Preparing academic medical department physicians to successfully lead

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Received 28 March 2014
Revised 5 December 2014
19 March 2015
Accepted 23 March 2015

Abstract

Purpose – The purpose of this paper is to present a case study which details the successful development, design and deployment of a leadership course for academic medical department chairs. The course provides a needed local and contextual alternative to the lengthy and often theoretical MBA/MHA.

Design/methodology/approach – Faculty developers used a multi-tiered methodology for developing the physician leadership course. The methodology consisted of literature findings, needs assessment, stakeholder input and structured interviews with administrative leaders.

Findings – The research, stakeholder input and interviews revealed an increasing number of physician leaders with a general lack of fundamental administrative leadership skills. These shortfalls are largely because of underexposure to core management competencies during medical school and limited contextual knowledge outside their organization. There is an urgent need for leadership development opportunities aimed at current and future academic medical department chairs.

Research limitations/implications – This research is limited by the assumptions that the curriculum meets the ever-changing needs of health-care leaders, the course's focus on academic medical department chairs within the Texas Medical Center and the lack of long range follow-up data to substantiate the effectiveness of the curriculum content and course structure.

Practical implications – The Academic Medical Department Leadership course offers valuable management skills training which complements standard medical training. Much of the course structure and content is adaptable to physician administrative and leadership positions in all settings.

Originality/value – Although the Academic Medical Department Leadership course is a response to a local concern, the study offers a generalizable approach to addressing the demand for skilled physician leaders.

Keywords Health leadership competencies, Health leadership initiatives, Leadership, Management development, Medical department chairs, Administrative leadership skills

Paper type Case study

Introduction

Effective organizational leadership is fundamental to the efficiency and quality of individual institutions and our health-care system as a whole. Extensive reforms in recent years have contributed to shifts in the profile of health-care organizational leadership (Bachrach, 1997; Clair, 1990; Colla *et al.*, 2014; Shortell *et al.*, 1995), namely, the demand for savvy physician leaders (Brook, 2010; Stefl and Bontempo, 2008; Stoller, 2009). Health-care organizations are increasingly looking towards physicians to lead

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Leadership in Health Services
Vol. 28 No. 4, 2015
pp. 317-331

1751-1879
DOI 10.1108/LHS-03-2014-0023

and collaborate alongside traditional administrators (American Hospital Association, 2013; Colla *et al.*, 2014; Shortell *et al.*, 1995). This is particularly true in academic medical centers where a physician leader often serves as both the department chair in the medical school and the clinical chief of service in the affiliated hospital. The trend in physician leadership is stimulated by the growing consensus among health industry professionals that good system management, whether a hospital, an academic medical department or a physician practice, enables optimal outcomes for individuals receiving services and for the organization overall (Blumenthal *et al.*, 2012; Butcher, 2011). The industry's expectation is to integrate clinical and operational management to maximize quality and efficiency of health-care delivery (American Hospital Association, 2013; Scott, 2010; Shortell *et al.*, 1995).

With physicians expanding their roles as leaders in healthcare, there is a healthy concern for their preparedness to manage health organizations (Clark and Armit, 2010; Clark and Amit, 2008; Dowton, 2004). Current scrutiny of clinically trained health-care leaders is, to some degree, a consequence of the failures of past physician leaders. Physicians were historically regarded as appropriate organizational leaders (CEOs) in health-care delivery organizations because they understood, and in many cases had delivered, the product or service. Over time, the health-care delivery system grew more complex, and health-care organizations became large businesses; thus, the traditional skills needed to be a good physician were not sufficient to be a good CEO. Physicians are trained to focus on doing the best for their patients, often with appropriate disregard for other organizational considerations, such as economics, sensitivity, and societal concerns. Unfortunately, it is high academic achievement and strong clinical expertise which are the evaluative criteria often used to select physician leaders, as opposed to their accomplishments in management (American Hospital Association, 2013). Consequently, when many physicians move into leadership positions, they find themselves in unfamiliar territory with regard to balancing the many trade-offs they face in managing a portfolio of people, projects and departments. In fact, physician leaders often lack key leadership aptitudes and knowledge, such as devising organizational strategy, championing an institutional vision and promoting teamwork (Scott, 2010; Stefl and Bontempo, 2008; Clair, 1990). Insufficient financial literacy has also deterred success among physician leaders (Clark and Armit, 2010). To some extent, these new physician leaders have to "unlearn" the principle of independently focusing on one individual at a time, which likely contributed to their success as a clinician. On a more specific level, department chairs in academic medicine face even more complex managerial and leadership challenges, as they deal with the tripartite mission of medical schools. These chairs have to deal with issues that cover education, research and practice – three very distinct, and sometimes conflicting, businesses. With that observation, it is apparent that physician management and leadership capabilities are essential to the success of the academic medical enterprise.

This paper discusses the gap between traditional clinical training and the business acumen needed to be an effective physician leader. To narrow the gap and prepare physician leaders, an Academic Medical Department Leadership (AMDL) course was created to meet the local market need. The course is uniquely designed to provide business and leadership skills within the contextual framework of the highly competitive and collaborative Texas Medical Center (TMC). Participants, who are carefully selected by their institution, typically enter the course as anonymous

competitors yet leave as connected colleagues. A case study is presented detailing the development, design and deployment of this much-needed course.

Physician leadership development efforts

Clinical programs generally do not equip physicians with the knowledge and skills required for successful organizational leadership. The shortcomings of physician leaders stem from their inadequate leadership training and limited fundamental management knowledge (Clark and Amit, 2008; Fairchild *et al.*, 2004; Lieff *et al.*, 2013). This is also true internationally, as evidenced in the United Kingdom where in 2008 the Academy of Medical Royal Colleges and the National Health Service (NHS) Institute for Innovation and Improvement (2008) developed a medical leadership competency framework. Despite this limitation, physicians are not shying away from administrative roles in hospitals and academic medical institutions; in fact, they are actively seeking such positions. Clearly, physician leadership in academic medicine is not new, but ill-prepared academic physicians compromise the effectiveness and magnify potential damage to the institution. It can be said that medical schools are no better than their departmental chairs, and affiliated hospitals are no better than their medical school affiliates. The response to the noticed gaps in physician education and managerial training has been a proliferation of leadership and management development programs, with varying curriculum, class sizes and quality. The National Center for Healthcare Leadership (NCHL) surveyed select hospitals and health-care organizations that claim to have physician leadership development programs (PLD). A total of 25 organizations responded to the survey which found most PLD's are "still evolving and much variation exists, in part reflecting the size and type of the organization, the organizational strategic goals, and the resources available to support PLD programs" (National Center for Healthcare Leadership, 2014).

The academic market has also responded, with tremendous variation in format, content and cost, to the apparent need for physician-based managerial training. Specifically, The Duke Fuqua School of Business has a Health Sector Management Executive Education program customized for physicians that ranges from two days to several weeks on different topics (Duke Fuqua Business School, 2014). The Chicago Management Institute created a more generalized executive education program for all types of executives. The class sessions span six months to enable students to apply the concepts within their organization and receive feedback from instructors (The Chicago Management Institute, 2014). The Kellogg School of Management built a Physician CEO Program for board-certified physicians that covers four business modules (Kellogg School of Management, 2014), and the University of Michigan Ross School of Business has a certification program in health-care management aimed at all health care leaders, including physicians (Michigan Ross School of Business, 2014). Lastly, and most closely aligned with the AMDL course described in this paper is provided by the Harvard T.H. Chan School of Public Health and the University of Pennsylvania. Harvard offers a number of executive education courses for physicians including "Leadership Development for Physicians in Academic Health Centers" and "Program for Chiefs of Clinical Services", the latter of which has been in existence for 35 years (Harvard T.H. Chan School of Public Health, 2015). The University of Pennsylvania also offers management education that targets chiefs and chairs of surgery (Wharton/Leonard Davis Institute of Health Economics, 2014).

Degree granting business administration programs are also capitalizing on the increasing number of physicians and medical students seeking to gain management competencies; in the past decade, the number of Doctor of Medicine (MD)/Master of Business Administration (MBA) dual degree programs doubled (Butcher, 2011). Business administration degrees offer what medical programs typically lack, for example, training in leadership, strategic planning, finance and organizational performance (Taylor *et al.*, 2008). And, unlike the "self-reliance" didacticism of conventional medical schools, business schools teach the value of teamwork and collaboration (Butcher, 2011). However, earning an MBA is both an expensive and time-consuming endeavor and some, such as Mintzberg (2004) and Gosling and Mintzberg (2004), question the relevance of the MBA curriculum. They contend the MBA curriculum is overly focused on technical skills and lacks the contextual knowledge and softer-skills, such as interpersonal and organizational competencies. Alas, is it reasonable or sustainable for physicians to be expected to master an entire auxiliary field just to prepare them for leadership in healthcare? Our research demonstrates a successful alternative – through thoughtful consideration, stakeholder input and meticulous planning, an AMDL certificate course with a contextual focus that promotes collaboration within competition, emerged.

Academic medical school department leadership challenges

Academic medical school department leaders serve multiple purposes; they serve as the chief of the clinical service for the institution, the chair for the medical school department (which includes both research and education), and as head of the outpatient clinical service for the medical school practice plan. Their multiple leadership positions have a significant impact on the overall performance of the medical institution, as well as the cohesion of the departmental medical staff. To be successful, it is crucial for these new physician leaders to have practical knowledge of core management constructs and to be able to balance the many trade-offs they face in coordinating their multiple and sometimes conflicting roles. Their administrative tasks and challenges require an understanding of finance and accounting, organizational behavior, quality assessment, strategy, leadership skills, ethics and law (Millward and Bryan, 2005). Additionally, they must recognize the many interests of their patients, students, residents and fellows, in addition to the interests of the department as a whole within the context of both the medical school and the affiliated hospital. Unfortunately, the typical medical school curriculum does little to address the relevant business constructs, instead teaching a purely clinical approach to management and organizational strategy. Physician leaders often find they are ill prepared for the operational, organizational and leadership challenges that come with simultaneously managing their multiple roles. Table I depicts the marked gap in core management skill instruction between business and health administration programs [Master of Health Administration (MHA)/MBA] and clinical programs (Medical School). The table was constructed by the authors based on the typical curriculum of US business, healthcare and medical schools.

Case study: Launching an AMDL course

This case study details the development, design and deployment of the AMDL certificate course as one approach to address the educational disparity that limits the development of physician leadership potential in academic medical departments. The

AMDL certificate course was developed to serve the TMC. The TMC hosts the largest concentration of medical professionals and experts anywhere in the world; over 100,000 employees, 17,500 faculty, 15,000 nurses, 50,000 students and 5,700 researchers work in the TMC (Texas Medical Center, 2014). Within the TMC, health research, education and practice intersect, often as a product of inter-institutional collaborations. The TMC contains two prominent medical schools, the University of Texas, Medical School in Houston and Baylor College of Medicine, both providing physician faculty who serve as department chairs in the medical schools and, simultaneously, as chiefs of service in the affiliated hospitals. Thus, the need for a local AMDL certificate course within the TMC was obvious and compelling. A local program provides a cost-effective forum for physicians to learn the needed leadership skills while minimizing time away from their organizations. The AMDL certificate course curriculum was specifically designed to meet these needs of the TMC. It allows for contextual learning, peer sharing, and collaboration among physicians who typically perceive their course colleagues as competitors. Contextual knowledge is essential to physician engagement, and engagement has been demonstrated to improve organizational performance and productivity (Spurgeon *et al.*, 2011). The curriculum seeks to achieve the three pillars of AMDL: to expose physicians to the vertical continuum of management through concrete business skills, to promote the importance of teamwork within leadership, including the interpersonal skills personified by well-rounded leaders, and to increase physician awareness of the organizational needs driven by stakeholders and patients alike.

Study objectives: Identifying the need for physician leadership training

The proposal for developing the AMDL certificate course began with an identified need by the University of Texas School of Public Health (UTSPH), George McMillian Fleming Center for Healthcare Management (Fleming Center) faculty. The Fleming Center, located in the TMC, was established in 2008 with the purpose of developing health-care educational programs (degree and non-degree) within the TMC. The Fleming Center faculty includes academicians, retired and current health-care executives and physician leaders with MBA/MHA degrees. The diversity in educational backgrounds and professional experience provides the Fleming Center with the necessary skill mix to offer educational programs aimed at preparing individuals for administrative

Business skills taught in MHA/MBA curricula	Core management constructs	Business skills taught in medical school curricula
Organizational strategy	Strategy	None: focus on specific content
Budgeting	Finance/accounting	None
Quality management instruction	Quality	Clinical quality measures and training
Institutional level organizational behavior	Organizational behavior/teams	Individual accountability
Business law, ethical practice	Ethics/law	Biomedical ethics
Personal leadership development	Leadership	None; barriers to leadership among peers

Table I. Gaps in management training between clinical and administrative academic programs

leadership positions in the large and complex health-care delivery environment. The Fleming Center core faculty involved in developing the health-care management program comprised a PhD academic with 25+ years of health-care executive experience, a former hospital CEO with a Doctor of Public Health (Dr PH) degree and 20+ years of experience starting with a BSN and an individual with a DBA in industrial relations who has worked and consulted in the health-care system for over 25 years. The first two listed individuals are co-authors on this case study.

In the early years, the Fleming Center core faculty identified the educational gaps, met with stakeholders and developed responsive programs to meet a variety of needs in health-care management education. The need to develop a local cross-institutional course that provided business acumen to prepare and train physician leaders at the level of medical school department chairs was apparent. Prior to development, physicians who sought business knowledge often travel significant distances, at high cost to their institutions. A local program not only limited the impact on physician work schedules, but also assured contextual knowledge applicable to the TMC and peer sharing across traditionally competing organizations.

Methods: Developing the AMDL certificate course through data collection

The AMDL certificate course development began with the formation of an advisory board through the UTSPH Fleming Center. With advisory board guidance, the three Fleming Center core faculties (with significant health care managerial experience) began to design a practical management and leadership course that would be tailored to the needs of academic physicians in leadership positions within the TMC. The program design was then based on qualitative data gathered from interviews with senior executives from various TMC institutions. Given the managerial experience of the Fleming Center core faculty and their well-established relationship with TMC leaders, the interviews often reflected a confirmatory discussion of the weaknesses in physician leaders and the need for managerial education.

Based on the interviews and their personal expertise, the Fleming Center core faculty team organized a structured questionnaire for the current academic medical department chairs at six TMC institutions. A total of 20 existing academic medical department chairmen and a few administrators were selected across these six institutions, and the structured questionnaires were deployed over the course of four months. The structured questionnaire was delivered as an interview that gathered information about managerial and leadership aspects of the respondents' work. The 23-item questionnaire had three categories, seven questions were focused on leading and managing people, six questions were aimed at evaluating performance strategies and ten questions addressed management style. Examples from each respective category included: "What do you do to build and guide the group?", "What data do you use to determine how well your department is doing?" and "What are some of the typical conflicts that you have to deal with as chair?" Interviewers also made further open-ended inquiries about the interviewees' practical knowledge, and knowledge that they had learned on the job, but could be taught within the proposed AMDL certificate course.

From the interviews, structured questionnaires and other program's curriculum review, the Fleming Center core faculty identified the fundamental business skills and knowledge needed by physician leaders to effectively leads and manage academic medical departments. The identified needs were: strategy, finance and accounting,

organizational performance measures, including clinical quality, human resources and customer experience management, organizational behavior and team building and leadership skills. A grasp of ethics and law, as they relate to health-care organizations, was also recommended. In addition, the Fleming Center core faculty further identified experiential learning opportunities based on the critical managerial and leadership challenges described by the interviewed chairmen. Subsequently, many of the management and leadership challenges described in the interviews were incorporated into the AMDL certificate course curriculum through faculty lectures and/or presentations given by TMC institutional leaders. The Fleming Center core faculty also reviewed the health-care management literature and trends in physician leadership. The last resource used to develop the AMDL curriculum was a comparison of medical school curriculums to MHA and MBA curriculums, identifying disparities in leadership and management coursework, as shown previously in Table I. Using the identified competencies, the AMDL certificate course learning objectives were designed around three pillars. These pillars include the vertical continuum of management, collaboration competencies and responsiveness to organizational and stakeholder needs.

Results: designing the implementation of the AMDL certificate course

The final proposed curriculum for the AMDL certificate course was presented to and approved by the Fleming Center advisory board. Table II presents the overall topical coverage. Thoughtful consideration was given to the most effective way to deliver the

Class period	Topics
Class 1	Leadership Management Physician Leaders, Chairman Role
Class 2	Organizational assessment and dynamics Organizational relationships, self evaluation
Class 3	Human resources and management Conflict, negotiation, termination
Class 4	Recruitment and retention Team building, coaching
Class 5	SWOT assessment/market analysis Service portfolio
Class 6	Quality and process improvement Performance assessment
Class 7	Patient satisfaction Understanding customers
Class 8	Accounting Clinical, educational and research reimbursement
Class 9	Finance Business plans
Class 10	Community standards of behavior and practice Change management and strategy implementation
Class 11	Strategic planning Strategic implementation
Class 12	Project presentations Health care reform and you

Table II.
AMDL course topics

AMDL certificate course content. Given the acknowledged gap in the participant's management and leadership understanding, and the need to keep the content applicable to their current jobs, the delivery of AMDL certificate course content is broken into two parts. First, theoretical lectures, which include the specific principles of management and leadership, are delivered in a didactic mode to assure participant understanding on theories and concepts. Immediately following the theoretical delivery, application of the theory to practice is presented, and active participation in the form discussion and the sharing of individual experiences is required. The culminating applied learning outcome is a defined project that benefits the participant's respective institution. Participants present their own projects while critiquing and judging those of their peers. The project includes a proposal, a financial analysis and an implementation plan. Class participants rank the projects based on their willingness (acting as hospital executives) to fund and support the project. The highest scoring projects are acknowledged, making the learning experience a fun, and slightly competitive, academic exercise.

After the curriculum was well-defined, the course delivery well-designed, and the project-based learning experience determined, the Fleming Center core faculty began to recruit both content experts for course delivery and the first cohort of academic medical school department chairs. Unlike traditional MBA and/or physician leadership courses, the AMDL content experts are not pure academics. Instead, AMDL content experts are senior leaders within the TMC who have both the theoretical knowledge, as well as the experiential background, to be credible to the physician participants. They also provide contextual knowledge of their organization, their competitive position and their relationship within the TMC.

To recruit participants, the Fleming Center core faculty requested each of the TMC institution executives (often the CEOs) to identify and sponsor two new academic department chairs for course attendance. The executives were supportive of this effort, students were readily identified, and the first successful AMDL certificate course began in the fall of 2011. Figure 1 depicts the AMDL certificate course development timeline.

Findings: AMDL certification course outcomes

In 2011, after a year of development, the Fleming Center AMDL certificate course was offered to senior-level physicians ("chairs and near-chairs") in the TMC. It was the result of the collaborative input and effort of seven TMC institutions. The institutions which participated in the AMDL certificate course development and subsequently selected the first class of physician attendees included: The University of Texas Health Science

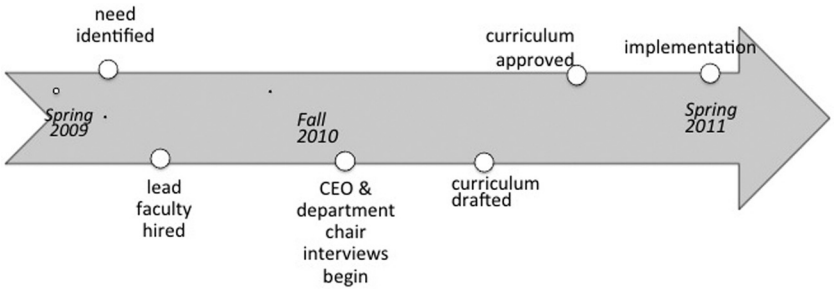

Figure 1.
AMDL certificate course development and implementation timeline

Center (home to the UT Medical School, the UT School of Nursing, the UT School of Public Health and the Fleming Center), Baylor College of Medicine, Memorial Hermann – TMC, the University of Texas: MD Anderson Cancer Center, Texas Children's Hospital and Houston Methodist Hospital.

The AMDL course is taught annually to 15-18 participants. In total, the AMDL certificate course entails 12 days of instruction at eight hours per day. The course meets every other Friday spanning both fall and spring semesters. Participants are allowed no more than two absences. Participants missing more than two classes are permitted to take the course the following year. In addition, participants are permitted up to six hours of for-credit course allowance if they pursue a MPH degree at the UTSPH (no one has taken this option).

Uniqueness of the AMDL certificate course

The development, design and deployment of the AMDL certificate course are abundant with unique complexities that contribute to its success. First, the development phase (and continued course improvements) includes a significant insight from the stakeholders – the TMC institutions and current academic medical department chairs. This allows the course to be context specific for the TMC institutions that send participants. The course is also designed to address the competitive, yet collaborative, intricacies of the TMC setting. Integrating presentations from active TMC leaders, including the CEOs of the major institutions, reinforce the importance of and the attention to local relevance.

The participants themselves also create another, somewhat unique, characteristic of the course. Participants are similar in that clinically, they are peers and seen as leaders by their respective institutions. However, they are individually diverse in specialty, gender and ethnicity. Perhaps the most unique participant characteristic is that they are employees and medical staff of competing organizations. This uniqueness creates an explicit need for trust among participants. Because of the inherent sensitivities, special attention is given at the beginning of the course to develop a sense of comfort and confidentiality among the participants enabling the discussion of issues that can be both delicate and competitive. To some extent, gaining a level of trust among participants supports a complementary course objective – the development of a "peer network" and a sense that those completing the program have a shared and common experience that allows them to reach out to one another for future guidance. This level of trust and candor is reinforced by not allowing any outside observers or prospective students in the classroom during the sessions. This policy provides further reassurance to those in attendance that confidentiality is taken very seriously.

The unique mix of skills provided by the Fleming Center core faculty gives the needed expertise to solicit stakeholder input, develop context-specific curriculum and create an interactive, relevant learning experience. The AMDL certificate course core faculty and content delivery have evolved over time. The faculty team continually refines the course to maintain relevancy to marketplace demands. At the onset and presently, a Fleming Center core faculty member, who is a former TMC hospital executive with a Dr PH and a co-author, directs the AMDL course. Her advisory team comprises three local professionals with varying educational and experiential backgrounds.

Measures of success

The AMDL course began in 2011 and has been taught to approximately 50 academic medical department chairs and near-chairs. To date, all participants have successfully completed the course, and about 40 per cent of the course projects have been funded by and implemented within the participant's respective institution. Course completion and project implementation are two measures of success. Other measures include participant satisfaction surveys, anecdotal discussions and continued support from TMC institution executives and alumni involvement.

Throughout the AMDL course, participants are surveyed to assure the course is providing value and meeting their expectations. Mid-course corrections are often made, such as, including additional topical coverage, removing and/or adding speakers and increasing discussions and/or providing additional resources. The Fleming Center core faculty and the advisory board review the end-of-course evaluations to improve subsequent AMDL courses. Satisfaction scores are compared across years and at the individual speaker level to determine necessary changes. Examples of daily topical survey questions and results are shown in Table III. Mid-course evaluations are done every 4th class; overall, course evaluations are done at the conclusion of the course. Relevancy of readings and overall feedback is also done at course conclusion. Example survey questions and a sample of responses for mid- and end–of-course evaluations are shown in Table IV.

At the end of each AMDL certificate course, the Fleming Center core faculties meet with the senior leader at each of the participant's TMC institution. The participant's involvement, including discussion and classroom interaction, is discussed. The participant's project, which should have been presented to the leadership team before this meeting, is also reviewed. Senior leaders are asked to give feedback and typically report high levels of satisfaction. Their satisfaction is further evidenced by their continued support in sending new participants each year.

AMDL alumni are encouraged to come back to future courses to network and share their experiences. They are invited on Day 1 for a social event and, subsequently, as guest lecturers or invited panel guests. The most common response when alumni are asked about the course is the value they derived from the peer-to-peer interactions, the supportive discussions and the continued collaborative relationships. The alumni also speak highly of the financial and human resources topics, as well as the TMC guest speakers.

An unintended consequence, which demonstrates the high level of participant satisfaction, is the request from participants to develop a shorter course aimed at

Table III.
Satisfaction survey on "overall effectiveness of the topical coverage"

Class 6	Content expert/lecturer	2013-14
Overview on quality	Instructor 1	4.82
Integration of quality and strategic planning	Instructor 1	4.55
Process improvement tools	Instructor 2	4.82
Organizational performance indicators	Instructor 3	4.73
Case study: quality	Physician guest speaker	4.55
Daily average		4.69

Note: Ratings are on a 1 to 5 scale

Overall satisfaction	
Overall how would you rate the course to date (4 classes)?	4.7
Overall how would you rate the course?	4.69
Readings and workload satisfaction	
Did we establish relevance between the topics and your current position?	71% yes
How is the workload for the class?	76% light and 26% want more readings
Are the readings relevant and interesting?	76% yes and 24% relevant but not interesting
Comments on work load	The textbook is much tougher to get through than the articles
Comments on Readings	To be fair, it is difficult to make concepts interesting (relevant but not interesting) Text book little dry; articles more interesting
Open-ended questions	
Are there topics you would have liked to have had covered in this course that were not, or something you wanted to gain but did not? If yes, please list them	
Invite someone to discuss the Porter/Kaplan value concept. Invite someone from NASA and/or Exxon to discuss the impact of catastrophic safety failure on their organizations More attention to budgeting. I would have liked more detailed financial analysis specifically on outpatient clinical practice expenses/revenues Additional emphasis on research: this represents one-third of academic medical departments' mission	
Has the knowledge gained in this course led to a difference in your work performance?	
Many new projects and ways to look at my work, value and inputs I am more engaged when I have conversations regarding planning, finance and HR Overall, this has been the most useful, valuable course of my career Very much so. Not every topic was germane, but I learned from every lecture I have found myself relying upon things, and I have learned (and using them) in the midst of my day-to-day administrative responsibilities – very helpful	
Additional comments	
Helpful and excellent. Would like to see the course condensed These sessions gave me a very different perspective on critical issues that I face daily. Thank you for the great speakers I really enjoy course and have learned a lot. Outside speakers are consistently interesting	

Table IV.
Mid- and end-of-course satisfaction survey questions and select responses

lower-level physicians. In 2014, a new shorter physician leadership course was developed for an individual institution based on an AMDL participant's expressed need. Currently, a second TMC institution is working with the Fleming Center faculty to develop a course targeted for their physicians.

Discussion

The AMDL certificate course presented here focuses on one of the most complex positions in medicine, the medical school departmental chair. The course structure and content has been designed to be specific to academic medical department leaders; however, much of it is adaptable to physician management and leadership positions in all settings. In fact, the AMDL course encompasses much of the current thinking on

physician leadership development. A 2014 white paper by the National Council for Healthcare Leadership's (NCHL) Physician Leadership Development Council recommends ten strategies for PLD programs (National Council for Healthcare Leadership, 2014). These strategies include many of the design components of the AMDL. For example:

- ensure organization's executive leaders actively support the program;
- use the program to build and expand physician relationships;
- design curriculum to support organization's desired competencies/capabilities; and
- use both internal and external faculty.

Clearly, the Fleming Center core faculties were on the right path when they began their effort more than four years ago.

Over the past three years, the success of the AMDL certificate course has been attributed to the careful consideration given to its development, design and deployment. Stakeholder inquiry is instrumental in identifying both the needs and deficiencies of physician leaders. Stakeholder buy-in provides the needed impetus to assure adequate on-going participation. The Fleming Center core faculty contributes the needed knowledge and skills to carefully develop an integrative curriculum built on theory, but focused on application. Successful deployment includes content, speaker and activities that provide immediate relevancy.

Limitations

The UTSPH Fleming Center faculties make every effort to assure both relevancy and up-to-date course materials. Assigned readings and guest speakers are re-evaluated each year. During 2014, a lecture and exercise on population health were added. That being said, there are only 12 class periods, and, inevitably, some content is not covered. Additionally, guest speakers include TMC executives who may or may not always provide the necessary detailed level topical coverage. Another possible limitation is the specific target audience of the course, academic medical department chairs. However, recent developments have shown that the design and delivery can be tailored to a general physician audience. Thus, the limitations of the AMDL course are predominantly on course content, rather than delivery and implementation. Because the course has been in existence for only three years, there is no evidence to substantiate the overall effectiveness of the course. Over time, the alumni and their executives will be able to better address questions on effectiveness.

Conclusions

The AMDL certificate course is in its third year of offering. Time will tell if it produces the intended result of more effective management among physicians who are in a position to take on additional leadership responsibilities. Designed around the three pillars of business management, teamwork within leadership and awareness of organizational needs, the AMDL certificate course alumni are well adept to tackle the complexities of their new positions. In addition, many alumni are finding the added benefit of strong and valuable relationships among their peer attendees who work for competing institutions.

Although the AMDL certificate course responds to the needs of academic medicine, the methodology for development, design and deployment is transferable. The Fleming Center faculties are finding that with slight adjustments, the AMDL certificate course can be modified to address similar educational needs for other populations of physician leaders and in other clinical settings. In the end, preparing physician leaders to provide better and more efficient patient care, across and within their institutions, should be the focus of any physician-targeted management and leadership course. The AMDL certificate course provides a successful example for all academic and educational institutions that are interested in developing their own courses.

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