evidence practice and bring them back. There’s also a three year restricted license, you don’t know this in England. But as a GP for example which is 50% of the population, and even more as a specialist because it’s a long training pipeline for specialist in the U.K. You have three years that you have as a GP you have to practice with a colleague with a group. So you’re a licensed physician, you’ve done your residency, been for three years under the supervision of a colleague or mentor…

MARTHA: A true apprenticeship.

A true apprenticeship…much more of a true apprenticeship. Or you may be assigned or you can choose to go somewhere else. It’s a lot better training.
MARTHA: Do you think that’ll ever happen here? (Laughs)

I presented the Ontario system to colleagues in Virginia many years ago. And the Ontario system is the random peer audit. It’s done by trained peers so dermatologists to dermatologist. I talked about it and mostly it’s been a positive experience with the odd physician who resents it; the odd physician who brings his lawyer in when a charge happens. But somebody thanked me for the talk and said this, and I think this is true in the American setting. “Here you wouldn’t get past the front door because it would be restraint of trade.” If you were to say to me as a GP, or general internist, or dermatologist “Your practice is substandard in my views and therefore you shouldn’t be practicing and you’ll have to go back to school,” that’s restraining my trade as a dermatologist. And that from what I understand (with the nods in the audience) was pretty sacrosanct in the American context. (Laughs) That may be changing. With the advent of healthcare reform, we heard some of that today, the elephant in the room is over utilization right. We were talking about that outside.

MARTHA: Part of the factors that are influencing continuing education were brought up pretty well in the last couple of days in terms of conflict of interest, the disclosure, and who can you get to speak if you only have five experts [to chose from].

That’s right. If it’s a very rare disease for example, who are you going to get to speak on that only has five experts universally? I think disclosure is (not to digress from your questions), but I think disclosure is necessary but not sufficient. I think disclosure is all we can do in CME. I think part of the role of AAMC is to make it easier for the CME provider, so there’s an online resource where every faculty member has to go and it probably shouldn’t be housed at the medical school. Kept maybe by the AAMC, so if I’m a Harvard person going to Duke, the Duke CME provider just has to go and check on the disclosures. (Mr. Blue)

You know I can reiterate the educational planning process, and my approach to pulling it together. Which means robust practice gap analysis and developing goals and performance based objectives, identifying the correct format, and implementing the program in a way that it’s effective and efficient, and then evaluating it different ways. You know the overall gestalt of CME is to improve patient care, and ultimately patient health as difficult as it may be in our current environment, with the lack of data, the inability to access data. It’s very difficult to demonstrate cause and effect, return on the educational effect both financially and in adult education. You’re are in line for challenge and I’m pleased to see the direction we’re going in which is not seat time, but maintaining certification which is very good for competency and the documentation. As much as everyone’s complaining about it seems to be the only rational and reasonable approach to improve patient care, which is our ultimate goal. Other countries
spend far less for total care and have improved outcome, better outcome. (Ms. Amber)

IOM’s *Redesigning Continuing Education in the Health Professions*

Recommendation 8 suggested training health care providers as teams to facilitate collaboration, align communication, and share advances. Recommendation 9 encouraged physician involvement using portfolios and other development tools to document their educational pursuits and their progress. This put the physician in the center of the learning experience.

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

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. (Institute of Medicine, 2009b, p. 8)

**Summary of Themes Question One - What are the major elements of CME?**

**Accreditation.** Excerpts selected from the IOM report, *Redesigning Continuing Education in the Health Professions* (2009), illustrated the importance of accredited CME. However, as expressed by the IOM committee, providers are distracted from designing, delivering and evaluating CME intended to close knowledge and professional gaps by the pressure of meeting regulatory requirements. While Mr. White is very familiar with the history and importance of such regulatory agencies, he suggested that
time would be better spent focusing on the physician competencies outlined by the ACGME and ABMS to assist target audiences close those gaps and support physicians in their maintenance of certification. The Joint Commission expects that these same competencies are met during ongoing professional performance evaluations of hospital medical staff physicians, so it is a logical focus for continuing medical education. Mr. Red, Mr. Gray, and Mr. Green noted the expense of fulfilling the regulatory process and bureaucratic requirements. From their perspectives, expenditures of resources should be directed to impacting patient care through educational interventions. The perspectives of Mr. Black and Ms. Brown lean more toward the expectation the providers will demonstrate adherence to accreditation requirements in order to maintain their status as accredited CME providers. The general perception is that CME professionals struggle to meet all of these expectations.

**Physician Involvement.** Here the IOM redesigning continuing education committee recommends interprofessional team learning and collaborative patient care. Physicians can still center their self-directed assessment of knowledge and performance gaps as well as identification of appropriate learning experiences in this interprofessional model. Mr. Green sees the CME professional as a facilitator to assist in the development of a learning plan inclusive of multiple types of interventions and based on self-directed approach and to monitor the quality of those learning experiences. The interprofessional team experiences would be yet another intervention to achieve the desired outcome. Ms. Brown and Mr. Blue reflected on the importance of physician involvement in the development and implementation of CME. Physician champions are key to ensure the ultimate design and delivery of interprofessional team based learning and collaboration
for team based patient care is consistent with guidelines, protocols and best practice. Mr. Blue reflected on knowledge translation in medicine at the physician level and the challenge of embracing the wealth of knowledge in continuing education and lifelong learning to design and implement policy and system changes.

*Question Two - What influences CME?*

The most influential forces on CME are funding, physician involvement, and ACCME (accreditation). Funding from commercial supporters is dwindling in the realm of CME, in part because of accreditation requirements to resolve conflicts of interest and demonstrate transparency in educational programs. The involvement of physicians in assisting with the identification of gaps and offering their expertise in discovering ways to narrow or close those gaps is crucial to the success of CME programs.

*Funding.* The pharmaceutical and device manufacturing industries traditionally provided funding, in part, for continuing medical education, also referred to as commercial support and associated with conflict of interest. However, concern arouse that such funding might influence prescribing patterns and use of devices by physicians. Also, the social component of CME programs was sometimes a larger focus than the educational component. Monies from these industries came from the marketing divisions or the promotional department. In recent years, management of commercial support from the pharmaceutical industry transferred from the marketing department to the medical affairs department to reduce the chance of undue influence.

In its report on *Redesigning Continuing Education in the Health Professions* (2009), the IOM commented on the current state of continuing education including funding.
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. (p. 3)

ACCME announced updated criteria in 2006 along with well-defined guidelines for commercial support and insurance of the clear separation of education and marketing.

The ACCME system is focused on supporting physician learning and change to benefit the quality of care. In November 2007, the ACCME Board of Directors articulated that, “the concepts of independence from industry and collaboration with industry in the development of [CME] content are mutually exclusive. Although commercial interests may provide commercial support for educational activities as defined by the ACCME’s Standards for Commercial Support: Standards to Ensure Independence, in the US in the context of independence, there is no role for ACCME-defined commercial interests in the development or evaluation of accredited CME activities.” 1 This defines the “independence” of CME.

The CME community is not alone in its concern for improving health. The biopharmaceutical and medical device industries also seek to contribute to the improvement of public health. Although their products and services reduce the burden of disease and improve patient outcomes with
innovations in therapy, these companies are ultimately responsible to the
financial interests of their stockholders.

Framed by the Updated Criteria, CME is an endeavor for medicine, by
medicine. When CME fails to be exclusively oriented to measured gaps in
the delivery of care, it ceases to be relevant to physicians-in-practice—
and, ultimately, fails patient care. Our most important stakeholder—the
American public—demands that the CME system provide demonstrable
value without influence from industry. In return, “the ACCME is resolute
in its efforts to ensure that CME is provided through a valid and credible
accreditation system... independent of commercial interests and free of
commercial bias in all CME topic selection, planning decision, and
presentation content.”1,2 (ACCME, 2008)

The participants in the current study were also keenly aware of the current state of
affairs regarding funding of CME and considered it an influential factor in the industry.

You’re asking about some of the most influential things and this may sound
strange, but I think one of the most influential groups in continuing medical
education are the pharmaceutical, independent medical education grants people
because these people in these pharmaceutical companies that are managing these
independent medical education grants departments know our rules as well as or
better than we do. And they know what ACCME requires, they know what AMA
requires for credit. They know what OIG says. They know it all and they know
it... because their lawyers make them for compliance. So what they are doing
when they are funding continuing medical education, is they are winnowing out
the people who either can’t write an educational grant like they know those rules,
they’re winnowing out those that don’t know the rules, and they’re funding the
ones that do know the rules, that are pushing the envelope in terms of less
traditional continuing medical education, getting into things that are blended
learning kinds of things, and they’re getting into performance improvement kinds
of things in continuing medical education, at least they say they are, there’s not a
lot of money in there right now. I think that they are pushing the field in a way
that the field has been talking about going for years, not just doing a one-off
lecture, but doing a series of lectures that might have a theme to them, like a
series of grand rounds on one topic, coming at it from different perspectives. They’re pushing things like the use of audience response systems like we’re going to have in our conference downstairs. They’re pushing things like that, so in a very backhanded kind of way, they are under the gun for influencing medical education and all that. They are the only people who are really pushing the profession and making the profession say, “If you want money folks to do this, you’ve got to do it right.” And to me, I think it’s great! I wish we weren’t as dependent as we are on pharmaceutical money, but we are, and that to me is one of the biggest influences in the field right now.

The other big influence is ACCME and the new regulations and their attempt now in their thinking what the field should be, especially related to the commercial support thing we were just talking about whether you ought to label something commercial free or an author is a no-commercial-support author, which to me just piles on and piles on and piles on. It’s ridiculous. And the other thing that could be very influential in the future depending on what ACCME does about it and their collective membership, is that they decide that this super pool of funds. If they do that, it’s going to be huge but it’s not going to change one thing because people who know the rules are still going to be making the decisions concerning grants.

I think it’s a very bad idea. It’s mission creep from ACCME. That to me interferes with the enterprise within the field of continuing medical education. It intervenes between your relationships with a supportive industry that wants to do the best they can and most of them do. It creates another super entity and my guess would be that some pharmaceutical companies will not put into that pool because their compliance people say, “We can’t do that, because if you do that we don’t know if our money’s going to something that would be off-label for us.” And some say, “It doesn’t matter because you don’t know.” But they do know. If their money is in that pool and all of a sudden something comes up, and a bunch of trouble comes from it, they’ll come back to the super pool where all of the money is, and if my money’s in there.

That may be a negative scenario. What ACCME is trying to do right now to push the field is very influential as well. With the current criteria, and with these efforts that they are involved in trying to push the field, I think they are being very influential. I think in some small way from a public policy perspective, not even in a small way, the Alliance [Alliance for Continuing Medical Education] is beginning to exert itself into the field, taking on incoming public policy issues, representing the profession, and trying to be our spokesman out there when others have concerns. It’s a tremendously varied membership. You have people out there that are totally dependent upon pharma [pharmaceutical] money, you know the MECC’s and then others that don’t get anything at all when you’re looking at that issue. (Mr. Gray)
You know all the ethical concerns, the funding concerns, the acceleration of medical knowledge people don’t have the time to go to meetings. I don’t see meetings going away. There will be meetings always, as people want to network. People say I’m going to that meeting because I haven’t seen Dr. Baker [referring to researcher after graduation] and I want to ask her a question. Or, see you there! I just thought of this thing that I want to talk to you about that’s fabulous. But the technology people say you can recreate that. But I think we’re hundreds of years away from people being comfortable with technology to actually do that. But there will be fewer meetings. Not as much funding available from external sources to pay for those meetings. A friend of mine on the Alliance board told me about a brochure he saw from a specialty society that had two prices: one was the price with pharma support, the second box to check if you were of an ilk to disagree with pharmaceutical funding and continuing medical education this is the price you would pay.

MARTHA: Really? Was the price considerably different?

Yes. Very considerably different. I haven’t heard the results of that but it was kind of a test case to see who would check the second box. How many people actually would pay a lot more money to feel clear from pharma money? But there’s not going to be much pharma money in the future, so we’ll have to come up with some ways to fund CME. On the state provider medical society provider level, the hospital has been funding CME for many years. I don’t know if they’re going to continue to do so or at the same level. Can we have every Wednesday morning Grand Rounds? (Mr. Green)

Well clearly, the environment currently is for all of us both the regulatory environment, and the political environment. I think that most people understand that. What I would probably again compare and contrast, a little bit of what should be to what is. What should be influencing CME is very much that needs basis while the profession exists, how it contributes to improve healthcare quality that you as a professional within your own organization; that ideally should be the almost exclusive focus, the very data driven focus. But your reality unless you’re different than most people, you have politics that enter into it, different departments are interested in referrals for example, deal with the issue of people wanting things rather than needing it, so there’s a gap between what should be and what is. When I think about what influences CME, resources influence it for some providers more than others. I think that’s where the issue of commercial support certainly is problematic for a lot of people. If you’re a department or an organization that does not have funding from your own institution, it’s problematic so unfortunately there is an influence about where resources come from. That remains a concern of mine. I’ve been an advocate of balanced funding for a long time. For institutions that are too dependent on the industry, I don’t think should receive funding from the industry. In my view, it shouldn’t be more than 50%. We’ve only drawn the line at 90% currently. So I think that industry has to be careful of not setting standards. It should follow the lead of the
profession setting the standards. But sometimes the profession is slow in setting those standards because of politics, especially the MECC community in particular wouldn’t agree with this position. So resources certainly are the cons. Yeah, it’s just between the environment, the politics, the resources; it’s a fairly broad brush of some of the influences out there right now.

MARTHA: I don’t know a lot about MECCS, but from what other place would they get resources unless they had an owner who had plenty of money to spend? You must have some seed money to start with, but when you think about it that really is the only place they’d get money.

Some of them have started charging registration fees. What a novel concept. But by and large they are entirely dependent on the industry. I think that certainly raises a lot of questions that margins are very high. That is truly a growth industry from the 90’s, especially where there was so much blurring between education and promotion. There certainly are good ones out there. You work with some in your own institutions. They serve you. They created the exit key well, great project managers, they do a lot of things well, there’s a lot of wonderful people in that setting, but among those influences we’re talking about are conflict of interest inherent in an organization that’s irrespective of what its mission statement may say that’s 100% dependant on industry for funding. That belies a different mission, and truly is a vendor in that mindset. If it’s not a healthcare delivery organization or professional association with a clear purpose caring for patients, if it’s only other purpose is to get money from industry and do what we can get done because of industry funding. A process measure may have wonderful educational statements per ACCME requirements, but we’re not accessing the organizational conflict of interest that’s clearly there.

But I am in favor, I mean other than environmental force that starts occurring is this idea of block grants. You as a provider don’t have the time or resources to be applying for all these grants. (Mr. Red)

A discussion ensued regarding the researcher’s involvement with block grants provided by one of the state medical associations. The association applied to one pharmaceutical company for a large educational grant to provide CME on a specific disease state and, subsequently, providers from the region had an opportunity to apply for a portion of the funds.

They’ve had a real struggle to get industry to support that model but that’s the future. Hopefully I don’t want to see that effort die. I think that was an early attempt, and it shows innovation at the state. I think it’s interesting right now. We’re not seeing that with the national providers as much as with the state effort. Council of Medical Specialties saw it and is getting very interested in that
approach, which could change the dynamic. So I think maybe to add to your list of influences, I mentioned the environment and regulatory issues, but I do think the recent IOM report calling for new funding mechanism to be proposed in two years, is a major driver of change and I’m all for it. I think it’s a wonderful thing and the types of things I’d like to see mandated today and from an industry perspective. There is just too much unresolved, and the system today remains too dependent on the competency within the industry around many of these issues. That’s always been a drag on the system, because the best that you can hope for in industry is that we don’t get in the way. I think to a large measure and I hate to say it this way, I think the industry is a laggard in recognizing quality so people try to do innovative things, like your approach through Georgia. It’s not recognized. It’s different and it takes a long time for industry to see that as quality so the system needs to evolve in such a way that industry is not the one determining what quality is. My concern is that there’s too much of that today. It’s not an intent to be biased, but there’s a lack of recognition that people in industry, we don’t know what we don’t know. Industry people feel like we by and large know about these areas, and I think that’s a real mistake for the system to be built where any dependency on industry competence or our view is part of the equation. As long as that many resources are coming. So I’m in favor of the block grant approach, I think it should be mandated. I don’t think it should be updated. Industry should not make that decision. Industry believes it has a role in this, and then this is the only way it will occur. If you choose to do it this way and make sure of that, there’s too many loopholes and how that could be rolled out. (Mr. Red)

The interview with Ms. Amber, as noted earlier, was via telephone. However, when I saw her give a presentation in June 2009, she was very professional and wore business attire. The perspectives that she offered were invaluable because she worked in almost every segment of CME, from the pharmaceutical industry to academia to consulting and several places in between. As a result, she was fluent in her responses and easy to follow. Based on my notes, her focus was on the importance of accessibility to data and tools in order to measure the impact of CME accurately and to demonstrate change in patient outcomes. Accountability and adherence to accreditation guidelines were also important. She envisioned CME becoming less a commodity and more maintenance of certification with points based on true needs. Here, she discusses influences on CME followed by Mr. Black.
Well conflict of interest is a component, pharmaceutical funding, and the relationship between faculty and programs that are conducted and the relationship between the funding, the publications that are printed, and the content that’s generated the type of clinical trials that are done. The conflict of interest is significant. Also, the lack of consistency in patient care, the overall the cost of healthcare, the overall results of existing healthcare, the numbers of medical errors that are generated each year are really significant. It tends to be addressed by some of the work we do. (Ms. Amber)

So there are all these forces. Then the other set of forces is the fact that medical education, graduate and undergraduate, and continuing medical education’s funding is done totally differently. So the private universities do it this way, public universities the government pays for, graduate medical education for some bizarre reason is paid for through Medicare. There are huge amounts of money that go from the government to medical residency programs because they’re so well funded; they can support a very large accrediting body. The ACGME has 150 staff people, [ACCME has] twenty. I don’t know if they’re accrediting about 8,000 programs, but they’re probably not accrediting more institutions than [ACCME and there] 2,400 institutions in [ACCME] but there’s not that many more in the ACGME. All that money is golden for them. [CME] this is completely unfunded. The private sector funds a lot of it from commercial support, but in dollars perspective that might account for half of the money that gets recorded. If you think of the amount of infrastructure in teaching and time that’s donated by the profession, by all these institutions, there’s a huge amount of money getting spent. Probably five or six billion dollars with only a billion dollars of income. And that’s really a problem. As we raise the bar, a force against progress is that as we make it more demanding in graduate and undergraduate medical education, they get more resources and more support, as students or residents have to do more and more. In [CME] the resources get thinner and thinner.

MARTHA: And that’s the longest piece of their education.

Exactly. The whole construct is a problem, and we have a world full of people that think we shouldn’t take any commercial support, and we shouldn’t have any drug company money involved in our system. And that’s a firmly held belief; they really do believe it, and think it must have a negative consequence. But the jury’s still out as to whether that’s the truth or not.

MARTHA: Right. And/or that the physician should pay for it all themselves, that’s another comment that I heard.

The physicians are contributing their time and fee-for-service physicians stop generating income, and most physicians are fee-for-service physicians. So from an in-kind support perspective, they’re already kicking in two thousand dollars per day for the educational activity. People need to recognize that. Yes, they
might make $200,000, $300,000, or $400,000. That’s true. But that doesn’t mean that they’re not paying for anything. And I’m not opposed to, or I don’t have a position on whether they should pay for it or not pay for it. The medical residents don’t pay for their education. And the undergraduate students that pay tuition, they come up with this enormous debt. They pay while they’re practicing for the first ten years. They’re paying off for the privilege of being there. It’s pretty complicated. It’s a little simplistic to say that they don’t pay anything. (Mr. Black)

Mr. White was the historian of the group with dates, facts, and names at his fingertips. In addition, he had knowledge from an international perspective because of his previous and current positions. Somehow, without even asking specific questions, I was able to gather the data I sought. Portfolios, maintenance of certification, e-learning, systems based practice, and mission driven CME were the immediate categories of conversation.

I was on the [state] Medical Association CME committee. The interesting comment was for me that in several site visits (of course you interview the C.E.O. and they have all stopped taking commercial support), the C.E.O. has agreed with their CME coordinators who often aren’t very knowledgeable people about getting grants that this is too much hassle, and it’s not worth it, and we can do it in a couple of different ways. The medical staff dues are often devoted to supporting the continuing education program and the library. I think that’s very interesting as we’re going through the battles right now. Where will commercial support go eventually? But I think the main focus for CME is that it has to be embedded in the mission of the institution be it a medical school, or a medical center, like this one. (Mr. White)

Mr. White continued with historical data that pointed to the origination of the guidelines regarding commercial support.

I think that in 1997 the FDA issued their Guidance on industry supported educational activities. It’s an important document and it still stands. It was crafted after a lot of input from the CME community through the Task Force, and they had interviews with others but it was actually somewhere around that time, the task force first called on the ACCME to change their standards of commercial support which dated back to 1984 and were pretty general. Then in 1992 the Task Force made an offer by saying “Dear ACCME and dear other accrediting agency including pharmacy and nursing, these are some improved guidelines for commercial support”. And then the ACCME, [Sue Ann Capizzi was very involved at that point], said “no these aren’t guidelines; we’re going to make them
standards.” Then more recently, the inspector general’s office is questioning things like can hospitals even provide CME for their medical staff? Like this is some sort of gift. This is totally screwy. Pardon me but it is. They have no business in this, but we brought it on ourselves, I think, by our increasing dependence on commercial support. And in the old days, this support was often specifically directed. I know at [college of medicine] there were a few companies that I wouldn’t even let into the office, because they wouldn’t give you money unless you took their suggestions and used their speaker’s bureaus. Get lost! We had the Upjohn’s and other companies out there that didn’t do that. It’s perhaps a wishful spin but I think that they should have bigger fish to fry than worrying about us including incentives in CME – including the Senate. But again, that’s an issue totally mixed up with gifts to doctors.

MARTHA: It doesn’t seem like the same thing to me but that’s my opinion.

It isn’t but it gets lumped in because for them, and I don’t think they live in their own world. Doctors are not all making these huge amounts of money that are heard about; pediatricians start with $100,000 salaries, and at least that much in medical school debt and so on. Well we don’t have to go there anymore. I think a big factor though has to be dealt with, and that’s the physicians don’t pay for their CME. I think that we’re really off the deep end on that score. Now of course you’ve paid your medical school tuition, and then in residency for the most part you got paid a pittance. In my case, my parents continued to subsidize me. I couldn’t live in Baltimore on a resident’s salary in those days. Now you can because thankfully that’s gone up a lot. Entering residents, I’m not sure where they are nowadays but it’s ok. Not if you’re married with kids, but it’s better. But doctors have not had to pay for CME, and this is antithetical in a sense to where it used to be. I mentioned this 1932 publication from AAMC, their Commission on Medical Education, and the lead author, Willard Rappleye ... They lauded using extension services of universities as a place to put CME run by the university, using the outreach of these extension services.

MARTHA: As in the land grant universities.

Yes and they mentioned several examples, where the university and the medical system provided the framework and set it up. The docs paid either dues or specific fees to help pay the cost of the faculty to get to their place, and some minor honorarium. But I think we need to, there are a lot of proposals right now that are looking at that. But it’s not wrong. My feeling is you don’t value what you don’t pay for. I know from many experiences in CME that you’ve always got to charge some kind of registration fee. Otherwise, everyone says they’re going to come but no one remembers or cares. Of course, it doesn’t have to be much, but I think you value in a sense what you made a commitment to. I think that the local hospital model where the docs pay into their medical library, dues go into supporting their education; that’s a little example, not a very big one. Most medical school faculty, of course would not like unless they were given it as a part of their academic
privileges, along with other benefits they get. But I think that docs have got to be
guided into involvement by paying something. (Mr. White)

As heard from the experts, funding of CME is a significant influence on the field
and will influence its future. Their thoughts were shared by the IOM Committee
established to investigate continuing education in the health professions.

Recommendations 1 and 7 from the 2009 IOM report, *Redesigning Continuing
Education in the Health Professions*, referred to financing continuing professional
development and directing the Continuing Professional Development Institute (CPDI) to
coordinate and guide efforts to align approaches for financing of CPD to involve
professional performance and patient outcomes. The new 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” (Institute of Medicine, 2009b, p. 8) This certainly supports the perspectives of
the group of experts in the current study.

Kuehn (2010) reported on this IOM report in the Medical News & Perspectives
section in *JAMA*. Her review of the conflict of interest recommendations included
comments from the Chair, Gail Warden.

At a briefing in December, Chair Gail L. Warden, MHA, professor of
health management and policy at the University of Michigan School of
Public Health in Detroit, said the committee found major flaws in the
conduct, financing, regulation, and evaluation of clinician continuing
education programs. Among the most pressing concerns the committee
identified was the potential for conflict of interest when makers of drugs
or devices fund education for the practitioners who decide whether to use
these products. Warden noted that in 2007, commercial entities contributed $1.5 billion to such education programs. The committee’s report, he said, took a hard line on the need to prevent marketing messages from being integrated into clinical education programs. (p. 716)

Another IOM committee had the primary responsibility for looking at funding in the 2009 publication, *Conflict of Interest in Medical Research, Education, and Practice.* The committee chair, Dr. Bernard Lo opened the report with these comments:

Hardly a week goes by without a news story about conflicts of interest in medicine. While this committee met, colleagues and friends sent me many news reports and journal articles on the topic. These reports—even if one expects that initial news reports may not always have the stories quite straight—served as continual reminders that conflicts of interest create deep concerns about the integrity of medicine and medical research and raise questions about the trustworthiness of physicians, researchers, and medical institutions. As I look back over our deliberations, several themes stand out. First, as with all Institute of Medicine (IOM) reports, the committee was charged with making recommendations that were based on evidence and convincing reasons. Although the committee members were aware of powerful anecdotes and had personal beliefs about the issues, we repeatedly asked whether the evidence supported our conclusions and recommendations. If it did not, we developed a reasoned case on the basis of the committee’s experience and the judgment of the committee members about the arguments for the use of different approaches
presented in the literature or in statements submitted to the committee. Second, it is a challenge to craft policy recommendations that strike the right balance between addressing egregious cases and creating burdens that stifle relationships that advance the goals of professionalism and generate knowledge to benefit society. The committee tried to consider the possibility that well-intentioned policies may have unintended adverse consequences. Third, regulation alone may have limited effectiveness in the absence of a culture of professionalism and other incentives that are aligned to promote professional behavior. The committee considered how a variety of organizations—including those that accredit health care institutions and license health care professionals, publish the findings of medical research, use practice guidelines, and pay for medical care—can buttress the conflict of interest policies implemented by institutions that carry out medical research, provide education and patient care, and develop practice guidelines. (Institute of Medicine, 2009a, p. x)

The committee developed 16 recommendations with several specific to undergraduate, graduate, and continuing medical education. These will be in the data regarding the future of CME.

**Physician Involvement.** Recommendation 5 from the *Redesigning Continuing Education in the Health Professions* suggested that the CPD Institute 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,
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. (p. 7)

While Recommendation 8 suggested that the CPD Institute “identify, recognize, and foster models of CPD that build knowledge about interprofessional team learning and collaboration” (p. 8).

According to the participants in the current study, physician involvement was already a significant influence on CME as was the need to focus on quality improvement and patient care.

We are not getting the buy-in in some reasons because, let me just conjecture… Continuing medical education credit falls off of trees. You walk by McDonald’s and you can get one credit. It’s just everywhere, so it’s not that they need the credits, so anytime we make it difficult to award somebody the credit for involvement in continuing medical education, they don’t want to do it. They say, “I don’t want to go through all of that stuff, the performance.” But if you go to them and say, “The hospital’s involved and is trying to improve Sepsis care and you go to your medicine department or your surgery department and say “We are involved in these missions as an educational partner, let’s see what’s going on and let’s see if there’s a way that we can help our staff, everybody that touches these things to know what we need to know to do, and make sure that they are doing these things and gauge ourselves there.” That’s different than saying, “Get out your disclosures and give us your performance gaps, and the minutes of your meetings and fill out the application, and all of that,” so they just want off right away, “I’m not going to do that stuff.” Go to them engaged in what we’re about and it’s different. (Mr. Gray)

A certain amount of formalized structured quality “stamp of approval” learning I think physicians are always going to want to have that. Do they need as much of it? There’s not much to doubt there’s too much CME.

MARTHA: Required by state licensing?

No there’s just too much CME around. Physicians almost have to avoid getting CME. It’s pushed at them all the time. And we were talking last night about some experiences with workshops and online kinds of things. Well you know online
CME, there’s a large percentage of learners who finish the programs don’t go on to answer the questions for the certificate. They don’t want the credit. They don’t need the credit. CME is about credit, so CME as we know it may be greatly diminished in the future. Is CME about anything other than credits? They really need to make the case it needs to be about something other than credits. It’s adding value to the production of this educational material. I don’t think they’ve made a very good case for that and I think the increasing preponderance of guidelines don’t help make the case that it’s a value added concept. You see this when you try to talk a physician into joining the CME committee. Well you start telling them what’s necessary and their eyes glaze over. Then they’ll tell you “I’ll get back to you on that.” And there are a lot of settings where you wouldn’t have anybody on the CME committee if physicians weren’t ordered to be on the committee. You I don’t think we’ll going to ever have the kind of CME system we want until we have a process that’s honored and valued its supposed to serve which is physicians. Until you can explain to a physician what you do, and they think that is worthwhile we’re not going to be a profession. We’re not going to have insurance about viability in the future. That’s what I think. (Mr. Green)

Accountability is an important aspect of physician involvement as described by Mr. Black.

Yeah, this is real multiply layered. It gets flat in one, and then all these things stack on one another that create a three-dimensional set of issues. In its simplest form as contributors in the healthcare system, there is a new wave of accountability that’s emerged in the last two decades and even more so in the last decade led by all kinds of things. But there’s an enhanced accountability at the individual level, the individual person physician is more accountable for how she cares for patients, how she responds to bad information, how she works in groups, how she gets funded and paid. All of these things have changed. Around the individual person is a community of peers who have also been going through change, but variably. It’s heterogeneous. The pediatricians and the anesthetists and a few family physicians down at the bottom haven’t had much salary change, fee change and people are sort of now talking about dumping all the work down on them where in fact for years it’s all been moved out to the specialties. So there’s this mobility of reality where the individuals practice has really changed over the last decade. Then in a layer around that, we’re talking about the forces of change that are affecting CME; the groups and organizations that people belong to that have an advocacy function are changing in response. (Mr. Black)

Definitely their preferences and desires as physicians, their willingness to participate in the system, the availability of funding is pretty crucial right now. I think that also the commitment of organizations to remain accredited, I see that as huge. That really worries me because I think that organizations are washing their hands, “this is too much.” I see accreditation to provide CME as an organizational designation. You’ve got to have commitment from the top, down. It can’t be from
the bottom, up. That’s kind of where we’ve been and are. With funding being so tight right now, those are two major factors that are really influencing CME. I think the other thing that influences CME is the way that physicians practice medicine, the healthcare delivery system. I think that’s why as providers we’re struggling a little bit. It used to be that physicians would go to a meeting and they would make time for a weekly meeting, or a monthly meeting and it wasn’t a big deal. Now that’s not really what physicians are looking for, or are able to do right now. I think that it has everything to do with the way that the healthcare delivery system has changed. It used to be fee for service, physicians were practicing very independently, they were in their own office, and they didn’t have to answer to any higher authorities. I think even the society role; we might have had one member of the family working. So basically, I think that a lot of that has changed now. Just the preferences of physicians, I don’t think they’re joiners. It used to be you just joined your professional associations; you just participated in organized medicine because that’s what we did. That’s not what physicians do anymore. So it’s really tied to how physicians practice medicine, how they’re reimbursed, and the way they’re employed now. I think they’re more employees rather than owners in a lot of ways. I think that has really influenced the way CME is being delivered, and why a lot of us are really struggling with attendance. I wonder if the other thing with performance improvement CME, maybe the physicians don’t feel like they’ve participated enough in the identification of the gap, or the data that indicates that “well there’s a problem here.” Do physicians necessarily agree with what that measure is? I don’t know a lot about performance improvement, in terms of what groups are measuring these things but I know that I hear a lot of our members talk about pay for performance, bad. The hospital, bad. Physicians want to be independent, they want to be autonomous, they have their realm, and they really don’t appreciate the government or any other organizations like HMO’s, and PPO’s infiltrating this realm. I wonder if there is concern that that’s what’s happening. “They’re telling me I have to do this, and I don’t agree with that.” I think there’s some of that too, some reluctance. Which is again why physicians really need to be inserted into the process because we need physician buy in. And I don’t hear a lot of people talking about that. The ACCME doesn’t seem to be talking about that at all, and that I don’t understand. There’s a lot of talk about what the public is saying about care and what the IOM is saying about care, but what about what practicing physicians say? And there’s a lot of blame to be shared, and one of my frustrations has been you do have to accept the fact that care isn’t perfect. Let’s not worry about is it 100,000 deaths per year by medical errors or whatever that number is. It doesn’t really matter, because we know it’s too much. So let’s just forget that and focus on preventing medical errors. So doctors do need to be encouraged to take control and actually suggest proactive ways to prevent medical errors, improve care. I think that physicians are feeling very burdened right now and I think the CME system is reflecting that. I think that morale is low. I think that physicians don’t think they have control of the practice of medicine, they don’t have control over what they love. They want to care for patients. That’s what they want to do, so CME should be a natural extension of that. I think that CME is getting lost in this shuffle in trying to figure out who is
going to be in control of medicine. I think it’s too bad actually, because I think that physicians should play a really instrumental role in defining their own gaps and setting goals for how to address those gaps and it seems like we’re relying more on gaps that are being thrust upon. That may be why physicians are resisting that PI-CME. (Ms. Brown)

When docs see you involved in what’s increasingly going to drive their well being, they’ll participate in performance improvement activities and so on. You know I’ve never met a doctor who didn’t want to be aware of how they did in comparison to somebody else. They like feedback. Unfortunately, that feedback has to be pretty confidential to them so they can recognize their learning needs and gaps, and then they’re motivated to change.

[Name], was with the [University] first, and then the [Hospital] in [City]. He, by example, showed how you could guide a medical staff to use guidelines and parameters, assess themselves; usually the unit, the urology department, or something in medicine, the gastroenterology unit or something like that. And what he also found which is also very interesting is that all these AMA practice parameters and guidelines, they don’t mean anything to the physician unless the physician buys into it. And what he did and illustrated so well, is that when physicians sat around as a group and discussed the guidelines that came up, I use as an example the American Urologic Society I (AUA) guidelines on, managing prostate cancer. Then they had a debate. That makes no sense for us, but that’s good learning. They developed their own sense of what was important, and those were the criteria that was set up that they were measured against. And then the feedback was given to them. As a group, they could see the whole group but not where anybody individually was. There are certainly outliers but the physicians got the actual data. I remember Brent being “crucified” once on the pages of the New York Times for his insistence that this feedback is confidential to the doctors. “What do you mean? The public has the right to know.” But it’s been a lifelong thesis of mine that if you give quality feedback to docs, they will accept it and use it to move to the next dimension. I think the factors influencing CME that we have to talk about are also is what’s going to happen with this “trashing,” as I call it, of industry and their relationship to education… But so often in the past all funds from industry came through the marketing units, and then were given to CME. And yes the companies have set up separate medical education units, but then they have been watching and totally concerned with what is going on with the regulation from government. I hear from my colleagues that applying for some of these commercial grants is an enormous hurdle. (Mr. White)

Mr. White discussed the importance of considering the processes involved within physician practice and how CME could have an impact there as well on quality patient care.
Well I think there’s a section that’s called Systems Based Practice for the doctors to understand the systems they’re working in, and work within that. That leads me into the “we versus them” attitude of hospital administrators and sometimes the medical staff and that’s been going on for ages. They don’t trust each other and it’s crazy. But it’s true. And we were kind of brought up that way, separately, and can’t tell you AMA’s battles over the fact that economic credentialing was used…someone had lost their credentials because they “didn’t fit the hospital director’s plan” or whatever. Doctors have to be citizens of their community, their medical community first. I think that they in some way ought to be involved in their real communities because they’re leaders and can do a lot. But I don’t think they have time to do it.

MARTHA: Time is a big factor I think.

Time off to reflect and so forth. There’s some interesting things going on in Europe now that were actually around in 1932 when the AAMC commission hinted at in Germany, a plan where the government provided educational courses free. Of course, doctors are pretty much salaried there but there are other countries including the UK where they’re given two weeks and money to go to CME courses. It’s part of the national health system. That makes it a lot more palatable.

The most important item over and over and over is gaining physician support and involvement. And by that I also mean getting physicians more than perfunctorily involved like on a CME committee. It’s interesting at SMCDCME now SACME, it used to be all docs that were involved as the assistant deans or whatever the title was. And over the years that’s completely changed, well not completely but has changed to a significant percentage. First PhD’s and then masters prepared people, and at some universities people with bachelor’s degrees or less. And that means the docs don’t care, they’re not somehow involved appropriately and they need to be ingenious to get that to happen in any local situation. All politics are local, and you have to deal with whatever situation is where you are, but I think buying into the medical staff deliberations is really important. At [a college of medicine] of course I had a role as Medical Director and Associate Dean of Clinical Affairs, I insisted on sitting in with the dean with his meeting with the department chairman. At medical schools the department chairman has the real power. The chairman of medicine, the chairman of surgery … I don’t know at Bayfront how it is. But CME has to be right there. I remember one of our early battles was writing guidelines for CME, and figured we better have them written down because the departments were doing their own thing. One of them had two full time people doing their own CME thing. I fought it like mad but eventually the other department chairman bought into the proposal and we had a [college of medicine] policy. My feeling was I was going to let them (the 2 departments) wear themselves out. It was first the department of anesthesiology, where the department chairman asked “would you take over?” because his people left or got going into other things, so it took care of itself. It was worth losing the war to win
the battle. And so I think it very important that CME be involved very closely. (Mr. White)

Another perspective is the physician involvement as a member of the patient care team and how they can work together to improve patient care and ultimately patient outcomes. The health care team is team is changing and the approach to CE should be an interdisciplinary one. The IOM noted:

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. (Redesigning Continuing Education in the Health Professions, 2009, p. 3)

Recommendation 2 from the previous study suggested a vision of CPD wherein stakeholders collaborated and fostered an interdisciplinary approach to the design and evaluation of educational activities, thereby, improving its value and cost effectiveness. In addition, the result of CPD should relate to the “quality and safety of the health care system” (p. 6).

The team is changing, so they’re more when I left practice, we had many more nurse practitioners and nurses, and we were just getting P.A.s. And when I started practice, there were no nurse practitioner and there’s a 30-40 year history, so the team was growing. The same with nurse anesthetists, and the big panoply, so I think the team is changing and the quality measures are changing. I think patients are changing too. I think patients are a little more prepared to say “Ok on my next visit I’ll see the nurse, and the dietician, and then I’ll see you [doctor] on the next visit, is that right?” Yes, that’s right. I feel comfortable, they feel comfortable, and the notes were good. So that’s changed I think. The next level up is that society’s
changing generally. We were talking about individual patients but I think society itself is changing. And there’s a little more awareness of “I can go online, I have tendonitis, tennis elbow, I’m going to go online, I’m going to search this for myself”; the informed patient; and it’s bi-modal. There’s some patients that are the luckier, the better educated, and have the ability to afford better care. Those are people who come in; they’re prepared, they have internet capabilities, they’re online regularly, they’re colleagues that play golf with the doctor. Then at the less educated, poorer, more disenfranchised end of the population, people who can’t even spell “computer,” wouldn’t know how to get on it, can’t speak English. So we have that bi-modal operation. I think that bi-modality is actually growing. I would think the poverty level beginning with the recession in the U.S. and Canada is probably growing; and so are the large immigrant populations for example. Both countries do that. Whereas this is either growing or staying the same; the luckier of the patient. But that’s a difference, I think. Our patients are growing older, we’re a graying society. We lived through SARS in Toronto in 2003. So there’s a pan flu epidemic waiting at the doorstep, whether it’s going to come in this year or twenty-five years from now we don’t know. Diseases are changing as well. Now we have the big government healthcare reform, maybe capitation systems. All of that is going to play a role in continuing education I think. Conflict of interest is another issue we talked about.

MARTHA: Right. So what do you think will impact or what’s relevant for the advancement of what we're doing? We spoke about that for a few minutes outside, but is it going to be more interdisciplinary, is it going to look totally different, what do you think it’s going to push to change?

I think that’s a very interesting question, Martha. You’ll hear a lot about age today because my back is sore and I feel like I’m one hundred years old! I think the change...you’ve probably seen this in hospital management, it’s much more program management, so twenty years ago it was division of cardiology. Now it’s the “program in cardiovascular health,” [which] has surgeons, internists, dieticians … I think that will drive it more. I think the more programmatic initiative; the disease classification from the hospital environment will drive it. We have better data now than we did five years ago, even one year ago. We’re getting better data, we can pinpoint it, and we make people accountable a little more. So I think those two things we’ll be able to say, “Hmmm, you know what? Our congestive heart failure patients do bounce back to the emergency department with a higher rate than they should statewide, and I think we should do something about it. We’re looking bad in the hospital state report cards, the state legislature is pointing at us. Several of our well-to-do Alliance patients are coming back and are complaining. That’s not good for us. Maybe it’s good for the bottom line in some ways, but you know what? We’re more than just the bottom line?” So I think that’s gonna drive us…Patients[at discharge] aren’t either being told that they need it they’re not getting their prescriptions, or the doctors don’t know to order it, they’re residents and don’t know to order it. Or they go home on a Saturday and there is a failure in the system; so figuring out where that failure is
and then fixing it. So if it’s educational, it means presenting grand rounds on the topic for example, or sort of a clinic day “Better Congestive Heart Failure Management,” or the CME office getting hold of the feedback data, the global data and feeding that back to the group and say “Let’s build something around this, whether more teamwork would do it.” All those things I think are in the purview, what isn’t in the purview are the quality measures, determination, and payment systems. But much of this is in the purview of the CME provider … this new smart, renaissance, the Martha Bakers of the world who understand it, who understand what it is and then can intervene, might intervene in a traditional way, “ok we’ll accredit rounds or medicine.” Three times this year I can just about fit in. We’ll present the data globally on those three occasions and look for trends, and look for the barriers, and post a focus group; the hospital will pay us for that because our measures will improve. That’s the goal. It may be a bit idealized.

MARTHA: As opposed to in six months we’re going to talk about MRSA. Well in six months, the information we might need to talk about something else, or how do you know what you need to talk about in a year’s time?

That’s right. So we need to have more accurate and up-to-date data. I think that’s a part of it. I think with an issue like MRSA, it’s a much more sort of onsite training. Hand washing is a small example. And there the SWAT team that the CME provider would develop is a little bit different than if it’s an issue like congestive heart failure where it’s a lack of prescriptions, or a lack of understanding, or maybe we need a patient educator. Maybe it’s a nurse … we did this in Toronto. We had a nurse patient educator and she was the discharge coordinator, so it was a little bit extra work for her. Twenty minutes to a half hour with every discharge on the cardiac ward. But she was the “knowledge broker,” going through the file, determining what had happened to the patient, asking the patient what they understood, making sure all the guidelines were being met. So it’s a congestive heart failure patient. “Here are the three things you need to go home. You have that prescription? Do you understand why you need to take it? Will you see your primary care provider within a week or two weeks? Would you like us here to make an appointment for you in order to do that? Sometimes we can get through on a backline with the primary care provider where you can’t. What about salt? How about making sure that it’s not just the medication, but you understand not to have a lot of salt like potato chips and what not.” (Mr. Blue)

Accreditation. Participants broached the role of accreditation by the ACCME throughout the interviews, sometimes in a positive fashion and sometimes not. Each participant appreciated the role that accreditation plays in the industry and considered it important, however, noted that a focus on regulatory requirements may interfere with the
provider’s ability to design and implement CME that is valuable and that will make a
difference in competency and performance.

The IOM Consensus Report, *Redesigning Continuing Education in the Health Professions* (2009), discussed the role of accreditation and provided recommendations for change via Recommendation 6, which was discussed with Question One. In the meantime, the expectations and requirements of the ACCME persist.

I have a chance to talk to a lot of people around the country and I think some people are having difficulty now with the accreditation requirements, not so much the administrative part of it, but the whole part of understanding what a practice gap is, and to specify what that is and to look at that gap and identify, as I mentioned earlier, what you can address educationally. A lot of people are having difficulty getting their head around that. And it’s probably in part because they don’t have the kind of background you and I have. They don’t have that educational background, they don’t have that experience, they are people who are dedicated and committed and have been given CME as an added responsibility in addition to medical staff, directors, administrative assistant, whatever. (Mr. Gray)

Mr. Gray’s comments on the influence of accreditation bear repeating. What would he do if he were King of ACCME?

What ACCME is trying to do right now to push the field is very influential as well. With the current criteria, and with these efforts that they are involved in trying to push the field, I think they are being very influential. I think in some small way from a public policy perspective, not even in a small way, the alliance is beginning to exert itself into the field, taking on incoming public policy issues, representing the profession, and trying to be our spokesman out there when others have concerns. It’s a tremendously varied membership. You have people out there that are totally dependent upon pharma money, you know the MECC’s and then others that don’t get anything at all when you’re looking at that issue… Absolutely. Anything that doesn’t add value to what we do, we should not even have to bother with it and there’s a lot of stuff in our systems now that add no value at all to what we do in terms of continuing education of physicians. For example, let’s go back to the example of whether ACCME is asking whether you ought to label something commercial-free CME and commercial-supported CME. Does that mean one is better than the other? Absolutely not. One adds no value to what we do; it’s just another layer of friggin paperwork we’re going to have to do. Those kinds of things.
A number of the things you have to do in the accreditation system where you have to document this and document that, put this in the file and that in the file, adds no value to what you do. If I were king of ACCME, I would say, “Tell me what your mission is.” We have to do that anyway. And I would say, “Are you achieving your mission, yes or no?” And if you say no, “Show me the data that say why you are not achieving your mission.” And if you say yes, “Show me the data that say that you are achieving your mission.” I don’t care how you’re getting there, but I do care that you are getting there efficiently and effectively and that you are in service to your client group, to your target audience, Bayfront, your physician constituents, however wide you define that. But the bottom line is, as an accredited provider, I’m responsible for being mission driven, what my CME mission says I should be doing if… There’s one hospital system up in Pennsylvania. Their mission is perfecting patient care. My CME mission should be contributing to their perfecting patient care. What am I doing to help them perfect patient care? Show me what I’m doing. I don’t care about disclosures, but we have to do disclosures and we have to do those things because of the external pressures, but I don’t care about whether or not you have in the minutes of a meeting something that said you did this or that. I’m concerned that you are mission focused and mission driven, where we ought to be. A lot of this other stuff that adds no value to what we’re doing, we ought to just dump it. So we have to take the quality improvement tools called value stream mapping and look at what we do and look at whether it adds any value and if it doesn’t add value, reject it, throw it out. Let’s get lean, let’s get mean, let’s get effective let’s get totally focused on what our responsibilities are, which is to support physician lifelong learning, anything else that gets in our way we should say, “No thank you, we don’t want to have anything to do with it.” (Mr. Gray)

He elaborated on his perception of the most important aspects of CME: patient safety, quality of care, and systems improvement. He encourages providers to step up to the plate.

We are probably uniquely positioned in the field of continuing medical education now, given the current criteria that we’re under, to integrate ourselves into the most important things that are going on in health care, and that’s patient safety, quality of care, systems improvement, it’s the best of all times since I’ve been in CME to be in CME, but it takes a whole bunch of talent – I don’t have it all. I need the best of your strengths, your quality strategies; we’ve got to do this together. We’ve got to get ourselves at the table in order to do that. You mentioned that you were there at the table with your quality coach. We’ve got to be at those tables. We’ve got to get them to our tables and show them that we’re interested in the same things that they’re interested in. We’re not just hot coffee, warm donut passer out people, we are directly involved, we are valued … If we don’t do it now, we do not need continuing medical education to improve the care of patients in hospitals. Quality departments can take that on quite nicely thank
you, and they have very capable people to do that. If we don’t step up to the plate now and add the value to continuing education, in my opinion, we are at a point of innovation and everything in continuing medical education now has to be focused on performance improvement either performance in terms of competence, performance in terms of actual performance, performance in terms of patient health outcomes. We are now required to be performance improvement people. What a great place to be. Our accrediting body has forced us to be what many of us in the field have been talking about where we needed to be for years and if you can’t do it, you’re out of the ball game. You won’t get accredited. What a wonderful place to be. You’ve got to step up and do it now. (Mr. Gray)

Another expert agreed that providers and physicians should step up to the plate, be accountable, and provide continuing education to support physician learning and change.

So if you take the unions of General Motors as sort of a paradigm where the interests of their members are paramount and they fight for things that kill the industry. That’s an extreme example of what advocacy organizations are about. We are taught in business school, “If you don’t know what to do you ask your customer.” Advocacy organizations, their members are their customers. So they’re being directed. So the forces of the advocacy organizations have become huge in the last decade as change goes on and that affects CME. And CME is supposed to be supporting the physician’s abilities and learning and change so they can do the right thing. In the days when we could drive it by what the doctors wanted because they weren’t accountable for anything, it was very easy. It was meeting planning, it was “what do you want,” “this is what we’ll put on” and everybody liked it. And what did we say? As long as it looked right, and you weren’t misbehaving and it wasn’t embarrassing, then it’s more power to you. So this business of accreditation expectations and accountability has come all the way up through to us, so it’s come all the way from the individual increased accountability, through all these advocacy organizations and layers of organization all the way up to the accrediting body that’s created rules that says “education must support physician learning and change”. It must support improvement. And that’s been welcomed by the people who are looking for accountability and courses of change, and disparaged by the people who are taking advocacy positions for the physicians. “It’s too hard, they shouldn’t be asked to do this, it’s too demanding, we shouldn’t be measuring”. So the forces are polar in the world that I live in, and to some extent going in two different directions. Interesting right? (Mr. Black)

Mr. White offered an historical perspective and speculated on which groups would lead CME in the future.
Meanwhile the ACCME is growing in numbers, and bureaucracy. I think its key to support your state system. That’s interestingly enough another battle you won’t know about but if you have … way back when in the 1975-ish era, Dr. C.H. William Ruhe was the VP of medical education at the AMA. They had a vision of creating a Coordinating Medical Education Council to deal with all three areas of education. So you had the Liaison Committee on Medical Education which still exists (from 1942 on) accrediting medical schools, you had the LCGME for graduate medical education, and you had the LCCME for continuing medical education. There’s some background personality issues involved that I’ll not go into, but the LCCME was started up, staffed by the Council on Medical Specialty Societies, and very quickly they moved to establish “Chicago national standards” for everybody; all the local hospitals and so on. So in 1976 or 1977 the AMA pulled out of the LCCME. They restarted their own accrediting system, in which they’d been accrediting providers.

I went to my boss and raised the roof. And that changed, but that was again from the people of the green eyeshades out looking at everything else. I think the major thing now is how CME will mature. With all the stuff, we’ve got a great amount of research on what works and now putting it into practice. And quite frankly forgetting about what ACCME is always pushing on us, which is more and more bureaucracy and paperwork and so forth. I have yet to see how all this stuff really helps the CME do their mission of getting good education to doctors. My wife ran a small medical, still does. They dropped their accreditation from ACCME. It was on humanism in medicine because for this little cited one annual meeting a year with 150 people coming, it was a $10,000 easy cost to get re-accredited and then the assessment each year. So now, they’ve gone to a joint sponsorship thing. But I think we’ve let ourselves, I mean I’m sorry we cannot control down to the “nth” degree with the individual doctor what he perceives. There’s bias in everything we do and to try to wipe this out with documentation, that’s baloney. I for one am sorry that the AMA didn’t stand up and say “enough of this.” There were several, I don’t know what’s happening I haven’t talked to Al because I was in Lyon France at the GAME Conference. The AMA had several resolutions this year from state medical societies complaining about ACCME’s costs. I don’t know what happened to them. I think they were adopted, but probably charged the AMA reps to do something about it.

So the AMA walked out. I was at that time at Maryland having to make the decision to get LCCME accredited and AMA accredited, and said I can’t. I need the AMA credit. I can’t do both. That’s why I was so interested in the history of this thing. Finally, in 1980 they came to a meeting of the minds and created the ACCME, with the understanding that there would be a state medical society system to accredit local hospitals based on uniform standards, but administered through the states. Actually, the LCCME was also trying to replace the state medical societies with new regional entities, which would be under their control. But that was back before the breakup. The AMA just marched out and stayed out for two and a half years. You wonder about some of this ferment now coming up
will not lead to something like that. But I think the AMA still has got to reestablish themselves, and AAFP has to also. But the AAFP has submitted a marvelous chapter on their history and accreditation. They were the first, 47 and it’s a wonderful story. There are so many current friends who were there - all later on, Norm Kahn and Nancy Davis and so on, developed the concept of evidence base and changed that. Those organizations are going to have to really come back in a big way.

MARTHA: Who can you see as the group that can make that kind of stuff happen? Like who was it that met recently at Mayo and they were talking about the importance of research and that was one group, and the Macy thing, and then the Council of Medical Specialty Societies that did the reform and repositioning of CME in 2005. They started, but I can’t see the result from that. It’s such a big task to take all of what they were calling “stakeholders” and make it happen. Who do you think should do that or can one group do that?

My personal belief is that is two groups; the AMA and the AAMC-Association of American Medical Colleges. They would have the clout to make something happen. The CMSS is too small; it doesn’t have AMA as a member. It’s a collection of specialty societies that relate to the specialty boards. And they’re big but they don’t have the sort of clout. AMA because of its history, the AAMC because of who they are and what they’ve done, what they’ve done over the years is really important.(Mr. White)

Summary of Themes - Question Two - What influences CME?

**Funding.** The funding of CME via commercial support remains a *hot topic* as noted in the two recent IOM reports. The ACCME criteria are clear guidelines as to appropriate use of these funds, separation of education and marketing, as well as conflict of interest resolution. Excerpts from six participant interviews highlighted and illustrated the theme of funding as an influential force in CME. The specific influences identified included: individuals employed by the medical affairs departments of commercial interests who review and approve/reject educational grant proposals; the role of ACCME and expectations of adherence to the guidelines for commercial support; the anticipated decline in the number of certified CME activities as a result of reduced funding; and the cultivation of alternative sources of support such as registration fees, contributions by
organized hospital medical staff, block grants, provider collaboration and pooling of resources.

**Physician Involvement.** The IOM committee on redesigning continuing education, recommended the establishment of a continuing professional development institute that would be able to evaluate CPD at the individual, team, organizational, system and national levels and ultimately foster models of CPD that support interprofessional team based learning and collaboration. The physician is an integral part of the team whose approach to patient care should be based on evidence provided by quality improvement data. Mr. Gray, Mr. Green and Ms. Brown encourage providers to engage with physicians and respond to their preferences for learning experiences. In addition, they need to get buy in from physicians by explaining the value of CME in their practice and patient health. Mr. Black pointed out the increase in physician accountability at various levels and that competency and performance need meet or exceed expectations at all of those levels. Mr. White reflected on the importance of data feedback to physicians regarding their practice patterns and reiterated the need to gain their support and involvement in CME.

**Accreditation.** The identification of accreditation as a theme for the elements of CME mirrors the identification of accreditation as an influence in CME. The IOM Consensus Report, *Redesigning Continuing Education in the Health Professions* (2009), addressed the role of accreditation and provided recommendations for change via Recommendation 6, which was discussed with regard to Question One. It was identified as an influence by Mr. Gray as providers are struggling to understand the underlying concepts of the criteria to be met. They lack the background in adult education principles

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and practices. He believes that the administrative burden required to achieve accreditation adds no value. Preferably the focus would be on mission driven CME whose foundation is built on quality data with the purpose of improving patient safety, patient outcomes, and health care systems. Mr. Black supports the value of the accreditation body as the rule maker for ensuring that CME supports physician learning, behavior change, and performance improvement. Therein lays the debate. The historian, Mr. White, talked about how accreditation has evolved, who has been involved, and what groups need to revitalize themselves now to make a stand in this debate. How CME matures, considering the research that has been generated on what works and now needs to be put it into practice, will impact its future. He does not see the value of what ACCME is always pushing on us… more and more bureaucracy and paperwork. He does not see how the bureaucracy helps CME achieve their mission of getting good education to doctors.

Question Three - What are the most significant issues in CME?

The interview question that helped to answer this question was “Please describe the issues in CME that are most relevant for the advancement of the field.” Data Analysis revealed one theme – providers, those who plan and execute CME activities. Based on the influential factors mentioned above, a naturally occurring significant issue is the actual provision of continuing education, specifically the role of the CME professional. Ms. Amber offered an overview of her perspective.

As I mentioned earlier we don’t have ready access to the data. If you work in a community hospital and you make friends with the Q.I. department you might have access to the data, (hopefully you do) you can create programs and re-measure something as simple as everyone entering the emergency room will be given an assessment for DVT with a goal of 90% assessment, something like that. You can work on those things, you can measure those things, but the majority of
the providers don’t have access to those data points, and managed care organizations who have access to the data are not ready to give it up. There’s only one company that I’m aware of that’s affiliated with a managed care organization and they struggle to get their own data. So I think the barriers are access to data and the barriers with physician time. They don’t have the time to collect the data, they don’t have the time to attend educational programs, they don’t have the time to spend with patients to do a quality differential diagnosis of history taking, and time is a barrier or lack of standardized CME platonic health record or medical record are barriers. Lack of funding; the government is saying they want certain things done and they want improve care. Show me the money. How do they expect that to happen while simultaneously saying that pharma [pharmaceutical industry] is not doing right by supporting medical education? There is an inconsistency there. (Ms. Amber)

It takes a different kind of CME professional to see that. So if you didn’t have to do all of that file crap, you could be out walking the halls, talking to the head of this department, and talking to the head of that department, and saying whatever your sermon would be … But we are engaged, we are directly engaged in trying to improve the quality care of people in this hospital. We want to support you so that you can do the best you possibly can. I know you are involved in a lot of quality things. Let’s look at it and see if there’s anything in there that you think we can support by our library services, by our educational services, or whatever it is, and in the meantime, and in doing that, provide the credit that the physicians need to report. We would meet JCAHO requirements because it is engaged in what we’re doing related to the patient care. That’s an interesting concept. You do education related to the kinds of things you see in your hospital -that’s unique isn’t it? Rather than what they see at another hospital. So if you don’t have kids in your hospital, you don’t do pediatric programs. That’s profound – JCAHO is profound.

To me, those are the kinds of things you’ve got to be doing and it’s different than making sure the coffee’s hot and the room’s there, and the lighting’s good, projector’s working, the attendance sheet is there, disclosure’s are in, and everything’s in the file, and all that, although some of that is required to do a good business, not all that we are required to do make any difference. Do a value stream map and everything else, out the door. (Mr. Gray)

Yes, I think that our CME production guidelines as defined by the ACCME should be streamlined to focus only on the minimum necessary to produce an educational activity. It’s my contention that people misunderstand those guidelines and they’re about achieving minimum standards; that’s what accreditation is. It’s not about excellence. The excellence in education is always going to be a local decision based on the standards of the people producing and consuming the activity at the local level. It’s not going to be driven by some national organization. They act like they can, and that’s their role. That’s not their role. Their role is to make sure that it doesn’t dip below the minimum standards.
They act like Jesuits instead of Franciscans. They’re not God’s holy warriors up there in Chicago. I understand that they want CME to be the best that they can. I said that recently… But I think that you do what you do thinking that you’re doing the best for CME. He was really kind of touched by that. He doesn’t hear that very much. I think they do, but I think they have gotten to where they think their role is some kind of cutting edge vanguard kind of thing and that’s not what they’re about. It should be providers taking the lead. Instead, what I see all the time are providers say “What would the ACCME and me think about that?” Who cares what they think about that? Go and do these innovative things that you want to, you can read the guidelines, you can see if you are adhering to the minimum standards, then just go do this innovative stuff. I just don’t see much innovation happening among providers. Well that’s what we want to do this brings us to the institute. We want to fund that kind of thing. Somebody wants to do something different than they’ve been able to do before we want to help them do that. (Mr. Green)

Mr. Green explained that less frequent, high quality impact CME was preferred to a frequent low impact, didactic style CME. As in the movie industry, not every activity can be a “blockbuster.” He also discussed the national certification of CME providers.

MARTHA: Now do you think that providers like me, a “one person shop,” I would love to do all those things. But I feel like I’m filing too much, and dotting too many “i’s”, and like you said the more guidelines there are, the more difficult it becomes to do anything strategically. But it seems to me the certification thing is a nice thing to get.

It wasn’t real easy either, was it?

MARTHA: No it wasn’t! It was harder than I thought it would be to get certified. But those folks are so busy doing everything else plus seeing me that it’s hard for them to lobby and to get their act together. Is that accurate?

I couldn’t agree more. You know it’s kind of like do you think your life is going to be one series of exhilarating adventures after another?

MARTHA: Well no.

Or is it going to be mostly kind of steady with peaks you know? I think that’s how you should think about your CME. And for most things, putting a huge amount of effort into it isn’t really necessary. And just like every couple of years, do some slam bang, whammer jammer, you know, innovative CME thing. That’s the kind of thing we want to get involved in. And so we want to bring these external resources to you, so you don’t really have a staff of one, but a staff of four or five
to do these things. But that’s not going to be your everyday reality, given the kind of shop that you’re in. And you go and you talk to people at the academic medical centers with staffs of 14-16 and it’s kind of the same thing there too.

MARTHA: Right it’s just bigger. (Laughs)

Yes just bigger, but they’re sub-divided out and their doing their little thing and it’s usually pretty much like it is…but you know with peaks … every now and then they get to go to Dubai. They don’t do that every week. Some of it I think providers have a thing “special is special,” and what I want to do is reduce the number of activities I do to a manageable number, have as many of them be meaningful as possible, and every now and again I want to do something that’s really important. Then I feel like I’ve made a contribution and a legacy they’ll look back and say, “He did some really interesting stuff.”

MARTHA: That sounds like really good advice. Plus financially more viable if you were to do it that way, and be able to plan more … oh what am I going to do next week? Oh gosh, they’ve cancelled. Now what?

You see that’s the tyranny. Your main concern is who is going to be in the ring next Wednesday morning, and the Wednesday after that, and the Wednesday after that, and the Wednesday after that. As long as you’ve got your nose to that continual grindstone, that’s not a good future. (Mr. Green)

Well, I think that from my perspective the professional development of CME staff is crucial. Very crucial. I think that I am very impressed with the quality of people who we deal with in terms of what I consider CME staff, CME coordinators. I’m talking about the people who are the administrative people that work with the physicians to plan and deliver CME. I’m impressed with them because I know that every one of them wants to do a good job, and they want to do it the right way. I think that usually however, this is not a profession at a state level so much as something you’re thrust into. I don’t think anyone wakes up and says “I want to be a CME coordinator when I grow up.” It’s a job that they worked for. They find themselves there by accident.

And it’s typically someone who really doesn’t have any adult education training. The thing about adult education is I think that because we’re adults, we know a lot about adult education. We may not know we do. We may not have the terminology, but we know from going to classes, or anything that we do we understand. I think subconsciously. Ok lecture is not as good as whatever but I think they don’t know that they do know what they know. I think we have to really develop the talent of our CME planners. (Ms. Brown)

I think you said it well earlier. I agree, I think a major barrier to advancement is the competency of the profession today. By and large, the majority of CME providers out there do not have CME professionals leading them. I do see
someone alluded to it yesterday; the medical staff secretary [is coordinating CME]. It’s still in a community hospital setting as you know. Those are the people often doing the work, the medical librarian, or whoever gets assigned, or the physician who has attended lectures for years and thinks they’re now CME and they’re the one-year rotating person responsible. There are still by and large too many involved who really lacked knowledge of the field, the move towards more professionalism, people like you pursuing advanced degrees I think is very much needed. Until that happens, until a more professional competency is required I think it is a major limitation. I’m one that has a view that either the professional ceases to exist, probably in the very near future unless it tackles some of these issues, or it will truly evolve into being that strategic asset embedded right in the core of an organization’s mission to improve healthcare quality and makes the transition. It may not be called CME in that environment, but it will involve people like you. Maybe it’s CPD, maybe it’s just quality, maybe CME as we know it we’ve got to completely eliminate it because people simply won’t change their opinion about what it is. I don’t have a crystal ball on that, but it’s either going to be irrelevant and disappear, or really make this transition. And now is the time. As you’re alluding to, the whole discussion around healthcare reform really fueled that, as it’s going to be so increasingly clear for all of us that if you’re not contributing in a cost effective way to improve health care quality and patient safety; if you’re not doing one of those two things in a measurable effective way, you’ll be largely irrelevant. You’ll be a cost to the system. We need to be an investment within the system. So it’ll be an interesting couple of years with a lot of opportunity. I think it’ll emerge. We talked about some of the barriers. I’m not sure where the biggest barriers are but I sometimes think the current accreditation system is one of them. I hate to say it that way as people are so focused on process, but it has so little do with what we’re talking about. (Mr. Red)

Continuing Medical Education providers come from a variety of backgrounds, are diverse in their education, may hold multiple roles in their organization, and represent an assortment of skill sets. The National Commission for Certification of CME Professionals, Inc. (NC-CME) is a recent national certification organization. Certain criteria in combination, such as length of experience in the field, educational level, continuing professional development, and others, are required to sit for the exam. At the time of this study, the organization was in the process of determining how providers with the certification could maintain it, whether by exam or continuing education. An
explanation of the organization as well as its Vision, Mission, and Goals and Objectives outlined on the website show the state of affairs for CME providers.

The National Commission for Certification of CME Professionals, Inc. (NC-CME) is a nonprofit organization founded in 2006 by an independent group of peers within the CME community for the purpose of establishing a definitive certification program for CME Professionals. In July 2008, NC-CME began designating qualified individuals as Certified CME Professionals (CCMEPs™); within six months, more than 150 CCMEPs were listed in the National Registry at www.NC-CME.org

The overarching purpose of the CCMEP program is to raise the bar in CME. The public deserves assurance that CME (also known as CPD, CPPD, CPE, and CE) is being managed by persons who understand principles of adult learning and professional development, know how to frame clinical content for maximum impact, and can wisely interpret the rules and regulations that define the field. CME Professionals are responsible for maintaining the integrity of activities essential for relicensure of more than 600,000 practicing physicians and 60,000 practicing physician assistants in the US.

The value of certification by an independent, self-sufficient national organization is widely recognized by CME professionals and their employers.

The mission of the National Commission for Certification of CME Professionals (NC-CME) is to improve the quality of patient care by
creating a standard of certification for the men and women who create, deliver, or support educational programs for practicing physicians and other healthcare professionals. Such a certification program will acknowledge, evaluate, and reward individuals for their achievements in the field of continuing medical education. [The goals and objectives were to]

- Establish an independent national program of certification for CME professionals, with input from stakeholders in the CME community;
- Demonstrate the value of CME as a career path to persons employed in the field of CME and to their employers, including accredited organizations, medical education and communication companies, commercial supporters, accrediting entities, and regulatory agencies;
- Establish criteria for acquiring knowledge and practical skills that are beneficial to practitioners and their employers;
- Create uniform standards of certification against which CME professionals can be measured periodically;
- Define a curriculum of study and levels of experience required for certification;
- Develop a valid and reliable program of examinations; [and]
• Encourage the development of self-directed learning tools and resources to help professionals prepare for certification. (National Commission for Certification of CME Professionals, 2010)

The Alliance for CME is also concerned about the expertise of its members. They provide professional development, educational opportunities, and training products including webinars, publications (*Journal of Continuing Education in the Health Professions*), and other resources via their website (http://www.acme-assn.org). “The aim is to improve the provider skills of CME professionals, which will ultimately improve the quality of healthcare through evidenced-based educational interventions for physicians and other healthcare providers and the systems in which they work.”

*Summary of Theme Question Three - What are the most significant issues in CME?*

**Providers.** The NC-CME and the Alliance for CME are the biggest proponents of continuing professional development for professionals who provide CME. The NC-CME has established a certification for professionals to clearly demonstrate their expertise. The Alliance is a professional organization devoted to supporting providers and CME professionals by offering continuing professional development opportunities, various types of training and education, guidance on obtaining and maintaining accreditation, networking, and through the publication of The Journal of Continuing Education in the Health Professions (JCEHP). The dilemma of not having access to quality data is a barrier for some providers. In a hospital setting, Ms. Amber suggests teaming up with hospital quality management departments, otherwise providers may need to partner with organizations that do have the information. A different type of CME professional who can engage physicians, who are involved with quality initiatives and who are familiar
with The Joint Commission requirements according to Mr. Gray. This perspective is shared by Mr. Green who adds that provider should *go do innovative stuff* that makes sense and reflects excellence at the local level while meeting the minimum standards. Ms. Brown and Mr. Red share the perspective that professional competency amongst providers is a barrier to advancement of the field and that the development of CME professionals is crucial to our success.

*Question Four – What is the future of CME?*

This question generated three themes: funding, providers and technology. The future of CME will look quite different than it has for the previous 30 or so years. The way in which it is funded, the skill sets of the providers, and the use of technology will be re-defined and re-designed. Responses that specifically cited technology are highlighted here. However, technology was found within the context of other responses and was described as an important aspect of CME that will continue to evolve.

*Funding.*

The future of continuing medical education will be, I think, will be defined on how well we are able to demonstrate that we can impact those three things. Not only physician competence, but care provider competence, care provider performance, and patient health status. Care provider competence is the easiest to assess, it’s the easiest to impact because it deals with knowledge, but not knowledge alone, we’ve got to share it so that they know how to apply that knowledge in some way, that they either can or in performance that they actually do.

What a great place for us to be as educators. That’s exactly what we are required to be doing. So from an educator’s perspective or from those who are CME managers or coordinators or directors or whatever we call ourselves, it’s a great time to be in CME. That’s the future.

I don’t know about other components of the future. I don’t know about the regulatory future, because of the Senate’s concern about bias coming from industry funding. I’m not sure industry is going to continue to fund continuing medical education in the long run because of all of this other stuff. They don’t
want the Senate breathing down their neck. Many of them are already saying "We’re not going to fund these kinds of providers." Several of them have. One company said, "We will not directly fund a MECC." You’ve got to be working with another kind, working with an organization that has a physician constituency. With the way that things are playing out in the field that may end up being the death knell for the medical communications companies. Pharma will not fund them directly, and the MECC’s can’t rely on partners that have physician constituents and find ways to work with them directly or a lot will go away. A lot of the MECC’s do absolutely phenomenal work. They do great work; they charge great prices, huge prices. So I think that’s part of our future in CME; how those collaborations can develop to do what we talked about doing in terms of the things that are impacting patient care. You know the legislative things; the funding things are going to be very important to us in the future.

If physicians have to pick up all of the cost of their continuing medical education, and there’s no “free” continuing medical education, I think we’ll see a huge dip in the amount of money spent in continuing medical education, and physicians have to carry it. What are we now, a billion dollar industry, a lot of that comes from pharma, when that goes away, and we become a half-billion dollar industry overnight. That will have a huge impact in terms of accredited or certified continuing medical education activities. That future is a little bit iffy. I think you’re going to have both, but to me, if you’re trying to, if, as we are required to have a direct impact on competence performance or patient health status.

One-off programs are not going to do that. But a series of programs designed specifically to address an issue, might have the opportunity. You might be able to do one, but I think the series is going to be more important. We know this from the literature, you’ve read the literature about, and Davis has done these reviews… he doesn’t say CME’s not effective, he says one-of CME is not effective, but if you engage in a solid needs assessment, if you engage in a series of activities, that those activities are interactive and basically engage a physician’s mind and learning, then those things are the things that are effective. So I think that – the pharmaceutical companies now since we depend on them for a lot of support, are funding those kinds of things. I heard one pharmaceutical company person talking to a professional society on the floor of the Alliance exhibit hall, He said, “We only save about 15% of our money to support the one-of kind of continuing medical education; 85% of our money goes to other kinds of things, series, focus kinds of things, multiple intervention kinds of things. (Mr. Gray)

But they’re going to see CME increasingly focused on what the strategy of the hospital is, and will be. And so in the outpatient setting, in the physician’s own practice I guess that will be the responsibility of the specialty society, and this kind of self-directed scene. I’d like to see somebody start to move in that direction. I don’t see it happening, but I see it as a force that is going to become driven by number factors, decreased pharma funding, continuing in ever-increasing needs for physicians to learn new stuff. That’s not going to slow down. The scientific advance in medicine is just accelerating, not slowing. How are they
going to keep up with it? You have a new generation coming along that is probably the most advanced self-directed learning generation ever. (Mr. Green)

MARTHA: So that’s the other question - the future. You mentioned a few things like the self directed piece, perhaps physician financed CME. Anything else about the future?

I think there’ll be less education with credit. I do. I think that’s a response to a number of the market realities, the demands of the users and the funding situation. Lots more use of technology. We’re going to get to a point where people are going to expect some kind of technology component, like is there something online I can do? Something more I can learn, just like when LCD projectors started replacing slide projectors. At first, it was a novelty, and then it became a requirement. When do you ever have a speaker now come and they don’t have a PowerPoint presentation? (Mr. Green)

MARTHA: I’d be really interested to see what people think about pooling funds.

I don’t think it’s going to happen. This morning at breakfast [a gentleman] was sitting with us, and somebody asked him that question. And he said he couldn’t see [it] partly because you’d get in trouble, and partly because the regulator says to you gave money to this, you didn’t know where it was going. Somebody over here was talking about an off label use, and you supported that. So they need to have a little more control and rightfully so. If I were the company and was producing agents that help with diabetes care, thank you very much I’d like all my money to go into a dye pack. Would it have to compare other medications to my own? Of course. Would it have to talk about prevention, screening, weight loss and all the other things? Of course, it would have to do that, but I think we should be able to label it. So maybe it goes into the dean’s office or CME office in kind of a blind trust but tagged in some way so this goes to cardiovascular health, or women’s health. I can see them doing that. I don’t think anybody’s donated to the Blind Stanford Pool. I don’t think anybody’s donated to that because that’s a donation. And as he said yesterday its 5% of the total amount of money that they’ve got so you can use that up pretty quickly every year. (Mr. Blue)

But I am in favor, [of] this idea of block grants. You as a provider don’t have the time or resources to be applying for all these grants. I think that Van Harrison was the first person to really address that issue in his article in JCEHP back in 2003. And he was dead on then, and it’s largely an issue for the profession. As he said the issue of commercial support is not industry’s problem that those funds are available. It’s the profession, its organization, its hospitals, its academic medical centers that haven’t stepped up to the plate, and potentially funded these areas in the manner in which they should. There’s so much blame for industry for those resources, although you can clearly hear it ought to be done differently. But it’s not industry’s fault that the profession has more fully funded this and I agree with you on that. I also agree with the concerns about topic bias with funding available
for specific areas. Everybody knows what they are from industry, and yes, many of those align with interests that organizations have so it’s a wonderful resource but we also see far too often and consider a lack of a priori needs determination, it’s really going in the direction of where the money is. As I’ve heard, what is the joke and I’ve heard this from the MECCS. Why do we pursue topics of interest to industry? Who is the famous bank robber? Or maybe it’s Jesse James, someone like that, you’ve probably heard it quoted. Why do I rob banks? Because that’s where the money is. MECCS use the same analogy of that, why do they hit the industry for funding. It’s those topics. That is a concern. Back to that article, one of the reasons I took an interest personally in the whole issue of health care disparity to the point that Murray made it the other day, a variety of topic areas that are not today addressed. I agree with that. There are many not addressed, and I too worry that industry has a responsibility; so long as we are in this space of being aware of that potential downside of industry support that it might drive people away from other areas of need. Now is that fault of industry? I don’t really think so. I think it’s the fault of profession, the lack of balanced funding frankly, but I think industry too needs to be aware of that. It’s a negative environmental influence. We need to help with those issues too. Either provide a percentage of funding and or be more clear about provider qualifications. If you for example were less than 50% dependant applying for grants, you should have a many time leg up over the 90-100% dependant on industry support, because it would be clear that you are pursuing what’s needed by your institution. I think the future, a huge need of this issue of balanced funding, other sources of funding come into play. (Mr. Red)

MARTHA: I have my standard questions but that all sort of leads into what is the future and what does it look like. I think you hit that one right on the head. As you have said before, there’s a place for an update but there’s also probably more of a place for hands-on work group type of stuff that can really make a difference and then blend that with the learners that we have now who will be more comfortable going online just in time to find out what they need to know. And based on the self-reflective stuff, there are lots of possibilities of how it could be done. I think it just depends on how creative people want to be, and how much support they have.

That’s right. I think we used to think of a hundred people in an audience, all at the same level. I’m going to teach them. But some of the guys and gals have already done what I’ve suggested they do. Some wouldn’t consider it in 100 years. And some are doing their Blackberry, or reading the morning paper, or not paying any attention. I think one of the big breakthroughs for us in CME is that by changing the culture of CME also change the audience. So if the question is, there’s a brand new discovery or they’ve never heard of this…a new form of anti-depressant for example, or a new screening test then maybe the lecture or online learning, or disseminating by means of newsletter to all your 500 to 600 docs … maybe that’s good enough. If they know about it but they don’t agree with it because there are guidelines created for cardiologists, and I’m a family doctor or general internist,
then there are other things we can do. Maybe that’s peer groups, maybe that’s
grand rounds, and maybe that’s workshops. If the issue is that I’m aware of it,
(this isn’t my model by the way) it’s somebody named Pathman. Do you know
the Pathman model 96, medical care 96? He talked about how people adhere to
guidelines 100% of the time. He had a four-phase model. One was awareness of
it. One was agreement with it. One was adoption of it. So not all the time, but
enough that I felt pretty comfortable, to adherence which meant everyone did it.
And so the issue is agreement. We’re talking about small groups, peer pressure,
maybe an opinion leader, in the ward or in a community setting. If the question is
adoption, that is “All right I should be using insulin more. I’m so used to
prescribing something that’s been many years that I’ve prescribed intramuscular
subcutaneous insulin. I think I should go to a workshop so I can learn how to do it
better.” That’s the adoption question. The adherence is “Should I do it every time
it’s needed?” And the interventions are different. On the front end, it’s more like
the lecture, the newsletter, the online thing. On the back end, it’s more like
reminders at the point-of-care so it pops out. Sixty-five year old lady diabetic
needs flu shot. Have you given her the flu shot? Yes, no. If no, click here and the
nurse will bring it in. So I mean that much more point-of-care learning will
happen. I think just understanding it that way is the way we need to proceed. And
there’s a big question there about where we do all of that. You were talking about
the extent to which your hospital would be able to support you. That’s a question
isn’t it? It’s not just you convincing the C.E.O. that you need the monies. It’s
looking at the data to say “Look we’ve got a problem here. We’ve got a gap in the
perception of our patients, or a gap in care.” (Mr. Blue)

The Institute of Medicine (IOM) study, Conflict of Interest in Medical Research,
Education, and Practice, published in 2009 was through support from the National
Institutes of Health, the Robert Wood Johnson Foundation, The Greenwall Foundation,
the ABIM Foundation, the Josiah Macy, Jr. Foundation, the Burroughs Wellcome Fund,
and the endowment fund of the IOM. The Abstract provided an excellent overview of the
study.

Patients and the public benefit when physicians and researchers
collaborate with pharmaceutical, medical device, and biotechnology
companies to develop products that benefit individual and public health.

At the same time, concerns are growing that wide-ranging financial ties to
industry may unduly influence professional judgments involving the
primary interests and goals of medicine. Such conflicts of interest threaten the integrity of scientific investigations, the objectivity of professional education, the quality of patient care, and the public’s trust in medicine.

This Institute of Medicine report examines conflicts of interest in medical research, education, and practice and in the development of clinical practice guidelines. It reviews the available evidence on the extent of industry relationships with physicians and researchers and their consequences, and it describes current policies intended to identify, limit, or manage conflicts of interest. Although this report builds on the analyses and recommendations of other groups, it differs from other reports in its focus on conflicts of interest across the spectrum of medicine and its identification of overarching principles for assessing both conflicts of interest and conflict of interest policies. The report, which offers 16 specific recommendations, has several broad messages.

- The central goal of conflict of interest policies in medicine is to protect the integrity of professional judgment and to preserve public trust rather than to try to remediate bias or mistrust after it occurs.

- The disclosure of individual and institutional financial relationships is a critical but limited first step in the process of identifying and responding to conflicts of interest.
• Conflict of interest policies and procedures can be strengthened by engaging physicians, researchers, and medical institutions in developing policies and consensus standards.

• A range of supporting organizations—including accrediting groups and public and private health insurers—can promote the adoption and implementation of conflict of interest policies and promote a culture of accountability that sustains professional norms and public confidence in medicine.

• Research on conflicts of interest and conflict of interest policies can provide a stronger evidence base for policy design and implementation.

• If medical institutions do not act voluntarily to strengthen their conflict of interest policies and procedures, the pressure for external regulation is likely to increase. (Institute of Medicine, 2009a, pp.1-2)

Recommendations 5.1, 5.2, and 5.3 were specific to conflicts of interest in undergraduate, graduate, and continuing medical education. Among other directives, Recommendation 5.1 called on academic medical centers to prohibit faculty, students, residents, and fellows from making presentations controlled by industry (a direct violation of the ACCME guidelines). Recommendation 5.2 suggested academic medical centers and teaching hospitals provide education on the avoidance of conflict of interest as well as the management of relationships with commercial entities. It directed accreditation organizations to develop standards accordingly.
Recommendation 5.3 was specific to CME.

Questions about conflicts of interest have been particularly visible in continuing medical education. Most physicians are required to participate in accredited continuing medical education as a condition for relicensure, specialty certification, or granting of hospital medical staff privileges. Many commercial and academic providers of accredited continuing medical education receive half or more of their funding from industry, which raises concerns about industry influence over the selection of educational topics, the content of presentations, and the overall scope of educational offerings (e.g., whether they provide sufficient coverage of such issues as prevention and physician-patient communication).

Although individual continuing medical education providers and the accrediting organization for continuing medical education have taken steps to limit industry influence, the dependence of many programs on industry funding raises doubts about how successful these steps can be.

Recommendation 5.3 calls for a broad-based consensus development process to propose a new system of funding accredited continuing medical education that is free of industry influence, enhances public trust in the integrity of the system, and provides high-quality education. Some members of the committee supported a total end to industry funding, but others were concerned about the potential for unintended harm from such a ban. The committee recognized that changes in the current system likely would substantially reduce industry funding for accredited continuing
medical education. Even if education providers trim their expenses, the costs of accredited continuing medical education would likely increase for many physicians, which could be an economic burden for some physicians, for example, those in rural areas. (pp. 11-12)

These recommendations will shape the future of funding in continuing medical education and chart the course for ways in which undergraduate, graduate, and continuing medical education manages conflicts of interest. The accreditation organizations for these entities should design standards in an effort to ensure compliance.

**Providers.** Ms. Amber spoke of the future including what CME providers would need to do in order to keep pace and demonstrate the types of skills necessary.

MARTHA: What does the future look like?

Moving away from CME as a commodity that is accrued in a haphazard sort of fashion, to moving towards maintenance and certification in order to enable board and licensure continuation, accruing points based on true need, not perceived needs, and based on data points from your own practice. Not something that’s designed by some national group. There’s a question running in evidence based guidelines that sometimes is not realistic to the healthcare system. So I see us moving away from CME and towards MOC and [CME providers] as facilitators for MOC. The C stands for certification now, but it may stand for competency in the future.

That’s my perception. That’s a tough angle, because you have to demonstrate competency not only in knowledge but also in skill set. And all the way up that paradigm of knowing what to do, knowing how to do it, and integrating it into your practice in a daily fashion. I see where there’s going to be a need for professional educators to structure the education for the learner, to take the new science and pull it together in a way that can be taught and understood and translated, translational practice. So there’s still going to be a need for educators. I think we’re going to need a higher skill level, and we’re going to need access to the data in some standardized way or at least train. I’m kind of interested in concepts that there’s a couple of groups that train practice enhancement coordinators, who are nurses or other health professionals who go into different practices and really hand hold them. They do chart audits, analyze, and determine whether outliers practice, direct them to different resources, a range of resources, and then go back and re-measure, and keep motivated all of the way. I think that’s
an interim step until we have an electronic health record system. So I’m kind of intrigued by practice enhancement coordinators.

MARTHA: Where do you think people like me in terms of providers or skill sets will need to be as we move forward?
I think you’re in the right place as far as developing your skill sets in education and all that, with an understanding of andragogy and continuing to do research and add to your body of knowledge around continuing education and adult learning. I think that learning from other disciplines, learning from other training and development organizations and associations is good, because there’s a lot of work on transferring knowledge to practice. We just happen to have been very insular in medicine, not looked beyond teaching and learning, and I think there’s a lot to be gained looking outside of the profession for ways to do things, ways to do them better. (Ms. Amber)

Mr. Black also anticipated a change in the type of providers that will survive as we move ahead.

I think the process that the individual physicians will go through will be one where each doc has their sort of measured needs in hand. Everybody will know and carry it around like a “smart card” what it is that they don’t know and what they do know, what they need knowledge on, what they need new strategies for, what performance they need to change. That there will be information for them that will be useful, interpretable, there will be assistance in interpreting it, so people are thinking about their learning all the time. They’re thinking about their improving, that it will be safe to say “I don’t know” to yourself and in public and there will be time and rewards for people who pursue new information and changes of practice. And that the delta slope of improvements will be markedly increased, people won’t be doing it in mass or in synchrony, they’ll be doing it as a million points of light. Together the pediatricians will all be engaged in it, and they will find synchronous in group things to do together and it might look sort of the same. But there’s an incremental and measurable improvement and there’s going to be data to show that this continuing professional development is occurring. And those CME people and resources that don’t contribute to that delta will be gone because they aren’t going to matter. They’re going to be a waste. I think that the providers will be as close to the patients as it can get. I don’t think that the model of an education company that is; there are multiple roles for the education companies as brokers, sort of putting the buyer of information and seller of information together. But if the need is really driven from patient need, the closer to the patients you are, the closer to the needs gonna be, and closer to the application of the measurement is and if you can measure what you’re trying to change like your performance then you’ll be better off … The learners are going to come to you more and more. Now the education companies overlap when you talk about any educational format. Like the specialty societies. The specialty societies are more like the education companies, than the specialty
societies are like the academic medical schools. All right? The specialty societies are distant from where people do their care; they don’t have access to the patient information. Just like the education company, they’re distinctly different in that they’re physician sort of run, owned, created. Their mission is to help the physicians care for the patients better. But the way that you can do CME because there is commercial support for a certain topic therefore you’re going to do it, if those topics aren’t linked to practice-based need then that education is going to dry up and go away. I think there will be differences in the types of educational providers as we go forward. (Mr. Black)

From the perspective of a state accredditor, there is a significant challenge to train providers statewide.

There’s so much that I need to teach these CME coordinators. But if it’s going somebody up there for four hours, and they would say it was too much. So I think that even with CME that is a lesson that needs to be learned. We do still have a lot of speakers who have PowerPoint with slide after slide after slide with so much information. We have to be very specific in what we want the physician to do or not do after the activity is over. That is the assessment of whatever the gap is and the desired result. We really have to get better at “what do we want to accomplish with this one hour lecture,” which apparently we are going to do lectures because they’re still going on. But what else are we going to do along with that? We haven’t gotten very good at that yet. That’s where the future is going to have to take a sharp turn. We can’t just keep going. We had static, nothing for such a long time. I think that forces are really driving the CME system right now to change dramatically. I’m excited about it. I’m a little scared because I’m not sure exactly how we’re going to get there, but I know that physicians have to want to do this. And right now, I don’t know that physicians know that anything’s going on! Of course, that the physicians that we talk to do, but there again they’re involved in planning. It’s the audience, so we have to bring them back to the equation a little bit and get them involved. (Ms. Brown)

The IOM report on redesigning continuing education pointed out that the CME/CPD provider skill sets will have to be broadened significantly and that clinical faculty need training in effective CPD methods. Those in roles similar to Ms. Brown’s will eventually have techniques, methods, and support systems to assist them with this task.
In a comprehensive CPD system, proven techniques and methods would be identified and disseminated systematically to provide the greatest benefit for the investment. Mechanisms for spreading effective learning methods could take a number of forms. Descriptive reports detailing these methods could be distributed widely to CPD providers and health professionals interested in advancing training. Alternatively, effective CPD methods could be taught by qualified CPD providers to other providers. This would require a much more coordinated effort of training and evaluation than currently exists among CPD policy makers, planners, and evaluators, but such coordination would greatly facilitate the dissemination of CPD advances and eventually be of great benefit to patients and clinicians.

With a framework of CPD research and practice improvement, CPD providers will progressively increase their adherence to evidence-based CPD and surveillance data and contribute knowledge regarding CPD, improvement, and patient safety. An innovative e-health infrastructure can provide this opportunity through a variety of methods. For example, multimethod educational materials and electronic newsletters could support just-in-time learning; social networking environments such as Facebook and Twitter could promote tacit knowledge acquisition and cocreation of clinical knowledge, increasing opportunities to engage in electronic communities of practice. Simulations could also be used to train
individuals and teams in disease management techniques. As technology advances, so, too, do to the opportunities for e-learning.

In a better CPD system, schools, universities, and colleges would offer professional degrees or certificates with curricula designed to dramatically improve health professions education. Continuous learning—a much more dynamic approach to evidence development and application—would take full advantage of newer information technology to implement innovations. Programs and institutions dedicated to continuous learning and health care improvement would help the CPD system develop by providing a stable infrastructure and learning environment. Such institutions would house faculty expert in CPD. It is conceivable that many health professionals would want to learn in a specialized institution dedicated to developing comprehensive and integrated CPD programs, rather than collecting credits in a piecemeal and disjointed fashion. If these CPD programs were structured to provide premier educational opportunities, the professional drive to achieve excellence would likely also spur health professionals to enroll. Further, involvement in a community of professional learners and teachers to help individual practitioners advance would be a strong incentive for clinician enrollment, especially if the knowledge and skills they gained could be tied to improving the economics of their practice and improving the value of their care. As centers of CPD activity and scholarship, these institutions would be ideal vehicles to pilot-test and assess effective CPD curricula by providing reliable contexts for
implementation and evaluation. Additionally, institutional structures for CPD could provide new levels of visibility and accountability for CPD and its resultant outcomes for learning, although health professionals would be responsible for their own learning and performance outcomes.

(Institute of Medicine, 2009b, pp. 80-81)

MARTHA: What about the providers themselves, in terms of now we have our certification ability, and someone mentioned that why isn’t education pushed in with the quality improvement department or whoever is doing that. And like you said a lot of us aren’t trained, or wouldn’t know about content. We’re just there to make sure that the file is complete so when we have our survey, we pass. So I think that’s sort of an interesting piece too in this particular field.

Yeah, first thing to say some departments and offices have begun to merge; so CME and CQI. Kaiser’s done it. Kaiser Northwest has pulled it together. I can’t remember what they call the unit. But it takes their details about their community based docs, and are they prescribing too many antibiotics for upper respiratory tract infections where they don’t work. And if that’s the case, they send a detailer out. The detailer says “I looked at your profile doctor, and it seems to me you’re prescribing a lot of penicillin to five year olds with viral throats. Did you do a throat swab?” The doctor says, “Well no I don’t.” “Well if you think of these five signs of strep throat for which penicillin would be useful. Here’s a little reminder card so you can look for those five signs. And here’s a strep kit. So if you’re really interested and feel you need it, this is a 24 hour return. Here’s a tool for you to use. And I’m going to come back in three months and visit with you. This is educational, doesn’t count for anything, but it’s educational. And I’d like to have your feedback. I hope you don’t feel like I’m intruding in your practice. I’m a pharmacist and I’m trained to do this.” It’s beginning to happen, nowhere near the speed I think it should happen of course. But it’s not. (Laughs) I think a part of it is to make sure that folks like us go to the Alliance for CME meeting, and the Society for Academic CME and all the other things like this kind of session, and the quality improvement one we did two weeks ago. So there’s a lot more like that, and I see more and more people doing it. We on our part are doing a lot more of that so I think that’s useful. I also think you don’t have to do it all. I never did it all. I had a little team around me, and the team would include the quality improvement person for my local hospital. So we had our quality assurance data kind of presented to us, and we developed the rounds and the informatics person there. So it was a little logistical committee. But you also need buy in for you.

(Mr. Blue)
Executive Summary reviewed their vision for continuing education and lifelong learning with an overview of the 30 recommendations put forth. The four key areas for analysis and recommendation were continuing education methods, interprofessional education, lifelong learning and workplace learning. Of greatest interest here was the continuing education methods that CME providers will be tasked to implement and facilitate.

While the Expert Panel and writing groups reviewed the literature, discussed the implications of their findings, and developed extensive recommendations, a vision was created for the future. This future for health professional lifelong learning places greater emphasis on interprofessional education and practice, preparation and assessment of graduates with skills that support lifelong learning; increased diversity in continuing education methods and self-learning opportunities; greater use of technologies to deliver evidence-based information and assess changes in practice; and a focus on ways in which this vision could be applied in the workplace setting. The recommendations that arose from this process provide a path for achieving this vision which we believe is necessary to address many of the issues currently facing the country’s healthcare system.

Continuing Education Methods

Classroom education (meetings, conferences, rounds, courses, and in-service training) is a tradition among health professionals. Most of these programs employ didactic methods, demonstrated to be effective at
transmitting new knowledge or delivering updates, but with little evidence that they produce change in the practice of health professionals. Newer and possibly more effective models are explored. Beyond classroom education there is a host of broadly defined but under-utilized educational interventions that exist which employ pro-active methods and strategies to effect learning and change in health professionals. Support from the Expert Panel for these methods was widespread.

(Association of American Medical Colleges and the American Association of Colleges of Nursing, 2010, pp. 5-6)

**Technology.** The Lifelong Learning in Medicine and Nursing Final Conference Report also discussed the role of technology in learning. They referred to the IOM 2003 report, *Health Professions Education: a Bridge to Quality*, which called on the health professions to look at how professionals would be educated in the future.

Despite the promulgation of these and other reports and their recommendations, work remains to be done regarding the methods and formats of continuing education, interprofessional education, and preparing future practitioners for lifelong learning to address the shifts in the nation’s patient population, growing complexity in the healthcare system, and exponential growth of knowledge and advances in technology, biomedical, and related fields. (Association of American Medical Colleges and the American Association of Colleges of Nursing, 2010, pp. 8-9)
Recognizing that the overlapping, broad concepts of continuing education and lifelong learning deserve a variety of perspectives, Expert Panel consensus developed around five major themes … In addition to these five major areas of focus, several important, cross-thematic considerations were agreed upon in broadening the conceptualization of continuing education and lifelong learning. These considerations are presented here as necessary ingredients in the reconceptualization of CE and lifelong learning:

A broader definition of continuing education

- in particular the acronyms CME and CNE used by medicine and nursing respectively appear to lead the reader to a more traditional and less broad understanding of the field

- including only ‘formal’ or ‘traditional’ CE appears to limit the use of the term, leading to confusion relative to credit systems, and impeding innovative thinking related to CE

- specificity is needed regarding the type of educational/learning method or intervention;

  • Incorporation of the principles, recommendations and messages of this report into basic or undergraduate health professional training; and

  • Application of information technology to each of the five focus areas.

The need for ongoing learning throughout a health professional’s career was widely supported; however, there was consensus among the Expert Panel that a simple readjustment of current polices and thinking regarding CE was insufficient to address healthcare system needs, reforms critical to improving care gaps, and concerns about the state of American healthcare, matching the conclusions of others (pp. 16-17).
The expert panel from the conference envisioned that health professionals’ lifelong learning would encompass, in part, “[n]ewly developed and tested technologies are used to deliver up-to-date, evidence-based information directly to health professionals in all practice settings and to document changes in practice and patient care outcomes” (p. 23). Experts in the current study concurred with the conference panel and are represented by the perspectives of Mr. Green, Ms. Amber and Mr. White in the following excerpts.

Lots more use of technology. We’re going to get to a point where people are going to expect some kind of technology component, like is there something online I can do? Something more I can learn, just like when LCD projectors started replacing slide projectors. At first, it was a novelty, and then it became a requirement. When do you ever have a speaker now come and they don’t have a PowerPoint presentation? Could you do something else interesting? (Laughs) Bring some props, or do a demonstration.

I saw a demonstration a few weeks ago, a virtual patient. There’s this company, a CME company that’s working with a gaming company. This was fabulous. You enter the doctor’s office, you go back to the examination room, and you see the patient, and you see the patient in 3-D in various angles, and you can query questions to the patient. They’ve already programmed in the patient answers; all sorts of responses to questions that are likely to be asked. Then you can click a button and hear an expert comment on what the patient just said. Then you can check out what peers have suggested might be the diagnosis and the treatment, whatever. (Mr. Green)

Technology; there seems to be some very cool dynamics, electronic delivery. There are a number of companies out there with some really interesting technology that have virtual offices, and vision trees and patients coming in and out, access to data, well hypothetical data, but still technology is really important for learning … Aligning with hospitals, academic medical centers, and associations are probably the key areas of employment or opportunity because I don’t see where medical education communication companies will have since they don’t have direct access to patients, data or care, they become facilitators and important ones. But it behooves those groups to really think about aligning with those other organizations that do have direct contact with patients. So I think positioning yourself as you are with hospital or medical center, learning as much as you can about the research to medical education. We just got the new JCEHP in. I myself am just devouring it, two or three times taking it with me on every plane ride, and trying to learn from the experience of others. That would be helpful. (Ms. Amber)
Another factor here that we sort of talked about is our CME leaders developing the types of media approaches that are going to work in the future; that’s the younger generation coming out. It’s moving toward e-learning. I don’t think we want to get away from group meetings. I think they’re very important for a number of reasons, and they’re very cost effective for getting information out, and the tradition of going is a good one because you never know when you might find a pearl somewhere even though you don’t care about that subject at Grand Rounds this month or week. You broaden your knowledge. I think for any internist that’s terribly important. I was a gastroenterologist by training and internal medicine was my background. If I didn’t know what was going on at least a little bit in hematology and endocrinology, I couldn’t do my job as well either. So I think that the conferences have a role, but getting ready for a new generation and leading our current docs into this I think it’s a different era now than when I last looked at it because doctors probably know how to use computers. (Mr. White)

Technology was addressed in the IOM report on redesigning continuing education and described it as an effective tool not only to collect data but also to create a platform for educational interventions. Recommendation 5 involved the use of data in CPD as well as the creation of standardized electronic portfolios.

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. (Institute of Medicine, 2009b, p. 7)
Summary of Themes Question Four – What is the Future of CME?

**Funding.** A successful CME program will be defined on how well we affect physician competence and performance as well as patient health status according to Mr. Gray. However, the anticipated decrease in commercial support will make it difficult to provide the accredited CME required to impact physician competence and performance. We may see more CME offered without credit. With the advance of technology, the resources to fund it for point of care educational interventions are in question. Mr. Blue says we will have to convince administrations to expend monies to assist with education based on data. Increased block grants, but not blind pools, are likely to increase as collaboration increases among providers. Mr. Red recommends balanced funding – using a variety of sources in combination with commercial support.

The IOM conflict of interest report was presented to further reveal the influence that funding from commercial support and the association conflict of interest will have on medical research, education, practice and development of guidelines based on the available evidence. The recommendations specific to CME were presented.

**Providers.** The future of CME providers and CME professionals, from Ms. Amber’s perspective, may be toward facilitators of maintenance of certification or competency who will need to be professional educators able to structure leaning activities that will translation into practice. This will require a higher skill level, ability to research and glean information from other successful professions. Mr. Black agreed that providers will change as the responsibility to effect change in
physician competence and performance increases. The ability to absorb new information and coach CME faculty will also be essential according to Ms. Brown. The continuing professional development of providers was mentioned by Mr. Blue as an important initiative.

The IOM committee for redesigning education reiterated the need to continuing professional development not only for providers but faculty too as mentioned by Ms. Brown. Suggestions for systematic identification and dissemination of effective and proven educational techniques were outlined. Recommendations for implementation methods to effect change in learning and change in the health professions were also provided in the Lifelong learning in Medical and Nursing Final Conference Report.

**Technology.** Technology is vital in the reconceptualization of continuing education. The lifelong learning conference report places technology in all five of its focus areas. Further, the IOM report on redesigning continuing education described it as an effective tool for data collection and to create platforms for educational interventions. Experts in the current study anticipate technology to be implemented for simulations, virtual patient experiences based on hypothetical data reflecting today’s and tomorrow’s professional practice, and a variety of e-learning applications.

*What haven’t I asked? Or, is there anything else you would like to add at this time?*

An open-ended closing question was posed to ensure that significant perspectives from each participant had been captured. The three themes that emerged accordingly related to Performance Improvement CME, CME providers, and accreditation.
**Performance Improvement-CME.** Performance Improvement CME (PI-CME) is the “gold standard” that CME providers are expected to demonstrate in order to maintain their accreditation. The problem, as mentioned by the participants, is the ability of the CME providers to grasp the concept of PI-CME, implement CME activities that incorporate performance improvement, identify objectives, develop and measure changes in physician competence, performance, patient outcomes or, ultimately, changes in population health. This can include PI-CME related to process in an office setting or in the inpatient arena.

That to me is one of the greatest opportunities we have as CME providers is to engage somehow in our CME activities ways to say docs you need to see how you work. You need to look at your work, how you do your work, and change the way you do your work. So maybe when a person with diabetes comes into the practice, for a while when they pull that file out and they put it into his file you put a blue sticker on something and everybody knows blue sticker means do a foot exam. Or you tell them to take their shoes off when they go into the room. Or you have them bring the patient monitor for their blood sugars using a red chart where they plot it. You draw lines on their chart showing where they should be and they’re up here and you show them where they are and they begin to say “Oh, I’m supposed to be down here.” Not that the doc doesn’t know it, but there are other things in the system. We kind of need to get ourselves involved in those things. It’s a great opportunity for us to help look at how work is done, not only what you know, but how you go about what you’re doing.

So if you have a CME activity that is a series of conferences on a particular point, treatment of hypertension, then what part of that program needs to be, Doc! Look at how you’re doing this. Look at your work. Here’s how they say the work ought to be done. What work are you doing? Sit down with your staff and have a 30-minute brainstorm about what you’re doing and actually map what you’re doing. You don’t even think of doing that. I’m doing one right now in an OB/GYN practice and one of the partners – they’re young – she’s concerned that she’s not doing her screening for osteoporosis in women of 65 and over that had the risk factors. She knows she doesn’t do it. “Why aren’t you doing it, Amy?” “I just don’t think of it.” So I said we’re going to sit down and map what happens in your practice, or you do this: have your nurse follow three patients through your practice, say when they come in. We’re going to figure out a way she can do that. She cannot not get that bone density screening done.

MARTHA: Could it be as simple as a checklist for patients?
It could be as simple as a checklist. It could be something more major where they buy a piece of equipment for their practice where they’d actually be able to do their testing themselves. It could be that they do a better contract with the people who do the bone density scans and tests and you get your reports back. And not only do you get reports back, but they get where they belong. They get an electronic medical record that actually gets on the record. It could be any number of things, if you think about it to cue them. I had some surgery done on my hand, and they had their papers and they checked this off and “you’re breathing and you don’t smell, you don’t have body odor” whatever all of those things are, and on the right hand corner of his form he had highlighted in magic marker, somebody highlighted the corner with a magic marker and I looked down there on the chart and it said PQRI [Physician Quality Reporting Initiative]. I said “Doc, why are you doing a PQRI?” and he said, “Well this is all part of our process.” I’m on Medicare and a supplement. He said, “We’re involved in trying to meet these incentives. This way when they pull your chart, they see that mark, and they have where they’ll sign highlighted in orange. “I sign that box, there’s no way I can sign it without making sure everything in that box has happened.” He knows it all needs to happen or they won’t get reimbursed. He won’t get their incentive money unless it’s documented. They didn’t go off to some continuing medical education activity to learn about documentation, what they did is they marked their form with an orange box and highlighted it and he has to look at it when he signs it. That is brilliant and they are meeting their incentives. They almost got their incentive last year except for making that one change.

Now if you were a CME provider and you came in and saw that … Look at your practice. Look at what you’re doing. Look at what you’re not doing. “Well, you know, I forget to do that.” So what can you do so that you will not forget it? Why don’t you highlight that in a magic marker? Oh, that’s a good idea.

MARTHA: It would depend on the individual as well. It’s like trying to get all of the protocols and the standing orders in line. Doctor A has to have it this way and Doctor Z has to have it this way. Sometimes they have the standing orders just for this group because that’s how they do it. If they can get them to include everything that needs to be included then that’s okay.

So when you go into Dr. A’s group practice and you find out that they’re not doing something as their CME provider or quality, your question is “How are you doing your work? What are you doing? Is this stuff you don’t know? Are there some things that you can think of that might make it so that you just couldn’t get away with it?” Once we as CME providers engage in those conversations, there’s a different playing field.

To me that’s where we need to be going. It’s going to take somebody other than the medical staff director’s secretary to do that. They’re not dumb. They could do those things. They can monitor whether it is happening, whether they can engage
in it or not and some doc says “I don’t know how to do that and he comes over to the CME director who’s just had that appended to their title because they’re the medical director and says “We can’t figure this out.” And the coordinator is sitting there and he says, “Why don’t you guys do a process map?” And here’s how you do it.

So what do we need CME providers to think about doing? About how we can inject ourselves into quality patient care, patient safety, and what we can do to support physician’s efforts in those areas in terms of patient safety and quality care. Those are areas as CME providers we haven’t traditionally been engaged in because we’ve been doing our one-of meetings with hot coffee and good donuts. (Mr. Gray)

It’s not supposed to be about documentation of activities, it’s supposed to be about activities resulting in learning that took place, or behaviors that followed. I don’t know how you’d substantiate anything without writing it down, but I don’t know it needs to be more than that. For a lot of people, it’s not much more than that. Just let me get the sign in sheets, get the evaluation form, put it in the folder, put it in the right order, have tabs filled out the right way. It makes me crazy.

MARTHA: As a provider then, if I’m supposed to be able in the long run to show a change in patient outcome, how are we going to do that?

I would never put that down as part of my mission statement. The day they require that will be the day that CME ends, that CME ceases to exist.

MARTHA: How far can we go do you think? What you can actually document?

It can definitely go to physician self-report of behavior change. There’s actually in the educational literature quite a bit of research that supports the commitment to change kinds of things that professional groups say that I’m going to do it. Then they will do it to some extent. So you’re looking at proxies for change. We definitely can do that. Occasionally we can have real data that shows the change in behavior like in prescription patterns. Now if you’re in a closed system like Kaiser, you can show actual changes in treatment of patients and in some cases information about their health status following. In open systems right now, I don’t think we can show that. So patient outcomes are very iffy to focus on; physician behaviors, you can do proxies. To go much beyond that, we know chart reviews are very accurate and time consuming, expensive, and invasive. You have all physicians paranoid if it comes to that, you have your IRB stuff to deal with. That’s hard. Population outcomes, never go there, never go there. Sometimes you can do patient outcomes. Sometimes you can show physician behaviors. [colleague] and I both agree that performance improvement is the ultimate form of CME. And I like to call it the most powerful learning technology there is. It’s the most advanced form of self-directed learning there is, to the extent that people actually do performance improvement work. I think you can nail it there. The question is what is acceptable in the mix? And so from an accreditation
standpoint, how many of those do you have to do? The ACCME has been mum on that. They don’t say. Are these proxy things enough? I don’t know. They won’t say, and it makes people very nervous. (Mr. Green)

And that’s one of those areas that’s a classic example of when you take the performance improvement approach to any clinical area, you’ve got to include that as in so many cases as one of the elements. But today’s world of funding things one grant at a time, one activity at a time, rather than a program level type of grant. Often those things are not understood and/or overlooked by commercial supporters. That’s a concern to me. That’s another reason that I think people outside of industry need to decide more about how those funds are used. The issue for the near future remains defining as we think about education differently, the role of the medical specialty society compared to the duty of care provider; you being a hospital, an academic medical center or a medical school. I think Marcia Jackson’s article in JCEHP a couple of years ago where she defined a medical specialty society, I forget the other co-authors, but they had a very much curriculum based approach in terms of a medical specialty society appealed to me, because I thought it defined the role for the future of the medical specialty society which today I see at times medical specialty societies competing with your efforts. Competing with medical schools in a way in the CME world doing the same thing in different settings, but in the new world of PI-CME, it seems like those roles could evolve a little bit differently. I don’t see how a specialty society could ever be integrated with local care and quality initiatives that are at the heart of this new world of CME, CPD. So I don’t have the answer, I’m just reflecting out loud. I’m interested in how that evolves, how the specialty societies might be more involved in identifying the competencies for specialists for example. But they can only carry that so far. It seems to me that in this future state, much more coordination, much more cooperation between different organization types. Because they’re in a better position to define competencies than you would be, but you’re in a better position to incorporate that into actual data driven activities. Those have got to go hand in hand. I don’t see much of that currently. Do you?

That would be interesting so that maybe in the future the alliances become more what the societies working, be they state or national with organizations like yours, and the MECC type world as it declines, as I think it will, becomes much more of that project management execution arm, and a lot less of a cognitive piece. Today it’s still the cognitive, more than it would be in that future state. So I think about things like that. It’ll be interesting in the future to see how that evolves. Even your own state is working with one of your state chapters and a national specialty society would be interesting. Like a cardiovascular one, I think the ACC has state chapters. Maybe they’re regional- the American College of Cardiology. It’s possible they just have regional chapters. It would be interesting to incorporate their competency work, Joe Green’s work for that type of initiative, in the future efforts like that. (Mr. Red)
**Providers.** As evidenced by the response to other interview questions, the experts were concerned with the caliber of CME providers, traditionally viewed as meeting coordinators and file clerks. As the road to maintenance of accreditation becomes more difficult to navigate, current providers will not be prepared to meet the challenge. As stated earlier, the National Commission for Certification of CME Professionals (NC-CME) offers a certification exam for those who meet the eligibility criteria.

Well let’s imagine what would happen if CME just went away. You know the basic question I think is CME valuable. Yeah, I don’t think we want CME to go away. I think we want our physicians to know the latest information, the latest evidence based information. There are a lot of people now who are saying that pharma is going to pull out of funding of CME, they’re going to stop funding, and there’s going to be marketing like you’ve never seen before. And I think that doctors will go to that. I don’t think that’s good. We’ve really got to win this battle and not have them completely exit the scene in terms of funding really good evidence based clinical information for physicians. While there might not be the onrush of every month of blockbuster drug being introduced, doctors have a real need to know how to prescribe medications and use them appropriately. And they shouldn’t be getting that information in a marketing based content in the absence of CME’s. We can’t lose this battle for CME and I really hope that CME won’t become so complex and so bureaucratic that people stop wanting to do it. There are people downstairs in the state of despair. You may be one of them. They’ve really kind of convinced themselves that this is all too complex now, and they can’t do it. What do you think has caused people to become convinced they can no longer do CME?

MARTHA: Well I think what I’m looking at is how to do it differently so you can demonstrate that you’re meeting the minimum standards. I can’t do that with the program I have now. So my barrier is support, both financial and people. The physicians who serve on committees just let me do my thing, and they say “that’s great, go ahead.” It’s a blessing more than anything else. There’s no active participation. And to change the culture of the grand rounds and case conferences and that kind of stuff will be difficult without some sort of other support or buy in by my customers. (Mr. Green)

It’s an exciting time though. You feel like you can almost see it. It’s the emergence of truly a redefined or new profession. To be a part of that is exciting. I’ve been always been an advocate of that when I was on the board of the Alliance. I was one of the few who voted in favor of that in the late 1990’s because maybe it’s some of the influence from someone like Ron Cervero and his writings about the politics of all this so it’s influenced me. That certification is not
needed by leaders of today… they are there and well known. It’s needed by all those folks who are marginalized in their own association or whatever setting they are, even in industry. It’s simply whether the exam is relevant or not, in terms of actual any relevance to competency. But nevertheless, it’s something that helps you become less marginalized, as it’s recognized in your own institution for no other reason than that even if it doesn’t contribute to improve competency. Just the move away from being so politically marginalized I think is healthy, so I am in favor of it even though we all might think of ways we can improve and all the politics with that. But yes, I’m generally in favor of it, although a lot of people have not been.

Even in the industry world, I’ve thought that there probably needs to be mandated if you’re in industry. What so often happens in industry is somebody right out of leaders thinks they can put somebody out of marketing directly into one of these roles with no knowledge, because they have a different orientation about what this all is. If you put that in as a job requirement you immediately build in some safeguards, so at least people with some level of knowledge won’t be replaced with somebody who shouldn’t be in that role. (Mr. Red)

One of our barriers to success and to change, one of the ACCME’s problems is although I love them, the people in the CME system, the heterogeneity of their backgrounds and their skill sets is a real hindrance to the evolution of CME, it really is. And we either have got to stop that and have a better admission process, training process, and preparation process, or we have got to address it and say “We’ve got to bring the skills up of everyone, make us more homogeneous from an ability to deliver, to evaluate, to measure, to participate, to do research, to be strategic, to deal with and have management skills.” We haven’t done a lot about that over the past, in the time since I’ve been in this job. We can’t get any better then, who we are, and we roll out new rules that aren’t rocket science, they’re not really hard, but the world has a seizure over them.

We could say, “Let’s dumb down the expectations.” But we’ll dumb down the expectations, and then organizations like ABMS and Maintenance of Certification or Maintenance of Licensure and the government will all say “To hell with you. We’ll just blow you out of the water.” If we diluted the standards of commercial support, if we took out independence and identification in resolving conflicts of interest, CME would be out of business overnight. The system just wouldn’t tolerate it anymore. So as I know personally what the struggle and the battle is, I came in as a CME dean and didn’t know anything about it. I had to do strategic management, I didn’t know how. I’ve done a leadership institute for continuing professional education - in the mid 80’s at Harvard there was a week long program that I went to, and some of the big leaders in CME (and I didn’t know who any of them were) were there. I went back as faculty the next year, and the year after that and went I came here to take this job… because I needed to enhance my skills to do this job. Then I did a certificate in management at [university], then I started a certificate program in conflict management because
of a lot of things we’re dealing with. So I have the right to say we need to improve ourselves in order to do these jobs better. We need to get better. And I don’t see that as much as I think we should. I’ve been seen people who have been in the business forever doing things exactly the same way forever, and I don’t see the quality. There’s a glimmer of it, in that the quality improvement people are starting to appear more often at CME meetings and inside CME there. They’re getting dragged over from quality into CME by some people who have insight.

What that is just the diluting of the people who haven’t changed. The people who haven’t changed haven’t changed and the minute when we dilute them out 100% then I don’t have anything to worry about. But we need to have expectations of people that are higher. What often happens is because the people who they’re accountable to don’t understand it or get it or don’t know what anything is about. They say, “Well she’s ok, she’s acceptable, she makes noise, she gets her accreditation every time, and she’s presentable so I’ve got no comment.” But they don’t really say “Why isn’t she publishing 23 articles, why isn’t she a leader, why isn’t she on any committees?”

I think anything that creates expectations that just gets people to understand that there are expectations is terrific. It’s a little bit of a cop out in that the world of credentialing of professionals that most of it’s done for immigration purposes where “Can this architect be an architect in this country?” There are tests and performance demonstration things that people have to pass but they started with training and credentials from the country that they lived in. In this system, all they’re doing is starting with a pulse, and the fact that they have a job. That’s the criteria. They’ve survived with this pulse, in this job long enough to be here when it’s time to do this test, and that’s not really certification or credentialing. They usually come hand in hand as, “We’ll give you a test to see if you have the knowledge” but there’s so much imbued in you by training they don’t just let you learn internal medicine and say go do it, and we’re just going to give you a test if you pass the test. You have to do a residency program, demonstrate in the residency program, then go write the test, and the two things together certifies you. (Mr. Black)

**Accreditation.** Although there are many components or elements in CME, providers must adhere to the criteria of the ACCME in order to maintain an approved provider status. Mr. Green and Ms. Brown commented on ACCME at the conclusion of their interviews.

There’s this thing in CME that whatever’s in the folders is what CME was. You know from way back when I worked with a consultant group, we used to talk to people about their cultural statements and in hospitals where they say “we strive to treat every patient with respect.” (laughs) They probably have that on the back
of your name badge. We used to say so if you’ve got that framed and on the wall, and you’ve got that laminated on the back of your card, that means that it can’t breathe; that no oxygen can’t get to it and it’s dead. And all of that happens in the living behaviors, interactions between people. It’s not words on a certificate somewhere. But the whole thing about accreditation ACCME if it’s in the folder, it happened. [A colleague] and I have talked before about setting up a dummy provider and just presenting the ACCME with file folders that represent activities that never happened but meet all the criteria and see if we could get this organization accredited that doesn’t exist anywhere. I don’t see why it couldn’t be accredited? I think they’d pass it.

MARTHA: Yeah, based on what they require.

They no longer require site visit. So just have a video, interview, some Kinko’s somewhere and they are looking the pieces of paper.

MARTHA: Your point is well taken indeed. (Laughs) I don’t know where we’re really headed.

It’s not supposed to be about documentation of activities, it’s supposed to be about activities resulting in learning that took place, or behaviors that followed. I don’t know how you’d substantiate anything without writing it down, but I don’t know it needs to be more than that. For a lot of people, it’s not much more than that. Just let me get the sign in sheets, get the evaluation form, put it in the folder, put it in the right order, have tabs filled out the right way. (Mr. Green)

That’s the other thing that’s happening at the national level is the ACCME is significantly raising their fees, like 100 times—a crazy raise in fees, in terms of the fees that the state medical associations are going to pay for each of the organizations that they accredit. So that’s a huge deal in CME right now is the cost. Again that’s the funding. I think that the way the ACCME looks at it is that you pay for value. You pay for quality. People only value what they have to pay for. Do we want to keep giving CME for free? I don’t know. I think certainly other professions pay for their continuing professional education, and doctors have gotten used to not doing that. Free CME is great but do physicians really value it? The value proposition is they’ve never had to pay for it, so it’s not that valuable to them. Now they need it, but they’re used to getting it for free. I think the ACCME thinks this is expensive. If you’re going to do CME and do it well, you’re going to have to sink some finances into it. It will be interesting to see. Probably fees will go up. I don’t know how much, we’ll see. The ACCME used to be three or four people.

Now it’s twenty-five people or so, I don’t even know how many employees they have now. I think it’s good because it’s elevating, it’s an important thing. Sometimes I think we have to be careful about creating busy work. To me the accreditation system should be less about documentation and more about results.
Less about the paperwork, and more about what actually happens. Whether it’s the educational room, or the computer or whatever the learning setting is going to be. I know there’s a lot of concern that we’re not focused enough on best practice, and we’re more focused on how we document it. I probably won’t be able to remember the quote but Dr. Kopelow from ACCME said “Well we’re concerned about best practice, but documentation is the…” I can’t remember how he said it. He said that best practice is what we want to focus on, but documentation is the way to get to best practice. It was almost like, that really doesn’t make sense. So it is a balancing act between the output and how we got there. And of course we, as accreditors, have to look at is the documentation which is not always exciting. But it is important. It is a balance. We have to be real careful about that balance because we can get too reliant on forms. There needs to be a passion, and enthusiasm, a sense of “oh gosh I’m learning something.” Doctors are turned off by filling out a form, or “Oh I have to do a evaluation form at the end of every activity and if I don’t do it I don’t get my credit.” Well, that is a turn off. It’s a turn off for any educated person. You want the za za zoo, but you don’t want to do a form. I think that’s the best way to kill the enthusiasm. It’s very difficult. What I like to do is learn all the rules so you can forget all the rules. Just make it happen. If you’re going to make great music you have to know the notes and what all the signs and symbols mean. But then you have your passion and have to do it that way. I think that’s a problem that people are having a hard time with, going from focusing on the rules to lets make the magic happen now. That’s the future of CME. We’ve got the rules, we’ve got to learn them all, but then we can forget them and focus on doing great CME, best practices. That’s where we want to be. It’s tough because you have turnover but we have to get there and we will get there, but it’s a question of how long it’s going to take. I think that it’s going to take longer than the ACCME wants it to take. (Ms. Brown)

Summary of Themes - What haven’t I asked? Or, is there anything else you would like to add at this time?

**Performance Improvement-CME.** PI-CME can be completed in outpatient or inpatient settings, in a hospital, in a health care system, or in a group or individual practice. The AMA requirements to earn CME credit for PI-CME are to complete three stages – learning from current, from the application of performance improvement and, finally, from an evaluation of the performance improvement effort.

In terms of funding, Mr. Red notes that educational grants are awarded for one activity at a time, rather than at the program level. The programmatic, systems based approach is not understood and is, therefore, overlooked or simply not considered by
commercial supporters. Mr. Gray sees this as one of the greatest opportunities for providers to connect with physicians and look at how they practice medicine with a focus on quality patient care and patient safety. Mr. Green goes a bit further to say that it is the “ultimate form of CME…the most powerful learning technology there is.”

**Providers.** As presented earlier, the role of CME providers will become very important in the design and delivery of more sophisticated CME. Mr. Green hopes that CME is not so complex and bureaucratic that providers will give up the profession. However, as Mr. Red points out, it is a “redefined or new profession” and national certification is a very useful appraisal to guarantee providers have the appropriate education and qualifications, along with the expertise necessary to oversee quality CME programs.

**Accreditation.** Mr. Green reiterated his view that CME should not equal what is in the activity file. Successful CME brings to light the learning that takes place and the resulting change in behavior. Ms. Brown commented on the high cost of remaining accredited. Her perspectives are parallel Mr. Green’s regarding accreditation systems which should be less about documentation and more about results with a goal of reaching best practice levels.

**Summary**

This chapter presented the data collected via interviews, document review, field notes, and reflective journal, and represented the perspectives of the experts in continuing medical education with whom I spoke as well as experts selected by the Institute of Medicine and those who participated in the Lifelong Learning in Medicine and Nursing Conference. Participant descriptions were in aggregate fashion to protect their identity.
The chapter illustrated each interview setting and the experience. The elements of CME were identified as accreditation, and physician involvement. Factors seen as the most influential were funding, physician involvement, and accreditation. The most significant issue facing CME is its providers and the future will revolve around funding, providers, and the role of technology. The final question posed was “what haven’t I asked or what else would you like to tell add at this time?” Responses focused on PI-CME, providers, and accreditation. Chapter Five summarizes the findings, provides conclusions, outlines implications to practice, and suggests recommendations for future research.
CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The field of medicine, bolstered by clinical research, advances in pharmacology and innovations in both technology and information technology systems, has accelerated faster than practitioners can keep pace. In an effort to ensure the competence and performance of practicing physicians, providers, accredited by ACCME, offer CME. Physician participants rely on these providers to produce educational activities that meet their needs and assist in maintaining or improving competency and performance. That improvement can ultimately enhance the health of their patients and, eventually, the health of the general population.

As a CME provider, I have witnessed significant changes in accreditation guidelines, commercial support, outcome measurement, certification of providers, reform and repositioning initiatives, and advances in technology. However, the perspectives of the interviewed experts and appreciation of their lived experience, as well as the review of documents and recent literature, has broadened my knowledge about the elements, influences, significant issues, and the future of continuing medical education.

Purpose of the Study

The purpose of this study was to describe and explain selected participants’ perspectives on continuing medical education.
I interviewed experts in the field of CME to obtain their perspectives on the current state of affairs of CME and the future of CME. The research questions developed for this project were:

1. What are the major elements of CME?
2. What influences CME?
3. What are the most significant issues in CME?
4. What is the future of CME?

The design of the interview questions elicited information to answer these questions. The researcher summarized the data obtained from the interviews along with direct quotes from the participants. As described in the Chapter Three, the researcher reviewed and coded answers for each question from the transcripts to search for general themes, and infused the data with review documents.

*Document Review*

A document review, which is an unobtrusive method rich in portraying the values and beliefs of the participants, supplemented the interview data, observations, and reflective journal. Documents may include meeting minutes, logs, announcements, formal policy statements, and letters to develop an understanding of the setting or group. Archival data can further supplement the data. Content analysis is a systematic examination of the communications to document patterns. The strength of the content analysis method is that it is unobtrusive and nonreactive. “The researcher determines where the greatest emphasis lies after the data have been gathered. Also, the method is explicit to the reader. Facts can therefore be checked, as can the care with which the analysis has been applied” (Marshall & Rossman, 1995, p. 86). An overview of this
method and references utilized as guides as well as the final list of review documents are provided in Chapter Three.

_Theoretical Framework_

The theoretical framework selected for the current study was constructivism, inclusive of social constructivism. It matches my understanding of how learning occurs and develops. Not only can constructivism explain how learning occurs, it guides teachers/instructors to the most effective instructional techniques. Likewise, it guides providers in selecting techniques, settings, and learning experiences most likely to change physician competence and performance. Physicians learn by comparing outcomes, by discussing patients with their colleagues, by trying new techniques and combinations of medications, and by noting the results for the future. They also learn by listening to national and local opinion leaders, researchers, and their patients. Sometimes learning occurs during hands-on workshops or on the battlefield. Self-reflection and reflective practice are excellent learning experiences, and are especially complementary to performance improvement projects. In short, physicians develop and refine their skills by the constant construction of new knowledge.

The method of interviewing is reflective of social constructivism wherein the researcher and the participant dialogue and interact, and negotiate meaning or refine understanding by contrasting personal perspectives. This was demonstrated in the presentation and analysis of data in the current study as there was a constant comparison of perspectives between the researcher and the participants and between participants via the transcripts. This framework consistently supported the research method and data
analysis which reflects the learning that takes place in medicine and that which occurs in
the interview process.

The perspectives expressed certainly ascribed meaning to the participants lived
experiences and provided a more thorough understanding of their role in the continuing
medical education community and beyond. As a result of the knowledge gained about
the field within which I work, observation of qualities, characteristics and/or skills
observed that I would like to emulate and ideas for future pursuits as a CME professional
and researcher, this research may be termed as “studying up.” The experts were receptive
to participating in the study, much to my delight, and proved to be gracious, open, funny,
insightful, opinionated, informative…and the list goes on. Not only that, but I have had
the opportunity to see all of them in the role of instructor or presenter at professional
meetings. All of these were an open invitation to continue pursuing my professional
goals and one day joining them in the level of “expert.”

Summary of Findings

Question One - What are the major elements of CME?

There are many segments of CME in terms of providers, such as community
hospitals, academic settings, professional societies, state medical associations, and
MECCs, and many steps in the development and implementation of each CME activity
that it was sometimes difficult for participants to answer this question. However, the
themes were accreditation and physician involvement. Figure 1 illustrates these findings.
Figure 2. Question One – What are the major elements of CME?

Either the ACCME or state medical association awards accreditation to providers at a national or regional level. The mission of ACCME is the “identification, development, and promotion of standards for quality continuing medical education (CME) utilized by physicians in their maintenance of competence and incorporation of new knowledge to improve quality medical care for patients and their communities” (Accreditation Council for Continuing Medical Education, 2008). Criteria are set for providers to become accredited and surveyed periodically to ensure they still meet the criteria. This requires providers to keep detailed files on each activity, series, or conference offered. Although some participants considered this absolutely necessary, others deemed the oversight unyielding, thereby not allowing providers enough leeway to produce continuing education that was mission based and focused on patient outcomes via progressive methodologies. The IOM report, Redesigning Continuing Education in
the Health Professions, noted this focus on regulatory requirements and suggested it would be preferable to concentrate on the identification of knowledge gaps and the development of educational interventions to fill those gaps. Variations in regulation contribute to “inconsistent learning and conflict with efforts to achieve high levels of competence and practice for every health professional” (Institute of Medicine, 2009b, p. 3).

The second theme was physician involvement, inclusive of physician participation in the planning process, attendance, and support of CME initiatives. Involvement at the physician level is crucial to a successful CME program because their knowledge, expertise, and front line work experience are necessary to develop educational initiatives to meet the needs of their colleagues and to close knowledge gaps. The IOM recommended establishing a Continuing Professional Development Institute to assist in the redesign continuing education in the health professions; the Lifelong Learning in Medicine and Nursing Conference findings also promoted team based education and practice. The Lifelong Learning vision included using outcome based continuing education methods that linked education to delivery of care. Both initiatives should promote the direct participation of physicians in the educational process and promote interdisciplinary, team based patient care.

Question Two - What influences CME?

The most influential factors in CME were identified as funding, physician involvement, and accreditation. The themes are represented in Figure 2.
Figure 3. Question Two – What Influences CME?

The method by which continuing medical education is financed (physicians registration fees, educational grants, academic institutions, medical centers and hospitals, independent medical education companies or foundations) served as the definition of funding in this instance. Commercial support and the conflicts of interest that arise from that source of funding have come under scrutiny by the federal government as a result of their concern for undue influence on prescribing patterns and use of devices by physicians, thus increasing market share for the commercial entity. Marketing and accredited education need to be separate. Educational activities should be free of commercial influence and bias.

Funding is influential because many accredited providers depend on commercial support and are not going to be able to finance CME without it, consequently reducing opportunities for physicians to participate in this important aspect of their practice.
Although the ACCME implemented updated standards for commercial support in 2006 in an effort to improve transparency and eliminate conflict of interest, the recent IOM reports on *Conflict of Interest in Medical Research, Education, and Practice* and *Redesigning Continuing Education in the Health Professions* took issue with the funding mechanisms and called for standardized procedures and conflict of interest guidelines. (Institute of Medicine, 2009a; Institute of Medicine, 2009b). Recommendation 5.3 from the conflict of interest report specifically directed stakeholders to propose a new system of funding CME within 24 months of the reports publication that was “free of industry influence, enhances public trust in the integrity of the system, and provides high-quality education” (p. 12). In turn, accreditation organizations should design standards in an effort to ensure compliance. Hopefully, accreditation organizations in all of the health professions will work to develop parallel standards across disciplines.

To further ensure this separation, Recommendation 6.2 stated pharmaceutical, medical device, and biotechnology companies should already have policies and practices in place that prohibited providing physicians with gifts, meals, drug samples (except for use by patients who lack financial access to medications), or other similar items of material value and against asking physicians to be authors of ghostwritten materials … Companies should not involve physicians and patients in marketing projects that are presented as clinical research. (p. S15-16)

Combined, these efforts are 180 degrees from elaborate CME conferences financially supported by the marketing divisions of pharmaceutical companies in the not so distant past. Frequently, these included food and beverage, resort activities and, as a sidebar,
CME activities. Implementation of these recommendations along with others presented in the *Conflict of Interest in Medical Research, Education, and Practice* report will go a long way to assure lack of undue influence of physicians by commercial entities.

Continuing medical education “for physicians by physicians” as described by Ms. Brown is a not a new concept. Physician involvement is a necessity in the design, implementation, and evaluation of CME activities in order to be effective and valued by the target audience, physicians. Their preferences and desires are crucial to the CME provider in order to offer the kinds of activities that physicians find worthwhile. CME can assist physicians in providing better care for their patients to whom they are accountable and who sustain their practice. Physicians are also interested in feedback and comparison of their practice patterns. CME and PI-CME can play a critical role in providing this information to physicians.

Another uncovered aspect of physician involvement was the importance of their participation in the treatment team. The team has changed over time to include not only physicians and nurses but physician extenders (nurse practitioners and physician assistants) as well as pharmacists, dieticians, and a variety of therapists who must work together in order to provide efficient and effective care. Communication and continuing education are keys to their success. The *Lifelong Learning in Medicine and Nursing Final Conference Report* contained 30 recommendations in the four key areas of continuing education methods, interprofessional education, lifelong learning, and workplace learning, all of which included physicians. Based on the literature reviewed, interprofessional education has merit and can have an impact particularly in primary care, geriatrics and other specialized areas. Thus there is evidence to support simultaneous and
collaborative education of new and practicing professionals (Association of American Medical Colleges and the American Association of Colleges of Nursing, 2010). IOM’s 
*Redesigning Continuing Education in the Health Professions* called for a focused effort to provide interdisciplinary design and evaluation of education activities (Institute of Medicine, 2009b).

Accreditation, by its nature, is an influence on CME. Simply put, the American Medical Association does not recognize continuing medical education activities unless provided by an accredited organization. The ACCME oversees accreditation in the United States, in a tiered style, by state medical associations.

Within the United States, the AMA only authorizes organizations that are accredited by the Accreditation Council for Continuing Medical Education (ACCME) or by a state medical society recognized by the ACCME Committee for Review and Recognition (CRR) to designate and award *AMA PRA Category 1 Credit(s)*™ to physicians. The AMA, on behalf of its physician constituency, also maintains international relationships for certain educational activities that meet *AMA PRA* standards.

In the 1960s, the AMA started to recognize CME programs in hospitals and other health care organizations for the purpose of encouraging quality CME. In 1977 the AMA responded to the rapidly growing number of accredited CME programs by inviting other organizations to form a national accrediting body, which eventually evolved into the ACCME in 1981. The ACCME currently includes seven member organizations: the AMA, American Board of Medical Specialties, American Hospital
Association, Association for Hospital Medical Education, Association of American Medical Colleges, Council of Medical Specialty Societies, and Federation of State Medical Boards. Today the ACCME directly, or through the recognized state medical societies, accredits more than 2,500 U.S.-based organizations to provide CME. For accredited providers who choose to designate their activities for *AMA PRA Category I Credit(s)*™

high quality program content is expected, in compliance with the standards outlined in this booklet. The strength of the *AMA PRA* credit system depends on the complementary roles of the ACCME essential elements and standards for commercial support, and the *AMA PRA* requirements. Both organizations work diligently to coordinate the development of their respective systems in a manner that seamlessly serves providers’ and physicians’ educational needs. This effort ensures the integrity and effectiveness of the *AMA PRA Category I Credit(s)*™ system. (American Medical Association, 2006, pp. 1-2)

Due to its mandatory nature, there are varied perspectives about ACCME. On the negative side, some perceive it to be a micromanaging organization that views CME as whatever is in the activity files of the provider. All the “i’s” must be dotted and “t’s” crossed in order to maintain accredited provider status. Providers do not have the skill set to understand the complexity of the focus on PI-CME, physician competence, performance, and patient outcome expectations. Within the confines of the field, it is too influential.
On the positive side is the recognition the PI-CME, as introduced by the AMA in 2006, has been adopted as the highest degree of provider performance and can help providers achieve accreditation with commendation by the ACCME. This focus also forces providers to practice their mission and adhere to their values. One could describe the polarity of this situation as those who embrace the opportunity to be held accountable versus others who say the task is too demanding and too difficult to measure.

*Question Three - What are the most significant issues in CME?*

CME providers were the most significant issue at the time of this study based on a number of factors. First, they often have multiple roles, which make it difficult to concentrate on the complexity of accreditation let alone implementation of quality educational programming aimed at improving physician competency, performance, and patient health with the ultimate goal of affecting community health. Second, providers have limited access to data, limited funds, lack of training in adult education principles and practices, and few professional development opportunities. Although the ACME offers an annual conference and online resources for their members, some are cost prohibitive to those who are already working on a shoestring budget. Third, as pointed out by the *Lifelong Learning in Medicine and Nursing Final Conference Report* (2010), providers should use newer and probably more effective education delivery models that would produce change in physician practice. Many will have a difficult time transitioning from the traditional didactic method to these more advanced methods. Fourth, the NC-CME offers the new certification exam; however, the experience, education, and continuing professional development required to take the exam are beyond the reach of some providers.
The experts look beyond the current state of affairs to a time when providers will be professional educators who are motivated to pursue continuing professional development and engage in conversations with their constituents and their quality management colleagues to provide excellent education as measured by local standards, not by national ones. Providers would take the lead in offering innovative programming. They would help institute external standards while adding value. As stated by Mr. Red, it’s going to be so increasingly clear for all of us that if you’re not contributing in a cost effective way to improve health care quality and patient safety; if you’re not doing one of those two things in a measurable effective way, you’ll be largely irrelevant. You’ll be a cost to the system. We need to be an investment within the system. So it’ll be an interesting couple of years with a lot of opportunity. I think it’ll emerge.

*Question Four – What is the future of CME?*

In 1992, Davis, Fink and Watts contributed a chapter entitled “What Lies Ahead?” to the book *Continuing Medical Education A Primer, Second Edition*. They noted that traditional CME formats, including didactic lectures and reading, had such a precedent that they impeded efforts to introduce practice- or problem-based CME activities. They anticipated that the physicians currently in training might support progressive practice- or problem-based CME. The authors noted several changes already underway that might drive important changes “in the content and methods of CME over the years ahead” (Rosof & Felch, 1992, p. 223). Those changes included:

- Quality Assurance
- Practice Arrangement and Cost Considerations
• Linking CME to Physician and Patient Outcomes

• The Definition and Scope of CME

• The Political Environment

Davis, Fink and Watts added,

The future almost certainly holds more structured, more data-based, more outcome-related CME, and a growing understanding of the nature and context of physician learning and change. As this occurs, the concept of individual physician responsibility for professional, lifelong learning, integrated to practice, will surely be strengthened. (p. 226)

The outlook for CME is changing and the credit goes to the contributors and editors of that text along with their respective colleagues and the stakeholders of CME who persevered and advocated for the changes they envisioned.

The future of CME as envisioned by this group of experts in 2009 is in Figure 3. It will depend on technology, professional CME providers, and the funding available for the provision of CME.
Figure 4. Question Four – What is the future of CME?

As can be seen from responses to other questions, the funding for continuing medical education is at a major cross road. The IOM directed stakeholders to create a new system for funding quality educational programs by 2011 that is free of industry influence and, simultaneously, earn public trust. The experts in this study questioned whether industry would fund CME or whether stakeholders would embrace a model of pooled funds. Perhaps block grants, especially useful for non-drug related topics not typically funded or PI-CME projects, will become the primary avenue of commercial support. Another scenario may be that we create quality education that does not offer continuing education credit. The question remains then … how will interactive series, workshops, electronic newsletters peer group initiatives, and didactic lecture from opinion leaders or national experts be funded?
In 2009, Robert Orsetti wrote an editorial for *CE Measure* in which he introduced Patrick Kelly, past President of Pfizer US Pharmaceuticals, whose paper was delivered at the 16th Annual Conference of the National Task Force on CME Provider/Industry Collaboration in 2005 as the distinguished *Shickman Lecture*. The paper, entitled *Let Science Prevail: Embracing the Ultimate CME Strategy*, concluded with the following thoughts:

Conflicts of interest can always be found by those who look hard enough, but for the sake of patients and the healthcare delivery system that serves them, more time and energy must be devoted to looking for the confluences of interest between CME and the pharmaceutical industry. The greatest of these confluences is a shared interest in information, objective, insightful, and timely scientific and medical information that expands our awareness, increases our options, and advances the cause of quality healthcare. Recognition of shared goals and interests is crucial, because just as the success of CME depends on the free movement of the best information available, so too does our ability to shape a healthier US healthcare system. We must work together to ensure that science—in the form of the free movement of the best information available—does prevail.

(Kelly, 2009, p. 15)

Orsetti (2009) noted that the debate on commercial support continued for the next four years. His concluding editorial statement revealed that “CME and patient care will surely benefit when debate and criticism of the appropriateness of commercial support
cease and all parties agree to collaborate within the existing guidelines to improve content and delivery systems, while strengthening them as needed” (p. 11).

The debate continues as the various stakeholders (regulatory agencies, government agencies and their committees, academic medical centers, providers and their professional associations, medical specialty societies, state and national medical associations, etc.) jockey for position to sustain themselves and uphold the honorable intention of providing quality, unbiased, evidence-based continuing medical education. Mr. Gray predicts the future of CME will depend on how well we affect physician competence, performance, and patient health.

Mr. Black and Ms. Amber, respectively, summarized the future of providers. One of our barriers to success and to change is the people in the CME system, the heterogeneity of their backgrounds and their skill sets is a real hindrance to the evolution of CME, it really is. And we either have got to stop that and have a better admission process, training process, and preparation process, or we have got to address it and say “We’ve got to bring the skills up of everyone, make us more homogeneous from an ability to deliver, to evaluate, to measure, to participate, to do research, to be strategic, to deal with and have management skills.

You have to demonstrate competency not only in knowledge but in skill set. And all the way up that paradigm of knowing what to do, knowing how to do it, and integrating it into your practice in a daily fashion. I see where there’s going to be a need for professional educators to structure the education for the learner, to take the new science and pull it together in a way that can be taught and understood.
and translated, translational practice. So there’s still going to be a need for educators. I think we’re going to need a higher skill level, and we’re going to need access to the data.

CME providers will need to be closer to patients, have access to data, and engage physicians. They will need not only to participate in the change process but also to facilitate it utilizing a sophisticated skill set. Practice based CME would be ideal perhaps along with working toward the maintenance of certification or competency CME as Ms. Amber pointed out. They must meet Joint Commission standards. Providers should design and implement innovative educational initiatives with measureable outcomes based on physician competence or performance and patient health. They should exhibit professionalism and competency on a regular basis, accentuated by research activity and leadership roles. The value of accredited continuing medical education, as opposed to marketing based education, should prove successful.

Technology is a component of CME’s future with the strength to make a significant impact on how, where and when CME is viable. There are only as many options as there are creative providers and information and communication technology professionals. Learning can take place in a synchronous or asynchronous environment or in a hybrid situation with e-learning and a classroom or face-to-face component. The range includes

- Point-of-care (Just-in-time learning)
- Virtual Office
- Simulations
- Computer based
• Web based
• Interactive webcasting with imaging
• Electronic newsletters
• Social networking – Facebook and Twitter
• Pod casting
• Satellite
• Cable TV
• Closed Circuit TV
• CD/DVD
• Digital

The *Lifelong Learning in Medicine and Nursing* report encouraged the application of technology in all five of its focus areas. They noted that technology can deliver up-to-date evidence based information to all practice settings and to document change (Association of American Medical Colleges and the American Association of Colleges of Nursing, 2010). IOM’s report, *Redesigning Continuing Education in Health Professions*, also urged the use of technology to collect data and as a platform for educational interventions. The committee members considered the e-health infrastructure of the future for evidence-based and surveillance data. Examples they provided were electronic newsletters and multi-method education to support just-in-time learning, Facebook and Twitter for tacit knowledge acquisition and co-creation of clinical knowledge, electronic communities of practice, and simulations to learn diagnostic and management techniques (Institute of Medicine, 2009b).
What haven’t I asked? Or, is there anything else you would like to add at this time?

PI-CME, providers, and accreditation were the themes uncovered with this closing question as shown in Figure 5.

The participants in the current study covered the role of providers and accreditation issues in previous research questions, including responses to this question. PI-CME, however, warrants additional discussion because it is where providers struggle to be competent to meet the expectations of ACCME. Figure 6 below depicts the traditional and performance improvement levels of CME.
Figure 6. Performance Improvement CME

Mr. Green stated:

You know it’s kind of like do you think your life is going to be one series of exhilarating adventures after another? Or is it going to be mostly kind of steady with peaks you know? I think that’s how you should think about your CME. And for most things, putting a huge amount of effort into it isn’t really necessary. And just like every couple of years, do some slam bang, whammer jammer, you know, innovative CME thing. That’s the kind of thing we want to get involved in. And so we want to bring these external resources to you, so you don’t really have a staff of one, but a staff of four or five to do these things. But that’s not going to be your everyday reality, given the kind of shop that you’re in. And you go and you talk to people at the academic medical centers with staffs of 14-16 and it’s kind of the same thing there too.
The question is what is acceptable in the mix? And so from an accreditation standpoint, how many if these do you have to do? The ACCME has been mum on that. They don’t say. Are these proxy things enough? I don’t know. They won’t say, and it makes people very nervous.

It is no surprise that providers are nervous about being able to meet accreditation expectations and have trouble embracing the concept. However, the experts offered insight on what kinds of performance improvement activities might be doable and effective. For example, examining how physicians conduct their daily routine and making changes can affect not only their efficiency and effectiveness but can also improve patient health and promote patient safety. Skilled CME providers can coach physicians in mapping out what happens in the office and determine what steps they miss, thus correcting the process and improving patient care. Concrete examples are the diabetic foot exams and completing an osteoporosis-screening exam. The implementation of electronic medical records will enhance this type of process. Another area where process improvement is to meet reimbursement incentives by properly documenting the patients chart based on guidelines and protocols as exemplified by the Center for Medicare & Medicaid Services Physician Quality Reporting Initiative (PQRI).

Mr. Green recommended implementing PI-CME by measuring commitment to change, behavior change, and, in some instances, change in patient health status.

It can definitely go to physician self-report of behavior change. There’s actually in the educational literature quite a bit of research that supports the commitment to change kinds of things that professional groups say that I’m going to do it. Then they will do it to some extent. So you’re looking at proxies for change. We
definitely can do that. Occasionally we can have real data that shows the change in behavior like in prescription patterns. Now if you’re in a closed system like Kaiser, you can show actual changes in treatment of patients and in some cases information about their health status following. In open systems right now, I don’t think we can show that.

Going much beyond Levels 4 and 5, competence and performance, would require patient chart audits, which are costly to perform, time consuming, and invasive.

Another view was to employ the common PDSA (Plan Do Study Act) model for PI-CME and obtain commercial support for the entire project rather than asking for educational grants for each activity. Mr. Red’s perception was that the pharmaceutical industry does not understand this approach to funding. He questioned how medical specialty societies would be able to conduct PI-CME since they are not close enough to local quality issues. They may need to collaborate with local hospital and academic medical centers that would have data and could identify high-risk, high volume issues. This point was echoed by Nedza (2009), Vice President, American Medical Association Clinical Quality and Patient Safety Member, in her article “All Health Care Quality is Local: The Role of PI CME in Achieving Sustainable Change.”

Just as all politics is local, all health care is local—and so is all QI. PI CME provides a model to enable such analysis and, more important, provides a flexible structure to facilitate changes at the practice level. Although there is room for improvement in the PQRI program, at the core of the PQRI program are performance measures that use Current Procedural Terminology (CPT®) Category II Quality Tracking Codes™
to capture variation. This includes variation based on clinical judgment, patient preferences, patient-specific barriers to compliance and/or system reasons that capture barriers to providing services (e.g., the influenza vaccine was not available to provide recommended vaccination). Work sheets and tools are available that enable the physician, the practice manager, the hospital QI department, and the professional coder and biller to support PI CME data collection.

Although performance measures have been developed to support various federal programs offering individuals and groups incentives to facilitate QI, at the local level one thing remains the same: Physicians still find themselves working within a system that inhibits their ability to practice and provide quality care. The transformation of the health care system will only be successful if national efforts to improve quality enable QI where care is provided. Although policymakers can design systems that facilitate or reward performance measurement, the success of these programs will depend on the ability of physicians to identify opportunities for improvement, the availability of tools that make performance measurement a byproduct of the care process and a commitment that supports continuous efforts to transform care at the practice level. (p. 2)

Conclusions

If taken as a whole, the interview data revealed the themes of accreditation, funding and providers. The experts weighed in on these themes by responding to interview questions which, in turn, answered the research questions.
As alluded to in the Introduction, CME has experienced little change in the past 30 years because its participants were happy with traditional formats of listening to one and done lectures that provided updates or introduced new technology or treatments. These are still important topics and this group of experts does not expect them to stop. However, there has been consistent pressure to move forward into problem-, practice-, evidence-based CME presented in a series with mixed interactive activities combined with didactic or other multi-method interventions that are effective and impact the competence and performance of physicians and, as a result, patient health. This pressure from certain stakeholders and individuals, supported by reports released by the IOM and other influential groups, resulted in directives to change what we are doing. When paired with the ACCME changes in 2006, providers have no other choice than to move forward or lose accreditation.

Providers, then, have a steep hill to climb to prove they are competent and skilled professionals who can deliver quality education in an efficient and economical manner. They may need to return to higher education to pursue college degrees – preferably advanced degrees. Obtaining national certification from NC-CME within in a certain timeframe could be a requirement for employment. Providers need to take advantage of resources available from professional associations such as ACME, SACME, AAMC, and the AMA as well as those in the adult education community.

Accreditation is a set of guidelines and rules “reflecting what is right. It’s not about creating what is right. It’s about reflecting what is right ... [it] needs to be focused on clarifying and improving how people conduct themselves as facilitators of CMC” (Mr. Black). The experts, both in this study and in the greater community, would probably
agree, but some say the focus should be on the provision of quality CME rather than following mandatory guidelines.

The financial support of CME is in limbo, and the CME community had less than 24 months, at the time of this study, to design a new system. Of course, it is unclear what that system will look like and makes it difficult for providers to develop strategic plans. In the interim, we struggle to obtain independent educational grants and prove to our respective institutions that CME is a valuable commodity in the world of health care.

Although his article specifically addressed conflict of interest, Dorman (2010) summarized the current state of affairs in CME and offered some remedies.

Vital signs: Temperature 100.3°F; blood pressure 160/95; heart rate 105 bpm; respiratory rate 28 pm

In health care, providers value tracking a patient’s vital signs. It is these signs that provide a window into the present state of the patient and a quick way to assess if something is wrong. If one were to take the vital signs on most continuing medical education (CME) providers, planners and faculty today, one would likely find that the patient is febrile, hypertensive and tachypneic—that is, the patient has signs and symptoms consistent with systemic inflammatory response syndrome (SIRS). A good clinician, suspecting something amiss and looking to dig further, would typically start by taking a history.

In this case, the patient, a CME provider, would respond that he was enjoying his usual state of good health until media, government and regulatory agencies began to question the veracity of his work and the
transparency of his process. To wit, the recent investigations conducted by
the Senate Finance Committee into relationships between physicians or
medical researchers and pharmaceutical, medical device, and
biotechnology companies have put a great deal of pressure on the entire
CME community. A clinician might trace the true source of this patient’s
malaise to these investigations, and the negative media attention that has
splashed on CME as result.(p. 1)

The remedies for such an ailment are:

1. For the health care industry to embrace the IOM’s recommendations in
   the Conflict of Interest report,

2. For those outside of health care to provide the time needed to collect
data and begin to implement the recommendations

3. Education must be acknowledged as the central core to the health care
   trifold mission of patient care, education, and research

4. Develop a national CME issues agenda and locate required funding

Dorman concludes with “Of course, if that doesn’t work, then my best advice is to take
two aspirin and call me in the morning” (p. 3).

Implications for Practice

As a CME practitioner I see many implications for practice that emerged from
this study, especially in the hospital setting. Although there are many facets of CME,
such as: the physician involved in development but also the primary customer;
commercial entities as a source of funding; and regulators who ensure that everyone
follows the rules, guidelines and laws. However, the CME provider is the one who makes
Practitioners, then, need to consider the following in terms of funding, design and delivery of CME, and continuing professional development.

**Funding.** As described in the current study, the availability of funds from commercial support for CME will continue to dwindle. The health care industry as a whole will continue to struggle with reform and decreased revenues, especially from government entities such as Medicare and Medicaid. CME must be considered a very valuable asset in order to survive in the hospital setting and to receive financial support from the accredited institution. CME professionals will have to demonstrate the ability to provide educational interventions that will support the initiatives of the hospital or health care system in order to request the additional funds that will be needed to support programming at current levels. As an alternative funding source, providers can request assistance from their foundations or request assistance in locating appropriate funding from external foundations. Other resources to consider are hospital vendors outside of the pharmaceutical and device manufacturing realms who are still able to offer donations to the foundation or directly to the institution. In order to reduce expenses, some providers have discontinued giving honorariums to members of their medical staff and have decreased the amount provided to external faculty.

Securing “block grants” granted by commercial supporters and administered by an independent group has recently become an excellent avenue for funding as well as assistance and guidance from the administrator for the CME project. The Physicians’ Institute for Excellence in Medicine based in Georgia is one such administrator. One of their projects has included a partnership and with the Association for Hospital Medical
Education to secure and administer the educational grant for performance improvement CME. A specific group of providers was then asked to apply for a portion of the grant for a local PI-CME project of their choosing. This is an outstanding example of supporting hospital initiatives, using external funding, and improving practice performance.

Another implication based on the findings in the current study is to consider pooling resources with local or regional accredited providers to deliver either didactic or innovative CME activities to meet the needs of the local and regional physicians respectively. This has been the practice called jointly sponsored CME when accredited providers work the non-accredited partners to produce CME conferences, review courses, webinars, internet CME, etc. The same type of partnership can be forged with accredited providers who share the workload and the cost. For accredited providers in the same community with shared medical staff members, this can have the additional advantage of being a physician satisfier when the educational intervention is convenient and applicable at both locations.

**Design and Delivery of CME.** Engaging physicians and involving them in all phases of CME development is the best way to ensure that the right topic is selected and offered at the right time to the right audience. It also helps in demonstrating the value of CME to the medical staff and administration. Designing creative and innovative educational interventions to replace some of the didactic lectures is another way to further engage physicians who may otherwise not participate.

Designing more programs that are truly interdisciplinary in nature will help to build collaboration within and between teams of health care providers. Utilizing the PI-CME
process to demonstrate excellence in CME is important but more importantly it can improve patient care and outcomes. Again, this supports the institutions mission and primary initiatives.

Implementing Just-in-Time/Point-of-care CME utilizing accredited institutions inpatient and outpatient electronic medical records as platforms to launch internet searches of evidence-based sites will be a satisfier to physicians and their patients. Confirmations regarding treatment choices and subsequent decisions are made more quickly and are made at the bedside or exam room. Simply teaching physicians how to use the internet for Just-in-Time/Point-of-care learning will be another satisfier because of the immediate results and the CME credits will be gathered electronically. Facilitating access to e-learning platforms, internet literature searches, access to evidence-based databases and external CME opportunities goes a long way in ensuring continued participation in ongoing CME programming.

Collaboration is an important strategy to implement for a successful CME program. The quality management, technology services, medical staff services, and other departments in the institution can provide expertise, data, and services in the design, delivery, and evaluation of CME. Collaboration with other local institutions to produce CME activities pertinent to community physicians, as mentioned above, would be a major influence on the ability of providers to effect a change in physician behavior. Finally, collaboration with experts reduces the burden on the individual provider to be an expert in every aspect of CME. For example, there are companies whose products have been designed to assist in identifying needs and knowledge or practice gaps, educational design, and outcomes measurement specifically for CME. Although the initial cost may
be significant, theses products and services will offer a large return on investment in a fairly short period of time. They make for a well designed activity based on the gaps and evidence and will have a greater impact on changing physician behavior and measuring that change over time. The other advantage is the adherence to accreditation guidelines and ability to meet and exceed accreditation standards.

**Continuing Professional Development.** When it is established, resources and data from the Continuing Professional Development Institute (per the IOM Committee on Redesigning Continuing Education for Health Professionals) should be utilized. The proposed institute is charged with researching the evaluation and assessment of CPD at various levels. In addition, it is to relate quality improvement data to CPD and describe the linkages between educational intervention, the resulting skill acquisition and their relationship to improved patient care. The result may be new methods and techniques for CPD with a focus of research and outcomes. CME leaders may also want to take the initiative to re-create their CME department personnel structure to reflect the higher educational levels and experience suggested by the Redesigning Continuing Education Committee. This should be inclusive of the pursuit of higher education - preferably advanced degrees. Staff members should be expected to qualify and obtain certification from the NC-CME. These restructuring efforts can be bolstered by taking advantage of resources available from the professional associations such as ACME, SACME, AAMC, AMA as well as adult education associations. Professionals need to subscribe to their respective journals or publications and be active participants in those same organizations. Finally, CME professionals should be expected to conduct research and publish their
findings. Often times this can be based on CME programs that have been creative, innovative and have found ways to impact physician behavior and patient outcomes.

How the Redesigning Continuing Education in the Health Professions recommendations are implemented and what changes in practice result will directly impact practitioners. I anticipate that the required skill set of the provider will be quite different than they are today and that the CME provider will be more innovative and progressive. I expect more emphasis on interdisciplinary education that utilizes a process improvement model and less emphasis on securing funding to bring in a national expert for a didactic presentation.

Adult Education. As discussed in Chapter Two, continuing professional development and education in any profession are rooted in the principles of adult education. As a result, providers in CME need to be well versed in these principles. Conversely, continuing education professionals in other disciplines and those involved in traditional adult education can consider some of the innovative educational interventions that are becoming more common in CME such as the performance improvement model. This could be implemented in any adult education discipline that collects data on process, outcomes, satisfaction, enrollment, retention, etc. For example, the Department of Surgery at Montefiore Medical Center in Bronx, NY was searching for “…Surgical Educators to develop curriculum and implement, analyze and report learner assessment and program evaluation processes for our residency programs” (Personal Communication, June 18, 2010). Certainly they would utilize performance improvement data to help assess the impact of educational interventions on the learners as an outcome measure. Based on the results, they can modify the curriculum to reach the outcomes
they expect. In the same setting, the satisfaction of the resident will be important for recruitment and retention.

Partnering with other CME providers and with other related businesses as suggested above has been well demonstrated in the unique partnerships forged by St. Petersburg College (SPC). In 1927 it was known as St. Petersburg Junior College and transitioned to a four year institution in 2001 (Saint Petersburg College, 2010a). A complete history of SPC can be found online at http://www.spcollege.edu/webcentral/catalog/Current/tradition.htm. Other adult education programs could benefit from considering these types of agreements which certainly exhibit entrepreneurship, resource sharing, and excellence in education. For example, “SPC has partnered with 16 esteemed educational institutions to offer bachelor's and master's degrees in disciplines including business, computer science, hospitality, pharmacy, and physician assistant. This is the first partnership center of its kind in Florida and only one of a handful nationwide” (Saint Petersburg College, 2010c).

In addition, SPC offers customized corporate training and “…offers a wide variety of individual and business related courses. Positioned as a strategic partner for both large and small corporations this versatile department has four main areas of focus, Technology, Professional Development, Licensed Professions, and Business Solutions” (Saint Petersburg College, 2010b). Not only do these programs enhance the local workforce but they could potentially attract corporate employees who may not have previously considered seeking other educational avenues including college and advanced degrees.
Recommendations for Future Research

This study was limited as a result of the number and types of experts that were interviewed and, as a result, the conclusions may be limited. However, the findings from the review documents and the expected implementation of the two IOM Committee recommendations help to reinforce my findings and conclusions. There are a several recommendations for future research based on the limitations as well as the anticipated changes in continuing medical education and its financial future.

Interviewing experts in similar work environments may provide more focused findings that would assist that particular segment of the profession and their respective institutions. These groups are naturally found via the Alliance for Continuing Medical Education member sections including Federal Health Care Educators, Health Care Education Associations, Hospitals Health Systems, Medical Education/Communication Company Alliance (MECCA), Medical Schools, Medical Specialty Societies, Pharmaceutical Alliance for Continuing Medical Education (PACME) and State Medical Societies. Results may identify specific issues for those provider types that were not identified in the current study. For example, funding from this researchers perspective in a Hospital Health Systems setting is problematic at this time due to a continual budget reduction at the department level over the past four to five years, reduced opportunities and more stringent rules for requesting and receiving educational grants from commercial supporters, etc. However, we do have the option of applying for block grants due to membership in the Florida Medical Association and the Association for Hospital Medical Education. Other providers such as Medical Education/Communication Companies would not have that advantage.
A comparison of local (accredited by state medical associations) and national providers (accredited by ACCME) may shed light on how similar or disparate they are in the design, delivery, evaluation, and funding of CME. Do national providers have more resources? Do they have a greater chance for partnerships with other types of companies based on their national accreditation? Since they can provide for national audiences, are the types of interventions different than those offered by local providers?

A prospective longitudinal study looking at the implementation and outcomes of the IOM initiatives for conflict of interest in medicine, the IOM initiative for the redesign of continuing education in the health professions or interdisciplinary lifelong learning as proposed by the AAMC and AACN would be an excellent mechanism to record the history of these initiatives. In addition, the outcomes after about five years could be compared to the original intended outcomes. Were they modified over time? Did the implementation go as planned? What barriers were encountered? What is the future based on the initiatives that were implemented?

Assuming the Continuing Professional Development Institute, as recommended by the IOM’s Redesigning Continuing Education in the Health Professions Committee, comes to fruition; it could be investigated in five to seven years to determine if it achieved the desired design and function. One of the primary functions outlined by the committee is to significantly enhance the research agenda for continuing education in the health professions. Was that accomplished? Was the resulting research translated into practice? Did the research reveal new techniques or methods not previously used in this field? Did it support continuing education as a means to improve the competence and performance of practitioners?
Repeating this study with experts from the same categories in about ten years should reveal significant changes in continuing medical education as compared to the findings in the current study. The role of accreditation, funding, CME provider credentials, technology, performance improvement CME, access to data, partnerships, and collaboration may all have changed, or perhaps some will be different, or some issues may have disappeared. Based on this researcher's experience in the past ten years, the field of CME may transform dramatically in the next ten.

The Dissertation Committee for the current study wondered, “What will it take to get to the top of the pyramid?”, referring to the pyramid presented in Chapter Five as Figure 5 and entitled Performance Improvement CME. Today, providers are working toward moving into the performance improvement levels of that pyramid inclusive of levels four through seven. One of the experts in the current study recommends staying focused on competence and performance as measuring change in patient health and community health is very difficult, expensive, labor intensive, and time consuming. Most providers would not have the resources to successfully measure and demonstrate outcomes in these levels. However, it would be useful to know in about five years how providers are meeting this challenge. Based on the quantity of data collected, is there a difference between a large health system and a rural hospital in their ability to measure outcomes? Can providers demonstrating improvements in patient or community health prove that the PI-CME they implemented had an impact on the ability to facilitate these improvements?

George Miller, MD, whose original pyramid appears in Chapter One as Figure 1, was convinced that educational interventions based on categorical content failed to substantially change physician behavior. Miller called for an evidence-based, student...
centered model called the “Process Model” inclusive of delineating the health needs of the populations served and then studying hospital data in order to improve patient health (see Chapter Two). Acceptance and full implementation of this model has taken about 40 years. Has the process model, more commonly known as PI-CME in this instance, been able to achieve the results that Miller expected? Do hospital based CME and Quality Improvement departments communicate and work together to reach a common goals via educational interventions and process improvement strategies? Are content based interventions worthwhile in the quest to improve patient health?

Technology was one of the themes in the current study specific to Research Question Four – What is the Future of CME? – and a list of possible uses in CME was put forward in Chapter Five. The questions surrounding the future use of technology in CME could represent a robust research study. How can it be utilized? What benefits could e-learning have in medicine? What impact could consistent point-of-care learning (tracked as CME) have on the improved patient health? What other types of technology would be useful in supporting the measurement aspects of activity evaluation, program evaluation, and PI-CME? Can simulations be advanced to better replicate real life scenarios with immediate feedback to the learner? Will the successful completion of simulations or virtual office visits be the preferred measurement for demonstrating improved competence, performance, or even measures for maintenance of certification? How does use of technology in CME compare to its use in other professions engaged in continuing education?
Summary

This chapter reviewed the purpose of the study, offered a brief discussion of how review documents were incorporated in the data collection, and reflected on the theoretical framework guiding the current study. The research findings were summarized and discussed followed by the conclusions. Implications for practice, including those applicable to adult education, were presented and recommendations for future research submitted. The remainder of the manuscript contains the Appendices and References Cited.
Appendices
Appendix A: Sample Letter of Invitation via e-mail

May 13, 2009

Via e-mail to participant

Dear participant:

I am a doctoral candidate in the College of Education at the University of South Florida in Tampa, FL majoring in Educational Program Development with an emphasis in Adult Education. My Dissertation Proposal is entitled Perspectives From the Lived Experience of Continuing Medical Education Experts: A Descriptive Study and the purpose of this study is to describe and explain selected participants perspectives on continuing medical education. I am recruiting volunteers to be interviewed for two one-hour sessions in order to collect data for this qualitative study. I know you have worked in different CME settings and have been very involved at a national level. Your perspectives, especially from your current role, would lend themselves beautifully to this study. Interviews will be conducted at an agreed upon time and place that is convenient for you. I noticed that the [Meeting] is scheduled for [date] in Boston and that you and other prospective participants are scheduled to present at this meeting. If that time frame would be convenient, I am happy to meet you there. Otherwise, another time and location can be arranged. Please contact me at 727-403-0938 to let me know of your decision and, if appropriate, we will proceed with making arrangements for the first interview. Please know that all information obtained will be kept confidential. I have included my approved informed consent form for your review and signature should you decide to participate. Thank you very much for considering my invitation.

Sincerely,

Martha C. Baker, EdD Candidate, CCMEP

Enclosure
Appendix B: Informed Consent Form

Informed Consent to Participate in Research

I __________________________ agree to voluntarily participate in a study entitled *A Descriptive Study of The View From The Top: Perspectives of Experts in Continuing Medical Education* with Martha C. Baker as the Principle Investigator. I have the alternative to choose not to participate in this research study. This is Ms. Baker’s Dissertation Study and I realize this information will be used for educational purposes. The potential benefit is being part of an educational study for the field. I understand the purpose of the study which to describe and explain the lived experience of Continuing Medical Education (CME) experts. I will be asked to complete two (2) one (1) hour audio taped interviews on CME, at the site to be determined by agreement between us. The Principle Investigator, the Chair of Ms. Baker’s Dissertation Committee, the transcriptionist and I have access to the audio tapes and transcripts both of which will be used and stored for two (2) years. They will be kept confidential and stored in a secure location in the Principle Investigator’s home. All participant names will be changed for confidentiality. This research is considered to be minimal risk which means that the risks associated with this study are the same as ordinary living as defined by federal standards. I understand that I may withdraw at any time. I you have any questions, concerns, or complaints about this study, call Martha Baker at 727-403-0938.

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the Division of Research Integrity and Compliance of the University of South Florida at 813-974-9343.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form.

__________________________________
Signature of Person Taking Part in the Study

__________________________________
Printed Name of Person Taking Part in Study

__________________________________
Date
Appendix C: Peer Reviewer Form

I, _____________________________, have served as a peer reviewer for “A Descriptive Study of the View from the Top: Perspectives of Experts in Continuing Medical Education” by Martha C, Baker. In this role, I have worked with the researcher throughout the study in capacities such as reviewing drafts, and assisting in emerging issues.

Signed: __________________________________________

Date:____________________________________________

Please see next pages for completed Peer Reviewer Forms
Peer Reviewer Form

I, Stephen L. Alexander, have served as a peer reviewer for “A Descriptive Study of The View From the Top: Perspectives of Experts in Continuing Medical Education” by Martha C. Baker. In this role, I have worked with the researcher throughout the study in capacities such as reviewing drafts, and assisting in emerging issues.

Signed: Stephen L. Alexander

Date: 3/22/2010
Peer Reviewer Form

I, Anne Cloutier, have served as a peer reviewer for "A Descriptive Study of The View From the Top: Perspectives of Experts in Continuing Medical Education" by Martha C. Baker. In this role, I have worked with the researcher throughout the study in capacities such as reviewing drafts, and assisting in emerging issues.

Signed: Anne Cloutier

Date: March 6, 2010
Peer Reviewer Form

I, Virginia Phillips, have served as a peer reviewer for "A Descriptive Study of The View From the Top: Perspectives of Experts in Continuing Medical Education" by Martha C. Baker. In this role, I have worked with the researcher throughout the study in capacities such as reviewing drafts, and assisting in emerging issues.

Signed: Virginia Phillips

Date: 3-6-13
Peer Reviewer Form

I, [Name], have served as a peer reviewer for "A Descriptive Study of The View From the Top: Perspectives of Experts in Continuing Medical Education" by Martha C. Baker. In this role, I have worked with the researcher throughout the study in capacities such as reviewing drafts, and assisting in emerging issues.

Signed: [Signature]

Date: 3/19/10
Appendix D: Sample Confirmation Letter sent via e-mail

June 21, 2009

Via e-mail to participant

Dear participant:

I hope this finds you well and enjoying the summer. This is to confirm our appointment on June 30, 2009 at 7:00am in [Room] for the purpose of an interview. Since our time together will be fairly brief, I am sending the standard questions in advance so that you will have a little time to consider your responses.

1. Please describe your current role in CME.
2. From your perspective, what are the major elements that define CME?
3. Based on your experience, what factors influence CME?
4. Please describe the issues in CME that are most relevant for the advancement of the field.
5. What, from your perspective, is the future of CME?
6. Is there anything else you would like to add at this time?

So that I will be more familiar with you and your journey I would appreciate receiving your resume in advance of our meeting. Please forward via e-mail to me at marthabaker@tampabay.rr.com or via FAX to 727-893-6819.

Thank you very much for participating in my research study. I look forward to meeting you!

Sincerely,

Martha C. Baker, EdD Candidate, CCMEP
Date

Participant Address

Dear____________:

Thank you very much for volunteering to participate in my dissertation research study. As part of the qualitative research process, I am offering you the option to check the accuracy of our initial interview. I have attached a draft copy of the verbatim transcript. Please take some time to review the transcript for accuracy of responses and reporting of information. Please contact me with any corrections or questions. My contact information is listed below. If you do not wish to review it, just let me know.

I will be in touch regarding any follow up questions and a second interview.

Thank you again.

Sincerely,

Martha C. Baker, EdD Candidate
marthabaker@tampabay.rr.com
1500 13\textsuperscript{th} Street North
St. Petersburg, FL 33704
Mobile 727-403-0938
FAX 727-893-6819
Appendix F: Interview Questions

Interview Questions

1. Please describe your current role in CME.
2. From your perspective, what are the major elements that define CME?
3. Based on your experience, what factors influence CME?
4. Please describe the issues in CME that are most relevant for the advancement of the field.
5. What, from your perspective, is the future of CME?
6. Is there anything else you would like to add at this time?
Excerpts from Ms. Brown’s Interview

Ms. Brown: As elements do you mean in terms of different… I guess that the way, and you can direct me if I’m not answering the question, I guess the way I view CME and it’s very much based on and the education that I received from our CME committee. I was mentored right from the very beginning when I got here, and CME is education is planned by physicians for physicians. [e physician involvement]

M: Correct.

Ms. Brown: Sometimes I wonder if there aren’t other organizations, other people who have a different opinion of that but from my standpoint it is for physicians, planned by physicians, so physicians have the instrumental role in defining gaps, planning, setting the objectives, choosing the speaker, setting the content. I think to me that is a sacred role. Physicians have to remain at the center of the system. [e physician involvement] If they don’t, then it’s just professional education for anybody, for everybody. But I also think that it’s definitely based on principles of adult education. [e adult education] I recognize that, so I think that it is extremely important to recognize how adults learn. Physicians are no exception to that. For sure adult education, but again the role of physician to me, I can’t overstate it is that too many times we try to take them out of the equation and that’s wrong. And I also see the CME system that facilitates learning, rather than a system that just produces curriculum. What I mean by that is that as a CME provider, I’m not really teaching physicians as much as I’m helping physicians to learn to teach themselves what they need to know. That’s how I view CME. So those are the elements to me. You’ve got the physician role, the adult education, and then a system of not teaching but facilitating learning on the part of physicians, so they can change themselves.

M: Oh, cool. And then what factors do you see influence CME at this point?

Ms. Brown: Definitely their preferences and desires as physicians, their willingness to participate in the system, the availability of funding is pretty crucial right now. I think that also the commitment of organizations to remain accredited, I see that as huge. That really worries me because I think that organizations are washing their hands, “this is too much”. I see accreditation to provide CME as an organizational designation. You’ve got to have commitment from the top, down. It can’t be from the bottom, up. That’s kind of where we’ve been and are. With funding being so tight right now, those are two major factors that are really influencing CME. I think the other thing that influences CME is the way that physicians practice medicine, the healthcare delivery system. [I physician involvement] [different] systems I think that’s why as providers we’re struggling a little bit. It used to be that physicians would go to a meeting and they would make time for a weekly meeting, or a monthly meeting and it wasn’t a big deal. Now that’s not really what physicians are looking for, or are able to do right now. I think that it has everything to do with the way that the healthcare delivery system has changed. [I funding] It used
to be fee for service, physicians were practicing very independently, they were in their own office, and they didn’t have to answer to any higher authorities. I think even the society role; we might have had one member of the family working. So basically I think that a lot of that has changed now. Just the preferences of physicians, I don’t think they’re joiners. It used to be you just joined your professional associations; you just participated in organized medicine because that’s what we did. That’s not what physicians do anymore. So it’s really tied to how physicians practice medicine, how they’re reimbursed, and the way they’re employed now. I think they’re more employees rather than owners in a lot of ways. I think that has really influenced the way CME is being delivered, and why a lot of us are really struggling with attendance.

M: In looking at what we learned at our provider meeting about the quality piece, do you think that based on physicians practice now that would be an easier avenue for us to do provide the learning you’re talking about? Or to facilitate that learning?

Ms. Brown: You’re talking about the quality performance improvement. I think that logically it should because you feel like, and I feel strongly that physicians want to do a good job. They want to take care of their patients. It goes without saying that these are people who are highly intelligent, highly competitive and wouldn’t be in this profession if they didn’t want to do a good job, care for patients, and be recognized for that ability so I know it’s not a question of that. But I think there’s a real difficulty in getting physicians to accept CME for that and I don’t know why that is. And I’m not basing that so much on personal experience, as to when I talk to providers who are trying to do PI-CME[PICME], or CME that is more based on quality measures that are identified within the hospital setting particularly. It doesn’t seem like it hasn’t taken off like I thought it would. I don’t know why and I’m a little surprised. I don’t know what that has to do with. Another thing about physicians is that it’s a traditional kind of profession. Clearly you have your older physicians for the most part still are the anchor of the profession, doing the lions share, fifty and above are doing the lion’s share of care for the patients. Then you have your residents, your fellows, and your younger physicians [I age] who are obviously contributing to the profession as well, but I don’t know if there’s such a schism there that you’re trying to serve two masters as a sense. You have your younger doctors who I would think that would be the way we would be going. And then we have these other physicians who want to sit in the back of the room, and I’m the guy with PowerPoint slides, and then “I don’t want to participate in any learning activities ok, because this is the way we’ve done this and we don’t see why we need to change it now.” I’m really surprised that the performance improvement hasn’t taken off. It seems like the providers have really struggled with setting it up, and having physicians participate in the process. And maybe the message there is that it’s smaller… I think we’re used to wanting to see one hundred people sitting in the seats and then that’s a success. Maybe we have to change the way we view success. It may be that it comes in smaller doses, and that we will only have five or six physicians who do this, and five or six that do this, and one or two that do this. We may have to as providers change our idea of what success is. But I think it’s a disruptive technology, something we have to pay attention to be and be ready
for so that when our target audience is ready for it we can jump right on it. So I think it’s good what we’re doing. It’s like dabbling, getting used to it. I wonder if the other thing with performance improvement CME, [I PICME] maybe the physicians don’t feel like they’ve participated enough in the identification of the gap, or the data that indicates that “well there’s a problem here”. Do physicians necessarily agree with what that measure is? I don’t know a lot about performance improvement, in terms of what groups are measuring these things but I know that I hear a lot of our members talk about pay for performance, bad. The hospital, bad. Physicians want to be independent, they want to be autonomous, they have their realm, and they really don’t appreciate the government or any other organizations like HMO’s, and PPO’s infiltrating this realm. I wonder if there is concern that that’s what’s happening. “They’re telling me I have to do this, and I don’t agree with that.” I think there’s some of that too, some reluctance. Which is again why physicians really need to be inserted into the process because we need physician buy in. [I physician involvement] And I don’t hear a lot of people talking about that. The ACCME doesn’t seem to be talking about that at all, and that I don’t understand. There’s a lot of talk about what the public is saying about care and what the IOM is saying about care, but what about what practicing physicians say? And there’s a lot of blame to be shared, and one of my frustrations has been you do have to accept the fact that care isn’t perfect. Let’s not worry about is it 100,000 deaths per year by medical errors or whatever that number is. It doesn’t really matter, because we know it’s too much. So let’s just forget that and focus on preventing medical errors. So doctors do need to be encouraged to take control and actually suggest proactive ways to prevent medical errors, improve care. [I physician involvement] I think that physicians are feeling very burdened right now and I think the CME system is reflecting that. I think that morale is low. I think that physicians don’t think they have control of the practice of medicine, they don’t have control over what they love. They want to care for patients. That’s what they want to do, so CME should be a natural extension of that. I think that CME is getting lost in this shuffle in trying to figure out who is going to be in control of medicine. I think it’s too bad actually, because I think that physicians should play a really instrumental role in defining their own gaps and setting goals for how to address those gaps and it seems like we’re relying more on gaps that are being thrust upon. That may be why physicians are resisting that PI-CME.

Excerpts from Mr. Blue’s Interview

M: Right. So what do you think will impact or what’s relevant for the advancement of what we’re doing? We spoke about that for a few minutes outside, but is it going to be more interdisciplinary, is it going to look totally different, what do you think it’s going to push to change?

Mr. Blue: I think that’s a very interesting question Martha. You’ll hear a lot about age [I age] today because my back is sore and I feel like I’m one hundred years old! I think the change...you’ve probably seen this in hospital management, it’s much more program
management, so twenty years ago it was division of cardiology. Now it’s the “program in cardiovascular health”, has surgeons, internists, dieticians…I think that will drive it more. I think the more programmatic initiative; the disease classification from the hospital environment will drive it. We have better data now than we did five years ago, even one year ago. We’re getting better data, [I data] we can pinpoint it, and we make people accountable a little more. So I think those two things we’ll be able to say, “Hmmm, you know what? Our congestive heart failure patients do bounce back to the emergency department with a higher rate than they should state wide, and I think we should do something about it. We’re looking bad in the hospital state report cards, the state legislature is pointing at us. Several of our well-to-do Alliance patients are coming back and are complaining. That’s not good for us. Maybe it’s good for the bottom line in some ways, but you know what? We’re more than just the bottom line?” So I think that’s gonna drive us. That might say “Where is the ????”, so we know we should be getting these three drugs when you leave the hospital. Patients aren’t either being told that they need it they’re not getting their prescriptions, or the doctors don’t know to order it, they’re residents and don’t know to order it. Or they go home on a Saturday and there is a failure in the system; so figuring out where that failure is and then fixing it. So if it’s educational, it means presenting grand rounds on the topic for example, or sort of a clinic day “Better Congestive Heart Failure Management”, or the CME office getting hold of the feed back data, the global data and feeding that back to the group and say “Lets build something around this, whether more teamwork would do it.” All those things I think are in the purview, what isn’t in the purview are the quality measures, determination, and payment systems. But much of this is in the purview of the CME provider…this new smart, renaissance, the Martha Bakers of the world who understand it, who understand what it is and then can intervene, might intervene in a traditional way, “ok we’ll accredit rounds or medicine”. Three times this year I can just about fit in. We’ll present the data globally on those three occasions and look for trends, and look for the barriers, and post a focus group; the hospital will pay us for that because our measures will improve. That’s the goal. It may be a bit idealized.

M: As opposed to in six months we’re going to talk about MRSA. Well in six months the information we might need to talk about something else, or how do you know what you need to talk about in a year’s time?

Mr. Blue: That’s right. So we need to have more accurate and up to date data. [I data] I think that’s a part of it. I think with an issue like MRSA, it’s a much more sort of onsite training. Handwashing is a small example. And there the SWAT team that the CME provider would develop is a little bit different than if it’s an issue like congestive heart failure where it’s a lack of prescriptions, or a lack of understanding, or maybe we need a patient educator. Maybe it’s a nurse…we did this in Toronto. We had a nurse patient educator and she was the discharge coordinator, so it was a little bit extra work for her. Twenty minutes to a half hour with every discharge on the cardiac ward. But she was the “knowledge broker”, going through the file, determining what had happened to the patient, asking the patient what they understood, making sure all the guidelines were
Appendix G (Continued)

being met. So it’s a congestive heart failure patient. “Here are the three things you need
to go home. You have that prescription? Do you understand why you need to take it?
Will you see your primary care provider within a week or two weeks? Would you like us
here to make an appointment for you in order to do that? Sometimes we can get through
on a backline with the primary care provider where you can’t. What about salt? How
about making sure that it’s not just the medication, but you understand not to have a lot of
salt like potato chips and what not.”

M: Do you think that the joint commission or other sort of overshadowing entities like
you will help people like me to make that change in culture? And how to go we go about
it?

Mr. Blue: Actually the Joint Commission to its credit has already changed some of its
provisions so it’s looking less at just “Does the doc have continuing education
credentials, like is he building all his credits and looking more at interprofessional
education and team based training” and that sort of thing. And the joint AAMC nursing
conference that we just held this year, one of the recommendations is to the joint
commission to be much more thoughtful about workplace learning. So the hospital
system must encourage workplace learning based the best data. And so we’re hopeful
that the joint commission will pick that up. The process is pretty slow, I mean it might be
a year before the Joint Commission / JCAHO] picks that up, but that’s kind of what’s in
our mind and hopefully will be in their minds as well.

M: I had to have my standard questions but that all sort of leads into what is the future
and what does it look like and I think you hit that one right on the head. As you have said
before, there’s a place for an update but there’s also probably more of a place for hands-
on work group type of stuff that can really make a difference and then blend that with the
learners that we have now who will be more comfortable going online just in time to find
out what they need to know. And based on the self reflective stuff, there are lots of
possibilities of how it could be done. I think it just depends on how creative people want
to be in, and how much support they have.

Mr. Blue: That’s right. I think we used to think of a hundred people in an audience, all at
the same level. I’m going to teach them. But some of the guys and gals have already done
what I’ve suggested they do. Some wouldn’t consider it in 100 years. And some are
doing their Blackberry, or reading the morning paper, or not paying any attention. I think
one of the big breakthroughs for us in CME is that by changing the culture of CME also
change the audience. So if the question is, there’s a brand new discovery or they’ve never
heard of this…a new form of anti-depressant for example, or a new screening test then
maybe the lecture or online learning, or disseminating by means of newsletter to all your
500 to 600 docs…maybe that’s good enough. If they know about it but they don’t agree
with it because there are guidelines created for cardiologists, and I’m a family doctor or
general internist, then there are other things we can do. Maybe that’s peer groups, maybe
that’s grand rounds, and maybe that’s workshops. If the issue is that I’m aware of it, (this
Appendix G (Continued)

isn’t my model by the way) it’s somebody named Pathman. Do you know the Pathman model 96, medical care 96? He talked about how people adhere to guidelines 100% of the time. He had a four phase model. One was awareness of it. One was agreement with it. One was adoption of it. So not all the time, but enough that I felt pretty comfortable, to adherence which meant everyone did it. And so the issue is agreement. We’re talking about small groups, peer pressure, maybe an opinion leader, in the ward or in a community setting. If the question is adoption, that is “Alright I should be using insulin more. I’m so used to prescribing something that’s been many years that I’ve prescribed intramuscular subcutaneous insulin. I think I should go to a workshop so I can learn how to do it better”. That’s the adoption question. The adherence is “Should I do it every time it’s needed?” And the interventions are different. On the front end it’s more like the lecture, the newsletter, the online thing. On the back end, it’s more like reminders at the point-of-care [f point of care] so it pops out. Sixty five year old lady diabetic needs flu shot. Have you given her the flu shot? Yes, no. If no, click here and the nurse will bring it in. So I mean that much more point-of-care learning will happen. I think just understanding it that way is the way we need to proceed. And there’s a big question there about where we do all of that. You were talking about the extent to which your hospital would be able to support you. [f funding] That’s a question isn’t it? It’s not just you convincing the C.E.O. that you need the monies. It’s looking at the data to say “Look we’ve got a problem here. We’ve got a gap [f gap] in the perception of our patients, or a gap in care.”
<table>
<thead>
<tr>
<th>Notes to Self</th>
<th>6/25/09 /7am/Tampa/ Mr. Gray</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2 – Dictaphone Signed Consent in advance and e-mailed</td>
<td>Setting: [conference hotel] Business casual No breakfast – just coffee Observed as speaker here and at another Med Assoc conference</td>
</tr>
<tr>
<td>Need to read article by [JG] and Mr. Gray and Review Rand Study</td>
<td>Interactions: Fun to talk with, very talkative and interested in project. Not shy to state bias. Lots of focus on PI/QI</td>
</tr>
<tr>
<td>Names dropped: Norman Kuhn, Don Moore, Joe Green, Nancy Bennett, Marsha Jackson, Barbara Barnes, Karen Overstreet, Ron Cervero</td>
<td>Reflections: Primary Topics… • Decision Pathways • Physicians perspective is important • Mind the Gap (knowledge/performance gap) • Evaluate Outcomes • System • Accreditation/Stark Laws • PhRMA • FDA • Pharmaceutical companies Independent Medical Education Departments are powerful – know the rules and expectations have increased in terms of quality of grant requests • Mission of CME Department – need to meet it/be mission driven • Physician funded education</td>
</tr>
<tr>
<td>Decision Pathways to guide CME (brother is an expert in PI) Pay attention to “If I were King of ACCME” Said 15 providers in Missouri dropped accreditation – too difficult and expensive!! Did Qualitative Dissertation – should look at if time allows/U of M – Go Blue! So excited to finish first interview. I thought it sent very well!</td>
<td></td>
</tr>
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</table>

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### Notes to Self

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Place</th>
<th>Setting</th>
<th>Interactions</th>
<th>Reflections: Primary Topics…</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/25/09</td>
<td>12 noon</td>
<td>Tampa/ Mr. Green</td>
<td>Setting: [conference hotel]</td>
<td>Interactions: Very easy to talk with</td>
<td>ACCME – too many form and focus on the activity folders</td>
</tr>
<tr>
<td></td>
<td>6/25/09</td>
<td></td>
<td>Business casual</td>
<td>We share a similar educational background with</td>
<td>Self-directed learning – like external degree??? – can’t read writing!</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Lunch – already ate (I ate outside afterwards)</td>
<td>guidance/counseling degree and rehab counseling</td>
<td>Key to CME – CME should become more self directed…our young and new physicians are them are self-directed group we have ever seen but will remain independent in their search of knowledge via technology/electronic tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Observed as speaker here and at another conference</td>
<td>Said he was tired</td>
<td>o Agrees with Mr. Gray that role of PI in CME especially with self directed process</td>
</tr>
</tbody>
</table>

| Current role 3.5 years with a 2 year startup | | |
| Mentioned the 15 providers in Missouri | |

- Future of CME will have less funding and less CME with credit
- Just CME for CME itself
- Increased use of technology in future is key – example was demonstration he saw of virtual patient interactions developed by gaming company
- VALUE of CME
- We don’t have to conduct research CME itself as it is no different from any other adult education
- Commitment to change; change in behavior (physician) --- measurable outcome

### Notes to Self

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Place</th>
<th>Setting</th>
<th>Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/30/09</td>
<td>3pm</td>
<td>Ms. Amber</td>
<td>Conference</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Observed as speaker at state medical association conference</td>
<td></td>
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</tbody>
</table>
Appendix H (Continued)

<table>
<thead>
<tr>
<th>Interactions: Spoke by telephone – limited interaction</th>
<th>Reflections: Primary Topics…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexpected it to be quiet but between the glasses, silverware and patrons along with the A/C it was too loud and difficult to hear [Ms. Amber]</td>
<td></td>
</tr>
<tr>
<td>Her experience is very valuable because of the variety of places where she has worked – the different facets. PI-CME is the way of the future During lecture – business attire</td>
<td></td>
</tr>
</tbody>
</table>

- Role is in instructional design/Education Planning from basic to advanced
- Has worked in all segments
  - Hospital
  - Pharmaceutical
  - University
  - Government
  - Professional society
  - Consulting
- Works on projects and grant proposals
- Works with professional organizations for needs analysis and strategic planning
- Basic elements consist of planning, setting goals, minding the Gestalt and improved patient care as an outcome; accountability
- CME moving form “seat time” to certification/competency/documentation
- Likes clinical trial format
  - Improves consistency in patient care
  - Impacts cost of care
  - Reduces medical errors
- Influences:
  - Ready access to tools
  - Measuring improvement in patient care
  - Conflict of interest/Funding
  - Faculty
- Barriers for advancement
  - Lack of data
  - Physician time (data, differential diagnosis and history taking
  - Lack of funding
- Providers need to get help from hospital departments
  - Research
  - QI-data
  - Patient registries
  - Lobby(?) faculty
  - Use EMR
- Future – CME as less of a commodity and move towards Maintenance of Certification to enable board/license continuation; point based on true need (data)
Appendix I: Original Categories and Codes

<table>
<thead>
<tr>
<th>Elements of CME</th>
<th>Significant Issues/Barriers to Advancement</th>
<th>What haven’t I asked/Anything to add?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[e resource] 2</td>
<td>[s ACCME] 1</td>
<td>[? PICME] 8</td>
</tr>
<tr>
<td>[e process] 2</td>
<td>[s value] 2</td>
<td>[? VALUE] 2</td>
</tr>
<tr>
<td>[e providers] 2</td>
<td>[s providers] 3</td>
<td>[? Comp/perf/outcome] 1</td>
</tr>
<tr>
<td>[e CPD] 1</td>
<td>[s data] 2</td>
<td>[? Providers] 3</td>
</tr>
<tr>
<td>[e ACCME] 6</td>
<td>[s research] 1</td>
<td>[? Physician involvement] 1</td>
</tr>
<tr>
<td>[e evaluation] 1</td>
<td>[s fund] 1</td>
<td>[? ACCME] 3</td>
</tr>
<tr>
<td>[e PICME] 1</td>
<td>[s physician involvement] 2</td>
<td>[? Self directed] 1</td>
</tr>
<tr>
<td>[e CME] 1</td>
<td>[s partnership] 2</td>
<td>[? Content] 1</td>
</tr>
<tr>
<td>[e strategic asset] 1</td>
<td>[s strategic mgt and leadership] 2</td>
<td>[? COI] 1</td>
</tr>
<tr>
<td>[different] 21</td>
<td>[s mission] 1</td>
<td>[? comparative effectiveness research] 1</td>
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<td>[? Evidence] 1</td>
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<td>[? Knowledge translation] 1</td>
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<tr>
<td>[e knowledge translation] 1</td>
<td></td>
<td>[? Marginalized] 1</td>
</tr>
<tr>
<td>[e collaboration] 1</td>
<td></td>
<td>[? Funding] 1</td>
</tr>
<tr>
<td>[e gaps] 1</td>
<td></td>
<td>[? One off] 1</td>
</tr>
<tr>
<td>[e physician involvement] 3</td>
<td></td>
<td>[? Define education] 1</td>
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<tr>
<td>[e mission] 1</td>
<td></td>
<td>[? Research to practice] 1</td>
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<td>[e age] 2</td>
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<td>[? culture shift] 1</td>
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<tr>
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<td>[? Strategic asset] 1</td>
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<tr>
<td>[e acceleration] 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[e adult education] 1</td>
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</tbody>
</table>

Influences

- [I acceleration] 1
- [I ACCME] 8
- [I providers] 3
- [I funding] 10
- [I process] 1
- [I transition] 1
- [I government] 5
- [I innovation] 1
- [I physician involvement] 11
- [I mission] 0
- [MARTHA] 14
- [I JCAHO] 2
- [I research] 3
- [I portfolios] 1
- [I systems based practice] 1
- [I value] 2
- [I collaboration] 1
- [I PICME] 4
- [I age] 6
- [I Marginalized] 2
- [I data] 2
- [I buy in] 1
- [I Industry] 1
- [I COI] 1
- [I Accountability] 1
- [I technology] 1

Future

- [f strategic asset] 1
- [f faculty development] 2
- [f MOC] 1
- [f government] 1
- [f funding] 9
- [f partnership] 2
- [f collaboration] 1
- [f one off] 2
- [f providers] 5
- [f data] 1
- [f research/knowledge translation] 1
- [f series] 1
- [f technology] 3
- [f gap] 2
- [f point of care] 1
- [f PICME] 2
- [f physician involvement] 2
- [f accountability] 1

What haven’t I asked/Anything to add?

- [? PICME] 8
- [? VALUE] 2
- [? Comp/perf/outcome] 1
- [? Providers] 3
- [? Physician involvement] 1
- [? ACCME] 3
- [? Self directed] 1
- [? Content] 1
- [? COI] 1
- [? comparative effectiveness research] 1
- [? Evidence] 1
- [? QI] 1
- [? Detailer] 1
- [? Knowledge translation] 1
- [? Marginalized] 1-2
- [? Funding] 1
- [? One off] 1
- [? Define education] 1
- [? Research to practice] 1
- [? culture shift] 1
- [? Strategic asset] 1

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Appendix J: Final Categories and Codes

Elements of CME
- [e ACCME] 6
- [e physician involvement] 3

Influences
- [I ACCME] 8
- [I funding] 10
- [I physician involvement] 11

Significant Issues/Barriers to Advancement
- [s providers] 3

Future
- [f funding] 9
- [f providers] 5
- [f technology] 3

What haven’t I asked/Anything to add?
- [? PICME] 8
- [? Providers] 3
- [? ACCME] 3
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About the Author

Martha C. Baker was born in Flint, MI, earned a Bachelor of Science in Psychobiology, an individually designed major, at Denison University, Granville, Ohio in 1980 and a Master of Arts in Counselor and Guidance Education at the University of South Florida (USF), Tampa, FL in 1983. Ms. Baker entered the EdD Educational Program Development with an emphasis in Adult Education program at USF in 2004.

Since 1993, Ms. Baker has been employed in a variety of hospital leadership roles. During the past eight years she has managed the continuing medical education and continuing pharmacy education programs, the medical library, conference center, and more recently, medical staff services. She is a Certified Continuing Medical Education Professional and community volunteer.