Organizational Change, Leadership, and the Transformation of Continuing Professional Development: Lessons Learned From the American College of Cardiology

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There is a need for a transformational change in clinical education. In postgraduate medical education we have traditionally had a faculty-centric model. That is, faculty knew what needed to be taught and who were the best teachers to teach it. They built the agenda, and worked with staff to follow Accreditation Council for Continuing Medical Education (ACCME) accreditation criteria and manage logistics. Changes in the health care marketplace now demand a learner-centric model—one that embraces needs assessments, identification of practice gaps relative to competency, development of learning objectives, contemporary adult learning theory, novel delivery systems, and measurable outcomes. This article provides a case study of one medical specialty society's efforts to respond to this demand.

Key Words: *commitment to change, communication skills, leadership, mentoring, small-group/team learning, strategic planning, theory-learning, theory-social learning, transformational change, organizational change*

Introduction

The past 20 years have seen significant increases in the production and dissemination of medical information, clinical trial data, and practice guidelines. Simultaneously, societal expectations for high-quality medical care have increased, and knowledgeable patients want to be more involved in their care decisions. Physicians are being asked to see more patients and provide more documentation, reducing the time available for continuing study and skills development.[1]

These trends have heightened expectations that continuing professional development (CPD) programs, including continuing medical education (CME), will result in demonstrable improvements, not only in clinical practice but also in patient outcomes at both individual and population levels.[2,3] As a result, there has been a significant effort to move CPD from a model that has "relied heavily on dissemination of scientific evidence to a more systematic and concerted effort to deliver educational interventions that improve clinical practice."[4] Some have gone even further and argued that CPD should not only focus on changing the physician's behavior and but also play a role in facilitating organizational improvement.[5]

Serving the aims of improving practice and health care organizations demands major changes in all aspects of the development and delivery of CPD,[3,6] including the organizations that develop it. We believe this change is rightly

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TABLE 1. Differences Between Teacher-Centric and Learner-Centric Education

Learning Assumptions	Pedagogy	Andragogy
Need to Know	Teacher-defined	Learner-defined
Learner's Self-Concept	Teacher-dependent	Self-directed
Role of Experience	Relatively unimportant	Very important
Readiness to Learn	Teacher-directed	Self-directed
Orientation to Learning	Subject-centered	Life-centered
Motivation	Extrinsic	Intrinsic

Adapted from Knowles et al.[7]

considered *transformational* in nature; it requires very different approaches to planning, implementing, and assessing the impact and merit of CPD. CPD has traditionally been based on a *faculty-centric model* with senior faculty selecting curriculum topics, choosing the best teachers to present, building a course agenda, and coordinating with certified meeting planners to follow accreditation criteria and manage logistics. As educational needs evolve, the transformation needed is from a faculty-centric to a *learner-centric model*—or in Knowles's terms, from pedagogy to andragogy[7] (see TABLE 1). Although Accreditation Council for Continuing Medical Education (ACCME) and American Medical Association requirements are structured to support learner-centric models of education, many providers of educational products have not yet made the required changes in instructional design, content creation, assessment creation, or teaching skills. As a result, a significant gap between the educational products provided and those that are needed has persisted.

Organizational Change Is Necessary to Meeting Evolving CPD Needs

In accordance with the principle that "in organizations as well as architecture, form follows function,"[8] transformational change in the purpose and nature of CPD programs requires transformational changes in the organizations that offer CPD. Transformational change in an organization is an elemental shift in operational strategy that results in a new culture inside that organization. It frequently requires new people with appropriate skills, a new organizational structure, and new business processes. Ideally, transformational change is supported across an organization and is sustained over a substantial period of time.[9]

Change inside a medical specialty society is complicated, with layers of complex governance and collaborations blended with history, tradition, and habit. Human elements are also reflected in the culture of an organization, and those elements must be understood, embraced, and adjusted for, in order to plan and implement effective change strategies.[9,10] These societies are also typically strategically led by member thought-leaders, while day-to-day operations are managed by the chief executive officer (CEO) and the association's professional staff. This bifurcation can create difficulties when innovating CPD activities because medical societies must be prepared to lead and manage the challenges that transformation will yield. The shift toward learner-centric CPD requires education providers to critically examine the structure of their current systems, to identify areas where the new needs are not being met, and to embark on the transformative efforts needed to evolve their organizations.[11,12] The obstacles faced can be not only technical or administrative but personal as well. As Gellerman cautions:

> There is always a potential tension between the economic purpose of an organization, which corresponds to what Sullivan called "function," and the personal or shared purposes of its members. This tension is likely to be high in organizations where economic, political, or technological conditions change frequently. Power, and even job security, can be gained or lost each time the organization attempts to readapt itself to its environment. Impending structural change pits group against group and, in some cases, career against career. This accounts for the sometimes surprising degree of inertia in organization structures.[8]

Another key issue is that financial performance, overseen by one set of member leaders, may not align with the strategic goals of the education oversight committee, which might wish to leverage patient outcomes data to innovate and invest in new models of educational intervention. Financial concerns influence decision making on matters such as the use of new technology and developing educational programming to facilitate andragogy across a wide variety of technological platforms. The use of information technology is an essential component in the shift to a learner-centered approach. Knowles posits that "technology is inherently a self-directed learning media that enables adults to access learning in a just-in-time, just-enough format under conditions of full learner control."[7] Knowles is referring to emancipatory learning facilitated through sophisticated education technology, not merely digitized lectures. Successful use of these technologies requires investment and educational expertise that is not typically found within medical specialty societies.

To align CPD with the modern context and purpose of health care quality improvement, CPD providers in complex organizations such as specialty societies need to take every opportunity to learn from others' experiences in initiating, planning, and implementing transformational change. In this article, we will describe the successful creation of a new teaching and learning model at the American College of Cardiology (ACC), the organizational changes required to implement these changes, the financial effects of the

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transformation, and the impact the reorganization made in CPD for its members. The ACC experience highlights the challenges and steps needed to maintain quality products and services while transforming the essential structure of developing and delivering both legacy and innovative educational products. Discussed are the logistical, cultural, and philosophical shifts required during this process. This case study provides an example and source of lessons learned to other CPD providers as they navigate the complexities and sensitivities of transforming their learning models and organizational delivery structures. It also illuminates potential opportunities for further study into the application of traditional business operating principles to the transformation of medical society CPD management.

Methods

Establishing Needs for Transforming Education at the American College of Cardiology

Since its founding in 1949, the key mission of the ACC has been to provide professional education for practicing cardiologists. Currently, the ACC serves over 50,000 United States–based and international members with an annual operational budget of over $100 million. As a leader in live education for cardiology, the organization had historically delivered programming through a meetings-management approach: the staff managed logistical operations and accreditation, while academic leaders created and delivered clinical content in a pedagogical fashion. Meaningful analysis of learner needs, professional impact on practice, and financial relevance to the organization did not occur, and no model of continual improvement was established. The ACC performed literature searches for needs assessments and provided basic outcomes methodology to meet ACCME and grantor requirements, but it did not use this information to inform those developing the curricula of the practice gaps in need of resolution. In addition, although the ACC's 7 registries provide continual surveillance of evidence-based practice inside care centers across the country, there was no analysis of these registry data to assess past impact of educational activities.

As educational needs shifted, it became clear that the existing system needed to be redesigned and expanded beyond clinical knowledge to include performance improvement with a new infrastructure to support member faculty and adjust to changing member needs.[13] By 2010, the ACC was experiencing flat or declining attendance and falling revenues in its education portfolio, which was largely composed of activities that were pedagogic in nature and changed little from year to year. The ACC's member leadership feared the CPD portfolio's relevance to membership might slip away if the offerings did not transform to meet changing learning needs. For more than a decade, incremental change had been attempted with successful individual initiatives, but the legacy portfolio remained essentially the same.

The ACC's member leadership embarked on a far-reaching reorganization to transform the manner in which CPD was developed, measured, and delivered to its members. The leadership determined that to improve CPD, a learner-centric model should be developed that embraced need assessments, identified practice gaps relative to competencies, established learning objectives, incorporated contemporary andragogical principles into educational design, used novel delivery systems, improved team-based and patient-centered care, and devised patient outcomes measures for later assessment of CPD effectiveness.[2,7,14]

Setting Goals

In early planning meetings, member leaders and ACC association professional staff determined that the overarching goal during the transformation would be *to establish an adult learning model within the ACC, with an inherent continual improvement function, designed to improve educational programming and clinical practice results.*

In order for this main goal to be achieved, several subcategory goals were identified:

- The capacity to analyze learner needs
- The capacity to analyze learning impact on patient outcome
- The expectation of financial stability
- An improved overall educational infrastructure

In addition, tactical requirements were also specified to meet these goals:

- Enhance curriculum development.
- Incorporate data from the ACC's seven clinical registries into the educational planning process.
- Create mechanisms to ensure the education portfolio's continuous improvement and measure financial viability of the portfolio.
- Adopt new content-delivery models.

For the ACC to successfully transform from a faculty-centric educational structure to one that promotes learner-driven, data-based CPD learning outcomes, as outlined in the goals above, it was necessary to reevaluate current methods and organizational capacities. This evaluation studied the existing curriculum development process and content delivery methodology; it also explored the capacity to commit to continuous improvement and to incorporate clinical registry data into the educational process. Studies concerning leadership effectiveness also highlight the need for incorporating key steps during the change initiative's process, such as endeavoring to "involve mapping the current situation even as it changes, creating a set of trusting relationships with people that together carry out the leadership activities and support one another, articulating a picture of a desired future that has

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meaning to its members, and the capacity to organize activity to meet work demands."[5]

Once senior management identified the key elements of improvements needed to transform the ACC, an outside transformation expert and other specialists were recruited to advise the ACC's CEO and leadership team on envisioning and managing the process. Transformations of this type have been studied extensively in corporate settings, and that research has identified techniques that increase the probability of success. These studies reinforce the necessity of techniques that include business analysis, leadership training, and the establishment of a common vision, unfettered communication, and cultural sensitivity.[9,15–17]

With key advisors in place, the ACC began the iterative process of applying these techniques in order to transform its CPD development, delivery, and impact.

Transforming Organizational Structure and Culture

The ACC's Education Division is responsible for strategic planning, implementation, and analysis of educational programming and was therefore identified as the starting point for the transformation. The Division was divided into 2 teams; two-thirds of the staff were charged with ensuring that the legacy portfolio continued to work smoothly. The ACC determined that existing, well-respected programs needed to be sustained while the organization reorganized in order to provide member support and continuity, as well as financial stability for the society.

The remaining one-third of the division was composed of strategic and creative thinkers with educational expertise. This second group, purposely chosen from all management levels to ensure cooperative development rather than "top-down" implementation, was tasked with working with member leadership on the design and development of the new model. Importantly, the change team members were selected for their demonstrated enthusiasm for the proposed changes, in addition to their professional expertise. Consultants were integrated into this task force to fill any gaps in expertise.

Involvement in planning the transformation was promoted and led by the transformation task force. Members of the task force were charged with creating a timeline for integration that was sensitive to both the need for open communication and the complexities of implementation within the organizational structure. Through months of research and collaboration, the task force was able to quantify the needs of ACC members, assess areas of weakness in the current development and delivery system, anticipate future member and organizational needs, and design an organizational structure to better meet the identified goals. This development process was iterative and informed by frequent feedback from staff, faculty, and learners. The task force did not attempt to simply restructure the existing system. Instead, they chose to develop an entirely new vision for CPD at the ACC, unencumbered by existing staff models and workflows. The vision was considered essential to success. As noted by Ancona:

> Visions are important because they provide the motivation for people to give up their current views and ways of working to change. If a vision is compelling, then this change occurs because people have actually changed their beliefs, not because they feel forced into a corner.[18]

Leaders at the ACC worked to ensure that staff understood that previous efforts were not wrong, but rather that the organization needed to change to meet evolving demands on medical education. Efforts were made to accomplish the transformation strategically and efficiently, with information provided to organization members at every opportunity over a period of 18 to 24 months, a tolerable pace for the organization.

The transformation task force outreach to staff, members, and faculty included focus groups, one-on-one meetings, and other information-sharing opportunities. This approach provided existing staff and faculty with an understanding of how their skills worked or needed to be developed in transforming CPD at the ACC. Members of management were also able to identify who was hesitant about or resisting the proposed changes. In cases where personnel demonstrated resistance or rejection of the transformation goals, ACC further provided personal coaches to assist staff in understanding how they fit into the new expectations. When these efforts were not successful and staff attitude was undermining the change goals, staff replacements were necessary.

Through regular communication and inclusion in the development of the transformation, the ACC staff came to recognize the opportunities for organizational and personal growth and development the transformation presented. The task force also met on a daily basis with the legacy portfolio team, which is charged with maintaining the existing programs during the transformation process, to ensure that it was kept informed of the process in a manner that was inclusive and welcoming. These efforts resulted in the staff gradually becoming evangelists for the process, and excitement began to grow across the division as the plan for the change initiative matured.

Transforming External Factors

Medical societies serve members and their needs, so integrating players outside of the internal organization is essential. Therefore, faculty, committee leaders, and members were tapped as important resources in the transformation process. Member leadership was deeply involved, and committee members who supported a transformational change participated at high levels.

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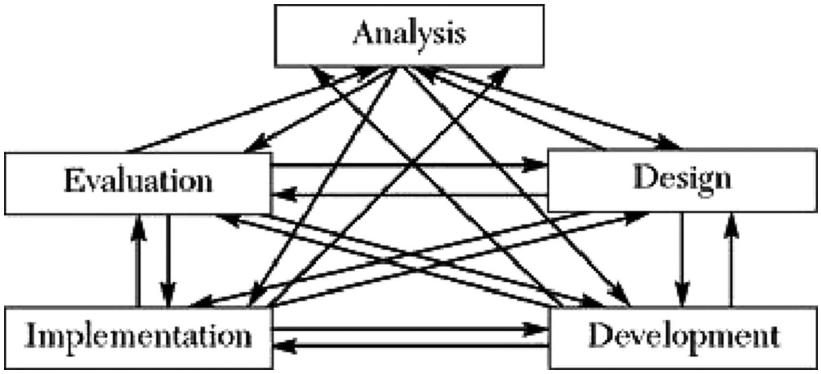

FIGURE 1. ADDIE Spider Web Instructional Design Model, with Design, Development, Implementation, Evaluation, and Analysis Flowing Back and Forth as Needs Were Defined, Addressed, and Reviewed
Adapted from: Brown and Green.[19]

Persuading educators with a long history of success in an established model to consider a new approach required a clear presentation of the new model, its benefits, and its strategic implementation. Educators who were committed to change were asked to assist with developing the new conceptual framework. These educators encouraged interest among other educators in the ACC's transformation. This engagement increased support for the change in the ACC's approach to CPD. This is a cultural sine qua non within the ACC, and it had the added benefit of creating member enthusiasm.

Building a Learner-Centric Model

The existing organizational structure of the Education Division was composed of separate units representing educational channel distribution modalities: Annual Scientific Session, Live Programs, Online Learning, and Accreditation. Staff members who specialized in operations were charged with strategy and implementation. The separate units worked independently, and with limited collaboration. As a result, ACC members were experiencing neither continuous learning nor blended learning. In addition, independent faculty drove much of the curriculum content without feedback either from learners or from the ACC staff. To achieve the transformation goals, the people, processes, and oversight that made up the existing infrastructure of the Education Division needed to be repurposed. An internal analysis, conducted over a 3-month period, identified the need for a new management model, and highlighted expertise gaps to be filled in the new educational model.

Over the next 6 months, the team identified specific tasks that needed to be developed within the Education Division to promote the transformation:

- To analyze learner needs and develop new curricula to maximize education impact and improve patient outcomes
- To write learning objectives and teaching and testing points to improve accountability
- To develop relevant clinical content and synthesize such content into small, digestible chunks to match learning objectives across learner experiences in various formats
- To develop board-style medical knowledge questions to help physicians self-assess and self-direct learning
- To design outcomes and metrics to create the baseline for effective continual improvement models and demonstrable financial relevancy

As the vision for the new Education Division developed, it became clear that new expertise, a new organizational construct, and new workflows would be required to foster collaboration, focus, and efficiency. The formation of these new constructs was a highly iterative process, much like the ADDIE Spider Web instructional design model[19] (illustrated in FIGURE 1), with design, development, implementation, evaluation, and analysis flowing back and forth as needs were defined, addressed, and reviewed.

Educational strategists were added when it became clear that expertise was needed in areas such as curriculum design, instructional design, business management, and analytics. These experts were able to design the offerings and to create platforms for dissemination through product-specific distribution channels. These improvements were assessed against the goal of putting the entire educational portfolio on a solid financial footing by establishing analytical benchmarks and evaluation methodology.

A new organizational structure was created to accommodate changes in personnel and workflow. The Educational Division was rebranded as the Lifelong Learning Division (LLD) to symbolize the strategic shift from teaching to learning. The structural changes also provided accountability and cross-team collaboration. New organizational teams were created, including an Academic Affairs Group, charged with overseeing competencies, assessments, outcomes,

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curriculum planning, faculty development, accreditation, certification, and educational advocacy activities. An Education Strategies Group was created to lead product development and management, instructional design, workflow management, project management, educational portfolios, financial analytics, and operation standards. These groups cooperated in building the strategic framework and organizational focus that were expected to deliver individualized and timely educational content. The Academic Affairs and Education Strategies groups worked closely with operational departments (eg, Annual Scientific Session, Live Courses, and Online Education) to deliver educational content. The new structure allowed staff in each area to focus on their expertise and work more effectively with other areas, while being guided by a cohesive strategy and common goals.

Staff members were instructed in product management (eg, learner needs, competitive research, opportunity identification, product innovation, development and management of key strategies for success), methods for tight integration with the operational teams, and analytics development to monitor progress and anticipate opportunities. Clinicians and clinical writers were requested to perform data analyses across the ACC's clinical practice registries, educational question evaluation, and performance analysis, as well as an analysis across the entire educational portfolio of programs spanning the preceding 5 years. Clinicians authored a new series of needs assessments spanning all subspecialty areas in cardiovascular care. These needs assessments became the strategic foundation for future educational planning. Experts were enlisted to improve quality, design, and development of the ACC's assessment tools. Clinical outcomes experts and statisticians designed novel outcomes methodology; identified practice, quality, and educational gaps; and provided insights that would establish the basis for a continually improving model. New staff members who were skilled in learning- and content-management systems, user interface design, and online instructional design were also required for the ACC to improve their online learning experience. Hence, the organizational construct shifted from separate, independent units that were responsible for strategy implementation, to integrated work groups in which education strategies and academic affairs became the guiding compass. The divisions shared a single workflow, fully integrated into new strategic design and analysis processes (FIGURE 2).

The ACC's educational governance structure was revised to reflect these new areas of responsibility to ensure that strategic developments were implemented. Eighteen loosely organized education committees were phased out and 7 new committees (Lifelong Learning Oversight, Education Quality Review Board, Curriculum Design, Competency Management, Accreditation & Outcomes, Annual Scientific Sessions Planning, and Lifelong Learning Portfolio), which were composed of both quality and education member experts, were structured to align with the new staff model, reporting through an oversight committee and the board of trustees. This eliminated the traditional, highly autonomous committee structure and provided integrated vision and strategic leadership.

To maintain high-quality educational activities while devoting time and resources to making the transformation, a strategic plan was developed in which new activities were introduced in stages, coordinated within the updated structure, and integrated with previous activities whenever possible. Recognizing the need to respect historic business cycles, it was not until Year Two of the change initiative that the LLD deployed its first annual product-development planning and management process. One major application of the new model was to apply principles of learner-centric education to the ACC's Annual Scientific Session, which is a major CPD intervention.

Effective Communications and Organizational Integration

Organizational strategies during the transformation process must foster transparent communication—a crucial aspect of change management in both corporate and medical education settings.[9,16,17,20] Theories of social constructivism suggest that successful communication with others is not a one-way process of developing and transmitting a message, but it is instead a shared process in which each party learns from and provides information to the other to develop a mutual understanding of information and goals.[13]

Throughout the transformation process, the ACC communicated internally with newsletters, quarterly retreats, and cross-team resource exchanges including ad-hoc teams for specific projects, cross-team education, town hall meetings, formal communication models that cascaded down the organization, and interdivisional collaborations. All team members could quickly access new ideas, strategies, and goals through support materials, including slide decks, spreadsheets, and analytics.

The transformation from faculty-centric to learner-centric education models demanded a new set of skills among the ACC staff. Developing new skills can lead to new opportunities for staff members, while clarifying their understanding of how their roles and tasks fit into the overall mission.[21] Worry about lacking the required skills for success in the changed organization may drive unproductive behaviors, but with complete, sequenced transparency, the leaders of the change can inform and encourage essential staff to identify and embrace opportunities for personal growth and to meet the demands of the new structure. Working to empower evangelists across the division through involvement and constant two-way communication—as well as, when necessary, marginalizing toxic, nonsupportive staff—ensured that the transformation goals were championed

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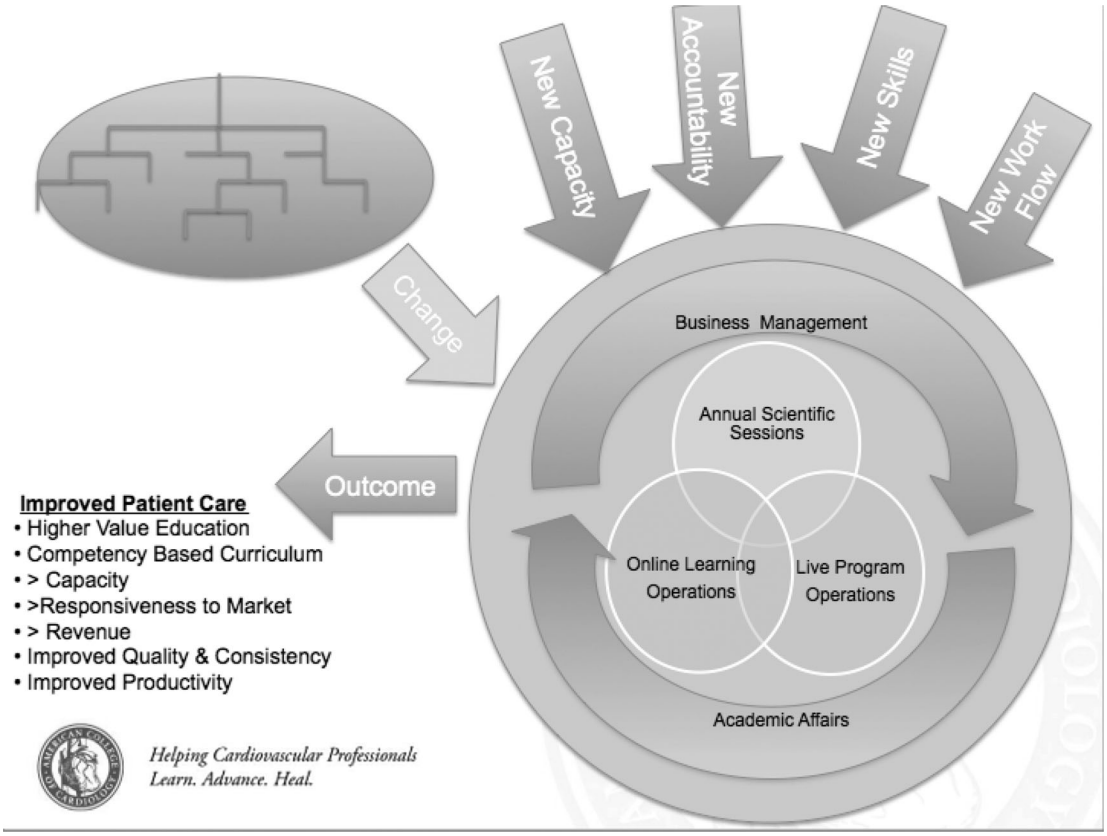

FIGURE 2. Fully Integrated, Single Workflow for American College of Cardiology Divisions, Sharing New Strategic Design and Analysis Processes for CPD Development

throughout the organization, not just implemented by management edict.

The executive leadership team of the ACC was also continually updated about and integrated into the process by the transformation task force. It was critical that the transformation within the LLD was understood and supported, particularly once that change began to influence staff across other divisions. Transformational change cannot be isolated to a single business unit, if it is to be successful; new standards will create conflict across services and divisions where natural points of integration occur. For example, at the ACC, new technology requirements by the LLD demanded more service and new skill sets from the Information Technology (IT) Division. Without IT involvement in the changing requirements, their acceptance of the revised needs, and their staff adjustment to meet these needs, LLD would run into roadblocks during implementation of their transformation. Restructuring may begin with one division and roll out to others over time, but strong support for the transformation must be communicated up, down, and across the organizational structure by senior management from the very beginning. Rapid engagement facilitates feedback collection throughout the organization that can then be incorporated into the transformation, making the process more iterative, flexible, responsive, and accepted. Another result of the transformational needs of the LLD was the creation of new direct marketing and digital strategy teams, nonexistent within the then-current organization.

While the development, analysis, revision, and implementation of the changes were occurring, the legacy portfolio staff continued to provide the products and services in place for ACC members. Some of the legacy personnel, primarily skilled in operational delivery, had direct reports that were included on the change team. This resulted in times when managers' direct reports were deeply involved in transformative work while the legacy efforts were rolling along. This inclusion allowed all staff, regardless of their day-to-day responsibilities, to be well informed throughout the process and the work of those not directly involved in the transformation to be recognized and valued.

Externally, the complexities of a member-led organization with multiple constituencies and goals were crucial elements to understand during the transformation. Members and committees were closely involved in planning and implementing the proposed changes. Focused workgroups were used to promote teamwork and to improve performance.[22] A systematic

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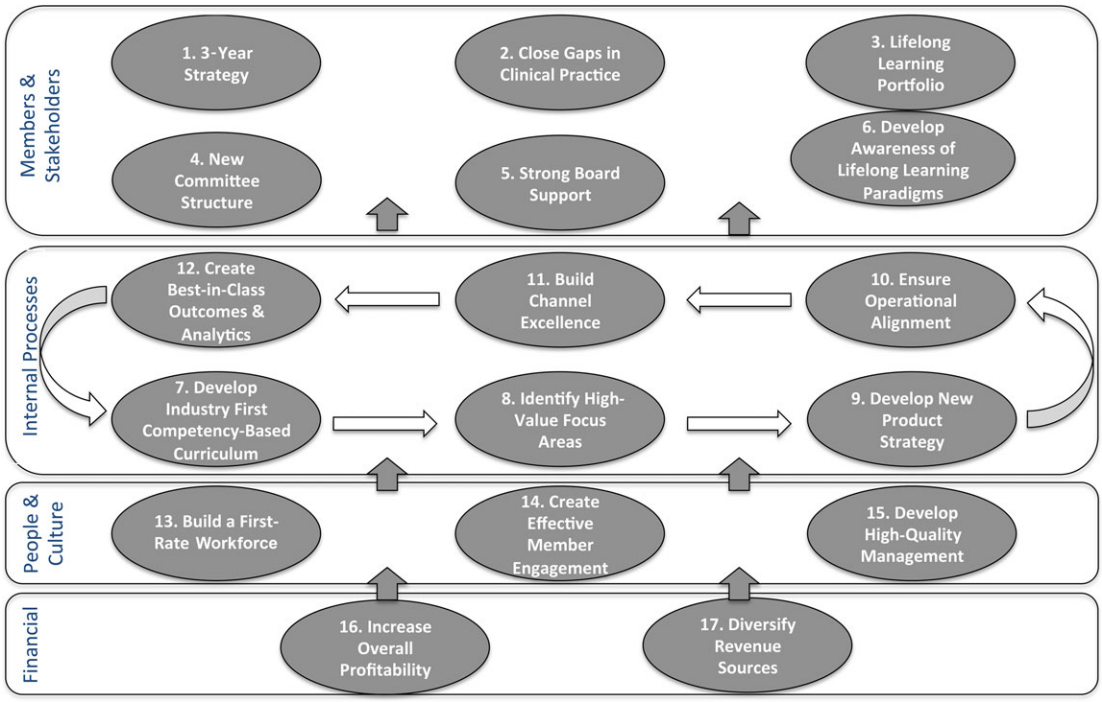

FIGURE 3. American College of Cardiology Division Performance Plan That Would Ensure Success and Inform Each Staff Member Where and How They Delivered Critical Value to the New Model

review of this process found that staff development programs increase participants' commitment to the institution's mission while increasing confidence, motivation, and awareness of personal strengths and limitations. In addition to changing leadership styles, development programs encouraged the application of new skills in the workplace, such as departmental reorganization and team building, adoption of new leadership roles and responsibilities, and creation of new collaborations and networks.[23]

As a final step, the transformation task force built a division performance plan that would ensure success and inform each staff member where and how they delivered critical value to the new model. A scorecard methodology was used to measure and track success. The division conducted a team-building exercise and introduced the transformational change strategy (FIGURE 3).[7] Department managers tied each staff member's annual performance goals to the division strategy map. They then met one-on-one with staff members, creating opportunities to discuss career paths, growth opportunities, and creation of essential, objective, and measurable performance goals.

Results

The success of these efforts was demonstrated in improved continuity, quality, and consistency; as well as stronger strategic partnerships, greater efficiencies, and increased net revenue. To date, the ACC's transformational process has led to 4 notable and tangible results:

1. *The ACC has delivered a multidimensional, 24-month improvement in quality, learning interventions, and research inside a set of local care centers.* The goal was to move beyond the dissemination of knowledge to improving intercenter care coordination and enhancing patient-centered care. Cardiology fellows-in-training were directly involved in the design, delivery, and promotion of change inside their institutions. They cooperated across institutions to test various models of integrating new-shared decision-making and frailty assessment tools. Through the process, a community of valve treatment centers was successfully sharing best practices for quality improvement for trans-catheter aortic valve replacement, a clinically transformational technology. Historically, the ACC had directed educational initiatives through live national and regional educational sessions generally focused on disseminating clinical knowledge; the new type of reflective learning inside and across care centers could not have succeeded under the ACC's previous educational structure.
2. *A revamped organizational structure, with financial activities, human resource activities and internal processes working together, now feeds into the development of appropriate, well-utilized educational activities.* The 50-member ACC Lifelong Learning Division is realigned, with 21 new individuals (a net gain of 1 employee), 17 of whom have expertise that is new to the organization. The creation and implementation of strategic restructuring enables staff to focus their efforts within their

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core competency. The new management structure is less top-heavy and includes a senior educational team with broader, deeper skills, which is fully integrated with the Science & Quality Division. Development of in-house expertise has also resulted in a decreased reliance on contractors, leading to financial savings and reduced dependence on management. In the first year of implementation, the ACC saved $200,000 on staff costs.

3. *An annual curriculum planning process is in place.* Curriculum planning is now fully competency based, with development and publishing of core clinical competencies spanning all cardiovascular subspecialties. Blended-learning offerings have their own criteria and success metrics, faculty development, and faculty are committed to meeting learner needs. A new needs-assessment methodology that allows utilization of data from 7 clinical registries, educational outcomes, assessment of members' educational gaps, and ongoing evaluation of the literature has been introduced. Future steps include development of a novel outcomes methodology that incorporates data in a concise, scholarly manner, so physicians can make strategic changes to their course offerings. Courses that live on in perpetuity no longer exist.
4. *The Lifelong Learning Portfolio was introduced, assisting learners with finding and tracking their personal learning.* Online portfolio management makes it convenient to track users' continuous maintenance of certification and state licensure requirements and to create and save transcripts. A rapid adoption was witnessed, with over 2800 learners participating in the first year of the Lifelong Learning Portfolio.

These changes have led to continued tangible improvements in the ACC's performance as a learning organization. For example, revenues for education increased in both 2012 and 2013, with the profit margin increasing by 43% in 2013. The number of CPD grant awards increased, and award amounts increased by 46%. Previous downward trends in membership participation, ACC Web site usage, and attendance at live-learning activities have been halted and, in some cases, reversed.

Discussion

A time of transformational change within an organization is by necessity a time of reflection and of trial and error. Not all ideas are good and not all ideas result only in the intended consequences, but to grow and develop, an organization must be willing to try new things and must understand that there will be failures among the successes. Above all, effective organizations must have the institutional courage to ask questions and to try new pathways. The ACC considered phasing out much of its live course portfolio; however, rather than removing this important content, new criteria for success were created, objective measurable goals were set, and an annual, data-informed planning process developed to update its utility. Course chairs were enabled to make strategic decisions. Each course director was provided with a 3-year opportunity to develop a blended-learning curriculum that would meet specific learning outcomes and performance criteria. The ACC used this transformation as an opportunity to meet the increasing demands of accrediting bodies and to better integrate quality improvement and lifelong learning for its members.

The ACC experience illustrated the following key areas of focus for a transformative reorganization:

1. Transformational change must continually be championed, prioritized, and supported by the executive management team.
2. Strong leadership in managing strategic change is essential to planning, directing, and applying transformational change principles.
3. Participants must be informed, educated, and listened to throughout the development process. The feedback gleaned through these efforts helps to direct the approach to and the pace of change. Involving and informing everyone involved in the transformation creates trust and enthusiasm, along with better outcomes and smoother transitions.
4. A change initiative should be designed to support, rather than threaten, the organization. Leadership must encourage an organization to be strengthened by the necessary change. Support may be gained through inclusion, but it may be necessary to replace those who interfere with the transformation or lack skills required by the changes.
5. Organizational change is an ongoing, iterative process rather than a one-time event. Change management leadership must recognize that transformation takes time and requires the accommodation of many variables, some of which will be unknown at the outset. The final state of the organization is unlikely to be exactly what was originally envisioned.[9,21]
6. Transformational change will eventually require change across the organization, and must not be isolated to a single division. The larger organization consumed with an old model will likely reject new requirements and expectations from the changed division without appropriate integration, and success will be far more difficult.

The transformational change in the ACC's educational activities has greatly improved the organization's ability to meet the evolving educational needs of its membership. Both staff and faculty share criteria and metrics for success across the educational portfolio as common goals. Member leadership is enabled by total transparency and informed feedback to make strategic decisions as curriculum developers. Performance analytics are reviewed weekly, empowering staff to make timely strategic operational decisions about the product. Staff have objective performance metrics aligned with their division's strategic plan.

As medical education continues to evolve, other professional medical organizations similar to the ACC will find the need to undergo such a transformation to stay relevant, meet their members' changing needs, and meet society's

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Lessons for Practice

- CPD can make an important contribution to changing behavior and improving the quality of patient care. To succeed, CPD developers require the skills, structures, and processes for delivering CPD that changes clinicians' practices and enables adaptation to local needs.
- Organizations can share strategies for transformation; this case study presents an example highlighting the evidence that showed the need for change at the ACC and the shifts that change required.
- Quality and lifelong learning divisions of CPD organizations benefit from a synchronized workflow that outlines individual contributions to joint outcomes.
- Andragogy supported by educational expertise, technology, and alignment with quality measures can build participation and financial stability.

expectations for medical education that improves quality of care. The ACC's ongoing successful transformation demonstrates that applying established principles of change management can facilitate changes in CPD organizations as successfully as in corporate organizations.

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