WHITE PAPER
CHANGING HEALTH CARE ENVIRONMENT AND CONTINUING PROFESSIONAL DEVELOPMENT: Looking at a Collaborative Educational Initiative Through a Social Accountability Lens

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# TABLE OF CONTENTS

**ABSTRACT**....................................................................................................................................................... 3

**INTRODUCTION**............................................................................................................................................... 3

  Continuing Education Approaches Adapt in Response to Dynamic Environment........................................ 3

  Understanding Social Accountability ............................................................................................................... 4

  Figure 1. Concept Map of Continuing Professional Development (CPD) and Social Accountability. Adapted from Thompson and Davis (2008). 4

**A CASE: THE TEAM-A INITIATIVE**.............................................................................................................. 5

  Background ....................................................................................................................................................... 5

  Educational Design ......................................................................................................................................... 5

  Figure 2. The TEAM-A Process .................................................................................................................... 6

  Figure 3. A Set of Competency Statements Related to Anticoagulation of Patients With Atrial Fibrillation... 6

  Outcomes .................................................................................................................................................... 7

**DISCUSSION**.................................................................................................................................................... 8

  Strategic Education Planning Was the Key Element of TEAM-A ............................................................... 8

  TEAM-A and Social Accountability .................................................................................................................. 9

  Why Socially Accountable CPD? .................................................................................................................. 9

  Challenges of Practicing Social Accountability ............................................................................................ 9

  Who Is Responsible for Socially Accountable CPD? .................................................................................. 10

  Addressing Social Accountability Through Collaborative Initiatives ..................................................... 10

  Conclusion ................................................................................................................................................ 10

**PRACTICE POINTS**......................................................................................................................................... 10

**NOTES ON CONTRIBUTORS**.......................................................................................................................... 10

**ACKNOWLEDGMENTS**.................................................................................................................................. 11

**DISCLOSURE**.................................................................................................................................................. 11

**REFERENCES**................................................................................................................................................ 12

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Confidential and proprietary information of The Evolution of Anticoagulation Management—Atrial Fibrillation (TEAM-A) partnership.
ABSTRACT

This article reflects on the changes and challenges continuing professional development (CPD) practitioners collectively experience, and discusses a multiorganizational educational initiative in relation to the best CPD practices and a concept of social accountability. Social accountability is defined as the use of theory, experience and evidence to improve the well-being of the populations served in a way that best meets health and social needs. Some features of socially accountable CPD overlap with well-recognized strategies of education designed to improve performance and patient outcomes, such as engaging teams in learning together and demonstrating sustainable impact on practice. But socially accountable CPD extends the traditional CPD boundaries by emphasizing solutions to the global threats to health and creating a more equal and socially inclusive society. Using a case example, the authors discuss several issues, including: How does an intention to produce and demonstrate sustainable improvements influence education planning? How should education be designed to result in sustainable practice change, and how should potential increase in costs be offset? Why socially accountable CPD? Who should be responsible for it? In conclusion, the health care environment continues to change and CPD approaches must adapt to embrace facets of this dynamic environment.

INTRODUCTION

The health care environment in the United States (US) is changing, making it imperative that continuing education for clinicians transforms accordingly. Providers of continuing education react to, interact with, operate within, and influence the context in which educational programs are planned and delivered. In this paper, we reflect on the changes and challenges that continuing education practitioners collectively experience, and present a case of a multi-organizational initiative responding to the dynamic environment. We also discuss this initiative in relation to the best continuing education practices and a concept of social accountability.

Continuing Education Approaches Adapt in Response to Dynamic Environment

Health care systems in the US strive to improve quality of care and the health of populations while reducing costs, which is known as the Triple Aim (Berwick et al. 2008). Pay-for-performance approaches were established to provide financial incentives in order to stimulate high quality and efficiency of patient care (James 2012). Several models of reimbursement are being tested to replace current payment models, including payments triggered by population management, bundled payments, and payment penalties (“Better Care” 2015). Most recently, the Medicare Access and Children’s Health Insurance Program Reauthorization Act (MACRA) established a framework for rewarding clinicians for value over volume (“Medicare Access and CHIP Reauthorization Act” 2015). Improved delivery of care, as exemplified in the Patient Centered Medical Home (Nutting et al. 2009), focus on delivering efficient care for both chronic and acute patients and transforming care into what patients want it to be.

These developments fueled several changes in continuing medical education (CME)/CPD. First, education is moving closer to the practice environment (Cervero 2003), and a greater effort is being made to engage care teams and provide interprofessional education (Owen and Schmitt 2013). Second, education planners are challenged to design performance improvement (PI) interventions using measurement through electronic health records (EHR) and clinical registries (Conway and Clancy 2009). Initiatives like the Quality Improvement Education Initiative (QIE), powered by the Alliance for Continuing Education in the Health Professions (2015), are underway to bridge current gaps between continuing education and quality improvement. Third, CME/CPD providers are looking for effective ways to bring the patient perspective into education planning (Towel and Godolphin 2011), as well as to train health care professionals in clinician-patient shared decision-making (Légaré et al. 2013).

Systems directly impacting CME/CPD have responded to the changing environment as well. The metric for CME credit is shifting from a time-based credit system to measuring the level of engagement (Davis and Willis 2004). The bar for outcomes assessment has been raised through the Accreditation Council for Continuing Medical Education 2006 Accreditation Criteria, directing CME programs to evaluate educational impact on not only physician competence but physician performance and/or patient outcomes (Accreditation Council for Continuing Medical Education n.d.). Maintenance of Certification Part IV: Improvement in Medical Practice requirements focus on measuring, assessing, and improving clinical practice (American Board of Medical Specialties n.d.).
Further, increased government involvement in accredited CME is observed in multiple areas, influencing different aspects of education planning and content. One example is training of prescribers on extended-release and long-acting opioid analgesics offered as part of the Food and Drug Administration (FDA) Risk Evaluation and Mitigation Strategies (REMS). Educational content must be consistent with the FDA blueprint ("FDA Blueprint" 2014). Another example is Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) training curriculum developed by the Department of Defense’s Patient Safety Program in collaboration with Agency for Healthcare Research and Quality (n.d.).

Thus, a host of solutions and best practices make continuing education for clinicians responsive to the changing health care environment. Interprofessional education, education targeting health care teams as opposed to individuals, integration of CPD and quality improvement, and other trends that encompass these solutions and best practices inform ongoing education planning and are extensively discussed among continuing education practitioners and scholars (Balmer 2013; Olson 2012). In the next section, we elaborate on one relevant trend—social accountability—which to our knowledge is less present in the CME/CPD literature and practice.

Understanding Social Accountability

CPD is increasingly discussed as a part of a fundamental social contract between health care professionals and society that gives health care professionals privileges of income, professional status, and self-governance in return for responding to social needs (Thompson and Davis 2008). In the context of this contract, CPD providers must consider local and national priorities as well as an individual learner’s educational needs and be socially accountable not only to health care professionals but to patients, the community, and policymakers (Fleet et al. 2008). There is no one best definition of social accountability (Fleet et al. 2008). For the purpose of this paper, we define it as the use of theory, experience and evidence to improve the well-being of populations being served in a way that best meets their health and social needs (Fleet et al. 2008; Heller et al. 2003). Thompson and Davis (2008) identified five best practices applicable to socially-accountable CPD: addressing social issues; focusing on professional and social relevance; avoiding commercial bias; maintaining competence and high quality physician performance; and measuring social accountability across the value domains of relevance, quality, cost effectiveness, and equity (Figure 1).

Figure 1. Concept Map of Continuing Professional Development (CPD) and Social Accountability. Adapted from Thompson and Davis (2008).
Aspects of socially accountable CPD overlap with well-recognized strategies of continuing education designed to improve clinical practice and patient outcomes. Specifically, socially accountable CPD expands its focus from disease-specific content to addressing complex population and public health issues (Balmer 2013), engages interdisciplinary clinical teams in learning together to provide optimal, patient-centered care (Goldman et al. 2008), and demonstrates improvement in professional behavior, population health, cost effectiveness, and other outcomes that society defines as important (Thompson and Davis 2008). Notably, the desired outcomes of CPD are expected to be sustainable (Hovlid 2012). At the same time, socially accountable CPD extends the traditional CPD boundaries by emphasizing implementation of solutions to the global threats to health (Pearson 2015), while balancing global principles with context specificity (“Global Consensus” 2010), addressing political aspects of health care (“Better Care“ 2015), and contributing to creating a more equal and socially inclusive society (Pearson et al. 2015).

We further explore the social accountability theme by reporting and discussing a case of a multiorganizational educational initiative The Evolution of Anticoagulation Management–Atrial Fibrillation (TEAM-A) aimed at preventing stroke in patients with atrial fibrillation in the US.

A CASE: THE TEAM-A INITIATIVE

Background
The TEAM-A initiative started in 2012 as a collaboration of 10 organizations, including professional societies, medical schools, and other organizations focused on continuing education and/or quality improvement, driven by a common goal to enable clinicians to optimally manage anticoagulation therapy for patients with atrial fibrillation. This collaboration built on the success of a multiyear educational initiative on smoking cessation (Olson et al. 2011) with expanded representation from the American College of Cardiology (ACC) and the American Heart Association (AHA).

Today, more than three million people in the US have been diagnosed with atrial fibrillation, and the prevalence is expected to increase with the aging population (Colilla et al. 2013). Without appropriate anticoagulation management, these individuals are at increased risk for devastating ischemic stroke. TEAM-A not only responded to existing practice gaps in this essential area (Arepally et al. 2010; Kowey et al. 2010) but also addressed these gaps at the national and local levels. Involvement of ACC and AHA, membership-based organizations that develop clinical practice guidelines (Fuster et al. 2011; January et al. 2014), ensured initiative alignment with national priorities related to management of anticoagulation.

Educational Design
A six-step approach to curriculum development for medical education (Kern et al. 2009)—problem identification and general needs assessment; targeted needs assessment; setting goals and objectives; choosing educational strategies; implementation; and evaluation—inform ed educational design of the initiative. These steps were embedded in the TEAM-A process model developed early in the project (Figure 2).
Figure 2. The TEAM-A Process

This process encouraged efficiency since it was applied across the entire initiative and involved centrally conducted general needs assessment followed by adaptation to the specific needs of target learners: primary care clinicians, cardiologists and hospitalists. Clinical competency statements related to anticoagulation of patients with atrial fibrillation were derived from the clinical practice guidelines (Fuster et al. 2011), needs assessment surveys and expert input (Figure 3). The competencies were patient-centered and reflected all aspects of optimal patient care delivered by multiple disciplines, and thus became the foundation for a comprehensive and practice-oriented curriculum.

Figure 3. A Set of Competency Statements Related to Anticoagulation of Patients With Atrial Fibrillation

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<tr>
<td>1.</td>
<td>Describe the incidence and consequences of untreated atrial fibrillation.</td>
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<td>2.</td>
<td>Identify patients for whom antithrombotic management for atrial fibrillation or atrial flutter is appropriate.</td>
</tr>
<tr>
<td>4.</td>
<td>Determine the relative risk and benefit of antithrombotic therapy for a given patient.</td>
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<tr>
<td>5.</td>
<td>Discuss antithrombotic therapy with the patient in order to make an informed therapy decision.</td>
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<tr>
<td>6.</td>
<td>Select the appropriate antithrombotic therapy.</td>
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<td>7.</td>
<td>Maintain desirable levels of anticoagulation.</td>
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<tr>
<td>8.</td>
<td>Manage anticoagulation through medical procedures and special situations.</td>
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<tr>
<td>9.</td>
<td>Coordinate the care of patients on anticoagulation therapy.</td>
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The TEAM-A educational strategy allowed content and education experts to customize education to the learning environment and clinician needs. Education was delivered through multiple modalities, including integration of TEAM-A content into existing national and regional meetings, distance learning through Web-based and mobile platforms, PI activities, and collaborative grants to existing educational networks. While traditional didactic formats were used in many activities to disseminate new knowledge, other approaches were integrated to support practice improvement. Practice improvement strategies included offering interprofessional education, targeting clinical teams, training clinicians in quality improvement methods, discussing barriers to improvement, sharing examples of best practices, and providing decision-support tools and other resources for patients and clinicians (see toolkit at www.teamanticoag.com). There was also an ongoing effort to engage clinicians in multiple activities and follow-up several months post education to facilitate and document changes in practice.

Aggregate data analysis and reporting of results were possible due to utilization of the competency-based educational framework, measuring outcomes at multiple levels of evaluation (Moore et al. 2009), and using the same assessment methods and metrics in multiple activities, including common sets of clinical vignettes and clinical performance measures. Although evaluation methods had limitations, such as lack of a unique learner tracking system, possible inaccuracies and bias in self-reports and small follow-up samples, the evaluation approach provided sufficient information to inform program planning decisions.

Continuous assessment and improvement were accomplished using repeated needs assessment, monitoring for new evidence, collecting feedback from the TEAM-A Clinical Advisory Panel, planners and faculty, and ongoing outcomes tracking. This effort led to curriculum and implementation changes such as enhancing patient counseling content, creating an interprofessional activity to address how clinicians work together in stroke risk management, and updating content to reflect new clinical practice guidelines. It also was critical for providing timely and relevant reports to the TEAM-A partners, collaborators, funders and CME/CPD peers.

Outcomes

The combined capacity of all partner organizations allowed this initiative to be national in scope and deliver 105 live sessions and 15 online activities in the first two years, cumulatively reaching more than 64,000 clinicians. More than half were physicians, and others primarily included nurse practitioners, nurses and physician assistants. Additionally, 21 primary care practices, one hospital, one integrated health system, and nearly 150 cardiologists/cardiology practices engaged in PI activities. Key findings from the aggregate outcomes analysis are highlighted below. (More evaluation data are available upon request.)

Based on clinical vignette assessment, participants demonstrated varying degree of improvement in knowledge and competence. More than 10,000 participants in live and online activities, representing 91 percent of those who responded to a commitment to practice change question, planned to make changes to their practice after participating in the TEAM-A activities. A total of 883 participants who completed follow-up assessments one-to-six months postactivity reported 2829 changes made in practice (Figure 4).
The impact of engaging multidisciplinary clinical teams in TEAM-A was most evident in the PI activities. The majority of participating practices began by implementing a systematic stroke risk assessment process. Participants across all PI projects achieved on average 27 percent improvement on a clinical performance measure related to documentation of stroke risk. These results reflected system improvements of thromboembolic risk assessment, such as implementation of nurse anticoagulation evaluation and EHR reminders for annual risk assessment. Other common system changes included a revised process flow for prescribing anticoagulation and a new template for reporting prothrombin time (PT)/INR results. Although still in progress at the time of writing this article, the PI project in an integrated health system is addressing cost, patient satisfaction, and transitions of care.

**DISCUSSION**

**Strategic Education Planning Was the Key Element of TEAM-A**

The described collaborative educational initiative had a positive impact on thousands of participating clinicians and their clinical practices. Reflecting on the TEAM-A experience, we recognize that desired educational outcomes were achieved through a strategic education planning process. As CPD providers we routinely design and implement individual activities to improve knowledge, competence, and/or performance. However, learner needs are rarely fully addressed by one exposure to an educational intervention (O’Neil et al. 2009) and clinicians need further education and support to implement and sustain changes in practice over time. Therefore, CPD planners must develop methods of sustaining the change achieved through the educational intervention, build in ways to transfer what was learned to additional topics and practices, and provide education that lives on through sharing knowledge and best practices with additional learners.

In TEAM-A, several approaches served this purpose—providing learners with multiple educational opportunities to engage in serial education, modifying the content and interventions in response to the evolving needs of learners, and providing practice-oriented tools and resources. Collectively these represented a transition from planning and implementation of single activities to a CPD process supported by continuous assessment and improvement.
TEAM-A and Social Accountability

Although “social accountability” was not part of the initial partnership vocabulary, the underlying notions of focusing on a public health area important for society and producing and demonstrating to the medical community, funders and other stakeholders sustainable improvements influenced inception, planning, and implementation of this initiative. Looking at TEAM-A through the social accountability lens we identified natural alignments between this strategically planned collaboration and features of socially accountable CPD. TEAM-A education was relevant to the needs of patients with atrial fibrillation, health systems, care teams, and clinicians because it was informed by multi-component needs assessment, utilized competency-based framework and offered practice-oriented tools and patient resources. Appropriate procedures were in place to avoid commercial bias and, thus, support trust and credibility. The quality aspect was addressed through systematic measurement of outcomes at multiple levels of evaluation and continuous assessment and improvement embedded in the initiative. We came to a conclusion that a shift toward strategic education planning moved this initiative in a direction of increased social accountability.

Notably, the PI component of TEAM-A most aligned with socially accountable CPD. PI activities, continuous rather than episodic in nature, guided by a review of local performance data, enhanced by a combination of educational and quality improvement interventions and positioned at the intersection of the clinician, the team, the patient and the health system, are likely to be the most suitable mechanism to deliver socially accountable CPD.

We also acknowledge that not all best practices of socially accountable CPD were present in this initiative. Cost of care was on the agenda of the care transitions PI project but cost effectiveness was not integrated in the educational design to the same degree as the relevance and quality value domains. Global threats to health and advocacy were not part of the curriculum. Scholars demonstrated a connection between global issues, such as climate change, and decisions that clinicians make routinely in their practice as well as health system operations (Barna et al. 2012; Gillam and Barna 2011). Medical education including CPD is called to address this connection (Gillam and Barna 2011; Thompson at al. 2014).

Why Socially Accountable CPD?

We want to challenge ourselves and our peers in the CME/CPD field to become more socially accountable with education programs. Social accountability practices add value to CPD because they position continuing education practitioners to be more responsive to the needs and outcomes that the society defines as important. Further, the social accountability framework may reinforce understanding of the value of effective CME/CPD approaches among communities outside of the CME/CPD networks since it uses language and concepts that can appeal to a broad range of stakeholders and society in general.

Challenges of Practicing Social Accountability

Based on the TEAM-A experience, aiming for measurable sustainable changes in clinical practice and patient outcomes has a number of implications for CPD programs. While Moore’s levels-of-evaluation paradigm (Moore et al. 2009) serves well in many instances of planning and evaluation of continuing education, it does not distinguish between individual behavioral changes, team behavior changes, system changes, or societal impact. Scheirer (2013) argued that various types of changes are likely to require different means to foster their sustainability and different approaches to investigate sustainability. This researcher defined six types of changes: changes made by individual providers; changes requiring coordination among multiple staff; new policies, procedures, and technologies; capacity or infrastructure building; collaborative partnerships or coalitions; and broad-scale system changes. This categorization appears to be a useful way to think about evaluation for CPD providers who seek new models/frameworks to better measure higher level outcomes and their sustainability. Another useful guidance specific to evaluation of socially accountable CPD is provided by Thompson and Davis (Thompson and Davis 2008) who suggested measuring relevance, quality, cost effectiveness, and equity. Today continuing education practitioners lack tools and experience to assess some of these domains.

Further, adapting CPD to be more socially accountable in the future raises a legitimate budgetary concern in that its development, implementation and measurement may be more time- and resource-intensive. Implications may include...
identifying additional funding sources or streamlining and consolidating some parts of the CPD process to offset increases in other areas. In addressing this dilemma, the TEAM-A planners invested in detailed planning early in the project and thought creatively about existing resources that might be used to support and reinforce learning. A multi-organizational collaboration provided an advantage in this respect, as partners shared tools and content assets and streamlined their utilization across multiple activities.

Who Is Responsible for Socially Accountable CPD?
Socially accountable CPD is a shared responsibility among clinicians, CPD providers, patients and patient advocates, professional regulatory authorities including accreditation, licensing and governing bodies, and others who influence and/or benefit from CPD (Thompson and Davis 2008). However, we suggest it is primarily the CPD providers’ role to coordinate, facilitate partnerships and build bridges to other stakeholders.

Addressing Social Accountability Through Collaborative Initiatives
Partnerships of CPD providers and other organizations are increasingly formed to make a greater educational impact by developing synergy and leveraging educational endeavors (Cervero 2001; Lasker et al. 2001; Olson et al. 2011). CPD providers must balance interests of many stakeholders and learners’ needs with the business of providing education. Large initiatives add complexities to this, including balancing among the partner organizations’ priorities and establishing shared goals, but also provide more reasons and opportunities for fostering socially accountable CPD. For example, a collaboration of medical schools in Canada focused on innovative continuing education models was featured as a mechanism to introduce social accountability into the realm of CPD (Goldman et al. 2008).

Conclusion
The health care environment continues to change and CPD/CME approaches must adapt to embrace facets of this dynamic environment and evolving stakeholder demands. As education professionals we need to continuously evaluate environmental factors and critically examine existing and emerging educational solutions that we employ or should add to our practice. In particular, we need to delve deeper into the issues surrounding social accountability, generate practical and research questions that will further guide the inquiry and collectively find answers through sharing experiences and conducting research.

PRACTICE POINTS
1. Socially accountable continuing professional development (CPD) that addresses complex public health issues and demonstrates outcomes of societal value requires a shift from planning individual activities to a planning process that supports sustainable change and application to additional topics and practices.
2. Increased social accountability of CPD enables education planners to facilitate partnerships and build bridges to clinicians, patients, professional regulatory bodies, and other stakeholders who influence and/or benefit from CPD.
3. Sharing experiences and conducting research are critical to support implementation of socially accountable CPD.
4. Strategies and tools for assessment of social accountability within CPD practice environments need to be developed.

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Robyn Snyder, Director of Education Design at the American College of Cardiology, leads the team responsible for needs assessment, competencies, educational outcomes and faculty development. She has interest in assuring high-quality, competency and needs-based, measureable educational interventions that will lead to positive change in learner attitudes, knowledge, competence, or performance.

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