

# FACULTY COMMITTEE ON STRATEGIC PLANNING FOR CONTINUING EDUCATION AT HARVARD MEDICAL SCHOOL



*HMS CME Course, March 2012*

September 2012      Final Report

A report to the Dean of the Faculty of Medicine proposing strategic recommendations for the future of continuing education at Harvard Medical School.

# Faculty Committee on Strategic Planning for Continuing Education at Harvard Medical School

## FINAL REPORT

### EXECUTIVE SUMMARY

In September 2011, Dean Flier charged a group of faculty and senior administrators to think creatively about the future of continuing education at Harvard Medical School (HMS) with the goal of making strategic recommendations about improving existing activities and venturing into new opportunities. Over 50 faculty and senior school administrators met regularly to discuss continuing education from the standpoints of best pedagogical practices, faculty development, financial and administrative issues, and opportunities for expanded or new ventures, such as those related to distance education and executive education. The committee's deliberations coalesced around several principles that push HMS continuing education to be known not only for its content expertise, but also its innovative pedagogy; to expand audiences through new types of courses or content delivery methods; and to provide enhanced infrastructure to ensure continued excellence. Out of these guiding principles emerged seven major recommendations:

- ☐ HMS should aspire to become nationally known for delivering courses that combine cutting edge content with a format that facilitates enduring knowledge via pedagogical best practices for adult learners.
- ☐ HMS should enhance the academic status of the Department of Continuing Education (DCE) through support for improved assessment, evaluation and research activities so that the department can better fulfill the mission of discovering improved educational methods and be more prepared to take a more active national role regarding accreditation and policy making.
- ☐ HMS should seek to expand audiences beyond those which have traditionally participated in accredited CME activities, with a focus on online communities, international learners, individuals interested in executive education, non-physician health care professionals, health care teams, and the lay public. All programs, regardless of audience, should meet the high academic standards of HMS.
- ☐ HMS should initiate, develop and sponsor school-wide curricular offerings that focus on biomedical and executive education topics with the following goals: to enhance education and collaboration among

HMS affiliated institutions, to fill gaps in the range of content addressed by current CME courses, and to engage new audiences. These courses are intended to complement, not to compete with, existing hospital or department-based offerings.

- ☐ HMS should invest in an infrastructure consisting of the right people (faculty and staff), services, technology, and facilities to support continuing education activities, because it is critically important to maintaining ACCME accreditation, staying competitive in both accredited and non-accredited continuing education activities, and launching new, high-profile ventures.
- ☐ HMS should enact a more transparent and viable financial model for all continuing education activities.
- ☐ The Dean should implement a governance structure to oversee HMS continuing education both academically and administratively. This structure should optimize synergies among continuing education activities (including both accredited CME and beyond accredited CME), to help realize a broadened vision for HMS continuing education.

## INTRODUCTION

Harvard Medical School (HMS) has a broad educational mission that encompasses five pillars: undergraduate medical education leading to the MD degree; graduate education leading to the PhD or Master of Medical Sciences degree; graduate medical education focusing on the training of residents and fellows in its affiliated hospitals; continuing education, both accredited and non-accredited; and public information and education. The continuing education enterprise at HMS is vast, with the primary vehicle being continuing medical education (CME) courses developed by the School's affiliated institutions and accredited via a centralized Department of Continuing Education (DCE) situated at HMS. DCE currently accredits close to 650 courses per year, including over 300 regularly scheduled series (e.g., grand rounds), approximately 250 traditional, hotel-based live courses and community programs and just over 75 self-directed online course modules. These courses reach tens of thousands of physicians and other health care professionals a year, across multiple disciplines, and touch a range of learners that spans from our own HMS faculty to physicians in all 50 states and in 175 countries across the globe. HMS faculty alone earn over 110,000 continuing medical education credits a year through regularly scheduled series accredited by DCE. The current CME model has been built on the strengths of entrepreneurial faculty who propose, design and deliver high-quality content, in partnership with DCE as the accrediting body that provides review, program support, evaluation and other services. These courses enhance the reputation of HMS and the clinical departments and hospitals whose faculty participate at all levels of planning, design and instruction.

Physicians are instilled with the need for life-long learning from the time they are in medical school. Keeping abreast of biomedical advances, evolving standards of care, and changes in the health care system is critical, and HMS provides a valuable service through its continuing education program to our faculty and their patients, and to society. HMS is deeply committed to the mission of providing outstanding continuing education. In light of the important link between continuing education and high-quality health care, the need for continuous improvement in our offerings and in the learner experience, the potential to reach a

broader audience, and the advent of new technologies that might be harnessed for education, the Dean commissioned a faculty committee to engage in a strategic planning effort and review of continuing education at HMS.

## CHARGE AND PROCESS

The committee began its work in the fall of 2012 and this report is a synopsis of its findings and recommendations. The Dean's mandate to the committee was to think creatively about how continuing education might develop in the future to best seize opportunities in support of the School's mission. The committee was asked to consider both accredited CME activities typically targeted at physicians and health care professionals and non-accredited continuing education activities that might be targeted at new audiences. The committee was chaired by Richard Schwartzstein, director of The HMS Academy, and comprised more than 50 faculty, including course directors and department chairs, and senior administrators of the School (See Appendix A). It was staffed by the Office of Institutional Planning and Policy. The committee formed four subcommittees: Pedagogy and Faculty Development, chaired by Richard Schwartzstein and Alan Leichtner; Networked Learning, Technology and Global Connections, chaired by David Golan and Elliot Chaikof; Executive Education, chaired by Barrett Rollins and Barbara McNeil; and Finance and Administration, chaired by Robert Mayer and Wesley Benbow. The subcommittees relied on a variety of sources to carry out their work, including the expertise of its members, many of whom are CME course directors, testimony from dozens of subject matter experts across multiple domains, interviews and "listening tours" with thought leaders both within and external to the HMS community, course director focus groups, preliminary research on the present state of CME in the United States, and academic articles. A steering committee integrated the work of the subcommittees and provided an umbrella analysis of the recommendations. The full reports and recommendations of the subcommittees are available at the Dean's continuing education strategic planning website.

## CONTINUING EDUCATION LANDSCAPE

The world of continuing education is broad and rapidly expanding. Medical schools, medical societies and professional groups, and for-profit educational ventures are all engaged in offering both accredited and non-accredited educational opportunities to physicians, other health care professionals and individuals working within the biomedical field. While live, in-person conferences continue to be prominent, there is an ever-increasing proportion of courses being offered online or in hybrid online/in-person formats. Moreover, accredited CME has changed dramatically in the past few years, as standards from the Accreditation Council for Continuing Medical Education (ACCME) have become increasingly prescriptive for course directors and DCE alike, and as requirements for maintenance of certification and maintenance of licensure for physicians have also become increasingly complex. The need for high-quality, easy-to-access, and affordable accredited CME is clear. Moreover, institutions are offering ever more non-accredited continuing education via free online courses, and are branching out into professional development and executive education offerings. All of these changes are occurring against a background of evolving educational practices. Increasingly, new pedagogical approaches emphasize interactive, experiential learning and the goals of adult education have shifted from transfer of knowledge to deeper levels of understanding that ultimately lead to changes in behavior (and for physicians, improvement in patient outcomes). The question for the strategic



planning committee was: how can HMS and DCE best meet the evolving demands of this shifting landscape?

In parallel with the work of the faculty committee, DCE has been hard at work over the past year and a half to prepare for reaccreditation. This effort has included revisions in course planning procedures and in multiple policies. The work of the committee took into account the ongoing changes and improvements in DCE, but also explored possible improvements and innovations in the realms of pedagogy, including networked and distance learning; the opportunities for expanded audience, including executive education, broader global activities, and public information; and the need for suitable infrastructure to support all these endeavors. The subcommittee on Finance and Administration provided ongoing advice to DCE over the course of the year, which helped align developments in the department with emerging recommendations.

## KEY THEMES

Three key themes emerged from the Steering Committee and subcommittees' deliberations: 1) to meld the best pedagogical techniques with the School's historic strength in biomedical content expertise, 2) to expand the audiences for continuing education, and 3) to enhance the academic stature and resources available to DCE and make strategic investments in infrastructure to support new initiatives.

### Enhancing Pedagogy

The neurobiology of learning has made great strides over the past several decades and our understanding of the strategies and techniques best suited to adult learners has expanded enormously. In a world in which medical knowledge has grown exponentially and technology puts "facts" at our fingertips within seconds, we must look to education to achieve more than just transmission of content. Continuing education, as with our work at the undergraduate medical, graduate, and graduate medical levels, must aspire to go beyond "knowing" to "understanding"; learners must be able to transfer what they learn in one context to solve problems in another context.

HMS faculty members are among the world's leaders in their fields and are sought for their scientific expertise. While many are also outstanding teachers, some are not, and much of the content accredited by the DCE is offered in traditional lecture formats in which the learner is a relatively passive recipient of information. The achievement of enduring, long-term learning requires interactive, experiential formats that engage and challenge the learner. A range of strategies, from audience response systems to project-based learning to the use of simulation, should be incorporated into continuing education, beyond the current levels of employing these methodologies. Moreover, with an increasing number of people seeking online educational communities, networked learning models, which are experiences that engage learners virtually with resources, teachers and/or coaches, and fellow learners, should be more widely integrated into online CME course offerings and hybrid online/in-person offerings. The educational experiences of health care providers should stimulate their curiosity and ultimately lead to changes in behavior and performance that improve patient outcomes. To succeed, we must make HMS continuing education sought after not only for its outstanding content but also for the excellence of its delivery and for its ability to facilitate enduring learning.

## Expanding Audiences

HMS continuing education offers an impressively large number of accredited courses both to physicians within the School and its affiliated hospitals, and to practicing clinicians throughout North America. Online programming has made content available to learners across the globe, and is offered at a discount or gratis to health care professionals in the developing world. All of the subcommittees noted, however, that the mission of HMS demands that we expand our view of the range of individuals who could benefit from the work of the DCE. To achieve this goal, we need to increase both traditional medical CME topics as well as less traditional offerings for HMS, particularly programs targeted at audiences for whom education credits may not be relevant.

Medical care is increasingly delivered by inter-disciplinary and inter-professional teams rather than individuals, both in the ambulatory and hospital environments, yet most continuing education continues to focus on individual physicians. As DCE moves forward, it should explore opportunities to bring inter-professional teams together for experiential learning that improves communication, technical expertise, patient safety, and overall performance.

While DCE has offered internet-based course offerings globally for many years, the Committee felt that the international audience could be greatly expanded with targeted live-courses as well as more robust technological platforms to enhance networked learning. Consideration should be given to leveraging the strength of the faculty affiliated with or working in the HMS Department of Global Health and Social Medicine, as well as other HMS and affiliated hospital clinicians and scientists working internationally. Also, there is opportunity in extending existing collaborations, such as those developed by the HMS Office of Global Programs, as well as forging new relationships with international partners.

Non-traditional medical audiences should also be targeted by HMS in the years to come. With the increasing prominence of health care as an economic and political priority for the United States, the need to educate business and political leaders as well as laboratory scientists about the intersection of biomedical knowledge, technology and patient care is growing. A new version of “executive education” to meet these needs should be a priority for HMS. Identifying faculty to champion these new efforts will be critical to such a program’s success.

Medical information, some of it accurate and much of it confusing, is plentiful and readily accessible by all via the internet. Nevertheless, with debates about the value of various forms of cancer screening, nutrition guidelines, and medications appearing on the nightly news every week, and an increasing demand for the public to be informed consumers of health care, HMS, and in particular DCE, should consider leveraging work done by the Office of Communications and External Relations and Harvard Health Publications to collaboratively target the lay public as an audience for carefully tailored programming.

## Strengthening Continuing Education Infrastructure

To achieve the goals emerging from the first two themes, all of the subcommittees articulated that the resources and infrastructure available for continuing education must be enhanced, with a two-fold focus: 1) supporting efforts already underway within DCE to provide more robust services; and 2) investing in technology, people and partnerships that enable innovation in continuing education more broadly. The

presence of a robust, centralized accreditation office situated within HMS provides significant value to the Medical School community. DCE has made strong efforts in the past year to adapt to the ever-more-stringent accreditation requirements and competition within the CME market; these efforts must be sustained.

In addition to the department's traditional and recently expanded responsibilities for accrediting courses and programs and tracking continuing medical education credits, the DCE of the future must be able to support improved audience needs assessments and more robust evaluation of courses. In concert with the HMS Academy, hospital affiliates, and other interested entities at HMS, the department should provide professional development programs to enhance the teaching skills of the faculty and resources to facilitate research on the best pedagogical strategies for continuing education. To the extent that technology may provide solutions to the challenge of creating interactive, enduring learning experiences, DCE should explore, validate, and provide these resources for course directors. The DCE should be alert to gaps in curricular offerings and bring faculty together from across the system for HMS sponsored courses to fill those gaps. As a service organization, DCE must continue to be accessible to its constituents, and funded by a transparent, fair and viable financial model.

Consistent with HMS' mission as an integral part of the university, the Committee endorses raising the stature of the department such that individual faculty who wish to make a commitment to continuing education can do so within an academic environment that supports individual career development. This includes supporting research leading to academic publications and recognition for such research within the promotions process.

Finally, as HMS is in the position to seize upon opportunities in the realms of executive education, online learning, and public education, it must use its resources strategically to develop an internal infrastructure (and potentially engage in external partnerships) in support of such efforts. While clear incentive structures exist for faculty to develop and deliver accredited CME courses, careful consideration should be devoted to designing faculty incentive structures (i.e., academic, intellectual, financial) to build and launch these new types of continuing education ventures. An academic and administrative governance structure should be created to facilitate communication among and provide oversight of both new and existing continuing education activities managed by DCE and other HMS offices. Such a structure would help capitalize on possible synergies across existing programs within the school and accelerate the expansion of audience for HMS offerings in continuing education in its broadest sense.

## RECOMMENDATIONS

The recommendations of the subcommittees were carefully reviewed, integrated and expanded upon by the steering committee, and are summarized below:

- 1. HMS should aspire to become nationally known for delivering courses that combine cutting edge content with a format that facilitates enduring knowledge via pedagogical best practices for adult learners.*

### ■ Pedagogy

- The pedagogy employed in continuing education courses should be designed to promote effective and long lasting learning. Course directors should use active learning techniques, including project based activities and multi-modal strategies, and consider opportunities to leverage simulation resources more aggressively. Course directors should consider both evidence-based established methods, and innovative strategies to accomplish this goal in live and online courses, and through on-going interaction with a community of learners, such as networked learning opportunities.

### ■ Learners' Needs

- Course design should be based on a comprehensive needs assessment and tailored to the specific needs of the audience. Courses should be updated as the audience and its needs change.
- Course directors should assess their courses annually to ensure they are meeting the goals of changing learner behavior and improving health care outcomes.

### ■ Faculty Development

- Faculty development should be considered an integral aspect of conducting continuing education courses in order to ensure quality, to promote innovation, to improve teaching skills, and to assist in faculty career advancement. HMS should consider identifying an education specialist who can help meet this goal.

## 2. *HMS should enhance the academic status of the Department of Continuing Education (DCE) through support for improved assessment, evaluation and research activities so that the department can better fulfill the mission of discovering improved educational methods and be more prepared to take a more active national role regarding accreditation and policy making.*

### ■ Research and Assessment

- The DCE should have a formal research program to develop more effective assessment tools and otherwise improve educational offerings with a focus on: 1) evaluating new pedagogies, 2) determining learner needs, and 3) creating robust course assessment tools.
- The research staff should collaborate with course directors and other faculty interested in formal and rigorous assessment of continuing education.

### ■ Ongoing Evaluation

- All courses should be evaluated periodically for content, pedagogical techniques, alignment with mission, resource intensiveness and competitiveness within the continuing education market.



3. *HMS should seek to expand audiences beyond those which have traditionally participated in accredited CME activities, with a focus on online communities, international learners, individuals interested in executive education, non-physician health care professionals, health care teams, and the lay public. All programs, regardless of audience, should meet the high academic standards of HMS.*

■ **Online Communities**

- HMS should pursue technical upgrades that enable it and its course directors to improve and expand its online offerings (e.g., webcasts, spaced education, virtual conferences with synchronous and asynchronous learning components, live and recorded video presentation, networked learning opportunities).
- HMS should actively seek to increase the visibility of its online offerings (including, but not limited to those offered by DCE), by developing a targeted marketing strategy to promote online continuing education.
- DCE should review and update its online course content to identify and remediate gaps, with particular attention paid to topics and disciplines that might appeal to international audiences, such as those in developing or tropical countries.

■ **International Audiences**

- HMS should create a worldwide presence by capitalizing on current international relationships and by evaluating new opportunities to teach hybrid online/in-person courses abroad.

■ **Executive Education**

- HMS should consider piloting courses that both leverage HMS expertise and fill market niches. Priority should be placed on courses with content focused on biomedical sciences, bioinformatics, health care IT and health care policy. Courses in leadership and managing the academic component of academic health centers should also be seriously considered.

■ **Non-Physician Health Care Professionals and the Lay Public**

- The traditional DCE audience should be expanded to include other health care professionals through inter-professional programs, particularly through courses that might include team or project-based training.
- HMS should engage the lay public through collaboration with the Office of Communications and External Relations (such as expanding successful events like the Longwood Seminars), Harvard Health Publications (such as developing blogs around controversial health topics important to the lay public), and other emerging opportunities.

4. *HMS should initiate, develop and sponsor school-wide curricular offerings that focus on biomedical and executive education topics with the following goals: to enhance education and collaboration among HMS affiliated institutions, to fill gaps in the range of content addressed by current CME courses, and to engage new audiences. These courses are intended to complement, not to compete with existing hospital or department-based offerings.*

■ Accredited CME Courses

- DCE should be empowered to identify and develop HMS-sponsored accredited CME courses in which DCE, in collaboration with faculty in the hospitals and on the Quad, provides the leadership and infrastructure to manage the course, and partners with faculty recruited from multiple institutions to plan and teach the content.

■ Non-Accredited CME Courses

- HMS should explore growth opportunities in the realm of non-accredited continuing education courses such as:
  - Offering live clinical and biomedical science courses, cross-institutional in nature, that can be delivered internationally;
  - Leveraging online platforms (e.g., EdX) so that courses offered in undergraduate medical education, graduate education and/or continuing education can be viewed by a broader audience; and
  - Developing executive education courses that could be immersive “on-campus” experiences, hybrid online/live courses, or custom programs for particular entities (such as companies).

5. *HMS should invest in an infrastructure consisting of the right people (faculty and staff), services, technology, and facilities to support continuing education activities, because it is critically important to maintaining ACCME accreditation, staying competitive in both accredited and non-accredited continuing education activities, and launching new, high-profile ventures.*

■ People and Services

- DCE-Specific
  - DCE should provide baseline services required for accreditation in a manner that balances both ACCME requirements and ease of use by its various constituents. All non-required services, such as building and executing marketing plans, should also be of high quality and efficiency, but optional.
  - DCE should be structured and staffed to take advantage of opportunities for growth and added value, such as helping to align CME courses with maintenance of

certification, licensing and credentialing requirements, and providing better analytic reports to course directors and department heads (e.g., faculty evaluations, trends in tuition, etc.).

- HMS should provide DCE with adequate and flexible staffing to meet the needs of all of its activities, with a focus on ensuring high quality customer service and complying with accreditation standards.
- HMS should invest in improvements to DCE's current information system and technology staffing support and DCE should reevaluate its technology needs in the context of any programmatic expansion of activities.

- Executive Education-Specific

- Exceptional HMS and guest faculty, who are both academically and financially incentivized to participate, and who will take ownership of a course's success, should be recruited to lead and teach in executive education programming.
- A strong administrative leader, who is entrepreneurial and respected by the HMS faculty, and who ideally has a background in and/or knowledge of the biomedical community, should be hired to launch and run an executive education program.

- Technology

- HMS should develop or purchase a new learning management system (LMS) with the ability to support course content creation and distribution, course management, and collaboration among and between students and faculty. Ideally, the LMS would support all continuing education courses offered by HMS, including DCE-sponsored CME delivered online.
- HMS may also want to consider leveraging other LMS's for courses targeted at the lay public (e.g., EdX).

- Facilities

- As HMS considers the future of its educational space on campus, it should integrate potential space needs for continuing education courses, such as locations that facilitate small group learning, team training (such as simulation or skills centers), and online or hybrid courses (such as video recording space).
- HMS should identify spaces that feel “of Harvard” for courses it sponsors, both domestically and abroad. This may include identifying educational space at HMS, using conference facilities owned by other Harvard University schools, or supporting the development of centrally managed Harvard University conference space.

6. *HMS should enact a more transparent and viable financial model for all continuing education activities.*

■ Financial Model for Accredited CME

- DCE should adopt a financial model that is transparent, fair and sustainable, and that provides for funds to support new initiatives.
- Every activity that makes use of DCE resources should share in the costs of the department, in some measure (this includes services that have not historically been assessed a charge, such as review of commercial support contracts and accreditation of regularly scheduled series).
- There should not be excessive subsidization of one activity type by another, or among activities within the same category.
- HMS should aim to design a new system of charges that is equitable and cognizant of market rates.
- DCE must seek to recover more than its actual direct expenses so that the benefits of investments made for ongoing improvements and innovations can accrue to all.
- A more thorough review of online programs is required, as HMS is increasingly in competition with institutions that offer online CME gratis as a result of commercial sponsorship.

■ Financial Model for Executive Education

- Executive education courses should be developed with a plan that aims for a positive financial return on investment within a reasonable period of time, recognizing that the launch of an executive education program is likely to be a series of experiments, only some of which will succeed.

7. *The Dean should implement a governance structure to oversee HMS continuing education both academically and administratively. This structure should optimize synergies among continuing education activities (including both accredited CME and beyond accredited CME), to help realize a broadened vision for HMS continuing education.*

■ Reporting Structure

- DCE should be placed within a formal, explicit academic and administrative governance structure.
- Other continuing education activities should also be anchored to administrative and academic homes.

### ■ Advising Structure

- An advisory board, composed primarily of faculty, and including key HMS administrators, should be created to provide ongoing strategic advice regarding continuing education activities, including:
  - Financial planning and policy questions related to the administration of DCE; and
  - Strategic planning related to the types of activities and initiatives HMS should pursue, continue and/or eliminate both within DCE and more broadly (e.g., types of online activities and technologies to pursue, assessing academic and financial value proposition of existing or new types of activities, identifying synergies across administrative units within HMS that are currently providing or developing continuing education activities).

## CONCLUSION

On behalf of the full committee, the steering committee is pleased to present these recommendations and to observe that this is an exciting time for continuing education, despite its many challenges. The recommendations outlined in this summary report raise the bar for continuing education at HMS. They elevate continuing education to a formal academic enterprise that will broaden the reach of the Medical School and have a lasting impact on a wide range of learners. We thank the committee members and guests who contributed to this effort.



## APPENDIX A: STEERING COMMITTEE MEMBERS

### Chair

Rich Schwartzstein, MD, Ellen and Melvin Gordon Professor of Medical Education and Director of the Academy, HMS, BIDMC

### Members

Liz Armstrong, PhD, Director, Harvard Macy Institute and Clinical Professor of Pediatrics, BCH

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David Golan, Professor of Biochemistry and Molecular Pharmacology, Dean for Graduate Education and Special Advisor to the Dean on Global Programs, HMS, BWH

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